

# The Ridge Project

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SCH# 2020120544

## Draft Environmental Impact Report

Prepared for  
Placer County



October 2021

Prepared by



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SCH# 2020120544

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# 1. INTRODUCTION

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# 1. INTRODUCTION

## 1.1 TYPE AND PURPOSE OF THE EIR

The Ridge Project Environmental Impact Report (EIR) has been prepared in accordance with the California Environmental Quality Act (CEQA) of 1970, Public Resources Code (PRC) Sections 21000-21178, as amended and the Guidelines for Implementation of the California Environmental Quality Act, California Code of Regulations (CCR) Title 14, Sections 15000-15387 (CEQA Guidelines). Placer County is the lead agency for the environmental review of The Ridge Project (proposed project) evaluated herein and has the principal responsibility for reviewing the impacts of and considering approval of the proposed project. As required by Section 15121 of the CEQA Guidelines, this EIR will (a) inform public agency decision-makers, and the public generally, of the significant environmental effects of the 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 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 Placer County Water Agency (PCWA), Central Valley Regional Water Quality Control Board



(RWQCB), and the Placer County Air Pollution Control District (PCAPCD) 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 for the project is the California Department of Fish and Wildlife (CDFW).

Although not subject to California law, and, thus, outside the definitions of responsible agency or trustee agency, the U.S. Army Corps of Engineers (USACE) and U.S. Fish and Wildlife Service (USFWS) may also be called upon to grant approvals — under federal law — necessary for the development of the 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 proposed project site is a 24.95-acre horseshoe-shaped parcel situated atop three interconnected ridges located approximately one mile southeast of the intersection of State Route (SR) 193 and Clark Tunnel Road in Placer County. The site is identified by Assessor’s Parcel Number (APN) 031-106-030-000. The Placer County General Plan designates the site as Agriculture/Timberland 10-Ac. Min. and the site is zoned Farm, combining minimum Building Site of 10 acres (F-B-X 10-Ac. Min.). Currently, the project site is undeveloped, consisting primarily of grasses, oak woodland, and scattered rock outcroppings.

The densely wooded area to the north of the proposed project site slopes steeply downward towards the valley below. An undeveloped ranch (La Faille Ranch property), owned by the project applicant, which is also used for cattle grazing, is located within the valley to the north of the site. The southern boundary of the La Faille Ranch property includes the existing concrete-lined Caperton Canal, owned and operated by the PCWA, which bifurcates the ranch from the project site. A dirt road connecting to Clark Tunnel Road extends along the southern boundary of the project site. The areas to the east, south, and west of the site are undeveloped but are planned for buildout with future low-density residential and rural residential uses as part of the Bickford Ranch Specific Plan (BRSP), which was approved by the County in 2004 and amended as recently as 2015.

The proposed project would include the subdivision of the project site to develop 34 single-family residential homes, an internal roadway, a detention/retention basin, and associated improvements. Of the 34 total residential lots, 28 would be medium density lots and the remaining six lots would be larger, low density residential lots. In addition, the proposed project would include construction of a six-foot masonry wall along the project frontage at Bickford Ranch Road. The remainder of the proposed development area would be surrounded by split rail fencing along the east and west boundaries where residential lots are proposed and wrought-iron fencing elsewhere. The proposed project would also include new trees and other landscaping elements along Bickford Ranch Road, street trees internal to the site, and enhanced landscaping at the project entry. Primary access to the project site would be provided by Bickford Ranch Road from Sierra College Boulevard. The project entry would include a gated entry feature.



Development of the proposed project is conditioned to be dependent upon the installation of Bickford Ranch Road and associated utilities through Phase 1 of the BRSP. Bickford Ranch Road will be a public, County-maintained roadway. In the event the necessary BRSP Phase 2 improvements within the BRSP development have not yet been constructed from the Phase 1 boundary to and along the proposed project frontage, and the proposed project has obtained necessary entitlements and is ready to proceed, off-site improvements to a segment of Bickford Ranch Road would be required to extend services and complete access to the project site. Specifically, such improvements would include the approximately 400-foot extension of Bickford Ranch Road from the BRSP Phase 1 terminus thereof to the project site and along the entire frontage of the proposed project, including all required water, sewer, drainage and dry utilities therein. In addition, improvements would be made to the BRSP landscape corridor parcel which fronts upon the project, including the landscaping and the installation of the a paved, Class 1 path and adjacent natural-surface, multi-use trail which would connect the trails from the BRSP on the east and west sides of the proposed project in accordance with the improvement concept set forth in the BRSP Development Standards and Design Guidelines. In addition, the proposed project would include the establishment and on-going maintenance of an off-site, 300-foot-wide Fuel Management Zone easement along the proposed project's northern boundary, north of the Caperton Canal.

The proposed project would require County approval of the following entitlements:

- General Plan Amendment to change the site's land use designation from Agriculture/Timberland 10-Ac. Min. to Medium Density Residential (MDR) (13.85 acres) and Low Density Residential (LDR) (11.10 acres);
- Rezone from F-B-X 10-Ac. Min. to Residential Single-Family, combining minimum Building Site of 8,000 square feet (RS-B-8) (13.85 acres) and Residential Single-Family, combining minimum Building Site of 10,000 square feet (RS-B-10) (11.10 acres); and
- Vesting Tentative Subdivision Map.

The following additional County approval is required:

- Annexation into Placer County Sewer Maintenance District 1 (SMD 1); and
- Annexation into Bickford Ranch Community Facilities District for applicable services.

## **1.4 EIR PROCESS**

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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 of copies of the Draft EIR 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 PROJECT BASELINE

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According to the CEQA Guidelines Section 15125(a), "An EIR must include a description of the physical environmental conditions in the vicinity of the project. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant." Notably, the purpose of this requirement, "...is to give the public and decision-makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts."

The CEQA Guidelines, and the courts, have noted that in some situations, the physical conditions existing at the time the environmental analysis commences (e.g., for an EIR, the Guidelines describe this as publication of the NOP) do not always provide the most accurate and understandable picture practically possible of the project's likely impacts. For example, Guidelines Section 15125(a)(1) states that, "...where necessary to provide the most accurate picture practically possible of the project's impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence."

Similarly, in *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4<sup>th</sup> 439 (*Neighbors for Smart Rail*), the Supreme Court stated, "...we note that in appropriate circumstances an existing conditions analysis may take account of environmental conditions that will exist when the project begins operations; the agency is not strictly limited to those prevailing during the period of EIR preparation. An agency may, where appropriate, adjust its existing conditions baseline to account for a major change in environmental conditions that is expected to occur before project implementation." This is different than use of a future baseline, a subject



dealt with in both the CEQA Guidelines Section 15125(a)(2) and *Neighbors for Smart Rail*. A future baseline is understood to be a point in time beyond the date of project operations, as was the case in *Neighbors for Smart Rail*.

For the following reasons, the existing conditions environmental baseline for the proposed project has been adjusted to be consistent with date-of-project implementation. As noted by the court, "...such a date-of-implementation baseline does not share the principal problem presented by a baseline of conditions expected to prevail in the more distant future following years of project operation - it does not omit impacts expected to occur during the project's early period of operation."

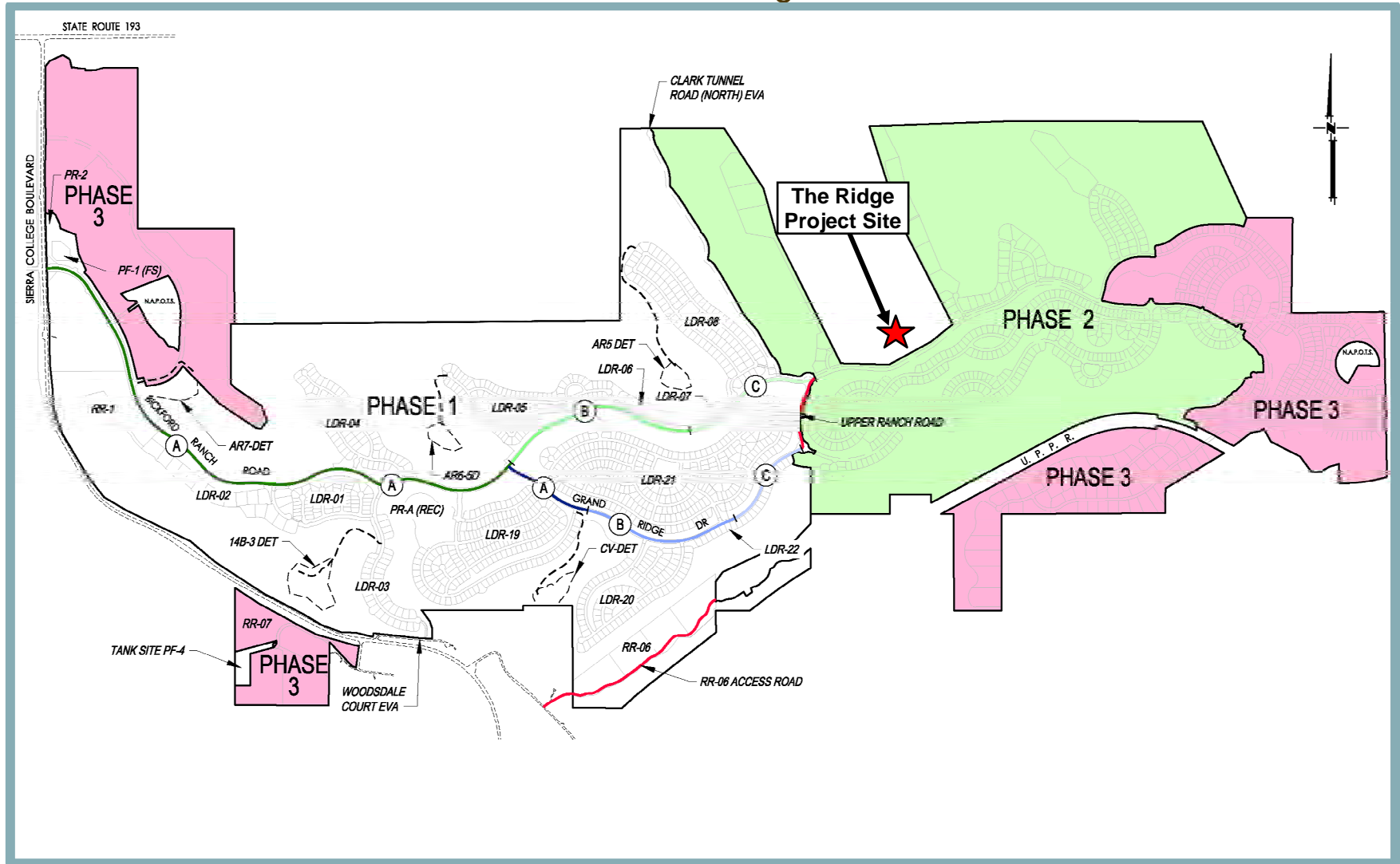
Importantly, development of the proposed project is dependent upon the installation of Bickford Ranch Road and associated utilities (water and sewer trunk mains) through Phase 1 of the BRSP, and extension of such infrastructure through a portion of BRSP Phase 2 to the project entry (see Figure 1-1). The applicant for the proposed project has indicated that it is not financially feasible to proceed with the proposed project prior to the completion of Phase 1 of the approved BRSP project; specifically, the cost of the key backbone infrastructure needed to serve the proposed project cannot be borne by the 34-lot proposed project alone. As a result, the proposed project would be developed subsequent to completion of the Phase 1 infrastructure for BRSP. It is, therefore, necessary to identify the number of residential units that could be built in BRSP Phase 1 and considered part of the baseline for the proposed project analysis. As shown in Table 1-1, the total possible number of units in Phase 1 of the BRSP is 1,010.

Parcel	Specific Plan Land Use	# of Units
RR-1	Rural Residential	1
RR-6	Rural Residential	4
LDR-01	Low Density Residential	26
LDR-02	Low Density Residential	20
LDR-03	Low Density Residential	35
LDR-04	Low Density Residential	72
LDR-05	Low Density Residential	103
LDR-06	Low Density Residential	8
LDR-07	Low Density Residential	3
LDR-08	Low Density Residential	103
LDR-19	Low Density Residential	196
LDR-20	Low Density Residential	89
LDR-21A	Low Density Residential	198
LDR-21B	Low Density Residential	128
LDR-22	Low Density Residential	24
<b>Total</b>		<b>1,010</b>
* Based on Table 3-2 of the BRSP (December 2015) and Exhibit 2 of BRSP Phase 1 Infrastructure Phasing Plan (April 4, 2017).		

Consistent with the BRSP Infrastructure Phasing Plan, it is reasonable to assume that the BRSP owners would proceed by constructing homes along with Phase 1 backbone infrastructure in an effort to help finance the infrastructure costs.



Figure 1-1  
BRSP Phasing





Furthermore, given the State of California's current housing crisis,<sup>1</sup> it is reasonable to assume that there will be sufficient demand for the proposed homes. The weight of evidence suggests that it is reasonable to assume that BRSP Phase 1 would include concomitant construction of homes and infrastructure, rather than just infrastructure. It should be noted that BRSP Phase 1 would include three subphases, as shown in Figure 1-2. Subphase 1A includes 350 units; Subphase 1B includes 439 units, and Subphase 1C includes 221 units. Each subphase also includes construction of the water, sewer, drainage and roadway infrastructure needed to serve the subphase. The construction and installation of Subphase 1A backbone infrastructure began in July 2021. All 1,010 units associated with Phase 1 are conservatively anticipated to be built prior to commencement of construction of The Ridge. Given the preceding information, commencement of subsequent BRSP phases (i.e., 2 and/or 3) may also be underway prior to or during construction of The Ridge project.

To assume that construction of the BRSP infrastructure would proceed without associated housing construction could be considered speculative, which is discouraged by the CEQA Guidelines (Section 15145). Thus, substantial evidence exists to support use of the above-articulated adjustments to the existing conditions baseline for The Ridge EIR. Because the proposed project cannot move forward without completion of Phase 1 of the BRSP, adjusting the proposed project's baseline to reflect completion of BRSP Phase 1 gives the public and decision-makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts (CEQA Guidelines Section 15125[a]). The approved land uses for the portions of the BRSP adjacent to the project site are shown in Figure 1-3, which is an excerpt from the approved BRSP land use plan.

## 1.6 SCOPE OF THE EIR

The Initial Study prepared for the proposed project during the scoping period (see Appendix C) includes a detailed environmental checklist addressing a range of technical environmental issues. For each technical environmental issue, the Initial Study identifies the level of impact for the proposed project. The Initial Study identifies the environmental effects as either "no impact," "less than significant," "less than significant with mitigation incorporated," or "potentially significant." Impacts identified for the proposed project in the Initial Study as "no impact," "less-than-significant," or "less-than-significant with mitigation incorporated" are summarized below. All remaining issues identified in the Initial Study as "potentially significant" are discussed in the subsequent technical chapters of this EIR.

- *Aesthetics (Items I-1, I-2)*: According to the General Plan, the Placer County Planning Area 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 proposed project site, implementation of the proposed project would not have a substantial adverse effect on a scenic vista, and a *less-than-significant* impact would occur.

In addition, according to the California Scenic Highway Mapping System, Placer County does not contain any officially designated State Scenic Highways. Therefore, implementation of the proposed project would not substantially damage scenic resources including but not limited to, trees, rock outcroppings, and historic buildings, within a State Scenic Highway, and *no impact* would occur.

<sup>1</sup> See for example, the *Housing Crisis Act* of 2019.



**Figure 1-2  
 BRSP Phase 1 Subphasing**

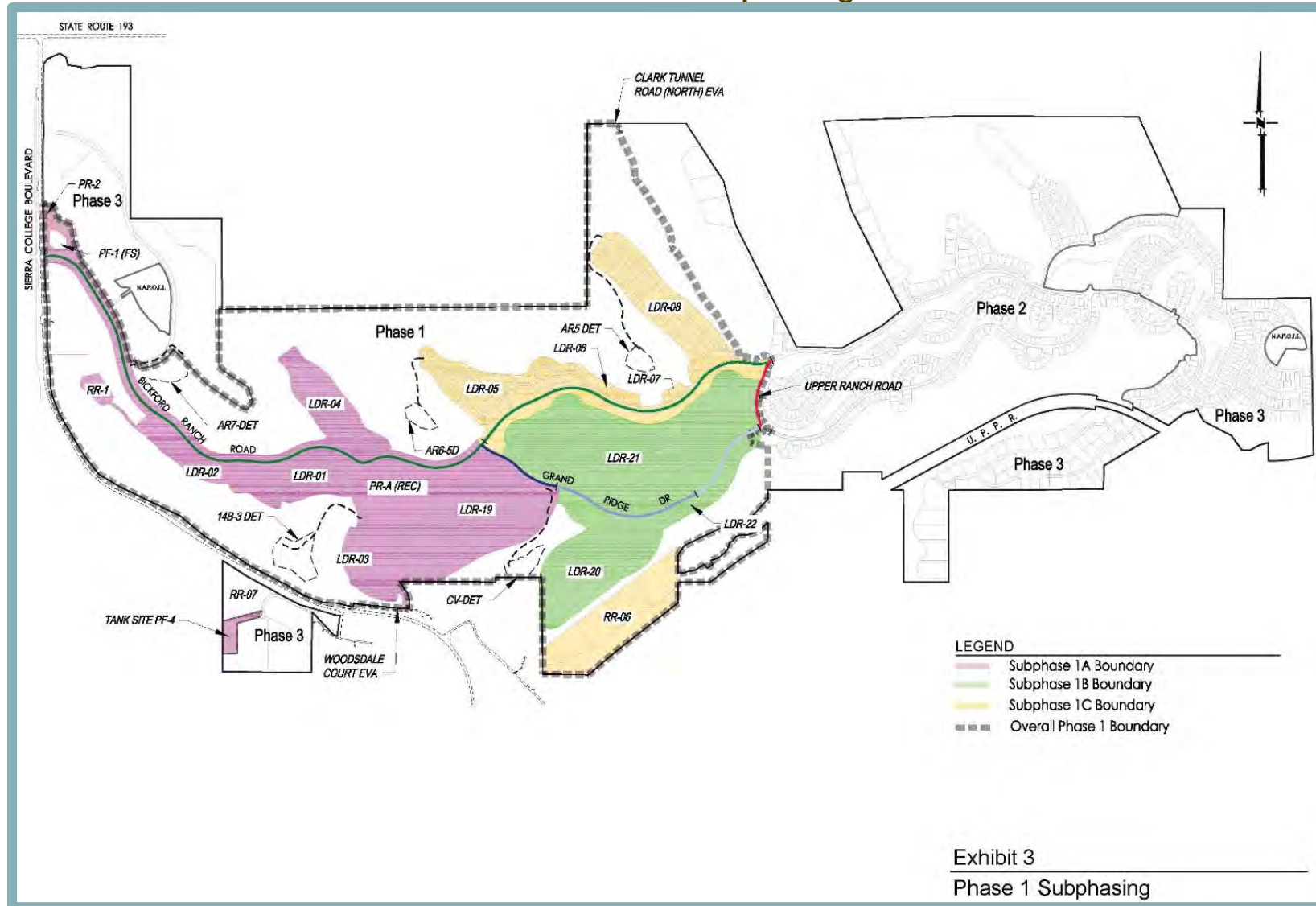
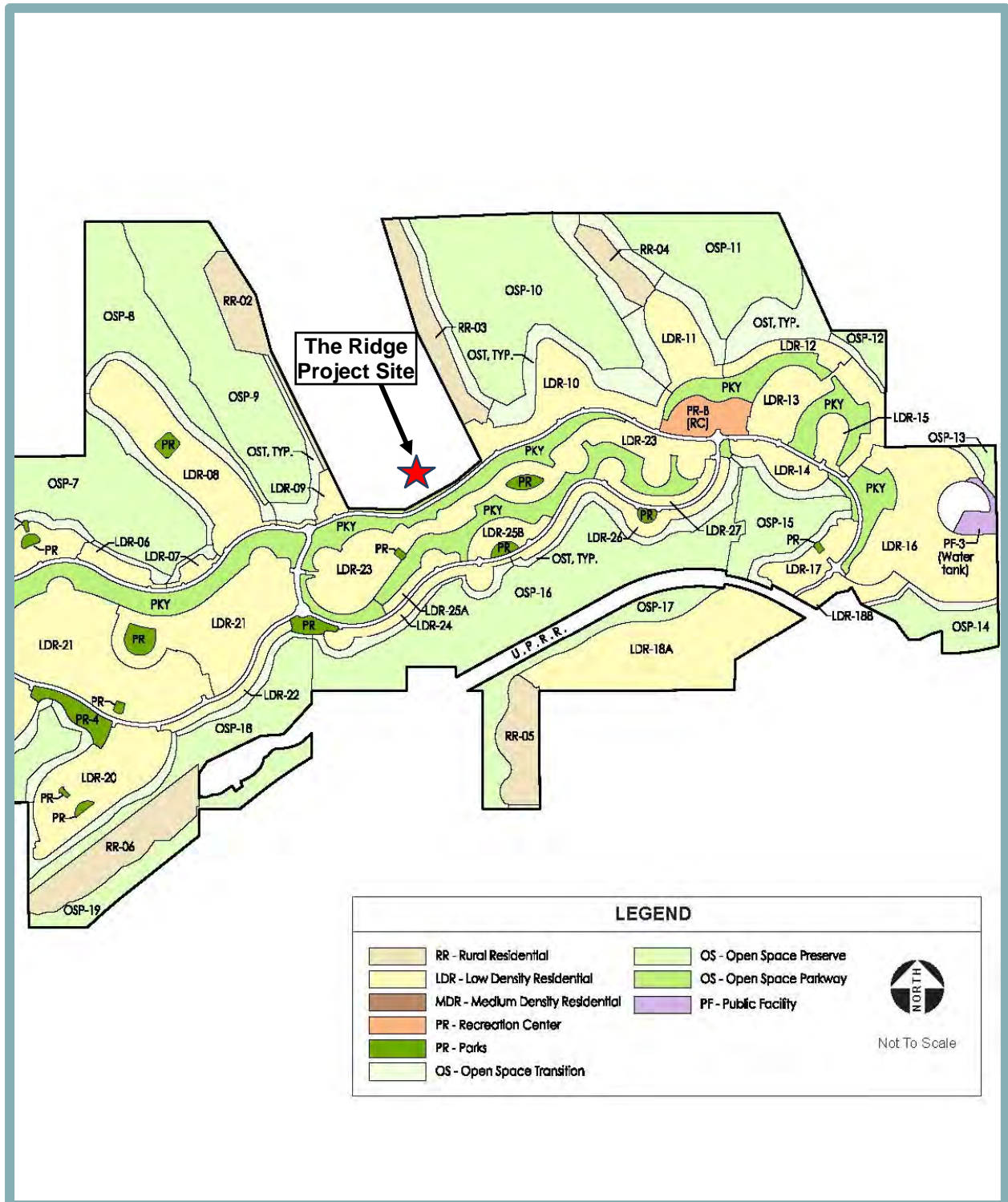


Figure 1-3  
BRSP Land Use Plan



- *Agricultural & Forest Resources (All Items)*: According to the Department of Conservation's Farmland Mapping and Monitoring Program, the project site is classified as Farmland of Local Importance, while the off-site improvement areas are classified as Grazing Land. Therefore, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance 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 or conversion of forest land to non-forest use. The Placer County General Plan designates the site as Agriculture/Timberland 10-Ac. Min. and the site is zoned F-B-X 10-Ac. Min.; however, on-site agriculture is limited to grazing. Other common agricultural uses of the site would be limited due to soil type. Currently, seasonal cattle grazing occurs on the undeveloped ranch to the north of the project site, which is owned by the project applicant.

Placer County has adopted a Right-to-Farm Ordinance to minimize loss of the County's commercial agricultural resources by limiting the circumstances which agricultural operations may be deemed to constitute a nuisance. As part of the project, the County would require a standard condition of project approval for notification to future homeowners of the County's Right-to-Farm Ordinance. The native oak trees within the project footprint are considered forestland, as defined by PRC Section 12220(g), and the area is designated Timberland by the County General Plan. Pursuant to the Placer County Conservation Plan (PCCP), impacts to oak woodland are subject to payment of PCCP Development Fees – Land Conversion for the foothills, which would fully address potential forest land/oak woodland impacts through off-site purchase of oak woodland preserves. Based on the above, a *less-than-significant* impact would occur related to agricultural and forest resources.

- *Air Quality (Items III-4)*: The proposed project would not involve or be located in the vicinity of any uses or operations typically associated with the generation of significant odors. While construction may result in objectionable odors, construction is temporary and operation of equipment is regulated by federal, State, and local standards, including PCAPCD rules and regulations. In addition, construction equipment would operate at varying distances from existing sensitive receptors; thus, potential odors from construction equipment would not expose any single receptor for a substantial period of time. With regard to 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 construction equipment would be required to meet visible emission standards defined by Rule 202. During operations, the proposed project would not be anticipated to result in substantial visible emissions. Therefore, a *less-than-significant* impact related to emissions (such as those leading to odors) adversely affecting a substantial number of people would result.
- *Cultural Resources (All Items)*: According to the Cultural Resources Assessment prepared for the proposed project, one historic built environment resource, a previously recorded segment of the Caperton Canal (P-31-000963, CA-PLA-000840H), is located immediately north of the project site. However, the segment of Caperton Canal along the project site is not considered historically significant according to the California Register of Historical Resources eligibility criteria. In addition, the Cultural Resources Assessment did not identify any known existing religious or sacred uses within the project site. Therefore, a *less-than-significant* impact would occur related to causing a substantial adverse change



in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5, and related to restricting existing religious or sacred uses within the potential impact area.

The pedestrian survey conducted as part of the Cultural Resources Assessment resulted in the identification of one new archaeological site, Ridge-FEA-01, within the project site boundaries. Ridge-FEA-01 would be located within the proposed Lot B and surrounded by a new post-and-cable fence, providing a 20-foot buffer surrounding the resource. Nonetheless, the potential exists for Ridge-FEA-01 to be subject to disturbance during construction activities. Furthermore, given the extent of documented Native American occupations within the project region, unknown archaeological resources have the potential to be uncovered during ground-disturbing activities associated with the proposed project. Although human remains or evidence thereof was not identified during the site surveys, the potential for unknown human remains to be discovered during construction cannot be eliminated given the known prehistoric occupation of the vicinity by Native American tribes. However, implementation of Mitigation Measures V-1 through V-4 would reduce all such impacts to a *less-than-significant* level.

- *Energy (Item VI-1)*: Construction of the proposed project is required to comply with the California Building Standards Code (CBSC) and the 2019 Building Energy Efficiency Standards (which is a portion of the CBSC). Compliance with the CBSC would ensure that the proposed project would not result in insufficient or wasteful use of energy during operations. All construction equipment and operation thereof would be regulated per the California Air Resources Board (CARB) In-Use Off-Road Diesel Vehicle Regulation. Project construction would also be required to comply with all applicable PCAPCD rules and regulations related to energy efficiency, which would help to further reduce energy use associated with the proposed project. Therefore, the proposed project would not result in a wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operations, and the impact would be considered *less than significant*.
- *Geology & Soils (All Items)*: Given that the proposed project would be served by the existing public sewer system, the project would result in *no impact* related to having soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems.

Buildout of the proposed project would require grading, excavation, and other construction-related activities that could cause topsoil to be exposed, potentially resulting in erosion or an accelerated rate of erosion. While Improvement Plans 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), short-term construction-related impacts associated with soil erosion and the loss of top soil could occur. According to the Placer County General Plan, the western portion of the County, in which the project site is located, is generally characterized by low seismicity, and is not in an area at risk for severe ground shaking associated with earthquakes. In addition, the proposed 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 occur, the design of project structures would be required to adhere to the provisions within the CBSC. The Geotechnical Exploration prepared for the proposed project determined that, based on site observations, topographic and lithologic data, subsurface data, and regional geology, the overall potential for landslides, lateral spreading, liquefaction, or subsidence at the site



is low to negligible. Additionally, the Geotechnical Exploration did not identify expansive soils within the project site. The Geology and Soils section of the Initial Study also considered paleontological resources, and determined that the potential exists for paleontological resources or unique geologic features to be unearthed and disturbed during construction. Implementation of Mitigation Measures VII-1 through VII-5, which include the County's standard geology and soils requirements for development projects, would reduce all aforementioned impacts to *less-than-significant* levels.

- *Hazards and Hazardous Materials (Items IX-1 through IX-6)*: The project area is not located within the vicinity of a public airport or a private airstrip, nor is the site located within an airport land use plan. Therefore, the proposed project would not create safety hazards for people living or working in the project area as a result of being in close proximity to an airport, and *no impact* would occur.

During construction of the proposed project, proper handling and usage of potentially hazardous materials in accordance with label instructions would ensure that adverse impacts to human health or the environment would not occur. Operations of the proposed single-family residential project would not include the routine transport, use, disposal, or generation of substantial amounts of hazardous materials. The project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Features such as septic systems, wells, above-ground storage tanks, underground storage tanks, or other features related to uses of environmental concern were not identified on the site. The proposed project would not be located within 0.25-mile of an existing or proposed school and, thus, the handling of hazardous materials within 0.25-mile of a school would not occur. The proposed project would not include any substantial modifications to planned Bickford Ranch Road and, therefore, would not interfere with an adopted emergency response plan or emergency evacuation plan.

Overall, the proposed project would have a *less-than-significant* impact with respect to the following: creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; being located on a list of hazardous materials sites compiled pursuant to Government Code Section 56962.5; and impairing implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan.

- *Hydrology & Water Quality (All Items)*: The proposed project would not rely on groundwater as a potable water source and would not substantially interfere with groundwater recharge. Further, the proposed project would not substantially degrade groundwater quality given the limited infiltration potential of the on-site soils. Therefore, the proposed project would result in a *less-than-significant* impact related to substantially decreasing groundwater supplies or interfering substantially with groundwater recharge, or conflicting with or obstructing implementation of a water quality control plan or sustainable groundwater management plan.



The proposed project would satisfy the treatment and flow control requirements set by the West Placer Storm Water Quality Design Manual and would appropriately manage runoff for 100-year storm events. Thus, the project would not substantially alter the existing drainage pattern of the project area or substantially increase the rate or amount of surface runoff. A final drainage report would be required with the project Improvement Plans to substantiate the preliminary drainage design. Without approval of a final drainage report, a potentially significant impact could occur. Compliance with the State National Pollutant Discharge Elimination System (NPDES) Construction General Permit and Article 8.28 and 15.48 of the Placer County Code, as required by Mitigation Measures VII-1 through VII-4 within the Initial Study, would minimize the potential degradation of stormwater quality and downstream surface water associated with construction of the proposed project. In addition, Best Management Practices (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). Implementation of Mitigation Measures X-1 through X-6 would reduce the aforementioned potential impacts to *less-than-significant* levels.

According to the Federal Emergency Management Agency's flood insurance rate map, the project site is not located within a 100-year flood zone. Therefore, the proposed project would not place housing or improvements within a 100-year flood hazard area, and *no impact* would occur.

- *Land Use & Planning (Items XI-1, XI-3, and XI-4)*: The proposed project would be consistent with planned uses in the vicinity of the project site. Therefore, the proposed project would not physically divide an established community or disrupt or divide the physical arrangement of an established community. The project lot sizes would be consistent with the BRSP parcels to the east and west of the project site. In addition, the development standards for the proposed project are similar to the County-approved Rural Residential and Low-Density Residential standards set forth in the BRSP Development Standards. Further, the proposed project would be consistent with the existing rural residential character of the area and would not develop retail uses that would result in increased vacancy rates or abandonment of commercial spaces in the project vicinity, resulting in urban decay. As a result, the proposed project would result in a *less-than-significant* impact related to physically dividing an established community, incompatible uses and/or the creation of land use conflicts, or economic or social changes that would result in significant adverse physical changes to the environment such as urban decay or deterioration.
- *Mineral Resources (All Items)*: According to the Geotechnical Exploration prepared for the proposed project, the project site does not contain evidence of historic mining activities, and the General Plan does not identify any mineral resources within the Planning Area. Therefore, the proposed project would not result in the loss of availability of a known mineral resource or a locally-important mineral resource recovery site, and a *less-than-significant impact* related to mineral resources would occur.
- *Noise (All Items)*: The nearest noise sensitive receptors under the adjusted baseline would be the planned single-family residences located approximately 1,000 feet to the west of the project site, within the LDR-08 area of BRSP Phase 1. Project operational noise would



primarily consist of traffic noise. According to the project specific noise study, the addition of traffic from the proposed project would not result in significant increases in traffic noise levels along Sierra College Boulevard and, thus, the proposed project would not increase noise at existing residences along the roadway. Construction activities associated with the proposed project would require the use of numerous pieces of noise-generating equipment. In addition, construction worker traffic and construction-related material delivery trips would increase ambient noise levels. Compliance with Placer County standards, as required by Mitigation Measure XIII-1, would be necessary to ensure that the proposed construction activities would not result in a temporary or periodic increase in ambient noise levels in the project vicinity. Implementation of Mitigation Measure XIII-1 would reduce the impact to a *less-than-significant* level.

The primary vibration-generating activities associated with the proposed project would occur during construction. However, vibration levels associated with project construction would be below the threshold for damage to structures and for human annoyance. Therefore, a *less-than-significant* impact would occur related to the generation of excessive groundborne vibration or groundborne noise levels.

The project site is not covered by an airport land use plan and is not located within two miles of a private airstrip, public airport, or public use airport. Therefore, the proposed project would result in *no impact* related to exposing people in the project area to excessive noise levels associated with air traffic.

- *Population & Housing (All Items)*: The proposed project would directly result in on-site population growth. However, the proposed on-site infrastructure improvements would be sized to accommodate the proposed project only. In addition, the extension of Bickford Ranch Road and associated water and sewer lines between the BRSP Phase 1 boundaries and the proposed site boundaries have been previously planned for development and evaluated in the BRSP EIR. Thus, the infrastructure improvements have been previously anticipated to serve planned population growth within the County. Furthermore, the project site does not contain existing housing. Thus, the proposed project would not displace people or housing necessitating the construction of replacement housing elsewhere. Overall, the proposed project would not induce substantial unplanned population growth in an area, either directly (i.e., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure) and would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere, and a *less-than-significant* impact would occur.
- *Public Services (All Items)*: The Penryn Fire Protection District (PFPD) response times from Station 38 to the proposed project would meet the County's response time goal for rural areas, and would ultimately be improved upon following construction of the new BRSP fire station. In addition, the County would condition the proposed project, if approved, to require payment of the Fire Protection Facility Fee as part of ensuring the project pays a fair share of the cost associated with the design, construction, and equipping of the BRSP Fire Station. The proposed project would not substantially increase demand for Placer County Sheriff services such that construction or expanded facilities would be required. Although the proposed development would result in an increase in demand for school services, the increase in demand would not necessitate the





construction of new school facilities. In addition, the proposed project would be subject to payment of applicable school impact fees. The proposed project would only minimally increase demand on existing parks and recreational facilities, and, thus, the project is unlikely to require new facilities or expansion of existing facilities. Additionally, although project-generated traffic could result in an incremental increase in maintenance of County roads in the project area, such an increase would be negligible due to the limited number of proposed residences and associated vehicle trips. 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. 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.

- *Recreation (All Items)*: The proposed project would only minimally increase demand on existing parks and recreational facilities. In addition, the proposed project would be required to pay applicable in-lieu park fees pursuant to Section 16.08.100 of the Placer County Code. Therefore, a *less-than-significant* impact would occur related to recreation.
- *Transportation (Item XVII-4)*: The County has determined that the proposed project would provide sufficient on-site parking in accordance with Section 17.54.060 of the Placer County Code. Therefore, the proposed project would not result in insufficient parking capacity on-site or off-site, and a *less-than-significant* impact would occur.
- *Tribal Cultural Resources (All Items)*: A search of the Sacred Lands File maintained by the Native American Heritage Commission (NAHC) returned negative results for the presence of known Native American sacred sites in the immediate project vicinity. Pursuant to Assembly Bill 52 and Senate Bill 18, Placer County notified the appropriate Native American tribes of the proposed project on December 20, 2019. The United Auburn Indian Community of the Auburn Rancheria (UAIC) initiated consultation, requested a site visit, and requested copies of cultural searches/surveys. A site visit was conducted with representatives from the UAIC on January 29, 2020, and the County provided copies of the Paleontological Records Search and Cultural Resources Assessment prepared for the proposed project. The Shingle Springs Rancheria requested copies of cultural searches/surveys, which were provided, and further consultation has not been requested to date. While none of the contacted tribes identified additional known Tribal Cultural Resources on the project site beyond the resources identified in the Paleontological Records Search and Cultural Resources Assessment prepared for the proposed project, the possibility exists that construction of the proposed project could result in a substantial adverse change in the significance of a Tribal Cultural Resource if previously unknown Tribal Cultural Resources are uncovered during grading or other ground-disturbing activities. However, implementation of Mitigation Measures V-1 through V-4, agreed to between the UAIC and the County, would ensure that impacts associated with Tribal Cultural Resources would be reduced to a *less-than-significant* level.



- *Utilities & Service Systems (All Items)*: All necessary utilities to serve the proposed project have been planned for extension to the project site as part of the BRSP; therefore, the proposed project would not require or result in the relocation or construction of new off-site utilities beyond what has been anticipated by the County and analyzed in the BRSP EIR. Adequate water supplies exist to serve buildout of the PCWA service area, which includes the project site. The wastewater generated by the proposed project would not cause the Lincoln Wastewater Treatment Plant to exceed its current permitted capacity. Solid waste would be collected by Recology Auburn Placer and transported to the Western Placer Waste Management Authority's Western Regional Sanitary Landfill located in the City of Lincoln, California. As of 2017, the year for which the most recent information is available, the remaining capacity of the landfill was approximately 70 percent, or 24,468,271 cubic yards, with an estimated closure date of 2058. Thus, adequate capacity exists at the landfill to accommodate solid waste generated by the proposed project. In addition, Recology has issued a Will-Serve letter indicating that the firm is capable of providing service to the proposed project. Based on the above, impacts related to utilities and service systems would be *less than significant*.

Pursuant to the CEQA Guidelines, the scope of this EIR addresses specific issues and concerns identified as potentially significant in the Initial Study prepared for the proposed project. The sections of the CEQA Checklist identified for study in this EIR include:

- Aesthetics (Items I-3 and I-4);
- Air Quality, Greenhouse Gas Emissions, and Energy (Items III-1 through III-3; Items VIII-1 and 2; and Item VI-2);
- Biological Resources (All items);
- Transportation and Circulation (Items XVII-1 through XVII-3; and XVII-5); and
- Wildfire (All Items).

The evaluation of effects is presented on a resource-by-resource basis in Chapters 4 through 8 of the EIR. Each chapter is divided into the following four sections: Introduction, Existing Environmental Setting, Regulatory Context, and Impacts and Mitigation Measures. The Impacts and Mitigation Measures section addresses both project-specific and cumulative impacts. Impacts that are determined to be significant in Chapters 4 through 8, 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 9 of the EIR presents a discussion of growth-inducing impacts, summary of cumulative impacts, and significant irreversible environmental changes associated with the project. Alternatives to the proposed project are discussed in Chapter 10 of the 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 insubstantial, do not exceed the specified thresholds of significance, and do not require any mitigation to reduce impacts;
- 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: 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 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 (see Appendix A), as well as the attached Initial Study (see Appendix C), was circulated to the public, local, State and federal agencies, and other known interested parties for a 30-day public and agency review period from December 30, 2020 to January 28, 2021. 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.



Pursuant to CEQA Guidelines Section 15082, the County held an NOP scoping meeting for the EIR during the review period on January 14, 2021 for the purpose of receiving comments on the scope of the environmental analysis to be prepared for the proposed project. Agencies and members of the public were invited to attend and provide input on the scope of the EIR. All comments were taken into consideration during the preparation of this EIR. A summary of the NOP comments received, including the verbal comments received at the NOP scoping meeting, is provided in Section 1.9 below.

## 1.9 COMMENTS RECEIVED ON THE NOTICE OF PREPARATION

During the NOP public review period from December 30, 2020 to January 28, 2021, Placer County received nine comment letters. A copy of each letter is provided in Appendix B of this EIR. In addition, two members of the public voiced specific concerns during the NOP scoping meeting. The comment letters and verbal concerns were submitted by the following representatives of State and local agencies, as well as individual members of the general public.

### State Agencies

- California Department of Fish and Wildlife – Barker, Kelley;
- California Department of Transportation (CalTrans) – Yount, Kevin;
- Department of Toxic Substances Control – McCreary, Gavin; and
- Native American Heritage Commission – Gonzalez-Lopez, Nancy.

### Local Agencies

- Placer County Air Pollution Control District – Hobbs, Ann;
- Placer County Flood Control and Water Conservation District – Brewer, Brad; and
- Placer County Water Agency – Wirth, Richard.

### Individuals

- Green, Karen (verbal commenter);
- Neifer, Patty;
- Warren, Leslie; and
- Windgasse, Gabrielle (verbal commenter).

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:

<p><b><u>Aesthetics</u></b> (Chapter 4)</p>	<p>Concerns related to:</p> <ul style="list-style-type: none"> <li>• Light pollution/enforcement of dark sky guidelines.</li> <li>• Style/aesthetic quality of homes (i.e., building height, setback from ridge, exterior colors).</li> </ul>
<p><b><u>Air Quality, Greenhouse Gas Emissions, and Energy</u></b> (Chapter 5)</p>	<p>Concerns related to:</p> <ul style="list-style-type: none"> <li>• Implementation of a Dust Control Plan during construction.</li> <li>• Vegetation removal, and the possibility of vegetation burning, for land development.</li> <li>• Impacts related to residential outdoor burning during project operations.</li> </ul>
<p><b><u>Biological Resources</u></b> (Chapter 6)</p>	<p>Concerns related to:</p> <ul style="list-style-type: none"> <li>• Loss of plant and wildlife habitat, including riparian ecosystems.</li> <li>• Impacts to wildlife migration routes.</li> <li>• Indirect biological impacts to any designated reserve or mitigation lands.</li> </ul>



	<ul style="list-style-type: none"> <li>• Impacts related to wildlife-human interactions created from the proposed project associated with lighting, noise, and human activity.</li> <li>• Project consistency with the Placer County Conservation Program.</li> </ul>
<b>Transportation and Circulation</b> (Chapter 7)	<p>Concerns related to:</p> <ul style="list-style-type: none"> <li>• Construction-related traffic, particularly related to Clark Tunnel Road.</li> <li>• Connectivity of new trails throughout the subdivision and to the existing regional trail network.</li> </ul>
<b>Wildfire</b> (Chapter 8)	<p>Concerns related to:</p> <ul style="list-style-type: none"> <li>• Fire services from Penryn Fire Protection District.</li> </ul>
<b>Initial Study</b> (see Appendix C)	<p>Concerns related to:</p> <ul style="list-style-type: none"> <li>• Release of hazards and hazardous materials on or near the project site.</li> <li>• Increased runoff peak flow rates and increased runoff volume at downstream locations.</li> <li>• Potential for overloading stormwater and flood-carrying facilities.</li> <li>• Impacts to tribal and cultural resources.</li> <li>• Impacts to the local water table/groundwater.</li> <li>• Impacts related to the proposed change in land use designation.</li> <li>• Increase in runoff to the State's highway right-of-way and Caltrans' drainage facilities.</li> <li>• Noise pollution/increase in ambient noise levels.</li> <li>• Impacts to local schools.</li> </ul>

All of these issues are addressed in this EIR in the relevant sections identified in the first column, as well as in the attached Initial Study.

## **1.10 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 the 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  
[cdraecs@placer.ca.gov](mailto:cdraecs@placer.ca.gov)

## 1.11 ORGANIZATION OF THE DRAFT EIR

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The Ridge Project EIR is organized into the following sections:

### **Chapter 1 – Introduction**

Provides an introduction and overview describing the intended use of the EIR and the review and certification process, as well as summaries of the chapters included in the 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, major 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. 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, Greenhouse Gas Emissions, and Energy**

The Air Quality, Greenhouse Gas (GHG) Emissions, and Energy 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 PCAPCD, as well as the GHG reduction and energy efficiency measures included in the Placer County Sustainability Plan.

### **Chapter 6 – Biological Resources**

The Biological Resources chapter of the EIR evaluates the biological resources of special-status 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 – 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. Vehicle Miles Traveled will be used as the



metric for assessing transportation impacts under CEQA. The analysis includes consideration of transit impacts, bicycle impacts, and pedestrian impacts.

### **Chapter 8 – Wildfire**

The Wildfire chapter of the EIR includes an evaluation of whether the proposed project would exacerbate the risk for wildfires, expose people and/or structures to significant wildfire risks, substantially impair an adopted emergency response plan or emergency evacuation plan, or expose people or structures to significant risks, including downslope flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. The chapter offers mitigation measures to eliminate or substantially reduce impacts, as necessary.

### **Chapter 9 – Statutorily Required Sections**

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

### **Chapter 10 – 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 are analyzed at a level of detail less than that of the proposed project; however, the analyses include sufficient detail to allow for a meaningful comparison of impacts.

### **Chapter 11 – References**

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

### **Chapter 12 – 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 and IS, comments received during the NOP comment period, and technical reports prepared for the proposed project.

## **1.12 TECHNICAL CHAPTER FORMAT**

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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:



## **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.

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

#### **Mitigation Measure(s)**

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

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

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

## **Cumulative Impacts and Mitigation Measures**

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

### **X-2 Statement of Cumulative Impact**

Discussion of cumulative impacts for the proposed project in paragraph format.

As discussed in detail in Chapter 9, Statutorily Required Sections, of the EIR, the cumulative setting for the proposed project is generally considered to be development anticipated to occur upon buildout of The Ridge Project, as well as buildout of a number of approved or reasonably foreseeable projects within the project region (i.e., the BRSP, Bickford Ranch Marketplace, La Faille Ranch).

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





Mitigation Measure(s)

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

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

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

### **1.13      FINAL EIR AND EIR CERTIFICATION**

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Upon completion of the Draft EIR 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 PRC Section 21081.6. The Final EIR will address 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 also will be required to adopt Findings of Fact and, for any impacts determined to be significant and unavoidable, adopt a Statement of Overriding Considerations.



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## **2. EXECUTIVE SUMMARY**

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## 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 8. This chapter also summarizes the alternatives to the proposed project that are described in Chapter 10, 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 is a 24.95-acre horseshoe-shaped parcel located approximately one mile southeast of the intersection of State Route (SR) 193 and Clark Tunnel Road in Placer County. The site is identified by Assessor's Parcel Number (APN) 031-106-030-000. The Placer County General Plan designates the site as Agriculture/Timberland 10-Ac. Min. and the site is zoned Farm, combining minimum Building Site of 10 acres (F-B-X 10-Ac. Min.). Currently, the project site is undeveloped, consisting primarily of grassland, oak woodland, and scattered rock outcroppings.

The site is surrounded by a dirt road to the south and a densely wooded area to the north, which is a part of an undeveloped ranch (La Faille Ranch), owned by the project applicant. The southern boundary of the La Faille Ranch property features the concrete-lined Caperton Canal. The areas to the east, south, and west of the site are undeveloped but are planned for buildout with low-density residential and rural residential uses as part of the Bickford Ranch Specific Plan (BRSP). BRSP Phase 1 would include three subphases. Subphase 1A commenced in July 2021 with the construction of backbone infrastructure.

The proposed project would include the subdivision of the project site to develop 34 single-family residential homes, an internal roadway, a detention/retention basin, and associated improvements. Of the 34 total residential lots, 28 would be medium density lots and the remaining six lots would be larger, low density lots. In addition, the proposed project would include construction of a six-foot masonry wall along the project frontage at Bickford Ranch Road. The remainder of the proposed development area would be surrounded by split rail fencing along the east and west boundaries where residential lots are proposed and wrought-iron fencing elsewhere. The proposed project would also include new trees and other landscaping elements along Bickford Ranch Road, street trees internal to the site, and enhanced landscaping at the project entry that would be gated.

The proposed project would require County approval of the following entitlements:

- General Plan Amendment to change the site's land use designation from Agriculture/Timberland 10-Ac. Min. to MDR (13.85 acres) and LDR (11.10 acres);
- Rezone from F-B-X 10-Ac. Min. to RS-B-8 (13.85 acres) and RS-B-10 (11.10 acres); and



- Vesting Tentative Subdivision Map.

The following additional County approval is required:

- Annexation into Placer County Sewer Maintenance District 1 (SMD 1); and
- Annexation into Bickford Ranch Community Facilities District for applicable services.

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

- Placer County Conservation Program Authorization
- Placer County Water Agency – Related to construction in proximity to Caperton Canal;
- Regional Water Quality Control Board – National Pollutant Discharge Elimination System (NPDES) Permit;
- Placer County Air Pollution Control District;
- U.S. Army Corps of Engineers – Section 404 Permit; and
- Regional Water Quality Control Board – Section 401 Permit.

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 MITIGATION**

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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; Biological Resources; Transportation and Circulation; and Wildfire. Additionally, the Initial Study prepared for the proposed project (see Appendix C) includes mitigation measures that must be implemented as part of the proposed project associated with the following resource areas: Cultural Resources, Geology and Soils, Hydrology and Water Quality, Noise, and Tribal Cultural Resources. The mitigation measures required for the proposed project, as presented in this EIR and the Initial Study, 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.

In Table 2-1, provided at the end of this chapter, a summary of the proposed project's impacts are identified for each technical chapter (Chapters 4 through 8) of the EIR, as well as the proposed project's mitigable impacts identified in the Initial Study (see Appendix C). Refer to Chapter 1, Introduction, of the EIR for more information regarding the analysis included in the Initial Study. 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;
- Clustered Development Alternative; and
- Large-Lot Residential Alternative.

For a more thorough discussion of project alternatives, please refer to Chapter 10, 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 grassland, oak woodland, and scattered rock outcroppings and is absent of structures. The No Project (No Build) Alternative would not meet any of the project objectives.

### **Clustered Development Alternative**

The Clustered Development Alternative would cluster the single-family lots along the southern portion of the project site in an effort to avoid all on-site oak woodland habitat. Given the limited land area available for development under the Alternative, the internal roadway would be eliminated and direct access to the lots would be provided by Bickford Ranch Road. Thus, homes would front Bickford Ranch Road, and, in order to minimize the number of driveways connecting to Bickford Ranch Road, tandem driveways would be provided. It is estimated that 15 homes would front Bickford Ranch Road, and two additional residential lots and a stormwater detention/retention basin lot would be provided in the southwest corner of the project site, with access from a new cul-de-sac. Thus, the total number of single-family homes under this Alternative would be 17, which is half of the proposed project's density. This Alternative would require a General Plan Amendment to redesignate the site from Agriculture/Timberland 10-Ac. Min. to Low Density Residential (1-5 dwelling units per acre) and a rezone from Farm, combining minimum Building Site of 10 acres (F-B-X 10-Ac. Min.) to Residential Single-Family, combining minimum Building Site anticipated to be 8,000 square feet (RS-B-8).

Similar to the proposed project, the Alternative would include the establishment and on-going maintenance of an off-site, 300-foot-wide MSFB along the project's northern boundary, north of the Caperton Canal. It is assumed that the intervening, on-site oak woodland would also be managed for fuel reduction purposes.

Because the Clustered Development Alternative would include development of the project site with residential uses adjacent to the BRSP, Objective 1 would be met. While the Clustered Development Alternative would result in project structures being set further back from the ridgeline, the Alternative would not include the project's landscape buffer along Bickford Ranch Road. Thus, although the alternative would meet Objective 3 (e.g., provide high quality residential community compatible and consistent with adjacent approved residential development), it may not satisfy the objective to the same extent as the proposed project. Considering the Clustered Development Alternative would include only 17 residential units as compared to the proposed 34 units, Objective 2, which aims to provide housing to accommodate population growth, would be achieved to a lesser extent. Because the Alternative would avoid oak woodland habitat, Objective 4 would be met.



### **Large-Lot Residential Alternative**

The Large-Lot Residential Alternative would include development of the project site at a reduced density using larger residential lots. It is assumed that lots would be 2.3 acres in size, thus resulting in a development potential of 10 single-family homes. The 10 lots are assumed to be custom, non-pad graded lots, thereby increasing the potential for tree retention during home design and construction. This Alternative would require a General Plan Amendment to redesignate the site from Agriculture/Timberland 10-Ac. Min. to Rural Residential (1-10 acre minimum) and a rezone from F-B-X 10-Ac. Min. to Residential Agricultural 2.3-acre minimum RA-B-100). Similar to the proposed project, this Alternative would also include a separate lot for a detention/retention basin and vehicle access would be from one of two driveways connecting to Bickford Ranch Road, or from two on-site private laneways.

Similar to the proposed project, this Alternative would include the establishment and on-going maintenance of an off-site, 300-foot-wide MSFB along the project's northern boundary, north of the Caperton Canal.

Because the Large-Lot Residential Alternative would include development of the project site with residential uses adjacent to the BRSP, Objectives 1 and 3 would be met. However, considering the Alternative would include only 10 residential units as compared to the proposed 34 units, Objective 2, which aims to provide housing to accommodate population growth, would be achieved to a lesser extent. Because the Alternative would have the potential to reduce tree removal, Objective 4 would 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.

The No Project (No Build) Alternative would not meet any of the project objectives. Both the Clustered Development Alternative and the Large-Lot Residential Alternative would meet Objectives 1 and 3. However, the Clustered Development Alternative would include the development of more units than the Large-Lot Residential Alternative and, therefore, would more substantially achieve Objective 2. In addition, because the Clustered Development Alternative would avoid on-site oak woodland, the Alternative would fully achieve Objective 4. Although the Large-Lot Residential Alternative has the potential to avoid oak trees, the full implementation of Objective 4 cannot be ensured at this time, given the customized nature of the Alternative's 10 lots. In other words, because the lots would be custom non-pad graded lots, the extent of grading by future lot buyers, and extent of related tree impacts, requires speculation.

As discussed throughout the Alternatives chapter, both the Clustered Development Alternative and the Large-Lot Residential Alternative would result in fewer impacts than the proposed project related to air quality, GHG emissions, energy; transportation and circulation; and wildfire. However, because the Clustered Development Alternative would result in a smaller area of



disturbance, the Alternative would result in fewer impacts to biological resources and, specifically, fewer impacts to oak woodlands.

Based on the above, the Clustered Development Alternative would be considered the environmentally superior alternative to the proposed project.

## **2.5 AREAS OF KNOWN CONTROVERSY**

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

- Concerns related to introducing light to the area, and compliance with dark sky guidelines.
- General aesthetic concerns (style of homes).
- Potential increase in dust and other pollutants.
- Potential for disposal of vegetation by burning.
- Loss of plant and wildlife habitat, including riparian ecosystems.
- Potential impacts to wildlife migration routes.
- Potential for Clark Tunnel Road closures due to construction.
- Construction vehicles using Clark Tunnel Road.
- Fire services from Penryn Fire Protection District.
- Increased runoff peak flow rates and volume of runoff at downstream locations.
- Impacts related to the inadvertent discovery of cultural and tribal cultural resources.
- Indirect impacts from General Plan Amendment.



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>4. Aesthetics</b>			
<b>4-1</b> 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
<b>4-2</b> Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	S	<b>4-2</b> 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 consistent with Section 7 of the Bickford Ranch Specific Plan Development Standards/Design Guidelines (August 2015), which includes but is not limited to standards related to utilization of Dark-Sky compliant principles, limiting amount of light to achieve minimum adequate nighttime visibility, minimizing sky glow by controlling the amount of uplight, utilizing shields or other design techniques to direct light downward, etc.	LS
<b>4-3</b> Long-term changes in visual character associated with cumulative development of the	LCC	None required.	N/A

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





**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
proposed project in combination with future buildout of the BRSP.			
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 BRSP.	LCC	<i>None required.</i>	N/A
<b>5. Air Quality, Greenhouse Gas Emissions, and Energy</b>			
5-1 Conflict with or obstruct implementation of the applicable air quality plan during project construction.	LS	<i>None required.</i>	N/A
5-2 Conflict with or obstruct implementation of the applicable air quality plan during project operation.	LS	<i>None required.</i>	N/A
5-3 Expose sensitive receptors to substantial pollutant concentrations.	LS	<i>None required.</i>	N/A
5-4 Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.	LS	<i>None required.</i>	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	LCC	<i>None required.</i>	N/A

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



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).			
<b>5-6</b> 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	<i>None required.</i>	N/A
<b>6. Biological Resources</b>			
<b>6-1</b> Impacts to special-status plant species either directly (e.g., threaten to eliminate a plant community) or through substantial habitat modifications.	S	6-1(a) <i>Prior to ground disturbance, the project applicant shall enlist a qualified botanist to conduct a botanical survey within project site's footprint during the applicable evident and identifiable blooming periods for special-status plant species having the potential to occur within the Study Area, including big-scale balsamroot (blooms March through June), Ahart's dwarf rush (blooms March through May), Butte County Fritillary (blooms March through June), dwarf downingia (blooms March through May), dubious pea (blooms April through May), Humboldt lily (blooms May through August), oval-leaved viburnum (blooms May through June), Red Hills soaproot (blooms May through June), streambank spring beauty (blooms February through May), and valley brodiaea (blooms April through May). A</i>	LS

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



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>survey conducted in May shall satisfy the blooming periods for all of the aforementioned plants. If no special-status plants are observed, the botanist shall document the findings in a letter report to the Placer County Community Development Resource Agency and no additional mitigation measures shall be required.</i></p> <p>6-1(b) <i>If any of the aforementioned special-status plant species are identified within areas of potential ground disturbance, they shall be avoided to the greatest extent feasible, as determined by a qualified botanist. If the plants cannot be avoided, a mitigation plan shall be prepared in consultation with the Placer County Community Development Resource Agency. The plan shall detail the various avoidance and minimization approaches to ensure no net loss of the special-status plants, such as transplanting individual plants, transplanting the seedbank by way of topsoil salvage to suitable habitat near the project site but outside of the construction footprint, or use of appropriate nursery stock. The plan shall include at a minimum: (1) transplantation procedures success criteria and (2) long-term monitoring protocols sufficient to verify establishment for plant species subject to mitigation.</i></p> <p>6-1(c) <i>Modified Shaded Fuel Break (MSFB): Prior to ground disturbance associated with the initial establishment of the MSFB, Mitigation Measures 6-</i></p>	

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



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>1(a) and 6-1 (b) shall be implemented. Annual maintenance of the MSFB through grazing and use of approved hand-held equipment is not anticipated to result in ground disturbance. Ground-disturbing methods shall require prior County approval and implementation of Mitigation Measures 6-1(a) and 6-1(b) for the affected area.</p> <p>6-1(d) If the applicant proceeds ahead of BRSP Phase 2 improvements in order to construct the 400-foot segment of Bickford Ranch Road to the project's boundaries, then Mitigation Measure B-G from the BRSP EIR shall be implemented within the portion of Bickford Ranch Road that would be constructed by The Ridge project, as follows:</p> <p>Before construction, the Applicant will hire a County-approved botanist to survey oak woodlands within all proposed construction areas for big-scale balsamroot, Layne's ragwort (<i>Packera layneae</i>), oval-leaved viburnum (<i>Viburnum ellipticum</i>), and Red Hills soaproot (<i>Chlorogalum grandiflorum</i>). In all areas of oak woodland that will be graded, a survey should be conducted between March and May for big-scale balsamroot, April and August for Layne's ragwort, May and June for oval-leaved viburnum, and May and June for Red Hills soaproot. If no special-status plants are identified within construction areas, no</p>	

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



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>further mitigation is required. However, if one or more populations are found within proposed construction areas, the Applicant will implement measures to be developed in coordination with the CDFW (and USFWS for layne's ragwort) to avoid the population, minimize impacts on the population, and/or compensate for removal of the population. Potential compensation measures may include avoidance of populations, where feasible; minimization of impacts on populations; purchase and preservation of another known population of the affected species; or attempts to transplant the species to an undisturbed area within the project site.</i></p> <p><i>Before construction and/or approval of improvement plans, the Applicant will hire a County-approved botanist to survey oak woodlands within all proposed construction areas for big-scale. In all areas of oak woodland that will be graded, a survey should be conducted between March and May for big-scale balsamroot. If no special-status plants are identified within construction areas, no further mitigation is required. However, if any special-status plant populations are found within proposed construction areas, the project biological monitor will evaluate the significance of the population(s). If any special-status plant</i></p>	

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



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>population is too small and isolated to be sustainable, the impact will be considered less than significant. If any special status plant population is large enough to be potentially sustainable, the loss of the population will be considered significant and the Applicant will implement mitigation. Potential mitigation measures for the loss of a special-status plant population include complete avoidance of the population, if feasible; minimization of the impact, i.e., partial avoidance; purchase and preservation of another known population of the affected species; transplantation of the plants or collection and sowing of the seeds to another on-site location; collection and sowing of seeds to an off-site location.</i></p> <p><i>The most feasible of these potential mitigation measures for any California balsamroot population that could not be avoided would be to transplant or seed the population to an undisturbed area of open canopied oak woodland or grassy slope on the site. A recommended location is within the open space preserve.</i></p> <p><i>If a State or federal listed plant species population is identified within the proposed construction area, the Applicant will notify CDFW (for State-listed species) and/or the</i></p>	

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



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>USFWS (for federally listed species). CDFW and/or the USFWS may impose alternative or additional mitigation requirements to the soil transplantation for impacts to listed species. If alternative mitigation requirements are imposed, the Applicant will implement the alternatives in lieu of the proposed soil transplantation. If additional mitigation requirements are imposed, the Applicant will implement both the soil transplantation mitigation and the agency mitigation.</i></p>	
<p><b>6-2 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 western spadefoot.</b></p>	<p>S</p>	<p>6-2(a) <i>Prior to any ground-disturbing activities associated with the proposed project, the project applicant shall enlist a qualified biologist to conduct a pre-construction survey for western spadefoot within existing suitable habitat within the Study Area. The survey shall be conducted between February 1st and March 31st, when western spadefoots are above ground and identifiable. If no western spadefoots are found within the Study Area, then a letter report shall be prepared to document the survey and submitted to the Placer County Community Development Resource Agency, and no additional mitigation shall be required. Construction may begin within one-year after the survey is conducted and construction is not required to start immediately after the survey is completed.</i></p> <p>6-2(b) <i>If western spadefoots are identified during the focused survey, then prior to commencement of</i></p>	<p>LS</p>

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



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>ground-disturbing activities, a qualified biologist shall conduct an environmental awareness training for all construction personnel. The training shall include information on the identification of special-status species including western spadefoot, required practices before the start of construction, general measures that are being implemented to conserve the species as they relate to the proposed project, penalties for non-compliance, and boundaries of the Study Area and of the permitted disturbance zones. Supporting materials containing training information shall be prepared and distributed to construction personnel during the training. Upon completion of training, all construction personnel shall sign a form stating that they have attended the training and understand all of the measures. Proof of training completion shall be kept on-file with the project applicant as well as submitted to the Placer County Community Development Resource Agency.</i></p> <p>6-2(c) <i>If western spadefoots are identified during the focused survey, a qualified biologist shall be present on-site during initial ground-clearing and grading activities for the purpose of relocating any western spadefoot found within the construction footprint to suitable habitat away from the construction zone, but within the Study Area. The biologist shall obtain permission for relocation from CDFW, prior to relocation of western spadefoots. A brief letter report</i></p>	

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





**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>documenting the implementation of relocation procedures and results of the relocation shall be provided to the Placer County Community Development Resource Agency within 14 days of translocation activities. A copy of the letter shall be provided to CDFW, if requested.</i></p> <p>6-2(d) <i>Modified Shaded Fuel Break (MSFB): A qualified biologist shall conduct a survey for western spadefoot between February 1 and March 31 of the year the MSFB is established and any subsequent year in portions of the MSFB where fuel maintenance activities other than grazing or the use of approved hand-held equipment will take place that year.</i></p> <p><i>If western spadefoots are found during the survey, an environmental training program shall be conducted by a qualified biologist for all personnel who will be engaged in fuel maintenance that year. The program shall cover identification of the western spadefoot, steps to take prior to and during construction, areas to be avoided (if any), and penalties for non-compliance.</i></p> <p><i>If any western spadefoots are discovered during fuel maintenance, a qualified biologist shall obtain permission from CDFW to relocate the individuals, and shall document the relocation in a letter report provided to the Placer County Community</i></p>	

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



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<i>Development Resource Agency within 14 days of translocation activities. A copy of the letter shall be provided to CDFW, if requested.</i>	
<p><b>6-3 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 andrenid bee, Morrison bumble bee, western bumble bee, and VELB.</b></p>	<p>S</p>	<p>6-3 <i>If the applicant proceeds ahead of BRSP Phase 2 improvements in order to construct the 400-foot segment of Bickford Ranch Road to the project's boundaries, then Mitigation Measures B-I and/or B-J from the BRSP EIR shall be implemented within the portion of Bickford Ranch Road that would be constructed by The Ridge project, as follows:</i></p> <p><i><u>BRSP MM B-I:</u> For elderberry shrubs that will not be removed or damaged by the project, the Applicant will protect elderberry shrubs from inadvertent harm during construction as described in the USFWS's VELB mitigation guidelines. The Applicant will:</i></p> <ul style="list-style-type: none"> <li><i>• Fence and flag all areas to be avoided with a minimum setback of at least 20 feet from the dripline of each elderberry plant.</i></li> <li><i>• Brief contractors on the need to avoid damaging elderberry plants and the possible penalties for not complying with these requirements.</i></li> <li><i>• Install signs every 50 feet along the edge of the avoidance areas with the following information, "This area is habitat of the valley elderberry"</i></li> </ul>	<p>LS</p>

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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
		<p><i>longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment.” The signs should be clearly readable from a distance of 20 feet and must be maintained for the duration of construction.</i></p> <ul style="list-style-type: none"> <li><i>Restore the disturbed area to its original condition. Provide erosion control and revegetate with appropriate plant species, if needed.</i></li> <li><i>The Applicant will provide a written description of how the core and buffer avoidance areas are to be restored, protected, and maintained after construction is completed.</i></li> </ul> <p><i><u>BRSP MM B-J:</u> The Applicant will compensate for direct effects on VELB habitat associated with the project. This compensation will be achieved by implementation of the following measures, as described in the programmatic agreement between USFWS and the Corps (USFWS, 1996):</i></p> <ul style="list-style-type: none"> <li><i>Confirm the number of elderberry stems one inch or greater at ground</i></li> </ul>	

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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
		<p><i>level that would be affected by the project development. Any elderberry shrub that has stems of at least one inch at ground level, and the project will permanently encroach within 100 feet of the shrub dripline, will be considered a removed shrub and will need to be compensated for, except for shrubs located along existing ranch roads where the multi-purpose trail will be aligned.</i></p> <ul style="list-style-type: none"> <li>• <i>Determine the VELB units that would need to be mitigated for the project pursuant to the programmatic agreement between USFWS and the Corps.</i></li> <li>• <i>Obtain authorization from USFWS to take VELB that would be affected by the project. The Project shall adhere to all conditions the Biological Opinion, as revised. At a minimum, this shall include purchase of 22.2 beetle conservation credits from a USFWS-approved beetle conservation bank.</i></li> </ul> <p><i>Alternatively, Mitigation Measure 6-3 may be replaced with the PCCP's VELB avoidance and minimization measures as set forth in the PCCP implementation document.</i></p>	

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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
<p><b>6-4</b> 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.</p>	<p>S</p>	<p><b>6-4</b> A preconstruction survey shall be conducted within a 1,320-foot radius of the project no more than 15 days prior to ground disturbance. Surveys shall be conducted consistent with current guidelines (Swainson's Hawk Technical Advisory Committee 2000). In instances where an adjacent parcel is not accessible to survey, the qualified biologist shall scan all potential nest trees from the adjacent property, roadsides, or other safe, publicly accessible viewpoints, without trespassing, using binoculars and/or a spotting scope. Surveys are required from February 1 to September 15 (or sooner if it is determined that birds are nesting earlier in the year). If a Swainson's hawk nest is located and presence confirmed, only one follow-up visit is required.</p> <p>During the nesting season (approximately February 1 to September 15 or sooner if it is determined that birds are nesting earlier in the year), ground-disturbing activities within 1,320 feet of occupied nests or nests under construction shall be prohibited to minimize the potential for nest abandonment. While the nest is occupied, activities outside the buffer can take place provided they do not stress the breeding pair.</p> <p>If the active nest site is shielded from view and noise from the project site by other development, topography, or other features, the project applicant</p>	<p>LS</p>

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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
		<p><i>can apply to the PCA for a reduction in the buffer distance or waiver. A qualified biologist shall be required to monitor the nest and determine that the reduced buffer does not cause nest abandonment. If a qualified biologist determines nestlings have fledged, Covered Activities can proceed normally.</i></p> <p><i>Construction monitoring shall be conducted by a qualified biologist and shall focus on ensuring that activities do not occur within the buffer zone. The qualified biologist performing the construction monitoring shall ensure that effects on Swainson's hawks are minimized. If monitoring indicates that construction outside of the buffer is affecting nesting, the buffer shall be increased if space allows (e.g., move staging areas farther away). If space does not allow, construction shall cease until the young have fledged from the nest (as confirmed by a qualified biologist).</i></p> <p><i>The frequency of monitoring will be approved by the PCA and based on the frequency and intensity of construction activities and the likelihood of disturbance of the active nest. In most cases, monitoring will occur at least every other day, but in some cases, daily monitoring may be appropriate to ensure that direct effects on Swainson's hawks are minimized. The qualified biologist shall train construction personnel on the avoidance procedures and buffer zones.</i></p>	

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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
		<i>Active (within the last 5 years) nest trees on a project site shall not be removed during the nesting season. If a nest tree must be removed (as determined by the PCA), tree removal shall occur only between September 15 and February 1, after any young have fledged and are no longer dependent on the nest and before breeding activity begins.</i>	
<p><b>6-5</b> 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 grasshopper sparrow, northern harrier, purple martin, white-tailed kite, or other nesting raptors and migratory birds.</p>	S	<p>6-5(a) Construction activities, such as vegetation clearing and grading activities, shall be completed between September 1 and January 31, if feasible, to avoid impacts to suitable nesting habitat during the typical nesting season. If vegetation removal and grading activities must occur during the nesting season (February 1 to August 31), the project applicant shall enlist a qualified biologist to conduct a pre-construction survey of the project footprint and a 100-foot buffer area for active nests. The pre-construction survey shall be conducted within three days prior to commencement of ground-disturbing activities, per current CDFW guidance. If the pre-construction survey shows that there is no evidence of active nests, a letter report shall be prepared to document the survey and submitted to the Placer County Community Development Resource Agency within 10 days of completion of the survey, with no additional mitigation measures required. If construction does not commence within three days of the pre-construction survey, or halts for more than 14 days, an additional survey shall be required, prior to starting work.</p>	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
		<p>6-5(b) <i>Removal of trees, tree limbs, shrubs and understory within the MSFB shall be prohibited during the nesting season (February 1 to August 31) to the extent feasible. For any year that vegetation removal within the MSFB other than the cutting of grasses through grazing or the use of approved hand-held equipment would occur during the nesting season, a pre-construction survey for active nests shall be conducted in the affected area within three days prior to the start of vegetation removal, with completion of the survey and submittal of results carried out as outlined in Mitigation Measure 6-5(a).</i></p> <p>6-5(c) <i>If nests are found during pre-construction surveys and are considered to be active, a qualified biologist shall establish species-appropriate buffer zones to prohibit construction or vegetation management activities and minimize nest disturbance until the young have successfully fledged or until the biologist determines that the nest is no longer active. Buffer width will depend on the species in question, surrounding existing disturbances, and specific site characteristics. Buffer zones are typically 100 feet for migratory bird nests and 500 feet for raptor nests. If active nests are found within any trees slated for removal, then an appropriate buffer shall be established around the trees and the trees shall not be removed until a biologist determines that the nestlings have successfully fledged or until the nest is no longer active. A brief letter report documenting</i></p>	

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Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>the results of the nesting bird survey shall be provided to the Placer County Community Development Resource Agency within 14 days of the completion of the survey. Prior to construction commencing, a summary report documenting nest monitoring efforts and verification of fledging shall be provided to the Placer County Community Development Resource Agency.</i></p> <p>6-5(d) <i>Implement Mitigation Measure 6-3(b).</i></p> <p>6-5(e) <i>If the applicant proceeds ahead of BRSP Phase 2 improvements in order to construct the 400-foot segment of Bickford Ranch Road to the project's boundaries, then Mitigation Measures B-L and/or B-M from the BRSP EIR shall be implemented within the portion of Bickford Ranch Road that would be constructed by The Ridge project, as follows:</i></p> <p><u><i>BRSP MM B-L:</i></u> <i>Before construction of any phase of the project between March and August in oak woodlands or riparian habitats, the project proponent will conduct preconstruction surveys to determine if nesting raptors, special status birds or other migratory birds protected under the MBTA are present on or near (within 500 feet) construction areas. Night-time surveys will be performed to determine the presence of nesting owls. If no nesting raptors are found, no additional</i></p>	

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Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>mitigation will be needed for that portion of the project. If these surveys detect nesting raptors on or near construction areas, a buffer zone will need to be established (see Mitigation Measure B-M). If construction will occur outside of the nesting season (August through February), no preconstruction raptor nesting surveys are necessary.</i></p> <p><i><u>BRSP MM B-M:</u> If nesting raptors, special status birds or other migratory birds are found on or near active construction areas, a no-disturbance buffer zone will be established until nesting activity or construction activity is completed. The distance and placement of the buffer area will be determined in consultation with CDFW. Typically, buffer zones consist of a 500-foot radius area around the nest tree. If construction will occur outside of the raptor nesting season (September – February), no raptor surveys are required.</i></p>	
<p><b>6-6</b> Have a substantial adverse effect on any riparian habitat or other sensitive natural community, or on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal,</p>	<p>S</p>	<p>6-6(a) An application for CARP Authorization shall accompany the permit application (i.e., Improvement Plans) for the project step that would impact the on-site seasonal wetlands. In addition to the land conversion fee required in Mitigation Measure 6-8, the project is anticipated to result in permanent direct effects to 0.11-acre of seasonal wetlands. The applicant shall pay special habitat fees for wetland impacts prior to issuance of a land</p>	<p>LS</p>

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Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
filling, hydrological interruption, or other means.		<p><i>conversion authorization that allows ground disturbance of a special habitat. The fees to be paid shall be those in effect at the time of ground disturbance authorization for each project step and shall be the per acre fee based on the amount of aquatic resource disturbance resulting from the activity.</i></p> <p>6-6(b) <i>Prior to construction of the Modified Shaded Fuel Break (MSFB), the applicant shall retain a qualified wetland scientist to identify the extent of seasonal wetlands within the MSFB. The boundaries of the wetlands shall be visibly and permanently marked with stakes, flagging, or other method determined acceptable by the wetland scientist. No fuel maintenance activities other than the cutting of grasses through grazing or use of other approved hand-held equipment shall occur at any time within the delineated wetland areas. Proof of compliance with this measure shall be provided to the Placer County Community Development Resource Agency prior to creation of the MSFB.</i></p>	
6-7 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

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Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p><b>6-8 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.</b></p>	<p>S</p>	<p>6-8(a) <i>PCCP General Condition 1. Prior to Improvement Plan approval, the project shall obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ); including requirements to develop a project-based Storm Water Pollution Prevention Plan (SWPPP); and applicable NPDES program requirements as implemented by the County. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation.</i></p> <p><i>The project shall comply with the West Placer Storm Water Quality Design Manual (Design Manual).</i></p> <p><i>The project shall implement the following BMPs. This list shall be included on the Notes page of the improvement/grading plans and shall be shown on the plans:</i></p> <ol style="list-style-type: none"> <li>1. <i>When possible, vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas. When vehicle parking areas are to be established as a temporary facility, the site will be recovered to pre-project or ecologically improved conditions within 1 year of start of groundbreaking to ensure effects are temporary (refer to Section 6.3.1.4, General</i></li> </ol>	<p>LS</p>

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 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>Condition 4, Temporary Effects, for the process to demonstrate temporary effects).</i></p> <ol style="list-style-type: none"> <li>2. <i>Trash generated by Covered Activities will be promptly and properly removed from the site.</i></li> <li>3. <i>Appropriate erosion control measures (e.g., fiber rolls, filter fences, vegetative buffer strips) will be used on site to reduce siltation and runoff of contaminants into avoided wetlands, ponds, streams, or riparian vegetation.</i> <ol style="list-style-type: none"> <li>a. <i>Erosion control measures will be of material that will not entrap wildlife (i.e., no plastic monofilament). Erosion control blankets will be used as a last resort because of their tendency to biodegrade slowly and trap reptiles and amphibians.</i></li> <li>b. <i>Erosion control measures will be placed between the area of disturbance and any avoided aquatic feature, within an area identified with highly visible markers (e.g., construction and erosion-control fencing, flagging, silt barriers) prior to commencement of construction activities. Such identification will be properly maintained until construction is completed and the soils have been stabilized.</i></li> </ol> </li> </ol>	

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Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>c. Fiber rolls used for erosion control will be certified by the California Department of Food and Agriculture or any agency that is a successor or receives delegated authority during the permit term as weed free.</p> <p>d. Seed mixtures applied for erosion control will not contain California Invasive Plant Council–designated invasive species (<a href="http://www.cal-ipc.org/paf/">http://www.cal-ipc.org/paf/</a>) but will be composed of native species appropriate for the site or sterile non-native species. If sterile non-native species are used for temporary erosion control, native seed mixtures must be used in subsequent treatments to provide long-term erosion control and slow colonization by invasive non-natives.</p> <p>4. If the runoff from the development will flow within 100 feet of a wetland or pond, vegetated storm water filtration features, such as rain gardens, grass swales, tree box filters, infiltration basins, or similar LID features to capture and treat flows, shall be installed consistent with local programs and ordinances.</p> <p>6-8(b) <u>PCCP General Condition 3</u>. Prior to Improvement Plan approval, the project shall pay a land</p>	

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Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>conversion fee of \$2,279 for each development unit, plus \$7,560 per acre, for the permanent conversion of approximately 18.9 acres of natural land cover including mixed oak woodland, oak-foothill pine woodland, and annual grassland. The fees to be paid shall be those in effect at the time of ground disturbance authorization for each project step and shall be the per acre fee based on the amount of land disturbance resulting from the activity. For example, the entity responsible for constructing the Improvement Plans would be obligated to submit the per-acre PCCP Fee (1b, 2c, and 2d) based on the area of disturbance, and future homeowners would be obligated to submit the remainder of the per-acre and per-dwelling fees PCCP Fee (1b, 2c, and 2d).</p> <p>6-8(c) <u>PCCP General Condition 5.</u> Prior to initiation of construction activities, all project construction personnel shall participate in a worker environmental training program that will educate workers regarding the Covered Species and their habitats, the need to avoid impacts, state and federal protection, and the legal implications of violating environmental laws and regulations. At a minimum this training may be accomplished through tailgate presentations at the project site and the distribution of informational brochures, with descriptions of sensitive biological resources and regulatory protections, to construction personnel prior to initiation of construction work.</p>	

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Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
6-9 Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	S	6-9 Implement Mitigation Measures 6-6 and 6-8.	LS
6-10 Cumulative loss of habitat for special-status species.	LS	None required.	N/A
<b>7. Transportation and Circulation</b>			
7-1 Conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system during construction activities.	S	7-1 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: <ul style="list-style-type: none"> <li>• Guidance on the number and size of trucks per day entering and leaving the project site;</li> <li>• Identification of arrival/departure times that would minimize traffic impacts;</li> <li>• Approved truck circulation patterns;</li> <li>• Locations of staging areas;</li> <li>• Locations of employee parking and methods to encourage carpooling and use of alternative transportation;</li> </ul>	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
		<ul style="list-style-type: none"> <li>• <i>Methods for partial/complete street closures (e.g., timing, signage, location and duration restrictions);</i></li> <li>• <i>Criteria for use of flaggers and other traffic controls;</i></li> <li>• <i>Preservation of safe and convenient passage for bicyclists and pedestrians through/around construction areas;</i></li> <li>• <i>Monitoring for roadbed damage and timing for completing repairs;</i></li> <li>• <i>Limitations on construction activity during peak/holiday weekends and special events;</i></li> <li>• <i>Preservation of emergency and school bus vehicle access;</i></li> <li>• <i>Coordination of construction activities with construction of other projects that occur concurrently in the BRSP to minimize potential additive construction traffic disruptions, avoid duplicative efforts (e.g., multiple occurrences of similar signage), and maximize effectiveness of traffic mitigation measures (e.g., joint employee alternative transportation programs);</i></li> <li>• <i>Removing traffic obstructions during emergency evacuation events; and</i></li> <li>• <i>Providing a point of contact for BRSP residents and guests to obtain construction information, have questions answered, and convey complaints.</i></li> </ul>	

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Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>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.</i></p> <ul style="list-style-type: none"> <li>• <i>All construction employees shall park in designated lots owned by the project applicant or on private lots otherwise arranged for by the project applicant; and</i></li> <li>• <i>Roadways shall be maintained clear of debris (e.g., rocks) that could otherwise impede travel and impact public safety.</i></li> </ul>	
<p><b>7-2 Conflict with a program, plan, ordinance or policy addressing transit, bicycle and pedestrian facilities.</b></p>	<p>LS</p>	<p><i>None required.</i></p>	<p>N/A</p>
<p><b>7-3 Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).</b></p>	<p>S</p>	<p>7-3</p> <p><i>Prior to Improvement Plan approval, the project applicant shall submit a plan to achieve the following TDM measures to the satisfaction of the Placer County Community Development Resource Agency. The Plan shall be implemented by the HOA and included in the CC&amp;Rs:</i></p> <ul style="list-style-type: none"> <li>• <i>TP01 – School Pool Programs: Organize a program that matches families in carpools for school pick-up and drop-off.</i></li> <li>• <i>TP07 – Subsidized Transit Program: Provide either partially or fully subsidized</i></li> </ul>	<p>SU</p>

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Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>transit passes for all residents who request them, and shall publicize the availability of transit passes to residents in periodic communications.</i></p> <ul style="list-style-type: none"> <li>• <i>TP18 – Voluntary Travel Behavior Change Program: The HOA shall provide educational materials (e.g., brochure) to new homebuyers that target individual attitudes towards travel and providing tools for individuals to analyze and alter their travel behavior.</i></li> </ul>	
<p><b>7-4</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.</p>	LS	None required.	N/A
<b>8. Wildfire</b>			
<p><b>8-1</b> Substantially impair an adopted emergency response plan or emergency evacuation plan.</p>	LS	None required.	N/A
<p><b>8-2</b> Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from</p>	S	<p>8-2 <i>In conjunction with the submittal of and prior to the approval of Improvement Plans, the applicant shall submit a Fuel Management Program (FMP) for review and approval by CAL FIRE, PFPD, and Placer County Community Development Resource</i></p>	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
<p><b>a wildfire or the uncontrolled spread of a wildfire.</b></p>		<p>Agency. The FMP shall identify roles, responsibilities, and financial resources to ensure successful implementation of Actions 1-12 of The Ridge Subdivision Project Fire Safe Plan, as follows:</p> <p><u>Action #1:</u> Applicant shall consult with the PFPD during preparation of improvement plans for the Medium Density Residential development and individual site plans for the Low Density Residential parcels. Issues to be addressed during the planning process shall include, but would not be limited to:</p> <ul style="list-style-type: none"> <li>• Fire apparatus access,</li> <li>• Available water supply,</li> <li>• Evacuation routes, and</li> <li>• Safe refuge areas.</li> </ul> <p><u>Action #2:</u> The project lanes, private road, and project EVAs shall be constructed to PFPD and CAL FIRE standards. If any changes are made to the proposed design with respect to width or turning radius, the changes shall be reviewed by PFPD and CAL FIRE prior to final approval.</p>	

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Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><u>Action #3:</u> Fire hydrants serving the site shall be provided at the following locations in the project site, or equivalent locations, subject to approval by PCWA and Placer County ESD:</p> <ul style="list-style-type: none"> <li>• Along the private road near Lots 14/15,</li> <li>• Along the private road near Lots 18/19,</li> <li>• Along the private road near Lots 21/22,</li> <li>• Along the private road near Lots 24/25,</li> <li>• In the turnaround along the private lane at Lot 30,</li> <li>• In the turnaround along the private lane at Lot 33,</li> <li>• In the turnout along the private lane at Lot 33/34, and</li> <li>• In the turnaround along the private lane at Lot 34.</li> </ul> <p>In addition, as required by State law, all residences shall have sprinkler systems installed.</p>	

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



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><u>Action #4:</u> Individual building sprinkler systems used for fire suppression shall remain operable and shall be maintained by the individual homeowners at all times.</p> <p><u>Action #5:</u> All structures constructed on lots facing the WUI Zone (i.e., Lots 15 through 25 and 29 through 34) shall have a minimum 30-foot setback from the rear project line. Setback areas may contain driveways, parking areas, and/or other non-combustible surfaces.</p> <p><u>Action #6:</u> Fencing materials located along side and rear yard property lines facing the WUI on The Ridge Subdivision Lots 15 through 25 and 29 through 34 shall be constructed of non-combustible materials.</p> <p><u>Action #7:</u> Dwellings located on Project Lots 15 through 25 and 29 through 34 shall be constructed and maintained in accordance with the current design</p>	

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



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>standards found in California Building Code Chapter 7A (Materials and Construction Methods for Exterior Wildfire Exposure).</i></p> <p><u>Action #8:</u> <i>This Fuel Management Program shall ensure implementation of the Fuel Management Plan and MSFB. The Program shall be designed to:</i></p> <ul style="list-style-type: none"> <li><i>• Provide administrative oversight and coordination of fuel management projects within the project area.</i></li> <li><i>• Confirm that fuel management projects are identified, scheduled and completed in accordance with the Fuel Management Plan (see Action #9).</i></li> <li><i>• Coordinate the use of resources (e.g., crews, mechanical equipment, domestic livestock, etc.) that are most appropriate for the fuel</i></li> </ul>	

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



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>management work that is required.</i></p> <ul style="list-style-type: none"> <li>• <i>Ensure that sensitive biological resources within each area are identified in advance of the fuel management project. Complete pre/post project inspections of these areas to safeguard sensitive areas from damage and/or destruction.</i></li> <li>• <i>Verify that each fuel management project has sufficient fiscal resources available to it using industry best practices that are most appropriate for the project area.</i></li> <li>• <i>Ensure the safe disposal (e.g., hauling it to a landfill, chipping/mulching on site, etc.) of biomass materials removed as part of a fuel management project.</i></li> </ul>	

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





**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><u>Action #9:</u> The Ridge Fuel Management Plan (FMP) described in Technical Memorandum #2 (TM #2, June 7, 2021, in Appendix A of the FSP, included in Appendix G to this EIR) shall be implemented by the Project Applicant during project construction and until the project is fully developed and occupied. Upon acquiring a parcel, the parcel owner shall become responsible for complying with the defensible space requirements of the FMP (and any and all State or local laws and regulations governing fuel maintenance on private property). After construction, maintenance activities within the common lots and the MSFB shall be the responsibility of the Homeowners Association (HOA) (see Action #10). The FMP shall be adequately funded to ensure that all hazardous fuel reduction work is completed per the prescription requirements identified in TM #2.</p>	

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



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><u>Action #10:</u> A 300-foot-wide MSFB that reduces hazardous live and dead vegetation near the project site shall be constructed and maintained in accordance with the FMP in the canyon below project Lots 15 through 25 and 29 through 34. The MSFB shall meet the following criteria:</p> <ul style="list-style-type: none"> <li>• The construction of the shaded fuel break shall commence at the property line between the lot(s) and adjoining LaFaille Ranch property.</li> <li>• The MSFB shall extend nominally 300 feet except when variances are allowed due to topographical issues, sensitive cultural resources present, or environmental concerns.</li> <li>• The shaded fuel break shall be constructed and accepted by PFPD and CAL FIRE prior to the issuance of the first</li> </ul>	

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



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>building permit within the project site. See TM #2 of the Fire Safe Plan for shaded fuel break prescriptive requirements. Maintenance of annual grasses within the MSFB shall be accomplished preferably by grazing, or, if grazing is not feasible or sufficient, then other equipment may be allowable, while taking care to safeguard sensitive areas from damage and/or destruction, as required in Mitigation Measure 6-6(b) of the Biological Resources chapter.</i></p> <ul style="list-style-type: none"> <li>• A “Fuel Management Zone” easement shall be recorded on the LaFaille Ranch property that is subject of the MSFB. The easement shall allow right of entry to conduct fuel</li> </ul>	

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



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>management activities in perpetuity.</i></p> <p><u>Action #11:</u> <i>All hazardous fuels, including annual grasses and dead vegetation, on undeveloped lots within the project site shall be reduced to four inches or less during CAL FIRE declared fire season.</i></p> <p><u>Action #12:</u> <i>The Ridge HOA shall provide a mechanism for distributing public fire safety information such as a website, newsletter, and/or at HOA meetings. The information to be distributed is set forth in the Fire Safe Plan (Action #12).</i></p> <p><i>In addition, the applicant shall coordinate with the Placer County Fire Safe Alliance and local Fire Safe Councils to join the Placer County Firewise Communities program.</i></p>	
<p><b>8-3 Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate</b></p>	<p>LS</p>	<p>None required.</p>	<p>N/A</p>

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



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
fire risk or that may result in temporary or ongoing impacts to the environment.			
<b>8-4</b> Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.	LS	<i>None required.</i>	N/A
<b>8-5</b> Increase in wildfire risk attributable to the proposed project in combination with cumulative development.	LS	<i>None required.</i>	N/A

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



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## **3. PROJECT DESCRIPTION**

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## 3.0 PROJECT DESCRIPTION

### 3.1 INTRODUCTION

Pursuant to CEQA Guidelines Section 15124, an EIR is required to include a project description that includes the following information: project objectives, project location, a general description of the project's technical, economic and environmental characteristics, and a statement briefly describing the intended uses of the EIR, including a list of agencies expected to use the EIR and a list of permits and other approvals required to implement the project.

The Project Description chapter of the EIR provides a comprehensive description of The Ridge (proposed project) in accordance with the CEQA Guidelines. Please note that this chapter provides an overall general description of the existing environmental conditions; however, detailed discussions of the existing setting in compliance with Section 15125 of CEQA Guidelines, as it relates to each given potential impact area, is included in each technical chapter of this EIR.

### 3.2 PROJECT LOCATION

The 24.95-acre project site consists of a horseshoe-shaped parcel located approximately one mile southeast of the intersection of State Route (SR) 193 and Clark Tunnel Road in unincorporated Placer County, California (see Figure 3-1 and Figure 3-2). The site is identified by Placer County Assessor's Parcel Number (APN) 031-106-030-000.

### 3.3 PROJECT SETTING AND SURROUNDING LAND USES

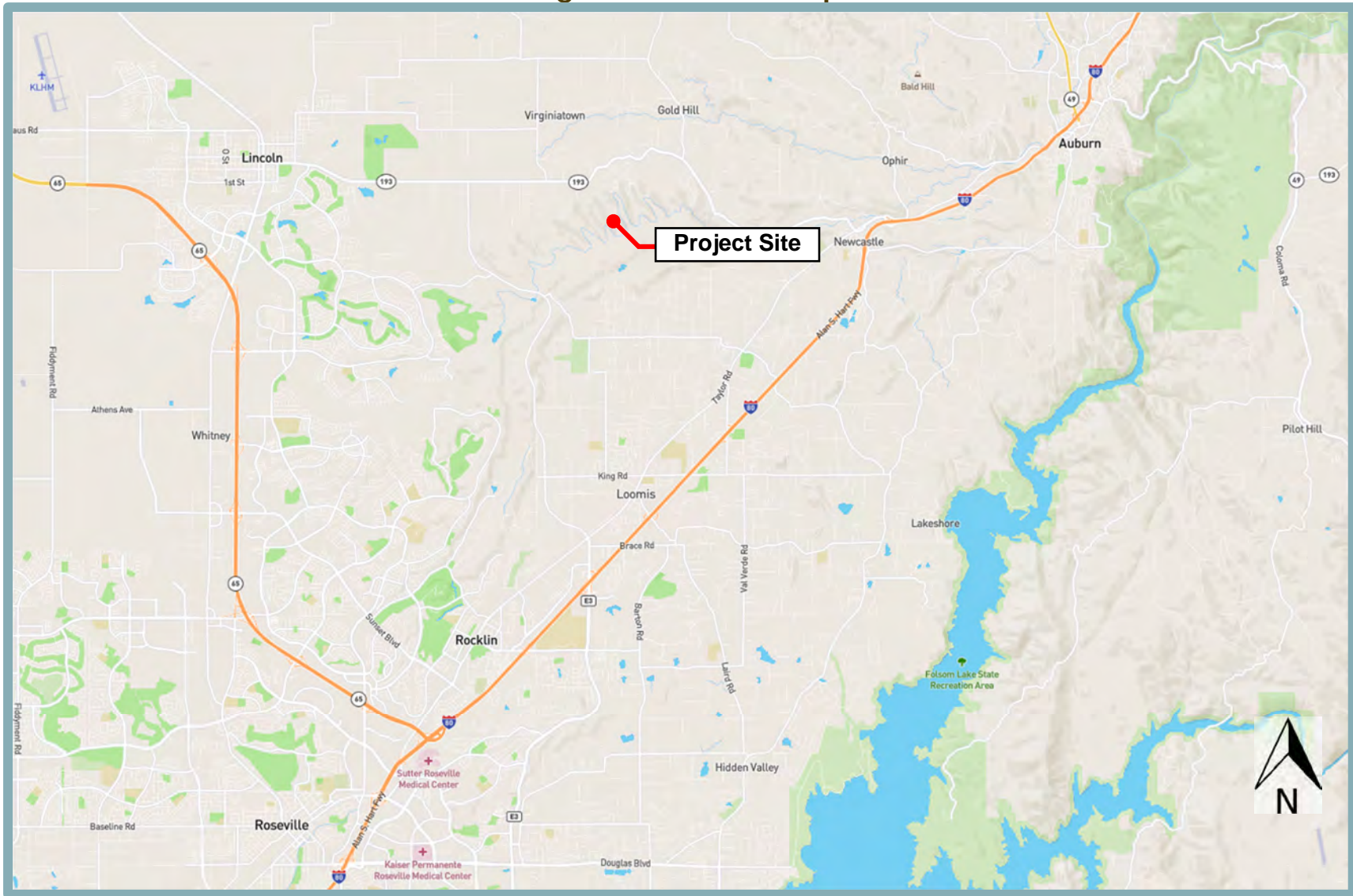
The project site is situated atop three interconnected ridges forming a horseshoe shape. The site is currently undeveloped, consisting primarily of grassland, oak woodland, and scattered rock outcroppings. Based on an Arborist Report prepared for the proposed project, the project site, along with an adjacent 50-foot survey area, contains a total of 46 oak trees with a single trunk diameter at breast height (DBH) of at least six inches or a cumulative trunk DBH of at least 10 inches.<sup>1</sup> The site is used for seasonal cattle grazing. Access to the project site is currently provided by Clark Tunnel Road off of SR 193, an unimproved dirt roadway that ultimately connects to the community of Penryn, further to the southeast of the project site.

The densely wooded area to the north of the project site slopes steeply downward towards the valley below. An undeveloped ranch (La Faille Ranch property), owned by the project applicant, which is also used for cattle grazing, is located within the valley to the north of the site. The southern boundary of the La Faille Ranch property includes the existing concrete-lined Caperton Canal, owned and operated by the Placer County Water Agency (PCWA), which bifurcates the ranch from the project site. The Caperton Canal is used to deliver untreated water to treatment plants in the Rocklin and Lincoln areas and is also sold to customers for irrigation, including supplying water to the pond on the La Faille Ranch property. The areas to the east, south, and west of the site are currently undeveloped, but are planned for buildout with future low-density residential and rural residential uses as part of the Bickford Ranch Specific Plan (BRSP), which was approved by the County in 2004 and amended as recently as 2015.

<sup>1</sup> HELIX Environmental Planning, Inc.. *Arborist Report and Oak Woodland Inventory, The Ridge ±56.6-Acre Study Area Placer County, California*. April 2020.

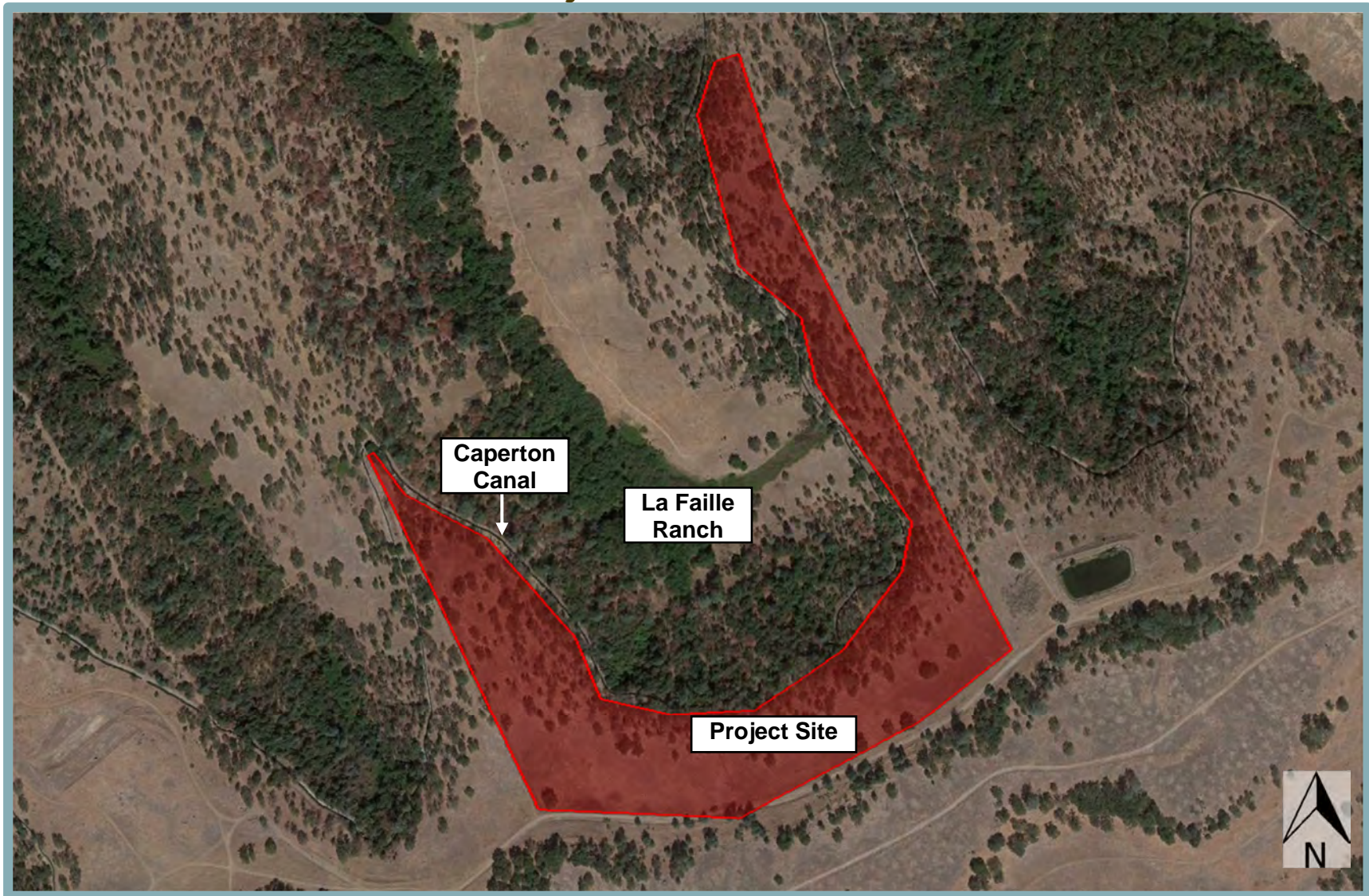


Figure 3-1  
Regional Location Map





**Figure 3-2**  
**Project Site Boundaries**



The above description of the current environmental conditions of the project site and its surroundings is provided for informational purposes and reflects the physical baseline conditions of the project site. As discussed in the Introduction chapter, the baseline conditions of the surrounding area for impact analysis purposes will be adjusted to reflect completion of Phase 1 BRSP, which includes 1,010 single-family units, installation of Bickford Ranch Road and underlying backbone infrastructure (water, sewer, drainage) to within 400 feet of the project site's western boundary.

### **3.4 PROJECT OBJECTIVES**

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

1. Create a foothill residential project that can easily be served by planned sewer, water, and roadway infrastructure.
2. Support the County in its goals to provide a diversity of housing types for population growth, including opportunities for custom home development.
3. Provide a high-quality residential community compatible and consistent with adjacent approved residential development by implementing complementary design elements and standards approved for the adjacent development.
4. Incorporate the existing natural terrain and character of the project area into the design of the development, recognizing its topography with slopes, ridges and oak woodlands while respecting off-site viewsheds and retaining and preserving existing natural resources to the greatest extent feasible.

### **3.5 PROJECT COMPONENTS**

The proposed project would include subdivision of the project site to develop 34 single-family residential homes and associated improvements (see Figure 3-3). The proposed project would require approval of a General Plan Amendment (GPA), a Rezone, and a Vesting Tentative Subdivision Map. The project would also be annexed into Placer County Sewer Maintenance District 1 (SMD 1) and will be conditioned to participate in the Bickford Ranch Community Facilities District (CFD) for applicable services. The proposed project components, along with all required entitlements, are described in the following sections.

#### **General Plan Amendment/Rezone**

The proposed project would include a GPA to change the General Plan land use designation of the project site from Agriculture/Timberland 10-Ac. Min. to Medium Density Residential (MDR) (13.85 acres) and Low Density Residential (LDR) (11.10 acres) (see Figure 3-4). In addition, the project would include a Rezone to change the site's zoning designation from Farm, combining minimum Building Site of 10 acres (F-B-X 10-Ac. Min.) to Residential Single-Family, combining minimum Building Site of 8,000 square feet (RS-B-8) (13.85 acres) and Residential Single-Family, combining minimum Building Site of 10,000 square feet (RS-B-10) (11.10 acres) (see Figure 3-5).



**Figure 3-3  
Vesting Tentative Subdivision Map**

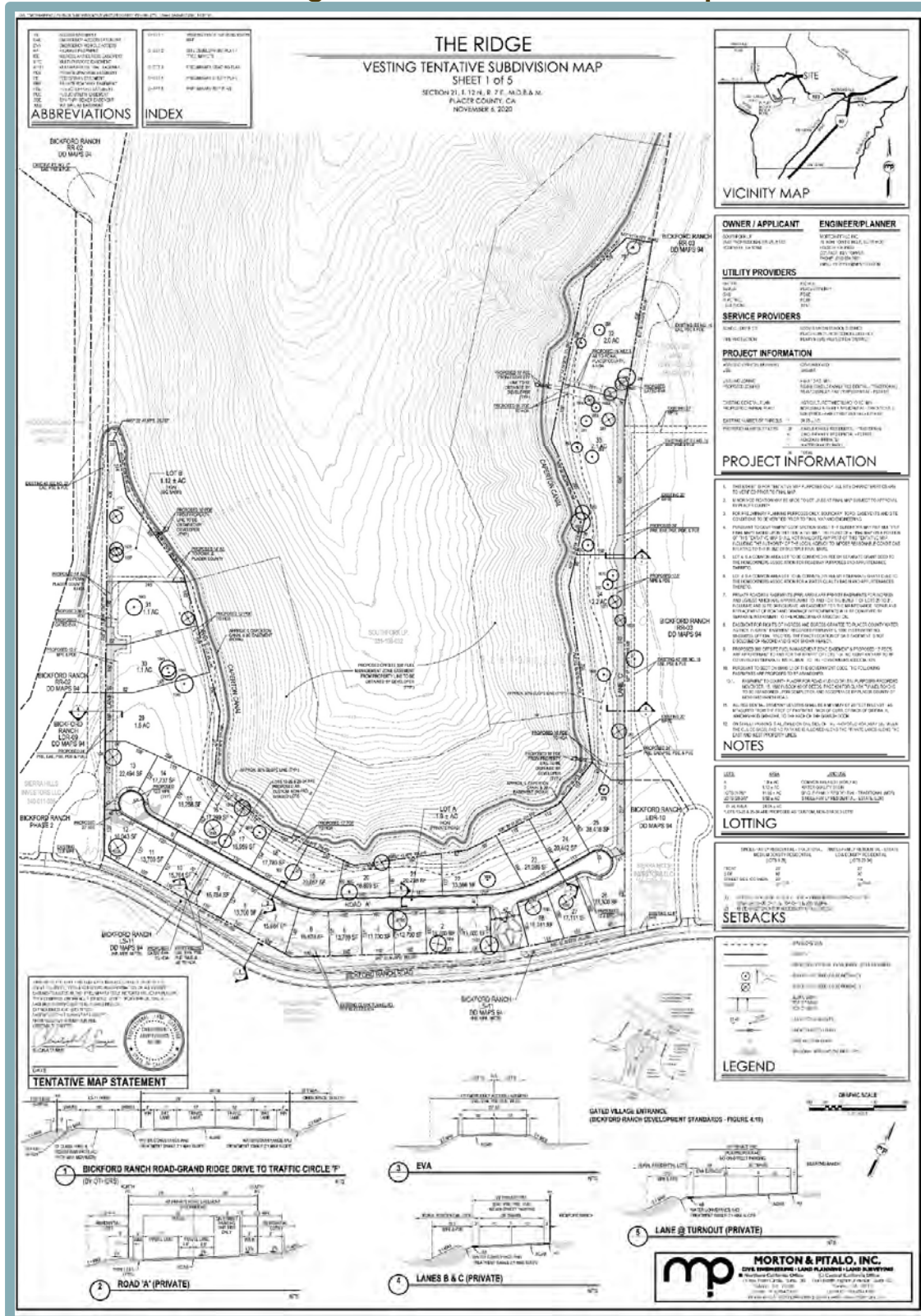


Figure 3-4  
Proposed General Plan Amendment

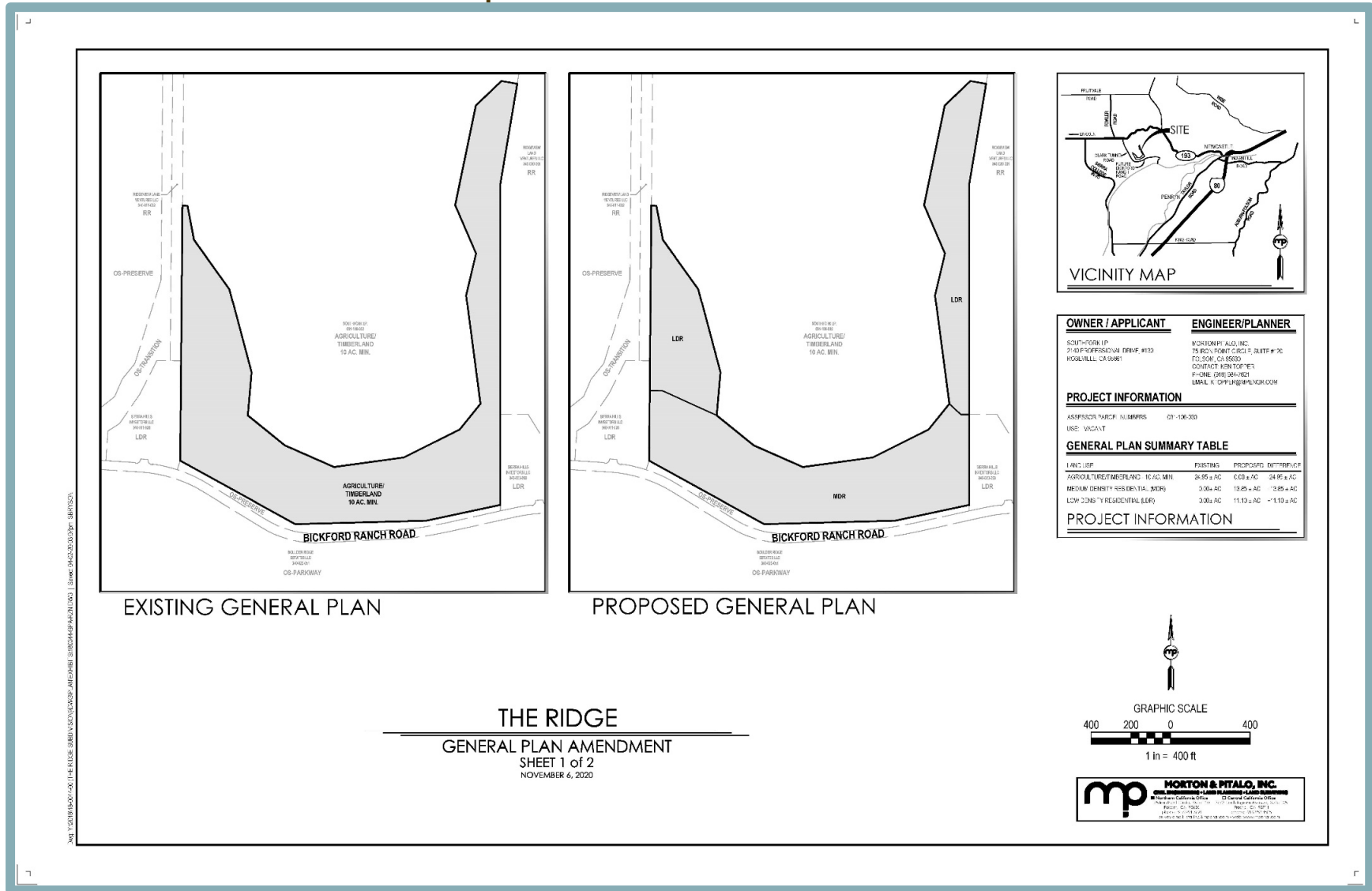
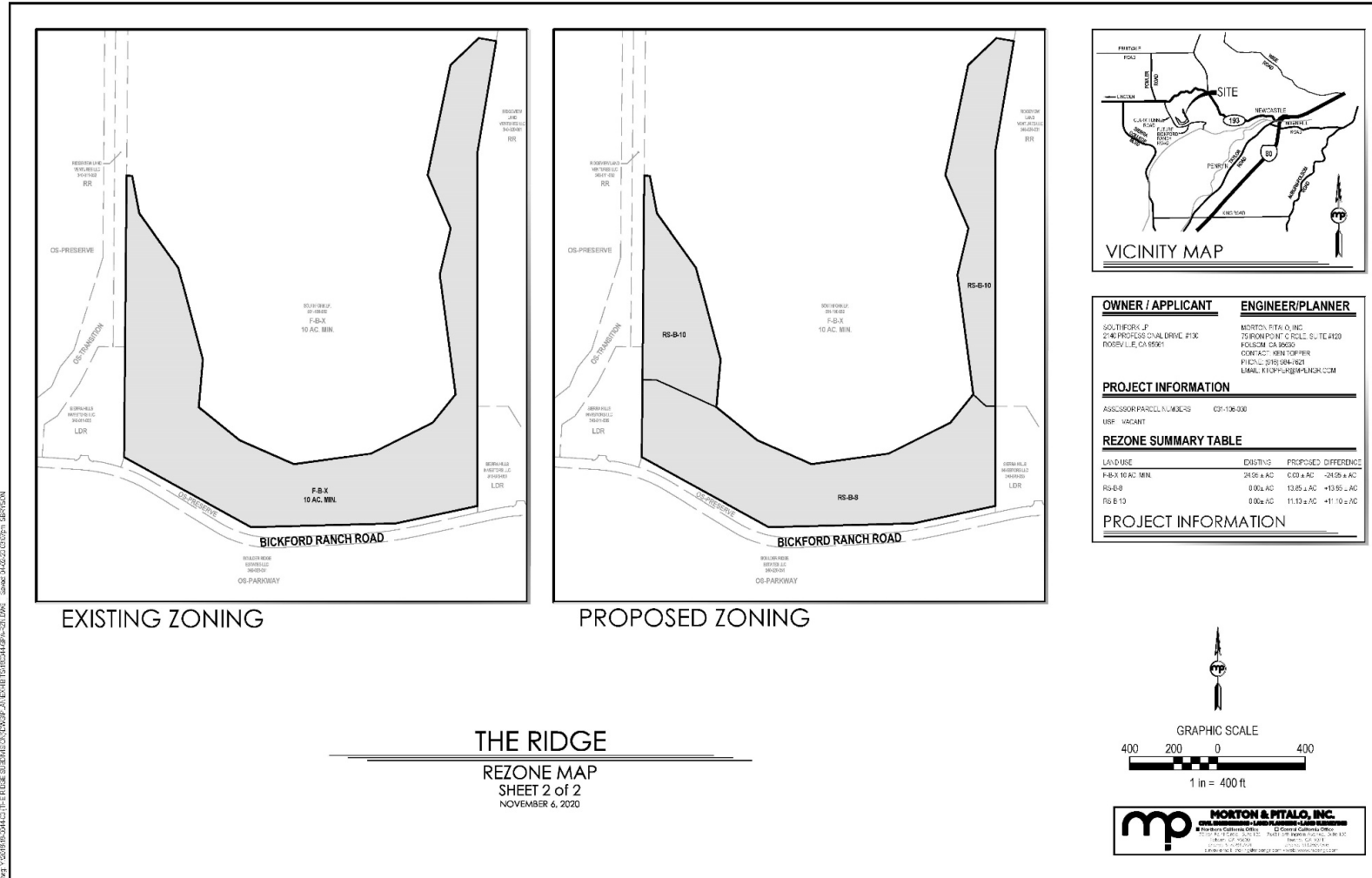


Figure 3-5  
Proposed Rezone



### **Vesting Tentative Subdivision Map**

The proposed Vesting Tentative Subdivision Map would create 34 residential lots, an internal roadway (Lot A) and a detention/retention basin (Lot B). Of the 34 total residential lots, 28 would be MDR lots ranging in size from 13,700 square feet (sf) to 38,416 sf, with an average size of 18,206 sf and an average net density of 2.3 units per acre. The remaining six residential lots would be larger LDR lots ranging in size from 1.1 to 2.2 acres, with an average net density of 0.60 units per acre, thus, greatly exceeding the allowable minimum lot size under the proposed rezone. The six LDR lots would be located along the ridges within the eastern and western portions of the site and are intended to be similar in size to the Rural Residential (RR) lots within the adjacent BRSP Phase 2 area. Combined, the proposed project would result in an average residential net density of 1.55 units per acre. The proposed lot sizes would be consistent with the BRSP parcels to the east and west of the project site. The proposed development standards for the proposed project, shown in Table 3-1 below, are generally similar to the County-approved development standards as set forth in the BRSP Development Standards for similar-sized lots. The proposed project would not include dedicated park space within the project site, but would be required to pay in-lieu fees for active and passive park requirements (5 acres each/1,000 residents) as well as for the trail requirement of 1 mile of trail per 1,000 residents.

**Table 3-1  
Proposed Development Standards**

	<b>Low Density Single-Family Estate Low Density (RS-B-10)</b>	<b>Single-Family Traditional Medium Density Residential (RS-B-8)</b>
<b>Lot Sizes and Coverage</b>		
Lot area – minimum	1.1 acre	13,700 sf
Lot coverage – maximum	40% one-story, 35% two-story	40%
Lot width – interior lot – minimum <sup>1</sup>	125 feet	90 feet
Lot width – corner lot – minimum <sup>1</sup>	N/A	90 feet
<b>Building Setbacks</b>		
Front <sup>2</sup>	25 feet	20 feet
Side	20 feet	10 feet
Rear <sup>3</sup>	30 feet	30 feet
Rear – accessory structure	15 feet <sup>3</sup>	15 feet <sup>3</sup>
<b>Building Height</b>		
	30 feet	30 feet
<b>Parking Spaces – Minimum</b>		
Resident – in garage	2	2
Guest – on- or off-street	2	2
<sup>1</sup> Measured at the front setback line. <sup>2</sup> Measured from back of sidewalk or right-of-way line where there is no sidewalk, and the edge of pavement on the private lanes. <sup>3</sup> Lots 15-25 and 29 – 34 shall have a minimum rear building setback of 30 feet or the top of slope of 30 percent, whichever is greater (as measured from the rear property line).		
Note: Setbacks subject to requirements of the Placer County Zoning Ordinance Section 17.54.150.		



Under the Placer County Conservation Program (PCCP), watercourses such as canals, channels and flood water conveyances that are lined and non-earthen condition do not have watercourse setbacks. For the proposed project, the minimum setback distance is the defined 30 percent slope line extending along the rear of lots 15 through 25 and 29 through 34, or the 30-foot rear lot building setback line of said lots, whichever is greater, but not less than 50 feet from the centerline of the canal. PCWA has determined that the proposed minimum 50-foot setback is acceptable.

The proposed project would include construction of a six-foot masonry wall along the project frontage at Bickford Ranch Road. The remainder of the proposed development area would be surrounded by split rail fencing along the east and west boundaries where residential lots are proposed and wrought-iron fencing elsewhere (see Figure 3-6). As shown in Figure 3-7, the proposed project would include new trees and other landscaping elements along Bickford Ranch Road, street trees internal to the site, and enhanced landscaping at the project entry that would be gated.

### **Access and Circulation**

The primary access for the proposed project would be provided by Bickford Ranch Road, a County-maintained road that would be constructed from Sierra College Boulevard to a point near the southwestern corner of the project site during completion of Phase 1 improvements for BRSP. As previously discussed, The Ridge Project will be developed after completion of BRSP Phase 1 infrastructure is installed and accepted as complete by the County. The terminus of Bickford Ranch Road after completion of Phase 1 BRSP improvements will stop short of The Ridge project site, leaving about 400 feet of unpaved roadway between the terminus and the southwestern corner of The Ridge project site. This 400-foot segment would either be constructed during commencement of Phase 2 of BRSP, or depending on the timing of BRSP Phase 2, potentially by The Ridge applicant. Analysis of the potential environmental impacts associated with construction of Bickford Ranch Road has already been conducted during the environmental review of the BRSP, and that analysis will be incorporated by reference in this EIR, as necessary, pursuant to CEQA Guidelines Section 15150. Should The Ridge applicant pursue construction of the above-referenced 400-foot segment of Bickford Ranch Road, The Ridge applicant would be responsible for implementing all applicable mitigation measures adopted in the MMRP for the BRSP EIR and associated Addendum, prior to and during construction of the roadway segment. Thus, access to future Bickford Ranch Road is assumed in this analysis.

The project entry would connect to Bickford Ranch Road and include a gated entry feature and a village entrance monument, similar to those designed and included in the approved BRSP Development Standards and Design Guidelines. Access to the proposed subdivision is available pursuant to easements on the recorded BRSP large lot final map (through Lot LS-11). Pedestrian access would be provided by a sidewalk connecting the 10-foot Class I path and five-foot natural-surface, multi-purpose trail in the landscaped parkway corridor along Bickford Ranch Road and extending through a pedestrian gated entry feature to connect with the sidewalk adjoining the south side of the proposed private residential street within the project site.



Figure 3-6  
Site Improvement Plan

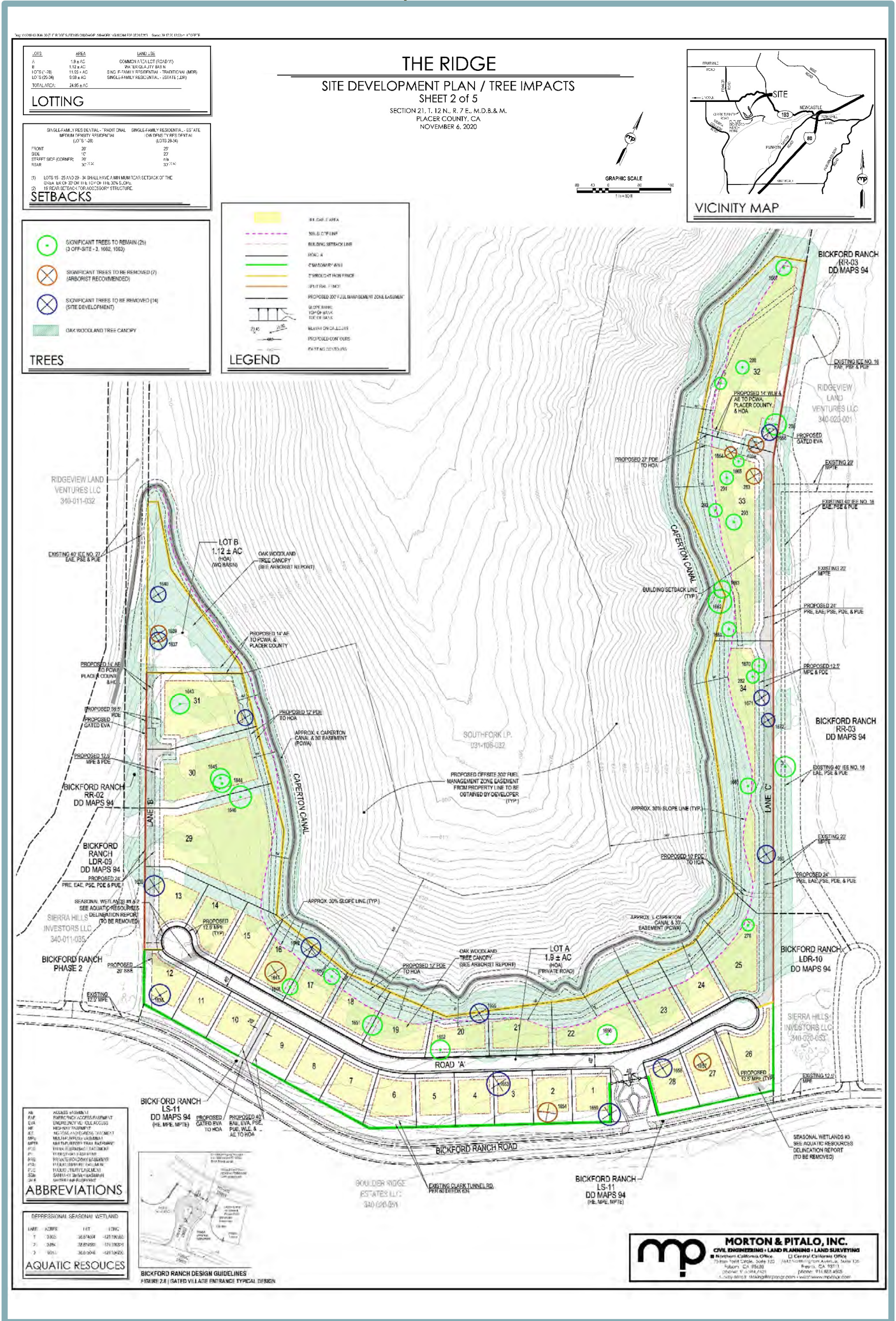
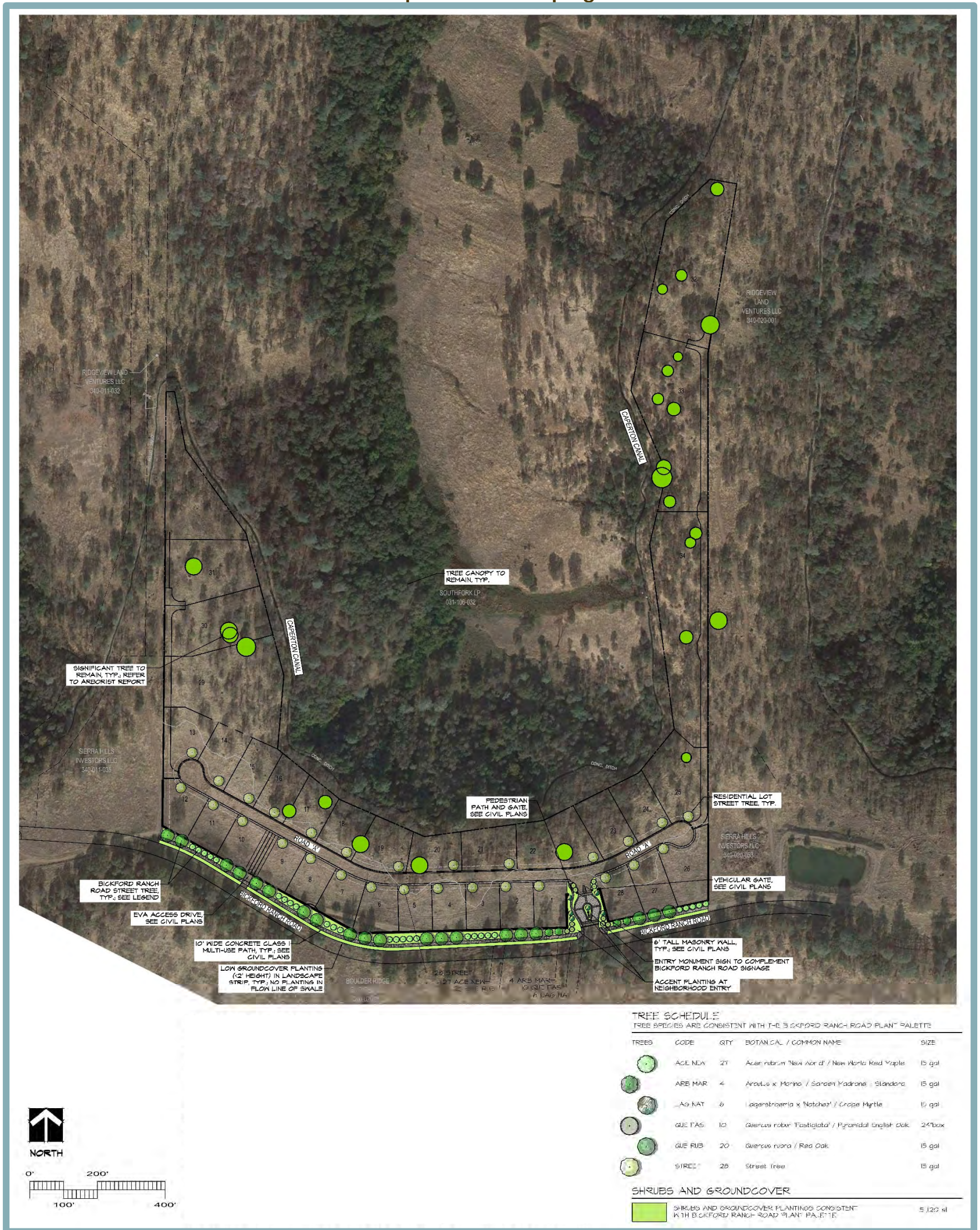




Figure 3-7  
Proposed Landscaping



The gated private two-way residential street fronting the proposed MDR lots would include a 22-foot-wide travel lane with a three-foot-wide curb and gutter on the north side, an eight-foot-wide parallel parking lane along the south side of the travel area, and a five-foot-wide pedestrian sidewalk contiguous thereto. Two private lanes would extend from the westerly and easterly cul-de-sacs of the private residential street, each serving three LDR lots. The two private lanes accessing the LDR lots would include 20-foot-wide travel lanes with two-foot-wide aggregate base shoulders on each side.

Contiguous to the interior of the private lanes (B and C) and shoulders, a drainage conveyance and treatment swale would be provided within a 12.5-foot-wide multipurpose easement and private drainage easement. Each of the private lanes would include vehicular turnouts for two-way emergency traffic and turn-arounds designed in accordance with the requirements of the governing fire and sewer districts. A gated, 20-foot-wide paved emergency vehicle access (EVA) road would connect the internal private residential street with Bickford Ranch Road. The EVA road would be located between Lots 9 and 10, near the southwest portion of the site. Locked gates for additional EVA purposes would be included as a part of the east and west project boundary fencing to allow access to and from the project's private lanes to the access roads designed along or near the project's common boundaries within the BRSP development. The specific location of the secondary EVA gates would be determined in accordance with County and the governing fire district requirements.

### **Utilities and Service Systems**

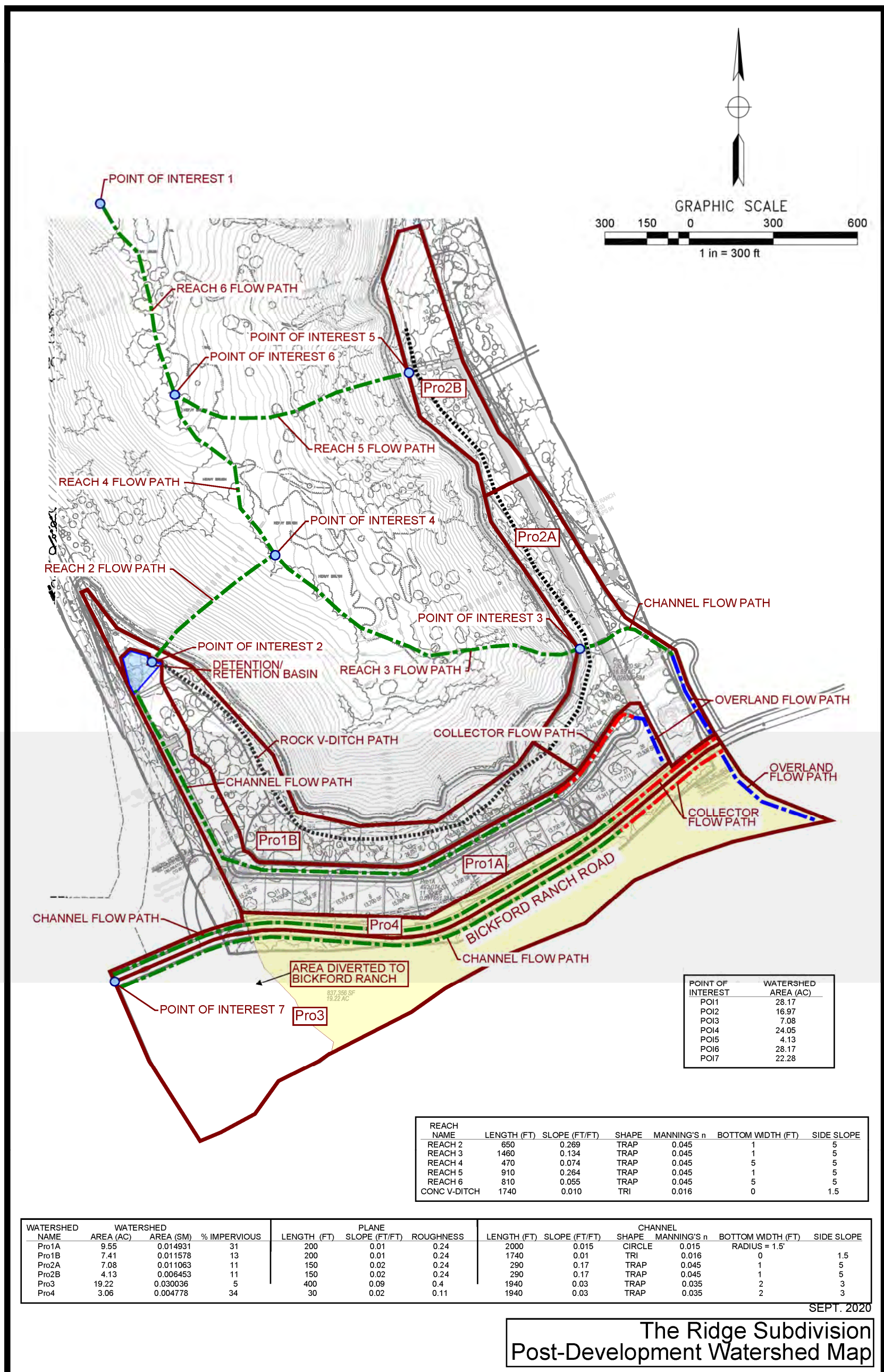
The proposed project would connect to public utilities that will be located within Bickford Ranch Road at the project frontage. Such utilities will be constructed as part of Phase 1 and Phase 2 of the BRSP. Completion of BRSP Phase 1 water and sewer infrastructure would bring the water and sewer trunk lines near the southwestern corner of The Ridge project site, leaving about a 400-foot gap between the stubbed lines and The Ridge project site. Again, depending on the timing of Phase 2 of BRSP, The Ridge applicant may choose to construct a portion of the water and sewer trunk lines to their property, which is discussed further under "Off-Site Improvements" below. Water would be provided by PCWA, and wastewater would be provided by the Placer County Department of Public Works Environmental Engineering Division.

The detention/retention basin included on Lot B would receive stormwater runoff from Pro1A (9.56 acres) and Pro1B (7.4 acres) (see Figure 3-8). Pro1A generally consists of the internal roadway (Road A), Lane B along the project's western boundary, Lots 1 through 13, and Lots 26 through 28.

Pro1B generally consists of Lots 14 through 23 and downslope portions of Lots 29 through 31. Stormwater runoff from Pro1A and Pro1B would flow to the detention/retention basin. Stormwater runoff from Pro1A would flow from the streets to the detention/retention basin via a vegetated swale. Stormwater runoff from Pro1B would be captured in the rock cobble cutoff v-ditch and directed to the detention/retention basin. The proposed rock cobble cutoff v-ditch has been sized to accommodate flow from a 100-year storm, with 0.50-feet of freeboard.



Figure 3-8  
Post-Development Drainage



SEPT. 2020

The Ridge Subdivision  
Post-Development Watershed Map



The proposed detention/retention basin has also been sized to mitigate the peak flow and volumetric impacts from the entire project. A 30-inch drainage discharge pipe would be directed to the flume over the Caperton Canal. The infiltration elevation of the basin, to be located upstream of the Caperton Canal, would be below the elevation of the existing canal. As such, infiltration from the detention/retention basin would not adversely affect the integrity of the canal. Pro2 consists of the remainder of the subdivision (Lots 23 through 25, 32 through 34, and Lane C) and is divided into Pro2A (7.08 acres) and Pro2B (4.13 acres) (see Figure 3-8). Stormwater runoff from Pro2 would be captured in the rock cobble cutoff v-ditch and drain to two proposed Caperton Canal flume crossings without restriction; the crossings are identified as Point of Interest POI 3 and POI 5 on the Watershed Map (see Figure 3-8). Water treatment for the sheds would be provided by the vegetated swales adjacent to the roadway pavement and disconnected roof drains for the residential lots. The proposed cobble lined v-ditch along the downslope section of the lots will convey the flows to the point of discharge.

Pro3 (19.22 acres) is existing, and is not proposed for development as part of the project. Pro4 (3.06 acres) would be directed to the portion of Bickford Ranch Road along the project's frontage with construction of the roadway improvements. Treatment of runoff from Pro4 would be provided by the proposed roadside vegetated drainage swale.

### **Off-Site Improvements**

Development of the proposed project is conditioned to be dependent upon the installation of Bickford Ranch Road and associated utilities through Phase 1 of the BRSP and extension of such infrastructure through a portion of BRSP Phase 2 to the project entry. In the event the Phase 2 improvements of Bickford Ranch Road have not yet been constructed, and the proposed project has obtained necessary entitlements and is ready to proceed, off-site improvements to a segment of Bickford Ranch Road would be required to extend services and complete access to the project site. Specifically, such improvements would include the approximately 400-foot extension of Bickford Ranch Road from the Phase 1 terminus thereof to the project site and along the entire frontage of the project, including all required water, sewer, drainage and dry utilities therein (see Figure 3-9, Figure 3-10, and Figure 3-11).

In addition, improvements would be made to the BRSP landscape corridor parcel which fronts upon the project, including the landscaping thereof and the installation of both the Class 1 path and multi-purpose trail in accordance with the Exhibits O and P set forth in the BRSP Development Agreement. All off-site improvements would be constructed consistent with the BRSP and applicable mitigation measures.

### **Modified Shaded Fuel Break**

The proposed project would include the establishment and on-going maintenance of an off-site, 300-foot-wide Modified Shaded Fuel Break (MSFB) easement along the project's northern boundary, north of the Caperton Canal. The design of the MSFB has been reviewed and approved by Penryn Fire Protection District and the California Department of Forestry and Fire Protection (CAL FIRE). The MSFB would be accessed by maintenance crews by way of the access easements from Lanes B and C along Lot B and Lot 32, and over the canal at access points consistent with those constructed by PCWA to service the canal. Maintenance of the MSFB would be the responsibility of the proposed project's homeowner's association and would include routine clearing of understory brush to reduce fire hazards, but would not include removal of mature trees or substantial ground-disturbing activities.



Figure 3-9  
 Utility Plan

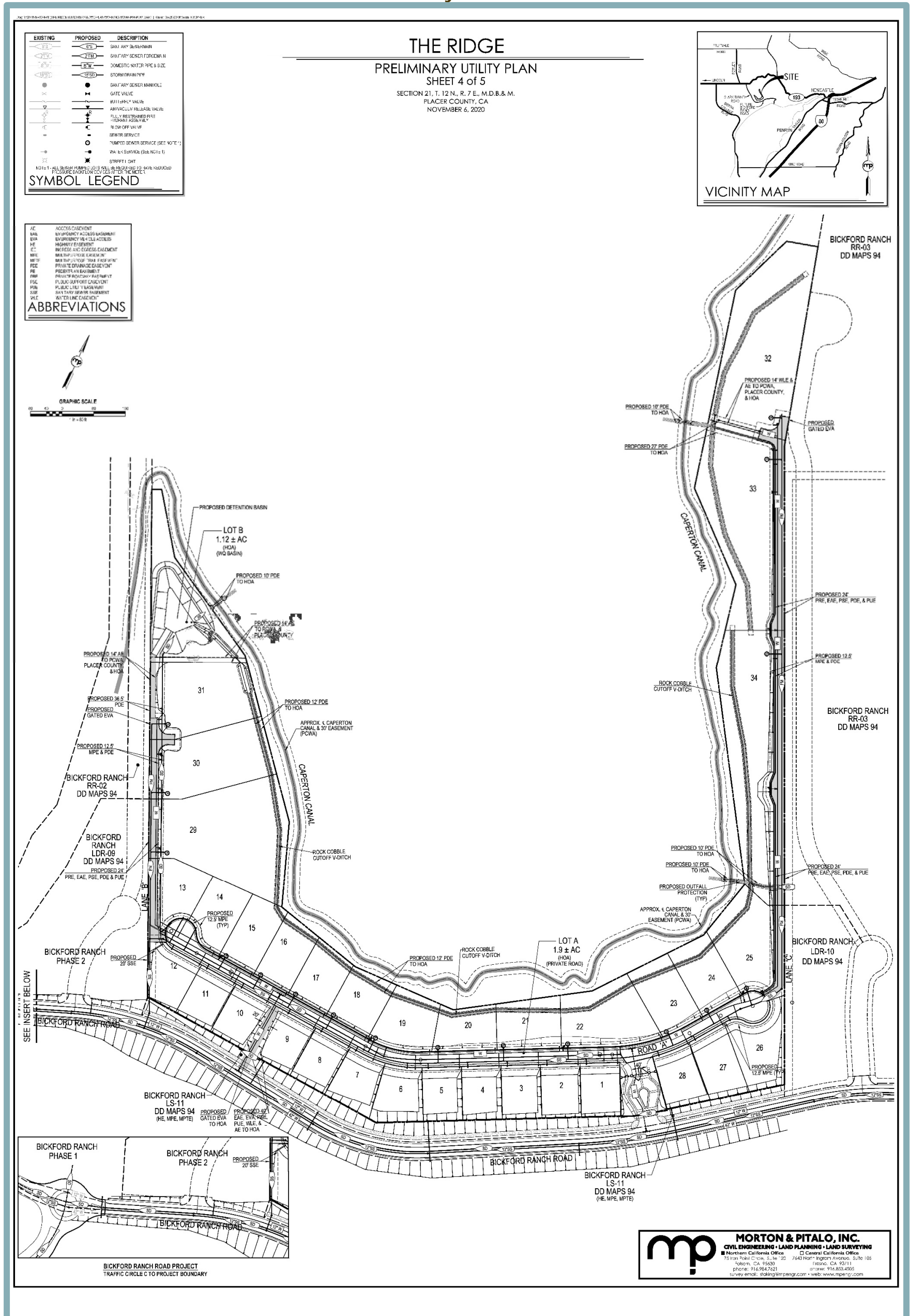


Figure 3-10  
 BRSP Subphase 1C – Water Facilities

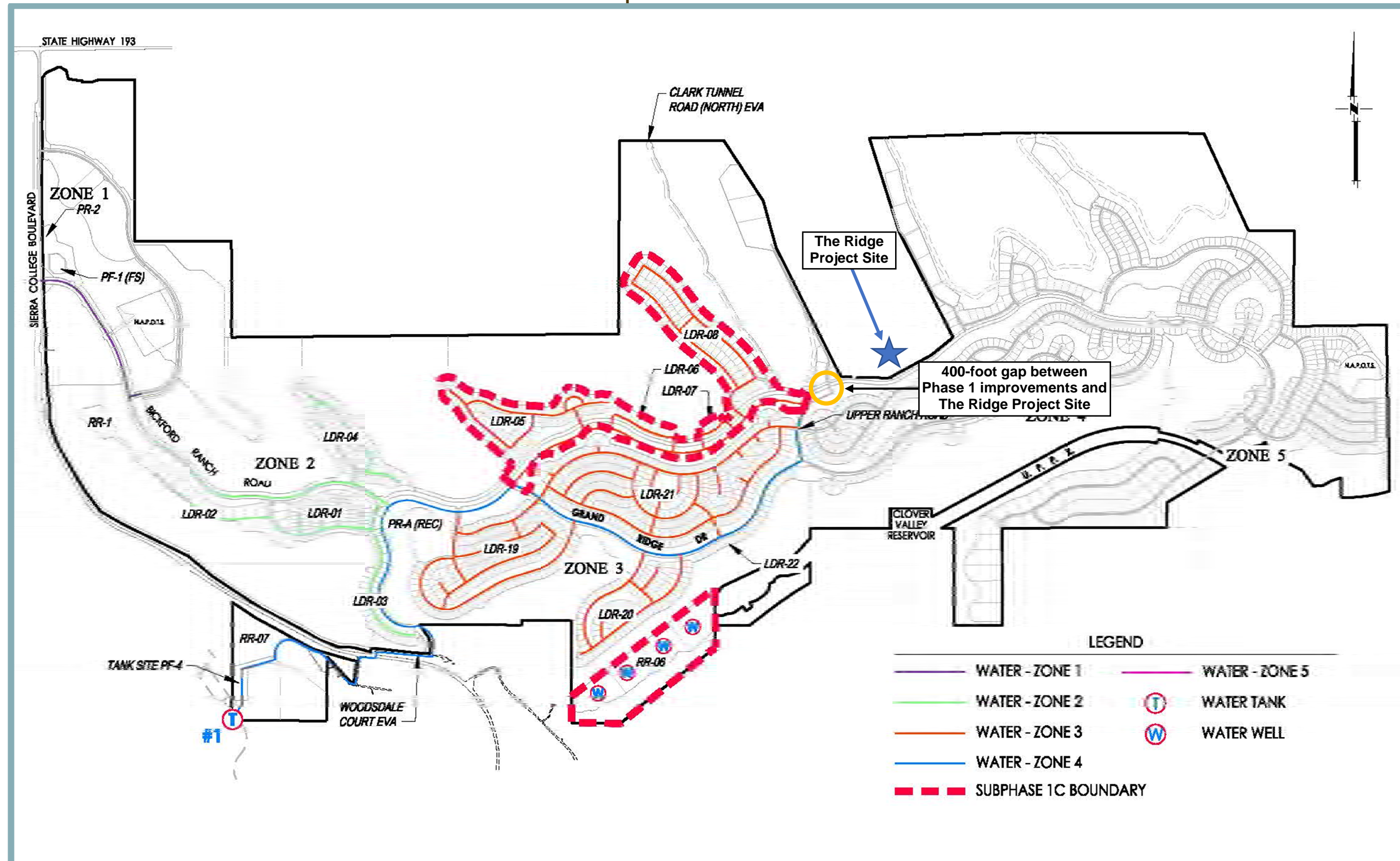
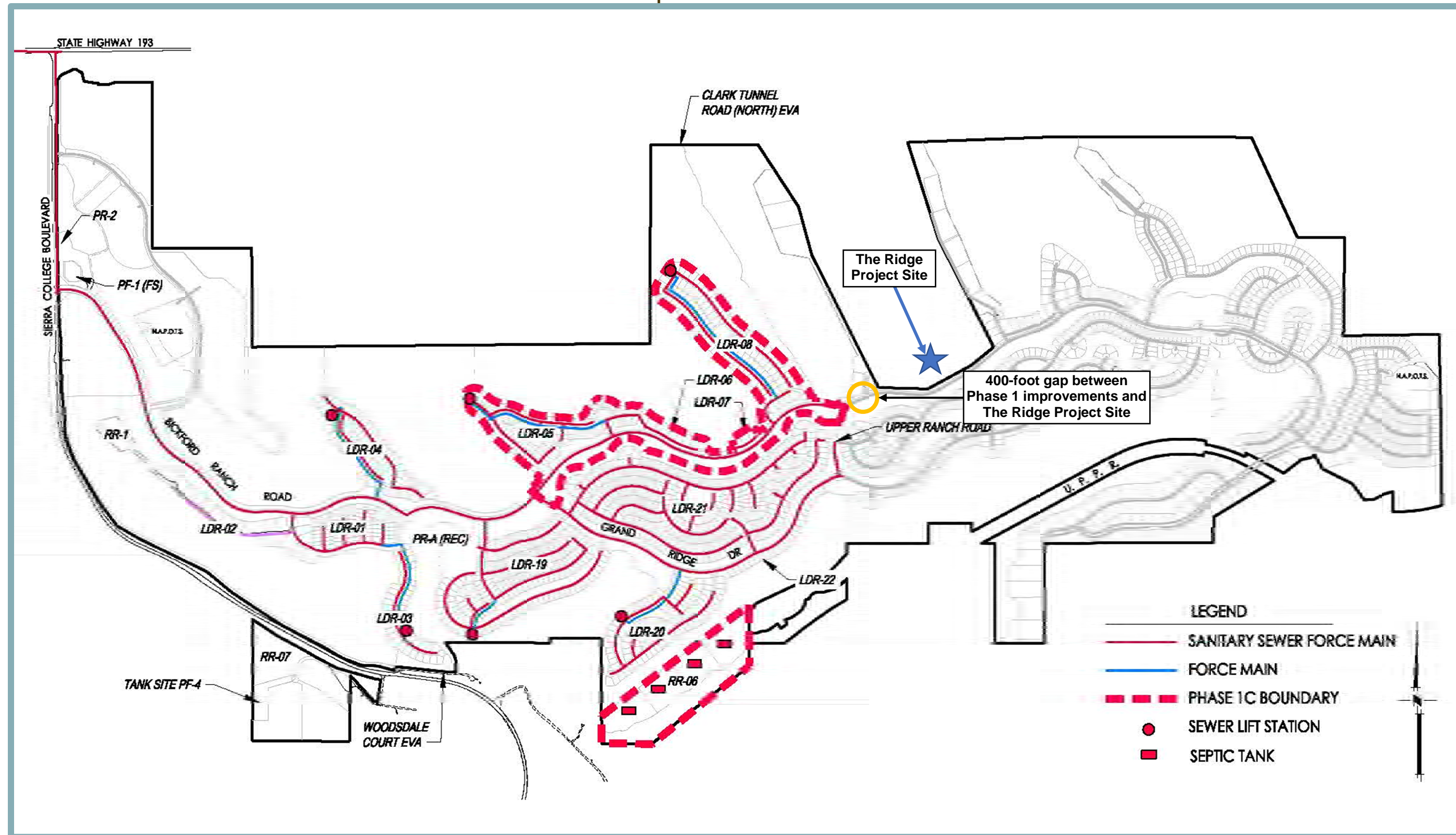


Figure 3-11  
 BRSP Subphase 1C – Sewer Facilities



During the CAL FIRE declared fire season, understory brush within the MSFB, including annual grasses and dead vegetation, would be maintained at a height of four inches or less. Maintenance would occur as frequently as necessary to ensure proper reduction of vegetation height, and no less than once per year, according to the Fire Safe Plan (see Appendix G) prepared for the project.

### **Grading Activities**

Similar to the BRSP Development Standards and standard County requirements, which restrict any construction activities in areas with slopes greater than 30 percent, the identified 30 percent slope line within the project site, as shown on Figure 3-6, would serve as the building setback line, where the 30 percent slope edge is greater than the typical development standard defined setback. The only proposed grading disturbance in slope areas greater than 30 percent would be for the construction of the proposed drainage outfalls and flume crossings of the Caperton Canal and the proposed rock cobble cutoff v-ditch.

It should be noted that Lots 13 through 25 along the north side of Road A and the proposed LDR lots (Lots 29 through 34) are proposed as custom, non-pad graded home lots. Individual grading plans will be reviewed by the County for these lots prior to home construction. Thus, grading activities would be primarily restricted to the upper elevations of the ridge predominantly within the southern portion of the project site.

### **Annexation**

The proposed project would require annexation of the project site into Placer County SMD 1 for the provision of sewer services, subject to approval by the Placer County Board of Supervisors. As part of the proposed annexation, the project would be subject to payment of applicable annexation fees pursuant to Section 13.12.260 of the Placer County Code.

In addition, the proposed project will be conditioned to annex into the Bickford Ranch Community Facilities District (CFD) for applicable services.

### **Design Exception Request**

The proposed project involves a request for an exception to the Placer County standards regarding design speed, as defined by Section 4.03 of the County's Land Development Manual, in two locations. The proposed private street and cul-de-sacs within the project site (Road A), which is fully consistent with the BRSP Development Standards, provides access to the 28 MDR lots, and the six LDR lots. The cul-de-sacs at the east and west ends of Road A would serve as the primary access points for the project's proposed six LDR lots in excess of one acre in size, three of which are located on the eastern side of the project site and three on the western side. Access for each of the lots would be provided by private 20-foot paved lanes (Lanes B and C) located within a 24-foot private roadway easement.

While each of the proposed private street to private lane transitions is designed with a 25-foot minimum turning radius to allow for full emergency vehicle access, neither lane meets the 25 miles per hour (mph) design speed requirement for residential streets, as defined by Section 4.03. However, the terminus and transition from the 40-foot private street to a 20-foot private lane at a fully improved cul-de-sac would naturally serve to slow speeds to 15 mph or less. Additionally, the two locations cannot accommodate a turning radius that adheres to a 25-mph design speed. The design of the transition from the private street to the private lane requires the reduction of speed with a transition to what is intended to be effectively a private lot driveway. As such, the





project proposal requests a design exception to the 25-mph design speed requirement to use a 15-mph design speed at the defined locations of each end of the private street (Road A).

### **3.6 PROJECT PUBLIC APPROVALS**

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The County of Placer has discretionary authority and is the lead agency for the proposed project. The proposed project would require County approval of the following entitlements:

- General Plan Amendment to change the land use designation of the project site from Agriculture/Timberland 10-Ac. Min. to MDR (13.85 acres) and LDR (11.10 acres);
- Rezone from F-B-X 10-Ac. Min. to RS-B-8 (13.85 acres) and RS-B-10 (11.10 acres); and
- Vesting Tentative Subdivision Map.

The following additional County approval is required:

- Annexation into Placer County SMD 1; and
- Annexation into Bickford Ranch Community Facilities District for applicable services.

#### **Review or Approvals by Other Agencies**

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

- Placer County Conservation Program Authorization
- Placer County Water Agency – Related to construction in proximity to Caperton Canal.
- Regional Water Quality Control Board – National Pollutant Discharge Elimination System (NPDES) Permit and Section 401 Water Quality Certification.
- Placer County Air Pollution Control District.



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## **4. AESTHETICS**

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## 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,<sup>1</sup> the Placer County General Plan EIR,<sup>2</sup> the Placer County Design Guidelines,<sup>3</sup> the Placer County Landscape Design Guidelines,<sup>4</sup> the Bickford Ranch Specific Plan (BRSP) EIR,<sup>5</sup> and the 2015 BRSP EIR Addendum (2015 Addendum).<sup>6</sup>

Pursuant to the court ruling in *Preserve Poway v. City of Poway* (2016) 245 Cal. App.4th 560 [199 Cal.Rptr. 3d 600], community character is separate and apart from aesthetic impacts and, thus, is not a CEQA issue. Rather, the analysis of aesthetics should be limited to tangible, physical evidence that a project is visually inconsistent with the surrounding community (rather than a psychological “feel”). Therefore, where applicable, the analysis presented within this chapter focuses on potential physical changes to 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 approximately one mile southeast of the intersection of the State Route (SR) 193 and Clark Tunnel Road in unincorporated Placer County, California.

#### Visual Character of the Region

The regional area encompassing the proposed project is rural in character. The area is situated within the foothills of the Sierra Nevada Mountains in the southwest portion of Placer County, in north-central California. The terrain shifts from rolling grasslands to steep ridges, with ridgelines and drainage patterns throughout the area accentuated by oak woodland and patches of riparian vegetation, contrasting noticeably to the surrounding grasslands. Residential, commercial, public, and industrial development is present throughout the region. In some cases, the rural character historically associated with the ranching and agricultural operations of the County has been replaced by suburban and urban development, with urban growth in the cities of Rocklin,

<sup>1</sup> Placer County. *Countywide General Plan Policy Document*. August 1994 (May 21, 2013).

<sup>2</sup> Placer County. *Countywide General Plan EIR*. July 26, 1994.

<sup>3</sup> Placer County. *Design Guidelines Manual*. Revised September 24, 2003.

<sup>4</sup> Placer County. *Placer County Landscape Design Guidelines*. Adopted May 7, 2013.

<sup>5</sup> Placer County Community Development Resource Agency. *Bickford Ranch Specific Plan Revised Draft Environmental Impact Report*. Adopted December 18, 2001.

<sup>6</sup> Placer County Community Development Resource Agency. *Environmental Review Checklist: Bickford Ranch Specific Plan Amendment*. October 2015.



Roseville, Lincoln, and other portions of the County having substantially altered the landscape. Between the developed areas, isolated natural sections have remained, increasing the aesthetic value of the remaining contiguous open space.

The landscape adjacent to the project site is comprised of ridge tops, punctuated by canyons sloping toward lower and flatter foothill areas. The areas to the east, south, and west of the project site are currently undeveloped, but are planned for development as part of the approved BRSP. The scenery of lands adjacent to the BRSP boundaries, such as the Penryn community to the southeast, are comprised of rural residential development and agricultural patterning dissected by riparian corridors and rolling terrain. The architecture in the area is highly diverse in style, orientation, and arrangement; however, single-story, unobtrusive, ranch-style homes are also typical within the Penryn community. Some of the local rural residential development in the region is located along ridge tops and ridgelines, such as the residential development along Ridge Road to the northeast of the BRSP.

Areas of uncommon scenic quality have not been identified in the regional surrounding of the proposed project. Additionally, the Placer County General Plan does not identify any roadways in the vicinity of the proposed project as scenic, requiring special considerations for adjacent development, rights-of-way landscaping, or signage restrictions.

### **State Scenic Highways**

The nearest State highway to the project site, located approximately 3,082 feet to the north, is SR 193. According to the California Department of Transportation (Caltrans) map of designated and eligible scenic routes under the California Scenic Highway Program, SR 193 is not an officially-designated State scenic highway and designated State scenic highways do not exist within the vicinity of the project site or in Placer County.<sup>7</sup>

### **Visual Character of the Project Site and Surrounding Area**

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

As discussed in Section 1.5 of the Introduction chapter of this EIR, substantial evidence exists to support adjusting the existing conditions baseline for the area to the west of the project site, within the Phase 1 boundaries of the BRSP, as such adjustments would give the public and decision-makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts (CEQA Guidelines Section 15125[a]). In plain language, this means that because the proposed project will not be constructed until Phase 1 of the BRSP has been constructed, the CEQA baseline for the proposed project assumes existence of BRSP Phase 1.

An estimated 1,010 single-family units would be developed within Phase 1 of the BRSP, as well as associated backbone roadway, water, sewer, and storm drainage infrastructure. The primary backbone roadway would be the two-lane Bickford Ranch Road, which would run in an east-to-west direction and provide access to Phase 1 of the BRSP and the proposed project from Sierra College Boulevard to the west. Bickford Ranch Road would include a 12-foot travel lane in each direction, with a seven-foot attached bicycle lane on the outside of each travel lane. Additionally, a drainage conveyance and treatment swale would be provided within a multi-purpose easement

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<sup>7</sup> Department of Transportation. *California Scenic Highway Mapping System, Placer County*. Available at: [http://www.dot.ca.gov/hq/LandArch/16\\_livability/scenic\\_highways/](http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/). Accessed December 2020.



on each side of Bickford Ranch Road, following the same east-to-west direction of the roadway. Along the northerly side of the road, a 10-foot Class I bike and pedestrian path would be implemented to the north of the swale and extend from the project site's western perimeter to the eastern perimeter.

The terminus of Bickford Ranch Road after completion of Phase 1 BRSP improvements would stop short of The Ridge project site, leaving approximately 400 feet of unpaved roadway between the terminus and the southwestern corner of The Ridge project site. This 400-foot segment would either be constructed during commencement of Phase 2 of BRSP, or depending on the timing of BRSP Phase 2, potentially by The Ridge applicant.

### **Project Site**

The project site is situated atop three interconnected ridges forming a horseshoe shape (see Figure 4-1 below). Currently, the site is undeveloped, consisting primarily of grasses, oak woodland, and scattered rock outcroppings. Based on an Arborist Report prepared for the proposed project, the project site contains a total of 46 oak trees with a single trunk diameter at breast height (DBH) of at least six inches or a cumulative trunk DBH of at least 10 inches.<sup>8</sup> The site is used for seasonal cattle grazing. Access to the project site is provided by Clark Tunnel Road, an unimproved dirt roadway that ultimately connects to the community of Penryn, further to the southeast of the project site. The Placer County General Plan designates the site as Agriculture/Timberland 10-acre minimum and the site is zoned Farm, minimum 10-acre Building Site (F-B-X 10-Ac. Min.). Representative views of the project site are available from SR 193 and Bickford Ranch Road, respectively.

### **Surrounding Areas**

The area to the north of the project site is densely wooded and slopes steeply downward toward the valley below. An undeveloped ranch (La Faille Ranch property), owned by the project applicant and used for cattle grazing, is located within the valley to the north of the site. The southern boundary of the La Faille Ranch property includes the existing concrete-lined Caperton Canal, owned and operated by the Placer County Water Agency (PCWA), which bifurcates the ranch from the proposed project site. The Caperton Canal is used to deliver untreated water to treatment plants in the Rocklin and Lincoln areas and is also sold to customers for irrigation, including supplying water to the pond on the La Faille Ranch property.

As previously discussed, under the adjusted baseline condition, the area to the west of the project site would consist of Phase 1 of the BRSP, including 1,010 single-family homes, open space preserve areas, and associated backbone infrastructure for roadway, water, sewer, and drainage systems.

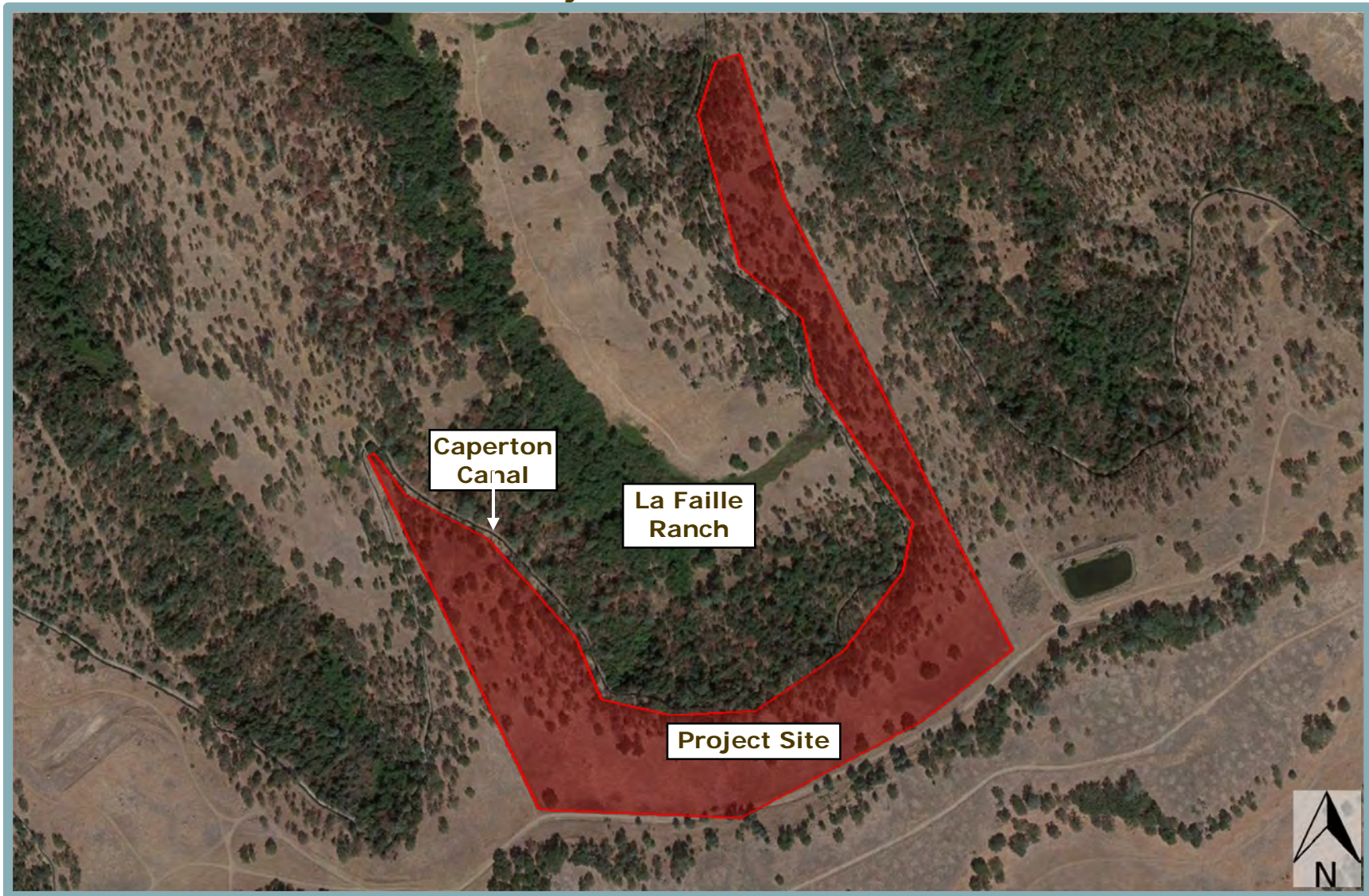
The areas to the south and east of the project site are part of the currently undeveloped Phase 2 of the BRSP and includes Clark Tunnel Road, which is lined by oak-foothill pine woodland to the south of the roadway. Immediately south of the oak-foothill pine woodland is another unimproved dirt roadway that runs parallel to Clark Tunnel Road. South of the second dirt roadway, the landscape starts to descend, with the terrain transitioning from open areas of annual grassland to a dense swath of oak woodland lining both sides of Union Pacific Railroad (UPRR) tracks. Finally, further south of the UPRR tracks, the landscape transitions to development associated with the community of Penryn.

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<sup>8</sup> Helix Environmental Planning, Inc. *Arborist Report and Oak Woodland Inventory, The Ridge ±56.6-Acre Study Area Placer County, California*. December 2020.



**Figure 4-1**  
**Project Site Boundaries**



The area to the east of the project site is currently undeveloped, densely wooded, and slopes steeply downward from the project site's eastern ridge toward the valley below. The area is similar to the existing terrain of the project site, with the valley landscape featuring oak woodland. A man-made retention pond is located immediately east of the project site, north of Clark Tunnel Road. Further northeast of the project site, rural residential land uses are located along Oak View Road, Columbia Dam Road, and Mandarin Hill Road.

### **Off-Site Improvement Areas**

The terminus of Bickford Ranch Road after completion of Phase 1 BRSP improvements would stop short of The Ridge project site, leaving approximately 400 feet of unpaved roadway between the terminus and the southwestern corner of The Ridge project site. This 400-foot segment would either be constructed during commencement of Phase 2 of BRSP, or depending on the timing of BRSP Phase 2, The Ridge applicant may choose to proceed with construction of this 400-foot segment to gain access to their site, assuming the proposed project has obtained necessary entitlements and is ready to proceed. The current conditions of this 400-foot segment generally consist of the unpaved Clark Tunnel Road, which is lined by oak-foothill pine woodland to the south of the roadway. Immediately south of the oak-foothill pine woodland is another unimproved dirt roadway that runs in a parallel direction to Clark Tunnel Road.

### **Viewer Types**

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

- Motorists along SR 193 have existing limited views of the project site while driving past the site, due to the fact that the project site is in the background view (just less than one mile away).
- Pedestrians and bicyclists along the Phase 1 portion of Bickford Ranch Road would have views of the site.
- Residents of the Phase 1 BRSP single-family residential subdivisions to the west of the project site would have limited views of the proposed project. However, views would be partially blocked by existing vegetation, notably, the scattered oak trees situated between the Phase 1 BRSP residences and the western border of the proposed project.

### **Public Versus Private Views**

Travelers along nearby roadways, as well as the proposed nearby residences west 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 SR 193 and the completed portion of Bickford Ranch Road in the project vicinity.

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



[the project] will adversely affect the environment of persons in general.” Such a conclusion is consistent with the thresholds of significance established in Appendix G of the CEQA Guidelines. Therefore, it is appropriate to focus the aesthetic impact analysis on potential impacts to public views, rather than private views.

### **Existing Conditions of Key Viewpoints**

Key public viewpoints that would most clearly display the proposed project’s potential visual effects under the adjusted baseline condition have been selected for in-depth analysis. For the purpose of this analysis, the segments of SR 193 and the Phase 1 BRSP portion of Bickford Ranch Road within the project vicinity are characterized as key public viewpoints (see Figure 4-2).

### **Existing Views from SR 193**

Views from SR 193 towards the project site consist of La Faille Ranch in the foreground with grassland areas in the valley (see Figure 4-3). Scattered trees are included in the midground as the landscape begins to recede toward the end of the canyon, after which the forest canopy thickens as the ridge ascends toward the project site. The project site itself from this viewpoint is not discernible beyond the oak woodland situated on the slope immediately north of the site. The rural visual character of the viewshed is consistent with the grassland and oak woodland to the south of SR 193.

### **Existing Views from Bickford Ranch Road**

Views from the planned Phase 1 BRSP terminus of Bickford Ranch Road towards the project site consist of grassland in the foreground and midground, followed by the beginning of a dense canopy of oak woodland in the background (see Figure 4-4). A worn path from previous vehicle use proceeds from the foreground along a path to the south of the project site. The project site from this viewpoint includes only grassland and oak trees. The rural visual character of the viewshed is consistent with the grassland to the west of the project site.

### **Light Pollution and Glare**

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

Currently, 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, with the adjusted baseline, the project site would be located within the immediate vicinity of Phase 1 BRSP’s residential development to the west and southwest. Lighting associated with such development, as well as headlights from vehicles traveling on Bickford Ranch Road, would contribute to the overall ambient nighttime lighting environment of the project area.

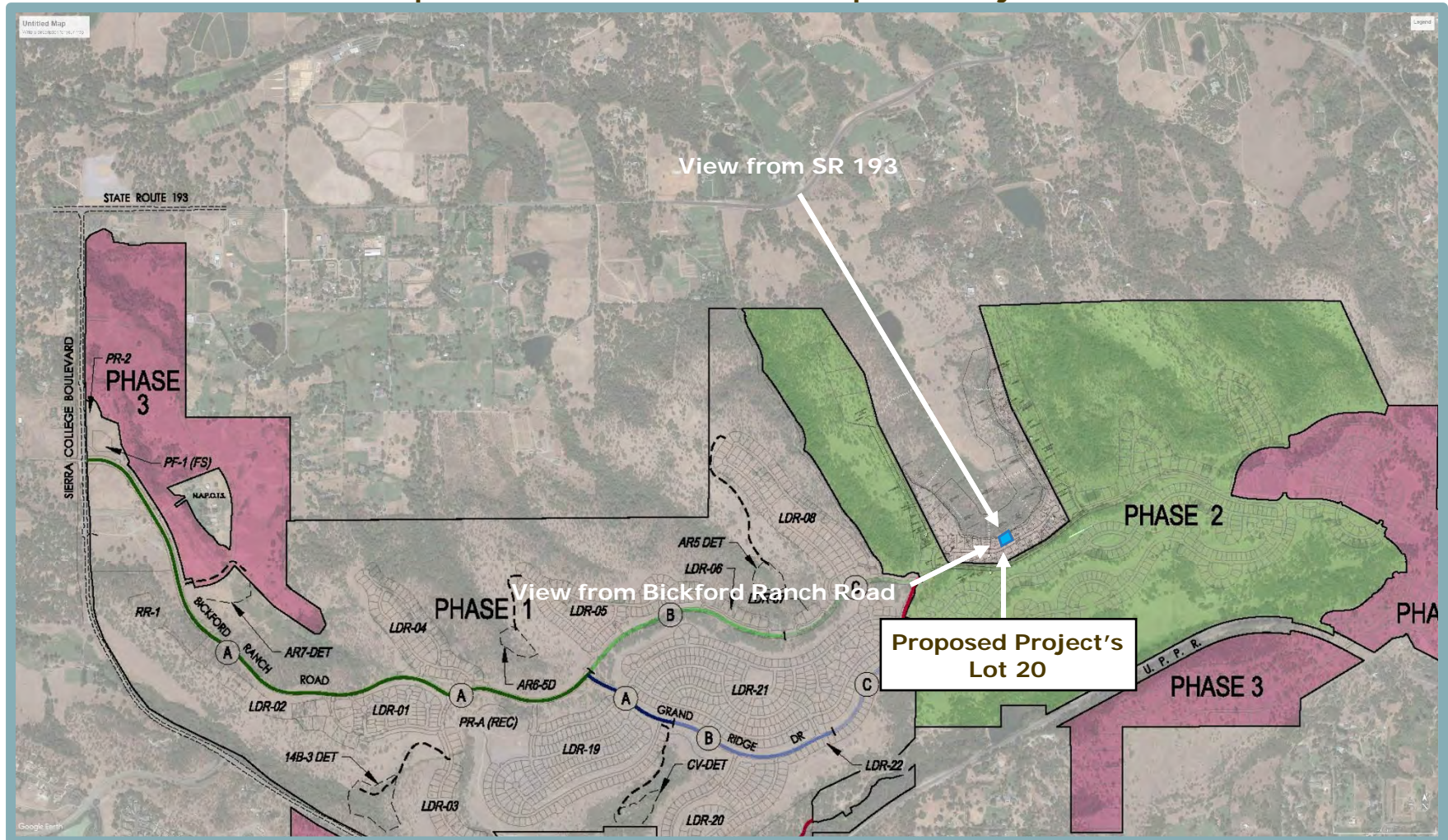
## **4.3 REGULATORY CONTEXT**

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.





Figure 4-2  
Representative Views of the Proposed Project



**Figure 4-3**  
**Existing Views Towards The Ridge Project Site From SR 193**



**Figure 4-4**  
**Existing Views Towards The Ridge Project Site From Bickford Ranch Road**



## **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.1 The County shall require that new development in scenic areas (e.g., river canyons, lake watersheds, scenic highway corridors, ridgelines, and steep slopes) is planned and designed in a manner which employs design, construction, and maintenance techniques that:

- a. Avoid locating structures along ridgelines and steep slopes;
- b. Incorporate design and screening measures to minimize the visibility of structures and graded areas; and
- c. Maintain the character and visual quality of the area.

Policy 1.K.2 The County shall require that new development in scenic areas be designed to utilize natural landforms and vegetation for screening structures, access roads, building foundations, and cut and fill slopes.

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.

Policy 1.K.6 The County shall require that new development on hillsides employ design, construction, and maintenance techniques that:

- a. Ensure that development near or on portions of hillsides do not cause or worsen natural hazards such as erosion, sedimentation, fire, or water quality concerns;
- b. Include erosion and sediment control measures including temporary vegetation sufficient to stabilize disturbed areas;
- c. Minimize risk to life and property from slope failure, landslides, and flooding; and
- d. Maintain the character and visual quality of the hillside.

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

Policy 1.O.1 Except as otherwise provided in the Design Guidelines of an approved Specific Plan, the County shall require all new development to be designed in compliance with applicable provisions of the Placer County Design Guidelines Manual.

Policy 1.O.3 The County shall require that all new development be designed to be compatible with the scale and character of the area. Structures, especially those outside of village, urban, and commercial centers, should be designed and located so that:

- a. They do not silhouette against the sky above ridgelines or hilltops;
- b. Rooflines and vertical architectural features blend with and do not detract from the natural background or ridge outline;
- c. They fit the natural terrain; and
- d. They utilize building materials, colors, and textures that blend with the natural landscape (e.g., avoid high contrasts).

Policy 1.O.4 The County shall require that new rural and suburban development be designed to preserve and maintain the rural character and quality of the County.



Policy 1.O.5 The County shall require that new development at entrances to rural communities be designed to include elements such as signage, landscaping, and appropriate architectural detailing to help establish distinct identities for such communities.

Policy 1.O.8 The County shall, where appropriate, require new development to provide activity pockets along public sidewalks as pedestrian amenities, including such features as benches, sitting ledges, and mini-parks.

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.1 The County shall encourage landowners and developers to preserve the integrity of existing terrain and natural vegetation in visually-sensitive areas such as hillsides, ridges, and along important transportation corridors.

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

### **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.

While the Placer County Design Guidelines Manual does not include a particular "style" for residential or institutional structures in western Placer County, 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.



## **BRSP Development Standards and Design Guidelines**

Various aspects of the proposed project – including, but not limited to, the project’s point of entry, landscaping, and structural architecture – would conform to the concepts set forth in the BRSP Development Standards and Design Guidelines. Such conformance would provide a sense of uniformity between the proposed project and the BRSP. The Development Standards and Design Guidelines are included in the 2015 Addendum.

The BRSP Development Standards and Design Guidelines contain setback requirements, coverage limits, height restrictions, parking requirements, etc. The document does not dictate specific styles or architectural character. The intent is to allow the various home design elements to respond to market conditions and other factors.

## **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 aesthetics impact is considered significant if the proposed project would:

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

The following issues related to whether the proposed project would result in impacts have already been dismissed in the Initial Study for the proposed project, included as Appendix C to this EIR, and will not be discussed further:

- 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.

### **Method of Analysis**

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



substantially degrade said visual character or quality. Computer-generated simulations were used to aid in this evaluation.

### **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*.**

Under the adjusted baseline condition, only the area to the west of the project site would be developed, as part of BRSP Phase 1. BRSP Phase 1 would include development of as many as 1,010 single-family units, as well as associated backbone roadway, water, sewer, and storm drainage infrastructure. However, the immediately adjacent areas to the north, south, and east of the project site would remain undeveloped and characterized by ridgelines and steeply sloping topography containing grassland and woodlands. While the areas to the south and east of the project site are also within the BRSP boundaries, the areas would not be developed until the cumulative horizon (e.g., once BRSP Phase 2 is completed). Based on the lack of development in most areas surrounding the project site, 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 34 single-family residential homes and associated improvements. Of the 34 lots, 28 would be Medium Density Residential (MDR) lots ranging in size from 13,700 square feet (sf) to 38,416 sf, with an average size of 18,206 sf and an average net density of 2.3 units per acre. The remaining six residential lots would be Low Density Residential (LDR) lots ranging in size from 1.1 to 2.2 acres, with an average net density of 0.60 unit per acre. The six LDR lots would be located along the ridges within the eastern and western portions of the site and would be similar in size to the Rural Residential (RR) lots within the adjacent BRSP Phase 2 area. Combined, the proposed project would result in an average residential density of 1.55 units per acre. The proposed development standards for the proposed project are consistent with the County-approved RR and LDR standards set forth in the BRSP Development Standards. The proposed project would not include dedicated park space within the project site.

The primary access for the proposed project would be provided by Bickford Ranch Road, which would be constructed from Sierra College Boulevard to a point near the southwestern corner of the project site during completion of Phase 1 improvements for BRSP. As previously discussed, the proposed project would be developed after completion of BRSP Phase 1 infrastructure is installed. The terminus of Bickford Ranch Road after completion of Phase 1 BRSP improvements would stop short of the project site, leaving about 400 feet of unpaved roadway between the terminus and the





southwestern corner of the project site. This 400-foot segment would either be constructed during commencement of Phase 2 BRSP, or potentially by the proposed project's applicant, depending on the timing of Phase 2 BRSP. Water and sewer trunk lines would also be extended beneath the 400-foot segment of Bickford Ranch Road to the project site. These infrastructure improvements would not substantially degrade the existing visual character or quality of the site and its surroundings as they would occur within an existing dirt road alignment and would not project above the ground surface.

Additionally, the proposed project would include construction of a six-foot masonry wall along the project frontage at Bickford Ranch Road. The remainder of the proposed development area would be surrounded by split rail fencing along the east and west boundaries where residential lots are proposed and wrought-iron fencing elsewhere. The proposed project would include new trees and other landscaping elements along Bickford Ranch Road and the project entry. The new trees and landscaping would include New World Red Maple, Garden Madrone, Crape Myrtle, Pyramidal English Oak, Red Oak, shrubs and groundcover (see Figure 3-7 in the Project Description chapter of this EIR). The proposed project would include the establishment and on-going maintenance of an off-site, 300-foot-wide Fuel Management Zone along the project's northern boundary, north of the Caperton Canal (see Figure 3-6 in the Project Description chapter). Maintenance of the Fuel Management Zone would include routine clearing of understory brush to reduce fire hazards, but would not include removal of mature trees or substantial ground-disturbing activities. During the California Department of Forestry and Fire Protection (CAL FIRE) declared fire season, understory brush within the Fuel Management Zone, including annual grasses and dead vegetation, would be maintained at a height of four inches or less. Maintenance would occur as frequently as necessary to ensure proper reduction of vegetation height.

As detailed under Impact 6-8 in the Biological Resources chapter of this EIR, a total of 7.985 acres of mixed oak woodland and oak-foothill pine woodland are anticipated to be directly impacted by the proposed project. However, the project would include new trees and other landscaping elements along Bickford Ranch Road, street trees internal to the project site, and enhanced landscaping at the project entry. Per the project's proposed landscaping plans, the project would include the planting of 95 new trees and 51,120 sf of new shrubs and groundcover plantings. The vegetation would be consistent with the BRSP's plant palette for Bickford Ranch Road. Additionally, the proposed project would avoid a total of 30.913 acres of mixed oak woodland and oak-foothill pine woodland, with the woodland acreage on the slopes to the north of the project site completely avoided. As such, the proposed landscaping and preservation of the majority of oak woodland would help to screen the project from public views.

As discussed above, public views of the project site are afforded from SR 193 and the proposed Bickford Ranch Road. Changes to the aforementioned public views due to development of the proposed project are discussed separately in further detail below.

### Views from SR 193

Currently, views from this public vantage point along SR 193 consist of rural grassland with scattered trees in the foreground, followed by increasingly dense wooded landscape in the midground as the valley of La Faille Ranch ascends upwards toward the project site, with the background featuring the slopes below the project site, covered in oak



woodland. Photo simulations were conducted by Williams + Paddon Architects + Planners, Inc. and include public views of the project site with a rendering of the proposed project. To be conservative, the simulations assumed two-story box-style residences for the proposed project. Figure 4-5 shows the view from SR 193, first as the viewshed currently exists, followed by a view with the proposed project incorporated. As shown in the figure, the proposed project's residential structures are discernible on the horizon from SR 193, just past the canopy of oak woodland. However, the character and quality of the view substantially remains that of a forested ridgeline, with distant views of residential structures. The visual intrusion of the proposed residences is rather minimal based on the distance of the development from the highway, as well as the substantial amount of vegetative screening, and the skyline above the site area remains intact, without noticeable projections of project structures above the ridge and canopy line. It is also noted that the canopy of oak woodland ascending toward the project's ridgeline would remain largely unaffected, even with implementation of the Fuel Management Zone, as the fuel management activities within the Fuel Management Zone would be limited to routine clearing of understory brush to reduce fire hazards, but would not include removal of mature trees.

Additionally, the proposed project, as simulated from the SR 193 viewpoint, adheres to the policies included in the Placer County General Plan with respect to the use of natural landforms and vegetation for screening purposes, the requirement that all new development be designed to be compatible with the scale and character of the area, and the requirement that new rural and suburban development be designed to preserve and maintain the rural character and quality of the County. General Plan Policy 1.K.1 notes that new development on ridgelines should be planned and designed in a manner which employs design, construction, and maintenance techniques that avoid locating structures along ridgelines and steep slopes. This policy is intended to achieve Goal 1.K, which has the focus of protecting "...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." Thus, the intent of the policy is to avoid locating structures along ridge lines and steep slopes for purposes of protecting visual resources. As previously discussed, and shown in the photo simulations, the character and quality of the ridgeline view from SR 193 substantially remains that of a forested ridgeline, with distant views of residential structures. The visual intrusion of the proposed residences is rather minimal based on the distance of the development from the highway, as well as the substantial amount of vegetative screening. Thus, the proposed design of the project is not in conflict with Policy 1.K.1.

Furthermore, as the speed limit on SR 193 to the north of the project site is 55 miles per hour (mph), public views would be temporary, occurring only as motorists briefly pass by the site. Due to the geometry of SR 193 in the project vicinity and the topography of the project site, public views from the roadway would be further limited. For example, SR 193 curves northward, which would angle the views of eastbound motorists away from the project site as vehicles drive past the property. Westbound travelers' views of the project site would be largely blocked due to the steepness of the existing ridgelines.

Based on the above, public views of the project site from SR 193 would not be considered to be substantially degraded by the proposed project.



**Figure 4-5**  
**View From SR 193 Existing Conditions (1) and Post-Project Conditions (2)**



### Views from Bickford Ranch Road

As mentioned above, substantial evidence exists to support the use of the County-approved BRSP-related adjustments for the existing conditions baseline of this EIR, as such adjustments would give the public and decisionmakers the most accurate and understandable picture practically possible of the proposed project's likely near-term and long-term impacts, pursuant to CEQA Guidelines. Therefore, Figure 4-6 shows views toward the project site from the BRSP Phase 1 terminus of Bickford Ranch Road under the adjusted baseline. The figure first shows the view without incorporation of the proposed project, followed by the view with implementation of the proposed project. Additionally, Figure 4-7 provides further context of the proposed project's effects on the viewshed by showing the view from the BRSP Phase 1 terminus of Bickford Ranch Road with only the proposed project depicted in color. The BRSP Phase 1 homes are greyed out so the reader can clearly identify the limits of The Ridge project site and associated homes. Similar to the simulated views from SR 193, views from Bickford Ranch Road assumed two-story box-style residences for the proposed project.

With development of the proposed project under the adjusted baseline, views toward the project site from Bickford Ranch Road would be consistent with the single-family residences and associated improvements of BRSP Phase 1. Consistent with General Plan Policy 1.K.3, a landscape corridor would extend along the northern side of Bickford Ranch Road, providing views of trees, shrubs, and groundcover plantings, which would partially shield views of the BRSP residences located north of the landscaping. The landscape corridor would be extended from BRSP Phase 1 to along the proposed project's frontage and would additionally help screen the masonry wall along the project's southern boundary.

In accordance with Policy 1.O.3 of the General Plan, which requires that all new development be designed to be compatible with the scale and character of the area, the proposed residences would be consistent with the BRSP Phase 1 residences, as the structures would be designed according to the standards set forth in the BRSP Development Standards and Design Guidelines. Such conformance would provide a sense of uniformity between the proposed project and the BRSP, particularly regarding the proposed project's point of entry, landscaping, and structural architecture. Thus, when accounting for buildout of BRSP Phase 1, the proposed project would serve as an extension of the residential development already approved in the vicinity and would not substantially deteriorate public views from Bickford Ranch Road. Based on the simulated view, the proposed structures would not exceed the height of the area's tree line, and as a result, would not disrupt the natural background afforded by the oak woodland canopy to the north of the project site. Furthermore, public views of the site for motorists, cyclists, and pedestrians traveling on Bickford Ranch Road would be temporary, occurring only briefly as such viewers pass the site.

Based on the above, public views towards the project site from Bickford Ranch Road would not be substantially degraded by the proposed project.



**Figure 4-6**  
**View From Bickford Ranch Road Under BRSP Phase I Baseline (1) and with Ridge Project (2)**



**Figure 4-7**  
**View From Bickford Ranch Road with BRSP Phase I Greyed Out**



### Conclusion

As mentioned above, the project site is currently undeveloped, consisting primarily of grasses, oak woodland, and scattered rock outcroppings. The proposed project would result in changes in the view from SR 193, and more substantial changes from Bickford Ranch Road. However, while the proposed project would change the visual character of the site as seen from public roadways near the site, the design of the project would be consistent with the standards set forth in the BRSP Development Standards and Design Guidelines, and would serve as a logical extension of the residential community developed during Phase 1 of the BRSP.

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 regulations governing scenic quality. Thus, a **less-than-significant** impact would occur.

It is also noted that, while impacts to aesthetics due to tree removals are less than significant due to the distance of the project from public vantage points, topography, and the density of vegetation on the ridge, the following Conditions of Approval will be placed on the proposed project to further limit tree removal for aesthetic and ridgeline protection purposes:

- A. Any significant tree identified as preserved on the Tentative Subdivision Map that is destroyed or damaged by construction activities shall be subject to a fee at the rate of \$125 per DBH, or the County's fair market DBH value in effect at the time. Fees for trees inadvertently damaged or impacted by construction would be paid prior to the issuance of the first Certificate of Occupancy for the project. The determination of impact to significant trees identified for protection shall be made by the Planning Services Division.
- B. Any significant tree identified as preserved on the Tentative Subdivision Map that is proposed to be removed by a future lot owner or the homeowner's association would require approval of a Tree Permit by Placer County. Any unpermitted removal of significant trees identified to be preserved on the Tentative Subdivision Map shall be subject to appropriate enforcement actions including, at a minimum, the assessment of fees at the rate of \$125 per DBH or the County's fair market DBH value in effect at the time. The determination of impact to significant trees identified for protection shall be made by the Planning Services Division.

In addition, project-related biological impacts to oak woodlands are mitigated through a PCCP Authorization including payment of land conversion fees.

Similarly, while impacts to aesthetics are less than significant due to the distance of the project from public vantage points, topography, and the density of vegetation on the ridge, on Lots 16 through 25 and Lots 29 through 34 all residences and accessory structures would be required to comply with development standards designed to further reduce the visual impact of structures. The development standards, contained in the conditions of approval, would address grading, retaining walls, height and siting, design and color, and lighting, and would be incorporated into the project's Covenants, Conditions, and



Restrictions (CC&Rs) enforced through the Home Owners Association (HOA) and during the County's review of building and/or grading permits.

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. However, the proposed project would be designed in accordance with the lighting standards contained in Section 7 of the BRSP Development Standards. The Development Standards require all outdoor lighting fixtures, including site and building lighting, to have directed shielding or to be recessed in order to prevent direct light from the fixture from shining beyond the property lines where the fixture is installed. The Development Standards also require that all lighting be installed in such a manner to reduce the effect of ambient lighting, light trespass, and light pollution, with lighting fixtures appropriate in scale and intensity for the intended use and designed to blend in with the architectural design of a building. Additionally, lighting within public rights-of-way or easements must be designed with the purpose of illuminating streets, roads, and/or intersections, with fixtures designed to not cast light onto adjoining areas outside the intended roadways/intersections, unless needed for a specific purpose. Nonetheless, because the types of lighting and the specific locations have not yet been determined, the proposed project's increase in light and glare generated on-site 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 could 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 potential 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 consistent with Section 7 of the Bickford Ranch Specific Plan Development Standards/Design Guidelines (August 2015), which includes but is not limited to standards related to utilization of Dark-Sky compliant principles, limiting amount of light to achieve minimum adequate nighttime visibility,*





*minimizing sky glow by controlling the amount of uplight, utilizing shields or other design techniques to direct light downward, etc.*

### **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 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.

Similarly, 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. The proposed project’s incremental contribution to changes in visual character and night sky lighting 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 BRSP. Based on the analysis below, the project’s incremental contribution to the 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 includes the area covered by the project site, full buildout of the BRSP, development of the La Faille Ranch property to the north of the project site, and City of Lincoln projects approved, and in some cases, under construction, along SR 193, west of the project site. Because the geographic scope for the cumulative aesthetics analysis includes all projects that could potentially exist within identified viewsheds, which includes views towards the project site from SR 193 and the planned Phase 1 BRSP terminus of Bickford Ranch Road, the City of Lincoln projects are not discussed further here as they are not within these viewsheds.

As depicted in Figure 3-10 in the Project Description chapter of this EIR, the 34-lot proposed project would be surrounded on three sides by a fully developed specific plan



community. The BRSP at buildout would generally consist of 1,890 new residential units, more than 1,100 acres of open space and recreation, and new public facilities, including a fire station and school site for a potential future school. As such, the County-approved BRSP would result in changes to the existing environment through conversion of vacant land to developed uses that would result in a change in visual character of the region surrounding the project site in the cumulative horizon (with the exception of those areas that are currently being developed with Phase 1 backbone infrastructure). As noted above, the BRSP Development Standards and Design Guidelines, included in the 2015 Addendum to the County-approved BRSP EIR, would guide the design, style, and architecture of the homes associated with the BRSP. Figure 4-8 below shows the view from SR 193 of the project site with both the proposed project and full buildout of the BRSP. It should be noted that while full buildout of the BRSP is assumed in this cumulative analysis, only a few of the RR lots and associated homes within Phase 2 of BRSP would be visible from this key viewpoint.

The residential structures associated with the proposed project and buildout of the BRSP are slightly visible on the horizon from SR 193, past the canopy of oak woodland. However, as shown in the figure, views of the canopy of oak woodland ascending toward the ridgeline would remain generally unaffected.

Although the foreground in Figure 4-8 appears identical to existing conditions, it should be noted that development of the La Faille Ranch property would alter the foreground area of the view. An active application to develop the 169.68-acre La Faille Ranch property has not been filed with the County; however, La Faille Ranch is included in the cumulative setting discussion, as a previous application to develop the site into 14 single-family lots was partially processed through the County prior to being subsequently withdrawn. The property still carries potential for future development. Under a similar proposal to the previous La Faille Ranch development application, the viewshed would likely include a neighborhood roadway providing access into the La Faille Ranch property, with the roadway starting in the view's foreground, before extending toward the viewshed's midground area. Single-family residences and associated landscaping, fencing, and driveways would be located on each side of the neighborhood roadway. Under such development, the existing setting of rural grassland and scattered trees in the viewshed's foreground would be replaced by residential structures and associated improvements. However, such a project would not obscure views of the distant slopes in the background. The view from SR 193 under the cumulative setting would generally consist of residential development in the foreground, dense oak woodland ascending from the development upwards toward The Ridge project site, with the ridgeline still completely discernible against the backdrop of the sky. Therefore, even with the potential development of the La Faille Ranch property, the character and quality of the view would substantially remain that of a forested ridgeline with residential development in the foreground.

The 2015 Addendum to the BRSP EIR addresses potential distant views of the BRSP site by including measures to reduce visibility of structures where building height and potential skylining of homes is of greatest concern. The measures include refinements to grading and residential unit construction. In some areas within the BRSP site, RR lots are located near the edge of existing slopes, increasing the potential for construction upon such lots to impact distant views. Such is the case with the simulated BRSP structures visible in Figure 4-8, which are on Parcel RR-02 of the BRSP.



**Figure 4-8**  
**View From SR 193 With Proposed Project and Full Buildout of BRSP**



The BRSP does not propose to use either split pad lots or non-padded lots in the development edges identified in high visibility areas. Lots in high visibility areas along the development edge are designed with flat graded pads. Furthermore, BRSP lots with areas of slopes greater than 30 percent, which would include the simulated RR-02 structures in Figure 4-8, would be subject to slope restrictions that prohibit building in the areas with slopes greater than 30 percent. A grading plan would be required to be submitted with the building permit application to confirm that the building envelope in such lots is outside of the slope areas.

Regarding tree removal, all BRSP RR lots, as well as several LDR lots, would be subject to tree removal restrictions that would help to minimize visibility of structures. Removal of trees on lots with tree removal restrictions would require a Tree Permit, which could discourage tree removal and encourage the retention of trees around residential structures. Finally, the BRSP EIR, under Impact V-1, analyzed potential impacts related to alteration of viewsheds within the BRSP study area through dividing the full BRSP project site into six zones and assessing impacts associated with developing each zone. The zone closest to The Ridge project site is Zone 3. According to the BRSP EIR, Zone 3 would not likely be visible from either SR 193 or adjacent rural residences due to terrain and vegetative characteristics of the narrow ridges within the zone. The steep side slopes of the ridges in combination with the relatively flat tops result in inferior viewing conditions from surrounding vantage points. In addition, the dense oak woodland to remain on the side slopes and ridge edges in the zone provide a visual buffer, screening the proposed structures. As a result, the BRSP EIR concluded that development in Zone 3 would not be visually evident from SR 193, and, therefore, would not constitute a significant change to the viewsheds in the area. As the proposed project would also be located near the area defined by Zone 3 and designed consistent with the BRSP Development Standards and Design Guidelines, residential structures associated the proposed project would similarly not be visually evident from SR 193.

In addition, the views of the project site from Bickford Ranch Road would not change from baseline conditions to cumulative conditions, given that, from this vantage point, BRSP Phases 2 and 3 would not be visible. As shown in Figure 4-6, only development associated with BRSP Phase 1 and the proposed project are visible from Bickford Ranch Road. Furthermore, as discussed under Impact 4-1, the proposed structures would be designed per the standards set forth in the BRSP Development Standards and Design Guidelines. Such conformance would provide a sense of uniformity between the proposed project and the BRSP, particularly in regard to the proposed project's point of entry, landscaping, and structural architecture. Accordingly, as discussed above, the proposed project would not result in substantial degradation of the visual character or quality of public views of the site or its surroundings. Based on the above, the proposed 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 BRSP. Based on the analysis below, the project's incremental contribution to the significant cumulative impact is *less than cumulatively considerable*.**

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, 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. The BRSP EIR analyzed the potential for buildout of the BRSP to result in increases in night lighting in the vicinity of the project and concluded that, even with incorporation of Mitigation Measures V-F and V-L, which require implementing the lighting standards set forth in the BRSP Development Standards, the impact would be considered significant and unavoidable, as it is uncertain whether increased night lighting introduced by buildout of the BRSP could be fully mitigated. Additionally, sources of light under the cumulative setting would include light generated by the Bickford Ranch Marketplace, a project located on a 10-acre site at the southeast corner of Sierra College Boulevard and SR 193, and potentially the development of the La Faille Ranch property.

The sources of light associated with the BRSP and the proposed project would be typical of existing residential development in the larger area, such as the residential subdivisions located to the south within the Penryn community and to the west of Sierra College Boulevard. In addition, development within the BRSP, as well as the proposed project, would be subject to the lighting standards contained in Section 7 of the BRSP Development Standards. As discussed under Impact 4-2 above, the Development Standards require all outdoor lighting fixtures, including site and building lighting, to have directed shielding or to be recessed in order to prevent direct light from the fixture from shining beyond the property lines where the fixture is installed. The Development Standards also require that all lighting be installed in such a manner to reduce the effect of ambient lighting, light trespass, and light pollution, with lighting fixtures appropriate in scale and intensity for the intended use and designed to blend in with the architectural design of a building. Lighting within public rights-of-way or easements must be designed with the purpose of illuminating streets, roads, and/or intersections, with fixtures designed to not cast light onto adjoining areas outside the intended roadways/intersections, unless needed for a specific purpose. Additionally, lighting plans for the BRSP recreation center, school, fire station, and park sites must use "dark sky" principles by incorporating design techniques included in Section 7.4 of the Development Standards, such as use of high-pressure sodium or light-emitting diode (LED) lights in parking lots, limiting height of parking lot lighting to 14 feet, and shielding of outdoor lighting to prevent light emitting above 90 degrees, unless otherwise approved by the County Planning Director. Compliance with the BRSP lighting standards would help to reduce the cumulative effects of new light sources and glare created by development associated with the BRSP and the proposed project.

In addition, development associated with the Bickford Ranch Marketplace and La Faille Ranch property would be subject to existing Placer County regulations and guidelines related to light and glare. For example, Section 17.54.070(A)(2)(i) of the Placer County Code requires 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. Furthermore, prior to implementation, any future projects would be required to submit a lighting plan showing that the project would avoid contribution to sky glow through Dark-Sky design compliance.

As discussed under Impact 4-3 above, the proposed project would contribute only 34 residential lots to an area with a fully developed specific plan community consisting of 1,890 new residential units, more than 1,100 acres of open space and recreation, and new public facilities. Thus, while the cumulative effect from development of the BRSP would be significant, the proposed project's incremental contribution to the significant cumulative impact would be ***less than cumulatively considerable***.

Mitigation Measure(s)

*None required.*



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## **5. AIR QUALITY, GREENHOUSE GAS EMISSIONS, AND ENERGY**

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## 5. AIR QUALITY, GREENHOUSE GAS EMISSIONS, AND ENERGY

### 5.1 INTRODUCTION

The Air Quality, Greenhouse Gas Emissions, and Energy chapter of the EIR describes the potential impacts of the proposed project on local and regional air quality emissions, potential impacts related to greenhouse gas emissions (GHGs) and climate change, and potential impacts related to energy. The chapter includes a discussion of the existing air quality, GHG, and energy 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, impacts associated with energy use, and mitigation measures warranted to reduce or eliminate any identified significant impacts. This chapter is based on the Placer County General Plan<sup>1</sup> and associated EIR, the Placer County Air Pollution Control District's (PCAPCD) *CEQA Air Quality Handbook*,<sup>2</sup> PCAPCD's *Review of Land Use Projects Under CEQA*,<sup>3</sup> the *Placer County Sustainability Plan: A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy*,<sup>4</sup> and the 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, and sensitive receptors are discussed. In addition to the information pertaining to air quality, information related to climate change, GHGs, and energy is provided as well.

#### 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

<sup>1</sup> Placer County. *Countywide General Plan Policy Document*. August 1994 (Updated May 21, 2013).

<sup>2</sup> Placer County Air Pollution Control District. *CEQA Air Quality Handbook*. November 21, 2017.

<sup>3</sup> Placer County Air Pollution Control District. *Review of Land Use Projects Under CEQA*. October 13, 2016.

<sup>4</sup> Placer County Community Development Resource Agency. *Placer County Sustainability Plan: A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy*. January 28, 2020.





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 mountains shelter the valley from much of the ocean breeze that keeps the coastal regions moderate in temperature. The only breach 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 from trains along the Union Pacific Railroad (UPRR) tracks south of the project site. 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 AAQS for common pollutants. The federal standards are divided into primary standards, which are designed to protect the public health, and secondary standards, which are designed to protect the public welfare. The AAQS for each contaminant represent safe levels that avoid specific adverse health effects. Pollutants for which AAQS have been established are called “criteria” pollutants. Table 5-1 identifies the major pollutants, characteristics, health effects and typical sources. The national and California AAQS (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<sub>x</sub>) 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.	<ul style="list-style-type: none"> <li>• Eye irritation</li> <li>• Wheezing, chest pain, dry throat, headache, or nausea</li> <li>• Aggravated respiratory disease such as emphysema, bronchitis, and asthma</li> </ul>	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.	<ul style="list-style-type: none"> <li>• Impairment of oxygen transport in the bloodstream</li> <li>• Impaired vision, reduced alertness, chest pain, and headaches</li> <li>• Can be fatal in the case of very high concentrations</li> </ul>	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.	<ul style="list-style-type: none"> <li>• Lung irritation and damage</li> <li>• Increased risk of acute and chronic respiratory disease</li> </ul>	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.	<ul style="list-style-type: none"> <li>• Aggravation of chronic obstruction lung disease</li> <li>• Increased risk of acute and chronic respiratory disease</li> </ul>	Diesel vehicle exhaust, oil-powered power plants, and industrial processes.
Particulate Matter (PM <sub>10</sub> and PM <sub>2.5</sub> )	A complex mixture of extremely small particles and liquid droplets that can easily pass through the throat and nose and enter the lungs.	<ul style="list-style-type: none"> <li>• Aggravation of chronic respiratory disease</li> <li>• Heart and lung disease</li> <li>• Coughing</li> <li>• Bronchitis</li> <li>• Chronic respiratory disease in children</li> <li>• Irregular heartbeat</li> <li>• Nonfatal heart attacks</li> </ul>	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.	<ul style="list-style-type: none"> <li>• Loss of appetite, weakness, apathy, and miscarriage</li> <li>• Lesions of the neuromuscular system, circulatory system, brain, and gastrointestinal tract</li> </ul>	Industrial sources and combustion of leaded aviation gasoline.
<b>Sources:</b>			
<ul style="list-style-type: none"> <li>• California Air Resources Board. <i>California Ambient Air Quality Standards (CAAQS)</i>. Available at: <a href="https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards">https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards</a>. Accessed January 2021.</li> <li>• Sacramento Metropolitan, El Dorado, Feather River, Placer, and Yolo-Solano Air Districts, <i>Spare the Air website. Air Quality Information for the Sacramento Region</i>. Available at: <a href="http://sparetheair.com">sparetheair.com</a>. Accessed January 2021.</li> <li>• California Air Resources Board. <i>Glossary of Air Pollution Terms</i>. Available at: <a href="https://ww2.arb.ca.gov/glossary">https://ww2.arb.ca.gov/glossary</a>. Accessed January 2021.</li> </ul>			



**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 <sub>10</sub> )	Annual Mean	20 ug/m <sup>3</sup>	-	Same as primary
	24 Hour	50 ug/m <sup>3</sup>	150 ug/m <sup>3</sup>	
Fine Particulate Matter (PM <sub>2.5</sub> )	Annual Mean	12 ug/m <sup>3</sup>	12 ug/m <sup>3</sup>	15 ug/m <sup>3</sup>
	24 Hour	-	35 ug/m <sup>3</sup>	Same as primary
Lead	30 Day Average	1.5 ug/m <sup>3</sup>	-	-
	Calendar Quarter	-	1.5 ug/m <sup>3</sup>	Same as primary
Sulfates	24 Hour	25 ug/m <sup>3</sup>	-	-
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<sup>3</sup> = 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: <https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf>. Accessed January 2021.

### Reactive Organic Gas

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

### Oxides of Nitrogen

NO<sub>x</sub> are a family of gaseous nitrogen compounds and are precursors to the formation of ozone and particulate matter. The major component of NO<sub>x</sub>, nitrogen dioxide (NO<sub>2</sub>), is a reddish-brown gas that discolors the air and is toxic at high concentrations. NO<sub>x</sub> 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<sub>x</sub>. NO<sub>x</sub> reacts with ROG to form smog, which could result in adverse impacts to human health, damage the environment, and cause poor visibility. Additionally, NO<sub>x</sub> emissions are a major component of acid rain. Health effects related



to NO<sub>x</sub> 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<sub>2</sub>) 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<sub>2</sub> is also emitted from several industrial processes, such as petroleum refining and metal processing. Similar to airborne NO<sub>x</sub>, suspended sulfur oxide particles contribute to poor visibility. The sulfur oxide particles are also a component of PM<sub>10</sub>.

### **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<sub>10</sub>) 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<sub>2.5-10</sub>)," which are found near roadways and dusty industries, are between 2.5 and 10 micrometers in diameter. PM<sub>2.5-10</sub> is deposited in the thoracic region of the lungs.
- "Fine particles (PM<sub>2.5</sub>)," which are found in smoke and haze, are 2.5 micrometers in diameter and smaller. PM<sub>2.5</sub> 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<sub>2.5</sub>, 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<sub>2.5</sub>.

PM<sub>10</sub>, PM<sub>2.5</sub>, 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<sub>2.5</sub> and UFP are emitted by combustion sources like vehicles, power generation, industrial processes, and wood burning, while PM<sub>10</sub> 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<sub>2</sub> during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO<sub>2</sub> 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 cardiopulmonary 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<sub>2</sub>S) 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<sub>2</sub>H<sub>3</sub>Cl, also known as VCM) is a colorless gas that does not occur naturally, but is formed when other substances such as trichloroethane, trichloroethylene, and tetrachloroethylene 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<sub>x</sub>. 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.<sup>5</sup>

More than 90 percent of DPM is less than one micrometer in diameter, and, thus, DPM is a subset of PM<sub>2.5</sub>. As a California statewide average, DPM comprises about eight percent of PM<sub>2.5</sub> 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

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<sup>5</sup> 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<sub>2.5</sub>) and UFPs. UFPs have a small diameter (on the order of 0.1 micrometers).<sup>6</sup> 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.<sup>7</sup> The penetration capability of UFPs may contribute to adverse health effects related to heart, lung, and other organ health.<sup>8</sup> 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<sub>2.5</sub>, estimations of either concentrations or emissions of PM<sub>2.5</sub> or DPM include UFPs.

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

### Naturally Occurring Asbestos

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

NOA is typically associated with fault zones, and areas containing serpentinite or contacts between serpentinite and other types of rocks. According to 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.<sup>9</sup>

<sup>6</sup> South Coast Air Quality Management District. *Final 2012 Air Quality Management Plan*. December 2012.

<sup>7</sup> Health Effects Institute. *Understanding the Health Effects of Ambient Ultrafine Particles*. January 2013.

<sup>8</sup> South Coast Air Quality Management District. *Final 2012 Air Quality Management Plan*. December 2012.

<sup>9</sup> 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.



### **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<sub>10</sub> 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 Lincoln-2885 Moore Road station, which is located approximately 7.7 miles west of the project site. The Lincoln-2885 Moore Road station does not provide data for 24-hour PM<sub>10</sub> or 1-hour NO<sub>2</sub> concentrations; thus, the nearest station with such data was used, which was the Roseville-N Sunrise station, located at 151 North Sunrise Avenue. Based on the data available from the applicable monitoring station, Table 5-4 presents the number of days that the State and federal AAQS were exceeded for the three-year period from 2017 to 2019.

### **Odors**

While offensive odors rarely cause physical harm, they can be unpleasant, leading to considerable annoyance and distress among the public and can generate citizen complaints to local governments and air districts. Adverse effects of odors on residential areas and other sensitive receptors warrant the closest scrutiny; but consideration 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.





**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 <sub>10</sub> )	Annual Mean	Nonattainment	-
	24 Hour	Nonattainment	Attainment
Fine Particulate Matter (PM <sub>2.5</sub> )	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 (2017-2019)**

Pollutant	Standard	Days Standard Was Exceeded		
		2017	2018	2019
1-Hour Ozone	State	*	0	0
	Federal	*	0	0
8-Hour Ozone	State	*	0	3
	Federal	*	0	4
24-Hour PM <sub>2.5</sub>	Federal	0	*	*
24-Hour PM <sub>10</sub>	State	5	16	2
	Federal	0	2	0
1-Hour Nitrogen Dioxide	State	0	0	0
	Federal	0	0	0

Notes:

- All measurements are from the Lincoln-2885 Moore Road station, with the exception of the 24-hour PM<sub>10</sub> and the 1-hour NO<sub>2</sub> measurements, which are from the Roseville-N Sunrise station.
- \* indicates that sufficient data was not available to determine the value.

*Source: California Air Resources Board. Aerometric Data Analysis and Management (iADAM) System. Available at: <http://www.arb.ca.gov/adam/welcome.html>. Accessed January 2021.*



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.

### **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. The nearest sensitive receptors to the project site, under the adjusted baseline, would be the single-family residences associated with the Bickford Ranch Specific Plan (BRSP) Phase 1. The closest residences would be approximately 1,000 feet west of the western site boundary.

### **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<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), 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<sub>2</sub>, with the next largest components being CH<sub>4</sub> and N<sub>2</sub>O. A wide variety of human activities result in the emission of CO<sub>2</sub>. Some of the largest sources of CO<sub>2</sub> 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<sub>4</sub> 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<sub>2</sub>O 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.<sup>10</sup>

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<sup>10</sup> U.S. Environmental Protection Agency. *Sources of Greenhouse Gas Emissions*. Available at: [https://19january2017snapshot.epa.gov/ghgemissions/sources-greenhouse-gas-emissions\\_.html](https://19january2017snapshot.epa.gov/ghgemissions/sources-greenhouse-gas-emissions_.html). Accessed August 2020.



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<sub>2</sub> 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 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<sub>2</sub>. GWP is based on a number of factors, including the heat-absorbing ability of each gas relative to that of CO<sub>2</sub>, as well as the decay rate of each gas relative to that of CO<sub>2</sub>. 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<sub>2</sub>, for which the GWP is set at one. Methane gas, for example, is estimated by the USEPA to have a comparative global warming potential 25 times greater than that of CO<sub>2</sub>, as shown in Table 5-5.

<b>Gas</b>	<b>Atmospheric Lifetime (years)</b>	<b>Global Warming Potential (100-year time horizon)</b>
Carbon Dioxide (CO <sub>2</sub> )	See footnote <sup>1</sup>	1
Methane (CH <sub>4</sub> )	12	25
Nitrous Oxide (N <sub>2</sub> O)	114	298
HFC-23	270	14,800
HFC-134a	14	1,430
HFC-152a	1.4	124
PFC: Tetrafluoromethane (CF <sub>4</sub> )	50,000	7,390
PFC: Hexafluoroethane (C <sub>2</sub> F <sub>6</sub> )	10,000	12,200
Sulfur Hexafluoride (SF <sub>6</sub> )	3,200	22,800

<sup>1</sup> For a given amount of CO<sub>2</sub> 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: 1990-2019 [Table 1-2]. April 14, 2021.**

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<sub>2</sub>. 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<sub>2</sub>, to 50,000 years for CF<sub>4</sub>. Longer atmospheric lifetimes allow GHG to buildup in the atmosphere; therefore, longer lifetimes correlate with the GWP of a gas. The common indicator for GHG is expressed in terms of metric tons of CO<sub>2</sub> equivalents (MTCO<sub>2</sub>e), which is calculated based on the GWP 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*,<sup>11</sup> 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
- 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.

In Placer County, specifically, effects of climate change will be more localized. Such hazards include agriculture and forestry pests and diseases, avalanche, drought, extreme heat, flooding, fog, human health hazards, landslides, severe weather, severe winter weather, and wildfire. Some hazards, such as wildfire and drought, relate directly to the occurrence of other hazards, such as agriculture and forestry pests and diseases, landslides, and flooding. Placer County is currently experiencing some of the aforementioned changes, and others may not occur for several decades.<sup>12</sup>

## Energy

California is one of the highest energy demanding states within the nation. Activities such as heating and cooling structures, lighting, the movement of goods, agricultural production, and

<sup>11</sup> 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.

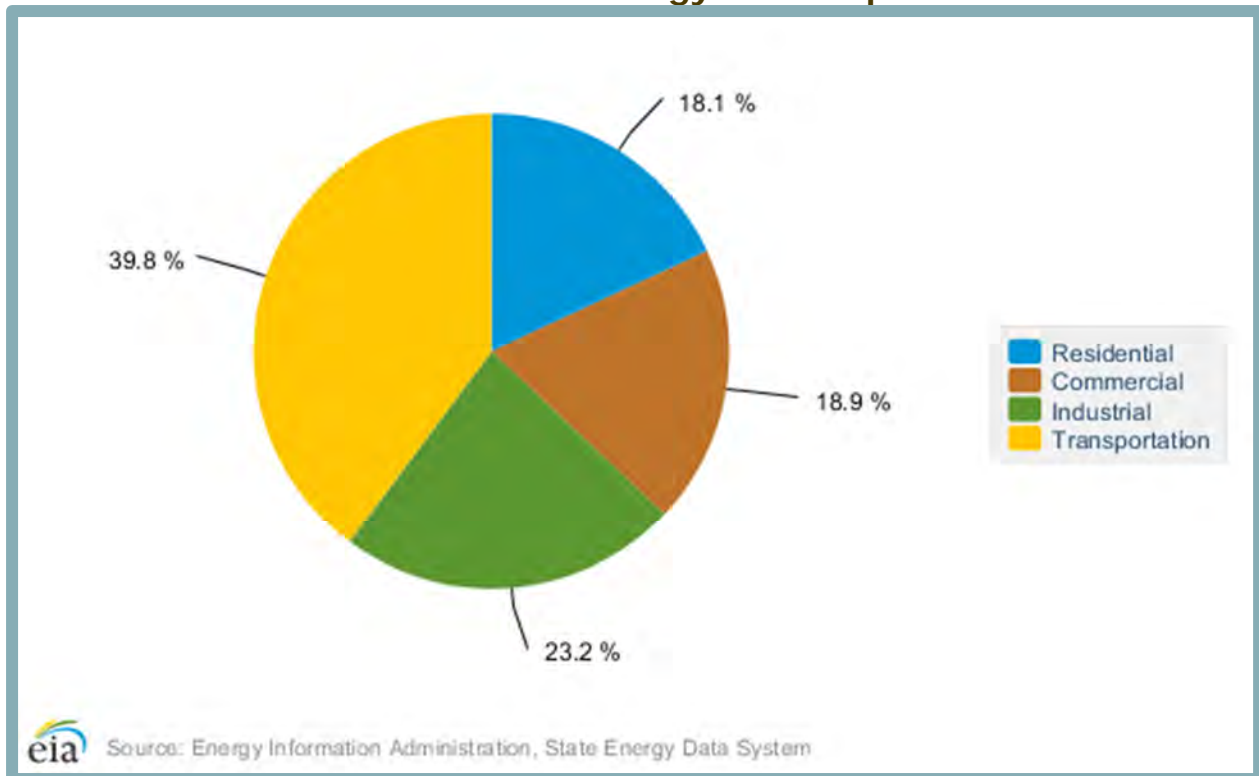
<sup>12</sup> Placer County Community Development Resource Agency. *Placer County Sustainability Plan: A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy* [pg. 14]. January 28, 2020.



countless other facets of daily life consume a variety of energy sources. Energy within the State is provided primarily by the combustion of fossil fuels such as natural gas, motor gasoline, diesel, jet fuel, and, to a lesser extent, coal. In addition to the fossil fuel-based energy sources, the State is ranked second in the nation in renewable energy generation, which includes solar, geothermal, wind, and biomass resources. In fact, California leads the nation in solar thermal electricity capacity, with 73 percent of the nation's total solar thermal capacity installed within the State.<sup>13</sup>

Figure 5-1 presents energy consumption within California for the most recent year for which data is available, 2018. As shown in the figure, transportation-related activity consumes the largest single share of energy within the State. Within the transportation sector, motor gasoline is the dominant form of energy, with jet fuel, diesel, natural gas, and electricity supplying the remaining portions of California's transportation sector energy demand. However, when considered together, energy demand from the built-environment including the residential, commercial, and industrial sectors, represents the greatest share of total statewide energy demand.

**Figure 5-1**  
**2018 California Energy Consumption**



Source: U.S. Energy Information Administration. *California: State Profile and Energy Estimates*. Accessible at: <https://www.eia.gov/state/index.php?sid=CA>. Accessed April 2021.

Electricity is provided to California consumers through a mix of sources including natural gas, hydroelectric, non-hydroelectric renewable sources, nuclear, coal, and petroleum. Of the foregoing sources of electricity, natural gas provided the greatest amount of electricity at approximately 45 percent of California's statewide supply in 2018. Meanwhile, non-hydroelectric

<sup>13</sup> U.S. Energy Information Administration. *California: State Profile and Energy Estimates*. Available at: <https://www.eia.gov/state/index.php?sid=CA>. Accessed December 2020.



based sources of renewable energy provided an additional 35 percent of the state's energy, with hydroelectric and nuclear providing nine and 11 percent, respectively. Coal contributed less than 0.2 percent of the State's total electricity supply.

In the year 2019, the entire State consumed approximately 279,401.90 gigawatt hours (GWh) of electricity. Of the total electricity consumed by the State, Placer County consumed approximately 2,914.87 GWh, which constitutes approximately 1.04 percent of the total energy consumed within the State.<sup>14</sup>

California residents and businesses consume petroleum products for various purposes including on-road vehicles, off-road equipment, and air travel. In 2018, 49 percent of all petroleum products consumed within California consisted of motor gasoline. The second largest demand on petroleum products is jet fuel, which represents 19 percent of the petroleum products consumed, while distillate fuel oils, which includes diesel fuel, represents 16 percent of the total petroleum products demanded within the State.<sup>15</sup>

### **Energy Consumption at the Project Site**

The project site is currently undeveloped, consisting primarily of grasses, oak woodland, and scattered rock outcroppings. As a result, the project site does not generate any energy demand nor result in any energy consumption.

## **5.3 REGULATORY CONTEXT**

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

### **Federal Regulations Related to Air Quality**

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

#### **Criteria Pollutants**

The FCAA, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The USEPA is responsible for implementing most aspects of the FCAA, including setting NAAQS for major air pollutants; setting hazardous air pollutant standards; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures, stratospheric ozone protection measures, and enforcement provisions. Under the FCAA, NAAQS are established for the following criteria pollutants: ozone, CO, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for ozone, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and those

<sup>14</sup> California Energy Commission. *Electricity Consumption by County*. Available at: <http://ecdms.energy.ca.gov/elecbycounty.aspx>. Accessed April 2021.

<sup>15</sup> U.S. Energy Information Administration. *California: State Profile and Energy Estimates*. Available at: <https://www.eia.gov/state/index.php?sid=CA>. Accessed December 2020.



based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for ozone, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub> are based on statistical calculations over one- to three-year periods, depending on the pollutant. The FCAA requires the USEPA to reassess the NAAQS at least every five years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a state implementation plan that demonstrates how those areas will attain the standards within mandated time frames.

### **Hazardous Air Pollutants/Toxic Air Contaminants**

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

### **Federal Regulations Related to GHG Emissions**

The following are the federal regulations relevant to GHG emissions.

#### **Federal Vehicle Standards**

In 2007, in response to the *Massachusetts v. EPA* U.S. Supreme Court ruling, the Bush Administration issued Executive Order (EO) 13432 directing the USEPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the National Highway Transportation Safety Administration (NHTSA) issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011; and, in 2010, the USEPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012 through 2016 (75 FR 25324–25728).

In 2010, President Obama issued a memorandum directing the Department of Transportation, Department of Energy, USEPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the USEPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017 through 2025 light-duty vehicles. The proposed standards were projected to achieve emission rates as low as 163 grams per mile of CO<sub>2</sub> by model year 2025 on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if the foregoing emissions level was achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017 through 2021 (77 FR 62624–63200), and NHTSA intended to set standards for model years 2022 through 2025 in future rulemaking.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the USEPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014 through 2018. The standards for CO<sub>2</sub> emissions and fuel consumption are tailored to three main vehicle categories: combination tractors; heavy-duty pickup trucks and vans; and vocational vehicles. According to the USEPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by six to 23 percent over the 2010 baselines (76 FR 57106–57513).



In August 2016, the USEPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program would have applied to vehicles with model years 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types of sizes of buses and work trucks. The final standards were expected to lower CO<sub>2</sub> emissions by approximately 1.1 billion MT, and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program.

In August 2018, the USEPA and NHTSA proposed to amend certain fuel economy and GHG standards for passenger cars and light trucks and establish new, less-stringent standards for model years 2021 through 2026. Compared to maintaining the post-2020 standards that were previously in place, the 2018 proposal would increase U.S. fuel consumption by approximately 0.5 million barrels per day, and would impact the global climate by 3/1000<sup>th</sup> of 1°C by 2100. California and other states stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures, and committed to cooperating with other countries to implement global climate change initiatives.

On September 27, 2019, the USEPA and NHTSA published the *Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program* (84 FR 51,310), which became effective November 26, 2019. The Part One Rule revokes California's authority to set its own GHG emissions standards and set zero-emission-vehicle mandates in California. On March 31, 2020, the USEPA and NHTSA issued the Part Two Rule, which sets CO<sub>2</sub> emissions standards and corporate average fuel economy standards for passenger vehicles and light-duty trucks for model years 2021 through 2026. On January 20, 2021, President Joe Biden issued an EO on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, which includes review of the Part One Rule by April 2021 and review of the Part Two Rule by July 2021. Implementation of both rules will be determined by the results of these reviews.

### **Federal Regulations Related to Energy**

The following are the federal regulations relevant to energy.

#### **Energy Policy and Conservation Act**

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

#### **Energy Policy Act of 2005**

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





## **State Regulations Related to Air Quality**

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

### **Criteria Air Pollutants**

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

CARB has established CAAQS, which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered “in attainment” if pollutant levels are continuously below the CAAQS and do not violate the standards more than once each year. The CAAQS for ozone, CO, SO<sub>2</sub> (one-hour and 24-hour), NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. The NAAQS and CAAQS are presented in Table 5-2.

### **Hazardous Air Pollutants/Toxic Air Contaminants**

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

### **CARB Air Quality and Land Use Handbook**

CARB’s *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB Handbook) addresses the importance of considering health risk issues when siting sensitive land uses, including residential development, in the vicinity of intensive air pollutant emission sources including freeways or high-traffic roads, distribution centers, ports, petroleum refineries, chrome plating operations, dry cleaners, and gasoline dispensing facilities.<sup>16</sup> The CARB Handbook draws upon studies evaluating the health effects of traffic traveling on major interstate highways in metropolitan California centers within Los Angeles (Interstate-405 and

<sup>16</sup> California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.



Interstate-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”.<sup>17</sup>

Importantly, the Introduction chapter of the CARB Handbook clarifies that the guidelines are strictly advisory, recognizing that: “[I]and use decisions are a local government responsibility. The Air Resources Board Handbook is advisory and these recommendations do not establish regulatory standards of any kind.” CARB recognizes that there may be land use objectives as well as meteorological and other site-specific conditions that need to be considered by a governmental jurisdiction relative to the general recommended setbacks, specifically stating, “[t]hese recommendations are advisory. Land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues”.<sup>18</sup>

### Diesel Particulate Matter

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

### Heavy-Duty Diesel Truck and Bus Regulation

CARB adopted the final Heavy-Duty Truck and Bus Regulation, Title 13, Division 3, Chapter 1, Section 2025, on December 31, 2014, to reduce DPM (black carbon) and NO<sub>x</sub> emissions from heavy-duty diesel vehicles. The rule requires DPM filters be applied to newer heavier trucks and buses by January 1, 2012, with older vehicles required to comply by January 1, 2015. The rule requires nearly all diesel trucks and buses to be compliant with the 2010 model year engine requirement by January 1, 2023. CARB also adopted an ATCM to limit idling of diesel-fueled commercial vehicles on December 12, 2013. The rule requires diesel-fueled vehicles with gross vehicle weights greater than 10,000 pounds to idle no more than five minutes at any location (13 CCR 2485).

### **California Health and Safety Code Section 41700**

Section 41700 of the Health and Safety Code states that a person must not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger

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<sup>17</sup> *Ibid.*

<sup>18</sup> *Ibid.*



the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. Section 41700 also applies to sources of objectionable odors.

### **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.<sup>19</sup> The regulation established new engine and in-use truck requirements and emission performance requirements for technologies used as alternatives to idling the truck's main engine. For example, the regulation requires 2008 and newer model year heavy-duty diesel engines to be equipped with a non-programmable engine shutdown system that automatically shuts down the engine after five minutes of idling, or optionally meet a stringent NO<sub>x</sub> emission standard. The regulation also requires operators of both in-state and out-of-state registered sleeper berth equipped trucks to manually shut down their engine when idling more than five minutes at any location within California. Emission producing alternative technologies such as diesel-fueled auxiliary power systems and fuel-fired heaters are also required to meet emission performance requirements that ensure emissions 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<sub>x</sub> emissions from in-use (existing), off-road, heavy-duty diesel vehicles in California.<sup>20</sup> Such vehicles are used in construction, mining, and industrial operations. The regulation is designed to reduce harmful emissions from vehicles by subjecting fleet owners to retrofit or accelerated replacement/repower requirements, imposing idling limitations on owners, operators, renters, or lessees of off-road diesel vehicles. The idling limits require operators of applicable off-road vehicles (self-propelled diesel-fueled vehicles 25 horsepower and up that were not designed to be driven on-road) to limit idling to less than five minutes. The idling requirements are specified in Title 13 of the CCR.

### **State Regulations Related to GHG Emissions**

The statewide GHG emissions regulatory framework is summarized below. The following text describes EOs, legislation, regulations, and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues. The following discussion does not include an exhaustive list of applicable regulations; rather, only the most prominent and applicable California legislation related to GHG emissions and climate change is included below.

### **State Climate Change Targets**

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

#### **EO S-3-05**

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

<sup>19</sup> 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 December 2020.

<sup>20</sup> 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 December 2020.



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

EO S-3-05 also directed the California EPA to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. The Climate Action Team was formed, which subsequently issued reports from 2006 to 2010.

### AB 32

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

### CARB's 2007 Statewide Limit on GHG Emissions

In 2007, in accordance with California Health and Safety Code Section 38550, CARB approved a statewide limit on GHG emissions by 2020, consistent with the determined 1990 baseline (427 million metric tons [MMT] CO<sub>2</sub>e).

### EO B-18-12

EO B-18-12 (April 2012) directed State agencies, departments, and other entities under the governor's executive authority to take action to reduce entity-wide GHG emissions by at least 10 percent by 2015 and 20 percent by 2020, as measured against a 2010 baseline. EO B-18-12 also established goals for existing State buildings for reducing grid-based energy purchases and water use.

### EO B-30-15

EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing GHG emissions to 40 percent below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80 percent below 1990 levels by 2050 as set forth in EO S-3-05. To facilitate achieving this goal, EO B-30-15 called for an update to the CARB's *Climate Change Scoping Plan: A Framework for Change* (Scoping Plan) to express the 2030 target in terms of MMT CO<sub>2</sub>e. The CARB's Scoping Plan is discussed in further detail below. The EO also called for State agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets.

### Senate Bill (SB) 32 and AB 197

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



website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

### CARB's Climate Change Scoping Plan

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

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

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

In 2014, CARB approved the first update to the Scoping Plan. The *First Update to the Climate Change Scoping Plan: Building on the Framework* (First Update) defined the State's GHG emission reduction priorities for the next five years and laid the groundwork to start the transition to the post-2020 goals set forth in EO S-3-05 and EO B-16-2012. The First Update concluded that California is on track to meet the 2020 target but recommended a 2030 mid-term GHG reduction target be established to ensure a continuation of action to reduce emissions. The First Update recommended a mix of technologies in key economic sectors to reduce emissions through 2050, including energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies. As part of the First Update, CARB recalculated the State's 1990 emissions level using more recent



GWPs identified by the Intergovernmental Panel on Climate Change, from 427 MMT CO<sub>2</sub>e to 431 MMT CO<sub>2</sub>e.

In 2015, as directed by EO B-30-15, CARB began working on an update to the Scoping Plan to incorporate the 2030 target of 40 percent below 1990 levels by 2030 to keep California on a trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80 percent below 1990 levels by 2050, as set forth in EO S-3-05. Governor Jerry Brown called on California to pursue a new and ambitious set of strategies, in line with the five climate change pillars from his inaugural address, to reduce GHG emissions and prepare for the unavoidable impacts of climate change. In summer 2016, the Legislature affirmed the importance of addressing climate change through passage of SB 32 (Pavley, Chapter 249, Statutes of 2016).

In December 2017, CARB adopted California's *2017 Climate Change Scoping Plan* (2017 Scoping Plan) for public review and comment. The 2017 Scoping Plan builds on the successful framework established in the initial Scoping Plan and First Update while identifying new, technologically feasible and cost-effective strategies that will serve as the framework to achieve the 2030 GHG target as established by SB 32 and define the State's climate change priorities to 2030 and beyond. Strategies within the 2017 Scoping Plan include implementing renewable energy and energy efficiency measures, increased stringency of the LCFS, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant (SLCP) Plan, and increased stringency of SB 375 targets (discussed in further detail below). To fill the gap in additional reductions needed to achieve the 2030 target, the 2017 Scoping Plan recommends continuing the Cap-and-Trade Program and a measure to reduce GHGs from refineries by 20 percent.

For local governments, the 2017 Scoping Plan replaced the initial Scoping Plan's 15 percent reduction goal with a recommendation to aim for a community-wide goal of no more than six MTCO<sub>2</sub>e per capita by 2030, and no more than two MTCO<sub>2</sub>e per capita by 2050, which are consistent with the State's long-term goals. Such goals are also consistent with the Under 2 Memorandum of Understanding (Under 2 Coalition 2019) and the Paris Agreement, which were developed around the scientifically based levels necessary to limit global warming to below an increase of 2°C. The 2017 Scoping Plan recognized the benefits of local government GHG planning (e.g., through Climate Action Plans [CAPs]) and provide more information regarding tools CARB is working on to support those efforts. The 2017 Scoping Plan also recognizes the CEQA streamlining provisions for project-level review where a legally adequate CAP exists.

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

### CARB's Regulations for the Mandatory Reporting of GHG Emissions

CARB's Regulation for the Mandatory Reporting of GHG Emissions (17 CCR 95100–95157) incorporated by reference certain requirements that the USEPA promulgated in its Final Rule on Mandatory Reporting of GHGs (40 Code of Federal Regulations [CFR] Part 98). Specifically,



Section 95100(c) of the Mandatory Reporting Regulation incorporated those requirements that the USEPA promulgated in the Federal Register on October 30, 2009; July 12, 2010; September 22, 2010; October 28, 2010; November 30, 2010; December 17, 2010; and April 25, 2011. In general, entities subject to the Mandatory Reporting Regulation that emit more than 10,000 MTCO<sub>2</sub>e per year are required to report annual GHGs through the California Electronic GHG Reporting Tool. Certain sectors, such as refineries and cement plants, are required to report regardless of emission levels. Entities that emit more than the 25,000 MTCO<sub>2</sub>e per year threshold are required to have their GHG emission report verified by a CARB-accredited third party.

### SB 605 and SB 1383

SB 605 (2014) required CARB to complete a comprehensive strategy to reduce emissions of SLCPs in the State, and SB 1383 (2016) required CARB to approve and implement that strategy by January 1, 2018. SB 1383 also establishes specific targets for the reduction of SLCPs (40 percent below 2013 levels by 2030 for CH<sub>4</sub> and HFCs, and 50 percent below 2013 levels by 2030 for anthropogenic black carbon), and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, CARB adopted its SLCP Reduction Strategy in March 2017. The SLCP Reduction Strategy establishes a framework for the statewide reduction of emissions of black carbon, CH<sub>4</sub>, and fluorinated gases.

### EO B-55-18

EO B-55-18 (September 2018) establishes a statewide policy for California to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net-negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the State's GHG emissions. CARB intends to work with relevant State agencies to ensure that future scoping plan updates identify and recommend measures to achieve the carbon neutrality goal.

### **Mobile Sources**

The following regulations relate to the control of GHG emissions from mobile sources. Mobile sources include both on-road vehicles and off-road equipment.

### AB 1493

AB 1493 (Pavley) (July 2002) was enacted in response to the transportation sector accounting for more than half of California's CO<sub>2</sub> emissions. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the State board to be vehicles that are primarily used for non-commercial personal transportation in the State. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards would result in a reduction of approximately 22 percent of GHG emissions compared to the emissions from the 2002 fleet, and the mid-term (2013–2016) standards would result in a reduction of approximately 30 percent. However, as previously described within the Federal Vehicle Standards section, the USEPA's SAFE Vehicles Rule Part One, adopted in November 2019, revokes California's authority to set GHG emissions standards. As the USEPA rule is the subject of pending legal challenges and President Biden issued an EO to review Part One and Part Two, the analysis within this EIR uses the best available information at this time, as set forth in CARB's Emission Factor Database (EMFAC).

### EO S-1-07

EO S-1-07 (January 2007, implementing regulation adopted in April 2009) set a declining LCFS for GHG emissions measured in CO<sub>2</sub>e grams per unit of fuel energy sold in California. The target



of the LCFS is to reduce the carbon intensity of California passenger vehicle fuels by at least 10 percent by 2020 (17 CCR 95480 et seq.). Carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered.

### SB 375

SB 375 (Steinberg) (September 2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 requires CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035, and to update those targets every eight years. SB 375 requires the State's 18 regional metropolitan planning organizations to prepare a sustainable communities strategy as part of their Regional Transportation Plans that will achieve the GHG reduction targets set by CARB. If a metropolitan planning organization is unable to devise a sustainable communities strategy to achieve the GHG reduction target, the metropolitan planning organization must prepare an alternative planning strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to California Government Code Section 65080(b)(2)(K), a sustainable communities strategy does not (1) regulate the use of land, (2) supersede the land use authority of cities and counties, or (3) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with the sustainable community strategy. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the State-mandated housing element process.

### Advanced Clean Cars Program and Zero-Emissions Vehicle Program

The Advanced Clean Cars program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. By 2025, implementation of the rule is anticipated to reduce emissions of smog-forming pollution from cars by 75 percent compared to the average new car sold in 2015. To reduce GHG emissions, CARB, in conjunction with the USEPA and NHTSA, adopted GHG standards for model year 2017 to 2025 vehicles; the standards were estimated to reduce GHG emissions by 34 percent by 2025. The zero-emissions vehicle program acts as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of zero-emissions vehicles and plug-in hybrid electric vehicles in the 2018 to 2025 model years. However, implementation of the Advanced Clean Cars program is contingent upon the outcome of the ongoing SAFE Vehicles Rule litigation.

### EO B-16-12

EO B-16-12 (March 2012) required that State entities under the governor's direction and control support and facilitate the rapid commercialization of zero-emissions vehicles. The order directed CARB, California Energy Commission (CEC), California Public Utilities Commission (CPUC), and other relevant agencies to work with the Plug-In Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve goals by 2015, 2020, and 2025.





On a statewide basis, EO B-16-12 established a target reduction of GHG emissions from the transportation sector equaling 80 percent less than 1990 levels by 2050. EO B-16-12 did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare.

### AB 1236

AB 1236 (October 2015) (Chiu) required a city, county, or city and county to approve an application for the installation of electric-vehicle charging stations, as defined, through the issuance of specified permits unless the city or county makes specified written findings based on substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and a feasible method to satisfactorily mitigate or avoid the specific, adverse impact does not exist. The bill provided for appeal of that decision to the planning commission, as specified. AB 1236 required electric-vehicle charging stations to meet specified standards. The bill required a city, county, or city and county with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, that created an expedited and streamlined permitting process for electric-vehicle charging stations. The bill also required a city, county, or city and county with a population of less than 200,000 residents to adopt the ordinance by September 30, 2017.

## **Water**

The following regulations relate to the conservation of water, which reduces GHG emissions related to electricity demands from the treatment and transportation of water.

### EO B-29-15

In response to a drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25 percent relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives subsequently became permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the State. In response to EO B-29-15, the California Department of Water Resources modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency, and broadens the applicability of the ordinance to include new development projects with smaller landscape areas.

### EO B-37-16

Issued in May 2016, EO B-37-16 directed the State Water Resources Control Board (SWRCB) to adjust emergency water conservation regulations through the end of January 2017 to reflect differing water supply conditions across the State. The SWRCB also developed a proposal to achieve a mandatory reduction of potable urban water usage that builds off the mandatory 25 percent reduction called for in EO B-29-15. The SWRCB and Department of Water Resources were directed to develop new, permanent water use targets that build upon the existing State law requirements that the State achieve 20 percent reduction in urban water usage by 2020. EO B-37-16 also specifies that the SWRCB permanently prohibit water-wasting practices such as hosing off sidewalks, driveways, and other hardscapes; washing automobiles with hoses not equipped with a shut-off nozzle; using non-recirculated water in a fountain or other decorative water feature; watering lawns in a manner that causes runoff, or within 48 hours after measurable precipitation; and irrigating ornamental turf on public street medians.



### EO B-40-17

EO B-40-17 (April 2017) lifted the drought emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne. It also rescinded EO B-29-15, but expressly stated that EO B-37-16 remains in effect and directed the SWRCB to continue development of permanent prohibitions on wasteful water use.

### **Solid Waste**

The following regulations relate to the generation of solid waste and means to reduce GHG emissions from solid waste produced within the State.

### AB 939 and AB 341

In 1989, AB 939, known as the Integrated Waste Management Act (California Public Resources Code [PRC] Sections 40000 et seq.), was passed because of the observed increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25 percent by 1995 and 50 percent by 2000.

AB 341 (Chapter 476, Statutes of 2011 [Chesbro]) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that the policy goal of the State is that not less than 75 percent of solid waste generated be source-reduced, recycled, or composted by 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery to develop strategies to achieve the State's policy goal.

### **Other State Actions**

The following State regulations are broadly related to GHG emissions.

### SB 97

SB 97 (Dutton) (August 2007) directed the Governor's Office of Planning and Research to develop guidelines under CEQA for the mitigation of GHG emissions. In 2008, the Governor's Office of Planning and Research issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents. The advisory indicated that the lead agency should identify and estimate a project's GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities. The advisory further recommended that the lead agency determine the significance of the impacts and impose all mitigation measures necessary to reduce GHG emissions to a level that is less than significant. The California Natural Resource Agency (CNRA) adopted the CEQA Guidelines amendments in December 2009, and the amended CEQA Guidelines became effective in March 2010.

Under the amended CEQA Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis, or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4[a]). The CEQA Guidelines require a lead agency to consider the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures. The adopted amendments do not establish a GHG emission threshold, instead



allowing a lead agency to develop, adopt, and apply the lead agency's own thresholds of significance or those developed by other agencies or experts. CNRA acknowledges that a lead agency may consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions.

With respect to GHG emissions, the CEQA Guidelines state that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions (14 CCR 15064.4[a]). The CEQA Guidelines note that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions or by relying on "qualitative analysis or other performance based standards" (14 CCR 15064.4[a]). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]).

### EO S-13-08

EO S-13-08 (November 2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. Therefore, the EO directs State agencies to take specified actions to assess and plan for such impacts. The final 2009 California Climate Adaptation Strategy report was issued in December 2009, and an update, *Safeguarding California: Reducing Climate Risk*, followed in July 2014. To assess the State's vulnerability, the report summarizes key climate change impacts to the State for the following areas: agriculture, biodiversity and habitat, emergency management, energy, forestry, ocean and coastal ecosystems and resources, public health, transportation, and water. Issuance of the *Safeguarding California: Implementation Action Plans* followed in March 2016. In January 2018, the CNRA released the *Safeguarding California Plan: 2018 Update*, which communicates current and needed actions that the State government should take to build climate change resiliency.

### State Regulations Related to Energy

The State has adopted various regulations aimed at reducing energy consumption, increasing energy efficiency, and mandating sourcing requirements for electricity production.

### **Building Energy**

The following regulations relate to energy efficiency and energy use reductions in the built environment.

### Title 24, Part 6

Title 24 of the CCR was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically established Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed periodically, and revised if necessary, by the Building Standards Commission and CEC (PRC Section 25402[b][1]). The regulations receive input from members of industry, as well as the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (PRC Section 25402). The regulations are scrutinized and analyzed for technological and economic



feasibility (PRC Section 25402[d]) and cost effectiveness (PRC Sections 25402[b][2] and [b][3]). As a result, the standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The 2019 Title 24 standards are the currently applicable building energy efficiency standards and became effective on January 1, 2020. The 2019 Title 24 Building Energy Efficiency Standards reduced energy used and associated GHG emissions compared to the previous 2016 Title 24 standards. In general, single-family residences built to the 2019 standards are anticipated to use approximately seven percent less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards use approximately 53 percent less energy than those under the 2016 standards. Nonresidential buildings built to the 2019 standards use an estimated 30 percent less energy than those built to the 2016 standards.

### Title 24, Part 11

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen, and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and State-owned buildings and schools and hospitals. The original CALGreen standards have been updated several times. The CALGreen 2019 standards, which are the current standards, improved upon the 2016 CALGreen standards, and went into effect on January 1, 2020. The mandatory standards require the following:

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings;
- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' Model Water Efficient Landscape Ordinance;
- 65 percent of construction and demolition waste must be diverted from landfills;
- Mandatory inspections of energy systems to ensure optimal working efficiency;
- Inclusion of electric vehicle charging stations or designated spaces capable of supporting future charging stations; and
- Low-pollutant-emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards.

The CALGreen standards also include voluntary efficiency measures that are provided at two tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15 percent improvement in energy requirements, stricter water conservation, 65 percent diversion of construction and demolition waste, 10 percent recycled content in building materials, 20 percent permeable paving, 20 percent cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30 percent improvement in energy requirements, stricter water conservation, 80 percent diversion of construction and demolition waste, 15 percent recycled content in building materials, 30 percent permeable paving, 25 percent cement reduction, and cool/solar-reflective roofs.



## Title 20

Title 20 of the CCR requires manufacturers of appliances to meet State and federal standards for energy and water efficiency. The CEC certifies an appliance based on a manufacturer's demonstration that the appliance meets the standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwashers; clothes washers and dryers; cooking products; electric motors; low-voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing each type of appliance covered under the regulations, and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types of standards for appliances: federal and State standards for federally regulated appliances, State standards for federally regulated appliances, and State standards for non-federally regulated appliances.

## SB 1

SB 1 (Murray) (August 2006) established a \$3 billion rebate program to support the goal of the State to install rooftop solar energy systems with a generation capacity of 3,000 megawatts through 2016. SB 1 added sections to the PRC, including Chapter 8.8 (California Solar Initiative), that require building projects applying for ratepayer-funded incentives for photovoltaic systems to meet minimum energy efficiency levels and performance requirements. Section 25780 established that it is a goal of the State to establish a self-sufficient solar industry. The goals included establishing solar energy systems as a viable mainstream option for homes and businesses within 10 years of adoption, and placing solar energy systems on 50 percent of new homes within 13 years of adoption. SB 1, also termed "Go Solar California," was previously titled "Million Solar Roofs."

## AB 1470

AB 1470 established the Solar Water Heating and Efficiency Act of 2007. The bill made findings and declarations of the Legislature relating to the promotion of solar water heating systems and other technologies that reduce natural gas demand. AB 1470 required the CEC to evaluate the data available from a specified pilot program, and, if the CEC made a specified determination, to design and implement a program of incentives for the installation of 200,000 solar water heating systems in homes and businesses throughout the State by 2017.

## AB 1109

Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general-purpose lighting to reduce electricity consumption by 50 percent for indoor residential lighting and by 25 percent for indoor commercial lighting.

## **Renewable Energy and Energy Procurement**

The following regulations relate to the source of electricity provided to consumers within the State, as well as standards related to the generation of electricity within the State.

### Renewable Portfolio Standard (RPS) 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 the year 2030.

### **Local Regulations**

The most prominent local regulations related to air quality, GHG emissions, and energy are established by the PCAPCD and the Placer County General Plan and are discussed in further detail below.

### **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 State Implementation Plan (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. An update to the plan, *2013 Revisions to the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 Ozone Attainment Plan)*, 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. In addition, another update was prepared in 2017. The *2017 Sacramento Regional 2008 NAAQS 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2017 Ozone Attainment Plan)* demonstrates how the region will attain the 2008 ozone NAAQS, and includes an updated emissions inventory, sets motor vehicle emissions budgets, and documents the modeling used to support the attainment demonstration.

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.<sup>21</sup>

### 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 ATCM for Construction, Grading, Quarrying, and Surface Mining Operations (Title 17, Section 93105, of the CCR), 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

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<sup>21</sup> U.S. Environmental Protection Agency. *Nonattainment and Unclassifiable Area Designations for the 2015 Ozone Standards*. April 30, 2018.



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.

### **Placer County Sustainability Plan**

The Placer County Sustainability Plan (PCSP), adopted by the Placer County Board of Supervisors on January 28, 2020, includes goals and policies for energy efficiency and the reduction of GHGs.<sup>22</sup> The PCSP is a planning document that outlines the programs and policies that are recommended for implementation by the community and the County to achieve the most

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<sup>22</sup> Placer County Community Development and Resource Agency. *Placer County Sustainability Plan: A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy*. January 28, 2020.



significant GHG emission reductions in unincorporated County. In addition to reducing GHG emissions, implementation of the PCSP is intended to help achieve multiple community-wide goals, such as lowering energy costs, reducing air and water pollution, supporting local economic development, and improving public health and quality of life within Placer County.

## 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, GHG emissions, and energy are described below. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

### Standards of Significance

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 related to air quality, GHG emissions, or energy 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;
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs;
- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation;
- or
- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

### Issues Not Discussed Further

The Initial Study prepared for the proposed project (see Appendix C) determined that development of the proposed project would result in a less-than-significant impact related to the following:

- Result in other emissions (such as those leading to odors) affecting a substantial number of people; and
- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

For the reasons cited in the Initial Study (Section III, Air Quality, and Section VI, Energy), the potential impacts associated with the above are not analyzed further in this EIR.



### Criteria Pollutant Emissions and Toxic Air Contaminant Emissions

In order to evaluate criteria air pollutant emissions from development projects, the PCAPCD has established significance thresholds for emissions of ROG, NO<sub>x</sub>, and PM<sub>10</sub>. 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. The PCAPCD's recommended thresholds of significance are listed in Table 5-6.

<b>Table 5-6 PCAPCD Thresholds of Significance</b>		
<b>Pollutant</b>	<b>Construction Threshold (lbs/day)</b>	<b>Operational/Cumulative Threshold (lbs/day)</b>
ROG	82	55
NO <sub>x</sub>	82	55
PM <sub>10</sub>	82	82
<i>Source: Placer County Air Pollution Control District. Placer County Air Pollution Control District Policy. Review of Land Use Projects Under CEQA. October 13, 2016.</i>		

Therefore, if the proposed project's emissions exceed the PCAPCD's 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 or result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment.

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.<sup>23</sup>

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.

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

<sup>23</sup> Placer County Air Pollution Control District. *CEQA Air Quality Handbook* [pg. 38]. November 21, 2017.



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<sub>10</sub> are based on attainment plans for the region. Thus, the PCAPCD concluded that if a project's ozone precursor and PM<sub>10</sub> 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.

### GHG 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.<sup>24</sup> 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 to 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.<sup>25</sup>

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<sub>2</sub>e/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<sub>2</sub>e/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<sub>2</sub>e/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<sub>2</sub>e/yr screening level threshold, but below the bright-line threshold of 10,000 MTCO<sub>2</sub>e/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<sub>2</sub>e/yr per capita or per square-foot, are presented in Table 5-7.

<sup>24</sup> Placer County Air Pollution Control District. *California Environmental Quality Act Thresholds of Significance: Justification Report*. October 2016.

<sup>25</sup> *Ibid.*



Residential (MTCO <sub>2</sub> e/capita)		Non-Residential (MTCO <sub>2</sub> e/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<sub>2</sub>e/yr, and/or operational GHG emissions in excess of 1,100 MTCO<sub>2</sub>e/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.

### **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.

### **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 Institute of Transportation Engineers (ITE) Manual, vehicle mix, trip length, average speed, etc. However, where project-specific data was available, such data was input into the model. For example, based on applicant-provided information, construction is assumed to commence in September of 2024 and occur over an approximately two-year period. In addition, the modeling included initial establishment of the off-site, 300-foot-wide Fuel Management Zone easement along the project's northern boundary, as well as consideration of the loss of carbon sequestration associated with the proposed project's anticipated removal of oak woodland.

The results of construction emissions estimations were compared to the standards of significance discussed above in order to determine the associated level of impact. All CalEEMod modeling results are included in Appendix D 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 2026. 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, and the Model Water Efficiency Landscape Ordinance. The proposed project's compliance with such would be verified as part of the County's building permit application review process. Fehr & Peers provided project-specific trip generation rates and



vehicle miles traveled (VMT), which were applied to the project modeling.<sup>26</sup> It should be noted that the project VMT with inclusion of implementation of Mitigation Measure 7-5 was applied to the project modeling. In compliance with the 2019 Title 24 standards, 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. In addition to adjustments related to on-site renewable energy and energy efficiency, the CO<sub>2</sub> intensity factor was adjusted within CalEEMod in order to reflect PG&E's anticipated progress towards the State RPS goals.<sup>27</sup>

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 D 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.

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

During construction of the project, various types of equipment and vehicles would temporarily operate on the project site. Construction-related emissions would be generated from construction equipment, vegetation clearing and earth movement activities, construction workers' commute, and construction material hauling for the entire construction period. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Project construction activities also represent sources of fugitive dust, which includes PM emissions. As construction of the proposed project would generate emissions of criteria air pollutants, including ROG, NO<sub>x</sub>, and PM<sub>10</sub>, 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.

Estimated unmitigated construction-related emissions associated with the proposed project are presented in Table 5-8.

	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>PM<sub>10</sub></b>
Maximum Project Emissions	6.70	32.41	19.44
<b>PCAPCD Significance Threshold</b>	<b>82.0</b>	<b>82.0</b>	<b>82.0</b>
<b>Exceeds Threshold?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<i>Source: CalEEMod, May 2021 (see Appendix D).</i>			

<sup>26</sup> Fehr & Peers. *Draft Technical Memorandum – The Ridge Subdivision*. August 6, 2020.

<sup>27</sup> California Public Utilities Commission. *California Renewables Portfolio Standard (RPS)*. Available at: <http://www.cpuc.ca.gov/renewables/>. Accessed March 2021.



As shown in the table above, the project's maximum construction-related emissions would be below the applicable PCAPCD thresholds of significance for ROG, NO<sub>x</sub>, and PM<sub>10</sub>.

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 in Table 5-8. 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 or 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<sub>x</sub> 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.
- 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)

As noted in Chapter 3, Project Description, of this EIR, the 400-foot segment of Bickford Ranch Road between the terminus of BRSP Phase 1 and the project site's southwest corner would be implemented either during Phase 2 of the BRSP or during construction of the proposed project, should the applicant secure all necessary approvals for the proposed project and choose to move ahead of BRSP Phase 2 infrastructure improvements. Construction of the 400-foot roadway segment has already been anticipated for development and analyzed in the approved BRSP EIR. Should the roadway extension occur as part of the proposed project, construction activities related to such would be required to comply with all applicable PCAPCD regulations listed above, as well as the following BRSP mitigation measures:

- Mitigation Measure A-A: Provide dust controls.
- Mitigation Measure A-B: Maintain construction equipment and vehicles.
- Mitigation Measure A-D: Require use of low-emission construction materials and equipment where feasible.
- Mitigation Measure A-N: Implement construction measures to reduce emissions.
  - a. The prime contractor shall submit to the County and PCAPCD a comprehensive inventory (e.g., make, model, year, emission rating) of all the heavy-duty off-road equipment (50 horsepower or greater) that will be used in aggregate of 40 or more hours for the construction project. If any new equipment is added after submission of the inventory, the prime contractor shall contact the County and 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 County and Placer County APCD with the anticipated construction timeline including start date, name, and phone number of the property owner, project manager, and on-site foreman.
  - b. Prior to approval of Grading or Improvement Plans, whichever occurs first, the Applicant shall provide a written calculation to the PCAPCD 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% of NOx and 45% of diesel particulate matter reduction as compared to CARB statewide fleet average emissions. Acceptable options for reducing emissions may include 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.
  - c. Include the following standard notes on the improvement plans and grading plans:
    1. During construction 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.



2. During construction, the contractor shall minimize idling time to a maximum of 5 minutes for all diesel-powered equipment.
  3. Signs shall be posted in the designated queuing areas of the construction site to limit idling of construction equipment to a maximum of 5 minutes.
  4. Idling of construction related equipment and construction related vehicles should not occur within 1,000 feet of any sensitive receptor.
  5. Schedule operations affecting traffic for off-peak hours whenever possible.
- d. An enforcement plan shall be established to evaluate on a weekly basis project-related on- and off-road heavy-duty vehicle engine emission opacities, using standards as defined in CCR, Title 13, Sections 2180-2194. An Environmental Coordinator, who is CARB-certified to perform Visible Emissions Evaluations, shall routinely evaluate project-related off-road and heavy-duty on-road equipment emissions for compliance with this requirement. Operators of vehicles and equipment found to exceed opacity limits will be notified, and the equipment must be repaired within 72 hours.
  - e. The PCAPCD Rules and Regulations shall be included as standard notes on grading and improvement plans.

### Conclusion

Because the proposed project's estimated unmitigated construction emissions would be below the applicable PCAPCD thresholds of significance, construction activities associated with development of the proposed project would not substantially contribute to the PCAPCD's nonattainment status for ozone or PM. Accordingly, construction of the proposed project would not conflict with or obstruct implementation of the applicable air quality plan, and a **less-than-significant** impact would occur associated with construction.

### Mitigation Measure(s)

*None required.*

## **5-2 Conflict with or obstruct implementation of the applicable air quality plan during project operation. Based on the analysis below, 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<sub>x</sub>, and PM<sub>10</sub> would be generated during operations of the proposed project from both mobile and stationary sources. Emissions related to operation of the



proposed project would include sources such as architectural coatings, landscape maintenance equipment exhaust, and consumer products (e.g., deodorants, detergents, 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, the project-specific trip generation rates and VMT estimates prepared by Fehr & Peers was applied to the project modeling.

The maximum unmitigated operational emissions for the proposed project are presented in Table 5-9 below.

	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>PM<sub>10</sub></b>
Project Emissions	54.59	4.20	11.02
<b>PCAPCD Significance Threshold</b>	<b>55</b>	<b>55</b>	<b>82</b>
<b>Exceeds Threshold?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<i>Source: CalEEMod, May 2021 (see Appendix D).</i>			

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 (woodfired fireplaces would be subject to regulation under PCAPCD Rule 225, Wood Burning Appliances). The operation of fireplaces is the primary source of ROG emissions related to project operations.

As shown in the table, unmitigated operational emissions would be below the PCAPCD's thresholds of significance for ROG, NO<sub>x</sub>, and PM<sub>10</sub>. Accordingly, operations of the proposed project would not violate any AAQS or contribute substantially to an existing or projected air quality violation. Therefore, operations of the proposed project would not conflict with or obstruct implementation of the applicable air quality plan, and a **less-than-significant** impact would occur.

Mitigation Measure(s)

*None required.*

Despite the less-than-significant impact, in an effort to further reduce emissions, the County will include a Condition of Approval to prohibit the use of wood-burning appliances in all units.

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

The major pollutant concentrations of concern are localized CO emissions, TAC emissions, and criteria pollutant 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.<sup>28</sup> 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 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.<sup>29</sup>

According to the Air Quality analysis performed for the proposed project, operation of the project would result in maximum mobile source CO emissions of 72.24 lbs/day (see Appendix D). 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 BRSP Phase 1 residential development west of the project site would be considered sensitive receptors. The closest sensitive receptor to the project site would be the easternmost residences located approximately 1,000 feet from the western project site boundary. Thus, activities related to the construction and operation of the proposed project

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<sup>28</sup> University of California, Davis. *Transportation Project-Level Carbon Monoxide Protocol*. December 1997.

<sup>29</sup> Placer County Air Pollution Control District. *CEQA Air Quality Handbook* [pg. 37]. November 21, 2017.



are considered to determine whether the proposed project would expose nearby sensitive receptors to substantial 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.

Operational-related emissions of TACs are typically associated with stationary diesel engines or land uses that involve heavy truck traffic or idling. The proposed residences would not involve long-term or frequent operations of any stationary diesel engines and, as a result, operations of the proposed project are not anticipated to result in substantial emissions of TACs. However, construction-related activities have the potential to generate concentrations of TACs, specifically DPM, from on-road haul trucks and off-road equipment exhaust emissions.

The construction period 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 two-year period. Only portions of the site 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. 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<sub>x</sub> 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. In addition, the prevailing wind direction in the project area is most often from the south.<sup>30</sup> As a result, construction-related emissions would primarily flow towards the north, away from the nearest sensitive receptors.

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

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<sup>30</sup> Weather Spark. *Average Weather in Lincoln California, United States*. Available at: <https://weatherspark.com/y/1138/Average-Weather-in-Lincoln-California-United-States-Year-Round#:~:text=The%20predominant%20average%20hourly%20wind,of%2074%25%20on%20August%202011..> Accessed May 2021.



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, the proposed project's construction-related emissions would be below the applicable mass emissions thresholds of significance for PM<sub>10</sub>, 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.<sup>31</sup> Considering that PM<sub>10</sub> 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. Furthermore, the nearest sensitive receptors would be located approximately 1,000 feet to the west, and the concentration of DPM at the sensitive receptors would be lower as compared to the concentration of DPM at the project site. Therefore, the proposed project would not expose sensitive receptors to substantial concentrations of DPM during construction.

#### *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.<sup>32</sup> 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<sub>10</sub> 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.<sup>33</sup> 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<sub>10</sub> standards.

<sup>31</sup> Placer County Air Pollution Control District. *CEQA Air Quality Handbook* [pg. 31 and 32]. November 21, 2017.

<sup>32</sup> Department of Conservation, California Geological Survey. *Special Report 190: Relative Likelihood for the Presence of Naturally Occurring Asbestos in Placer County, California*. Published 2006.

<sup>33</sup> Placer County Air Pollution Control District. *CEQA Air Quality Handbook* [pg. 20]. November 21, 2017.



However, as discussed in Impacts 5-1 and 5-2, 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<sub>10</sub> 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 Conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Based on the analysis below, the impact is *less than significant*.**

The PCSP, adopted by the Placer County Board of Supervisors on January 28, 2020, includes goals and policies for energy efficiency.<sup>34</sup> As a result, the PCSP is considered the local plan for renewable energy and efficiency. The PCSP contains community-wide and municipal energy efficiency and GHG mitigation strategies that can be applied to discretionary projects, as feasible, when the applicable project-level thresholds are exceeded. For example, the following strategies from the PCSP represent measures that could be applicable to residential developments such as the proposed project.

- **Strategy E-1:** Facilitate a transition to electricity as the primary energy source for residential, mixed-use, commercial, and office buildings;
- **Strategy E-2:** Provide increased awareness and resources for homeowners to replace old appliances with energy-efficient models.
- **Strategy E-4:** Encourage new residential, office, and commercial development, as mitigation for discretionary projects exceeding applicable CEQA GHG thresholds, to implement CALGreen Tier 1 standards and accelerate Zero Net Energy (ZNE) in new construction; and
- **Strategy WW-2:** Encourage new development projects, as mitigation for discretionary projects exceeding applicable GHG thresholds, to exceed minimum State water efficiency requirements for new water fixtures.

Under the PCSP, the County uses the PCAPCD-recommended GHG threshold of 1,100 MTCO<sub>2e</sub> per year to determine whether PCSP emission reduction measures are required. Because the proposed project's operational GHG emissions would be below the applicable GHG thresholds (see Table 5-11), implementation of the GHG reduction

<sup>34</sup> Placer County Community Development Resource Agency. *Placer County Sustainability Plan: A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy*. January 28, 2020.



measures included in the PCSP is not required. As a result, the project would not conflict with or obstruct a local plan for renewable energy or energy efficiency, and the impact would be **less than significant**.

Mitigation Measure(s)

*None required.*

**Cumulative Impacts and Mitigation Measures**

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

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<sub>10</sub>.

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 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, 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<sub>10</sub>. 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<sub>10</sub>. 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<sub>x</sub> or PM<sub>10</sub> 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.

As discussed under Impact 5-2, and demonstrated in Table 5-9, operational criteria pollutant emissions associated with the proposed project would be below the applicable PCAPCD thresholds of significance.

Therefore, implementation of the proposed project would not 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 ***less than cumulatively considerable***.

#### Mitigation Measure(s)

*None required.*

- 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.

#### Construction GHG Emissions

The estimated unmitigated maximum construction-related GHG emissions from the proposed project are presented in Table 5-10. As shown in the table, the maximum annual GHG emissions related to construction of the proposed project are anticipated to occur in 2025. However, even the maximum construction-related GHG emissions would be well below the PCAPCD's bright-line threshold of 10,000 MTCO<sub>2</sub>e/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 (2026) are presented in Table 5-11. As shown in the table, the proposed project would result in operational GHG emissions below the 1,100 MTCO<sub>2</sub>e/yr operational threshold of significance. Accordingly, further evaluation in comparison with the efficiency thresholds presented in Table 5-7 is not necessary or required.

<b>Year</b>	<b>GHG Emissions (MTCO<sub>2</sub>e/yr)</b>	<b>Threshold of Significance (MTCO<sub>2</sub>e/yr)</b>
2024	191.08	10,000
2025	1,447.78	10,000
2026	670.19	10,000

**Source: CalEEMod, May 2021 (see Appendix D).**

<b>Emission Source</b>	<b>GHG Emissions</b>
Area	51.93
Energy	44.19
Mobile	370.84
Solid Waste	17.56
Water	3.79
<b>TOTAL ANNUAL GHG EMISSIONS</b>	<b>488.31</b>
<b>PCAPCD Screening Level Threshold</b>	<b>1,100</b>

Note: Rounding may result in small differences in summation.

**Source: CalEEMod, May 2021 (see Appendix D).**

### **Consistency with Placer County Sustainability Plan**

The CARB encourages local governments to adopt a reduction goal for municipal operations emissions and move toward establishing similar goals for community emissions that parallel the State's commitment to reducing GHG emissions. As noted previously, Placer County adopted the PCSP in January, 2020.<sup>35</sup> The PCSP includes an inventory of baseline emissions from the year 2005 and forecasted emissions in 2020, 2030, and 2050. In addition, the PCSP establishes a target of reducing the County's GHG emissions to 15 percent below 2005 levels by 2020 and achieving the State-wide per capita efficiency target of six MTCO<sub>2</sub>e per person by 2030. The GHG reductions presented within the PCSP are designed to achieve the State's adopted AB 32 and SB 32 reduction targets. The PCSP would not be applicable to projects that have been previously analyzed under a certified EIR, which are consistent with such analysis, and addresses the most recent GHG regulatory requirements.

As noted above, because the proposed project's operational GHG emissions would be below the applicable thresholds (see Table 5-11), implementation of the GHG reduction measures included in the PCSP is not required. Therefore, the proposed project would not conflict with implementation of the PCSP.

<sup>35</sup> Placer County Community Development Resource Agency. *Placer County Sustainability Plan: A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy*. January 28, 2020.



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 an 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.*



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## **6. BIOLOGICAL RESOURCES**

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## 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 and surrounding environs. The chapter describes the proposed project's potential impacts to biological resources and identifies measures to eliminate or substantially reduce impacts to a less-than-significant level. Existing plant communities, wetlands, wildlife habitats, and potential for special-status species and communities are discussed for the project region. The information contained in the analysis is primarily based on an Aquatic Resources Delineation Report (ARDR),<sup>1</sup> Arborist Report,<sup>2</sup> and Biological Resources Assessment (BRA),<sup>3</sup> all prepared for the proposed project by HELIX Environmental Planning, Inc. Further information was sourced from the Placer County Conservation Program,<sup>4</sup> Placer County General Plan, Placer County General Plan EIR, and the Bickford Ranch Specific Plan EIR.<sup>5</sup>

### 6.2 EXISTING ENVIRONMENTAL SETTING

The following sections describe the regional biological setting in which the project site is located, the biological setting of the project site, and the special-status species and sensitive natural communities known to occur within the project site and surrounding environs.

#### Regional Setting

The project site is located immediately north of the approved Bickford Ranch Specific Plan (BRSP) area in the southwest portion of Placer County (County), in north-central California. The County has a Mediterranean climate and consists of a mosaic of oak woodland and savanna, mixed evergreen and pine forests, grasslands, chaparral, wetland communities, and riparian scrub and forest communities. Within the project vicinity the landscape includes annual grassland on shallow soils derived from volcanic mudflows along the area's central ridgeline and on formerly irrigated ground with deeper soils derived from decomposed granite. Blue oak woodland occurs primarily on the slopes below the project vicinity's main ridges on volcanic mudflow soils and on side slopes with deeper, granitic-derived soils. A riparian corridor exists approximately 2,100 feet south of the project vicinity along a section of Clover Valley Creek, downstream of Clover Valley Reservoir, consisting of a dense, closed-canopy forest dominated by valley oak, with many interior live oaks and scattered California buckeye.

The region is situated in the transitional zone between the higher elevation Sierra Nevada and the lowlands of the Central Valley. The region's location is within the range of several species common to either bioregion. At lower elevations, the County is characterized by annual grasslands, intermittent streams, and riparian vegetation. At higher elevations, oak woodland, mixed evergreen forest, scrub and chaparral, and riparian vegetation dominate. For many years,

<sup>1</sup> HELIX Environmental Planning, Inc. *The Ridge, Aquatic Resources Delineation Report*. May 15, 2019.

<sup>2</sup> HELIX Environmental Planning, Inc. *Arborist Report and Oak Woodland Inventory, The Ridge ±56.6-Acre Study Area Placer County, California*. April 2020.

<sup>3</sup> HELIX Environmental Planning, Inc. *The Ridge, Biological Resources Assessment*. March 2021.

<sup>4</sup> County of Placer. *Placer County Conservation Program*. February 2020.

<sup>5</sup> Placer County Community Development Resource Agency. *Bickford Ranch Specific Plan Revised Draft Environmental Impact Report*. Adopted December 18, 2001.



the principal land use of the region was cattle grazing, mining, logging, and farming. Such land uses are still prevalent in the County, but they are being replaced with residential, commercial, and industrial land uses.

### **Project Setting**

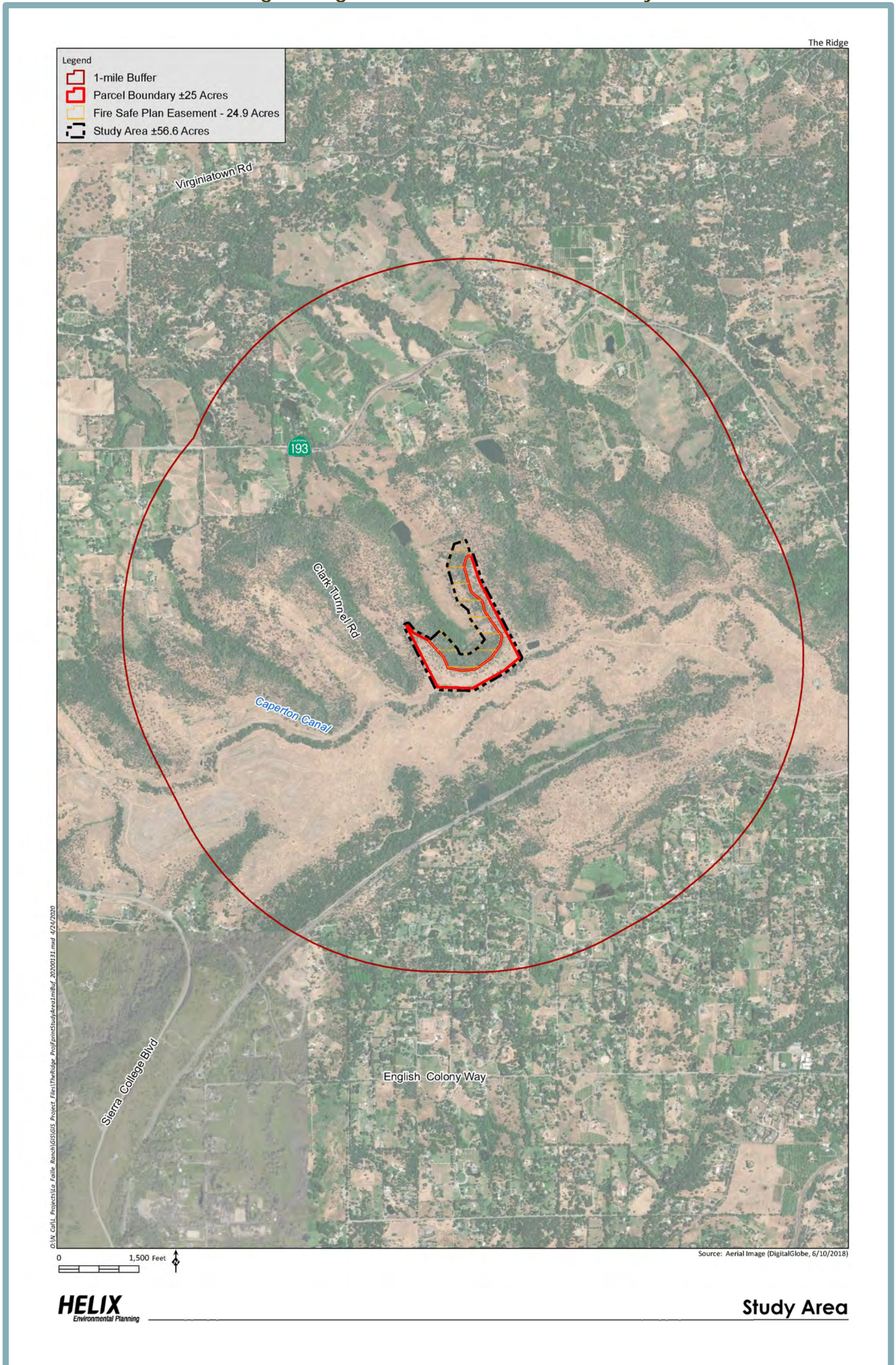
The approximately 56.6-acre “Study Area” for the proposed project is depicted in Figure 6-1. The Study Area encompasses the following three components: (1) the 24.95-acre project site, which consists of a horseshoe-shaped parcel situated atop three interconnected ridges; (2) the 24.9-acre, 300-foot-wide Modified Shaded Fuel Break (MSFB) along the project’s northern boundary, north of Caperton Canal; and (3) a 50-foot survey buffer area. The project site is located approximately one mile south of State Route (SR) 193 in an unincorporated area of the County and is bounded to the north, east, and west by undeveloped land, and to the south by a dirt roadway, connecting to (north-south) Clark Tunnel Road, an unimproved dirt roadway that ultimately connects to the community of Penryn, further to the southeast of the project site. The general topography of the Study Area is moderate to steeply sloped hillsides with variable aspects. Portions of the Study Area in the south and southeast, while not level, are moderately undulating with irregular microtopography. By and large, the areas in the south and southeast portions of the Study Area lack significant topographic depressions or folds. Elevations range between approximately 718 feet above mean sea level (MSL) in the southcentral portion of the Study Area to 830 feet above MSL in the southeastern portion.

The densely wooded area to the north of the project site slopes steeply downward towards the valley below. An undeveloped ranch (La Faille Ranch property), owned by the project applicant, is located within the valley to the north of the site. The ranch is used for cattle grazing. The southern boundary of the La Faille Ranch property includes the Caperton Canal, owned and operated by the Placer County Water Agency (PCWA), which bifurcates the ranch from the project site. The Caperton Canal is used to deliver untreated water to treatment plants in the Rocklin and Lincoln areas and is also sold to customers for irrigation, including supplying water to the pond on the La Faille Ranch property. The areas to the east, south, and west of the site, currently undeveloped, are planned for buildout with future low-density residential and rural residential uses as part of the BRSP, which was approved by the County in 2004 and amended as recently as 2015.

As discussed in Section 1.5 of the Introduction chapter, substantial evidence exists to support adjusting the existing conditions baseline for the area to the west of the project site, within the Phase 1 boundaries of the BRSP, as such adjustments will give the public and decision makers the most accurate and understandable picture practically possible of the project’s likely near-term and long-term impacts (CEQA Guidelines Section 15125[a]). It is estimated that 1,010 single-family units could be developed within Phase 1 of the BRSP, as well as associated backbone roadway, water, sewer, and storm drainage infrastructure. The primary backbone roadway would be the two-lane Bickford Ranch Road, which would provide access to Phase 1 of the BRSP and the proposed project from Sierra College Boulevard to the west and run in an east-to-west direction. The terminus of Bickford Ranch Road after completion of Phase 1 BRSP improvements will stop short of The Ridge project site, leaving about 400 feet of unpaved roadway between the terminus and the southwestern corner of The Ridge project site. This 400-foot segment would either be constructed during commencement of Phase 2 of BRSP, or depending on the timing of BRSP Phase 2, potentially by The Ridge applicant.



Figure 6-1  
The Ridge Biological Resources Assessment Study Area



## Biological Communities

According to the BRA, four biological communities, described in the Placer County Conservation Program (PCCP), occur within the Study Area: annual grassland, mixed oak woodland, oak-foothill pine woodland, and urban road areas (the PCCP will be discussed in further detail in the Regulatory Context section of this chapter). The biological communities are shown in Figure 6-2 and discussed in further detail below.

### Annual Grassland

A total of 16.37 acres of annual grassland occurs within the Study Area. Annual grassland consists of several native and non-native annual plant species and occurs in a majority of the State at elevations from sea level to approximately 4,000 feet above MSL. Composition of the vegetation community varies depending on distribution, geographic location, and land use. Dominant vegetation present in the annual grassland within the Study Area includes soft chess (*Bromus hordeaceus*), ripgut grass (*Bromus diandrus*), slender oat (*Avena barbata*), yellow star thistle (*Centaurea solstitialis*), medusahead (*Elymus caput-medusae*), and Italian thistle (*Carduus pycnocephalus*).

### Mixed Oak Woodland

A total of 37.82 acres of mixed oak woodland habitat occurs within the majority of the Study Area. The mixed oak woodland consists of approximately 12.72 acres on-site and approximately 25.1 acres off-site. The vegetative community is composed primarily of an overstory of interior live oak (*Quercus wislizeni*) and blue oak (*Quercus douglasii*) trees. The main understory comprises species described in the annual grassland community.

### Oak-Foothill Pine Woodland

A total of 1.08 acres of oak-foothill pine woodland habitat occurs within the Study Area. The vegetative community is comprised primarily of an overstory of foothill pine (*Pinus sabiniana*) and a few scattered interior live oak and tree of heaven (*Ailanthus altissima*) trees. The main understory comprises a scattered shrub layer of coyote brush (*Baccharis pilularis*), Himalayan blackberry (*Rubus armeniacus*), and a short herbaceous layer of species described in the annual grassland community.

### Urban (Roads)

A total of 0.92-acre of urban (road) areas occurs within the Study Area. The urban road area is associated with Clark Tunnel Road. The community includes minimal vegetation coverage and is similar in composition to the annual grassland community.

## Aquatic Resources

Aquatic resources, including three non-vernal pool seasonal wetlands, occur within the project site's footprint in the Study Area (see Figure 6-3). Caperton Canal exists within the Study Area, but lies outside of the project's footprint. Each are discussed in further detail below.





**Figure 6-2**  
**The Ridge Study Area Biological Communities**

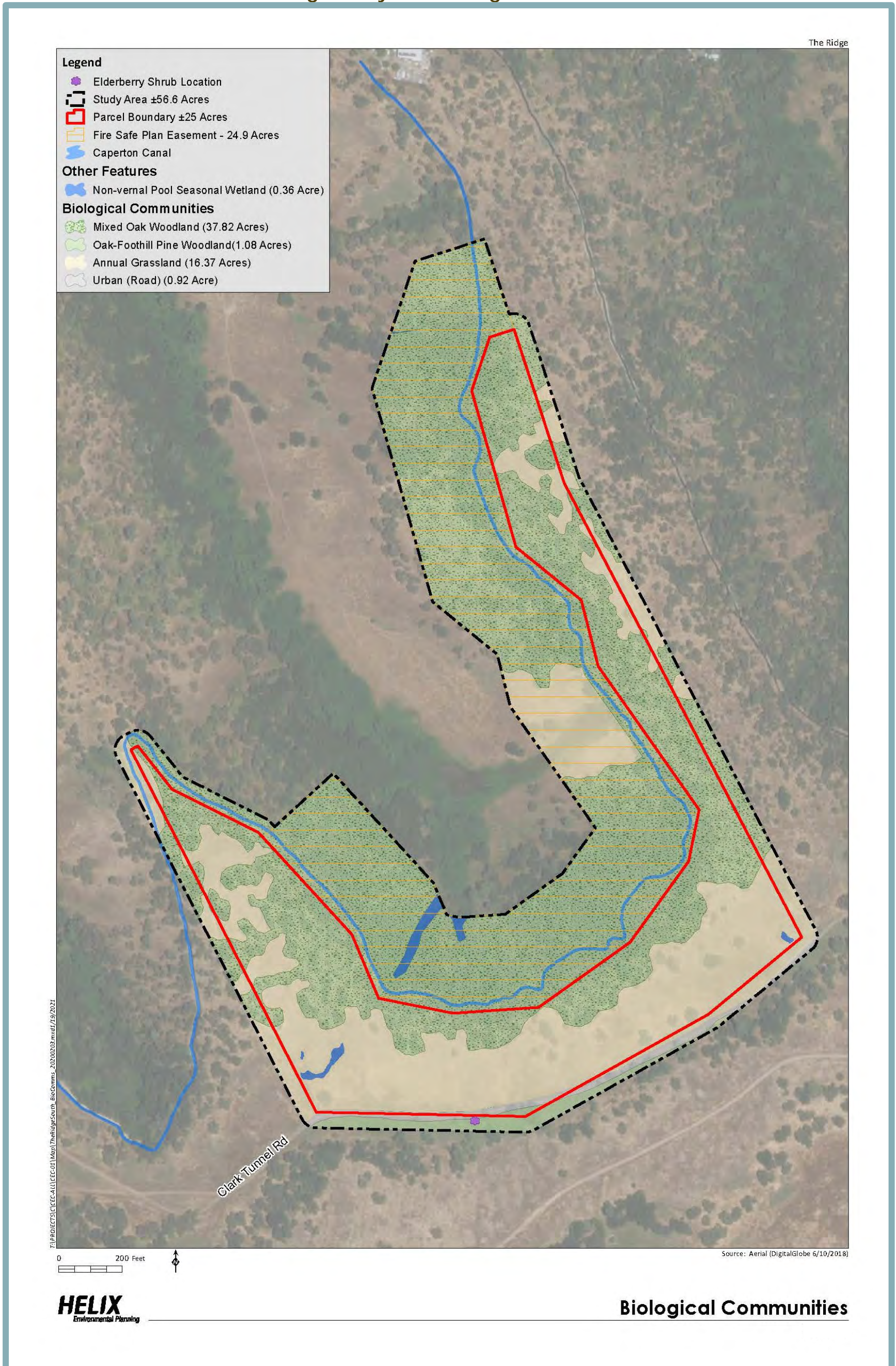
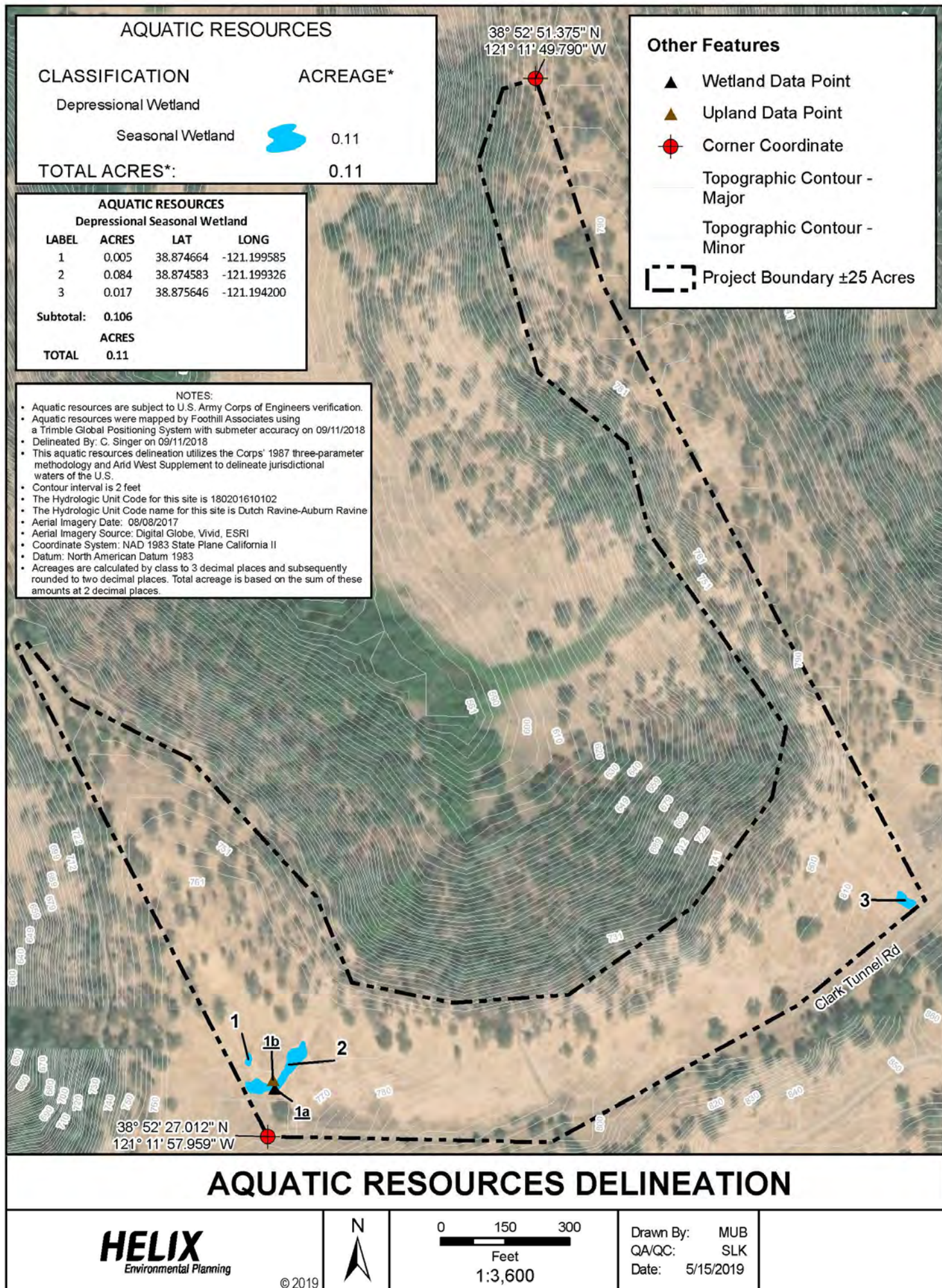


Figure 6-3  
The Ridge On-Site Aquatic Resources Delineation



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### Non-Vernal Pool Seasonal Wetlands

Three depressional non-vernal pool seasonal wetlands totaling 0.11-acre occur within the annual grassland habitat in the southwest and southeast portions of the project site's footprint (see Figure 6-3). The features were dry at the time of the site survey, which was conducted September 11 and 12, 2018. Vegetation associated with the wetlands include Italian rye grass (*Festuca perennis*), slender oat, medusahead, and riggut grass. Portions of two non-vernal pool seasonal wetlands totaling 0.25-acre occur within the mixed oak woodland habitat within the northern southwest portions of the MSFB, as generally shown in Figure 6-2. Vegetation associated with the latter features is similar to those described for seasonal wetlands within the impact footprint.

### Caperton Canal

Caperton Canal is a cement-lined canal that is managed by PCWA. Water flows in a general northeast to southwest direction towards the Caperton Reservoir, approximately 1.4 miles southwest of the Study Area. Caperton Canal occurs, in general, within the center of the Study Area along the border of the MSFB. Vegetation does not exist within Caperton Canal.

### **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 Code of Federal Regulations [CFR] Section 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 CFR 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]).

All plants appearing on CNPS Rank 1 or 2 are considered to meet CEQA Guidelines Section 15380 criteria. According to CNPS, CRPR 4 taxa do not clearly meet CEQA standards and thresholds for impact considerations.<sup>6</sup> Nevertheless, some level of CEQA review is justified for CRPR 4 taxa, and under some circumstances, a full impact analysis is warranted. Taxa that can be shown to meet the criteria for endangered, rare, or threatened status under CEQA Section 15380(d) or that can be shown to be regionally rare or unique as defined in CEQA Section 15125(c) must be fully analyzed in a CEQA document. Four CNPS List 4 plant species have the potential to occur within the project site. As will be discussed below, with the exception of Brandegees' clarkia, very limited distribution data exists for these species; thus, it is difficult to

<sup>6</sup> California Native Plant Society. *Technical Memorandum: Considerations for Including CRPR 4 Plant Taxa in CEQA Biological Resource Impact Analysis*. Adopted January 21, 2020.



determine whether these species warrant consideration under CEQA according to Section 15380(d) and the reasons set forth in CNPS' January 2020 Technical Memorandum ("Considerations for Including CRPR 4 Plant Taxa in CEQA Biological Resource Impact Analysis"). Out of an abundance of caution, three of the four CNPS List 4 species are treated as special-status for purposes of this analysis (Humboldt lily, streambank spring beauty, and valley brodiaea).

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 State 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 and endangered under the CESA (14 CCR 670.5);
- Wildlife that meet the definitions of rare or endangered species under CEQA Guidelines Section 15380;
- Wildlife species of special concern (SSC) to the California Department of Fish and Wildlife (CDFW);
- Wildlife species that are fully protected in California (California Fish and Game Code [CFGF], Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]); and/or
- Covered species under the PCCP.

Several species of plants and animals within 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."

### Listed and Special-Status Plant Species

According to the records search conducted as part of the BRA, 28 special-status plant species have the potential to occur on or in the vicinity of the Study Area. Based on field observations and literature review (detailed further in this chapter under the Method of Analysis subsection), 10 special-status plant species were determined to have the potential to occur in the Study Area. The species that is considered to have a high potential to occur in the Study Area includes big-scale balsamroot. Species that are considered to have a *low* potential to occur in the Study Area include: Ahart's dwarf rush, Butte County fritillary, dwarf downingia, dubious pea, Humboldt lily, oval-leaved viburnum, Red Hills soaproot, streambank spring beauty, and valley brodiaea.

The following discussions provides further details of the 10 special-status plant species with potential to occur on-site (see also Table 6-1). Appendix B of the BRA (included as Appendix E to this EIR) lists all 28 special-status plant species with potential to occur in the vicinity of the



Study Area. The following set of criteria was used to determine the potential for special-status plant and wildlife species to occur within the Study Area:

- Present: Species known to occur within the Study Area based on California Natural Diversity Database (CNDDDB) records and/or observed within the Study Area during the biological surveys;
- High: Species known to occur within or in the vicinity of the Study Area (based on CNDDDB records within five miles and/or based on professional expertise specific to the Study Area or species), and suitable habitat exists within the Study Area;
- Low: Species known to occur in the vicinity of the Study Area and marginal habitat exists within the Study Area; or species is not known to occur in the vicinity of the Study Area, but suitable habitat exists in the Study Area; or
- None: Species is not known to occur within or in the vicinity of the Study Area and suitable habitat does not exist within the Study Area; or the species was surveyed for during the appropriate season with negative results; or the Study Area occurs outside the known elevation or geographic ranges.

#### *Big-Scale Balsamroot*

Big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*) is ranked as a CNPS 1B.2 species, which are plants that are rare, threatened or endangered in California and elsewhere. The plant is a perennial herb found sometimes in serpentine soils within chaparral, cismontane woodland, and valley and foothill grassland habitats from 295 feet to 5,102 feet above MSL. The identification period for the species is from March through June. One documented CNDDDB record is located within five miles of the Study Area. The mixed oak woodland within the Study Area provides habitat for the species. This species was not observed within the Study Area during the site surveys. However, the survey was conducted outside of the evident and identifiable period for the species. Big-scale balsamroot has a *high* potential for occurrence within the Study Area.

#### *Ahart's Dwarf Rush*

Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*) is ranked as a CNPS 1B.2 species. The plant is an annual herb found in mesic areas within valley and foothill grasslands from 98 feet to 751 feet above MSL. The identification period for the species is from March through May. The CNDDDB does not include documented records for the species within five miles of the Study Area. The non-vernal pool seasonal wetlands within the annual grassland in the Study Area provide suitable habitat for this species. The species was not observed within the Study Area during the site surveys; however, the survey was conducted outside of the evident and identifiable period for the species. Ahart's dwarf rush has a *low* potential for occurrence within the Study Area.



**Table 6-1  
Special-Status Species with Potential to Occur within the Project Site**

Scientific Name (Common Name)	Federal Status	State Status	Habitat Requirements	Potential for Occurrence
<b>Plants</b>				
<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i> Big-scale balsamroot	--	CNPS 1B	Perennial herb sometimes found on serpentinite soil in chaparral, cismontane woodland, and valley and foothill grassland from 90 to 1,555 meters in elevation.	<b>High.</b> The mixed oak woodland and annual grassland within the Study Area provides habitat for the species. One known CNDDDB occurrence for the species is located within five miles of the Study Area (CDFW 2020).
<i>Juncus leiospermus</i> var. <i>ahartii</i> Ahart's dwarf rush	--	CNPS 1B	Annual herb found in mesic areas in valley and foothill grassland from 30 to 229 meters in elevation.	<b>Low.</b> The seasonal wetlands within the annual grassland in the Study Area provide habitat for the species. There are no documented CNDDDB records for this species within five miles of the Study Area (CDFW 2020).
<i>Downingia pusilla</i> Dwarf downinigia	--	CNPS 2B	An annual herb found in mesic areas within valley and foothill grassland and vernal pool habitats from 1 to 445 meters in elevation.	<b>Low.</b> The seasonal wetlands within the annual grassland in the Study Area provide habitat for the species. There are no documented CNDDDB records for this species within five miles of the Study Area (CDFW 2020).
<i>Viburnum ellipticum</i> Oval-leaved viburnum	--	CNPS 2B	A perennial deciduous shrub found within chaparral, cismontane woodland, and lower montane coniferous forests from 215 to 1,400 meters in elevation.	<b>Low.</b> The mixed oak woodland and foothill pine within the Study Area provide habitat for the species. There are no documented CNDDDB records for this species within five miles of the Study Area (CDFW 2020).
<i>Chlorogalum grandiflorum</i> Red Hills soaproot	--	CNPS 1B	Perennial bulbiferous herb sometimes found on serpentinite and gabbroic soil in chaparral, cismontane woodland, lower coniferous forests from 245 to 1,690 meters in elevation.	<b>Low.</b> The mixed oak woodland and foothill pine within the Study Area provide habitat for the species. There are no documented CNDDDB records of this species within five miles of the Study Area (CDFW 2020).
<i>Fritillaria eastwoodiae</i> Butte County fritillary	--	CNPS 3	A perennial bulbiferous herb found sometimes in serpentinite soils within chaparral, cismontane woodland, and openings of lower montane coniferous	<b>Low.</b> The mixed oak woodland within the Study Area provides suitable habitat for the species. There are no documented CNDDDB records for this species within five

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**Table 6-1  
Special-Status Species with Potential to Occur within the Project Site**

Scientific Name (Common Name)	Federal Status	State Status	Habitat Requirements	Potential for Occurrence
			forests from 50 to 1,500 meters in elevation.	miles of the Study Area (CDFW 2020).
<i>Lathyrus sulphureus</i> var. <i>argillaceus</i> Dubious pea	--	CNPS 3	A perennial herb found within cismontane woodland, and upper and lower montane coniferous forests from 150 to 930 meters in elevation.	<b>Low.</b> The mixed oak woodland within the Study Area provides suitable habitat for the species. There are no documented CNDDDB records for this species within five miles of the Study Area (CDFW 2020).
<i>Lilium humboldtii</i> ssp. <i>humboldtii</i> Humboldt lily	--	CNPS 4.2	Perennial bulbiferous herb found in openings in chaparral, cismontane woodland, lower montane coniferous forest from 90 to 1,280 meters in elevation.	<b>Low.</b> The mixed oak woodland within the Study Area provides suitable habitat for the species. There are no documented CNDDDB records for this species within five miles of the Study Area (CDFW 2020).
<i>Claytonia parviflora</i> ssp. <i>grandiflora</i> Streambank spring beauty	--	CNPS 4.2	An annual herb found on rocky soil in cismontane woodland from 250 to 1,200 meters in elevation.	<b>Low.</b> The mixed oak woodland within the Study Area provides suitable habitat for the species. There are no documented CNDDDB records for this species within five miles of the Study Area (CDFW 2020).
<i>Brodiaea rosea</i> ssp. <i>vallicola</i> Valley brodiaea	--	CNPS 4.2	Perennial bulbiferous herb found on silty, sandy, and gravelly loam on old alluvial terraces within swales in valley and foothill grassland and vernal pools from 10 to 335 meters.	<b>Low.</b> The Study Area provides suitable habitat for the species within mesic topographical folds in the annual grassland. There are no documented CNDDDB records for this species within five miles of the Study Area (CDFW 2020).
Invertebrates				
<i>Desmocerus californicus</i> <i>dimorphus</i> Valley elderberry longhorn beetle	FT	--	Sole hosts are elderberry ( <i>Sambucus</i> sp.) shrubs typically associated with riparian areas. The species is known from portions of the Central Valley of California. The species has an elevational range limit of 500 feet above MSL (USFWS).	<b>Low.</b> One elderberry shrub with exit holes was observed within the Study Area during the September 12, 2018 biological survey. Because the shrub is isolated, occurs above 500 feet and outside of a riparian zone, the shrub provides marginal habitat for the species within the Study Area. One known CNDDDB occurrence for the species is located within five miles of the Study Area (CDFW 2020).

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**Table 6-1  
Special-Status Species with Potential to Occur within the Project Site**

Scientific Name (Common Name)	Federal Status	State Status	Habitat Requirements	Potential for Occurrence
<i>Andrena subapasta</i> Andrenid bee	--	CSA	Found in grassland habitats within El Dorado, Placer, Sacramento, and San Joaquin counties. Ground nesters that will be underground from summer, fall and winter and emerge in early spring to forage and pollinate early bloomers, such as willows, maples, violets and other early blooming wildflowers.	<b>Low.</b> The burrows and annual grassland within the Study Area provides suitable nesting and foraging habitat for the species.
<i>Bombus morrisoni</i> Morrison bumble bee	--	CSA	Inhabits open dry scrub where it nests underground, in structures and on grass hummocks. Nests are often underground, abandoned rodent nests or above ground in tufts of grass, old bird nests, rock piles or cavities in dead trees. Associated food plants include <i>Asclepias</i> , <i>Astragalus</i> , <i>Chrysothamnus</i> , <i>Cirsium</i> , <i>Ericameria</i> , <i>Helianthus</i> , <i>Melilotus</i> , and <i>Senecio</i> .	<b>Low.</b> The burrows and annual grassland within the Study Area provides suitable nesting and foraging habitat for the species.
<i>Bombus occidentalis</i> Western bumble bee	--	CSA	Found in open grassy areas, urban parks and gardens, chaparral and shrub areas, and mountain meadow. Nest underground in abandoned rodent burrows or other cavities. Associated food plants include <i>Ceanothus</i> , <i>Centaurea</i> , <i>Chrysothamnus</i> , <i>Geranium</i> , <i>Grindellia</i> , <i>Lupinus</i> , <i>Melilotus</i> , <i>Monardella</i> , <i>Rubus</i> , <i>Solidago</i> , and <i>Trifolium</i> .	<b>Low.</b> The burrows and annual grassland within the Study Area provides suitable nesting and foraging habitat for the species.
Amphibians/Reptiles				
<i>Spea hammondii</i> Western spadefoot	--	CSC	Found in a variety of upland habitats, including lowlands, foothills, grasslands, open chaparral, and pine-oak woodlands. Habitat preferences include shortgrass plains, and sandy or gravelly soils for burrowing (e.g., alkali flats, washes, alluvial fans). Fossorial species that hibernates/aestivates for most of the year	<b>Low.</b> The seasonal wetlands within the Study Area provide marginal breeding habitat and the small underground burrows throughout the mixed oak woodland and annual grassland provide upland habitat for the species.

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**Table 6-1  
Special-Status Species with Potential to Occur within the Project Site**

Scientific Name (Common Name)	Federal Status	State Status	Habitat Requirements	Potential for Occurrence
			underground. Breeds temporary rain pools, and slow-moving streams (e.g., areas flooded by intermittent streams), and other artificial bodies of water as long as surrounding habitat is not developed or irrigated for agricultural purposes.	
<b>Birds</b>				
<i>Buteo swainsoni</i> Swainson's hawk	--	CT	Nests peripherally to Valley riparian systems lone trees or groves of trees in agricultural fields. Most commonly used nest trees in Central Valley include valley oak, Fremont cottonwood, walnut, and large willows, and occasionally eucalyptus, pine and redwood trees. Forages in row, hay and grain agricultural crops, especially post-harvest when prey is easy to observe.	<b>Low.</b> The mixed oak woodland within the Study Area provides potential nesting habitat. The project footprint does not provide suitable foraging habitat although suitable foraging habitat is located to the north and west of the project footprint.
<i>Elanus leucurus</i> White-tailed kite	PT	CFP	Inhabit savanna, open woodlands, marshes, desert grassland, partially cleared lands and cultivated fields. Nests in trees, often near a marsh in savanna, open woodland, partially cleared lands, and cultivated fields. Foraging occurs within ungrazed or lightly-grazed fields and pastures.	<b>High.</b> The mixed oak woodland within the Study Area provides suitable nesting habitat and the annual grassland provides foraging habitat for the species. One known CNDDDB occurrence for the species is located within five miles of the Study Area (CDFW 2020).
<i>Ammodramus savannarum</i> Grasshopper sparrow	--	CSC	Frequents dense, dry, or well drained grassland. Nests at base of overhanging clump of grass. The species is known from Los Angeles, Mendocino, Orange, Placer, Sacramento, San Diego, San Luis Obispo, Solano, and Yuba counties.	<b>High.</b> The annual grassland, and mixed oak woodland within the Study Area provide habitat for the species. One known CNDDDB occurrence for the species is located within five miles of the Study Area (CDFW 2020).
<i>Circus cyaneus</i> Northern harrier	--	CSC	Found in coastal scrub, Great Basin grassland, marsh and swamp, riparian scrub, valley and foothill grassland, wetland. Nests and forages in grasslands, from salt grass in desert sink to mountain cienagas.	<b>High.</b> The annual grassland within the Study Area provides habitat for the species.

(Continued on next page)



**Table 6-1  
 Special-Status Species with Potential to Occur within the Project Site**

Scientific Name (Common Name)	Federal Status	State Status	Habitat Requirements	Potential for Occurrence
			Nests on ground in shrubby vegetation usually at marsh edge; nests built of a large mound of sticks in wet areas.	
<i>Progne subis</i> Purple martin	--	CSC	Nests in wide variety of open and partly open habitats that are often near water or around towns. Nests in tree cavities, abandoned woodpecker holes, crevices in rocks, and sometimes in bird houses or gourds put up by humans.	<b>High.</b> The trees within the mixed oak woodland in the Study Area provides nesting habitat for the species.

Status Codes:

**BCC** - USFW Birds of Conservation Concern; **CCE** - CDFW Candidate Endangered; **CCT** - CDFW Candidate Threatened; **CE** - CDFW Endangered; **CFP** - CDFW Fully Protected; **CNPS** – California Native Plant Society Rare Plant Rank; **1B** – Rare, threatened, or endangered in California and elsewhere; **2B** - Rare, threatened, or endangered in California but more common elsewhere; **3** - Plants about which more information is needed; **4** - Plants of limited distribution; **CR** - Critically Endangered; **CSA** - CDFW Special Animals List; **CSC** - CDFW Species of Concern; **CT** - CDFW Threatened; **FD** - Federally Delisted; **FE** - Federally Endangered; **FSC** - Federal Species of Concern; **FT** - Federally Threatened; **PT** - USFW Proposed Threatened.

**Source: Helix Environmental Planning. The Ridge Biological Resources Assessment. March 2021.**



### *Butte County Fritillary*

Butte County fritillary (*Fritillaria eastwoodiae*) is ranked as a CNPS 3.2 species, which are plants on a review list that require more information. The plant is a perennial bulbiferous herb found occasionally in serpentine soil within openings of chaparral, cismontane woodland, and lower montane coniferous forest from 164 feet to 4,921 feet above MSL. The identification period for the species is from March through June. The CNDDDB does not include documented records for the species within five miles of the Study Area. The mixed oak woodland within the Study Area provides habitat for this species. The species was not observed within the Study Area during the site surveys. However, the survey was conducted outside of the evident and identifiable period for the species. Butte County fritillary has a *low* potential for occurrence within the Study Area.

### *Dubious Pea*

Dubious pea (*Lathyrus sulphureus var. argillaceus*) is ranked as a CNPS 3 species. The plant is a perennial herb found in cismontane woodland and montane coniferous forests from 165 feet to 1,020 feet above MSL. The identification period for the species is from April to May. The CNDDDB does not include documented records for the species within five miles of the Study Area. The mixed oak woodland within the Study Area provides habitat for this species. The species was not observed within the Study Area during the site surveys. However, the survey was conducted outside of the evident and identifiable period for the species. Dubious pea has a *low* potential for occurrence within the Study Area.

### *Dwarf Downingia*

Dwarf downingia (*Downingia pusilla*) is ranked as a CNPS 2B.2 species, which are plants that are rare, threatened or endangered in California, but are more common elsewhere. The plant is an annual herb found in mesic areas within vernal pools and valley and foothill grassland from three feet to 1,460 feet above MSL. The identification period for the species is from March through June. The CNDDDB does not include documented records for the species within five miles of the Study Area. The non-vernal pool seasonal wetlands within the annual grassland within the Study Area provide suitable habitat for the species. The species was not observed within the Study Area during the site surveys. However, the survey was conducted outside of the evident and identifiable period for the species. Dwarf downingia has a *low* potential for occurrence within the Study Area.

### *Humboldt Lily*

Humboldt lily (*Lilium humboldtii ssp. humboldtii*) is a CNPS 4.2 species. The plant is a perennial bulbiferous herb found in openings of chaparral, cismontane woodland, and lower montane coniferous forests from 90 feet to 1,280 feet above MSL. The blooming period for the species is from May through July and sometimes extends into August. The CNDDDB does not include documented records for the species within five miles of the Study Area. The mixed oak woodland within the Study Area provides habitat for the species. The species was not observed within the Study Area during the site surveys. However, the survey was conducted outside of the evident and identifiable period for the species. Humboldt lily has a *low* potential to occur within the Study Area.

### *Oval-Leaved Viburnum*

Oval-leaved viburnum (*Viburnum ellipticum*) is ranked as a CNPS 2B.3 species. The plant is a perennial deciduous shrub found in cismontane woodland, lower montane coniferous forest, and chaparral from 705 feet to 4,600 feet above MSL. The identification period for the species is from May through June. The CNDDDB does not include documented records for the species within five miles of the Study Area. The mixed oak woodland within the Study Area provides habitat for the



species. The species was not observed within the Study Area during the site surveys. However, the survey was conducted outside of the evident and identifiable period for the species. Oval-leaved viburnum has a *low* potential for occurrence within the Study Area.

#### *Red Hills Soaproot*

Red Hills soaproot (*Chlorogalum grandiflorum*) is ranked as a CNPS 1B.2 species. It is a perennial bulbiferous herb often found on gabbro, serpentinite, or other soils in chaparral, cismontane woodland, and lower montane coniferous forest from 800 to 4,070 feet (245 to 1,240 meters) above MSL. The identification period for this species is from May through June. There are no documented CNDDDB occurrences within five miles of the Study Area (CDFW 2021). The nearest documented occurrence is approximately 11.9 miles from the Study Area. The mixed oak woodland within the Study Area provides suitable habitat for this species although the Study Area does not contain serpentinite and gabbroic soils that is often associated with this species. This species was not observed within the Study Area during the September 11 and 12, 2018 biological surveys. However, the survey was conducted outside of the evident and identifiable period for this species. Given the lack of CNDDDB records in the immediate vicinity of the Study Area and a lack of preferred soil types for this species, Red Hills soaproot has a *low* potential for occurrence within the Study Area.

#### *Streambank Spring Beauty*

Streambank spring beauty (*Claytonia parviflora* ssp. *grandiflora*) is ranked as a CNPS 4.2 species. The plant is an annual herb found in rocky habitat within cismontane woodland from 820 feet to 3,937 feet above MSL. The identification period for the species is from February through May. The CNDDDB does not include documented records for the species within five miles of the Study Area. The mixed oak woodland within the Study Area provides habitat for the species. The species was not observed within the Study Area during the site surveys. However, the survey was conducted outside of the evident and identifiable period for the species. Streambank spring beauty has a *low* potential for occurrence within the Study Area.

#### *Valley Brodiaea*

Valley brodiaea (*Brodiaea rosea* ssp. *vallicola*) is ranked as a CNPS 4.2 species. The plant is a perennial bulbiferous herb found on silty, sandy, and gravelly loam on old alluvial terraces within swales in valley and foothill grassland and vernal pools from 33 feet to 1,099 feet above MSL. The identification period for the species is from April through May, sometimes extending into June. The CNDDDB does not include documented records for the species within five miles of the Study Area. Valley brodiaea has a *low* potential for occurrence within the Study Area.

#### Listed and Special-Status Wildlife Species

According to the records search conducted as part of the BRA, 36 special-status wildlife species have the potential to occur on-site or in the vicinity of the Study Area. Based on field observations and literature review (detailed further in this chapter under the Method of Analysis subsection), 10 of the 36 special-status wildlife species were determined to have the potential to occur in the Study Area (see Table 6-1). Species that are considered to have a high potential to occur include various migratory bird species. Species that are considered to have a low potential to occur include Swainson's hawk, western spadefoot, andrenid bee, Morrison bumble bee, valley elderberry longhorn beetle (VELB), and western bumble bee.



The following discussions provide further details of the 10 special-status wildlife species with potential to occur on-site. Appendix B of the BRA (included as Appendix E of this EIR) lists all 36 special-status wildlife species with potential to occur in the vicinity of the Study Area.

### *Andrenid Bee*

The andrenid bee (*Andrena subapasta*) is on the California Special Animals List as designated by CDFW. The species is found in grassland habitats within El Dorado, Placer, Sacramento, and San Joaquin counties. Andrenid bees are ground nesters, and will typically stay underground through summer, fall, and winter and emerge in spring to forage on blooming flowers. They are among the first bees to emerge in the spring and will often pollinate willows, maples, violets, and other early blooming wildflowers. The CNDDDB does not include documented records for the species within five miles of the Study Area.

Small burrows present within the Study Area provide nesting habitat. The annual grassland within the Study Area provides suitable foraging and nesting habitat for the species. The species was not observed on-site during the biological survey. The species has a *low* potential to occur within the Study Area.

### *Morrison Bumble Bee*

The Morrison bumble bee (*Bombus morrisoni*) is on the California Special Animals List as designated by CDFW. The species often nests underground, in abandoned rodent nests, but also above ground in open dry scrub habitat in tufts of grass, old bird nests, rock piles, or cavities in dead trees. Plants that the species is associated with include milkweed (*Asclepias sp.*), milkvetch (*Astragalus sp.*), rabbitbrush (*Chrysothamnus sp.*), thistle (*Cirsium sp.*), goldenbush (*Ericameria sp.*), sunflower (*Helianthus sp.*), sweetclover (*Melilotus sp.*), and ragwort (*Senecio sp.*). The CNDDDB does not include documented records for the species within five miles of the Study Area.

Small burrows present within the Study Area provide nesting habitat and the annual grassland and food plants (e.g., thistle) identified within the Study Area provide suitable foraging habitat for the species. The species was not observed on-site during the biological survey. The species has *low* potential to occur within the Study Area.

### *Valley Elderberry Longhorn Beetle*

VELB (*Desmocerus californicus dimorphus*) is a federally-threatened species and is a PCCP covered species. The beetle depends on elderberry (*Sambucus sp.*) shrubs for the species' entire lifecycle. Adults are typically active from March through May during the flowering period of the elderberry shrub. The female lays eggs on the leaves and stems of the elderberry shrub. The larvae emerge within a few days and burrow into the elderberry stem. The larvae feed on the stem pith until they pupate. When the host shrub begins flowering, the pupa emerges from the stem as an adult. VELB require elderberry stems with at least one-inch diameter at ground level (DGL) in order for the larvae to utilize the stems. VELB are usually found on elderberry shrubs within riparian plant communities, which include California sycamore (*Platanus racemosa*), willow (*Salix spp.*), blackberry (*Rubus sp.*), and western poison oak (*Toxicodendron diversilobum*). Multiple elderberry shrubs clumped together provide superior habitat for VELB, while isolated elderberry shrubs are less likely to support VELB populations. Historically, the range of VELB includes the American, the San Joaquin, and Sacramento Rivers and their tributaries up to approximately 3,000 feet above MSL. Current USFWS guidance states that VELB are typically not found above 500 feet in elevation. One CNDDDB record exists for VELB documented within five miles of the



Study Area. The documented occurrence is located approximately 1.10 miles southwest of the Study Area.

A single elderberry shrub was documented within the Study Area, but outside the boundaries of the project site (see Figure 6-2). The elderberry shrub featured several stems with diameters ranging from less than one inch up to five inches. Approximately six stems were observed with potential exit holes. The observed holes in the stems could have potentially been created by invertebrates other than VELB. Because the elderberry shrub is isolated, outside of a riparian zone, and located above an elevation of 500 feet, the elderberry shrub provides marginal habitat for VELB. Therefore, the species has a *low* potential to occur within the Study Area.

### *Western Bumble Bee*

The western bumble bee (*Bombus occidentalis*) is on the California Special Animals List as designated by CDFW. The species is found in open grassy areas, urban parks and gardens, chaparral and shrub areas, and mountain meadows. The species nests underground in abandoned rodent burrows or other cavities. Plants that the species is associated with include ceanothus (*Ceanothus sp.*), thistle (*Centaurea sp.*), rabbitbrush (*Chrysothamnus sp.*), geranium (*Geranium sp.*), gumplant (*Grindelia sp.*), lupine (*Lupinus sp.*), sweetclover, monardella (*Monardella sp.*), blackberry (*Rubus sp.*), goldenrod (*Solidago sp.*), and clover (*Trifolium sp.*). The CNDDDB does not include documented records for the species within five miles of the Study Area.

Small burrows present within the Study Area provide nesting habitat and the annual grassland and food plants (i.e., thistle, ceanothus, blackberry, and clover) identified within the Study Area provides suitable foraging habitat for the species. The species was not observed on-site during the biological survey. The species has a *low* potential to occur within the Study Area.

### *Nesting Birds and Raptors*

Avian species forage and nest in a variety of habitats throughout the County. The trees within the mixed oak woodland and the annual grassland within the Study Area provide nesting and foraging habitat for protected birds. Protected migratory birds identified to potentially occur within the Study Area include grasshopper sparrow (*Ammodramus savannarum*), northern harrier (*Circus hudsonius*), purple martin (*Progne subis*), and white-tailed kite (*Elanus leucurus*). The CNDDDB includes one documented occurrence for grasshopper sparrow and one occurrence for white-tailed kite within five miles of the Study Area. While the CNDDDB does not include a documented occurrence for purple martin within five miles of the Study Area, migratory birds occupy a wide range of territories as long as the territories offer suitable nesting and foraging habitat, such as the habitats present within the Study Area.

### *Swainson's Hawk*

Swainson's hawk (*Buteo swainsoni*) is a California threatened species and is a covered species under the PCCP. The hawk migrates from the species' wintering grounds in the La Pampas Region in Argentina to the species' breeding grounds in western North America, including the Central Valley of California, from early March through early April. Within breeding grounds, Swainson's hawk prefer open habitats, including mixed and short grass grasslands, with scattered trees or shrubs for perching; dry grasslands; irrigated meadows; and edges between two habitat types. Breeding occurs from late March to late August, peaking in late May through July. In the Central Valley, Swainson's hawk nest in stands with few trees in juniper-sage flats, riparian woodlands, and oak woodlands. The species nests in close proximity to suitable foraging habitat,



which can be located within a 10-mile radius of an active nesting site. Swainson's hawk leave their breeding grounds to return to their wintering grounds in late August or early September.

CNDDDB occurrences have not been recorded within five miles of the Study Area; however, six CNDDDB occurrences with identified active nests exist within 10 miles of the Study Area (CDFW 2020). The nearest occurrence is approximately 6.18 miles to the west of the Study Area. The species was not observed within the Study Area during the biological survey. However, the site visits were conducted when the species would not be expected to be present within the Study Area, due to fall migration patterns. The trees within the mixed oak woodland habitat provide potential nesting habitat and the annual grassland habitat in the valley to the north and east of the project footprint provides potential foraging habitat for the species. Annual grassland within the Study Area is composed of small patches within larger patches of oak woodland. The mosaic of small openings of annual grassland and oak woodland is not ideal for Swainson's hawks that typically forage in open grasslands and agricultural fields. In addition, the project site is located on the far eastern edge of the known range of the species. Areas to the west and north of the Study Area provide more suitable foraging habitat for the species as such areas contain more open habitat with more scattered woodlands. Therefore, the species has a *low* potential to nest within the Study Area but would not be expected to forage within the Study Area.

### *Western Spadefoot*

Western spadefoot (*Spea hammondi*) is a California Species of Special Concern. The species occurs throughout the Central Valley and on the coast from Point Conception south to the Mexican border. The species occurs from sea level up to 4,500 feet above MSL, in the southern Sierra foothills. Western spadefoot individuals are most commonly found in grassland habitats with temporary pools of water, but they have also been found in open chaparral and valley-foothill pine-oak woodlands. The species spends most of the year underground, where they seek refuge from desiccation through constructing and residing in small burrows. The species often breeds in temporary pools and quiet streams between the months of October and May, depending on rainfall. The CNDDDB does not include documented records for the species within five miles of the Study Area.

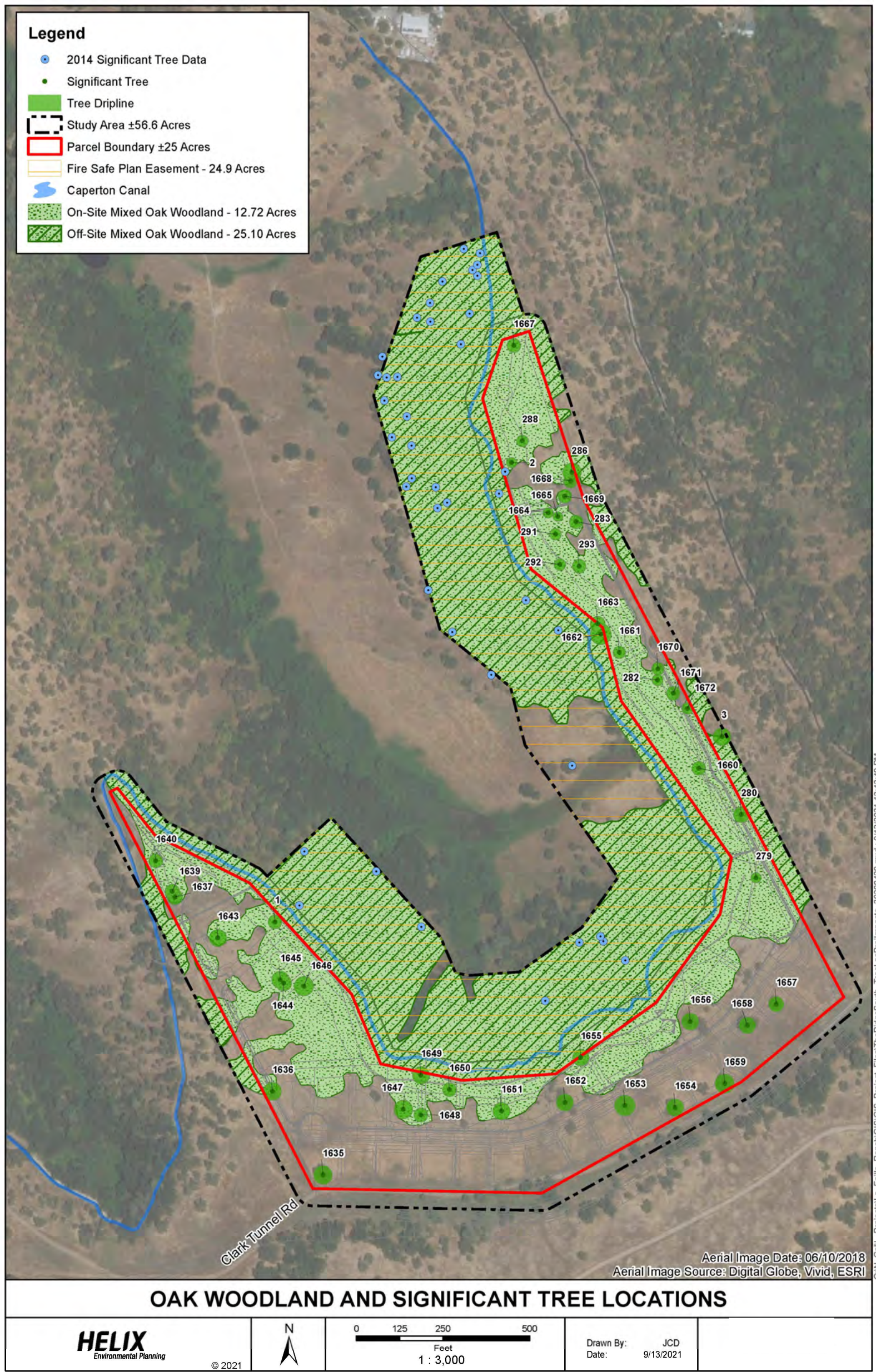
The species was not observed within the Study Area during the biological survey. The small burrows throughout the mixed oak woodland and annual grassland provide aestivation habitat and non-vernal pool seasonal wetlands could provide marginal potential breeding habitat for the species. Therefore, the species has a *low* potential to occur within the Study Area.

### **Trees**

Including the MSFB, the Study Area includes a total of 88 significant oak trees, which are defined by the County as oak trees with a trunk diameter at breast height (DBH) greater than 24 inches or multi-trunked oak trees with a total circumference greater than 72 inches (23-inch diameter) at ground level (see Figure 6-4). Minus the MSFB, 46 significant trees exist within the Study Area. While major tree removal within the MSFB is not expected, impacts could still result to trees and oak woodland within the MSFB, if deemed necessary to minimize crown overlap. It is noted that the significant trees indicated by blue circles in Figure 6-4 represent trees within the MSFB that were surveyed in 2014, whereas significant trees indicated by green circles represent trees within the proposed subdivision boundaries that were surveyed in 2018.



**Figure 6-4**  
**The Ridge Study Area Oak Woodland and Significant Trees Locations**



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### 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.

#### **Federal Endangered Species Act**

The U.S. Congress passed the FESA in 1973 to protect species that are endangered or threatened with extinction. FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend. FESA prohibits the “take” of endangered or threatened wildlife species. “Take” is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA Section 3 [3], [19]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 CFR Section 17.3). Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR Section 17.3). Actions that result in take can result in civil or criminal penalties.

For federally listed species covered under the PCCP, the Biological Opinion issued by the USFWS for the PCCP provides take coverage for covered projects under the PCCP that may impact federally listed species that are covered species under the PCCP. No further consultation is required as long as the covered project complies with PCCP requirements. For federally listed species that are not covered species under the PCCP, take coverage is required as outlined below.

In the context of the proposed project, FESA consultation with USFWS or the NMFS would be initiated if development resulted in take of a threatened or endangered species not covered under the PCCP or if issuance of a Section 404 permit or other federal agency action could result in take of an endangered species not covered under the PCCP or adversely modify critical habitat of such a species.

#### **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 CFGC 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 U.S. Army Corps of Engineers (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 CFR Section 328.2[f]). In addition, Section 401 of the CWA (Title 33 of U.S. Code [USC], Section 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the 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 CFR Section 328.3[b]).

Furthermore, Jurisdictional Waters of the United States can be defined by exhibiting a defined bed and bank and ordinary high-water mark (OHWM). The OHWM is defined by the USACE as “that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” (33 CFR Section 328.3[e]).

For covered projects under the PCCP, impacts to 404 jurisdictional waters are addressed under the County Aquatic Resources Program (CARP) which allows a streamlined 404 permitting process for covered activities under the PCCP that will result in impacts to aquatic resources subject to Section 404 jurisdiction.

## **State Regulations**

The following are the State environmental laws and policies relevant to biological resources.

### **California Department of Fish and Wildlife**

CDFW administers a number of laws and programs designed to protect fish and wildlife resources under the CFGC, such as CESA (CFGC Section 2050, et seq.), Fully Protected Species (CFGC Section 3511) and the Lake or Streambed Alteration Agreement Program (CFGC Sections 1600 to 1616). Such regulations are summarized in the following sections.

#### **California Endangered Species Act**

The State of California enacted CESA in 1984. CESA is similar to the FESA but pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with CDFW when preparing CEQA documents to ensure that the State lead agency actions do not jeopardize the existence of listed species. CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur, and allows CDFW to identify “reasonable and prudent alternatives” to the project consistent with conserving the species. Agencies can approve a project that affects a listed species if they determine that “overriding considerations” exist; however, the agencies are prohibited from approving projects that would result in the extinction of a listed species.

As with FESA, for covered projects that may impact State-listed species under CESA that are also covered species under the PCCP, direct consultation with CDFW for State-listed take authorization is not required as long as the covered project complies with PCCP requirements.



For projects that may result in take of State-listed species that are not PCCP covered species, CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur and allows CDFW to identify “reasonable and prudent alternatives” to the project consistent with conserving the species. CESA allows CDFW to authorize exceptions to the State’s prohibition against take of a listed species if the “take” of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (CFGF Section 2081).

### California Fish and Game Codes

A number of species have been designated “fully protected” species under Sections 5515, 5050, 3511, and 4700 of the CFGC, but are not listed as endangered (Section 2062) or threatened (Section 2067) species under CESA. Except for take related to scientific research, all take of fully protected species is prohibited. The CFGC defines take as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.”

Birds of prey are protected in California under provisions of the CFGC Section 3503.5 (1992), which states, “it is unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “taking” by CDFW.

### Lake or Streambed Alteration Program

The CDFW is responsible for conserving, protecting, and managing California’s fish, wildlife, and native plant resources. To meet this responsibility, the CFGC Section 1602, requires notification to CDFW of any proposed activity that may substantially modify a river, stream, or lake. Notification is required by any person, business, state or local government agency, or public utility that proposes an activity that will:

- substantially divert or obstruct the natural flow of any river, stream or lake;
- substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

For the purposes of Section 1602, rivers, streams and lakes must flow at least intermittently through a bed or channel. If notification is required and CDFW believes the proposed activity is likely to result in adverse harm to the natural environment, the CDFW will require that the parties enter into 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 be considered for review are included on a list of “Species of Special Concern” developed by CDFW. Species whose numbers, reproductive success, or habitat may be threatened are tracked by CDFW in California.



### **Native Plant Protection Act**

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. Currently 64 species, subspecies, and varieties of plants 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**

Any action requiring a CWA Section 404 permit, or a Rivers and Harbors Act Section 10 permit, must also obtain a CWA Section 401 Water Quality Certification. The State of California Water Quality Certification (WQC) Program was formally initiated by the State Water Resources Control Board (SWRCB) in 1990 under the requirements stipulated by Section 401 of the federal CWA. Although the CWA is a federal law, Section 401 of the CWA recognizes that states have the primary authority and responsibility for setting water quality standards. In California, under Section 401, the State and Regional Water Quality Control Boards (RWQCBs) are the authorities that certify that issuance of a federal license or permit does not violate California's water quality standards (i.e., that they do not violate Porter-Cologne and the Water Code). The WQC Program currently issues the WQC for discharges requiring USACE's permits for fill and dredge discharges within waters of the U.S., and also implements the State's wetland protection and hydromodification regulation program under the Porter Cologne Water Quality Control Act.

On April 2, 2019, the SWRCB adopted a State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures), for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California Plan. The Procedures consist of four major elements: (1) a wetland definition; (2) a framework for determining if a feature that meets the wetland definition is a water of the State; (3) wetland delineation procedures; and (4) procedures for the submittal, review, and approval of applications for WQCs and Waste Discharge Requirements (WDR) for dredge or fill activities. The State Office of Administrative Law (OAL) approved the Procedures on August 28, 2019, and the Procedures became effective May 28, 2020.

Under the Procedures and the State Water Code (Water Code Section 13050[e]), "waters of the State" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." Unless excluded by the Procedures, any activity that could result in discharge of dredged or fill material to waters of the State, which includes waters of the U.S. and non-federal waters of the State, requires filing of an application under the Procedures.

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act, Water Code Section 13000 et seq.) is California's statutory authority for the protection of water quality in conjunction with the federal CWA. The Porter-Cologne Act requires the SWRCB and RWQCBs under the CWA to adopt and periodically update water quality control plans, or basin plans. Basin plans are plans in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The Porter-Cologne Act also requires dischargers of pollutants or dredged or fill material to notify the RWQCBs of such activities by filing Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, National Pollution Discharge Elimination System (NPDES) permits, Section 401 water quality certifications, or other approvals.



## **Local Regulations**

The following are the local environmental laws and policies relevant to biological resources.

### **Placer County Conservation Program**

On September 1, 2020, Placer County adopted the PCCP, which is a Habitat Conservation Plan (HCP) under the Federal Endangered Species Act and a Natural Community Conservation Plan (NCCP) under the California Natural Community Conservation Planning Act. The PCCP includes the CARP to issue permits related to the CWA and the CFGC.

As a permittee under the PCCP, Placer County can transfer take authorization to private entities conducting activities covered by this Plan and under their jurisdiction. Covered Activities are generally any actions undertaken in the Plan Area by or under the authority of the Permittees that may affect Covered Species or covered natural communities. The area proposed for permit coverage under the HCP/NCCP has two main parts and associated subcomponents. The Ridge project site is within Plan Area A, which is the main focus of the HCP/NCCP and where all future growth and most of the Covered Activities will take place. Plan Area A is covered by a comprehensive permit and is comprised of the City of Lincoln plus all unincorporated lands within western Placer County: approximately 210,000 acres, or roughly five-sixths of western Placer County.

The Foothills portion of Plan Area A, within which the project site is located, comprises the unincorporated communities along the Interstate 80 corridor, the unincorporated Auburn area, and the northern Foothills that support most of the woodland communities in the Plan Area. The Foothills portion comprises approximately 109,134 acres.

The PCCP addresses 14 Covered Species and several Covered Natural Communities, and includes conservation measures to protect all 14 Covered Species and their habitats. Avoidance and minimization measures are set forth in Chapter 6 of the PCCP, and are intended to ensure that adverse effects on Covered Species and natural communities are avoided and minimized.

Applicants are required to obtain a signed Certificate of PCCP Authorization form from Placer County for potential impacts to terrestrial and aquatic habitats. During the local impact authorization process, impact fees are calculated utilizing land cover data. Fees can include Land Conversion fees and Aquatic/Wetland Special Habitat fees.

The proposed project would participate in the PCCP for incidental take coverage and mitigation for effects to waters of the U.S. and state, as well as oak woodlands.

### **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 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.

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. Consideration shall be given to out-of-kind compensatory mitigation for wetland impacts when larger landscape-level goals and objectives may be met by doing so. 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.
- h) Habitat necessary to protect and recover populations of the Covered Species identified in the Placer County Conservation Program.

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 programs that preserve the habitats of threatened, endangered, and/or other special status species including the implementation of the Placer County Conservation Program. 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 and whether the approval affects the viability of County, state or federal conservation programs that seek to protect the significant ecological resource areas.

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.
- h) Habitat necessary to protect and recover populations of the Covered Species identified in the Placer County Conservation Program.

Policy 6.C.12 The County shall cooperate with, encourage, and support the plans of other public agencies to acquire fee title or conservation easements to privately-owned lands in order to preserve important wildlife corridors and to provide habitat protection of California Species of Concern and state or federally listed threatened, or endangered plant and animal species, or any species listed in an implementing agreement for a habitat conservation plan and natural communities conservation plan such as the Placer County Conservation Program.

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

- Goal 6.D To preserve and protect the valuable vegetation resources of Placer County.
- Policy 6.D.1 The County shall encourage landowners and developers to preserve the integrity of existing terrain and natural vegetation in visually-sensitive areas such as hillsides, ridges, and along important transportation corridors.
- Policy 6.D.2 The County shall require developers to use native and compatible non-native species, especially drought-resistant species, to the extent possible in fulfilling landscaping requirements imposed as conditions of discretionary permits or for project mitigation.
- 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, vernal pools, and habitat necessary to protect and recover populations of the Covered Species identified in the Placer County Conservation Program.
- 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.6 The County shall ensure the conservation of sufficiently large, continuous expanses of vegetation that provides suitable habitat for maintaining abundant and diverse wildlife including habitat necessary to protect and recover populations of the Covered Species identified in the Placer County Conservation Program.
- Policy 6.D.7 The County shall support the management of wetland and riparian plant communities for passive recreation, groundwater recharge, nutrient catchment, and wildlife habitats. Such communities shall be restored or expanded, where possible.
- Policy 6.D.8 The County shall require that new development preserve natural woodlands to the maximum extent possible.
- Policy 6.D.9 The County shall require that development on hillsides be limited to maintain valuable natural vegetation, especially forests and open grasslands, and to control erosion.



- Policy 6.D.10 The County shall encourage the planting of native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native wildlife, and ensure that a maximum number and variety of well-adapted plants are maintained.
- Policy 6.D.11 The County shall support the continued use of prescribed burning, mastication, chipping, and other methods to mimic the effects of natural fires to reduce fuel loads and associated fire hazard to human residents and to enhance the health of biotic communities.
- 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.

### Open Space for the Preservation of Natural Resources

Goal 6.E To preserve and enhance open space lands to maintain the natural resources of the County.

- Policy 6.E.1 The County shall support the preservation and enhancement of natural land forms, natural vegetation, and natural resources as open space to the maximum extent feasible. The County shall permanently protect, as open space, areas of natural resource value, including wetlands, riparian corridors, unfragmented woodlands, and floodplains.
- Policy 6.E.2 The County shall require that new development be designed and constructed to preserve the following types of areas and features as open space to the maximum extent feasible:
- a) High erosion hazard areas;
  - b) Scenic and trail corridors;
  - c) Streams, riparian vegetation;
  - d) Wetlands;
  - e) Significant stands of vegetation;
  - f) Wildlife corridors;
  - g) Any areas of special ecological significance
  - h) Habitat necessary to sustain protect and recover populations of the Covered Species identified in the Placer County Conservation Program.
- Policy 6.E.3 The County shall support the conservation of open space and natural areas that are interconnected and of sufficient size to protect biodiversity, sustain viable populations, accommodate wildlife movement, and sustain ecosystems. In particular, lands within the Placer County Conservation Program Plan Area that meet these criteria are a priority for conservation.



## Placer County Woodland Conservation Ordinance

The Placer County Woodland Conservation Ordinance (Chapter 19, Article 50, 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. According to the Placer County Woodland Conservation Ordinance, a protected tree is defined as any *landmark tree* or *tree* requiring a tree permit. According to 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 Woodland Conservation 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 Services Division. In the project area, tree impacts are fully mitigated pursuant to the Placer County Conservation Program (i.e., through payment of land conversion fee).

Exemptions to the Placer County Woodland Conservation 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.

## 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;
- Conflict with the provisions of an adopted HCP, 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; or
- 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 BRA, ARDR, and Arborist Report prepared by HELIX Environmental Planning, Inc.

### **Biological Resource Assessment**

Special-status species considered as part of the BRA's analysis were based on queries of the CNDDDB, the USFWS, and CNPS ranked species for the Gold Hill U.S. Geological Survey (USGS) quadrangle and the eight surrounding quadrangles (Auburn, Camp Far West, Lake Combie, Lincoln, Pilot Hill, Rocklin, Roseville, and Wolf). In addition, the analysis incorporated information from the PCCP and associated biological technical reports.

Subsequent to review of information from the aforementioned queries, a biological field survey of the Study Area was conducted on September 11 and 12, 2018. The project site's footprint within the Study Area was systematically surveyed on foot, using binoculars to identify birds and other animal species, with special attention given to identifying the portions of the Study Area with the potential for supporting special-status species and sensitive habitats. Although the MSFB was not included as part of the survey, existing biological data collected during previous surveys of the larger La Faille Ranch property north of the project site was used to assess the MSFB's potential for supporting special-status species. During the field survey, biologists recorded observed plant and wildlife species and characterized biological communities occurring on the site.

Following the field survey, the potential for each species identified in the records search to occur in the Study Area was determined based on the field survey, soils, and species-specific information.

### **Aquatic Resources Delineation Report**

The Aquatic Resources Delineation was prepared in accordance with the U.S. Army Corps of Engineers Wetland Delineation Manual (1987) utilizing the three-parameter (vegetation, hydrology, and soils) methodology to delineate aquatic resources. The purpose of the USACE Manual is to provide users with guidelines and methods to determine whether an area is a wetland for purposes of Section 404 of the Clean Water Act. The Arid West Regional Supplement was also used in conjunction with the USACE Manual for applications in the Arid West Region. Where differences in the two documents occur, the Supplement takes precedence over the USACE



Manual. The Arid West Region consists of all or significant portions of 11 states, including California (USACE 2008). The region is differentiated from other surrounding areas by having a predominantly dry climate and long summer dry season. Vegetation characteristics of the Arid West Region include little to no forest cover consisting of mainly annual grasslands, shrublands, hardwood savannas, deciduous woodlands, and pinyon/juniper woodlands. The Arid West Supplement was used for the Study Area, because it is located in the *Mediterranean California* Land Resource Region (LRR C), which is characterized by warm, wet winters and dry summers. The three-parameter methodology requires the collection of data on soils, vegetation, and hydrology at several locations to establish the jurisdictional boundary of wetlands. Additional methods to identify and delineate other waters of the U.S. (e.g., streams, drainages, lakes) were used as applicable. The method typically used for delineation of non-wetland waters of the U.S. is the delineation of the OHWM.

An analysis of historic and recent aerial photographs, topographic maps, and soils survey data was conducted before delineating the Study Area on September 11, 2018, between approximately 8:00 AM and 2:00 PM. The temperature during the delineation was in the mid-80s. The most recent measurable precipitation occurred months prior to the delineation. As part of the delineation, the entire Study Area was visually inspected and representative data points were collected within potential wetland areas and corresponding uplands. Correlations were developed between the three parameters (vegetation, hydrology, and soils) to make wetland determinations. Specifically, plots at data point locations were evaluated to determine the composition and identification of dominant plant species. The soils were examined for hydric soil indicators. Hydric soil indicators are described in the *Field Indicators of Hydric Soils in the U.S.*, Version 7.0 (U.S. Department of Agriculture, Natural Resources Conservation Service, 2010 and 2015). Observations were made and recorded for both primary and secondary wetland hydrology indicators, if present.

### **Arborist Report**

The Arborist Report and Oak Woodland Inventory was conducted within the Study Area on September 11 and 12, 2018 to identify the extent of oak woodlands and to inventory all significant trees. Oak woodland was initially mapped using ArcMap 10.5 aerial imagery and field-verified during the survey. The Study Area was systematically surveyed on foot to ensure total search coverage. All existing trees within the project site's footprint, the MSFB, and the surrounding 50-foot buffer were closely examined to determine species and DBH. A diameter tape or calipers were used to verify each trunk diameter. The measurement from the trunk to the end of the longest lateral limb of each inventoried tree was visually estimated and used as the dripline radius (DLR). Recommendations for removal or suitability for preservation were noted for each inventoried tree.

### **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.**



The proposed project would include subdivision of the 24.95-acre project site to develop 34 single-family residential homes, connection to public utilities, a gated private two-way residential street, and other associated improvements, which, depending upon timing of BRSP Phase 2, could include limited off-site improvements to a 400-foot-long segment of Bickford Ranch Road to extend utilities services and complete access to the project site. Based on field observations and literature review, the BRA concluded 10 special-status plant species have the potential to occur in the 56.6-acre Study Area, which encompasses the project site. The species with high potential to occur includes big-scale balsamroot. Species with low potential to occur on-site include Ahart's dwarf rush, Butte County Fritillary, dwarf downingia, dubious pea, Humboldt lily, oval-leaved viburnum, Red Hills soaproot, streambank spring beauty, and valley brodiaea.

With respect to big-scale balsamroot (high potential to occur on-site), the species was not observed during the field survey.<sup>7</sup> However, as the survey was conducted outside of the evident and identifiable period for the species, the BRA found that the species still has a high potential to occur in the Study Area, particularly given the suitable on-site habitat that exists.

For the remaining nine special-status plant species, which the BRA concluded have low potential to occur within the Study Area, with the exception of Red Hills soaproot (Rank 1B.2), the remainder have not been documented per the CNDDDB as having occurred within five miles of the Study Area (Red Hills soaproot has five documented CNDDDB occurrences within five miles of the Study Area). However, suitable habitat exists within the Study Area to support each species. While the plant species with low potential to occur were not observed during the field survey, because the survey was conducted outside of the evident and identifiable period for each species, the BRA concluded the possibility of the species existing within the project site could not be ruled out.

With respect to the MSFB specifically, one special-status plant species has a high potential to occur – big-scale balsamroot (blooms March through June). A number of other special-status plant species have a low potential of occurring within the MSFB, including Ahart's dwarf rush (blooms March through May), Butte County fritillary, (blooms March through June), dubious pea (blooms April through May), dwarf downingia (blooms March through May), Humboldt lily (blooms May through August), oval-leaved viburnum (blooms May through June), Red Hills soaproot (blooms May through June), and streambank spring beauty blooms (February through May). As

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<sup>7</sup> Brandegee's clarkia, a CNPS List 4 species, also has a high potential to occur within the project site. This species has a total of 89 occurrences within the California Natural Diversity Database (CNDDDB) because this species was previously classified as a CRPR 1B species by CNPS. Of those 89 CNDDDB records, 22 records are recorded within Placer County. There are 79 recorded specimens of this species within the Consortium of California Herbaria (CCH). Of those 79 records, 30 records are documented from Placer County. Additionally, there are 166 documented occurrences within CalFlora, of which 33 occur within Placer County. This species appears to be well distributed throughout western Placer County, and in adjacent counties within similar elevations and vegetation communities as those found within The Ridge property based on available database records. This species is not included on BLM, USFWS, or USFS sensitive species lists. Based on a review of the available information on this species' distribution and this species not being included on BLM, USFWS, or USFS lists, it would likely not warrant consideration for inclusion in a project-specific CEQA analysis for The Ridge unless on-site populations were to exhibit unusual morphology or occur on unusual substrates.





indicated above, work within the MSFB would focus on removal of dead and dying vegetation and trees, removal of understory fuels taller than one foot, and reducing the height of annual grasslands through grazing or the use of approved hand-held equipment as required by Mitigation Measure 8-2 (see Action #10) in the Wildfire chapter of this EIR. These activities would not result in the loss of plant habitat, because the soil would not be disturbed, and most vegetation would not be entirely removed.

Based on the above information, if any of the aforementioned special-status plant species are present within areas of the project site subject to ground disturbance and construction activities, the species would be subject to impact or removal. Therefore, impacts related to special-status plant species could be **significant**.

#### Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level. In addition, if the applicant secures all approvals and permits for the project, and elects to proceed ahead of BRSP Phase 2 improvements in order to construct the remaining 400-foot segment of Bickford Ranch Road to the project's boundaries, then the applicant will be required to implement BRSP EIR Mitigation Measure B-G regarding special-status plants, if any improvement areas are within oak woodland habitat. Mitigation Measure B-G is incorporated into this EIR as Mitigation Measure 6-1(d) below.

- 6-1(a) *Prior to ground disturbance, the project applicant shall enlist a qualified botanist to conduct a botanical survey within project site's footprint during the applicable evident and identifiable blooming periods for special-status plant species having the potential to occur within the Study Area, including big-scale balsamroot (blooms March through June), Ahart's dwarf rush (blooms March through May), Butte County Fritillary (blooms March through June), dwarf downingia (blooms March through May), dubious pea (blooms April through May), Humboldt lily (blooms May through August), oval-leaved viburnum (blooms May through June), Red Hills soaproot (blooms May through June), streambank spring beauty (blooms February through May), and valley brodiaea (blooms April through May). A survey conducted in May shall satisfy the blooming periods for all of the aforementioned plants. If no special-status plants are observed, the botanist shall document the findings in a letter report to the Placer County Community Development Resource Agency and no additional mitigation measures shall be required.*
- 6-1(b) *If any of the aforementioned special-status plant species are identified within areas of potential ground disturbance, they shall be avoided to the greatest extent feasible, as determined by a qualified botanist. If the plants cannot be avoided, a mitigation plan shall be prepared in consultation with the Placer County Community Development Resource Agency. The plan shall detail the various avoidance and minimization approaches to ensure no net loss of the special-status plants, such as transplanting individual plants, transplanting the*



seedbank by way of topsoil salvage to suitable habitat near the project site but outside of the construction footprint, or use of appropriate nursery stock. The plan shall include at a minimum: (1) transplantation procedures success criteria and (2) long-term monitoring protocols sufficient to verify establishment for plant species subject to mitigation.

6-1(c) *Modified Shaded Fuel Break (MSFB): Prior to ground disturbance associated with the initial establishment of the MSFB, Mitigation Measures 6-1(a) and 6-1 (b) shall be implemented. Annual maintenance of the MSFB through grazing and use of approved hand-held equipment is not anticipated to result in ground disturbance. Ground-disturbing methods shall require prior County approval and implementation of Mitigation Measures 6-1(a) and 6-1(b) for the affected area.*

6-1(d) *If the applicant proceeds ahead of BRSP Phase 2 improvements in order to construct the 400-foot segment of Bickford Ranch Road to the project's boundaries, then Mitigation Measure B-G from the BRSP EIR shall be implemented within the portion of Bickford Ranch Road that would be constructed by The Ridge project, as follows:*

*Before construction, the Applicant will hire a County-approved botanist to survey oak woodlands within all proposed construction areas for big-scale balsamroot, Layne's ragwort (*Packera layneae*), oval-leaved viburnum (*Viburnum ellipticum*), and Red Hills soaproot (*Chlorogalum grandiflorum*). In all areas of oak woodland that will be graded, a survey should be conducted between March and May for big-scale balsamroot, April and August for Layne's ragwort, May and June for oval-leaved viburnum, and May and June for Red Hills soaproot. If no special-status plants are identified within construction areas, no further mitigation is required. However, if one or more populations are found within proposed construction areas, the Applicant will implement measures to be developed in coordination with the CDFW (and USFWS for layne's ragwort) to avoid the population, minimize impacts on the population, and/or compensate for removal of the population. Potential compensation measures may include avoidance of populations, where feasible; minimization of impacts on populations; purchase and preservation of another known population of the affected species; or attempts to transplant the species to an undisturbed area within the project site.*

*Before construction and/or approval of improvement plans, the Applicant will hire a County-approved botanist to survey oak woodlands within all proposed construction areas for big-scale balsamroot. In all areas of oak woodland that will be graded, a survey should be conducted between March and May for big-scale balsamroot. If no special-status plants are identified within construction areas, no further mitigation is required. However, if*



any special-status plant populations are found within proposed construction areas, the project biological monitor will evaluate the significance of the population(s). If any special-status plant population is too small and isolated to be sustainable, the impact will be considered less than significant. If any special status plant population is large enough to be potentially sustainable, the loss of the population will be considered significant and the Applicant will implement mitigation. Potential mitigation measures for the loss of a special-status plant population include complete avoidance of the population, if feasible; minimization of the impact, i.e., partial avoidance; purchase and preservation of another known population of the affected species; transplantation of the plants or collection and sowing of the seeds to another on-site location; collection and sowing of seeds to an off-site location.

The most feasible of these potential mitigation measures for any California balsamroot population that could not be avoided would be to transplant or seed the population to an undisturbed area of open canopied oak woodland or grassy slope on the site. A recommended location is within the open space preserve.

If a State or federal listed plant species population is identified within the proposed construction area, the Applicant will notify CDFW (for State-listed species) and/or the USFWS (for federally listed species). CDFW and/or the USFWS may impose alternative or additional mitigation requirements to the soil transplantation for impacts to listed species. If alternative mitigation requirements are imposed, the Applicant will implement the alternatives in lieu of the proposed soil transplantation. If additional mitigation requirements are imposed, the Applicant will implement both the soil transplantation mitigation and the agency mitigation.

**6-2 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 western spadefoot. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.**

Western spadefoot is considered a Species of Special Concern by the CDFW, and is not covered under the PCCP. A search of the CNDDDB did not return any records of western spadefoot within five miles of the Study Area, and the field survey did not include observations of the special-status species; nevertheless, the BRA concluded western spadefoot has the potential to occur within the project site, given the on-site availability of suitable aestivation and breeding habitat for the species.



Non-vernal pool seasonal wetlands within the southwest and southeast portions of the project site could provide marginal potential breeding habitat for the species. Additionally, the small burrows throughout the mixed oak woodland and annual grassland located throughout the project site provide aestivation habitat within the project site.

As noted above, three depressional non-vernal pool seasonal wetlands, totaling 0.11-acre, occur within the annual grassland habitat in the southwest and southeast portions of the project site. These wetlands would be impacted during project development. Additionally, oak woodland and annual grassland is located throughout the project site. If present, ground disturbance and construction activities could subject western spadefoot adults, juveniles, and egg masses to injury or mortality.

Two additional non-vernal pool seasonal wetlands, totaling approximately 0.25-acre, occur within the MSFB's mixed oak woodland habitat. A low potential exists for western spadefoot to occur within these seasonal wetlands. The wetlands could provide marginal breeding habitat, and individuals could use the small burrows located throughout the annual grasslands and oak woodlands during their dormant periods. If present during fuel management activities, individuals could be injured or killed.

Based on the above information, impacts to western spadefoot as a result of the proposed project could be **significant**.

#### Mitigation Measure(s)

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

- 6-2(a) *Prior to any ground-disturbing activities associated with the proposed project, the project applicant shall enlist a qualified biologist to conduct a pre-construction survey for western spadefoot within existing suitable habitat within the Study Area. The survey shall be conducted between February 1st and March 31st, when western spadefoots are above ground and identifiable. If no western spadefoots are found within the Study Area, then a letter report shall be prepared to document the survey and submitted to the Placer County Community Development Resource Agency, and no additional mitigation shall be required. Construction may begin within one-year after the survey is conducted and construction is not required to start immediately after the survey is completed.*
- 6-2(b) *If western spadefoots are identified during the focused survey, then prior to commencement of ground-disturbing activities, a qualified biologist shall conduct an environmental awareness training for all construction personnel. The training shall include information on the identification of special-status species including western spadefoot, required practices before the start of construction, general measures that are being implemented to conserve the species as they relate to the proposed project, penalties for non-compliance, and boundaries of the Study Area and of the permitted disturbance zones. Supporting*



materials containing training information shall be prepared and distributed to construction personnel during the training. Upon completion of training, all construction personnel shall sign a form stating that they have attended the training and understand all of the measures. Proof of training completion shall be kept on-file with the project applicant as well as submitted to the Placer County Community Development Resource Agency.

6-2(c) *If western spadefoots are identified during the focused survey, a qualified biologist shall be present on-site during initial ground-clearing and grading activities for the purpose of relocating any western spadefoot found within the construction footprint to suitable habitat away from the construction zone, but within the Study Area. The biologist shall obtain permission for relocation from CDFW, prior to relocation of western spadefoots. A brief letter report documenting the implementation of relocation procedures and results of the relocation shall be provided to the Placer County Community Development Resource Agency within 14 days of translocation activities. A copy of the letter shall be provided to CDFW, if requested.*

6-2(d) *Modified Shaded Fuel Break (MSFB): A qualified biologist shall conduct a survey for western spadefoot between February 1 and March 31 of the year the MSFB is established and any subsequent year in portions of the MSFB where fuel maintenance activities other than grazing or the use of approved hand-held equipment will take place that year.*

*If western spadefoots are found during the survey, an environmental training program shall be conducted by a qualified biologist for all personnel who will be engaged in fuel maintenance that year. The program shall cover identification of the western spadefoot, steps to take prior to and during construction, areas to be avoided (if any), and penalties for non-compliance.*

*If any western spadefoots are discovered during fuel maintenance, a qualified biologist shall obtain permission from CDFW to relocate the individuals, and shall document the relocation in a letter report provided to the Placer County Community Development Resource Agency within 14 days of translocation activities. A copy of the letter shall be provided to CDFW, if requested.*

**6-3 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 andrenid bee, Morrison bumble bee, western bumble bee, and VELB. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.**



Based on field observations and literature review, the BRA determined a low potential exists for andrenid bee, Morrison bumble bee, and western bumble bee to occur within the Study Area. These species are on the California Special Animals List as designated by CDFW. The records search of the CNDDDB did not return recorded occurrences for any of the bees within five miles of the Study Area, and none of the species were identified within the Study Area during the field survey. Notwithstanding, the BRA concluded a low potential exists for each of the bees to occur within the Study Area, given the availability of suitable habitat. For example, small burrows throughout the project site's mixed oak woodland and annual grassland provide nesting habitat for the bees. However, given that similar habitats and vegetation species are present immediately adjacent to the Study Area, the proposed project is not expected to have a significant impact to nesting and foraging habitat for these species and no mitigation is warranted.

With respect to VELB, the special-status invertebrate is a federally threatened species and is a covered species under the PCCP. The BRA acknowledged that the species has been documented per the CNDDDB within five miles of the Study Area. The documented occurrence is located approximately 1.1 miles southwest of the Study Area. In addition, an elderberry shrub was identified within the Study Area, outside the the proposed project site's footprint, within the approximate alignment of Bickford Ranch Road along the project site's frontage. The elderberry shrub included several stems with diameters ranging from less than one inch and up to five inches. VELB require elderberry stems of at least one-inch diameter at ground level in order for larvae to use the stems. Approximately six stems were observed with potential exit holes. However, the BRA noted the observed holes could have potentially been created by invertebrates other than VELB. Additionally, VELB are usually found on elderberry shrubs within riparian plant communities, with multiple elderberry shrubs clumped together providing superior habitat to that of isolated elderberry shrubs, which are less likely to support VELB populations. Given that the identified elderberry shrub is isolated, occurs outside of a riparian zone, and is located above an elevation of 500 feet, the BRA found that the shrub provides marginal habitat for VELB. Furthermore, although VELB is a PCCP covered species, the PCCP only requires surveys for elderberry shrubs occurring below 650 feet in elevation. As the project site's elevation ranges from approximately 700 feet to 800 feet, PCCP avoidance measures for VELB do not apply to the proposed project.

As previously discussed, the terminus of Bickford Ranch Road after completion of Phase 1 BRSP improvements will stop short of The Ridge project site, leaving about 400 feet of unpaved roadway between the terminus and the southwestern corner of The Ridge project site. This 400-foot segment would either be constructed during commencement of Phase 2 of BRSP, or depending on the timing of BRSP Phase 2, potentially by The Ridge applicant. The constructing party, be it BRSP or The Ridge, will be required by the County to implement the adopted BRSP Mitigation Measures pertaining to VELB. Mitigation Measure B-I of the certified BRSP EIR requires protection of VELB habitat during construction, or if planned for removal, Mitigation Measure B-J requires compensation for loss of VELB habitat. As determined in the BRSP EIR, implementation of the VELB mitigation measures would reduce the impact to potential VELB habitat to a less-than-significant level.



### Conclusion

Based on the above, while vegetation clearing and ground disturbance associated with the proposed project could impact potential nesting habitat and foraging vegetation for the aforementioned special-status bee invertebrates, the BRA determined that ultimately, the proposed project would not be expected to significantly affect the species, given that similar habitats and vegetation species are present immediately adjacent to the Study Area. Additionally, as mentioned, the one elderberry shrub identified within the Study Area is outside of the proposed project's footprint and in a location that would provide only marginal habitat for VELB. Nevertheless, should the elderberry shrub be impacted during construction of Bickford Ranch Road along the proposed project's frontage, implementation of Mitigation Measures B-I and/or B-J of the BRSP EIR would be required to ensure a **significant** impact does not occur. The referenced BRSP mitigation measures are incorporated into this EIR as Mitigation Measures 6-3(a) below.

### Mitigation Measure(s)

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

- 6-3            *If the applicant proceeds ahead of BRSP Phase 2 improvements in order to construct the 400-foot segment of Bickford Ranch Road to the project's boundaries, then Mitigation Measures B-I and/or B-J from the BRSP EIR shall be implemented within the portion of Bickford Ranch Road that would be constructed by The Ridge project, as follows:*

*BRSP MM B-I:* *For elderberry shrubs that will not be removed or damaged by the project, the Applicant will protect elderberry shrubs from inadvertent harm during construction as described in the USFWS's VELB mitigation guidelines. The Applicant will:*

- *Fence and flag all areas to be avoided with a minimum setback of at least 20 feet from the dripline of each elderberry plant.*
- *Brief contractors on the need to avoid damaging elderberry plants and the possible penalties for not complying with these requirements.*
- *Install signs every 50 feet along the edge of the avoidance areas with the following information, "This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." The signs should be clearly readable from a distance of 20 feet and must be maintained for the duration of construction.*
- *Restore the disturbed area to its original condition. Provide erosion control and revegetate with appropriate plant species, if needed.*



- *The Applicant will provide a written description of how the core and buffer avoidance areas are to be restored, protected, and maintained after construction is completed.*

*BRSP MM B-J: The Applicant will compensate for direct effects on VELB habitat associated with the project. This compensation will be achieved by implementation of the following measures, as described in the programmatic agreement between USFWS and the Corps (USFWS, 1996):*

- *Confirm the number of elderberry stems one inch or greater at ground level that would be affected by the project development. Any elderberry shrub that has stems of at least one inch at ground level, and the project will permanently encroach within 100 feet of the shrub dripline, will be considered a removed shrub and will need to be compensated for, except for shrubs located along existing ranch roads where the multi-purpose trail will be aligned.*
- *Determine the VELB units that would need to be mitigated for the project pursuant to the programmatic agreement between USFWS and the Corps.*
- *Obtain authorization from USFWS to take VELB that would be affected by the project. The Project shall adhere to all conditions the Biological Opinion, as revised. At a minimum, this shall include purchase of 22.2 beetle conservation credits from a USFWS-approved beetle conservation bank.*

*Alternatively, Mitigation Measure 6-3 may be replaced with the PCCP's VELB avoidance and minimization measures as set forth in the PCCP implementation document.*

**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 Swainson's hawk. Based on the analysis below, and with implementation of mitigation, the impact is *less than significant*.**

The BRA's analysis included an assessment of the potential for Swainson's hawk, a California threatened species also covered under the PCCP, to occur within the Study Area. The BRA noted that the trees within the Study Area's mixed oak woodland habitat provide potential nesting habitat for Swainson's hawk and the annual grassland habitat in the valley to the north and east of the project site's footprint provides potential foraging habitat. However, as the annual grassland within the Study Area is composed of small patches of grassland within larger patches of oak woodland, such a mosaic of





small openings of annual grassland and oak woodland is not ideal for Swainson's hawks, which typically forage in open grasslands and agricultural fields. Furthermore, the project site is located on the far eastern edge of the known range of this species, per the BRA. Areas to the west and north of the Study Area provide more suitable foraging habitat for the species, as the areas contain more open habitat with more scattered woodlands. Therefore, the BRA concluded Swainson's hawk would not be expected to forage within the Study Area.

As a PCCP covered species, focused nesting surveys for Swainson's hawk must be conducted within areas of the PCCP's Plan Area in the Central Valley. The project site is located in the foothills, and thus, focused nest surveys for Swainson's hawk, per PCCP requirements, would not be required as part of implementing the proposed project. Nevertheless, in the unlikely event that Swainson's hawks are nesting within the Study Area, the County would require the applicant to implement the species-specific avoidance and minimization measures for Swainson's hawk included in the PCCP.

Based on the above information, project impacts related to Swainson's hawk could be **significant**.

#### Mitigation Measure(s)

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

6-4 *A preconstruction survey shall be conducted within a 1,320-foot radius of the project no more than 15 days prior to ground disturbance. Surveys shall be conducted consistent with current guidelines (Swainson's Hawk Technical Advisory Committee 2000). In instances where an adjacent parcel is not accessible to survey, the qualified biologist shall scan all potential nest trees from the adjacent property, roadsides, or other safe, publicly accessible viewpoints, without trespassing, using binoculars and/or a spotting scope. Surveys are required from February 1 to September 15 (or sooner if it is determined that birds are nesting earlier in the year). If a Swainson's hawk nest is located and presence confirmed, only one follow-up visit is required.*

*During the nesting season (approximately February 1 to September 15 or sooner if it is determined that birds are nesting earlier in the year), ground-disturbing activities within 1,320 feet of occupied nests or nests under construction shall be prohibited to minimize the potential for nest abandonment. While the nest is occupied, activities outside the buffer can take place provided they do not stress the breeding pair.*

*If the active nest site is shielded from view and noise from the project site by other development, topography, or other features, the project applicant can apply to the PCA for a reduction in the buffer distance or waiver. A qualified biologist shall be required to monitor the nest and determine that the reduced buffer does not cause nest abandonment.*



*If a qualified biologist determines nestlings have fledged, Covered Activities can proceed normally.*

*Construction monitoring shall be conducted by a qualified biologist and shall focus on ensuring that activities do not occur within the buffer zone. The qualified biologist performing the construction monitoring shall ensure that effects on Swainson's hawks are minimized. If monitoring indicates that construction outside of the buffer is affecting nesting, the buffer shall be increased if space allows (e.g., move staging areas farther away). If space does not allow, construction shall cease until the young have fledged from the nest (as confirmed by a qualified biologist).*

*The frequency of monitoring will be approved by the PCA and based on the frequency and intensity of construction activities and the likelihood of disturbance of the active nest. In most cases, monitoring will occur at least every other day, but in some cases, daily monitoring may be appropriate to ensure that direct effects on Swainson's hawks are minimized. The qualified biologist shall train construction personnel on the avoidance procedures and buffer zones.*

*Active (within the last 5 years) nest trees on a project site shall not be removed during the nesting season. If a nest tree must be removed (as determined by the PCA), tree removal shall occur only between September 15 and February 1, after any young have fledged and are no longer dependent on the nest and before breeding activity begins.*

- 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 grasshopper sparrow, northern harrier, purple martin, white-tailed kite, or other nesting raptors and migratory birds. Based on the analysis below and with implementation of mitigation, the impact is less than significant.**

Based on field observations and literature review, the BRA concluded implementation of the proposed project has high potential to impact migratory birds and raptors protected under the MBTA. The trees associated with the mixed oak woodland and the annual grassland within the project site provide nesting and foraging habitat for protected birds. Protected migratory birds identified as having potential to occur within the project site include grasshopper sparrow, northern harrier, purple martin, and white-tailed kite. Grasshopper sparrow and white-tailed kite have been documented in the CNDDDB as having occurred within five miles of the Study Area. While purple martin has not been documented as having occurred within five miles of the Study Area, the BRA noted that migratory birds can occupy a wide range of territories as long as suitable nesting and foraging habitat is available. As such, the aforementioned



protected migratory birds and raptors have a high potential to forage and nest within the project site.

As previously discussed, native nesting birds, including raptors, are protected by CFGC Section 3503. Raptors, passerines, non-passerine land birds, and waterfowl are further protected under the MBTA. The MBTA prohibits the take, possession, purchase, sale, or bartering of any migratory bird, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations. All migratory bird species are protected by the MBTA. Any disturbance that causes direct injury, death, nest abandonment, or forced fledging of migratory birds, is restricted under the MBTA. Any removal of active nests during the breeding season or any disturbance that results in the abandonment of nestlings is considered a 'take' of the species under federal law.

The proposed project would include grading activities, construction of residential structures, connection of structures to public utilities, and potential implementation of off-site improvements to connect to the Phase 1 terminus of Bickford Ranch Road and the road's associated water, sewer, drainage, and dry utilities. If construction activities occur during the nesting season, which generally extends from February 1 to August 31, nests of both special-status and non-special-status native birds could be impacted by the various project components, conflicting with the provisions of CFGC Section 3503 and the MBTA.

With respect to the MSFB, the only wildlife species with a high potential for occurring within the MSFB are certain nesting birds, which are protected under the Migratory Bird Treaty Act, as well as other laws and regulations. Protected birds that have a high potential to occur within the MSFB include grasshopper sparrow, northern harrier, purple martin, and white-tailed kite. While tree removal is expected to be minimal within the MSFB, some removal may need to occur to minimize crown overlap. Removal of trees and/or tree limbs during the breeding season could disturb these birds and cause them to abandon their nests and offspring. One way to avoid disturbing nesting birds is to remove trees and tree limbs in the non-breeding season, typically between September 1 and January 31. However, this may not be feasible with an annual fuel reduction program, which typically occurs prior to the fire season, in the spring/early summer, when grasses have reached mature growth.

Based on the above, impacts related to migratory birds and raptors protected under the MBTA could be **significant**.

#### Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level. In addition, if the applicant secures all approvals and permits for the project, and elects to proceed ahead of BRSP Phase 2 improvements in order to construct the remaining 400-foot segment of Bickford Ranch Road to the project's boundaries, then the applicant will be required to implement BRSP EIR Mitigation Measures B-L and/or B-M regarding nesting raptors, if any improvement areas are within oak woodland habitat. Mitigation Measures B-L and B-M are incorporated into this EIR as Mitigation Measure 6-5(e) below.



- 6-5(a) *Construction activities, such as vegetation clearing and grading activities, shall be completed between September 1 and January 31, if feasible, to avoid impacts to suitable nesting habitat during the typical nesting season. If vegetation removal and grading activities must occur during the nesting season (February 1 to August 31), the project applicant shall enlist a qualified biologist to conduct a pre-construction survey of the project footprint and a 100-foot buffer area for active nests. The pre-construction survey shall be conducted within three days prior to commencement of ground-disturbing activities, per current CDFW guidance. If the pre-construction survey shows that there is no evidence of active nests, a letter report shall be prepared to document the survey and submitted to the Placer County Community Development Resource Agency within 10 days of completion of the survey, with no additional mitigation measures required. If construction does not commence within three days of the pre-construction survey, or halts for more than 14 days, an additional survey shall be required, prior to starting work.*
- 6-5(b) *Removal of trees, tree limbs, shrubs and understory within the MSFB shall be prohibited during the nesting season (February 1 to August 31) to the extent feasible. For any year that vegetation removal within the MSFB other than the cutting of grasses through grazing or the use of approved hand-held equipment would occur during the nesting season, a pre-construction survey for active nests shall be conducted in the affected area within three days prior to the start of vegetation removal, with completion of the survey and submittal of results carried out as outlined in Mitigation Measure 6-5(a).*
- 6-5(c) *If nests are found during pre-construction surveys and are considered to be active, a qualified biologist shall establish species-appropriate buffer zones to prohibit construction or vegetation management activities and minimize nest disturbance until the young have successfully fledged or until the biologist determines that the nest is no longer active. Buffer width will depend on the species in question, surrounding existing disturbances, and specific site characteristics. Buffer zones are typically 100 feet for migratory bird nests and 500 feet for raptor nests. If active nests are found within any trees slated for removal, then an appropriate buffer shall be established around the trees and the trees shall not be removed until a biologist determines that the nestlings have successfully fledged or until the nest is no longer active. A brief letter report documenting the results of the nesting bird survey shall be provided to the Placer County Community Development Resource Agency within 14 days of the completion of the survey. Prior to construction commencing, a summary report documenting nest monitoring efforts and verification of fledging shall be provided to the Placer County Community Development Resource Agency.*
- 6-5(d) *Implement Mitigation Measure 6-3(b).*



- 6-5(e) *If the applicant proceeds ahead of BRSP Phase 2 improvements in order to construct the 400-foot segment of Bickford Ranch Road to the project's boundaries, then Mitigation Measures B-L and/or B-M from the BRSP EIR shall be implemented within the portion of Bickford Ranch Road that would be constructed by The Ridge project, as follows:*

*BRSP MM B-L: Before construction of any phase of the project between March and August in oak woodlands or riparian habitats, the project proponent will conduct preconstruction surveys to determine if nesting raptors, special status birds or other migratory birds protected under the MBTA are present on or near (within 500 feet) construction areas. Night-time surveys will be performed to determine the presence of nesting owls. If no nesting raptors are found, no additional mitigation will be needed for that portion of the project. If these surveys detect nesting raptors on or near construction areas, a buffer zone will need to be established (see Mitigation Measure B-M). If construction will occur outside of the nesting season (August through February), no preconstruction raptor nesting surveys are necessary.*

*BRSP MM B-M: If nesting raptors, special status birds or other migratory birds are found on or near active construction areas, a no-disturbance buffer zone will be established until nesting activity or construction activity is completed. The distance and placement of the buffer area will be determined in consultation with CDFW. Typically, buffer zones consist of a 500-foot radius area around the nest tree. If construction will occur outside of the raptor nesting season (September – February), no raptor surveys are required.*

- 6-6 Have a substantial adverse effect on any riparian habitat or other sensitive natural community, or on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.**

Riparian habitats are lands that occur along watercourses and water bodies, with typical examples including streambanks and floodplains. Riparian habitats are distinctly different from surrounding lands, due to a riparian habitat's unique soil and vegetation characteristics, which are strongly influenced by the presence of water. While the proposed project would include subdivision of the 24.95-acre project site to develop 34 single-family residential homes, grading activities, connection to public utilities, a gated private two-way residential street, and other associated improvements, project components would not impact riparian habitats, as riparian habitats do not exist within the footprint of the Study Area. According to the ARDR prepared for the proposed project, the Caperton Canal is the closest USGS "blue line"



to the project site. However, the Caperton Canal is an unvegetated, cement-lined canal. Additionally, while the Caperton Canal occurs within close proximity to the project site, the canal is located outside of the proposed project's footprint (see Figure 6-1). Furthermore, the BRA did not identify riparian habitats that would be impacted as a result of the proposed project. Therefore, the proposed project would not result in impacts to riparian habitat.

With respect to State or federally protected wetlands, the BRA identified three non-vernal pool seasonal wetlands totaling 0.11-acre within the southwest and southeast portions of the project site (see Figure 6-3). The 0.11-acre of wetlands are potential jurisdictional waters, potentially qualifying as waters of the U.S. and/or waters of the State. Grading activities and construction of residential structures associated with Lots 12 to 14 and Lot 26, along with implementation of associated improvements such as the proposed project's private two-way residential street, would result in impacts to the seasonal wetlands. Special habitat fees would apply to the proposed project to mitigate impacts to non-vernal pool seasonal wetlands. The PCCP's Special Habitat Fee Schedule (Table 9-7 of the PCCP) sets fees for impacts to wetlands at a rate of \$121,025 for each acre.

An additional two non-vernal pool seasonal wetlands, totaling 0.25-acre, occur within the MSFB's mixed oak woodland habitat. Maintenance activities within the MSFB are not anticipated to involve fill of aquatic features, given that the preferable method of maintaining annual grasses within the MSFB is grazing (see also Mitigation Measure 8-2 of the Wildfire Chapter, Action #10). Notwithstanding, if grazing is not feasible in certain circumstances, other means may be allowed (e.g., mechanical equipment). Depending upon the equipment selected, there is a potential for use of mechanical equipment to result in significant impacts to occur to the wetlands within the MSFB.

As previously discussed, development of the proposed project is dependent upon the installation of Bickford Ranch Road and associated utilities (water and sewer trunk mains) through Phase 1 of the BRSP and extension of such infrastructure through a portion of BRSP Phase 2 to the project entry. The terminus of Bickford Ranch Road after completion of Phase 1 BRSP improvements will stop short of The Ridge project site, leaving about 400 feet of unpaved roadway between the terminus and the southwestern corner of The Ridge project site. The 400-foot segment would either be constructed during commencement of Phase 2 of BRSP, or depending on the timing of BRSP Phase 2, potentially by The Ridge applicant. Construction of the 400-foot segment would not impact wetlands, as waters of the U.S. have not been mapped within the road alignment's area of disturbance (see Figure 13-2 of the BRSP EIR). As such, potential off-site improvements associated with construction of the 400-foot segment of Bickford Ranch Road to the project entry would not impact State or federally protected wetlands.

Based on the above information, because the 0.11-acre of non-vernal pool seasonal wetlands in the southwest and southeast portions of the project site are potential jurisdictional waters, impacts to State or federally protected wetlands from implementation of the proposed project could be **significant**.



### Mitigation Measure(s)

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

6-6(a) *An application for CARP Authorization shall accompany the permit application (i.e., Improvement Plans) for the project step that would impact the on-site seasonal wetlands. In addition to the land conversion fee required in Mitigation Measure 6-8, the project is anticipated to result in permanent direct effects to 0.11-acre of seasonal wetlands. The applicant shall pay special habitat fees for wetland impacts prior to issuance of a land conversion authorization that allows ground disturbance of a special habitat. The fees to be paid shall be those in effect at the time of ground disturbance authorization for each project step and shall be the per acre fee based on the amount of aquatic resource disturbance resulting from the activity.*

6-6(b) *Prior to construction of the Modified Shaded Fuel Break (MSFB), the applicant shall retain a qualified wetland scientist to identify the extent of seasonal wetlands within the MSFB. The boundaries of the wetlands shall be visibly and permanently marked with stakes, flagging, or other method determined acceptable by the wetland scientist. No fuel maintenance activities other than the cutting of grasses through grazing or use of other approved hand-held equipment shall occur at any time within the delineated wetland areas. Proof of compliance with this measure shall be provided to the Placer County Community Development Resource Agency prior to creation of the MSFB.*

**6-7 Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Based on the analysis below, the impact is *less than significant*.**

Wildlife corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. Fragmentation also occurs when a portion of one or more habitats is converted into another habitat, such as when woodland or scrub habitat is altered or converted into grasslands after a disturbance, such as fire, mudslide, or grading activities. Wildlife corridors mitigate the effects of fragmentation by (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thereby reducing the risk of catastrophic events (such as fire or disease) on population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

During the field surveys conducted as part of the BRA's analysis, several mobile wildlife species, including coyote, were observed, and evidence of the presence of



black-tailed mule deer, bear, racoon, and skunk was also observed within the Study Area. Per the BRA, the majority of the oak woodland within the interior of the Study Area and within the MSFB along the steep slopes to the north and west of the project site, would also remain intact. As detailed in Figure 6-6, of the 37.82 acres of mixed oak woodland within the Study Area, only approximately 7.916 would be impacted.

Under the adjusted baseline, the area to the west of The Ridge project site would consist of development associated with Phase 1 of the BRSP, which could include as many as 1,010 single-family units along with associated backbone roadway, water, sewer, and storm drainage infrastructure. However, the areas to the north, east, and south of the project site would remain undeveloped and provide movement corridors to the surrounding habitats, including mixed oak woodland, oak-foothill pine woodland, and annual grassland.<sup>8</sup> For example, the land to the north of The Ridge project site would continue to contain undeveloped natural habitat on the larger La Faille Ranch property, owned by the project applicant. The La Faille Ranch property contains a drainage course outside of the project site that likely serves as a local wildlife movement corridor. The drainage course would not be affected by the proposed project. Therefore, implementation of the proposed project would not result in the creation of extensive barriers or impacts to wildlife migration corridors.

Based on the above information, because natural habitats such as oak woodland and annual grassland within the Study Area surrounding the project site would remain intact with implementation of the proposed project, as well as undeveloped natural habitat on the larger La Faille Ranch property, implementation of the proposed project would not result in the creation of extensive barriers or impacts to wildlife migration corridors. Thus, the proposed project would result in a ***less-than-significant*** impact.

Mitigation Measure(s)

*None required.*

**6-8 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.**

According to the BRA, approximately 7.916 acres of mixed oak woodland and approximately 0.069-acre of oak-foothill pine woodland are anticipated to be directly impacted by the proposed project's components (see Figure 6-5). Additionally, a total of 46 significant trees were inventoried within the project footprint and buffer area, consisting of 40 blue oaks and six interior live oaks (see Figure 6-6). A tree is considered significantly impacted if changes in grade, drainage, or soil are performed within 10 feet of the outside edge of the DLR. Of the 46 on-site significant trees, seven have been recommended for removal due to poor condition, and an additional 25 trees would be either avoided or minimally impacted.

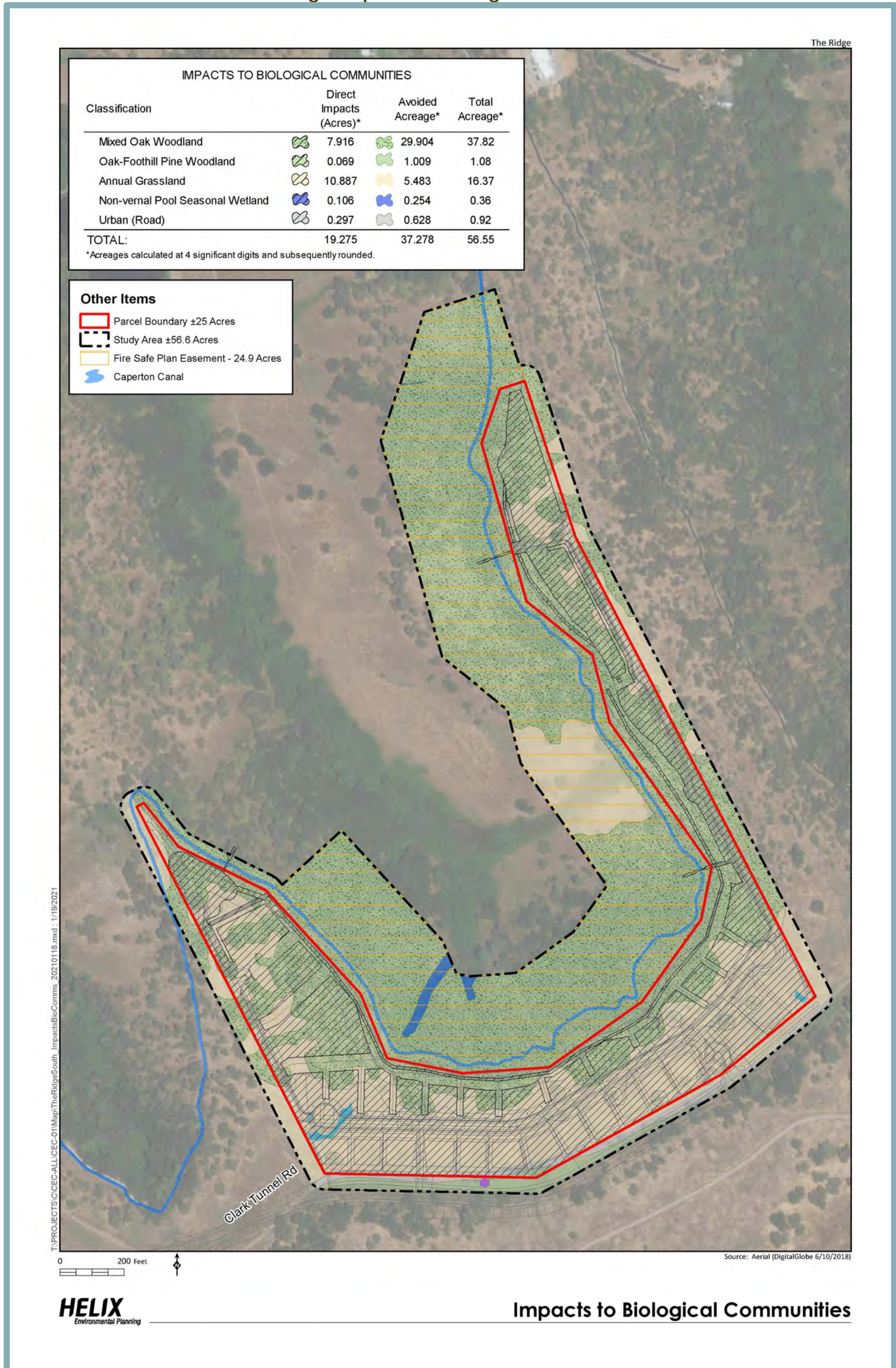
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<sup>8</sup> It is noted that in the cumulative condition, the areas to the east and south would be developed as part of BRSP buildout. However, even in such a cumulative scenario, substantial open space would be preserved in BRSP which would continue to enable wildlife movements through the area, though to a lesser degree.

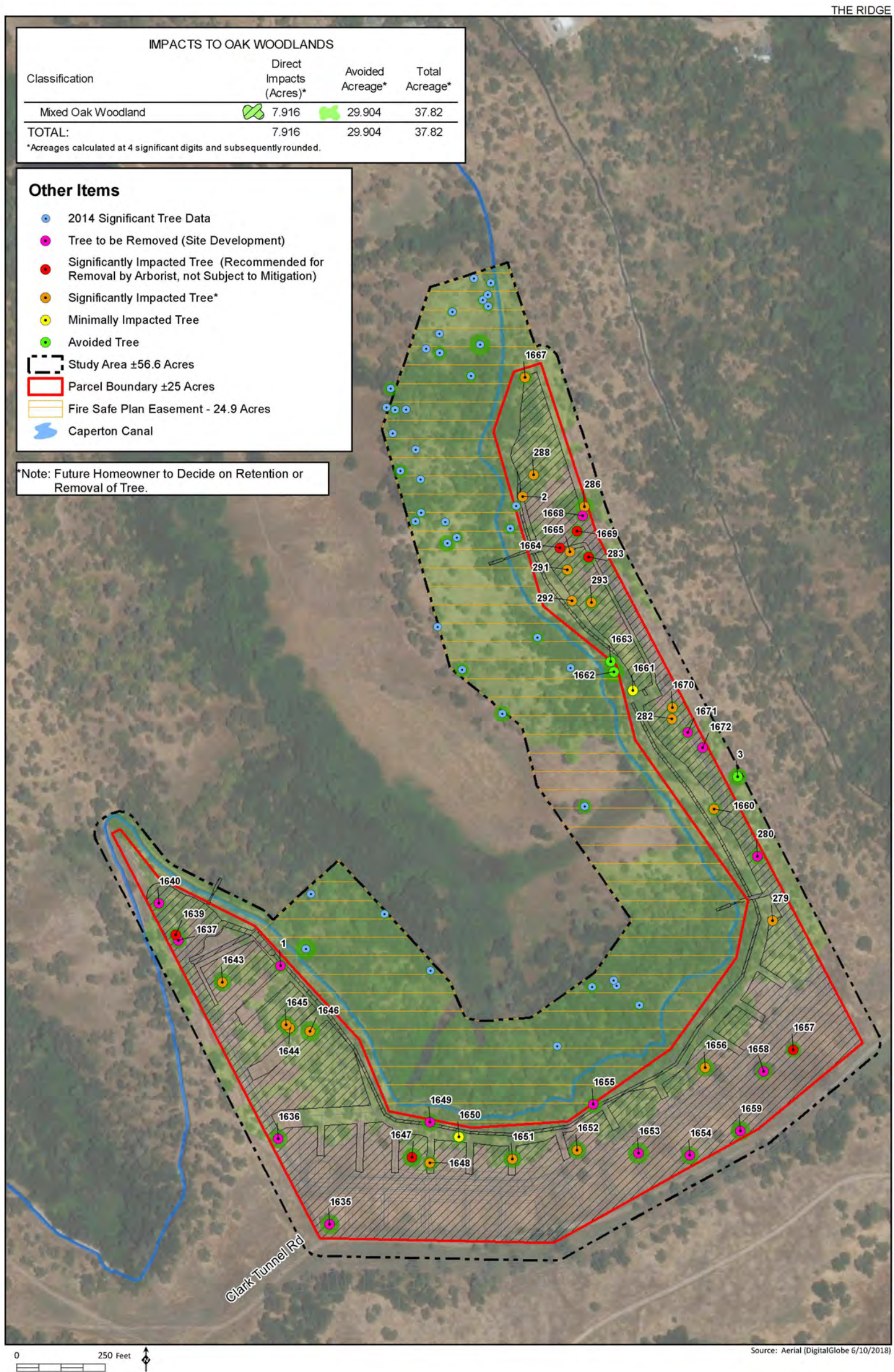




**Figure 6-5**  
**The Ridge Impacts to Biological Communities**



**Figure 6-6**  
**Impacts to Significant Trees and Oak Woodland Within The Ridge Study Area**



An additional 42 significant trees are present in the MSFB. Activities within the MSFB are anticipated to be restricted to brush clearing and removal of downed/dead trees to create a shaded fuel break for public safety; however, individual trees could potentially be subject to removal if deemed necessary for crown clearance. Under the PCCP, mitigation for oak woodland is achieved at a landscape level rather than a tree-by-tree basis. The Placer County Conservation Program (HCP/NCCP), County Aquatic Resources Program (CARP), Cultural Resources Management Plan, and related implementing ordinances and programs (PCCP) were adopted by the Placer County Board of Supervisors on September 23, 2020. The project site is located within Plan Area A: Foothills of the PCCP and the proposed project is a Covered Activity requiring PCCP Authorization. The project is required to apply for PCCP Authorization and comply with PCCP General Conditions 1, 3, and 5 for water quality and habitat protection; land conversion fee obligations for permanent land conversion; and construction worker training.

As the PCCP has been adopted, development fees would be applied for the proposed project's vegetation community impacts, in accordance with PCCP guidelines. The vegetation community impacts that would be accounted for would include impacts to the oak woodlands, as well as other natural and semi-natural habitats, such as annual grassland. According to the PCCP's Land Conversion Fee Schedule (Table 9-6 of the PCCP), fees applied under Plan Area A – Foothills, 2d for "Single family residential on any parcel created by subdivision of existing parcel into five or more total parcels and multi-family residential" are \$2,279 for each development unit, plus \$7,560 per acre, as well as any applicable special habitat fees. It is noted that, while the project is required to mitigate for the entirety of oak woodland impacts through payment of the PCCP land conversion fee, conditions of approval will require that future buyers of the lots obtain a tree permit from the County before impacting significant trees not identified for removal on the Tentative Map in order to further limit impacts to the extent practicable, consistent with the Project Design Guidelines and Covenants, Conditions, and Restrictions (CC&Rs). Special habitat fees would also apply to the proposed project to mitigate impacts to non-vernal pool seasonal wetlands, as discussed in Impact 6-6.

Based on the above, 7.985 acres of mixed oak woodland and oak-foothill pine woodland are anticipated to be directly impacted by the proposed project within the area identified for Potential Future Growth (PFG) within the PCCP, the impacts of which would be fully mitigated through compliance with the PCCP. Without compliance with the PCCP, the impact could be considered **significant**.

#### Mitigation Measure(s)

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

- 6-8(a) *PCCP General Condition 1. Prior to Improvement Plan approval, the project shall obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ); including requirements to develop a project-based Storm Water Pollution Prevention Plan (SWPPP); and applicable NPDES program requirements as*



implemented by the County. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation.

The project shall comply with the West Placer Storm Water Quality Design Manual (Design Manual).

The project shall implement the following BMPs. This list shall be included on the Notes page of the improvement/grading plans and shall be shown on the plans:

1. When possible, vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas. When vehicle parking areas are to be established as a temporary facility, the site will be recovered to pre-project or ecologically improved conditions within 1 year of start of groundbreaking to ensure effects are temporary (refer to Section 6.3.1.4, General Condition 4, Temporary Effects, for the process to demonstrate temporary effects).
2. Trash generated by Covered Activities will be promptly and properly removed from the site.
3. Appropriate erosion control measures (e.g., fiber rolls, filter fences, vegetative buffer strips) will be used on site to reduce siltation and runoff of contaminants into avoided wetlands, ponds, streams, or riparian vegetation.
  - a. Erosion control measures will be of material that will not entrap wildlife (i.e., no plastic monofilament). Erosion control blankets will be used as a last resort because of their tendency to biodegrade slowly and trap reptiles and amphibians.
  - b. Erosion control measures will be placed between the area of disturbance and any avoided aquatic feature, within an area identified with highly visible markers (e.g., construction and erosion-control fencing, flagging, silt barriers) prior to commencement of construction activities. Such identification will be properly maintained until construction is completed and the soils have been stabilized.
  - c. Fiber rolls used for erosion control will be certified by the California Department of Food and Agriculture or any agency that is a successor or receives delegated authority during the permit term as weed free.
  - d. Seed mixtures applied for erosion control will not contain California Invasive Plant Council–designated invasive species (<http://www.cal-ipc.org/paf/>) but will be composed of native species appropriate for the site or sterile non-native species. If sterile non-native species are used for temporary erosion control, native seed mixtures must be used in subsequent treatments to



*provide long-term erosion control and slow colonization by invasive non-natives.*

4. *If the runoff from the development will flow within 100 feet of a wetland or pond, vegetated storm water filtration features, such as rain gardens, grass swales, tree box filters, infiltration basins, or similar LID features to capture and treat flows, shall be installed consistent with local programs and ordinances.*

6-8(b) PCCP General Condition 3. *Prior to Improvement Plan approval, the project shall pay a land conversion fee of \$2,279 for each development unit, plus \$7,560 per acre, for the permanent conversion of approximately 18.9 acres of natural land cover including mixed oak woodland, oak-foothill pine woodland, and annual grassland. The fees to be paid shall be those in effect at the time of ground disturbance authorization for each project step and shall be the per acre fee based on the amount of land disturbance resulting from the activity. For example, the entity responsible for constructing the Improvement Plans would be obligated to submit the per-acre PCCP Fee (1b, 2c, and 2d) based on the area of disturbance, and future homeowners would be obligated to submit the remainder of the per-acre and per-dwelling fees PCCP Fee (1b, 2c, and 2d).*

6-8(c) PCCP General Condition 5. *Prior to initiation of construction activities, all project construction personnel shall participate in a worker environmental training program that will educate workers regarding the Covered Species and their habitats, the need to avoid impacts, state and federal protection, and the legal implications of violating environmental laws and regulations. At a minimum this training may be accomplished through tailgate presentations at the project site and the distribution of informational brochures, with descriptions of sensitive biological resources and regulatory protections, to construction personnel prior to initiation of construction work.*

**6-9 Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.**

As discussed above under Impact 6-8, as the PCCP has been adopted, development fees would be applied for the proposed project's vegetation community impacts and wetlands impacts, in accordance with PCCP guidelines. The Ridge project site is within Plan Area A, which is covered by a comprehensive permit. Avoidance and minimization measures, set forth in Chapter 6 of the PCCP, are intended to ensure that adverse effects on Covered Species and natural communities are avoided and minimized. Applicants are required to obtain a signed Certificate of PCCP Authorization form from Placer County for potential impacts to terrestrial and aquatic habitats. During the local impact authorization process, impact fees are calculated utilizing land cover data. Fees include Land Conversion fees and Aquatic/Wetland



Special Habitat fees, both of which are applicable to the project. The proposed project would participate in the PCCP for incidental take coverage and mitigation for effects to waters of the U.S. and state, as well as oak woodlands. Payment of all applicable development fees would ensure the proposed project is in compliance with the provisions of the PCCP.

Therefore, the impact associated with the proposed project would be **less than significant** with mitigation.

#### Mitigation Measure(s)

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

6-9                    *Implement Mitigation Measures 6-6 and 6-8.*

### **Cumulative Impacts and Mitigation Measures**

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

The geographic scope for the cumulative biological resources analysis generally includes buildout of the proposed project in conjunction with the BRSP, Bickford Ranch Marketplace, and La Faille Ranch. For more details regarding the cumulative setting, refer to Chapter 9, Statutorily Required Sections, of this EIR.

#### **6-10    Cumulative loss of habitat for special-status species. Based on the analysis below, the project, in combination with cumulative development, would have a less-than-significant cumulative impact to special-status species habitat loss.**

Implementation of the proposed project, in combination with development associated with the BRSP, Bickford Ranch Marketplace, potentially the La Faille Ranch property, the Turkey Creek Estates, Esplanade at Turkey Creek, The Waterfront, and Deer Crossing, could result in a significant cumulative impact related to the cumulative loss of special-status species habitat. As discussed above, The Ridge project would impact 7.916 acres of mixed oak woodland, 0.069-acre of oak-foothill pine woodland, 10.887 acres of annual grassland, and 0.106-acre of non-vernal pool seasonal wetlands, while avoiding 29.904 acres of mixed oak woodland, 1.009 acres of oak-foothill pine woodland, 5.483 acres of annual grassland, and 0.254-acre of non-vernal pool seasonal wetland within the Study Area. Altogether, the site’s vegetation communities offer suitable habitat of varying qualities to potentially support 10 special-status plant species and 10 special-status wildlife species and migratory birds protected under the MBTA.

Within the greater cumulative setting surrounding the project site, development of the County-approved BRSP, located on approximately 1,942.5 acres to the east, south,



and west of the proposed project, would result in further loss of habitats in the region. The BRSP Study Area includes 476 acres of annual grassland, 1,416 acres of blue oak woodland, three acres of valley oak woodland, and 52 acres of valley-foothill riparian habitat (see Figure 13-1 of the BRSP EIR), and approximately 78,700 trees, including those within the above-mentioned woodland areas. However, as noted in the 2015 Addendum to the BRSP EIR, following approval of the 2004 BRSP project, site development activities commenced including initiation of mass grading, tree removal and wetland species mitigation. Consistent with 2004 Project approvals, approximately 8,200 oak trees were removed and approximately 21,000 oak seedlings were planted in the northwest portion of the site as mitigation for trees removed. The seedlings failed due to lack of irrigation. The Bickford Ranch Tree Mitigation Plan prepared for the 2014 BRSP addresses the failed plantings and includes mitigation to address impacts of the BRSP and compensation for previous failed mitigation.

The BRSP Study Area consists of 7.71 acres of wetland swales, 3.11 acres of seasonal wetlands, 0.23-acre of vernal pools, 4.43 acres of riparian wetlands, and 0.26-acre of stock ponds (see Figure 13-2 of the BRSP EIR).

Development associated with the Bickford Ranch Marketplace and the La Faille Ranch property would further impact biological resources in the region. While the 10-acre Bickford Ranch Marketplace site, located at the southeast corner of Sierra College Boulevard and SR 193, consists primarily of developed areas and ruderal vegetation, the site contains 2.26 acres of annual grassland, 0.27-acre of valley oak woodland, and 0.3-acre of interior live oak woodland. The site additionally features a total of 0.14-acre of on-site aquatic resources, including 0.12-acre of seasonal wetland swale, 0.01-acre of emergent marsh, and a 0.004-acre drainage ditch. Currently, an active application to develop the 169.68-acre La Faille Ranch property to the north of The Ridge project site has not been filed with the County. However, La Faille Ranch is included in the cumulative setting discussion, as a previous application to develop the site into 14 single-family lots was partially processed through the County before being subsequently withdrawn. La Faille Ranch consists of four oak woodland types, totaling 105.28 acres. Approximately 64.93 acres are covered by blue oak woodland. Interior live oaks woodlands are found on 20.54 acres on the lower and northern slopes of the property. A mixture of oaks and other riparian trees make up the 16.84 acres of the site's valley foothill riparian woodland, and the on-site valley oak woodland consists of a narrow 2.96-acre band of widely spaced valley oaks. La Faille Ranch also includes two aquatic channels that run parallel to each other through the site and converge at the property's ultimate discharge point at the northern boundary.

Furthermore, development associated with the Turkey Creek Estates and Esplanade at Turkey Creek, The Waterfront, and Deer Crossing would additionally impact biological resources in the region. The first three of the foregoing projects are located within the Village 1 Specific Plan area of the City of Lincoln. Both the Turkey Creek Estates project (248 acres) and Esplanade at Turkey Creek project (approximately 175 acres) are approved residential projects currently under construction. Habitats that have been disturbed during construction include non-native annual grassland (especially Esplanade), oak woodland, and wetlands. The Waterfront (18.6 acres) has also been entitled within the Village 1 Specific Plan, but is not currently under construction. As detailed in the Village 1 Specific Plan EIR, The Waterfront project site is composed of various habitats, including non-native annual grassland, oak



woodland, and riparian. Lastly, Deer Crossing is an entitled non-residential project southwest of the intersection of SR 193 and Oak Tree Lane, adjacent to the Village 1 Specific Plan area of the City of Lincoln. The project, which is not currently under construction, would consist of approximately 22,000 square feet of commercial/retail uses. On-site habitat for Deer Crossing is comprised predominantly of non-native annual grassland.

Based on the above information, implementation of the proposed project, in combination with cumulative development anticipated for the region, would result in impacts to the aforementioned habitats, which represent potential habitat for various special-status species discussed throughout this chapter.

This chapter provides a wide range of mitigation to minimize potential adverse effects to habitat for special-status species within the project footprint. For instance, Mitigation Measure 6-8 requires payment of all PCCP development fees for impacts to on-site annual grassland, mixed oak woodland, and oak-foothill pine woodland. In addition, Mitigation Measure 6-6(a) would require that the proposed project conform with the Placer County CARP for wetland mitigation. Thus, any wetlands lost within the project site would ultimately be offset through the PCCP reserve system, funded by land conversion and special habitat fees. While the project would involve loss of some existing on-site habitat, implementation of the proposed project would not result in the creation of extensive barriers or impacts to wildlife migration corridors, as the surrounding landscape would continue to contain undeveloped natural habitat on the larger La Faille Ranch property, owned by the project applicant, to the north of the project site. Furthermore, the majority of the oak woodland surrounding the project site and within the MSFB along the steep slopes to the north and west of the project site would remain intact.

With respect to the cumulative setting, the BRSP at buildout will be a fully developed Specific Plan community, generally consisting of 1,890 new residential units, more than 1,100 acres of open space and recreation, and new public facilities, including a fire station and school site for a potential future school. Given the scope of the planned development, implementation of the BRSP will result in impacts to biological resources. Generally, the BRSP EIR concluded that implementation of the project would result in the loss of most of the 483 acres of annual grassland within the project site; removal of approximately 10,653 native trees protected under the County's Ordinance (most of which has already occurred, as previously noted); loss of approximately 147 acres of oak woodland; potential loss of an unspecified, but small portion of the 9.33 acres of riparian vegetation within the Meadows community (located in the northwest areas of the BRSP footprint); and direct impacts to 2.83 acres of waters of the U.S.

The BRSP EIR included a total of 19 mitigation measures to address potentially significant impacts to biological resources. The Bickford Ranch Tree Mitigation Plan has already been discussed above. In addition, Mitigation Measure B-E requires implementation of a Wetland Preservation and Impact Plan that will create 8.49 acres of seasonal wetland, emergent marsh, and riparian habitats for a mitigation ratio of more than 3:1. An additional 15.07 acres of open water will be created within the BRSP's seven constructed lakes, and 3.8 acres of emergent marsh wetland will be constructed along the fringes of the lakes.





Since the certification of the BRSP EIR and adoption of the 2015 Addendum, the Placer County Board of Supervisors has adopted the PCCP. The PCCP is designed to ensure that lands within western Placer County are 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. It should be noted that the purpose of the PCCP is to address cumulative impacts to biological resources in Placer County. The project site has been designated in the PCCP as an area of potential future growth in the Foothills (“Foothills PFG”, see Figure 6-7).

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. Also notable is the PCCP’s identification of BRSP as an area of Foothills PFG (A3) (Volume 1, pg. 2-38) and the aforementioned City of Lincoln projects as an area of Valley PFG (A1) (Volume 1, pg. 2-34). )The PCCP EIR/EIS concluded that impacts to biological resources related to future growth identified in the PCCP would be less-than-significant with implementation of the Plan’s conservation strategy.<sup>9</sup> To ensure the preservation of special-status plant and wildlife species, sensitive habitats, and State and federally protected wetlands, the PCCP includes the establishment of a Reserve Acquisition Area (RAA), an area designated in the PCCP within which a connected Reserve System will be assembled. The conservation strategy would establish most of the Reserve System in the RAA.

The Placer Conservation Authority (PCA), created to implement the HCP/NCCP and the CARP, will acquire approximately 47,300 acres for natural and semi-natural community protection and restoration over the 50-year permit term for the HCP/NCCP.

Bickford Ranch Marketplace and La Faille Ranch, are also located within the Foothills PFG area and would be required to comply with the PCCP, including payment of development fees for impacts to habitats. As previously discussed for the project site, these fees would be used to establish the RAA.

The above discussion provides substantial evidence that, while the combined effects on special-status species habitats resulting from approved/planned development, including the proposed project, could be considered significant, with implementation of the PCCP, cumulative impacts to biological resources habitat would be **less-than-significant**.

Mitigation Measure(s)

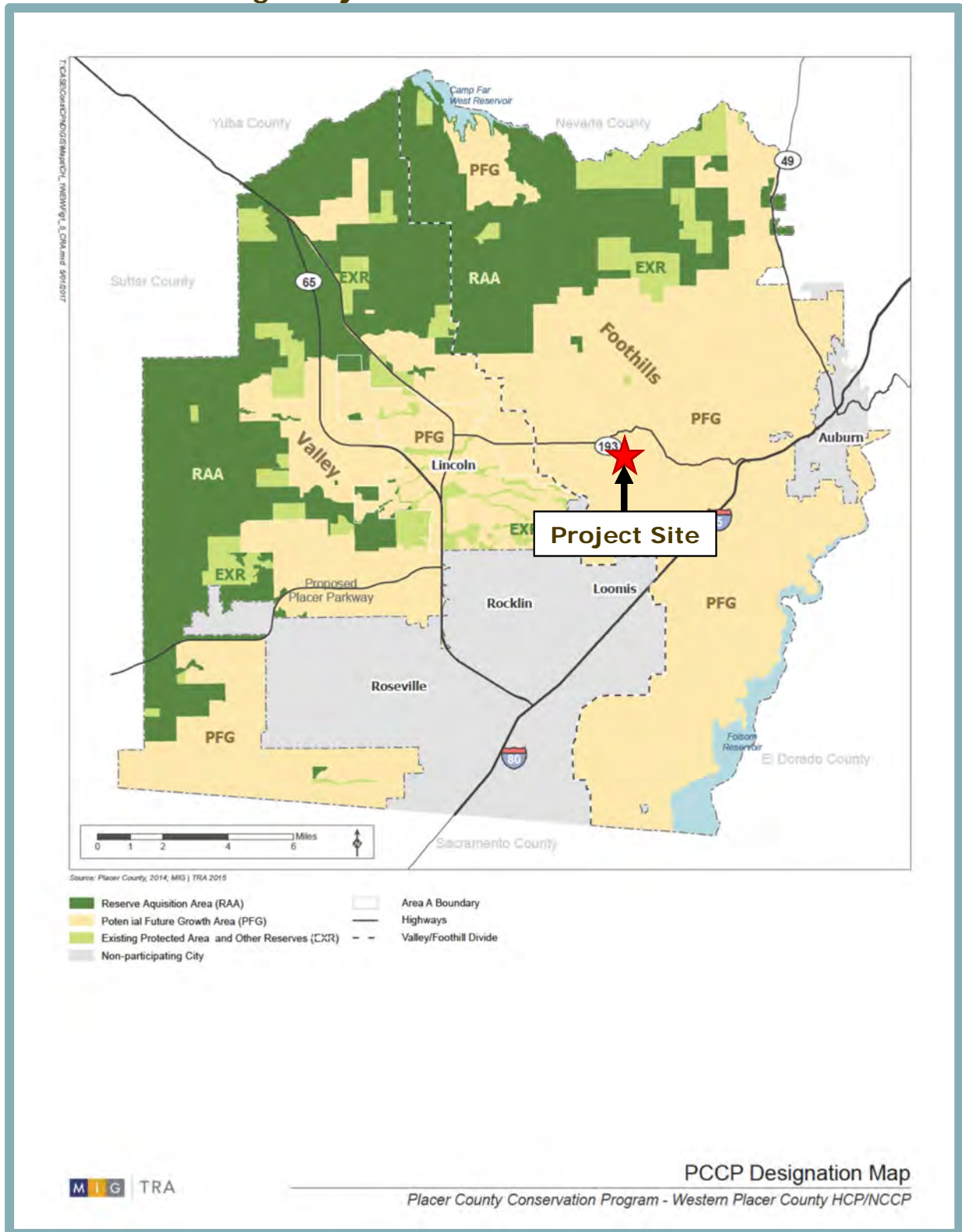
*None required.*

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<sup>9</sup> Placer County. *Placer County Conservation Program Final Environmental Impact Statement/Environmental Impact Report* [pg. 4.3-47]. May 2020.



**Figure 6-7**  
**The Ridge Project Site Location Within the PCCP**



Source: Placer County. Placer County Conservation Program. February 2020.



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## **7. TRANSPORTATION AND CIRCULATION**

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## 7. TRANSPORTATION AND CIRCULATION

### 7.1 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 Technical Memorandum<sup>1</sup> and VMT Analysis<sup>2</sup> prepared for the proposed project by Fehr and Peers (see Appendix F), as well as the Placer County General Plan,<sup>3</sup> and associated Placer County General Plan EIR.

At the beginning of 2019, updated California Environmental Quality Act (CEQA) Guidelines went into effect. The new Guidelines require CEQA lead agencies such as Placer County to transition from using “level of service” (LOS) to “Vehicle Miles Traveled” (VMT) as the metric for assessing transportation impacts under CEQA (see Section 15064.3). The State’s requirement to transition from LOS to VMT is aimed at promoting infill development, public health through active transportation, and a reduction in greenhouse gas emissions. Pursuant to the Guidelines, any project that did not initiate CEQA public review prior to July 1, 2020 must use VMT rather than LOS as the metric to analyze transportation impacts. LOS will still be used by the County for purposes of determining consistency with general plan and community plan goals and policies but is no longer used for determining significant impacts under CEQA.

Consistent with the County of Placer Transportation Study Guidelines (November 2020), both a VMT analysis and Local Transportation Assessment (LTA) were prepared for The Ridge project. Pursuant to CEQA Guidelines Section 15064.3, impact significance in this chapter is based upon VMT, whereas the results of the LTA are used to address consistency with Placer County General Plan goals and policies related to transportation, including adopted LOS policies.

### 7.2 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.

#### **Study Intersections and Roadway Segments**

The following section provides a list of the study intersections and roadway segments within the project area. The existing and future study intersections and roadways were identified based on the proposed project and conversations with Placer County’s Public Works Department. The study intersections are listed below, and depicted in Figure 7-1:

<sup>1</sup> Fehr and Peers. *Draft Technical Memorandum – The Ridge Subdivision*. August 6, 2020.

<sup>2</sup> Fehr and Peers. *The Ridge Subdivision VMT Analysis*. March 3, 2021.

<sup>3</sup> Placer County. *Countywide General Plan Policy Document*. August 1994 (updated May 2013).



1. State Route (SR) 193/Sierra College Boulevard (existing); and
2. Sierra College Boulevard/Bickford Ranch Road (assumed under adjusted baseline).

The study roadway segments are listed below:

1. Sierra College Boulevard – SR 193 to the future Bickford Ranch Road; and
2. Sierra College Boulevard – Future Bickford Ranch Road to existing Twelve Bridges Drive.

### **SR 193**

SR 193 is an east-west State highway that links the City of Lincoln with Newcastle. The two-lane highway is under the jurisdiction of the California Department of Transportation (Caltrans) and provides access from the project site to SR 65 to the west and I-80 to the east. Project access to SR 193 would be provided by Sierra College Boulevard.

### **Sierra College Boulevard**

Sierra College Boulevard is a north-south arterial that provides indirect access to the project site. This roadway is a public, County-maintained road that connects the project area to Loomis, Rocklin, and Sacramento to the south, as well as Lincoln (via SR 193) to the north. From Loomis' northerly town limits to SR 193, Sierra College Boulevard is classified as a rural arterial.

### **Bickford Ranch Road**

As discussed in Section 1.5 of the Introduction chapter of this EIR, substantial evidence exists to support adjusting the existing conditions baseline for the area to assume that Phase 1 of the BRSP has been built out, as such adjustments would give the public and decision-makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts consistent with CEQA Guidelines Section 15125[a].

Approximately 1,010 single family units could be developed within Phase 1 of the BRSP, as well as associated backbone roadway, water, sewer, and storm drainage infrastructure. The primary backbone roadway for Phase 1 of the BRSP would be Bickford Ranch Road, which will be a public, County-maintained roadway. The terminus of Bickford Ranch Road, after completion of Phase 1 BRSP improvements, would stop short of The Ridge project site, leaving approximately 400 feet of unpaved roadway between the terminus and the southwestern corner of The Ridge project site. The 400-foot roadway segment would either be constructed during commencement of Phase 2 of BRSP, or, depending on the timing of BRSP Phase 2, potentially by The Ridge applicant.

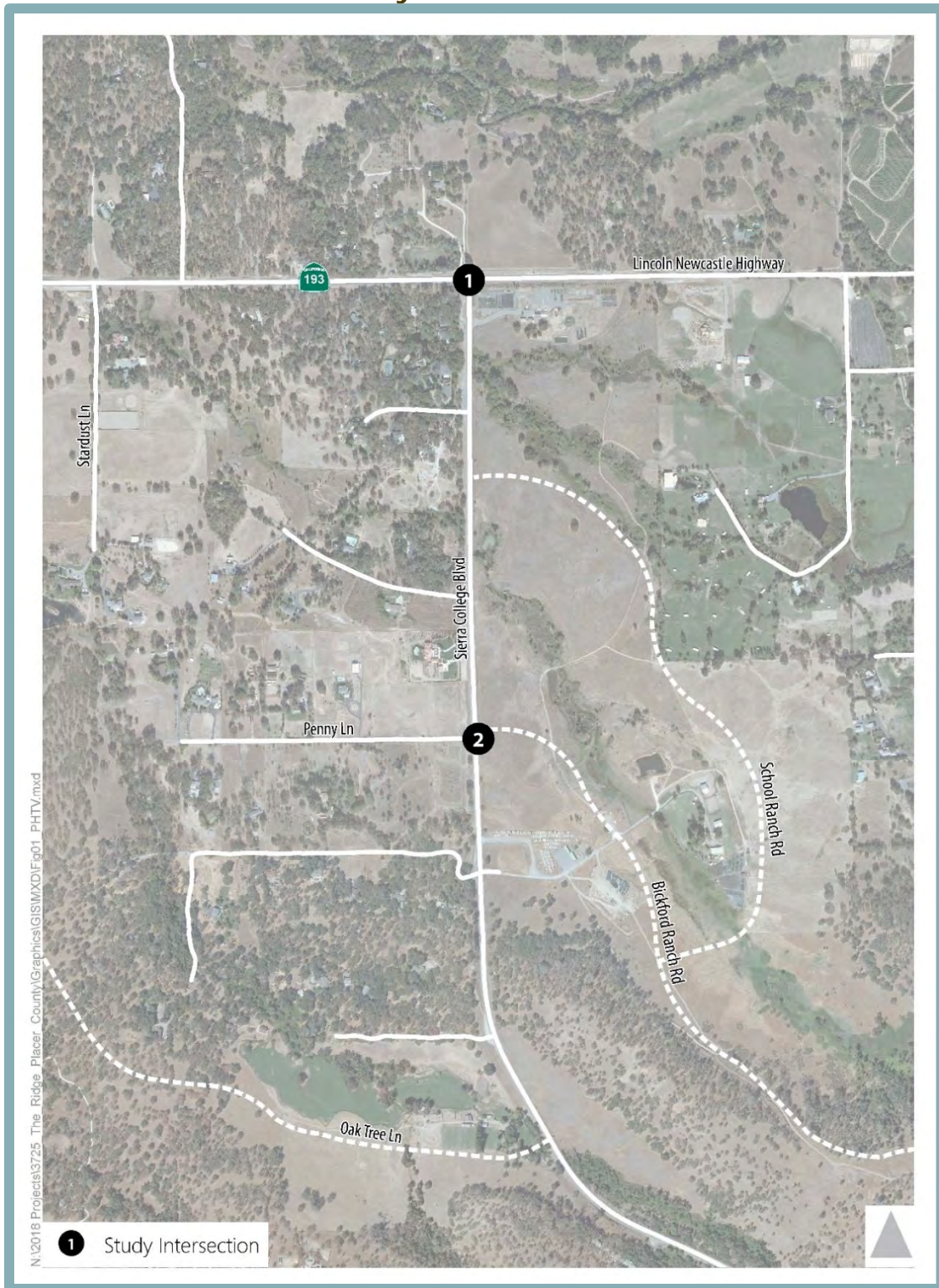
Bickford Ranch Road is planned to be a two- or four-lane winding collector roadway extending generally east from Sierra College Boulevard, through the BRSP, and towards the project site.

### **Existing Conditions**

Fehr & Peers conducted intersection turning movement counts at the SR 193/Sierra College Boulevard intersection, and daily roadway segment counts on Sierra College Boulevard between SR 193 and Twelve Bridges Drive, on November 15, 2018, which was a typical weekday with clear weather conditions and local schools in session. The observed peak hours are summarized below:



**Figure 7-1  
Study Intersections**



Source: Fehr & Peers, 2020.



- Intersection Counts (AM) – the AM peak hour was 7:00 AM to 8:00 AM;
- Intersection Counts (PM) – the PM peak hour was 4:45 PM to 5:45 PM; and
- Roadway Segment Counts – the AM peak hour was 6:45 AM to 7:45 AM and the PM peak hour was 6:30 PM to 7:30 PM.

## Vehicle Miles Traveled

Pursuant to CEQA Guidelines Section 15064.3, VMT is the primary metric used to identify transportation impacts under CEQA. VMT is a metric that accounts for the number of vehicle trips generated and the length or distance of those trips. VMT does not directly measure traffic operations; instead, VMT is a measure of transportation network use and efficiency, especially when expressed as a function of population (i.e., VMT per capita). For residential projects, such as the proposed project, Placer County considers household or home-based VMT per capita, which is the sum of trips originating from home, divided by the number of residents. VMT tends to increase as land use density decreases and travel becomes more reliant on the use of single-passenger vehicles.

In response to Senate Bill (SB) 743, which updated the CEQA Guidelines to include new transportation metrics, Placer County developed the Placer VMT Estimation Tool for use in evaluating local development projects. The Placer VMT Estimation Tool is based on data from the regional travel demand model, and is an interactive web-based map that estimates a project's VMT metrics based on the VMT performance of adjacent existing development. The Placer VMT Estimation Tool divides Placer County into Traffic Analysis Zones (TAZs) with generally similar rates of VMT. As a result, in order to use the Placer VMT Estimation Tool, the project must be generally consistent in size and land use type (i.e., density, mix of uses, transit accessibility, etc.) with the surrounding built environment.<sup>4</sup> In addition, the significance thresholds for VMT impacts differ per region. Western Placer County has identified recommended VMT metrics used to measure VMT by land use type. Considering the project site is located in Western Placer County, the project is subject to such thresholds.

According to Fehr & Peers, and based on the Placer VMT Estimation Tool, the existing VMT setting in TAZ 205, in which the project site is located, is 29.57 VMT per capita.

## Pedestrian, Bicycle, and Transit Facilities

The sections below describe the existing pedestrian, bicycle, and transit facilities located within the vicinity of the project site.

### Pedestrian and Bicycle Facilities

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.

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<sup>4</sup> Placer County. *County of Placer Transportation Study Guidelines*. November 2020.



- 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.

Bickford Ranch Road, which would be constructed as part of BRSP Phase 1, would include a 10-foot-wide Class I (e.g., separated) bike and pedestrian (AC) pathway. In addition, a seven-foot Class II bike lane would be provided along Bickford Ranch Road.

### Public Transit System

Placer County Transit provides public transit services in the project vicinity. The nearest existing bus stop to the project site is at Taylor Road and English Colony Way, which is located approximately two miles southeast of the project site. The Taylor Road and English Colony Way bus stop is served by Route #50, Taylor Road Shuttle, which connects Sierra College and the City of Auburn.

Mitigation Measure T-M of the BRSP EIR requires implementation of two new bus stops adjacent to the existing park-and-ride lot on the west side of Sierra College Boulevard, near SR 193, and/or within the BRSP area. The bus stops would consist of a paved area for benches and future bus stop improvements. The future bus stops would be accessible to future residents of the proposed project. However, the timing of bus stop development is unknown at this time, and the stops may not necessarily be operational at the time of occupancy of the proposed project.

## **7.3 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 plans, policies, regulations, or laws related to transportation are not directly applicable to the proposed project. Rather, the analysis presented herein focuses on State and local regulations, which govern the regulatory environment related to transportation at the project level.

### **State Regulations**

The following are the regulations pertinent to the proposed project at the State level, organized chronologically.

#### **Senate Bill 743**

In 2013, SB 743 was passed to amend Sections 65088.1 and 65088.4 of the Government Code, amend Sections 21181, 21183, 21186, 21187, 21189.1, and 21189.3 of the Public Resources Code (PRC), to add Section 21155.4 to the PRC, to add Chapter 2.7 (commencing with Section 21099) to Division 13 of the PRC, to add and repeal Section 21168.6.6 of the PRC, and to repeal and add Section 21185 of the PRC, relating to environmental quality. In response to SB 743, the Office of Planning and Research (OPR) has updated the CEQA Guidelines to include new





transportation-related evaluation metrics. In December 2018, the California Natural Resources Agency certified and adopted the CEQA Guidelines update package along with an updated Technical Advisory related to Evaluating Transportation Impacts in CEQA. Full compliance with the Guidelines became effective July 2020. As a result of SB 743, and Section 15064.3 of the CEQA Guidelines, as discussed in further detail below, local jurisdictions may no longer rely on vehicle LOS and similar measures related to delay as the basis for determining the significance of transportation impacts under CEQA, and instead a VMT metric should be evaluated.

### **Technical Advisory on Evaluating Transportation Impacts in CEQA**

In December of 2018, the OPR published the Technical Advisory on Evaluation Transportation Impacts in CEQA (Technical Advisory), which is a guidance document to provide advice and recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. The Technical Advisory is intended to be a resource for the public to use at their discretion, and the OPR does not enforce any part of the recommendations contained therein. The Technical Advisory includes recommendations regarding methodology, screening thresholds, and recommended thresholds per land use type. Per the Technical Advisory, residential development projects that would generate vehicle travel that is 15 or more percent below the existing residential VMT per capita, measured against the region or City, may indicate a less-than-significant transportation impact.

### **Vehicle Miles Traveled-Focused Transportation Impact Study Guide**

In May of 2020, Caltrans adopted the Vehicle Miles Traveled-Focused Transportation Impact Study Guide (TISG) to provide direction to lead agencies regarding compliance with SB 743. The TISG replaces the Caltrans' 2002 Guide for the Preparation of Traffic Impact Studies and is for use with local land use projects, not for transportation projects on the State Highway System. The objectives of the TISG are to provide:<sup>5</sup>

- a) Guidance in determining when a lead agency for a land use project or plan should analyze possible impacts to the State Highway System, including its users.
- b) An update to the Guide for the Preparation of Traffic Impact Studies (Caltrans, 2002) that is consistent with SB 743 and the CEQA Guidelines adopted on December 28, 2018.
- c) Guidance for Caltrans land use review that supports state land use goals, state planning priorities, and GHG emission reduction goals.
- d) Statewide consistency in identifying land use projects' possible transportation impacts, to the State Highway System, and to identify potential non-capacity increasing mitigation measures.
- e) Recommendations for early coordination during the planning phase of a land use project to reduce the time, cost, and/or frequency of preparing a Transportation Impact Study or other indicated analysis.

Caltrans has jurisdiction over State highways. Therefore, Caltrans controls all construction, modification, and maintenance of State highways, such as SR 193. Any improvements to such roadways require Caltrans approval.

### **Local Regulations**

Local rules and regulations applicable to the proposed project are discussed below.

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<sup>5</sup> Caltrans. *Vehicle Miles Traveled-Focused Transportation Impact Study Guide*. May 20, 2020.



## 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.3 The County shall require that roadway rights-of-way be wide enough to accommodate the travel lanes needed to carry long-range forecasted traffic volumes (beyond 2010), as well as any planned bikeways and required drainage, utilities, landscaping, and suitable separations. Minimum right-of-way criteria for each class of roadway in the County are specific in Part I of this Policy Document.
- Policy 3.A.11 The County shall require an analysis of the effects of traffic from all land development projects. Each such project shall construct or fund improvements necessary to mitigate the effects of traffic from the project consistent with Policy 3.A.7. Such improvements may include a fair share of improvements that provide benefits to others.
- 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.
- Goal 3.C To maximize the efficient use of transportation facilities so as to: 1) reduce travel demand on the County's roadway system; 2) reduce the amount of investment required in new or expanded facilities; 3) reduce the quantity of emissions of pollutants from automobiles; and 4) increase the energy-efficiency of the transportation system.
- Policy 3.C.1 The County shall promote the use of transportation systems management (TSM) programs that divert automobile commute trips to transit, walking, and bicycling.
- Policy 3.C.2 The County shall promote the use, by both the public and private sectors, of TSM programs that increase the average occupancy of vehicles.
- Policy 3.C.4 During the development review process, the County shall require that proposed projects meet adopted Trip Reduction Ordinance (TRO) requirements.
- 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.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.
- Policy 3.D.11 The County shall work to achieve equality of convenience and choice among all modes of transportation – pedestrian, cycling, transit and motor vehicles, through a balanced and interconnected transportation system.

### **County of Placer Transportation Study Guidelines**

The County of Placer Transportation Study Guidelines were published in November 2020. The Guidelines are intended to provide a clear and consistent technical approach to preparing



Transportation Studies in Placer County. They establish analysis techniques for transportation studies based on the current state-of-the-practice in transportation planning and engineering.

For example, the Guidelines set forth a number of thresholds for use in analyses within the County, including VMT thresholds per region. The significance thresholds for Western Placer County and recommended VMT metric used to measure VMT are described by land use type. Recommended thresholds for East Placer County (unincorporated areas from Donner Summit to the east, including the Tahoe Basin) were adopted by Placer County on June 22, 2021.

### **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 funds and has entered into a Memorandum of Understanding with Caltrans and the Sacramento Area Council of Governments (SACOG) to govern federal transportation planning and programming in Placer County. The PCTPA has also been involved in preparation of the following transportation planning documents.

#### Placer County Regional Bikeway Plan

In June 2018, Placer County adopted the Regional Bikeway Plan 2018 Update (Regional Bikeway Plan). The Regional Bikeway Plan identifies a vision and goals for bicycling, a network of bikeways to connect the County, and supportive programs and practices to encourage bicycling. The vision statement for the Regional Bikeway Plan is to promote safe, convenient, and enjoyable bicycling by establishing a comprehensive system of bikeways that link the communities of Placer County.<sup>6</sup>

The Regional Bikeway Plan develops a regional system of bikeways that connects the six incorporated cities and numerous unincorporated community areas. As shared-use paths are expanded across the County, they will continue to provide scenic recreational routes as well as key longer-distance regional connections.

#### Placer County Short-Range Transit Plan

In August 2018, the County adopted the Placer County Short-Range Transit Plan (SRTP) for the Placer County Transit program, which serves western Placer County. The SRTP is intended to provide a detailed business plan to guide the Placer County Transit program in establishing service strategies, improvement priorities, and implementation sequencing over the 2018 through 2025 planning period. The SRTP includes a review of demographics and transit needs, a series of surveys and ridership counts conducted for all Placer County Transit services, a review of the effectiveness and efficiency of existing services, analysis of a wide range of transit options, and the results of public input processes. This SRTP plan was prepared jointly with the development of parallel SRTPs for Roseville Transit, Auburn Transit, and the Western Placer Consolidated Transit Service Agency.<sup>7</sup>

### **Funding Sources/Fee Programs**

In April 1996, the Placer County Board of Supervisors adopted the Countywide Traffic Impact Fee Program, which requires new development within the County to mitigate impacts to the roadway

<sup>6</sup> Placer County. *Placer County Regional Bikeway Plan*. June 29, 2018.

<sup>7</sup> Placer County Transportation Planning Agency. *Placer County Transit Short Range Transit Plan 2018-2025*. August 9, 2018.



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 July of 2021. The County's fee program and Capital Improvement Program (CIP) are divided into eleven districts. The project site is included in the Placer Central District.

## 7.4 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, except LOS (Level of Service), 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.

Specific application of the general thresholds is provided in the following section, based on guidance from Placer County.

### **Vehicle Miles Traveled Standard of Significance**

On December 1, 2020, with the passage of Resolution 2020-250, the Placer County Board of Supervisors adopted VMT thresholds of significance, screening criteria, and Transportation Study Guidelines for analyzing transportation impacts under CEQA. Table 7-1 summarizes the VMT thresholds of significance for Western Placer County:

Land Use/Project Type	Recommended Metric	Threshold of Significance
Residential	Household or Home-based VMT per Capita	15% Below Unincorporated County Baseline
Commercial Retail	Total VMT	Zero Net Increase
Office Employment	Work VMT per Employee	15% Below Unincorporated County Baseline
Industrial/Agricultural Employment	Work VMT per Employee	
Hotel/Campground	VMT per Room or per Site	
<i>Source: Fehr and Peers (2021).</i>		

Based on the above, for the proposed project, a VMT impact would be considered less than significant if the household or home-based VMT per capita is determined to be 15 percent below the unincorporated County Baseline.



## **Method of Analysis**

The analysis methodology provided in the Technical Memorandum and VMT Analysis prepared for the proposed project by Fehr and Peers is discussed below.

## **Project Trip Generation**

The number of automobile trips that would be generated by the proposed project was estimated through application of trip generation rates. For operation of the project, applicable trip generation rates were obtained from the Institute of Transportation Engineer's (ITE) publication, Trip Generation Manual, 10<sup>th</sup> edition. Table 7-2 below identifies the trip generation applied to the proposed project. As shown in the table, the proposed project would generate an estimated 322 daily trips, with 25 trips expected in the AM peak hour and 34 trips generated during the PM peak hour.

ITE Land Use Code and Category	Quantity (D/U)	Time Period	Trip Rate			Vehicle Trips		
			In	Out	Total	In	Out	Total
210 – Single-Family Detached Residential	34	Daily	4.72	4.72	9.44	161	161	322
		AM	0.19	0.55	0.74	6	19	25
		PM	0.62	0.37	0.99	21	13	34

*Source: Fehr & Peers, 2020.*

## **Project Vehicle Miles Traveled**

As part of the VMT Analysis, Fehr and Peers estimated per capita VMT associated with the proposed project. In coordination with the Placer County Planning Services Division and the Department of Public Works, the proposed project was determined to be generally consistent in size and land use (i.e., density, mix or uses, transit accessibility, etc.) with the surrounding built environment. Therefore, the Placer VMT Estimation Tool was used to analyze the VMT performance of the proposed project. The Placer VMT Estimation Tool is an interactive web-based tool that estimates a project's VMT performance based on the VMT performance of adjacent existing development. The Placer VMT Estimation Tool is based on data from SACOG's SACSIM 19 regional travel demand model. The project site is located in TAZ 205 in the SACSIM 19 regional travel demand model.

## **Project-Specific Impacts and Mitigation Measures**

The proposed project impacts on the transportation system are evaluated in this section based on the thresholds of significance and methodology described above. Each impact is followed by recommended mitigation to reduce the identified impacts, if needed. In the case of traffic operations, specifically intersection and roadway level of service, such an analysis is not required pursuant to CEQA Guidelines Section 15064.3(a) since congestion and intersection operations no longer constitute a transportation impact under CEQA. Placer County staff will separately review LOS for the project's consistency with General Plan LOS policies.

**7-1 Conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system during construction activities. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.**



Construction activities associated with the proposed project would include use of construction equipment, including vehicles removing or delivering fill material, bulldozers, and other heavy machinery, as well as building materials delivery, and construction worker commutes. In addition, the project could include improvements and/or the extension of a short segment of Bickford Ranch Road within the project site vicinity, which could temporarily impede traffic for BRSP residents.

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. Construction access to the project site would be from Bickford Ranch Road, with no access from Clark Tunnel Road. In addition, any truck traffic to the site would follow designated truck routes, and project construction would likely stage any large vehicles (i.e., earth-moving equipment, cranes, etc.) on the site prior to beginning site work and remove such vehicles at project completion. However, detailed information related to the construction schedule during site development or a construction management plan is not available. As a result, construction activities could include disruptions to the transportation network near the project site.

Without proper planning of construction activities, construction traffic could interfere with existing roadway operations during the construction phase, which could result in a risk to public safety. Therefore, project traffic related to construction activities could result in a **significant** impact.

#### Mitigation Measure(s)

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

7-1            *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 and school bus vehicle access;*
- *Coordination of construction activities with construction of other projects that occur concurrently in the BRSP to minimize potential additive construction traffic disruptions, avoid duplicative efforts (e.g., multiple occurrences of 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 BRSP 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; and*
- *Roadways shall be maintained clear of debris (e.g., rocks) that could otherwise impede travel and impact public safety.*

**7-2 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 and Bicycle Facilities

As noted previously, Bickford Ranch Road, which will extend along the southern site boundary, would include a 10-foot-wide Class I separated bike and pedestrian pathway. In addition, a seven-foot Class II bike lane would be provided along Bickford Ranch Road. As previously discussed, the terminus of Bickford Ranch Road after completion of Phase 1 BRSP improvements will stop short of The Ridge project site, leaving about 400 feet of unpaved roadway between the terminus and the southwestern corner of The Ridge project site. This 400-foot segment would either be constructed during commencement of Phase 2 of BRSP, or depending on the timing of BRSP Phase 2, potentially by The Ridge applicant. If The Ridge applicant elects to proceed with construction of this 400-foot segment and the portion of Bickford Ranch Road along the project's frontage, the roadway cross-section would be constructed in conformance with BRSP improvement plans, which include the above-noted bike and pedestrian facilities. As such, pedestrian and bicycle





infrastructure which connects to the existing network would be available to future residents of the proposed project.

The Placer County Regional Bikeway Plan presents a vision for implementation of infrastructure and programs to support biking through the County. Figure 22 of the Placer County Regional Bikeway Plan identifies recommended focus areas and corridors for bikeway improvements. The project site is not located within a recommended focus area for bikeway improvements.<sup>8</sup> Therefore, implementation of the proposed project would not conflict with or preclude the development of any planned pedestrian or 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 Placer County Transit. The nearest bus stop to the project site is for Route #50, the Taylor Road Shuttle route, at Taylor Road and English Colony Way, which is located approximately two miles southeast of the project site. Based on the 2018 Placer County Short-Range Transit Plan, future transit routes are not identified in the immediate project vicinity.<sup>9</sup> However, ridership of the Taylor Road Shuttle averages 2.3 passenger trips per hour (or 4.6 per two-hour loop), which is the lowest productivity among the Placer County Transit routes. Therefore, the Taylor Road Shuttle has substantial capacity to accommodate the additional residents associated with the proposed project. Furthermore, the 2018 Placer County Short Range Transit Plan included consideration of the BRSP. As noted therein, the PCTPA recommended that a limited commuter service be provided to the BRSP area. Thus, buildout of the project area has been previously considered in County-wide planning efforts. Furthermore, as noted in the 2015 Addendum<sup>10</sup> to the BRSP EIR, implementation of the BRSP would include enhancements to an existing park and ride lot located on the west side of Sierra College Boulevard. Future residents of the proposed project would have access to all such improvements. As a result, the project would not conflict with any planning efforts related to public transit, and 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.

### Mitigation Measure(s)

*None required.*

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<sup>8</sup> Placer County. *Placer County Regional Bikeway Plan 2018 Update*. June 2018.

<sup>9</sup> Placer County Transportation Planning Agency. *Placer County Transit Short Range Transit Plan 2018-2025*. August 9, 2018.

<sup>10</sup> Placer County Community Development Resource Agency. *Environmental Review Checklist: Bickford Ranch Specific Plan Amendment*. October 2015.



**7-3 Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). Based on the analysis below, even with the implementation of mitigation, the impact is *significant and unavoidable*.**

Table 7-3 summarizes the VMT performance of the proposed project based on the output from the Placer VMT Evaluation Tool. The analysis was conducted for the year 2021.

The unincorporated County baseline VMT per capita was identified to be 31.05. As discussed previously, per County guidance, residential projects that generate VMT per capita at 15 percent less than the unincorporated County baseline average may be considered less than significant. Therefore, the VMT threshold applied to the proposed project is 15 percent less than 31.05, or 26.39 VMT per capita.

As shown in the table, the VMT per capita for the proposed project would be 29.55 VMT per capita, which exceeds the established threshold for residential land use by 12 percent.

<b>Table 7-3 Unmitigated VMT per Capita</b>		
<b>Baseline Year</b>	<b>Analysis Scenario</b>	
	<b>No Project</b>	<b>Plus Project</b>
2021	29.57	29.55
VMT Threshold	26.39	
<b>VMT Threshold Exceeded?</b>	<b>Yes</b>	<b>Yes</b>

*Source: Fehr & Peers, 2021.*

Given that the per-capita VMT associated with the proposed project would exceed the applicable threshold, the proposed project could conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), and a *significant* impact would occur.

Mitigation Measure(s)

Implementation of a Transportation Demand Management (TDM) Program would reduce project-related VMT. Mitigation Measure 7-3 includes Tier 4 VMT reduction strategies identified in the Placer County VMT Estimation Tool. Fehr & Peers recommended an additional reduction strategy, TP-12, which requires the project to contribute to the development of a neighborhood school that would serve families living in the development. This requirement is already addressed through State law in accordance with Proposition 1A/SB 50. As shown in Table 7-4, implementation of the TDM measures included in Mitigation Measure 7-3 would reduce the project's VMT per capita by approximately five percent. However, the project's VMT per capita would still exceed the threshold of 26.39. The effectiveness of TDM Strategies depend heavily on the level of implementation. The analysis presented herein assumes the maximum level of implementation and, consequently, the results in Table 7-4 present a best-case scenario. Furthermore, a portion of the TDM strategies may prove to be economically infeasible. Due to uncertainties regarding the ability for the mitigation measure to reduce VMT to a less-than-significant level, the impact would remain *significant and unavoidable*.



<b>Table 7-4 Mitigated VMT per Capita</b>		
<b>Baseline Year</b>	<b>Analysis Scenario</b>	
	<b>No Project</b>	<b>Plus Project</b>
2021	29.57	28.15
VMT Threshold	26.39	
<b>VMT Threshold Exceeded?</b>	<b>Yes</b>	<b>Yes</b>
<i>Source: Fehr &amp; Peers, 2021.</i>		

7-3 *Prior to Improvement Plan approval, the project applicant shall submit a plan to achieve the following TDM measures to the satisfaction of the Placer County Community Development Resource Agency. The Plan shall be implemented by the HOA and included in the CC&Rs:*

- *TP01 – School Pool Programs: Organize a program that matches families in carpools for school pick-up and drop-off.*
- *TP07 – Subsidized Transit Program: Provide either partially or fully subsidized transit passes for all residents who request them, and shall publicize the availability of transit passes to residents in periodic communications.*
- *TP18 – Voluntary Travel Behavior Change Program: The HOA shall provide educational materials (e.g., brochure) to new homebuyers that target individual attitudes towards travel and providing tools for individuals to analyze and alter their travel behavior.*

**7-4 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. Based on the analysis below, the impact is *less than significant*.**

Potential impacts related to gated access, roadway design features, incompatible uses, and emergency access are discussed below.

As part of the proposed project, a gated entrance would be provided at the southern end of the project site, along Bickford Ranch Road. Placer County has adopted a design standard for gated access to residential subdivisions (Plate 115). Visitors would be able to call the resident they are visiting to gain access to the neighborhood. Should the resident they are visiting not be available to permit access, a vehicle turnaround area would be provided. Routine delivery drivers, such as USPS, and emergency services would be provided an access code. It should be noted that access to the proposed subdivision is available pursuant to easements on the recorded BRSP large lot final map (through Lot LS-11).

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. 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 7-1 above.

The proposed project includes a request for an exception to the Placer County standards regarding design speed, as defined by Section 4.03 of the County's Land Development Manual, in two locations. The proposed private street and cul-de-sacs within the project site (Road A) is fully consistent with the BRSP Development Standards. The cul-de-sacs at the east and west ends of Road A would serve as the primary access points for the project's proposed six Low Density Residential lots, three of which are located on the eastern side of the project site and three on the western side. Access for each of the lots would be provided by private 20-foot paved lanes (Lanes B and C) located within a 24-foot private roadway easement.

While each of the proposed private street to private lane transitions is designed with a 25-foot minimum turning radius to allow for full emergency vehicle access, neither lane meets the 25-mph design speed requirement for residential streets, as defined by Section 4.03. However, the terminus and transition from the 40-foot private street to a 20-foot private lane at a fully improved cul-de-sac would naturally serve to slow speeds to 15 mph or less. Additionally, the two locations cannot accommodate a turning radius that adheres to a 25-mph design speed. The design of the transition from the private street to the private lane requires the reduction of speed with a transition to what is intended to be effectively a private lot driveway. As such, the project proposal requests a design exception to the 25-mph design speed requirement to use a 15-mph design speed at the defined locations of each end of the private street (Road A).

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.

Three emergency vehicle access (EVA) roads are planned for the project area. The EVA roads would provide emergency vehicle access to the project site and serve as secondary evacuation routes for the public if Bickford Ranch Road and other primary roads in the area are obstructed or heavily congested. BRSP Phase 1 would include construction of the following planned EVA locations: Clark Tunnel Road to SR 193, and the southernmost portion of the BRSP to Woodsdale Court in Penryn. All internal roadways proposed as part of the project would be at least 20 feet in width, which is substantially wide enough to accommodate emergency vehicles. In addition, the proposed gated access would be required to comply with the emergency vehicle access conditions established by Section 15.04.580 of the Placer County Code.

### Conclusion

Based on the above, the proposed internal circulation system and roadway improvements would be designed to minimize hazardous roadway design features, and the project would not introduce incompatible uses to area roadways. In addition, adequate emergency access would be available. Therefore, a **less-than-significant** impact would occur.



Mitigation Measure(s)

*None required.*

**Cumulative Impacts and Mitigation Measures**

For further detail related to the cumulative setting of the proposed project, refer to Chapter 9, Statutorily Required Sections, of this EIR.

It should be noted that increased traffic volumes on local roadway facilities under cumulative conditions would not substantially alter performance related to 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 7-2. 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.

Similarly, the VMT impact analysis for Existing Plus Project conditions included under Impact 7-3 would also apply to Cumulative Plus Project conditions. The VMT significance threshold compares project-generated VMT per service population to that of existing local and regional development. The VMT comparison is useful because the comparison provides information regarding how the project aligns with long-term environmental goals related to VMT established based on existing development levels. Use of VMT significance thresholds based on existing development levels is recommended in the OPR's Technical Advisory. The Technical Advisory indicates that VMT efficiency metrics, such as VMT per service population, are not appropriate for CEQA cumulative analysis. Instead, the Technical Advisory recommends that an impact finding from an efficiency-based project-specific VMT analysis (i.e., Existing Plus Project conditions) would imply an identical impact finding for a cumulative VMT analysis.<sup>11</sup> An example provided by OPR explains that a project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. Therefore, an analysis of VMT is not presented in this section as the conclusion would remain identical to that presented under Impact 7-3.

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<sup>11</sup> See *Placer County Transportation Study Guidelines*, November 2020, pg. 24, for similar determination.



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## **8. WILDFIRE**

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## 8. WILDFIRE

### 8.1 INTRODUCTION

The Wildfire chapter of the EIR summarizes the existing wildfire setting and identifies the wildfire potential within the project area. The chapter includes a review of planned fuel treatments projects such as mechanical thinning and prescribed fire within the region and consideration of site-specific factors that may affect the wildfire potential at the project site. The majority of the analysis presented below is based on a Fire Safe Plan (FSP) prepared for the proposed project (see Appendix G to this EIR).<sup>1</sup>

### 8.2 EXISTING ENVIRONMENTAL SETTING

The following section describes the existing wildfire setting in the project region.

#### Wildland Fire Hazard Characteristics

The threat of wildfire exposure to people, critical infrastructure, structures and communities is based upon a comprehensive vulnerability assessment of an area. The vulnerability assessment is usually completed through the evaluation of both fire hazard and fire risk factors. The term “hazard” describes the density of live or dead vegetation that could be ignited by the various fire risks or causes that can increase a fire’s intensity or rate of spread such as topography or weather conditions. The term “risk” describes the potential damage a fire can do to structures, critical assets/infrastructure and other values at risk in individual open space areas and other wildland urban interface (WUI) areas. The fire risk ratings are divided into low, moderate, high, or very high dependent on the existing conditions.

Land owners, managers and fire officials need to consider the potential wildfire hazard and risk factors that could make their community vulnerable to a wildfire when making land management and development decisions in fire-prone areas. The assessment also aids fire agencies in the preparation of pre-incident plans and resource deployment actions such as fire equipment, staffing levels, and resource placement during critical fire periods. The assessment should consider both existing conditions such as vegetation, topography, and climate, and the future built environment, including the size and configuration of the WUI, proximity of structures to the WUI, defensible space, emergency access, and water supply.

The following section includes a discussion of the wildfire classifications of the site and the common characteristics associated with wildfire potential.

#### **Wildfire Classifications**

Lands in the State are classified by the Director of the California Department of Forestry and Fire Protection (CAL FIRE) in accordance with the severity of wildfire hazard expected to prevail in certain areas and the responsibility for fire protection. The classifications allow for the appropriate measures to be identified to reduce the potential for losses to life, property, and resources from wildfire.

<sup>1</sup> Phillips Consulting Services. *The Ridge Subdivision Project Fire Safe Plan*. September 2019.



As shown in Figure 8-1, the project site is located within a State Responsibility Area (SRA), which is an area classified by CAL FIRE in which the financial responsibility of preventing and suppressing wildfire is primarily the responsibility of the State. Public Resources Code (PRC) 4201 to 4204 directs CAL FIRE to map fire hazards within SRAs based on relevant factors such as fuels, terrain, and weather. The hazards are described according to their potential for causing ignitions to buildings. The zones, referred to as Fire Hazard Severity Zones (FHSZ), provide the basis for application of various mitigation strategies to reduce risks to buildings associated with wildland fires. As also shown Figure 8-1, the project site is located on land that is classified as being within a Moderate FHSZ by CAL FIRE.

The zones also relate to the requirements for building codes designed to reduce the ignition potential to buildings in the WUI Zone. WUI zones are areas in which the local fire warden determines the topographical features, vegetation fuel types, local weather conditions, and prevailing winds can result in the potential for ignition of structures within the area from flames and firebrands of a wildland fire. According to the FSP, CAL FIRE and the Penryn Fire Protection District (PFPD) have designated the hillside area encompassing the project site as a potential WUI Zone, should buildings be constructed in the area. The WUI Zone includes the following undeveloped areas that could increase risk of fire spreading to the project site, due to topography and vegetation types present: (1) the La Faille Ranch area to the north that forms a canyon below the project site; (2) an approximately 125-acre designated open space area proposed for the Bickford Ranch Specific Plan (BRSP) to the west of the project site; and (3) an approximately 80-acre designated open space area proposed for the BRSP to the east of the project site. The open space and undeveloped areas north of Bickford Ranch Road near the project site consist of a series of small canyons and drainages that flow north towards State Route (SR) 193. The canyons in the area have steep topography on both sides of the drainage and extensive vegetation and tree canopies in most areas, which creates the potential for rapid wildfire growth that could quickly reach the project site. The open space and undeveloped areas are also of concern to CAL FIRE and the PFPD due to the steep slopes of the adjacent canyon that limit fire apparatus access and which could potentially create a “chimney effect” condition during intense wildland fire activity. The chimney effect, also known as the stack effect, involves the movement of air caused by displacement due to buoyancy, which creates an air current and could exacerbate fire conditions.

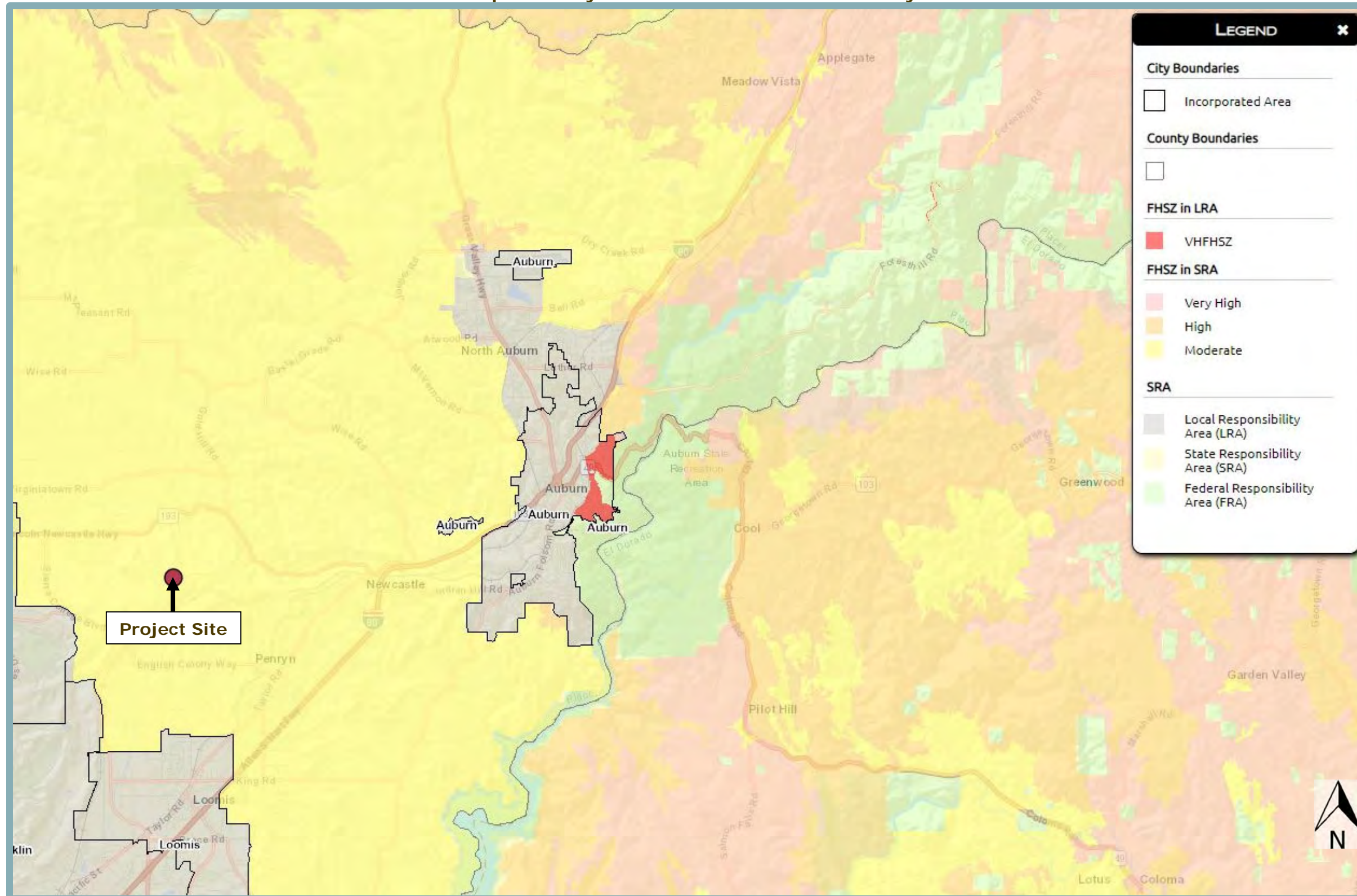
### **Topography and Vegetation**

As discussed in the Introduction chapter of this EIR, the CEQA Baseline for this EIR analysis has been adjusted to assume development of Phase 1 of the BRSP, which is estimated to include development of 1,010 single-family units, as well as associated backbone roadway, water, sewer, and storm drainage infrastructure. The primary backbone roadway would be the two-lane Bickford Ranch Road, which would provide access to Phase 1 of the BRSP and the project site from Sierra College Boulevard to the west and run in an east-to-west direction. The terminus of Bickford Ranch Road after completion of Phase 1 BRSP improvements would stop short of the project site, leaving approximately 400 feet of unpaved roadway between the terminus and the southwestern corner of the project site. The 400-foot segment would either be constructed during commencement of Phase 2 of BRSP, or, depending on the timing of BRSP Phase 2, potentially by the proposed project applicant. Therefore, the vegetated terrain currently existing to the west of the project site is assumed to be developed with buildout of BRSP Phase 1 under the adjusted baseline. Aside from the areas planned for BRSP Phase 1, the region surrounding the project site would still consist of wildfire fuel sources, including the area to the north associated with the La Faille Ranch property and the undeveloped areas to the east and south of the project site.





**Figure 8-1**  
**State Responsibility Areas and Fire Hazard Severity Zones**



Topography can play a significant role in wildfire risk given that fires burn faster uphill than downhill because the fuels above the fire are brought into closer contact with upward moving flames. In addition, the process of heat transfer is influenced by topography (slope and aspect). Because heat rises (convection), heat transfer through convection tends to move upward. During wildfires, burning materials on the forest floor create convection currents that preheat the leaves and branches of shrubs and trees above the fire. Heat transfer, therefore, occurs more rapidly through fuels located on the incline, causing a fire to travel more quickly upslope than downslope. The vertical air currents can also lift burning materials. The floating embers, also called firebrands, can settle in unburned areas ahead of the fire and start small fires. The advancing embers, known as spotting, can result in rapid advancement of the fire.

Topography varies across the project site from gentle slopes to steep slopes. Site elevations range from approximately 720 feet near the northwest corner of the site to 815 feet near the southeast corner. The southern portion of the site and the outer edges of the western and eastern arms of the site's horseshoe-shaped footprint are relatively flat to gently sloping. The project site is located at the top of a topographical drainage that forms a canyon with steep slopes (greater than 30 percent) bordering the project site. The steep slopes continue off-site northerly toward the Caperton Canal, La Faille Ranch property, and the valley floor. As mentioned previously, the steep slopes and canyon create a natural chimney effect that can enhance fire intensity and spread to hazardous levels.

Vegetation on the project site and vicinity is dominated by non-native annual grassland and oak woodlands. Portions of the project site are heavily wooded while others have a fairly extensive grassland understory. The surrounding area is composed largely of blue oak woodland, non-native grasslands, and mixed interior live oak-blue oak woodland. The small valley located between the east and west ridges is composed largely of annual grassland. The oak woodlands and underlying grasslands provide the potential for an intense wildfire, particularly when combined with the steep topography and critical fire weather conditions. Critical fire weather conditions are described below.

## **Climate**

Predominant weather patterns in southwest Placer County are characterized by hot dry summers and mild to cool winters. Dry conditions traditionally begin around the end of May and last into October. An average summer day is 90 to 95 degrees Fahrenheit, winds from the southwest at zero to 10 miles per hour (mph), and relative humidity levels in the 15 to 25 percent range. On average, the strongest wind speeds in south Placer County occur in March through May, but winds can exceed 20 mph during the fire season. Summer lightning storms are infrequent in the area. Critical fire weather conditions are becoming more frequent in the region starting in July and extending through October each year. Critical fire weather conditions are typically associated with very low humidity and strong north winds. The ignition potential and fire spread rates during critical fire weather conditions is high and can easily lead to large wildfires within the project area.

## **Prevailing Winds**

The predominant wind direction at the project site area is from the west to east. The predominant wind direction suggests, for example, that a fire burning in the forested terrain west of the project site could burn through the site due to the prevailing winds.



## Fire History

According to the FSP, five significant wildfires have occurred in the project vicinity since 1950, with the majority of the fires originating near existing roadways (see Table 8-1).

<b>Year</b>	<b>Fire Name</b>	<b>Acres Damaged</b>
1950	Beacon	500+
2003	Sierra	27
2008	Gladding	1,090
2008	Ravine	343
2013	Sierra	19
2021	River	2,619

**Source: Phillips Consulting Services. The Ridge Subdivision Project Fire Safe Plan. September 2019.**

The three most destructive fires in the project vicinity include the 1950 Beacon fire, which burned the project site and much of the areas planned for the BRSP; the 2008 Gladding fire, the most destructive of the project vicinity fires; and the 2008 Ravine fire, which resulted in 343 acres damaged. Common fire ignition sources have included arson, equipment failure, escaped debris burns, and vehicle-related causes.

The Placer County Fire Department (PCFD), with the assistance of local landowners, has implemented a voluntary roadside disking program in the southwestern Placer County area to reduce the probability of a wildfire spreading to undeveloped lands. Disking includes an area approximately 20 feet wide along existing roadside properties. According to statistics provided for 2011, the voluntary program has led to a 50 percent reduction of roadside wildland fires burning more than one acre of land in the southwest area of the County.

## Fuel Treatment Efforts

Fuel treatment efforts have been ongoing within the project region. Forest fuel treatments are used by managers for ecological restoration and reducing fire hazard. Due to past management decisions and long-term fire exclusion, forests are denser and are susceptible to severe wildfires. Fuel treatments aim to reduce the intensity and size of wildfires, increase species diversity, and restore forests to their historical condition. Two common types of treatments include:

- Mechanical thinning: cutting and clearing wood and brush; and
- Prescribed fire: burning existing fuel before more accumulates.

Based on proximity to homes and communities one treatment may be used over the other. Several research studies show a combination of thinning followed by burning of surface fuels is most effective in promoting forest resilience to wildfire.<sup>2</sup>

Implementation of the Placer County Conservation Program (PCCP) would result in the permanent protection of approximately 50,000 acres in conservation reserves by the year 2060. Preservation of the protected lands require that they are managed to reduce their susceptibility to wildfire. Current fuel reduction efforts (i.e., the Chipper Program) and new programs (i.e., Biomass

<sup>2</sup> For example, see U.S. Department of Agriculture/Forest Service, Rocky Mountain Research Station. *Review of Fuel Treatment Effectiveness in Forests and Rangelands and a Case Study from the 2007 Megafires in Central Idaho USA (General Technical Report RMRS-GTR-252)*. January 2011.



Box Program) would accomplish fuel reduction treatment efforts. The Placer County Resource Conservation's District (RCD) Chipper Program provides low-cost brush chipping for residents in Placer County. The Chipper Program continues to be available for local residents seeking to reduce fire hazards and improve defensible space around buildings and structures. The Chipper Program is funded through grants secured through a partnership with the RCD, Placer County Office of Emergency Services (OES), the Placer County Sheriff's Office, the Placer County Air Pollution Control District, and CAL FIRE.<sup>3</sup>

The Placer County Wildfire Protection and Biomass Utilization Program (i.e., Biomass Box Program) was established in 2006 to help protect residents, communities, forests, and important forest resources from the threat of wildfire and to efficiently manage and use biomass. Many wildfire protection activities and projects involve the cutting of trees and brush to reduce wildfire hazard. Trees large enough to have commercial value as lumber are transported to mills for processing, but brush, small trees, and the limbs and tops of larger trees are excess biomass that has most often been disposed of by open burning to complete the necessary reduction of fire hazard. Placer County has recognized that a better option is to use the excess biomass for generation of energy. Using excess biomass for generation of energy provides benefits through offsetting fossil fuel energy generation, reducing air pollution emissions, and increasing support for jobs associated with the biomass utilization. Use of biomass for energy also has a potential to help support the economic sustainability of forest management and hazard reduction projects designed to reduce the negative effects of wildfires.<sup>4</sup>

### **Public Safety Power Shutoffs**

In an effort to prevent fires, the electrical services provider for southern Placer County, Pacific Gas & Electric Co. (PG&E), initiated public safety power shutoffs (PSPS) in 2019, which may continue in subsequent years until fire risks associated with power lines are decreased. PSPS events involve PG&E turning off electrical service during times when the weather is predicted to have a heightened fire risk from gusty winds and dry conditions. Dependent on the fire risks, the power outage events may occur in specific areas or for all PG&E customers across the County.

The California Public Utilities Commission adopted the High Fire-Threat District Map in 2018,<sup>5</sup> which serves to assist in the public's protection from potential fire hazards associated with overhead powerline facilities and nearby aerial communication facilities by delineating fire-threat areas in the State. Fire-threat areas are designated as Tier 1, 2, or 3, with Tier 1 defined as a High Hazard Zone, Tier 2 as an Elevated Hazard Zone, and Tier 3 as an Extreme Hazard Zone. The project site is within a Tier 2-designated area, and, thus, could be prone to PSPS events.<sup>6</sup> The PSPS events that occurred in Placer County for 2019 impacted large portions of the County

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<sup>3</sup> Placer County. *Chipper Program Available for Placer County Residents*. November 2, 2012. Available at: [https://www.placer.ca.gov/483/\\_1122012#:~:text=Chipper%20Program%20Available%20for%20Placer%20County%20Residents&text=The%20program%2C%20managed%20by%20the,by%20state%20and%20federal%20grants.&text=In%20addition%2C%20state%20law%20also,defensible%20space%20clearing%20around%20residences](https://www.placer.ca.gov/483/_1122012#:~:text=Chipper%20Program%20Available%20for%20Placer%20County%20Residents&text=The%20program%2C%20managed%20by%20the,by%20state%20and%20federal%20grants.&text=In%20addition%2C%20state%20law%20also,defensible%20space%20clearing%20around%20residences). Accessed April 2021.

<sup>4</sup> Placer County Community Development Resource Agency. *Biomass and Wildfire Protection*. Available at: <https://www.placer.ca.gov/2881/Biomass-Wildfire-Protection#:~:text=The%20Placer%20County%20Wildfire%20Protection,large%20component%20of%20that%20threat>. Accessed April 2021.

<sup>5</sup> California Public Utilities Commission. *Fire-Threat Maps and Fire-Safety Regulations Proceedings*. Available at: <https://www.cpuc.ca.gov/FireThreatMaps>. Accessed June 2021.

<sup>6</sup> Pioneer Community Energy. *Public Safety Power Shutoffs*. Available at: <http://pioneercommunityenergy.ca.gov/need-to-know/pssp-events/>. Accessed April 2021.



for a total of 10 days.<sup>7</sup> Throughout the PSPS events, emergency services in Placer County remained functional with back-up power supplies, but many businesses and agencies were not operational, which resulted in inadequate access to medical services and exposure to excessive heat or cold.

### **Fire Agencies and Resources**

Several fire agencies provide fire protection services within the project area, including both wildland fire and structural fire response. Responsibility for wildland fire suppression at the project site is the sole responsibility of the State (i.e., CAL FIRE), given that the project site is located within a SRA. Fire and rescue service for the project site are the responsibility of the PFPD. The BRSP and adjoining unincorporated areas are also served by the PCFD.

### **California Department of Forestry and Fire Protection**

Wildland fire protection is provided either by the State (through CAL FIRE) or the federal government (through the U.S. Forest Service). The State has direct protection responsibility for all State and private wildlands (or forest lands) in designated areas, and provides support and assistance to local jurisdictions in other areas of the State. CAL FIRE is responsible for wildland fire response at the project site. The CAL FIRE Nevada-Yuba-Placer Ranger Unit serves the project area.

The nearest CAL FIRE station to the project site is Station No. 70, located at 1112 Wise Road, Lincoln, approximately 4.93 miles northwest of the project site. The CAL FIRE station is jointly operated with the PCFD and provides services to the unincorporated areas of Placer County, including the BRSP area. Station 70 has one Type I/II fire engine staffed daily by a minimum of two full-time firefighters. The full-time firefighters are augmented by seasonal and volunteer firefighters that support the emergency response capabilities of CAL FIRE and PCFD. Development of the proposed project is dependent upon the installation of Bickford Ranch Road and associated utilities (water and sewer trunk mains) through Phase 1 of the BRSP and extension of such infrastructure through a portion of BRSP Phase 2 to the project entry. After completion of Bickford Ranch Road, response times from CAL FIRE Station No. 70 to the project site would be on average 20 minutes or less for all wildfires and other emergencies.

In addition to legal responsibility for wildland fires in SRAs, where the project site is located, CAL FIRE has mutual and/or automatic aid agreements, and, thus, may assist local fire agencies with structural fires and medical incidents under the closest resource concept. CAL FIRE strives to meet the National Fire Protection Association (NFPA) 1710 guideline for fire department response time of five minutes 90 percent of the time.

### **Penryn Fire Protection District**

Fire and rescue services to the project site are the responsibility of the PFPD. Existing mutual aid agreements between PCFD and PFPD are in place. The closest fire station to the project site is the PFPD Station No. 38, located on Church Street in the Penryn community. Services from the PFPD are provided by Type I/III fire engines staffed daily by a minimum of two full-time firefighters. Upon completion of Phase 1 of Bickford Ranch Road to the project site, response times from PFPD Station No. 38 would be on average 10 minutes or less for all fire and rescue emergencies,

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<sup>7</sup> Placer County. *Placer County seeks alternatives to PG&E power shutoffs*. Available at: <https://www.placer.ca.gov/6207/Placer-seeks-help-with-power-shutoffs>. Accessed April 2021.



which is consistent with the average response time encouraged for local fire protection agencies by the County, as set forth in Policy 4.1.2 of the County's General Plan.<sup>8</sup>

### **Placer County Fire Department**

Fire and rescue services to the BRSP and adjoining unincorporated areas are served by the PCFD. The PCFD services are administered by the County OES and are responsible for fire protection and rescue and emergency response services for approximately 475 square miles of unincorporated area in Placer County. 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 CAL FIRE and eight volunteer companies, all operated by CAL FIRE under the name PCFD. Services provided include fire suppression, emergency medical, fire prevention, and rescue, among others. Additionally, PCFD, by way of its contract with CAL FIRE, conducts fire inspections and assists with land development functions within the PCFD 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 PCFD calls for service, including 42 permanent personnel assigned to serve PCFD stations full-time. As noted above, the nearest CAL FIRE station to the project site is Station 70, located approximately 4.93 miles northwest of the project site.

### **Emergency Vehicle Access**

Fire access can be described as the means by which firefighters can enter an area to quickly mitigate a wildfire incident prior to spread to adjacent properties and critical infrastructure at risk. The primary BRSP roadway, Bickford Ranch Road, would border the southern edge of the project site. Access to the project site would be through a connection to Bickford Ranch Road. The main emergency response route into the BRSP area and the project site would be Sierra College Boulevard. Sierra College Boulevard is a public road that would connect to Bickford Ranch Road.

The existing and planned roads that would serve as primary evacuation routes during a wildfire event would include SR 193, Sierra College Boulevard, Bickford Ranch Road, and School Ranch Road.

Additionally, the BRSP area would also be served by a network of arterial, collector, and local streets. Three BRSP Emergency Vehicle Access (EVA) roads would provide EVA to the project site and would serve as secondary evacuation routes for the public, if and when Bickford Ranch Road and the other primary roads in the area are obstructed or heavily congested during an emergency. The BRSP EVA locations include (1) Clark Tunnel Road (north) to SR 193, which is situated immediately northwest of the project site; (2) Clark Tunnel Road (south) at the southeast corner of the BRSP area; and (3) the southernmost portion of the BRSP area to Woodsdale Court in Penryn.

## **8.3 REGULATORY CONTEXT**

The following sections provide a summary of the federal, State and local regulations pertaining to wildfire that are applicable to the proposed project.

<sup>8</sup> Phillips Consulting Services . *The Ridge Subdivision Project Fire Safe Plan*. September 2019, pg. 2-4.



## **Federal Regulations**

The following are the federal environmental laws relevant to wildfire.

### **Healthy Forest Reforestation Act**

In recognition of widespread declining forest health, the Healthy Forest Restoration Act (HFRA) was passed in 2003 to expedite the development and implementation of hazardous fuel reduction projects on federal land. A key component of the HFRA is the development of Community Wildfire Protection Plans (CWPP) as a mechanism for public input and prioritization of fuel reduction projects. A CWPP provides background information about a project area, discussion of community values at risk, community base maps, a fire risk assessment, and recommendations that identify treatment areas for reducing fuels and promoting education and awareness about wildland fires, as well as monitoring and assessment strategies. The Placer County CWPP<sup>9</sup> provides a comprehensive analysis of wildfire-related hazards and risks in the WUI areas covered by the Greater Auburn Area, Foresthill/Iowa Hill, Lincoln, and Placer Sierra Fire Safe Councils and includes recommendations to assist stakeholders in preventing and/or reducing the threat of wildfires.

## **State Regulations**

The following are the State environmental laws and policies relevant to wildfire.

### **State Responsibility Area**

Pursuant to PRC Sections 4125-4128, the Board of Forestry and Fire Protection classifies all lands in the State for the purposes of determining areas in which the financial responsibility of preventing and suppressing wildfire is primarily the responsibility of the State. The classified lands are termed SRA.

### **Fire Hazard Severity Zones**

FHSZs are geographical areas designated pursuant to California PRC Sections 4201 through 4204 and classified as Very High, High, or Moderate in SRAs or as Local Agency Very High FHSZs designated pursuant to California Government Code Sections 51175 through 51189.

The California Code of Regulations (CCR), Title 14, Section 1280 entitles the maps of the geographical areas as “Maps of the Fire Hazard Severity Zones in the State Responsibility Area of California.”

### **California Public Resources Code Section 4291**

California PRC Section 4291 sets forth minimum fire safety standards for development in or adjoining mountainous areas and forest-covered lands. Provisions of California PRC Section 4291 that would apply to development of the proposed project include, but are not necessarily limited to the following:

- Defensible space must be maintained 100 feet from the side, front and rear of a structure, or up to the property line where the property line is less than 100 feet from the structure;
- Any tree, shrub, or other plant adjacent to or overhanging a building must be free of dead or dying wood;
- The roof of any structure must be free of leaves, needles, or other vegetative materials;

<sup>9</sup> Placer County. *Placer County Community Wildfire Protection Plan*. December 2012.



- Prior to constructing a new building, the owner shall obtain a certification from the local building official that the dwelling or structure, as proposed to be built, complies with all applicable State and local building standards; and
- Prior to final inspection approval of any building, the fire department must inspect the building and the fire suppression facilities to certify that the fire suppression improvements comply with the California Building Code and fire department service requirements.

### **California Building Code – Chapter 7A (Materials and Construction Methods for Exterior Wildfire Exposure)**

Chapter 7A of the California Building Code (CBC) includes definitions and standards for building materials, systems, and/or assemblies to be used for the exterior design and construction of new buildings located within a WUI Fire Area, which is defined by the CBC as a geographical area identified by the State as a “Fire Hazard Severity Zone” in accordance with the PRC Sections 4201 through 4204 and Government Code Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires.

Chapter 7A of the CBC is intended to establish minimum standards for the protection of life and property by increasing the ability of a building located in any FHSZ within SRAs or any WUI Fire Area to resist the intrusion of flames or burning embers projected by a vegetation fire and contributes to a systematic reduction in conflagration losses. All new buildings to be located in a FHSZ or WUI Fire Area designated by the enforcing agency for which an application for a building permit is submitted on or after July 1, 2008 are required to comply with Chapter 7A of the CBC. Examples of the Chapter 7A standards include, but are not limited to, use of ignition-resistant materials, fire-intrusion design of roofing and vents, and use of glazed exterior windows and doors.

### **Local Regulations**

The following local goals and policies related to wildfire are applicable to the proposed project.

### **Placer County General Plan**

The following applicable goals and policies related to wildfire are from the Placer County General Plan.

### **Public Facilities and Services Element**

Goal 4.1 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 4.1.1 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 4.1.2 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 4.1.3	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 4.1.4	The County shall work with local fire protection agencies to identify key fire loss problems and design appropriate fire safety education program to reduce fire incidents and losses.
Policy 4.1.5	The County shall work with local fire protection agencies and implement ordinances to control fire losses and fire protection costs through continued use of automatic fire detection, control, and suppression systems.
Policy 4.1.7	The County shall maintain and strengthen automatic aid agreements to maximize efficient use of available resources.
Policy 4.1.8	The County shall work with local fire protection agencies to maintain a pre-fire planning program with selected high-risk occupancies reviewed at least annually.
Policy 4.1.9	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.
Policy 4.1.10	The County shall work with local fire protection agencies to inventory and eliminate structurally unsafe and fire-hazardous housing units that are beyond repair or rehabilitation.
Policy 4.1.11	The County shall encourage local fire protection agencies to provide and maintain advanced levels of emergency medical services (EMS) to the public.

### Health and Safety Element

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.1	The County shall ensure that development in high-fire hazard areas is designed and constructed in a manner that minimizes the risk from fire hazards and meets all applicable state and County fire standards.



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- Policy 8.C.2            The County shall require that discretionary permits for new development in fire hazard areas be conditioned to include requirements for fire-resistant vegetation, cleared fire breaks, or a long-term comprehensive fuel management program. Fire hazard reduction measures shall be incorporated into the design of development projects in fire hazard areas.
- 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.4            The County shall refer development proposals in the unincorporated County to the appropriate local fire agencies for review for compliance with fire safety standards. If dual responsibility exists, then both agencies shall review and comment relative to their area of responsibility. If standards are different or conflicting, the more stringent standards shall be applied.
- Policy 8.C.7            The County shall work with local fire protection agencies, the California Department of Forestry and Fire Protection, and the U.S. Forest Service to promote the maintenance of existing fuel breaks and emergency access routes for effective fire suppression.
- Policy 8.C.8            The County shall encourage and promote installation and maintenance of smoke detectors in existing residences and commercial facilities that were constructed prior to the requirement for their installation.
- Policy 8.C.9            The County shall work with local fire agencies to develop high-visibility fire prevention programs, including those offering voluntary home inspections and promoting awareness of home fire prevention measures.
- 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.
- Policy 8.C.12           The County shall support annexations and consolidations of fire districts and services to improve service delivery to the public.
- Goal 8.E                To ensure the maintenance of an Emergency Management Program to effectively prepare for, respond to, recover from, and mitigate the effects of natural or technological disasters.



Policy 8.E.1                      The County shall continue to maintain, periodically update, and test the effectiveness of its Emergency Operations Plan.

### **Placer County Government Code**

The following applicable codes related to wildfire are from the Placer County Government Code.

#### Building Code

Buildings constructed within the project site would be subject to the current building standards found in both the CBC and Chapter 15 of the Placer County Code. The PFPD enforces standards associated with the installation of residential fire sprinkler systems and the installation of Class A roofing materials within all residential units. Both State and local requirements would significantly assist in reducing the threat of a wildfire spreading from undeveloped land to a nearby building.

#### Fire Code

Placer County has adopted the CBC, Title 24 of the CCR, and the California Fire Code (CFC) (Sections 15.04.700 and 15.04.710 Fire Code Amendment). The CFC addresses emergency access, access gates, sprinkler systems, fire alarms within buildings, and construction of access roads to accommodate fire apparatus. The CFC requires that an automatic fire sprinkler and/or fire extinguishing system be installed throughout new one- and two-family dwellings and commercial buildings 3,600 square feet and larger.

#### Fire Prevention Code

Chapter 9, Article 9.32, Part 3 of the Placer County Code requires the maintenance of "fire breaks" around structures and the clearing of roofs to prevent structural fires in the WUI. The provisions would apply to all structures built within the project site.

Chapter 9, Article 9.32, Part 4 of the Placer County Code requires that hazardous vegetation be abated on unimproved parcels in the County. Abatement of hazardous fuels is required if the unimproved parcel is adjacent to an improved parcel where implementation of required defensible space would extend onto the unimproved parcel. Abatement is also required along roads if, in the opinion of the County fire warden, the presence of hazardous fuels constitutes a potential obstacle to emergency access. The shaded fuel break on the adjacent La Faille Ranch property must be compatible with the fire prevention code requirements.

### **Placer County Office of Emergency Services**

Placer County's OES provides emergency management services in cooperation with local cities and special districts, including fire agencies. During an active incident, such as fire or flood, the OES helps initiate first responses. The functions of the OES include emergency planning, response, recovery, and mitigation, including preparation of a Local Hazard Mitigation Plan (LHMP). The Placer County LHMP, which was updated in 2016, is a joint effort between Placer County and 15 other jurisdictions, and is intended to guide hazard mitigation planning to reduce the effects of hazard events, including wildfires.

### **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 LHMP 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 is in the process of updating the March 2016 LHMP.<sup>10</sup>

### **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.<sup>11</sup> 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.

### **Placer County Community Wildfire Protection Plan**

The Placer County CWPP is the result of a community-wide planning effort that included extensive field data gathering, compilation of existing documents and geographic information system (GIS) data, and scientific analyses and recommendations designed to reduce the threat of wildfire-related damages to values at risk. The CWPP provides valuable information related to wildfire to citizens, policy makers, and public agencies throughout western Placer County. The primary goal of the CWPP is to protect human life, private property, essential infrastructure and natural resources through the implementation of fire prevention projects that work to increase public awareness, improve forest health, sustain local wildlife and preserve the natural beauty of the area through a shared responsibility concept. To that end, the CWPP identified recommendations to aid stake-holders in preventing and/or reducing the threat of wildfire in the County.

### **Placer County Sustainability Plan**

The County adopted the Placer County Sustainability Plan (PCSP) : A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy on January 28, 2020. The primary goal for the adaptation component of the PCSP is to create a resilient Placer County that can adapt to the hazards created or exacerbated by climate change. To accomplish this goal, the PCSP provides several

<sup>10</sup> Placer County. *Local Hazard Mitigation Plan Update*. March 2016.

<sup>11</sup> Placer County Office of Emergency Services. *Placer County and Placer Operational Area Emergency Operations Plan*. Adopted December 14, 2010.



goals, strategies, and actions that promote coordination among agencies, protection of buildings, and implementation of mitigation measures to reduce wildfire activity in the County. The following PCSP strategies and actions are related to wildfire.

#### Strategy WF-5

Require all new large development projects in Moderate, High, or Very High Fire Hazard Severity Zones to have multiple points of ingress and egress to improve evacuations and emergency response access.

#### Strategy WF-7

Explore requiring fire-safe improvements before issuing a building permit or other formal approval for significant retrofits to buildings in identified Very High and High Fire Hazard Severity Zones, including installation of sprinklers and fire-safe exterior materials as feasible.

#### Action 1

Coordinate with the Placer County Fire Safe Alliance and local Fire Safe Councils to encourage new and existing planned developments in the WUI and other areas with elevated wildfire risk to join the Placer County Firewise Communities program.

## **8.4 IMPACTS AND MITIGATION MEASURES**

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

### **Standards of Significance**

Consistent with Appendix G of the CEQA Guidelines, Section XX, Wildfire, determination of significant impacts related to wildfire is based on whether the proposed project would result in any of the following, if located in or near SRAs or lands classified as Very High FHSZs:

- Substantially impair an adopted emergency response plan or emergency evacuation plan;
- Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;
- Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or
- Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

### **Method of Analysis**

The impact analysis contained in this chapter is primarily based on the FSP prepared for the proposed project (see Appendix G to this EIR). The FSP was prepared to identify and provide measures to minimize the risk of wildland fires within and adjacent to the developed project site, as well as to help ensure adequate access is available to fire-prone areas in the event of a fire. The FSP also provides recommended action items to address and reduce the potential effects of wildfire at the project site and/or in the vicinity. As part of the FSP preparation, four technical memoranda were prepared by Ronald A. Phillips of Phillips Consulting Services, former Fire Chief with 35 years of experience in fire services in California. The technical memoranda include the



following: Fire Risk Analysis; Hazardous Fuel Reduction Plan and Recommended Maintenance Frequency; Wildfire Evacuation Planning and Fire Safety Zones; and Fire Safety Plan Recommendations. The information, analysis, and measures identified in the FSP are based on the memoranda, which are included with the FSP in Appendix G to this EIR.

The FSP includes a risk analysis of the project site, which was performed to determine the relative risk of wildfire associated with the project site, the extent of the wildfire hazards present on-site, and applicable mitigation measures as outlined in NFPA Standard No. 1144, Assessing Wildland Fire Hazards in the Structure Ignition Zone. Risk factors examined include the following:

- Fire Hazard Severity Rating;
- Local fire department capabilities;
- Local fire history;
- Size/Configuration of the WUI adjacent to the project site;
- Proximity of proposed structures within the project site to the WUI;
- Building construction in compliance with CBC Chapter 7A;
- Defensible space in compliance with PRC Section 4291;
- Emergency access to the WUI;
- Water supply for fire suppression; and
- Critical assets/infrastructure at risk.

The fire risk factor scoring for the project site is shown in Table 8-2. When analyzing individual fire risk factor ratings within the project area, the risk analysis used the following terms:

- Low Risk – Fire risk factors present typically do not support rapid fire spread;
- Moderate Risk – Fire risk factors present may support moderate fire spread, but burning ember distribution is limited to less than 0.5-mile;
- High Risk – Fire risk factors present may support rapid fire spread and ember distribution beyond 0.5-mile; and
- Very High Risk – Fire risk factors present may support extreme fire spread and intensity.

The overall risk rating levels are described as Low (zero to 29), Moderate (30 to 59), High (60 to 79), or Very High (80 to 100). Based on the proposed project's total risk factor rating of 57, the overall wildfire risk rating for the project site is Moderate.

As discussed above, the project site is classified as a Moderate FHSZ by CAL FIRE and could be served by the PFPD within the average response time encouraged for local fire protection agencies by the County. Thus, a "Moderate" rating was given for local fire department capabilities. Due to the local fire history within the project vicinity, as discussed above, a "Moderate" rating was given for local fire history. As noted in Impact 8-5 below, response times would be further improved upon completion of a new fire station planned for the BRSP area, which is anticipated to serve The Ridge project upon completion of construction.

The fire risk factor associated with the "Size/Configuration of the WUI" should be considered "High," unless adequate preparedness measures are undertaken by the proposed project and subsequent property owners. Such measures include all structures being constructed to resist exterior wildfire exposure and adequate defensible space being maintained within 300 feet of buildings facing the La Faille Ranch property. See the discussion under Impact 8-2 for further details.



**Table 8-2  
Fire Risk Factor Rating for The Ridge Project**

No.	Risk Factor	Low	Moderate	High	Very High	Total
		0-3	4-6	7-8	9-10	
1	Fire Hazard Severity Rating	-	6	-	-	6
2	Local Fire Department Capabilities	-	6	-	-	6
3	Local Fire History	-	6	-	-	6
4	Size/Configuration of the WUI	-	-	7	-	7
5	Proximity of Structures to WUI	-	-	7	-	7
6	Building Construction Meets CBC Chapter 7A	-	6	-	-	6
7	Defensible Space Complies with PRC Section 4291	-	6	-	-	6
8	Emergency Access to WUI	-	6	-	-	6
9	Water Supply for Fire Suppression	-	6	-	-	6
10	Critical Assets/Infrastructure at Risk	1	-	-	-	1
	Total	1	42	14	0	57/100

**Source: Phillips Consulting Services. The Ridge Subdivision Project Fire Safe Plan. September 2019.**

The fire risk factor associated with the “Proximity of Structures to the WUI” should be considered “High,” unless adequate preparedness measures are undertaken. Such measures include maintaining a 30-foot setback between the primary structure and the WUI Zone and limiting the use of combustible materials such as accessory structures, decks cantilevered over the rear-yard natural slope, and other uses that can contribute to fire spread. See the discussion under Impact 8-2 for further details.

The fire risk factor associated with “Building Construction Meets CBC Chapter 7A” and “Defensible Space Complies with PRC Section 4291” should be considered “Moderate.” Preparedness actions such as ensuring all structures constructed on a property meet current CBC standards, providing adequate defensible space, and the construction and maintenance of a shaded fuel break would limit the risk of wildfire impacts. See the discussion under Impact 8-2 for further details.

The fire risk factor associated with “Emergency Access to WUI” should be considered “Moderate.” Details regarding proposed EVA are presented under Impact 8-1.

The risk factor associated with “Water Supply for Fire Suppression” should be considered “Moderate”. Reliability and maintenance of the water supply is a key factor for the water supply system to work as designed during the height of a wildfire. As discussed in further detail under Impact 8-3, the proposed project is expected to meet the required fire flow demands, minimum operating pressures, and storage capacity to support fire suppression activities during a wildfire. The proposed project would include eight fire hydrants that would be distributed across the site to provide firefighters access to a fire hydrant quickly. All dwellings constructed as part of the proposed project would be protected by a residential fire sprinkler system meeting current CBC design standards, which would reduce the risk of interior fires once a residence is occupied.



The fire risk factor associated with “Critical Assets/Infrastructure at Risk” should be considered “Low”. The only identified infrastructure site of concern during a wildfire impacting the area is the Placer County Water Agency’s (PCWA) Caperton Canal. The canal provides raw water for municipal water and irrigation purposes in the area and may serve both the BRSP area and the proposed project.

The FSP notes that the risk factor ratings do not imply that a community is at greater or less risk due to the overall rating. Fires can, and do, cause significant damage to property even when they occur in areas that may receive an overall low or moderate rating. Failure to maintain adequate defensible space, critical fire weather conditions, and/or lack of available fire suppression resources due to other emergency incidents may cause a fire to increase in intensity and spread beyond the capabilities of firefighters on scene.

### **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.

#### **8-1 Substantially impair an adopted emergency response plan or emergency evacuation plan. Based on the analysis below, the impact is *less than significant*.**

Placer County does not have an adopted emergency evacuation plan; however, the County does have an adopted LHMP and EOP. While the plans do not identify officially designated evacuation routes, as noted above, the LHMP and EOP are intended to provide emergency resources and plans in response to local hazards such as wildfires.

According to the FSP, the primary evacuation routes in the project area would include SR 193, Sierra College Boulevard, Bickford Ranch Road, and School Ranch Road. Sierra College Boulevard would connect to Bickford Ranch Road, which would serve as the primary arterial ingress/egress to the project site. As detailed in the FSP, an evacuation of the project site would be expected to displace fewer than 89 residents, based on the same 2.6 persons per household factor used for the BRSP and the project’s proposed 34 residential lots. In addition, most evacuations due to a wildfire threat are anticipated to be less than 12 hours in duration. Given the capacity of SR 193 and Sierra College Boulevard (about 5,400 vehicles per hour), the number of additional vehicles on area roadways associated with the proposed project during an evacuation event would not substantially affect emergency response, emergency evacuation operations, and/or vehicle speeds on the aforementioned roadways or others in the region.<sup>12</sup>

A gated, 20-foot-wide paved EVA road would connect the proposed internal private residential street with Bickford Ranch Road. The EVA road would be located between Lots 9 and 10, near the southwest portion of the site. Two locked gates for additional EVA purposes would be included as part of the proposed boundary fencing to allow access to and from the project’s private lanes to the access roads designed along or near the project’s common boundaries within the BRSP development. One gated EVA

<sup>12</sup> Fehr and Peers. *Memorandum: The Ridge Subdivision – Response to Comments (Raney Planning & Management)*. August 6, 2020.





is proposed in the northwestern portion of the site, near Lot 31, and another gated EVA is proposed in the northeastern portion of the site, near Lot 32. In addition, the proposed project would connect to the planned EVAs in the BRSP, including Clark Tunnel Road (north) to SR 193, immediately northwest of the project site, Clark Tunnel Road (south) at the southeast corner of the BRSP area, and at the southernmost portion of the BRSP area to Woodsdale Court in Penryn. The BRSP EVA roads would provide necessary EVA to the project site and could serve as secondary evacuation routes for future project residents, if necessary, in the event that Bickford Ranch Road and other primary roads in the vicinity of the project site become obstructed or heavily congested during a wildfire event (see Figure 8-2). Furthermore, during evacuation events, emergency responders would provide active traffic control at intersections, and may close roads, provide detours for through traffic, and/or actively manage available travel lanes to facilitate evacuation away from the emergency.

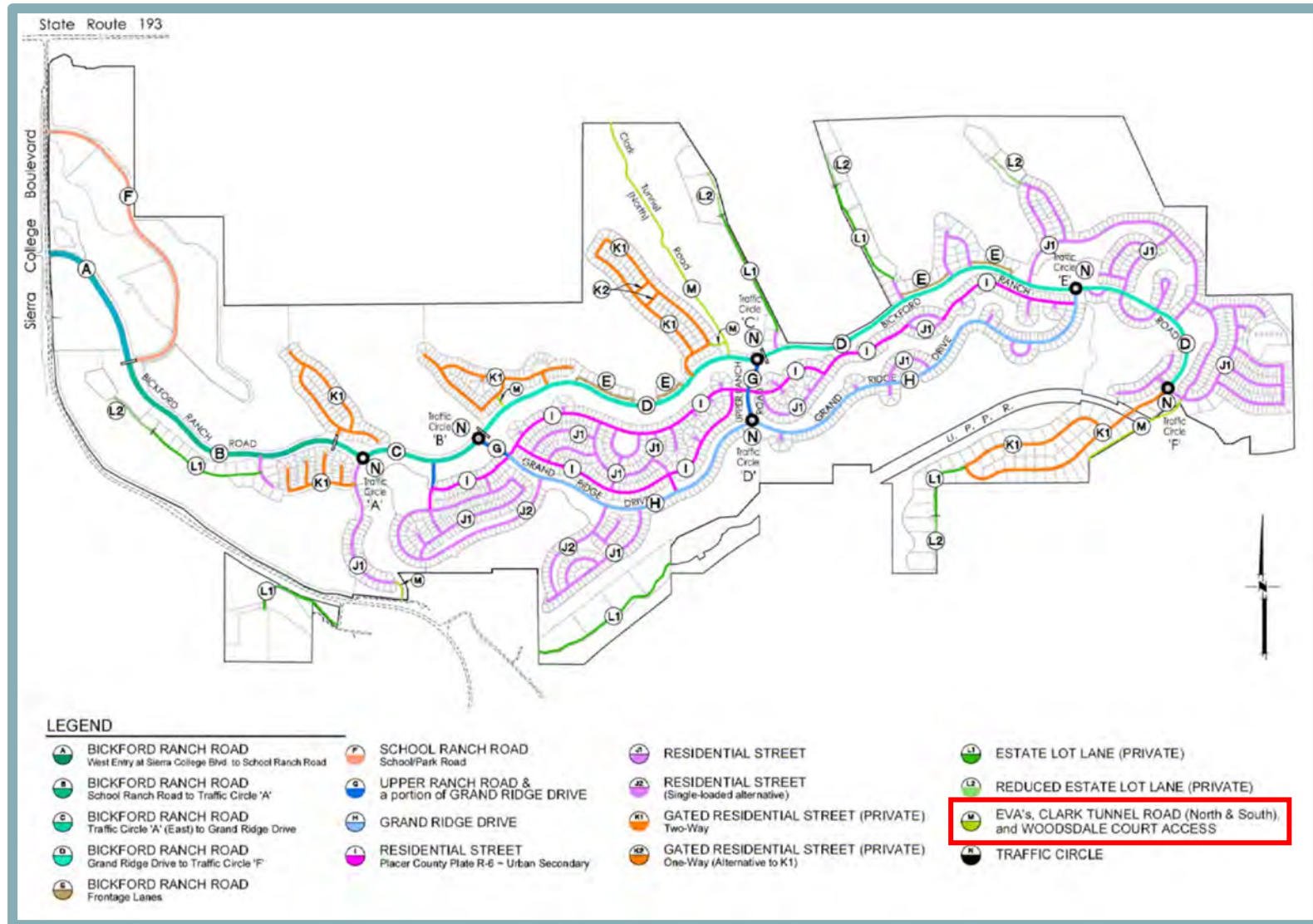
The project's main road would be 40 feet in width and would meet the fire apparatus access requirements found in the CFC. In addition, the two private lanes serving Lots 29 through 31 and Lots 32 through 34 would be 20 feet in width with a 24-foot-wide private easement, meeting the fire apparatus access requirements found in the CFC. Thus, all internal roadways proposed as part of the project would be at least 40 feet in width, which is substantially wide enough to accommodate emergency vehicles. The proposed gated access would be required to comply with the emergency vehicle access conditions established by Section 15.04.580 of the Placer County Code. All proposed access routes within the project site have been reviewed and approved by PFPD and CAL FIRE as part of the preliminary project review process. If any changes are made to the proposed design with respect to width or turning radius, the changes would be reviewed by PFPD and CAL FIRE prior to final approval. Accordingly, the proposed project would provide adequate emergency access to the project site and would not be expected to conflict with any potential evacuation routes.

Furthermore, Action Item 12 of the FSP requires the project applicant and/or the future homeowners association (HOA) of The Ridge to provide a mechanism for distributing information to new homeowners that:

- Encourages homeowners to subscribe to Placer Alert to receive emergency notifications;
- Provides new homeowners with CAL FIRE's Ready, Set, Go! pamphlet;
- Provides public safety updates and fire-related information in HOA forums, such as an HOA website, newsletters, and/or at HOA meetings, as needed, including links to OES and/or other appropriate emergency websites during emergencies;
- Encourages homeowners to assemble Emergency Supply Kits, with one kept in the house, one in the car, and one for pets;
- Encourages homeowners to have fire extinguishers on hand, with everyone in the household trained to use them; to keep emergency contact numbers and a portable radio handy; and to know evacuation routes and shelter locations; and



Figure 8-2  
 2015 BRSP Addendum Circulation Plan



- Provides an exhibit to each homeowner showing evacuations routes, with SR 193, Sierra College Boulevard, Bickford Ranch Road, and School Ranch Road identified as the primary community evacuation routes for The Ridge residents, and routes from the project site to the aforementioned evacuation routes and locations of temporary refuge areas also identified. The exhibit must be made available as part of the new homeowner information packet and through The Ridge HOA newsletter or website, if available.

Based on the above, the proposed project would not impair implementation of the LHMP, EOP, or an adopted emergency response plan or emergency evacuation plan. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

*None required.*

**8-2 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. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.**

Based on the risk analysis conducted for the proposed project in the FSP, which accounted for slope, prevailing winds, and other factors, the overall wildfire risk rating for the project site was determined to be “Moderate.” As detailed in the Method of Analysis section above, the project site was assessed against 10 risk factors to determine the property’s overall wildfire risk rating. Among the factors evaluated, the size and configuration of the WUI Zone and proximity of proposed structures to the WUI Zone were considered to be “High” risk factors, unless adequate preparedness measures are undertaken. All other risk factors were determined to be “Moderate,” with the exception of critical assets/infrastructure at risk, which was found to be “Low” due to the presence of only one infrastructure site of concern in the area (the Caperton Canal).

Fire spread during a wildfire is typically from one or more ignition sources. The most likely ignition factors present during a wildfire are direct flame impingement on combustible materials, such as building construction supplies or ember broadcast that ignites combustible materials on or near a structure. Buildings in the WUI Zone are at greater risk of damage or loss as a result of fire spread through either surface burning or ember broadcast. Building separation between the building envelope and the adjoining WUI must be maintained in order to reduce the threat of a wildfire damaging individual structures or multiple structures. For development within a fire hazard zone, State and local laws and regulations require measures to reduce the risk of buildings igniting or fire spreading.

As stated previously, the hillside area encompassing the project site has been designated a WUI Zone, should buildings be constructed in the area. The WUI Zone includes the following undeveloped areas that could increase risk of fire spreading to



the project site: the La Faille Ranch area to the north of the project site, an approximately 125-acre designated open space area proposed for the BRSP to the west, and an approximately 80-acre designated open space area proposed for the BRSP to the east. Lots 15 to 25 and Lots 29 to 34 of the proposed project would be located in the WUI Zone, as the lots are situated adjacent to the forested slopes that ascend toward the project site from the La Faille Ranch property. In addition, the open space and undeveloped areas north of Bickford Ranch Road near the project site are of concern. Due to their location within the WUI Zone, Lots 15 to 25 and Lots 29 to 34 would be the most vulnerable among the proposed project's lots to wildfires (see Figure 8-3). The PFPD has issued a Will Serve letter for the proposed project, confirming that the project has been reviewed and approved, upon the condition that the project meet all applicable requirements necessary for maintaining fire protection and evacuation operations. However, it is anticipated that the proposed project would be served by the BRSP Fire Station, once constructed.

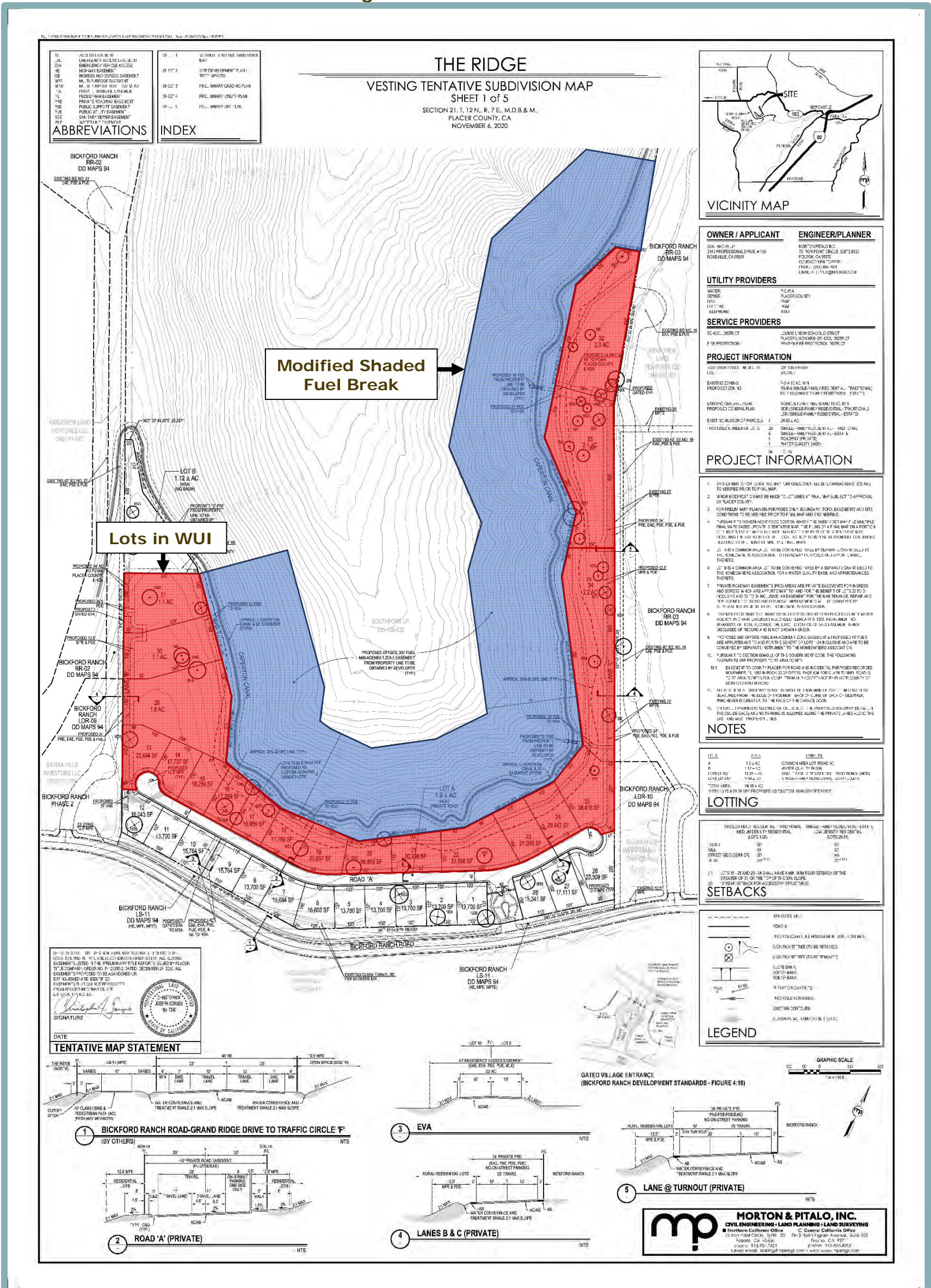
The proposed project would be required to comply with all applicable State and local standards and regulations associated with development within a fire hazard zone, including all applicable PRC and CBC standards, which would require installation of sprinklers in residential buildings, use of ignition-resistant materials, fire-intrusion design of roofing and vents, and use of glazed exterior windows and doors, among other items. For example, Section 4291 of the California PRC requires property owners to maintain a 100-foot defensible space perimeter around all structures on their property (or 100 feet from structure to the property line, whichever is closer) if the property is in proximity to forests, grasslands, or similar undeveloped areas. Defensible space on each lot is the responsibility of the individual property owner. Placer County Code Section 9.32.120 would extend the requirements set forth in Section 4291 for the proposed project to the La Faille Ranch property, as the undeveloped land on the property constitutes an extra hazardous fire condition based on consultation with the PFPD and CAL FIRE officials.

Furthermore, the PFPD and CAL FIRE would require the construction and ongoing maintenance of a Modified Shaded Fuel Break (MSFB) to protect the structures and population in the project site and vicinity from an advancing wildfire (see Figure 8-3). The MSFB, as reviewed and approved by PFPD and CAL FIRE, would originate at the rear property line of Lots 15 to 25 and Lots 29 to 34 and extend nominally 300 feet into the La Faille Ranch undeveloped land area. The 300-foot MSFB would reduce hazardous live and dead vegetation near the project site to reduce the risks of uncontrollable wildfires. Maintenance of the MSFB would be the responsibility of The Ridge HOA and require recordation of the Fuel Management Zone easement, along with a right-of-entry approval for the adjoining property owner. Maintenance of the open space/detention basin lot at the northwest corner of the subdivision would also be subject to ongoing fuel management, which would be carried out by the HOA.

In addition, the FSP includes a number of action items intended to address specific elements of the proposed project and would further reduce the risk of damage due to a wildfire and/or the spread of wildfire throughout the project site and into adjacent areas. For example, Action Items 5 through 7 of the FSP would require a number of safety measures specific to Lots 15 through 25 and Lots 29 through 34, including minimum setback requirements, use of non-combustible building materials, and compliance with CBC design standards.



Figure 8-3  
 The Ridge Lots Within the WUI Zone



The Fuel Management Plan described in Action Item 9 of the FSP is presented in Technical Memorandum #2, included in Appendix G to this EIR. The Fuel Management Plan serves as a master plan for the implementation of wildfire safeguards in the project vicinity and includes the following fuel management elements:

- Defensible Space Requirements, as identified in PRC Section 4291 and Placer County Code Chapter 9, Article 9.32, Parts 3 and 4;
- MSFB Requirements;
- Fuel Management on Vacant Properties and During Construction; and
- Fuel Management Maintenance Frequency.

The term “defensible space” refers to reducing the wildfire vulnerability in WUI Zones by actions that would decrease the potential of heat, flames and embers spreading to structures. Defensible space work would be performed around structures within two zone areas, based on the fire risk reduction efforts necessary to protect occupants and the property. Zone 1 would include areas within zero to 30 feet from dwellings, decks, and other structures. Defensible space efforts in Zone 1 would include using fire-resistant landscape materials as recommended by PFPD and CAL FIRE. Zone 2 would encompass areas within 30 to 100 feet from structures or to the property line, with defensible space efforts consisting of the cutting of annual grasses down to a height of four inches or less, creating 10-foot horizontal spacing between shrubs and trees, removing debris piles of dead materials, and the removal of ground ladder fuels within 10 feet of the ground between shrubs and trees. Dead trees and shrubs would be removed.

The MSFB Requirements Element refers to the proposed project’s MSFB criteria, established in accordance with PFPD and CAL FIRE standards. Fuel maintenance would occur as frequently as necessary to ensure proper reduction of vegetation height, and no less than once per year, according to the Fire Safe Plan (see Appendix G) prepared for the project. Maintenance criteria would include grazing or cutting of annual grasses down to a height of four inches or less and the removal of dead and diseased trees, debris, and tree limbs on live trees up to a height of 10 feet above the ground. Understory fuels over a foot in height would be removed in order to develop vertical separation and low horizontal continuity of fuels. The cutting of vegetation materials would be done with equipment featuring CAL FIRE-approved spark arrestors. The removal of annual grasses and other fine fuels would be completed through the use of plastic string weed trimmers equipped with PFPD- or CAL FIRE-approved spark arrestors.

The Fuel Management on Vacant Properties and During Construction Element addresses the significant fire risk posed by vacant or under construction parcels adjacent to structures. To address the threat of fire, a 100-foot defensible space zone would be established and maintained between developed parcels and adjacent undeveloped parcels or during construction activities. Additionally, as construction-related work such as welding and other “hot work” activities could pose an increased risk of fire ignition, leading to a significant wildfire risk, construction activities would conform to the current CFC provision required by PFPD and CAL FIRE.



The Fuel Management Maintenance Frequency Element refers to the fuel management maintenance required on an annual or otherwise noted frequency. The success in minimizing wildfire risk in the project vicinity would depend on the coordination of fuel management work between The Ridge HOA, PFPD, CAL FIRE staff, and the adjacent land owner(s) to complete fuel management maintenance projects, such as annual inspection of the MSFB, removal and trimming of annual grasses, and removal of debris and/or dead or dying trees, in a timely fashion.

Implementation of the Fuel Management Plan would reduce the risk of a wildfire damaging structures within the project site. Based on the above, compliance with all applicable standards and regulations, as well as the action items set forth in the FSP, including the Fuel Management Plan, would ensure that the proposed project would not exacerbate wildfire risks and/or expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. However, without compliance with the action items set forth in the FSP, the proposed project could result in a **significant** impact.

In addition, because primary and emergency access to The Ridge site would be through the BRSP and response to incidents in The Ridge subdivision are expected to be provided by the BRSP Fire Station, as the closest responding mutual aid fire station, the County shall condition the project, if approved, to require the following payment:

- Fire Protection Facility Fee: A fire protection facility fee (Fire Fee) shall be established for The Ridge project for its fair share costs of the design, construction, and equipping of the BRSP Fire Station on the Fire Station Site as mitigation of impacts to Placer County Fire to provide mutual aid fire services to The Ridge project. The developer shall pay to the County a Fire Fee of \$1,862.12 (estimated) per residential building permit (paid at building permit issuance). The Fire Fee shall be adjusted annually by the 20-city Construction Cost Index (CCI), as reported in the Engineering News Record. The Fire Fee shall be subject to an administration fee component, which shall not exceed three percent of the Fire Fee.

The County shall collect the Fire Fee and place it into a segregated account for the sole purpose of constructing and equipping the Fire Station (Fire Fee Account).

#### Mitigation Measure(s)

The project site is currently located on land that is classified as being within a Moderate FHSZ by CAL FIRE. According to the FSP, CAL FIRE and the Penryn Fire Protection District (PFPD) have designated the hillside area encompassing the project site as a potential WUI Zone, should buildings be constructed in the area. The canyons in the area have steep topography on both sides of the drainage and extensive vegetation and tree canopies in most areas, which creates the potential for rapid wildfire growth that could quickly reach the project site. The open space and undeveloped areas are also of concern to CAL FIRE and the PFPD due to the steep slopes of the adjacent canyon that limit fire apparatus access and which could potentially create a “chimney effect” condition during intense wildland fire activity. Implementation of the following



mitigation measure is required to ensure that the project would not exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, thus, ensuring the potential impact would be reduced to a *less-than-significant* level.

8-2 *In conjunction with the submittal of and prior to the approval of Improvement Plans, the applicant shall submit a Fuel Management Program (FMP) for review and approval by CAL FIRE, PFPD, and Placer County Community Development Resource Agency. The FMP shall identify roles, responsibilities, and financial resources to ensure successful implementation of Actions 1-12 of The Ridge Subdivision Project Fire Safe Plan, as follows:*

Action #1: *Applicant shall consult with the PFPD during preparation of improvement plans for the Medium Density Residential development and individual site plans for the Low Density Residential parcels. Issues to be addressed during the planning process shall include, but would not be limited to:*

- *Fire apparatus access,*
- *Available water supply,*
- *Evacuation routes, and*
- *Safe refuge areas.*

Action #2: *The project lanes, private road, and project EVAs shall be constructed to PFPD and CAL FIRE standards. If any changes are made to the proposed design with respect to width or turning radius, the changes shall be reviewed by PFPD and CAL FIRE prior to final approval.*

Action #3: *Fire hydrants serving the site shall be provided at the following locations in the project site, or equivalent locations, subject to approval by PCWA and Placer County ESD:*

- *Along the private road near Lots 14/15,*
- *Along the private road near Lots 18/19,*
- *Along the private road near Lots 21/22,*
- *Along the private road near Lots 24/25,*
- *In the turnaround along the private lane at Lot 30,*
- *In the turnaround along the private lane at Lot 33,*
- *In the turnout along the private lane at Lot 33/34,*  
*and*
- *In the turnaround along the private lane at Lot 34.*

*In addition, as required by State law, all residences shall have sprinkler systems installed.*

Action #4: *Individual building sprinkler systems used for fire suppression shall remain operable and shall be maintained by the individual homeowners at all times.*





Action #5: All structures constructed on lots facing the WUI Zone (i.e., Lots 15 through 25 and 29 through 34) shall have a minimum 30-foot setback from the rear project line. Setback areas may contain driveways, parking areas, and/or other non-combustible surfaces.

Action #6: Fencing materials located along side and rear yard property lines facing the WUI on The Ridge Subdivision Lots 15 through 25 and 29 through 34 shall be constructed of non-combustible materials.

Action #7: Dwellings located on Project Lots 15 through 25 and 29 through 34 shall be constructed and maintained in accordance with the current design standards found in California Building Code Chapter 7A (Materials and Construction Methods for Exterior Wildfire Exposure).

Action #8: This Fuel Management Program shall ensure implementation of the Fuel Management Plan and MSFB. The Program shall be designed to:

- Provide administrative oversight and coordination of fuel management projects within the project area.
- Confirm that fuel management projects are identified, scheduled and completed in accordance with the Fuel Management Plan (see Action #9).
- Coordinate the use of resources (e.g., crews, mechanical equipment, domestic livestock, etc.) that are most appropriate for the fuel management work that is required.
- Ensure that sensitive biological resources within each area are identified in advance of the fuel management project. Complete pre/post project inspections of these areas to safeguard sensitive areas from damage and/or destruction.
- Verify that each fuel management project has sufficient fiscal resources available to it using industry best practices that are most appropriate for the project area.
- Ensure the safe disposal (e.g., hauling it to a landfill, chipping/mulching on site, etc.) of biomass materials removed as part of a fuel management project.

Action #9: The Ridge Fuel Management Plan (FMP) described in Technical Memorandum #2 (TM #2, June 7, 2021, in Appendix A of the FSP, included in Appendix G to this EIR) shall be implemented by the Project Applicant during project construction and until the project is fully developed and occupied. Upon acquiring a parcel, the parcel owner



shall become responsible for complying with the defensible space requirements of the FMP (and any and all State or local laws and regulations governing fuel maintenance on private property). After construction, maintenance activities within the common lots and the MSFB shall be the responsibility of the Homeowners Association (HOA) (see Action #10). The FMP shall be adequately funded to ensure that all hazardous fuel reduction work is completed per the prescription requirements identified in TM #2.

**Action #10:** A 300-foot-wide MSFB that reduces hazardous live and dead vegetation near the project site shall be constructed and maintained in accordance with the FMP in the canyon below project Lots 15 through 25 and 29 through 34. The MSFB shall meet the following criteria:

- The construction of the shaded fuel break shall commence at the property line between the lot(s) and adjoining LaFaille Ranch property.
- The MSFB shall extend nominally 300 feet except when variances are allowed due to topographical issues, sensitive cultural resources present, or environmental concerns.
- The shaded fuel break shall be constructed and accepted by PFPD and CAL FIRE prior to the issuance of the first building permit within the project site. See TM #2 of the Fire Safe Plan for shaded fuel break prescriptive requirements. Maintenance of annual grasses within the MSFB shall be accomplished preferably by grazing, or, if grazing is not feasible or sufficient, then other equipment may be allowable, while taking care to safeguard sensitive areas from damage and/or destruction, as required in Mitigation Measure 6-6(b) of the Biological Resources chapter.
- A “Fuel Management Zone” easement shall be recorded on the LaFaille Ranch property that is subject of the MSFB. The easement shall allow right of entry to conduct fuel management activities in perpetuity.

**Action #11:** All hazardous fuels, including annual grasses and dead vegetation, on undeveloped lots within the project site shall be reduced to four inches or less during CAL FIRE declared fire season.

**Action #12:** The Ridge HOA shall provide a mechanism for distributing public fire safety information such as a website,



newsletter, and/or at HOA meetings. The information to be distributed is set forth in the Fire Safe Plan (Action #12).

*In addition, the applicant shall coordinate with the Placer County Fire Safe Alliance and local Fire Safe Councils to join the Placer County Firewise Communities program.*

**8-3 Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Based on the analysis below, the impact is less than significant.**

The proposed project would include installation of various infrastructure components, including roadways, fuel breaks, connection to emergency water sources, power lines, and other utilities. All potential physical environmental impacts that could result from implementation of the proposed project have been evaluated throughout the technical chapters of this EIR, as well as within the Initial Study prepared for the proposed project (see Appendix C).

The proposed roadways would not exacerbate fire risks, as the Placer County Code requires a ten-foot vegetation clearance next to roadsides to reduce fire hazards. Similarly, once the fuel break area is established, regular maintenance of the area would involve the removal and reduction of hazardous fuels, which would reduce the potential for fire to spread to the project site. Additionally, pursuant to County standards, power lines and other utilities constructed for the proposed project would be undergrounded, which would reduce fire risks during operations. As noted above, structures associated with the proposed project would also comply with standards set forth in Chapter 7A of the CBC, including use of ignition-resistant materials, fire-intrusion design of roofing and vents, and use of glazed exterior windows and doors. Therefore, the proposed infrastructure improvements associated with the project would not substantially exacerbate wildfire risk.

Water provided for fire suppression would be provided through a new 18-inch water transmission pipeline in Bickford Ranch Road, two aboveground water storage tanks within the BRSP, and proposed fire hydrants within the project site. The 18-inch pipeline would meet and/or exceed fire flow requirements of 1,000 gallons per minute at 20 pounds per square inch gauge for two hours as identified in the CFC. As noted in the 2015 Addendum to the BRSP EIR, the water storage system would consist of an aboveground tank located on Parcel PF-4 on the western side of the BRSP and an aboveground tank on Parcel PF-3 on the eastern side.<sup>13</sup> Both tanks would meet fire flow requirements. The fire hydrants within the project site would meet all applicable PCWA, PFPD, and CAL FIRE requirements. Long-term maintenance and operation of the emergency water supply infrastructure would not involve any activities that would result in an increase in wildfire risk.

<sup>13</sup> Placer County Community Development Resource Agency. *Environmental Review Checklist: Bickford Ranch Specific Plan Amendment*. October 2015.



While the long-term maintenance of the proposed roadways, fuel breaks, emergency water supply connections, power lines, and other utilities would not exacerbate fire risks, the activities associated with the initial construction and placement of the utilities and infrastructure could cause a temporary increase in fire risks due to the use of heavy equipment, which would contain combustible materials such as fuels and oils and ignition sources. However, the project contractor would be required to comply with all California Health and Safety Codes and local County ordinances regulating the handling, storage, and transportation of hazardous materials, which would help to minimize the potential for accidental conditions, including fire. Furthermore, as discussed above, the Fuel Management Plan's Fuel Management on Vacant Properties/During Construction Element requires that a 100-foot defensible space zone be established and maintained between developed parcels and adjacent undeveloped parcels or during construction activities. All construction-related work such as welding or other "hot work" activities that have the potential to increase risk of fire ignition, leading to a significant wildfire risk, would be required to comply with the current CFC provision required by PFPD and CAL FIRE. Compliance with the Fuel Management Plan would reduce the fire risk posed by vacant parcels or parcels under construction adjacent to structures.

Based upon the above, the proposed project would have **a less-than-significant** impact with respect to requiring 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.

Mitigation Measure(s)

*None required.*

**8-4 Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Based on the analysis below, the impact is *less than significant*.**

Wildfires alter landscapes and can result in post-event hazards triggered primarily by rainfall. Rainfall that is normally captured and stored by vegetation can run off almost instantly, causing creeks and drainage areas to flood much sooner during a storm and with more water than is expected under unburned conditions. Soils burned at moderate and high severity tend to have reduced infiltration capacity and are more easily eroded. The potential post-fire flooding, soil erosion, and debris flows can impact recreational areas, homes, structures, roads, and other infrastructure within, adjacent to, and downstream from burned areas.

Wildfire-related flooding and increased runoff may continue for several years in a burn area. However, post-fire debris flows do not typically occur beyond the second rainy season. Some of the largest debris-flow events happen during the first post-fire storm season. While multiple factors can affect debris-flow occurrence, post-fire debris flows generally are triggered by one of two processes: surface erosion caused by rainfall runoff; and landsliding caused by rainfall seeping into the ground. Surface-erosion



runoff processes are by far the most prevalent contributors to debris flows. Landsliding contributes less to fire-related debris flow, but prolonged heavy rains may increase soil moisture even after a wildfire.<sup>14</sup> The wetted soil can then fail, producing infiltration-triggered landslides. The landslides could be shallow or deep-seated (i.e., greater than 10 to 15 feet deep).

The proposed project would be located atop a ridge with a steep canyon towards the north. The canyon, known as the La Faille Ranch property, is not currently inhabited. The nearest single-family residences associated with BRSP Phase 1 buildout would be approximately 1,000 feet west of the western site boundary. Therefore, the project would not expose existing inhabitable structures or residents to significant risks. However, the Caperton Canal is located immediately north of the project site, at the top of the canyon. Thus, the analysis focuses on whether the project/project site could be subject to downslope flooding or landslides as a result of runoff or post-fire instability that could result in damage to the Caperton Canal.

While the project site is located at the top of a topographical drainage that forms a canyon with steep slopes bordering the property, the southern portion of the site, which would include Lots 1 to 12 and Lots 26 to 28, and the outer edges of the western and eastern arms of the horseshoe-shaped site are relatively flat to gently sloping. As discussed in the Initial Study prepared for the proposed project (see Appendix C to this EIR), the Geotechnical Exploration prepared for the project determined that based on site observations, topographic and lithologic data, subsurface data, and regional geology, the overall potential for landslides, lateral spreading, subsidence, or other unstable soil conditions at the site is low to negligible. In addition, the proposed project would adhere to the building setbacks set forth in the County-approved BRSP Development Standards (see Table 3-1 in the Project Description chapter of this EIR) and all applicable standards and regulations as required by the State, which would ensure lots nearest to the slopes (Lots 15 to 25 and Lots 29 to 34) would not be vulnerable to post-fire slope instability should the canyon area be subject to a wildfire event. As a result, the potential for project structures to slide into the Caperton Canal as a result of post-fire slope instability is not a significant risk.

The Caperton Canal is located within an approximately 30-foot-wide easement that is designed to allow access to the canal for maintenance and repair purposes. The canal easement is located between 54 feet and 150 feet from the building setback line on Lots 15 to 25 and Lots 29 to 34. The easement area contains annual grassland and other vegetation, which could allow for fire spread. However, as discussed under Impact 8-2 and required by Mitigation Measure 8-2, the proposed project would implement The Ridge Fuel Management Plan described in Technical Memorandum #2, which would ensure that all hazardous fuel reduction work is completed per the prescription requirements identified therein. In accordance with the Fuel Management Plan, a 300-foot-wide MSFB would be constructed and maintained in the canyon below Lots 15 to 25 and Lots 29 to 34, which would reduce hazardous live and dead vegetation near the project site. Thus, the MSFB would reduce exposure of Caperton Canal to wildfires spreading up the canyon and subjecting the Canal to potential risks

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<sup>14</sup> U.S. Geological Survey. *Post-Fire Flooding and Debris Flow*. Available at: [https://www.usgs.gov/centers/cawater/science/post-fire-flooding-and-debris-flow?qt-science\\_center\\_objects=0#qt-science\\_center\\_objects](https://www.usgs.gov/centers/cawater/science/post-fire-flooding-and-debris-flow?qt-science_center_objects=0#qt-science_center_objects). Accessed February 24, 2021.



related to post-fire slope instability. The MSFB would also reduce the risk for the project site and its structures to be damaged by wildfire, thus avoiding a site condition which could subject the downslope Canal to post-fire runoff debris.

For the above reasons, the proposed project would have a **less-than-significant** impact with respect to exposing people and/or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

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 wildfire encompasses buildout of the proposed project in conjunction with the BRSP, Bickford Ranch Marketplace, La Faille Ranch, and City of Lincoln projects along SR 193. For more details regarding the cumulative setting, refer to Chapter 9, Statutorily Required Sections, of this EIR.

#### **8-5 Increase in wildfire risk attributable to the proposed project in combination with cumulative development. Based on the analysis below, the cumulative impact is *less than significant*.**

Other reasonably foreseeable projects within the project vicinity include the BRSP, Bickford Ranch Marketplace, potentially the La Faille Ranch property, and City of Lincoln projects, including the Turkey Creek Estates, Esplanade at Turkey Creek, The Waterfront, and Deer Crossing. The BRSP, located west, south, and east of the project site, would involve development of up to a combined 1,890 low-density, medium-density, and rural residential units on a 1,982-acre site. The proposed Bickford Ranch Marketplace project, located north of the BRSP, would consist of a neighborhood commercial center, featuring a grocery store, fuel station, retail, and restaurants. Currently, an active application to develop the 169.68-acre La Faille Ranch property to the north of the project site has not been filed with the County. However, La Faille Ranch is included in the cumulative setting discussion, as a previous application to develop the site into 14 single-family lots was partially processed through the County before being subsequently withdrawn. Therefore, the La Faille Ranch property could consist of large-lot single-family residential development. Turkey Creek Estates and Esplanade at Turkey Creek are residential projects currently under construction within the Village 1 Specific Plan area of the City of Lincoln. Esplanade is the larger of the two projects (863 units) and consists of a 55 and older community. The project sites for both are immediately north of SR 193, approximately 0.65-mile west of the intersection of Sierra College Boulevard and SR 193 (Turkey Creek Estates) and 1.65 miles west of said intersection (Esplanade at Turkey Creek). The Waterfront (18.6



acres) has also been entitled within the Village 1 Specific Plan, but is not currently under construction. The project, which would be implemented southeast of the SR 193/Oak Tree Lane intersection, would consist of 271 multifamily units and approximately 45,000 square feet of office, commercial, and restaurant space. Deer Crossing is an entitled non-residential project southwest of the intersection of SR 193 and Oak Tree Lane, adjacent to the Village 1 Specific Plan area of the City of Lincoln. The project, which is not currently under construction, would consist of approximately 22,000 square feet of non-residential commercial/retail uses.

Similar to the proposed project, the aforementioned projects are located within the Moderate FHSZ in an SRA. Thus, as with the proposed project, should the projects ultimately be constructed, the developments would be required to comply with defensible space standards, pursuant to California PRC Section 4291, and other wildfire risk minimization standards set forth in Chapter 7A of the CBC, including, but not limited to, use of ignition-resistant materials, fire-intrusion design of roofing and vents, and use of glazed exterior windows and doors. All buildings would be required to meet all applicable CFC requirements as set forth by the County, the City of Lincoln, the CBC, and/or the CFC, which could include fire sprinklers and fire alarms, as determined by the Fire Marshal of the respective jurisdiction at building permit stage, depending upon building and occupancy type. Furthermore, Chapter 9, Article 9.32, Part 3 of the Placer County Code requires the maintenance of "fire breaks" around structures and the clearing of roofs to prevent structural fires in the WUI. Compliance with State and local standards would minimize wildfire risk at each of the project locations.

With respect to cumulative projects within the City of Lincoln, Lincoln General Plan Policy HS-7.3 requires the development of wildland fire management plans for projects adjoining significant areas of open space that may have high fuel loads. The aforementioned Village 1 Specific Plan projects would minimize wildland fire hazards in open space areas through implementation of a fuel modification plan, as approved by the Lincoln Fire Department.<sup>15</sup> Furthermore, Lincoln General Plan Policy HS-7.4 requires new development to incorporate additional greenbelts, fuel breaks, fuel reduction, and buffer zones around communities to minimize potential fire losses. As part of achieving consistency with the policy, the Village 1 Specific Plan projects would provide fuel modification zones around the sites' interfaces with adjacent undeveloped open space in accordance with the requirements of the Lincoln Fire Department.<sup>16</sup>

The ability to evacuate the area in which the cumulative projects are located during the event of a wildfire must also be considered. Among the important changes to the roadway system in the cumulative setting are the roadway and infrastructure improvements identified in the Conditions of Approval for Bickford Ranch Specific Plan Phase I (Placer County, 2017); these include installation of a traffic signal at the Sierra College Boulevard/SR 193 intersection and widening of Sierra College Boulevard from two lanes to four lanes from just south of the State Route 193 / Sierra College Boulevard intersection to just south of the Sierra College Boulevard / Bickford Ranch Road intersection. Further, the Placer Countywide Capital Improvement Program (February 10, 2020) includes widening of Sierra College Boulevard (from 2 to 4 lanes)

<sup>15</sup> City of Lincoln. *Final Village 1 Specific Plan*. July 2013, pg. A-66.

<sup>16</sup> *Ibid*, pg. A-67.



from State Route 193 to English Colony Way (about 4,500 feet south of Twelve Bridges Drive). This improvement will be funded through the County's traffic impact fee program. As part of the approved Village 1 Specific Plan, SR 193 would be widened from two lanes with gravel shoulders to a four-lane roadway with bike lanes and a center median or turn lane. The pavement would be up to 80 feet wide, about three times the width of the existing pavement.

Emergency events, like wildland fires, are unpredictable. The location of the fire, the time of day an event occurs, the direction of travel, and rate of spread is unknown. Due to this uncertainty, the utility of traditional capacity analysis, like AM and PM peak hour operations at study intersections, is limited for the analysis of emergency events. Further, during evacuation emergency responders will provide active traffic control at intersections, close roads, provide detours for through traffic, and actively manage available travel lanes to facilitate evacuation away from the emergency. For example, emergency responders may use three of the planned four travel lanes (i.e., 2 SB lanes and 1 NB lane) on Sierra College Boulevard for evacuation south of the project. Given the capacity of SR 193 and Sierra College Boulevard (about 5,400 vehicles per hour), the additional vehicles evacuating from the project would not substantially alter evacuation operations and/or vehicle speeds on these facilities, or others in the region.<sup>17</sup> Assuming an evacuation of the area could occur over multiple hours, the ability of the roadways (e.g., Sierra College Boulevard and SR 193) to move vehicles safely out of the area increases proportionately. For example, a four-hour evacuation event would allow these roadways to move up to 21,600 vehicles out of the area, which is more than sufficient to account for existing volumes (around 8,600 per project-specific traffic study) and BRSP and The Ridge volumes.

In addition, as detailed in the 2015 BRSP Development Agreement, the BRSP would include construction of a new fire station on a 1.4-acre site within Parcel PF-1, adjacent to Sierra College Boulevard. Construction of the fire station would commence, at the latest, by the time of issuance of the 1,000<sup>th</sup> residential building permit for the BRSP. Construction of the fire station would be required to be completed within 12 months. The BRSP applicant would be required to pay to the County \$940,000 by the time of issuance of the 900<sup>th</sup> residential building permit for the BRSP, which would be used to purchase a Type 1-1,500 gallons per minute fire apparatus, equipment to outfit the apparatus, a utility support vehicle and equipment, advanced life support equipment/supplies, and personnel training room equipment. Per a current contractual agreement with the County, CAL FIRE would serve as the fire protection services provider through the new station. As noted in the Fire Risk Analysis included in the FSP, with the addition of the new fire station, emergency response times would improve upon current response times. As discussed under Impact 8-2, as part of obtaining approval from the County, The Ridge project would be conditioned to require the payment of the Fire Fee to provide payment for a fair share cost of the design, construction, and equipping of the BRSP Fire Station.

Furthermore, as discussed above, with implementation of Mitigation Measure 8-2 and compliance with State and local standards, the proposed project's potential impacts

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<sup>17</sup> Fehr and Peers. *Memorandum: The Ridge Subdivision – Response to Comments (Raney Planning & Management)*. August 6, 2020.





related to wildfire would be reduced to less-than-significant levels. Because future development would be subject to similar requirements and standards, the proposed project, in conjunction with cumulative development in the area, would not be expected to substantially increase the risk of wildfire.

Based on the above, the proposed project, in combination with cumulative development, would have a **less-than-significant** cumulative impact related to increasing wildfire risk.

Mitigation Measure(s)

*None required.*



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## **9. STATUTORILY REQUIRED SECTIONS**

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## 9. STATUTORILY REQUIRED SECTIONS

### 9.1 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.

### 9.2 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 Section XIV, Population & Housing, of the Initial Study prepared for the proposed project, the proposed 34-unit single-family development would increase the available housing within the project vicinity, which would be expected to increase population in the area. Using the 2.6 persons/household average household size from the Bickford Ranch Specific Plan (BRSP) EIR,<sup>1</sup> the project would house an estimated 89 residents. Given that the project site is currently designated Agriculture/Timberland 10-Ac. Min. per the General Plan and zoned Farm, combining minimum Building Site of 10 acres (F-B-X 10-Ac. Min.), residential uses have not been previously anticipated for the site. While development of the proposed project is

<sup>1</sup> Placer County Community Development Resource Agency. *Bickford Ranch Specific Plan Revised Draft Environmental Impact Report*. Adopted December 18, 2001.



dependent upon the installation of Bickford Ranch Road and associated utilities through Phase 1 of the BRSP and extension of such infrastructure through a portion of BRSP Phase 2 to the project entry, these off-site improvements, and buildout of the BRSP, have been previously analyzed in the BRSP EIR. The proposed project's on-site infrastructure would be sized to accommodate only the proposed 34 residential units.

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.

All physical environmental effects of the proposed project, including single-family residential development and utilities and infrastructure improvements, have been addressed throughout this EIR and the Initial Study prepared for the proposed project. Overall, the proposed project would not be expected to generate any new growth-inducing impacts beyond those impacts identified in this EIR.

### **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.

Development of the proposed project is dependent upon the installation of Bickford Ranch Road and associated utilities through Phase 1 of the BRSP and extension of such infrastructure through a portion of BRSP Phase 2 to the project entry. Thus, the adjusted baseline assumes backbone infrastructure associated with the BRSP would already exist within the project vicinity as part of buildout of BRSP Phase 1. The improvements are already planned and approved for the BRSP. Therefore, the growth associated with the improvements has already been anticipated and evaluated in the BRSP EIR. The utility infrastructure proposed for the project site would be sized to specifically serve the proposed 34 single-family units.

In the event BRSP Phase 2 improvements have not yet been constructed, and the proposed project has obtained necessary entitlements and is ready to proceed, off-site improvements to a segment of Bickford Ranch Road would be required as part of the proposed project to extend services and complete access to the project site. Specifically, such improvements would include the approximately 400-foot extension of Bickford Ranch Road from the Phase 1 terminus thereof to the project site and along the entire frontage of the project, including all required water, sewer, drainage and dry utilities therein. In addition, improvements would be made to the BRSP landscape corridor parcel which fronts upon the project, including the landscaping thereof and the installation of the multi-purpose trail in accordance with the improvement concept set forth in the BRSP Development Standards and Design Guidelines. All off-site improvements would be constructed consistent with the BRSP and applicable mitigation measures. As previously discussed, the aforementioned BRSP-associated 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 Section XV, Public Services, of the Initial Study, 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 Section XIX, Utilities & Service Systems, of the Initial Study, wastewater generated by the proposed project could be accommodated by existing wastewater treatment facilities and planned infrastructure, and the previously approved water supply infrastructure associated with the BRSP would 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 Section X, Hydrology & Water Quality, of the Initial Study, 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 and the accompanying Initial Study provide a comprehensive assessment of the potential for environmental impacts associated with implementation of the proposed project. Please refer to Chapters 4 through 8 of this EIR and the Initial Study (see Appendix C of this EIR), which comprehensively address the potential for impacts from urban development on the project site.

## **9.3 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]). In accordance with Section 15130(b)(1)(a) and (b) of the CEQA Guidelines, the cumulative analysis in this EIR is based upon a summary of projections contained in the BRSP



EIR, as well as other reasonably foreseeable projects in the project region. The reasonably foreseeable projects in the project vicinity are described in further detail below.

### **Bickford Ranch Specific Plan**

The BRSP is a County-approved master planned community anticipated for implementation over three phases on 1,942.5 acres to the east, south, and west of The Ridge project site. BRSP Phase 1 would be implemented to the west of the proposed project. Because implementation of the proposed project is dependent upon backbone infrastructure that would be constructed as part of Phase 1 of the BRSP, development of Phase 1 is included in the project baseline. At buildout, the BRSP would generally consist of 1,890 new residential units, more than 1,100 acres of open space and recreation, and new public facilities, including a fire station and school site for a potential future school. As such, the County-approved BRSP would result in changes to the existing land use environment through conversion of vacant land to developed uses.

### **Bickford Ranch Marketplace**

The Bickford Ranch Marketplace is proposed for a 10-acre site at the southeast corner of Sierra College Boulevard and State Route (SR) 193, three miles east of the City of Lincoln, in an unincorporated area of the County. The BRSP area is located south and southeast of the Bickford Ranch Marketplace site, east of Sierra College Boulevard. The portion of the BRSP immediately south of the Bickford Ranch Marketplace site is designated as Open Space and vegetated with grassland and riparian habitat. The Bickford Ranch Marketplace project would include a total of 83,500 square feet (sf) of building space, comprised of one 56,000-sf grocery store, four retail buildings with a total of 20,400-sf of space, a 2,000-sf restaurant with a 40-seat patio, a 3,600-sf restaurant with a drive thru, and a nine-concurrent fueling position (18 nozzle) fuel station with a self-service car wash and convenience store.

### **La Faille Ranch**

The La Faille Ranch property is an undeveloped 169.68-acre site within the valley to the north of The Ridge project site. The property is owned by the proposed project applicant and is currently used for cattle grazing. The southern boundary of La Faille Ranch includes the existing concrete-lined Caperton Canal, owned and operated by the Placer County Water Agency (PCWA), which bifurcates the ranch from The Ridge project site. An application to develop the property into 14 single-family residential lots ranging between 10 and 16 acres was previously submitted to the County and subsequently withdrawn. While an active application is typically the determining factor for deciding which projects are reasonably foreseeable and warrant inclusion in an EIR's cumulative analysis, the County has taken a conservative approach by including La Faille Ranch in the cumulative setting discussion, as the previous application to develop the site was partially processed through the County and the property is the only other site in the surrounding area, other than The Ridge, BRSP, and Bickford Ranch Marketplace, with a reasonably foreseeable potential for future development.

### **Turkey Creek Estates and Esplanade at Turkey Creek**

Both the Turkey Creek Estates project (248 acres) and Esplanade at Turkey Creek project (approx. 175 acres) are approved residential projects within the Village 1 Specific Plan area of the City of Lincoln. According to the City of Lincoln, the total number of anticipated residential



units for both projects is 1,311.<sup>2</sup> Esplanade is the larger of the two projects (863 units) and consists of a 55 and older community. The project sites are immediately north of SR 193, approximately 0.65-mile west of the intersection of Sierra College Boulevard and SR 193 (Turkey Creek Estates) and 1.65 miles west of said intersection (Esplanade at Turkey Creek). Both projects are currently under construction.

### **The Waterfront**

A project known as The Waterfront (18.6 acres) has also been entitled within the Village 1 Specific Plan, but is not currently under construction. The project would consist of 271 multifamily units and approximately 45,000 square feet of office, commercial, and restaurant space.

### **Deer Crossing**

Deer Crossing is an entitled non-residential project southwest of the intersection of SR 193 and Oak Tree Lane, adjacent to the Village 1 Specific Plan area of the City of Lincoln. The project would consist of approximately 22,000 square feet of non-residential commercial/retail uses. The project is not under construction.

### **Geographic Scope of Cumulative Setting Within Each Chapter**

Situations exist where the geographic setting differs for various environmental issue areas analyzed under CEQA. The following discussions provide further details on the geographic scope for the cumulative setting for each CEQA topic area evaluated in this EIR.

#### Aesthetics

The geographic scope for the cumulative aesthetics analysis includes all projects that could potentially exist within identified viewsheds, which includes views towards the project site from SR 193 and the planned Phase 1 BRSP terminus of Bickford Ranch Road. See Chapter 4, Aesthetics, for further details.

#### Air Quality, Greenhouse Gas Emissions, and Energy

The geographic setting for the cumulative air quality analysis is the Sacramento Valley Air Basin (SVAB). Global climate change is, by nature, a cumulative impact. Greenhouse gas (GHG) emissions 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 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 cumulative global climate change analysis in this EIR is limited to the State of California.

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<sup>2</sup> City of Lincoln Community Development Project Activity Report, Updated July 01, 2021; available at <http://www.lincolncal.gov/Home/ShowDocument?id=14458>; accessed September 3, 2021.





### Biological Resources

The geographic scope for the cumulative biological resources analysis generally includes The Ridge project site, as well as the sites of the BRSP, Bickford Ranch Marketplace, La Faille Ranch property, and above-listed City of Lincoln projects along SR 193.

### Transportation and Circulation

Transportation impact significance in this EIR is based upon vehicle miles travelled. As discussed in Chapter 7 of this EIR, projects that use efficiency metrics, such as VMT/capita or VMT/employee may not be required to analyze cumulative VMT impacts. As stated in the OPR Technical Advisory, “A project that falls below an efficiency-based threshold that is aligned with long-term goals and relevant plans has no cumulative impact distinct from the project impact.” Thus, a separate cumulative VMT analysis was not performed for this EIR. It is noted that the separate level of service analysis performed for the project for GP consistency purposes utilized the Placer County Travel Demand Forecasting Model, which was updated in 2016 and accounts for reasonably foreseeable cumulative projects in the region.

### Wildfire

The geographic scope for the cumulative wildfire analysis generally includes The Ridge project site, as well as the sites of the BRSP, Bickford Ranch Marketplace, La Faille Ranch property, and above-listed City of Lincoln projects along SR 193.

Please refer to the Cumulative Impacts and Mitigation Measures section of each technical chapter for analysis of cumulative impacts for each CEQA topic.

## **9.4 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES**

Per CEQA Guidelines Section 15126.2(d), this EIR is required to include consideration of significant irreversible environmental changes that would be caused by the proposed project, should the project be implemented. An impact would be determined to be a significant and irreversible change in the environment if:

- Buildout of the project area could involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of development could generally commit future generations to similar uses (e.g., a highway provides access to a previously remote area);
- Development of the proposed project could involve uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The phasing and eventual development of the project could result in an unjustified consumption of resources (e.g., the wasteful use of energy).

The proposed project would likely result in, or contribute to, the following significant irreversible environmental changes:

- 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.

## **9.5 SIGNIFICANT AND UNAVOIDABLE IMPACTS**

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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[c]). 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 impact of the proposed project is summarized below.

### **7-5 Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). Based on the analysis below, even with the implementation of mitigation, the impact is *significant and unavoidable*.**

Implementation of the proposed project would result in a significant impact related to exceeding the threshold for the unincorporated County baseline vehicle miles traveled (VMT) per capita. Mitigation Measure 7-5 requires implementation of a Transportation Demand Management (TDM) Program to reduce the project-related VMT. However, the effectiveness of TDM strategies depend heavily on the level of implementation. The analysis presented in the EIR assumes the maximum level of implementation and, consequently, the results in Table 7-12 of the Transportation and Circulation chapter of this EIR present a best-case scenario. Furthermore, a portion of the TDM strategies may prove to be economically infeasible. Due to uncertainties regarding the ability for the mitigation measure to reduce VMT to a less-than-significant level, the impact would remain significant and unavoidable.



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## **10. ALTERNATIVES ANALYSIS**

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# 10. ALTERNATIVES ANALYSIS

## 10.1 INTRODUCTION

The Alternatives Analysis chapter of the EIR includes consideration and discussion of a range of reasonable alternatives to the proposed project, as required pursuant to CEQA Guidelines Section 15126.6. Generally, the chapter includes discussions of the following: the purpose of an alternatives analysis; alternatives considered but dismissed; a reasonable range of project alternatives and their associated impacts in comparison to the proposed project's impacts; and the environmentally superior alternative.

## 10.2 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. Create a foothill residential project that can easily be served by planned sewer, water and roadway infrastructure.
2. Support the County in its goals to provide a diversity of housing types for population growth, including opportunities for custom home development.
3. Provide a high-quality residential community compatible and consistent with adjacent approved residential development by implementing complementary design elements and standards approved for the adjacent development.
4. Incorporate the existing natural terrain and character of the project area into the design of the development, recognizing its topography with slopes, ridges and oak woodlands while respecting off-site viewsheds and retaining and preserving existing natural resources to the greatest extent feasible.

### **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 impacts related to substantially degrading the existing visual character or quality of public views of the project site and/or the site's surroundings would be less than significant. In addition, all cumulative impacts were determined to be less than cumulatively considerable.
- **Air Quality, Greenhouse Gas Emissions, and Energy.** The EIR determined that impacts related to conflicting with or obstructing a State or local plan for renewable energy or energy efficiency, or conflicting with or obstructing implementation of the applicable air quality plan during both project construction and operation, would be less than significant. In addition, the EIR determined that the project would result in a less-than-significant impact related to exposing sensitive receptors to substantial pollutant concentrations. With respect to cumulative impacts, all such impacts, including impacts related to the emissions of greenhouse gas (GHG), were determined to be less than cumulatively considerable.
- **Biological Resources.** The EIR determined that impacts related to wildlife movement would be less than significant.
- **Transportation and Circulation.** The EIR determined that a less-than-significant impact would occur related to transit, bicycle, and pedestrian facilities, as well as emergency access, hazardous design features, and incompatible uses.
- **Wildfire.** The EIR determined that a less-than-significant impact would occur related to the substantial impairment of an adopted emergency response plan or emergency evacuation plan. In addition, the EIR determined that a less-than-significant impact would occur related to requiring 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. Furthermore, because the project includes design features which would create defensible space and a Modified Shaded Fuel Break, and because the project site is subject to a low risk of landslides, the impact related to exposing people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes would be less than significant. For the same reasons, cumulative impacts related to an increase in wildfire risk attributable to the proposed project in combination with cumulative development was determined to be less than significant.

The Initial Study prepared for the proposed project during the scoping period (see Appendix C) includes a detailed environmental checklist addressing a range of technical environmental issues. For each technical environmental issue, the Initial Study identifies the level of impact for the proposed project. The Initial Study identifies the environmental effects as either “no impact,” “less-than-significant,” “less-than-significant with mitigation incorporated,” or “potentially significant.”



Impacts identified for the proposed project in the Initial Study as “no impact,” “less-than-significant,” or “less-than-significant with mitigation incorporated” are listed below, and summarized further in Chapter 1, Introduction, of this EIR.

- Aesthetics (Items I-1 and I-2);
- Agriculture and Forest Resources (All Items);
- Air Quality (Item III-4);
- Cultural Resources (All Items);
- Geology and Soils (All Items);
- Hazards and Hazardous Materials (Items IX-1 through IX-6);
- Hydrology and Water Quality (All Items);
- Land Use and Planning (Items XI-1, XI-3, and XI-4);
- Mineral Resources (All Items);
- Noise (All Items);
- Population and Housing (All Items);
- Public Services (All Items);
- Recreation (All Items);
- Transportation (Item XVII-4);
- Tribal Cultural Resources (All Items); and
- Utilities and Service Systems (All Items).

The alternatives discussed herein have been chosen based on feasibility to meet project objectives, as well as the ability to reduce potential impacts analyzed within this EIR. Impacts identified and fully mitigated in the Initial Study prepared for the proposed project would be similar or fewer for all of the alternatives included in this chapter. Accordingly, topics dismissed within the Initial Study prepared for the proposed project are not specifically addressed within the sections below. 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 substantially 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.
- **Biological Resources.** The EIR determined that implementation of the proposed project could result in potential adverse effects to special-status plants, VELB, western spadefoot, grasshopper sparrow, northern harrier, purple martin, and white-tailed kite, as well as Swainson’s hawk. Furthermore, the project could result in a substantial adverse effect on federal or State protected wetlands. Given that the proposed project would involve the



removal of mixed oak woodland and oak-foothill pine woodland, the project could conflict with local policies and/or ordinances that protect biological resources, including tree resources, and could conflict with the provisions of an adopted Habitat Conservation Plan. 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 cumulatively considerable. However, the EIR requires mitigation in order to ensure that impacts related to the aforementioned biological resources would be reduced to either less-than-significant or less-than-cumulatively considerable levels.

- **Transportation and Circulation.** The EIR determined that implementation of the proposed project could 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.
- **Wildfire.** The EIR determined that implementation of the project could result in a significant impact related to exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. However, the EIR requires mitigation to ensure implementation of all Action Items presented within the Fire Safe Plan, which would ensure that the aforementioned impact is reduced to a less-than-significant level.

### Significant and Unavoidable

The EIR has determined that the following project impact would remain significant and unavoidable, even after implementation of the feasible mitigation measures set forth in this EIR:

- **Transportation and Circulation.** Given that the per-capita VMT associated with the proposed project would exceed the applicable threshold (i.e., VMT per capita for the project is less than 15 percent below the unincorporated County baseline average), the EIR determined that the project could conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), and a significant and unavoidable impact would occur.

## 10.3 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 one or more significant project impacts, while still meeting most of the basic project objectives.

As stated in Guidelines Section 15126.6(c), among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are:

- (i) failure to meet most of the basic project objectives,
- (ii) infeasibility, or
- (iii) inability to avoid significant environmental impacts.

Regarding item (ii), infeasibility, among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). 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.

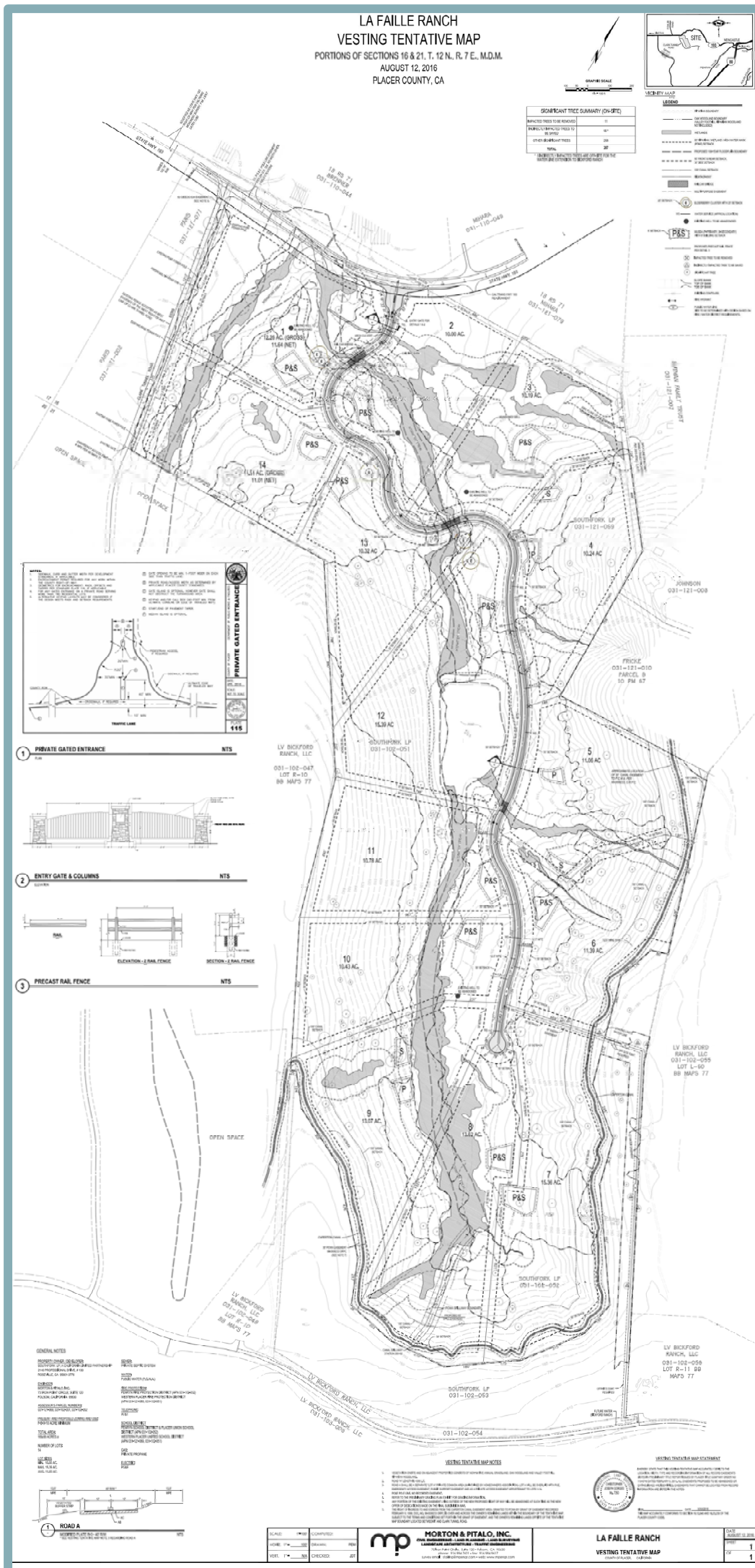
### **Off-Site Alternative**

The possibility of an off-site location was considered as an alternative to the proposed project. Specifically, the parcel located immediately north of the project site, known as La Faille Ranch, is owned by the same property owner as the project site. La Faille Ranch has been subject to previous planning efforts, one of which is shown in Figure 10-1 below. The former vesting tentative map includes 14 residential lots ranging from 10 to 15.39 acres in size. While the proposed project would be accessed by the future extension of Bickford Ranch Road, the Off-Site Alternative at La Faille Ranch would be accessed via an existing stretch of State Route 193.

The Off-Site Alternative would include a high-quality, large lot residential development that can be accommodated by existing and planned infrastructure. In addition, the Alternative would include opportunities for home customization, and, due to the proposed land use type and intensity of development, would be considered compatible and consistent with the nearby Bickford Ranch Specific Plan (BRSP) development and nearby rural residential parcels. Therefore, the Off-Site Alternative would generally achieve Objectives 1, 2, and 3. However, as discussed in further detail below, the Off-Site Alternative would not achieve Objective 4 because the Alternative would not preserve existing natural resources to the greatest extent feasible.



Figure 10-1  
Off-Site Alternative



The La Faille Ranch site includes almost 18 acres of wetlands, including several seasonal wetlands, three creeks, and a pond. For comparison, the proposed project site includes three seasonal wetlands totaling 0.11-acre within the southwest and southeast portions of the project site. In an effort to reduce impacts to wetlands, the Off-Site Alternative would include several bridges to cross over the existing wetlands, and would design residences to avoid wetlands, as feasible. Nonetheless, even with the inclusion of bridges and strategic project design, the Alternative would adversely affect substantially more wetland area as compared to the proposed project. The Alternative would not only result in increased impacts to wetlands, as compared to the proposed project, but also potentially greater impacts to special-status plant and animal species which rely on wetland habitat.

In addition, based on an Oak Woodland Inventory Report that was previously prepared for the La Faille Ranch site, impacts to oak woodlands related to roadway infrastructure alone (not including impacts from development of individual lots) would be similar to the proposed project, though slightly reduced (6.67 acres versus 7.92 acres). When factoring in oak woodland impacts associated with lot development for the Off-Site Alternative, the impact acreage would be increased, and possibly greater, than the proposed project. As a result, the impact level related to conflicting with any local policies or ordinances protecting biological resources, such as tree preservation and avoidance policies, would remain significant and require implementation of mitigation.

As noted above, CEQA Guidelines state that the primary intent of an alternative is to disclose other ways that the objectives of the project could be attained while reducing one or more of the significant environmental impacts of the proposed project. Considering the Off-Site Alternative would result in additional impacts related to biological resources, the Alternative would not achieve the intent of a feasible alternative under CEQA. 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;
- Clustered Development Alternative; and
- Large-Lot Residential Alternative.

See Table 10-3 for a comparison of the environmental impacts resulting from the considered alternatives and the proposed project.

### **No Project (No Build) Alternative**

CEQA requires the evaluation of the comparative impacts of the “No Project” alternative (CEQA Guidelines Section 15126.6[e]). Analysis of the no project alternative shall:

“... discuss [...] existing conditions [...] as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.” (*Id.*, subd. [e][2]) “If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the ‘no project’ alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in the property’s existing state versus environmental effects that would occur if the project were approved. If disapproval of the project under consideration



would result in predictable actions by others, such as the proposal of some other project, this 'no project' consequence should be discussed. In certain instances, the no project alternative means 'no build,' wherein the existing environmental setting is maintained. However, where failure to proceed with the project would not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment." (*Id.*, subd. [e][3][B]).

The County has decided to evaluate a No Project (No Build) Alternative, which assumes that the project site would remain in its current condition and would not be developed. As described in this EIR, the project site consists primarily of grasses, oak woodland, and scattered rock outcroppings and is absent of structures. The No Project (No Build) Alternative would not meet any of the project objectives.

### Aesthetics

The EIR determined that the proposed project could have a significant impact to nearby sensitive receptors as a result of the introduction of substantial 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, Greenhouse Gas Emissions, and Energy

The following discussion is provided for informational purposes only, given that this EIR determined the proposed project would not result in any significant impacts related to air quality, GHG emissions, or energy.

The EIR did not identify any significant impacts related to air quality, GHG emissions, or energy from implementation of the proposed project. Given the project site would remain as is under the No Project (No Build) Alternative, no impacts related to air quality, GHG emissions, and energy would occur.

### 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, western spadefoot, grasshopper sparrow, northern harrier, purple martin, and white-tailed kite. The Alternative would not include removal of mixed oak woodland and oak-foothill pine woodland and, thus, would not conflict with any local policies and/or ordinances that protect biological resources, including tree resources. In addition, the Alternative would not result in any substantial adverse effects on federal or State protected aquatic resources. Mitigation Measures 6-1(a) through 6-1(c), 6-2(a) through 6-2(c), 6-5(a) through 6-5(d), 6-7(a) and 6-7(b), 6-9, 6-10, 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.

### 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 7-1 related to preparation and implementation of a construction signing and traffic control plan would not be required. In addition, the Alternative would not result in a significant and unavoidable impact related to VMT and,



therefore, Mitigation Measure 7-5 would not be required. Overall, impacts related to transportation and circulation would not occur under the No Project (No Build) Alternative.

### Wildfire

Habitable structures would not be constructed on-site under the No Project (No Build) Alternative. As a result, fewer impacts related to exposing people or structures to significant risk would occur. In addition, because residents would not occupy the project site, Mitigation Measure 8-2 would not be required. However, the Modified Shaded Fuel Break included as part of the proposed project would not be constructed under the No Project (No Build) Alternative; therefore, the fuel reduction efforts adjacent to the BRSP would not occur and, thus, an increased risk of wildfire to future BRSP structures could result. Nonetheless, the impacts identified for the proposed project related to wildfire would not occur under the No Project (No Build) Alternative.

### **Clustered Development Alternative**

The Clustered Development Alternative would cluster the proposed single-family lots along the southern portion of the project site in an effort to avoid all on-site oak woodland habitat. Based upon the information provided in the Biological Resources Assessment for the project site, this would equate to the preservation of approximately 12.72 acres of woodland habitat, whereas the proposed project would preserve approximately 4.75 acres of the on-site oak woodland habitat (12.72 total acres – 7.97 impacted acres). This would also have the further benefit of setting back the structures from the ridgeline, thus, meeting General Plan Policy 1.K.1(a), by avoiding the location of structures along ridgelines.

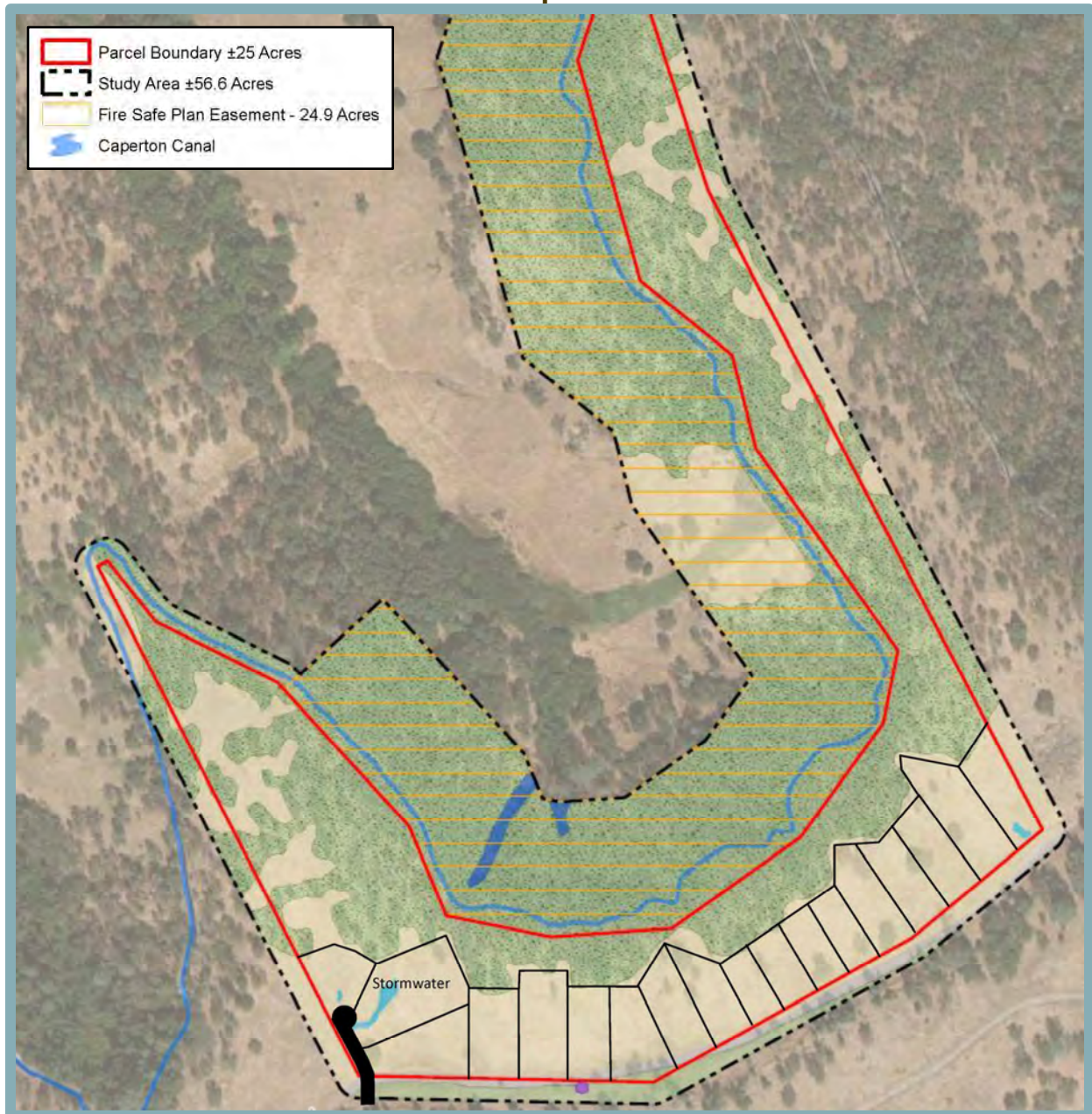
Given the limited land area available for development under the Alternative, the internal roadway would be eliminated and direct access to the lots would be provided by Bickford Ranch Road. Thus, homes would front Bickford Ranch Road, and, in order to minimize the number of driveways connecting to Bickford Ranch Road, tandem driveways would be provided. As shown in Figure 10-2, it is estimated that 15 homes would front Bickford Ranch Road. Two additional residential lots and a stormwater detention/retention basin lot would be provided in the southwest corner of the project site, with access from a new cul-de-sac. Thus, the total number of single-family homes under this Alternative would be 17, which is half of the proposed project's density. This Alternative would require a General Plan Amendment to redesignate the site from Agriculture/Timberland 10-Ac. Min. to Low Density Residential (1-5 dwelling units per net acre [du/ac]) and a rezone from Farm, combining minimum Building Site of 10 acres (F-B-X 10-Ac. Min.) to Residential Single-Family, combining minimum Building Site anticipated to be 8,000 square feet.

Similar to the proposed project, the Alternative would include the establishment and on-going maintenance of an off-site, 300-foot-wide Modified Shaded Fuel Break (MSFB) along the project's northern boundary, north of the Caperton Canal. It is assumed that the intervening, on-site oak woodland would also be managed for fuel reduction purposes.

Because the Clustered Development Alternative would include development of the project site with residential uses adjacent to the BRSP, Objective 1 would be met. While the Clustered Development Alternative would result in project structures being set further back from the ridgeline, the Alternative would not include the project's landscape buffer along Bickford Ranch Road. Thus, although the alternative would meet Objective 3 (e.g., provide high quality residential community compatible and consistent with adjacent approved residential development), it may not satisfy the objective to the same extent as the proposed project.



**Figure 10-2**  
**Clustered Development Alternative**



Considering the Clustered Development Alternative would include only 17 residential units as compared to the proposed 34 units, Objective 2, which aims to provide housing to accommodate population growth, would be achieved to a lesser extent. Because the Alternative would avoid oak woodland habitat, Objective 4 would be met.

### Aesthetics

As noted in the description above, the Clustered Development Alternative would situate the residential units further from the ridgeline, in compliance with General Plan Policy 1.K.1(a). Similar to the proposed project, the Clustered Development Alternative would introduce new sources of light and glare to the project site where none currently exist. Such sources would include, but would not be limited to, vehicle headlights, exterior lighting fixtures, interior light spilling through windows, and light reflected off of windows. Considering that the Clustered Development Alternative would involve the development of fewer units on-site, the project site would be anticipated to produce proportionately less light and glare as compared to the proposed project. Although less light and glare would be produced within the project site, Mitigation Measure 4-2 would still be required.

While not determined to be a significant impact for the proposed project, changes to the visual character or quality of the site and surrounding area under the Clustered Development Alternative would be further minimized, as compared to the proposed project, due to the preservation of more on-site oak woodland habitat and the reduced project footprint. Nevertheless, a noticeable change in the visual character of the site would still occur under the Alternative, as viewed from Bickford Ranch Road, due to the introduction of 17 single-family residences on the project site. In addition, the landscape buffer along the proposed project's Bickford Ranch Road frontage would be eliminated under this Alternative, thereby making project structures more visible from Bickford Ranch Road.

Overall, impacts related to aesthetics could be considered similar under the Clustered Development Alternative compared to the proposed project.

### Air Quality, Greenhouse Gas Emissions, and Energy

The following discussion is provided for informational purposes only, given that this EIR determined the proposed project would not result in any significant impacts related to air quality, GHG emissions, or energy.

Based on the CalEEMod modeling conducted for the proposed project, the development of the entire proposed project site and 34 residential units would generate construction-related and operational criteria pollutant and GHG emissions below the applicable PCAPCD thresholds of significance. Under the Clustered Development Alternative, a smaller area of ground disturbance would be impacted and fewer residential units would be constructed. Therefore, it can reasonably be assumed that criteria pollutant and GHG emissions associated with development of the Alternative would be fewer than those associated with development of the proposed project. In addition, because the Alternative would provide housing for fewer overall residents, fewer vehicle trips would occur under the Alternative and, thus, mobile-sourced GHG emissions would be reduced as compared to the proposed project. Furthermore, because the Alternative would preserve an additional 7.97 acres of oak woodland, the loss of carbon sequestration associated with tree removal would be prevented under the Alternative.



With regard to renewable energy and energy efficiency, both the proposed project and the Alternative would be subject to the requirements included within the 2019 California Building Standards Code and the Placer County Sustainability Plan. In addition, the Alternative would result in less energy demand during operations due to the reduced number of units. As a result, the Alternative would result in fewer impacts related to energy.

Based on the above, impacts related to air quality, GHG emissions, and energy would be fewer under the Clustered Development Alternative compared to the proposed project.

### Biological Resources

Similar to the proposed project, the Clustered Development Alternative would include ground-disturbing activities on the project site and, thus, would have the potential to impact special-status plants, western spadefoot, grasshopper sparrow, northern harrier, purple martin, and white-tailed kite and other migratory birds. Accordingly, Mitigation Measures 6-1(a) through (c), 6-2(a) through (c), 6-5(a) through (e), and 6-11 would still be required. While impacts could still occur, because the Alternative would avoid the on-site oak woodland, the potential for impacts to protected species associated with such habitat would be reduced. Although the Alternative would affect a smaller development footprint, development of the Alternative would likely affect the same 0.11-acre seasonal wetlands as the proposed project given their locations along the southwestern and southeastern project boundaries. As a result, Mitigation Measures 6-6(a) and (b) would still be required.

As noted above, the Clustered Development Alternative would avoid the on-site oak woodland. Therefore, the impact related to conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy, and the impact related to conflicting with the provisions of an adopted Habitat Conservation Plan would be reduced. However, Mitigation Measures 6-8 and 6-9 would still be required due to other land conversion (e.g., annual grassland) and need to comply with PCCP General Conditions.

Overall, impacts to biological resources would be fewer under the Alternative compared to the proposed project.

### Transportation and Circulation

Similar to the proposed project, the Clustered Development Alternative would add construction vehicle traffic to area roadways, thereby potentially conflicting with existing traffic patterns. As such, Mitigation Measure 7-1, which requires the preparation and implementation of a construction signing and traffic control plan, would still be required. However, because the Alternative would involve the construction of 17 residential units, as compared to 34 units under the proposed project, the overall intensity of construction traffic and timeline of the construction period, and associated impacts, would be reduced.

Based on vehicle trip generation rates provided in the Technical Memorandum prepared for the proposed project by Fehr and Peers (see Appendix F),<sup>1</sup> the Clustered Development Alternative would result in approximately 161 average daily trips (ADT) during operations, as compared to 322 ADT occurring with development of the proposed project (see Table 10-1).

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<sup>1</sup> Fehr and Peers. *Draft Technical Memorandum – The Ridge Subdivision*. August 6, 2020





	Quantity (units)	Trip Rate			Vehicle Trips		
		In	Out	Total	In	Out	Total
Proposed Project	34	4.72	4.72	9.44	161	161	322
Clustered Development Alternative	17	4.72	4.72	9.44	80	80	161
<b>Difference</b>	<b>-17</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>-81</b>	<b>-81</b>	<b>-161</b>

*Source: Fehr & Peers, 2020.*

Pursuant to CEQA Guidelines Section 15064.3, VMT is now used as the metric to analyze transportation impacts rather than LOS. While LOS will still be used by the County for purposes of determining consistency with General Plan and community plan goals and policies, LOS is no longer used for determining significant impacts under CEQA. Conflicts with General Plan LOS standards for study intersections or roadway segments were not identified for the proposed project.

Due to the project location and proposed land use type, both the proposed project and the Alternative would generate the same VMT per capita of 29.55. However, considering the Alternative would support 50 percent fewer residents, total VMT associated with the project would be half of the total VMT associated with the proposed project. In addition, according to the Placer County Transportation Study Guidelines screening criteria, small projects, which includes projects with 17 or fewer single-family dwelling units such as the Alternative, are presumed to result in a less-than-significant impact related to VMT.<sup>2</sup> As a result, Mitigation Measure 7-5 would not be required, and the significant and unavoidable impact related to VMT would be eliminated.

Overall, development of the Clustered Development Alternative would result in fewer impacts related to Transportation and Circulation compared to the proposed project.

### Wildfire

Similar to the proposed project, the Clustered Development Alternative would include the establishment and on-going maintenance of an off-site MSFB. In addition, it is assumed that the intervening, on-site oak woodland would also be managed for fuel reduction purposes, thereby creating an even greater fuel break area that could further minimize the potential to exacerbate the spread of a wildfire occurring in the area. Overall, because only 17 residential units would be developed, as opposed to the 34 proposed as part of the project, and an increased fuel management area would be provided, risks related to Wildfire would be slightly reduced as compared to the proposed project.

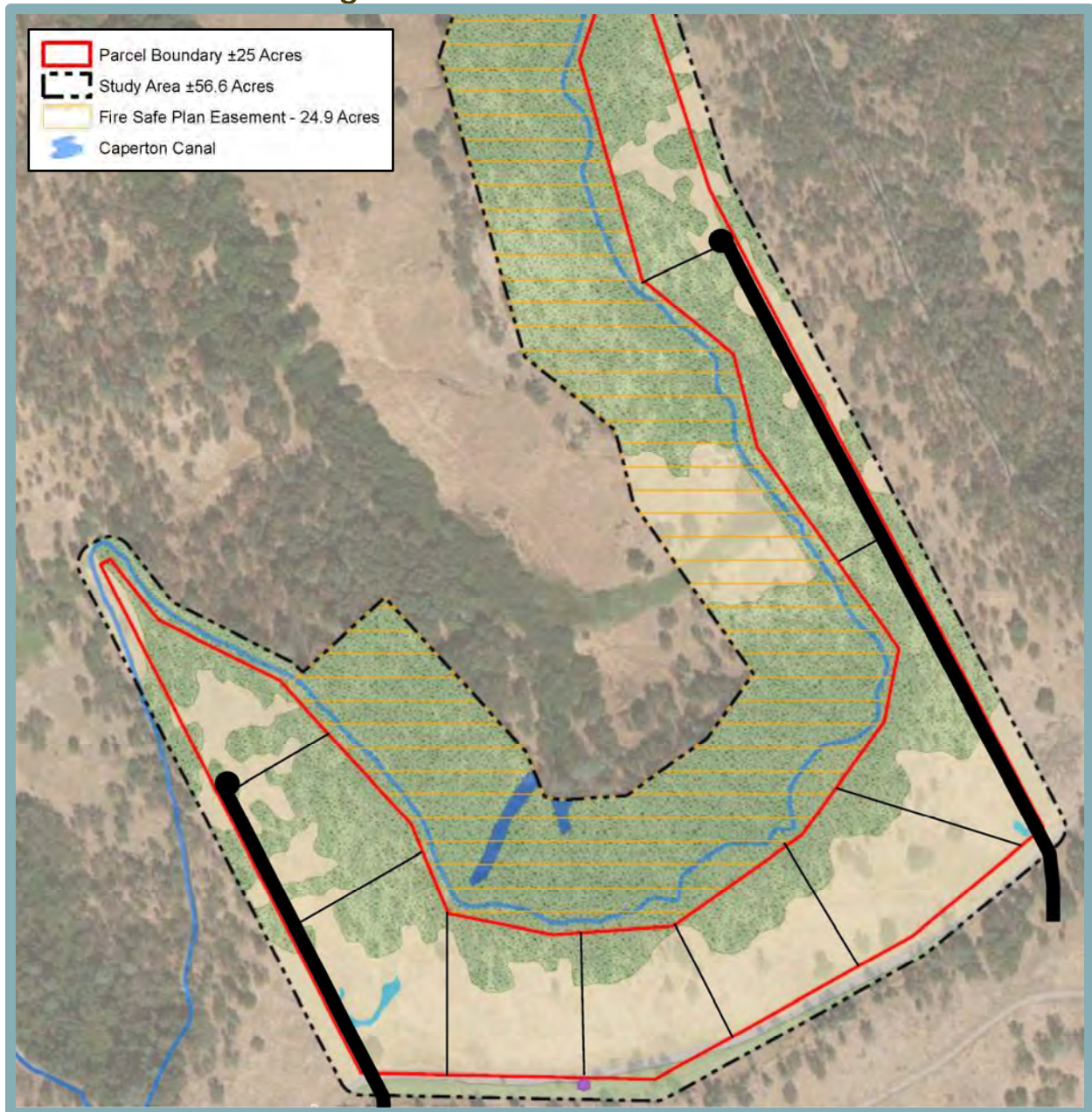
### **Large-Lot Residential Alternative**

This alternative would include development of the project site at a reduced density using larger residential lots. It is assumed that lots would be 2.3 acres in size, thus resulting in a development potential of 10 single-family homes (see Figure 10-3). The 10 lots are assumed to be custom, non-pad graded lots, thereby increasing the potential for tree retention during home design and construction.

<sup>2</sup> Placer County. *County of Placer Transportation Study Guidelines* [pg. 22]. November 2020.



**Figure 10-3**  
**Large-Lot Residential Alternative**



This Alternative would require a General Plan Amendment to redesignate the site from Agriculture/Timberland 10-Ac. Min. to Rural Residential (1-10 acre minimum) and a rezone from F-B-X 10-Ac. Min. to Residential Agricultural 2.3-acre minimum. Similar to the proposed project, this Alternative would also include a separate lot for a detention/retention basin and vehicle access would be from driveways connecting to Bickford Ranch Road, or from two on-site private laneways.

Similar to the proposed project, this Alternative would include the establishment and on-going maintenance of an off-site, 300-foot-wide MSFB along the project's northern boundary, north of the Caperton Canal.

Because the Large-Lot Residential Alternative would include development of the project site with residential uses adjacent to the BRSP, Objectives 1 and 3 would be met. However, considering the Alternative would include only 10 residential units as compared to the proposed 34 units, Objective 2, which aims to provide housing to accommodate population growth, would be achieved to a lesser extent. Because the Alternative would have the potential to reduce tree removal, Objective 4 would be met.

### Aesthetics

Similar to the proposed project, the Large-Lot Residential Alternative would introduce new sources of light and glare to the project site where none currently exist. Such sources would include, but would not be limited to, vehicle headlights, exterior lighting fixtures, interior light spilling through windows, and light reflected off of windows. Considering that the Large-Lot Residential Alternative would involve the development of fewer units on-site, the project site would be anticipated to produce less light and glare as compared to the proposed project. Although less light and glare would be produced within the project site, Mitigation Measure 4-2 would still be required.

While not determined to be a significant impact for the proposed project, changes to the visual character or quality of the site and surrounding area under the Large-Lot Residential Alternative would be further minimized, as compared to the proposed project, due to the reduced development density. Nevertheless, a noticeable change in the visual character of the site would still occur under the Alternative, as viewed from Bickford Ranch Road, due to the introduction of 10 single-family residences on the project site. In addition, the landscape buffer along the proposed project's Bickford Ranch Road frontage would be eliminated under this Alternative, thereby making project structures more visible from Bickford Ranch Road.

Overall, impacts related to aesthetics could be considered similar under the Large-Lot Residential Alternative compared to the proposed project.

### Air Quality, Greenhouse Gas Emissions, and Energy

The following discussion is provided for informational purposes only, given that this EIR determined the proposed project would not result in any significant impacts related to air quality, GHG emissions, or energy.

Based on the CalEEMod modeling conducted for the proposed project, the development of the proposed project site with 34 residential units would generate construction-related and operational criteria pollutant and GHG emissions below the applicable PCAPCD thresholds of significance. Under the Large-Lot Residential Alternative, fewer residential units would be constructed on a



similar area of disturbance. Therefore, it can reasonably be assumed that criteria pollutant and GHG emissions associated with development of the Alternative would be fewer than those associated with development of the proposed project. In addition, because the Alternative would provide housing for fewer overall residents, fewer vehicle trips would occur under the Alternative and, thus, mobile-sourced GHG emissions would be reduced as compared to the proposed project.

With regard to renewable energy and energy efficiency, both the proposed project and the Alternative would be subject to the requirements included within the 2019 California Building Standards Code and the Placer County Sustainability Plan. In addition, due to the reduced number of units, the Alternative would result in less energy demand during operations. As a result, the Alternative would result in fewer impacts related to energy.

Based on the above, impacts related to air quality, GHG emissions, and energy would be fewer under the Large-Lot Residential Alternative compared to the proposed project.

### Biological Resources

Similar to the proposed project, the Large-Lot Residential Alternative would include ground-disturbing activities on the project site and, thus, would have the potential to impact special-status plants, western spadefoot, grasshopper sparrow, northern harrier, purple martin, and white-tailed kite and migratory birds. Thus, Mitigation Measures 6-1(a) through (c), 6-2(a) through (c), 6-5(a) through (e), and 6-11 would still be required. While the Alternative includes the same overall development area, because only 10 residential lots would be included, as opposed to 34 under the proposed project, it is reasonable to expect that much of the large 2.3-acre lots would remain undeveloped, as the lots would not be mass-graded, but custom graded. Accordingly, the severity of impacts to protected species could reasonably be expected to be reduced compared to the proposed project. Development of the Alternative would likely affect the same 0.11-acre seasonal wetlands as the proposed project and, as a result, Mitigation Measures 6-6(a) and (b) would still be required.

As noted above, the Large-Lot Residential Alternative would have increased potential for tree retention. However, actual tree preservation cannot be quantified without home design and construction plans and, therefore, it is anticipated that Mitigation Measures 6-9 and 6-10 may still be required.

Overall impacts to biological resources would be similar or slightly less under the Alternative compared to the proposed project.

### Transportation and Circulation

Similar to the proposed project, the Large-Lot Residential Alternative would add construction vehicle traffic to area roadways, thereby potentially conflicting with existing traffic patterns. As such, Mitigation Measure 7-1, which requires the preparation and implementation of a construction signing and traffic control plan, would still be required. However, because the Alternative would involve the construction of 10 residential units, as compared to 34 units under the proposed project, the overall intensity of construction traffic and timeline of the construction period, and associated impacts, would be reduced.



Based on vehicle trip generation rates provided in the Technical Memorandum prepared for the proposed project by Fehr and Peers (see Appendix F),<sup>3</sup> the Large-Lot Residential Alternative would result in approximately 94 ADT during operations, as compared to 322 ADT occurring with development of the proposed project (see Table 10-2).

<b>Table 10-2 Trip Generation</b>							
	Quantity (units)	Trip Rate			Vehicle Trips		
		In	Out	Total	In	Out	Total
Proposed Project	34	4.72	4.72	9.44	161	161	322
Large-Lot Residential Alternative	10	4.72	4.72	9.44	47	47	94
<b>Difference</b>	<b>-24</b>	--	--	--	<b>-114</b>	<b>-114</b>	<b>-228</b>

*Source: Fehr & Peers, 2020.*

However, considering conflicts with General Plan LOS standards for study intersections or roadways segments were not identified for the proposed project, the Alternative would, similarly, not be expected to conflict with LOS standards. As noted previously, LOS is not a CEQA consideration, but is still used by the County for purposes of determining consistency with General Plan and community plan goals and policies.

Due to the project location and proposed land use type, both the proposed project and the Alternative would generate the same VMT per capita of 29.55. However, considering the Alternative would be assumed to house fewer residents, total VMT associated with the project would be reduced as compared to the total VMT associated with the proposed project. In addition, as noted previously, small projects, including the Alternative, are presumed to result in a less-than-significant impact related to VMT, pursuant to the County’s Transportation Study Guidelines screening criteria.<sup>4</sup> As a result, Mitigation Measure 7-5 would not be required, and the significant and unavoidable impact related to VMT would be eliminated.

Overall, development of the Large-Lot Residential Alternative would result in fewer impacts related to Transportation and Circulation compared to the proposed project.

### Wildfire

Similar to the proposed project, the Large-Lot Residential Alternative would include the establishment and on-going maintenance of an off-site Fuel Management Zone easement. In addition, Mitigation Measure 8-2 would still be required in order to reduce potential risks to future residents. However, because only 10 residences would be developed under the Alternative, as compared to the 34 associated with the proposed project, impacts related to Wildfire would be fewer than the proposed project.

## **10.4 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.

<sup>3</sup> Fehr and Peers. *Draft Technical Memorandum – The Ridge Subdivision*. August 6, 2020

<sup>4</sup> Placer County. *County of Placer Transportation Study Guidelines* [pg. 22]. November 2020.



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 10-3.

The No Project (No Build) Alternative would not meet any of the project objectives. Both the Clustered Development Alternative and the Large-Lot Residential Alternative would meet Objectives 1 and 3; although, as previously noted, the Clustered Development Alternative would not satisfy Objective 3 to the same degree as the proposed project. The Clustered Development Alternative would include the development of more units than the Large-Lot Residential Alternative and, therefore, would more substantially achieve Objective 2. In addition, because the Clustered Development Alternative would avoid on-site oak woodland, the Alternative would fully achieve Objective 4. Although the Large-Lot Residential Alternative has the potential to avoid oak trees, the full implementation of Objective 4 cannot be ensured at this time.

As discussed throughout this chapter and shown in Table 10-3, both the Clustered Development Alternative and the Large-Lot Residential Alternative would result in fewer impacts than the proposed project related to air quality, GHG emissions, energy; transportation and circulation; and wildfire. Because the Clustered Development Alternative would result in a smaller area of disturbance, the Alternative would result in fewer impacts to biological resources and, specifically, fewer impacts to oak woodlands.

Based on the above, the Clustered Development Alternative would be considered the environmentally superior alternative to the proposed project.



**Table 10-3  
Comparison of Environmental Impacts for Project Alternatives**

<b>Resource Area</b>	<b>Proposed Project</b>	<b>No Project (No Build) Alternative</b>	<b>Clustered Development Alternative</b>	<b>Large-Lot Residential Alternative</b>
Aesthetics	Less-Than-Significant with Mitigation	None	Similar	Similar
Air Quality, Greenhouse Gas Emissions, and Energy	Less-Than-Significant	None	Fewer	Fewer
Biological Resources	Less-Than-Significant with Mitigation	None	Fewer	Similar
Transportation and Circulation	Less-Than-Significant with Mitigation and Significant and Unavoidable	None	Fewer	Fewer
Wildfire	Less-Than-Significant with Mitigation	None	Fewer	Fewer
<b>Total Fewer:</b>		<b>5</b>	<b>4</b>	<b>3</b>
<b>Total Similar:</b>		<b>0</b>	<b>1</b>	<b>2</b>
Note: No Impact = "None;" Less than Proposed Project = "Fewer;" and Similar to Proposed Project = "Similar"				



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## **11. REFERENCES**

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## 11. REFERENCES

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## **12. EIR AUTHORS AND PERSONS CONSULTED**

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## 12. EIR AUTHORS AND PERSONS CONSULTED

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Michele Kingsbury	Principal Management Analyst
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David Bise

### Phillis Consulting Services

Adrienne L. Graham, AICP



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# APPENDIX A

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**COMMUNITY DEVELOPMENT/RESOURCE AGENCY**  
**Environmental Coordination Services**  
County of Placer

**DATE:** December 29, 2020

**TO:** California State Clearinghouse  
Responsible and Trustee Agencies  
Interested Parties and Organizations

**SUBJECT:** **Notice of Preparation of an Environmental Impact Report for The Ridge Subdivision Project**

**REVIEW PERIOD:** **December 30, 2020 through January 28, 2021**

Placer County is the lead agency for the preparation of an Environmental Impact Report (EIR) for The Ridge 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 a horseshoe-shaped parcel located approximately one mile southeast of the intersection of State Route (SR) 193 and Clark Tunnel Road in unincorporated Placer County, California. The Placer County General Plan designates the site as Agriculture/Timberland 10-acre minimum, and the site is zoned Farm, combining minimum Building Site of 10 acres (F-B-X 10-Ac. Min.). The site is identified by Placer County Assessor's Parcel Number (APN) 031-106-030-000.

**Project Description Summary:** The proposed project would include subdivision of the project site to develop 34 single-family residential homes and associated improvements. The proposed project would require approval of a General Plan Amendment (GPA), Rezone, and a Vesting Tentative Subdivision Map. The project also requires annexation into Placer County Sewer Maintenance District 1 (SMD 1) for sewer service and approval of a Design Exception Request.

**Contact Information:** For more information regarding the proposed project, please refer to the following detailed project description or contact Christopher Schmidt, Supervising Planner, at (530) 745-3076 or [crschmid@placer.ca.gov](mailto:crschmid@placer.ca.gov). A copy of the NOP is available for review 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 January 28, 2021, 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](mailto:cdraecs@placer.ca.gov).

**NOP Scoping Meeting:** In addition to the opportunity to submit written comments, a NOP scoping meeting will be held virtually via Zoom 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 Zoom meeting will be held on January 14, 2021, at 1:00PM

Enter the link below into your web browser to join the webinar:

<https://zoom.us/j/99325310487>

Or Telephone:

1+ (877) 853 5247 or 1+ (888) 788 0099

Webinar ID: 993 2531 0487



## **1.0 PROJECT DESCRIPTION**

### **1.1 Location and Setting**

The 24.95-acre Ridge Project (proposed project) site consists of a horseshoe-shaped parcel located approximately one mile southeast of the intersection of the intersection of State Route (SR) 193 and Clark Tunnel Road in unincorporated Placer County, California (see Figure 1 and Figure 2). The Placer County General Plan designates the site as Agriculture/Timberland 10-acre minimum, and the site is zoned Farm, combining minimum Building Site of 10-acres (F-B-X 10-Ac. Min.). The site is identified by Placer County Assessor's Parcel Number (APN) 031-106-030-000.

The project site is situated atop three interconnected ridges forming a horseshoe shape. The site is currently undeveloped, consisting primarily of grasses, oak woodland, and scattered rock outcroppings. Based on an Arborist Report prepared for the proposed project, the project site along with an adjacent 50-foot survey area contains a total of 46 oak trees with a single trunk diameter at breast height (DBH) of at least six inches or a cumulative trunk DBH of at least 10 inches.<sup>1</sup> The site is used for seasonal cattle grazing. Access to the project site is provided by Clark Tunnel Road, an unimproved dirt roadway that ultimately connects to the community of Penryn, further to the southeast of the project site.

### **1.2 Surrounding Land Uses**

The densely wooded area to the north of the project site slopes steeply downward towards the valley below. An undeveloped ranch (La Faille Ranch property), owned by the project applicant, which is also used for cattle grazing, is located within the valley to the north of the site. The southern boundary of the La Faille Ranch property includes the existing concrete-lined Caperton Canal, owned and operated by the Placer County Water Agency (PCWA), which bifurcates the ranch from the project site. The Caperton Canal is used to deliver untreated water to treatment plants in the Rocklin and Lincoln areas and is also sold to customers for irrigation, including supplying water to the pond on the La Faille Ranch property. The areas to the east, south, and west of the site are currently undeveloped, but are planned for buildout with future low-density residential and rural residential uses as part of the Bickford Ranch Specific Plan (BRSP), which was approved by the County in 2004 and amended as recently as 2015.

### **1.3 Approach to Baseline Analysis**

The above general description of the current environmental conditions of the project site and its surroundings is provided for informational purposes and reflects the baseline conditions of the project site for impact analysis purposes. The actual baseline conditions of the surrounding area for impact analysis purposes in the EIR and attached Initial Study will be adjusted to reflect completion of Phase 1 BRSP. Such an approach to the baseline is allowable under CEQA, as further discussed in the Background section of the attached Initial Study.

Importantly, development of the proposed project is dependent upon the installation of Bickford Ranch Road and associated utilities (water and sewer trunk mains) through Phase 1 of the BRSP and extension of such infrastructure through a portion of BRSP Phase 2 along the entire project frontage (see Figure 3). The applicant for the proposed project has indicated that it is not financially feasible to proceed with the proposed project prior to the completion of Phase 1 of the approved BRSP project; specifically, the cost of the key backbone infrastructure needed to serve the proposed project cannot be borne by the 34-lot project alone. As a result, the proposed project would be developed subsequent to completion of the Phase 1 infrastructure for BRSP. It is therefore necessary to identify the number of residential units that could be built in BRSP Phase 1 and considered part of the baseline for the subject analysis. According to the BRSP Infrastructure Phasing Plan (IPP), the total possible number of units in Phase 1 of the BRSP is 1,010.

The terminus of Bickford Ranch Road after completion of Phase 1 BRSP improvements will stop short of The Ridge project site, leaving about 400 feet of unpaved roadway between the terminus and the southwestern corner of The Ridge project site. This 400-foot segment would either be constructed during commencement of Phase 2 of BRSP, or depending on the timing of BRSP Phase 2, potentially by The Ridge applicant. In both cases, mitigation for this segment of Bickford Ranch Road would be implemented consistent with the adopted mitigation measures for BRSP.

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<sup>1</sup> Helix Environmental Planning. *Arborist Report and Oak Woodland Inventory, The Ridge ±56.6-Acre Study Area Placer County, California*. April 2020.

**Figure 1**  
**Regional Project Location**

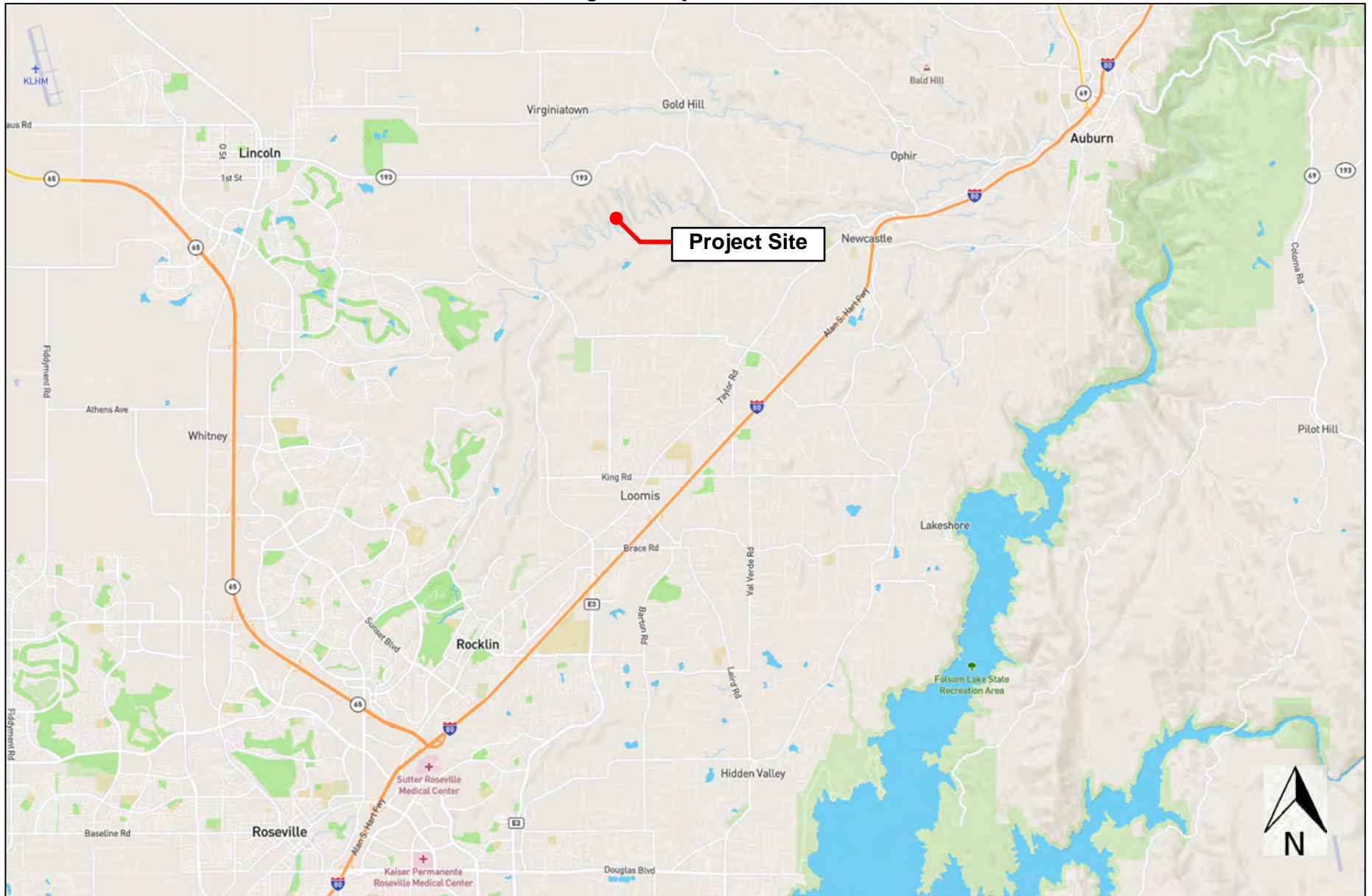


Figure 2  
Project Site Boundaries

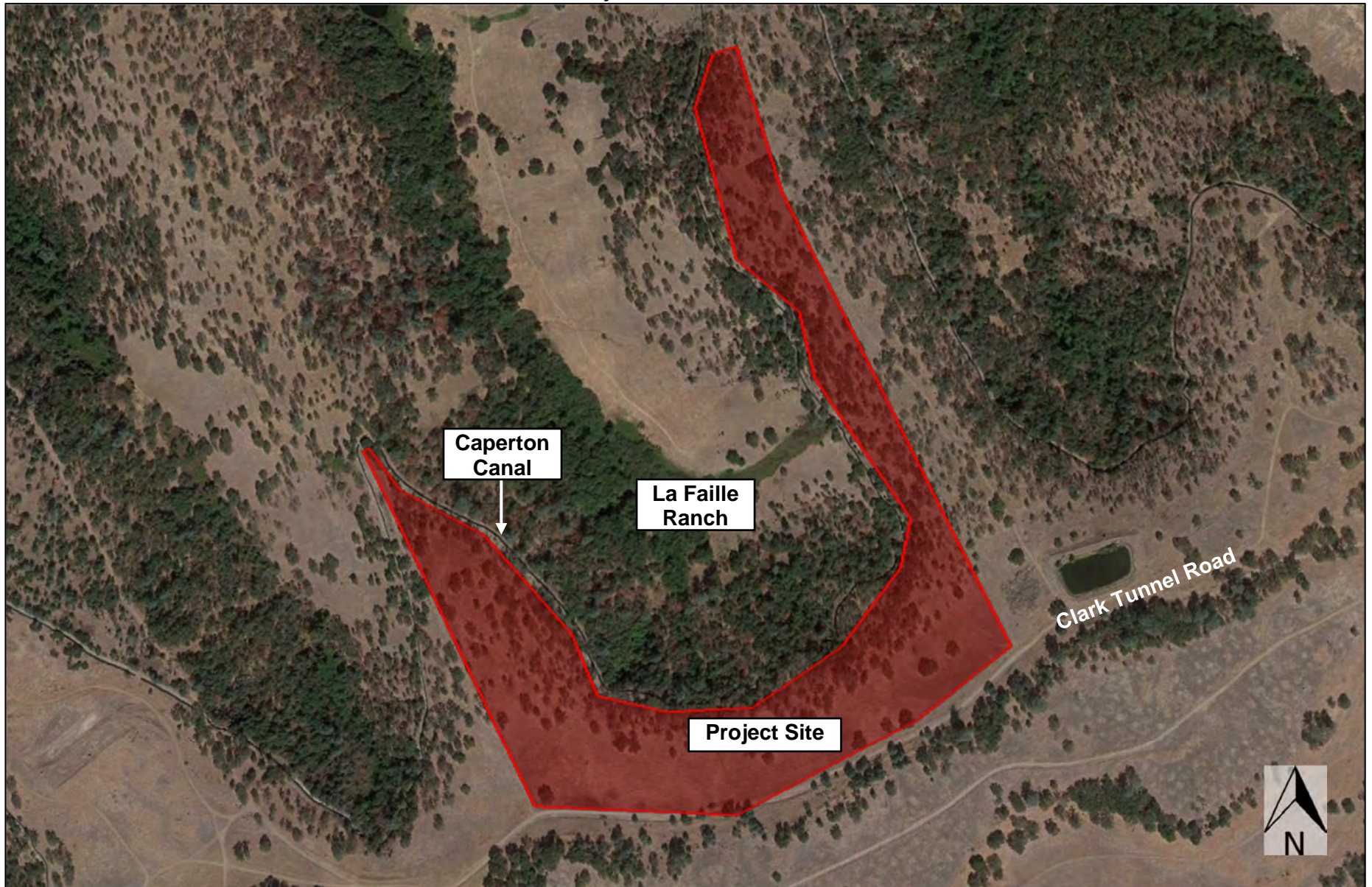
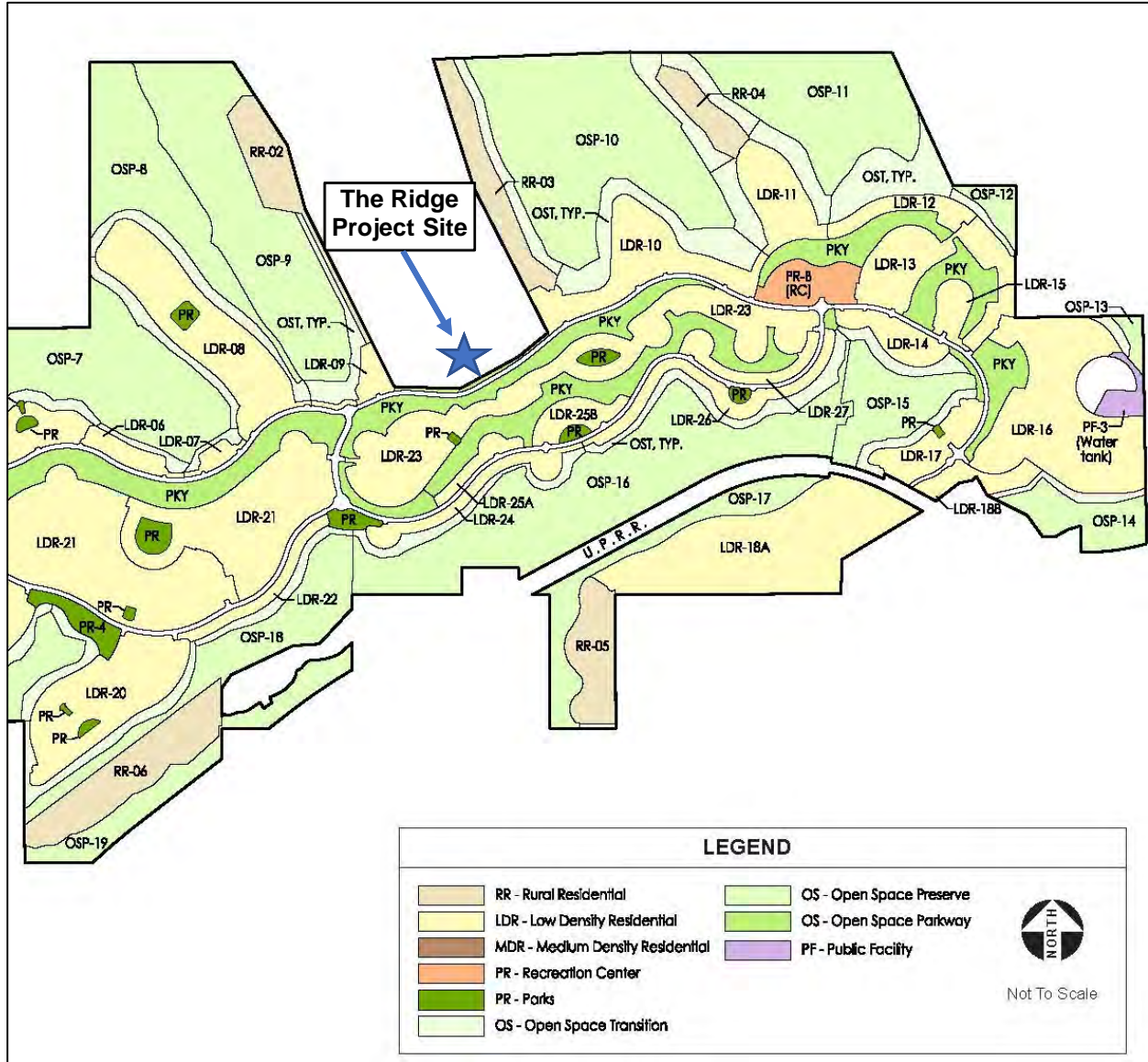


Figure 3  
BRSP Land Use Plan



## 1.4 Project Components

The proposed project would include subdivision of the project site to develop 34 single-family residential homes and associated improvements (see **Error! Not a valid bookmark self-reference.**). The proposed project would require approval of a General Plan Amendment (GPA), a Rezone, and a Vesting Tentative Subdivision Map. The proposed project also requires annexation into Placer County Sewer Maintenance District 1 (SMD 1) and approval of a Design Exception Request. The proposed project components, along with all required entitlements and approvals, are described in the following sections.

### General Plan Amendment/Rezone

The proposed project would include a GPA to change the General Plan land use designation of the project site from Agriculture/Timberland 10 Ac. Min. to Medium Density Residential (MDR) (13.85 acres) and Low Density Residential (LDR) (11.10 acres) (Figure 5). In addition, the project would include a Rezone to change the site's zoning designation from Farm, combining minimum Building Site of 10 acres (F-B-X 10-Ac. Min.) to Residential Single-Family, combining minimum Building Site of 8,000 square feet (RS-B-8) (13.85 acres) and Residential Single-Family, combining minimum Building Site of 10,000 square feet (RS-B-10) (11.10 acres) (see Figure 6).

### Vesting Tentative Subdivision Map

The proposed Vesting Tentative Subdivision Map would create 34 residential lots, an internal roadway (Lot A) and a detention/retention basin (Lot B). Of the 34 total residential lots, 28 would be medium-density lots ranging in size from 13,700 square feet (sf) to 38,416 sf, with an average size of 18,206 sf and an average net density of 2.3 units per acre. The remaining six residential lots would be low density residential lots ranging in size from 1.1 to 2.2 acres, with an average net density of 0.60 units per acre. The six low-density residential lots would be located along the ridges within the eastern and western portions of the site and are intended to be similar in size to the Rural Residential (RR) lots within the adjacent BRSP Phase 2 area. Combined, the proposed project would result in an average residential density of 1.55 units per acre.

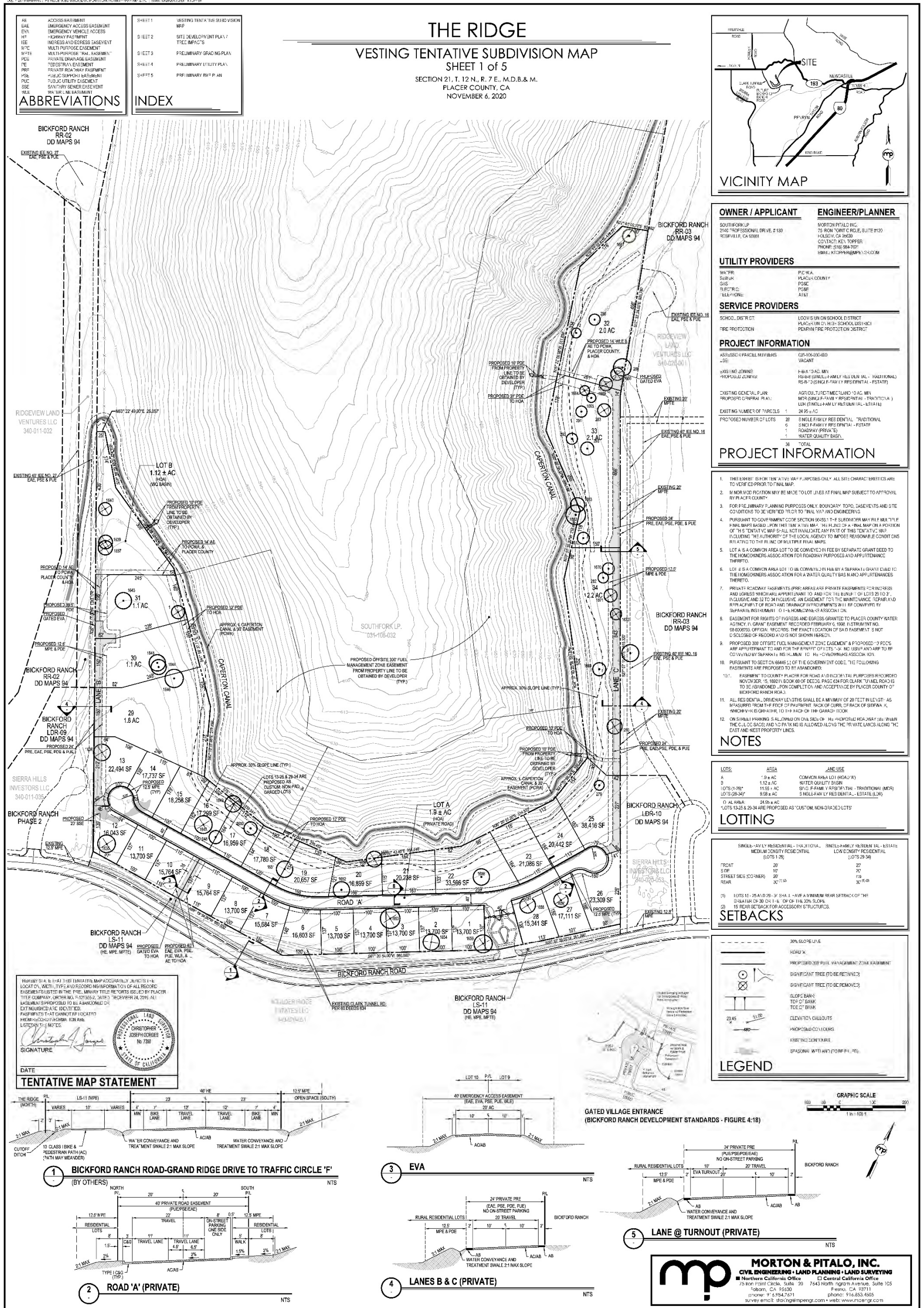
The proposed lot sizes would be similar to the BRSP parcels to the east and west of the project site. The proposed development standards for the proposed project, shown in Table 1 below, are generally similar to the County-approved Rural Residential and Low Density Residential standards as set forth in the BRSP Development Standards. The proposed project would not include dedicated park space within the project site.

In accordance with Placer County's adopted Affordable Housing and Employee Accommodation Fee Program, ten percent of the project's units would be required to be affordable due to the requested land use designation and zoning changes that would increase permitted residential density. Four affordable housing units are required (3.4 rounded up). The applicant may build or acquire the units at the affordability guidelines on or off site or pay an in-lieu fee. A specific approach to meeting the affordable housing requirement has not been selected at this time.

Under the Placer County Conservation Plan (PCCP), watercourses such as canals, channels and flood water conveyances that are lined and non-earthen condition do not have watercourse setbacks. For the proposed project, the minimum setback distance is to be the defined 30 percent slope line extending along the rear of lots 15 through 25 and 29 through 34, or the 30-foot rear lot building setback line of said lots, whichever is greater, but not less than 50 feet from the centerline of the canal. PCWA must determine that the proposed minimum 50-foot setback is not likely to jeopardize the canal structure, nor threaten the quality of water in the canal, nor inhibit access to the canal.

The proposed project would include construction of a six-foot masonry wall along the project frontage at Bickford Ranch Road. The remainder of the proposed development area would be surrounded by split rail fencing along the east and west boundaries where residential lots are proposed adjacent to Bickford Ranch Rural Residential lots, and by wrought-iron fencing elsewhere (see Figure 7). As shown in Figure 8, the proposed project would include new trees and other landscaping elements along Bickford Ranch Road and the project entry.

Figure 4  
Vesting Tentative Subdivision Map



**Figure 5  
Proposed General Plan Amendment**

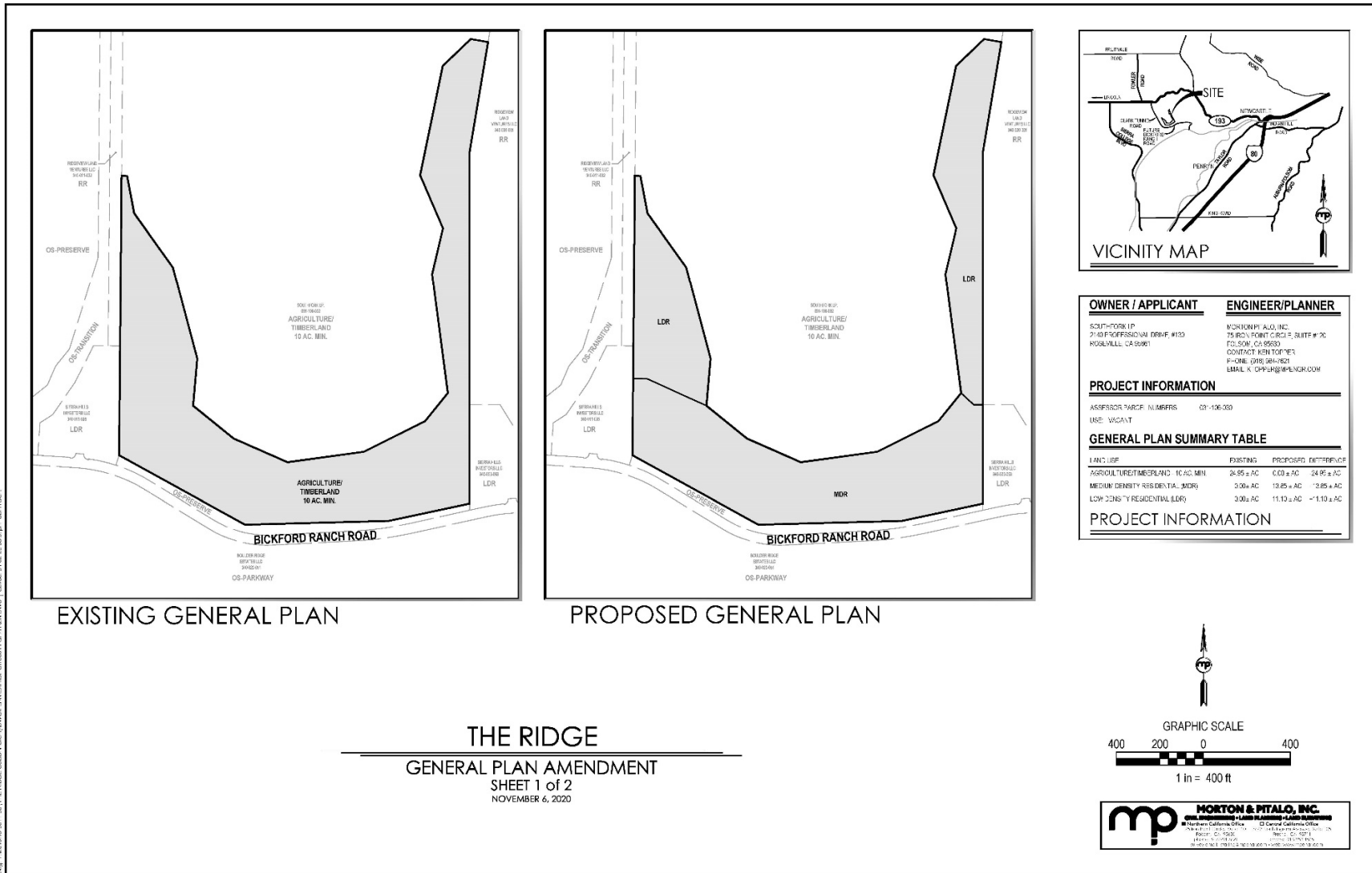
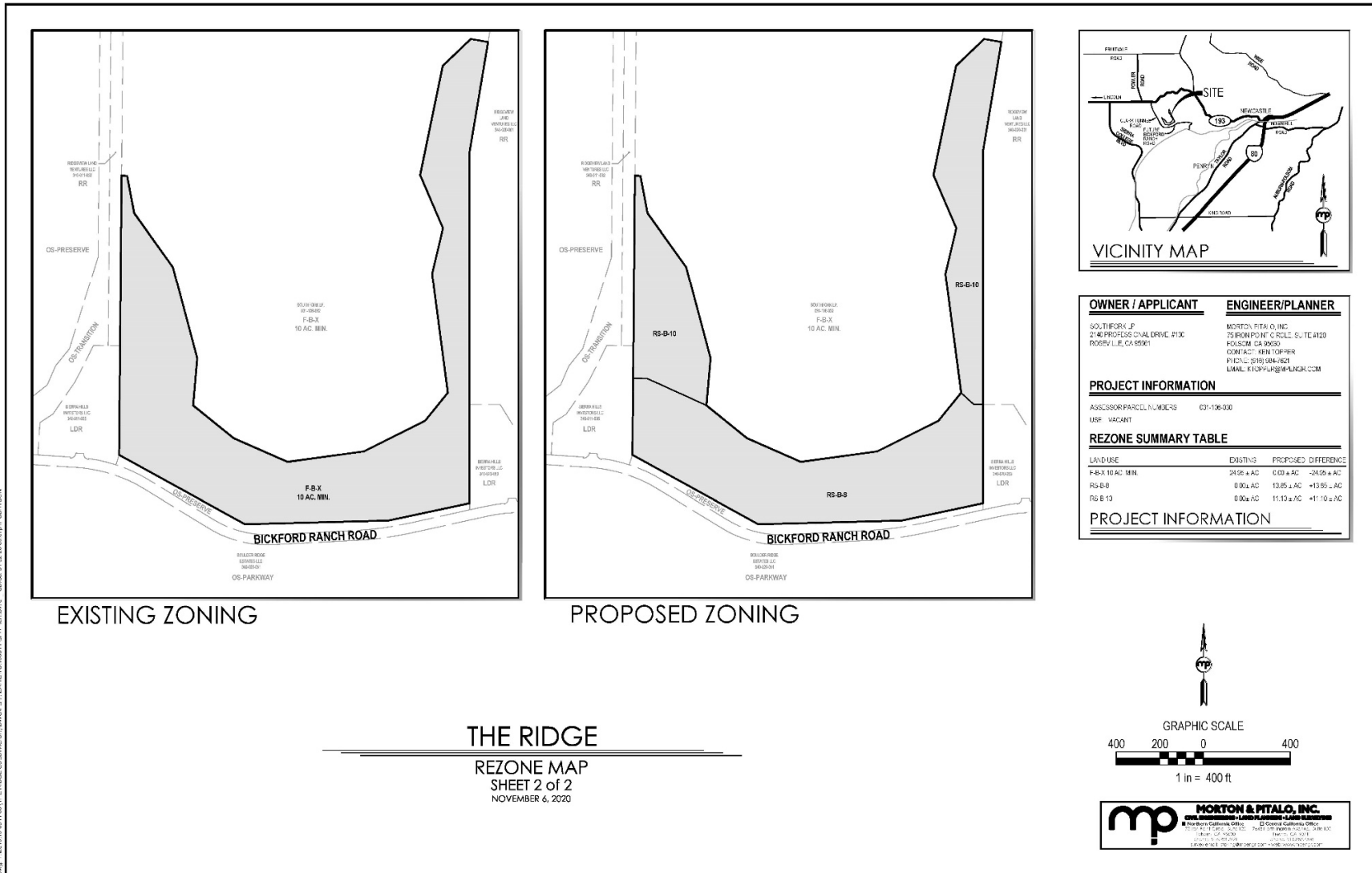


Figure 6  
Proposed Rezone





**Figure 7**  
**Site Improvement Plan**

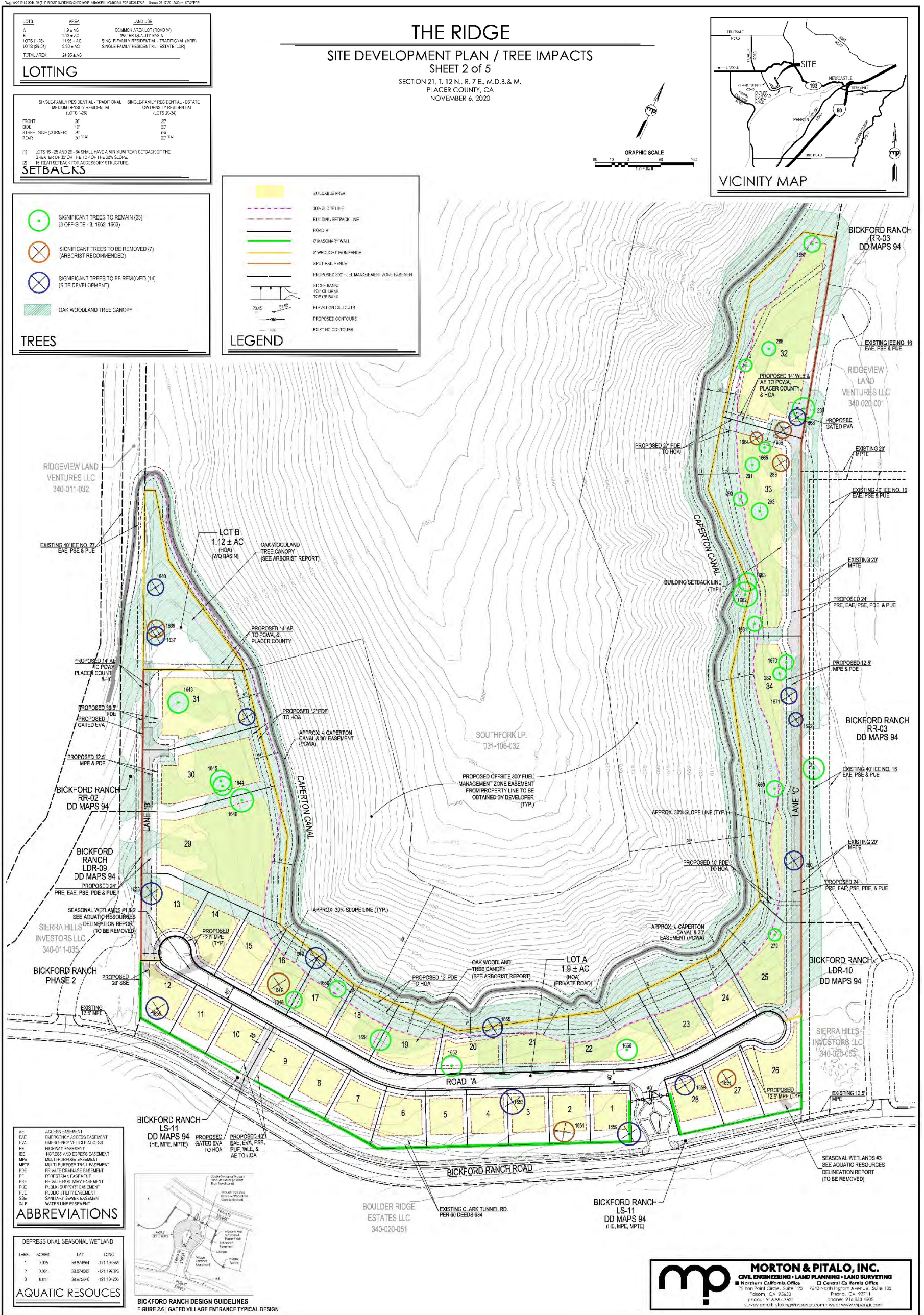
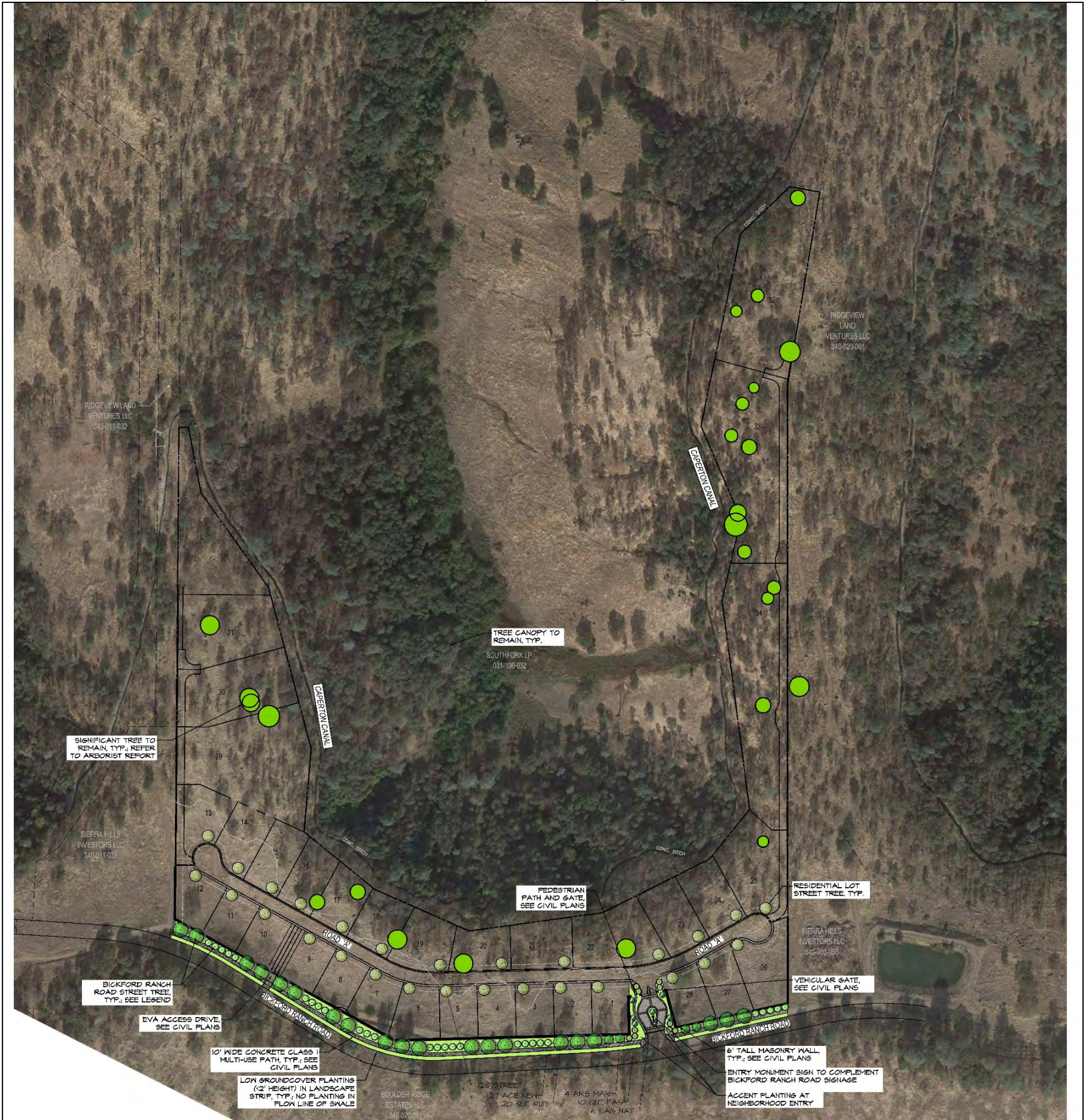


Figure 8  
Proposed Landscaping



**IRRIGATION NARRATIVE**

A new single point of connection for the irrigation system shall be tapped into the water mainline in the Bickford Ranch Road ROW. Irrigation system shall have its own dedicated irrigation water meter, backflow prevention device, master valve, and flow sensor consistent with current local codes.

Landscaping along Bickford Ranch Road and neighborhood entry drive will be serviced with a fully automatic irrigation system to include PVC mainline and lateral piping, remote control valves and wiring, bubblers at all new trees, and subsurface drip irrigation to all new shrub and groundcover plantings. Stations/hydrozones shall be delineated based on similar water demands, sun exposure, and microclimates. Street trees on residential lots along Road 'A' will be irrigated via each residential lot owner.

A new commercial-quality controller (minimum 18 stations) with wireless rain/freeze sensor will be installed in a metal pedestal near entry drive.

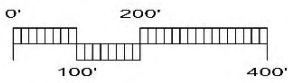
**TREE SCHEDULE**

TREE SPECIES ARE CONSISTENT WITH THE BICKFORD RANCH ROAD PLAN PALETTE

TREES	CODE	QTY	BOTANICAL / COMMON NAME	SIZE
	ACE NEA	27	Acer nitrum 'New Nor'd' / New Nordic Red Maple	15 gal
	ARB MAR	4	Arbutus x Marina / Garden Madrone - Standard	15 gal
	LAG NAT	6	Lagerstroemia x 'Natchez' / Grape Myrtle	15 gal
	QUE FAS	10	Quercus robur 'Fastigiata' / Pyramidal English Oak	24" box
	QUE RUB	20	Quercus rubra / Red Oak	15 gal
	STREET	25	Street Tree	15 gal

**SHRUBS AND GROUNDCOVER**

	SHRUBS AND GROUNDCOVER PLANTINGS CONSISTENT WITH BICKFORD RANCH ROAD PLAN PALETTE	5,120 sq
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<b>Table 1 Proposed Development Standards</b>		
	<b>Single-Family Estate Low Density (RS-B-10)</b>	<b>Single-Family Traditional Medium Density Residential (RS- B-8)</b>
<b>Lot Sizes and Coverage</b>		
Lot area – minimum	1.1 acre	8,000/13,700 sf
Lot coverage – maximum	40% one-story, 35% two-story	40%
Lot width – interior lot minimum <sup>1</sup>	125 feet	90 feet
Lot width – corner lot – minimum <sup>1</sup>	N/A	90 feet
<b>Building Setbacks</b>		
Front <sup>2</sup>	25 feet	20 feet
Side	20 feet	10 feet
Rear <sup>3</sup>	30 feet	30 feet
Rear – accessory structure	15 feet <sup>3</sup>	15 feet <sup>3</sup>
<b>Building Height</b>		
	30feet	30feet
<b>Parking Spaces – Minimum</b>		
Resident – in garage	2	2
Guest – on- or off-street	2	2
<sup>1.</sup> Measured at the front setback line. <sup>2.</sup> Measured from back of sidewalk or right-of-way line where there is no sidewalk, and the edge of pavement on the private lanes. <sup>3.</sup> Lots 15-25 and 29 – 34 shall have a minimum rear building setback of 30 feet or the top of slope of 30 percent, whichever is greater (as measured from the rear property line). <sup>4.</sup> Subject to requirements of the Placer County Zoning Ordinance Section 17.54.150.		

**Access and Circulation**

The primary access for the proposed project would be provided by Bickford Ranch Road, which would be constructed from Sierra College Boulevard to a point near the southwestern corner of the project site during completion of Phase 1 improvements for BRSP. As previously discussed, The Ridge Project is reasonably expected to be developed after completion of BRSP Phase 1 infrastructure is installed and accepted as complete by the County. The terminus of Bickford Ranch Road after completion of Phase 1 BRSP improvements will stop short of The Ridge project site, leaving about 400 feet of unpaved roadway between the terminus and the southwestern corner of The Ridge project site. This 400-foot segment and the segment along the entire frontage of the project site would either be constructed during commencement of Phase 2 of BRSP, or depending on the timing of BRSP Phase 2, potentially by The Ridge applicant. Analysis of the potential environmental impacts associated with construction of Bickford Ranch Road has already been conducted during the environmental review of the BRSP, and that analysis will be incorporated by reference in the EIR, as necessary, pursuant to CEQA Guidelines Section 15150. Should The Ridge applicant pursue construction of the above-referenced 400-foot segment of Bickford Ranch Road, The Ridge applicant will be responsible for implementing all applicable mitigation measures adopted in the MMRP for the BRSP EIR and associated Addendum, prior to and during construction of the roadway segment. Thus, access to future Bickford Ranch Road will be assumed in the analysis.

The project entry would connect to Bickford Ranch Road and include a gated entry feature and a village entrance monument, similar to those designed and included in the approved BRSP Development Standards and Design Guidelines. Pedestrian access would be provided by a sidewalk connecting the multi-purpose trail in the landscaped parkway corridor along Bickford Ranch Road and extending through a pedestrian gated entry feature to connect with the sidewalk adjoining the south side of the proposed private residential street within the project site.

The gated private two-way residential street fronting the proposed low density residential lots would include a 22-foot-wide travel lane with a three-foot-wide curb and gutter on the north side, an eight-foot-wide parallel parking lane along the south side of the travel area, and a five-foot-wide pedestrian sidewalk contiguous thereto. Two private lanes would extend from the westerly and easterly cul-de-sacs of the private residential

street, each serving three rural residential lots. The two private lanes would include 20-foot-wide travel lanes with two-foot-wide shoulders on each side.

Contiguous to the interior of the private lanes (B and C) and shoulders, a drainage conveyance and treatment swale would be provided within a 12.5-foot-wide multipurpose easement and private drainage easement. Each of the private lanes would include vehicular turnouts for two-way emergency traffic and turn-arounds designed in accordance with the requirements of the governing fire and sewer districts. A gated, 20-foot-wide paved emergency vehicle access (EVA) road would connect the internal private residential street with Bickford Ranch Road. The EVA road would be located between Lots 9 and 10, near the southwest portion of the site. Locked gates for additional EVA purposes would be included as a part of the east and west project boundary fencing to allow access to and from the project's private lanes to the access roads designed along or near the project's common boundaries within the BRSP development.

#### Utilities and Service Systems

The proposed project would connect to public utilities that will be located within Bickford Ranch Road at the project frontage. Such utilities will be constructed as part of Phase 1 and Phase 2 of the BRSP. Completion of BRSP Phase 1 water and sewer infrastructure would bring the water and sewer trunk lines near the southwestern corner of The Ridge project site, leaving about a 400-foot gap between the stubbed lines and The Ridge project site. Again, depending on the timing of Phase 2 of BRSP, the Ridge applicant may choose to construct a portion of the water and sewer trunk lines to their property and along the entire project frontage, which is further discussed under "Off-Site Improvements" below. Water would be provided by PCWA, and wastewater would be provided by the Placer County Department of Facility Services.

The detention/retention basin included on Lot B would receive stormwater runoff from Pro1A (9.56 acres) and Pro1B (7.4 acres). Pro1A generally consists of the internal roadway (Road A), Lane B along the project's western boundary, Lots 1 through 13, and Lots 26 through 28. Pro1B generally consists of Lots 14 through 23 and downslope portions of Lots 29 through 31. Stormwater runoff from Pro1A would flow to the detention/retention basin via a vegetated swale. Stormwater runoff from Pro1B would be captured in the rock cobble cutoff v-ditch and directed to the detention/retention basin. Stormwater runoff from Pro1B would be captured in the rock cobble cutoff v-ditch and directed to the detention/retention basin. The proposed rock cobble cutoff v-ditch has been sized to accommodate flow from a 100-year storm, with 0.50-foot of freeboard.

The proposed detention/retention basin has also been sized to mitigate the peak flow and volumetric impacts from the entire project. A 30-inch drainage discharge pipe would be directed to the flume over the Caperton Canal. The infiltration elevation of the basin, to be located upstream of the Caperton Canal, would be below the elevation of the existing canal. As such, infiltration from the detention/retention basin would not adversely affect the integrity of the canal.

Pro2 consists of the remainder of the subdivision (Lots 23 through 25, 32 through 34, and Lane C) and is divided into Pro2A (7.08 acres) and Pro2B (4.13 acres). Stormwater runoff from Pro2 would be captured in the rock cobble cutoff v-ditch and drain to two proposed Caperton Canal flume crossings without restriction. Water treatment for the sheds would be provided by the vegetated swales adjacent to the roadway pavement and disconnected roof drains for the residential lots. The proposed cobble lined v-ditch along the downslope section of the lots will convey the flows to the point of discharge.

Pro3 (19.22 acres) is existing and is not proposed for development as part of the project. Pro4 (3.06 acres) would be directed to the portion of Bickford Ranch Road along the project's frontage with construction of the roadway improvements. Treatment of runoff from Pro4 would be provided by the proposed roadside vegetated drainage swale.

#### Off-Site Improvements

Development of the proposed project is conditioned to be dependent upon the installation of Bickford Ranch Road and associated utilities through Phase 1 of the BRSP and extension of such infrastructure through a portion of BRSP Phase 2 to the project entry. In the event the Phase 2 improvements of Bickford Ranch have not yet been constructed, and the proposed project has obtained necessary entitlements and is ready

to proceed, off-site improvements to a segment of Bickford Ranch Road would be required to extend services and complete access along the entire project frontage. Specifically, such improvements would include the approximately 400-foot extension of Bickford Ranch Road from the Phase 1 terminus thereof, along the entire frontage of the project, including all required water, sewer, drainage and dry utilities therein. In addition, improvements would be made to the BRSP landscape corridor parcel which would front upon the project, including the landscaping thereof and the installation of the multi-purpose trail in accordance with the improvement concept set forth in the BRSP Development Standards and Design Guidelines. All off-site improvements would be constructed consistent with the BRSP and applicable mitigation measures.

#### Fuel Management Zone

The proposed project would include the establishment and on-going maintenance of an off-site, 300-foot wide Fuel Management Zone easement along the project's northern boundary, north of the Caperton Canal. The Fuel Management Zone would be accessed by maintenance crews by way of the access easements from Lanes B and C along Lot B and Lot 32, and over the canal at access points consistent with those constructed by PCWA to service the canal. Maintenance of the Fuel Management Zone would be the responsibility of the proposed project's homeowner's association and would include routine clearing of understory brush to reduce fire hazards, but would not include removal of mature trees or substantial ground-disturbing activities. During the CAL FIRE declared fire season, understory brush within the Fuel Management Zone, including annual grasses and dead vegetation, would be maintained at a height of four inches or less. Maintenance would occur as frequently as necessary to ensure proper reduction of vegetation height, and no less than once per year, according to the Fire Safe Plan prepared for the project.

#### Grading Activities

Similar to the Bickford Ranch Development Standards and standard County requirements, which restrict any construction activities in areas with slopes greater than 30 percent, the identified 30 percent slope line within the project site, as shown in Figure 7, would serve as the building setback line, where the 30 percent slope edge is greater than the typical development standard defined setback. The only proposed grading disturbance in slope areas greater than 30 percent would be for the construction of the proposed drainage outfalls and flume crossings of the Caperton Canal and the proposed rock cobble cutoff v-ditch.

It should be noted that Lots 13 through 25 along the north side of Road A and the proposed low density residential lots (Lots 29 through 34) are proposed as custom, non-graded lots. Thus, grading activities would be primarily restricted to the upper elevations of the ridge predominantly within the southern portion of the project site.

#### Annexation

The proposed project would require annexation of the project site into SMD 1 for the provision of sewer services, subject to approval by the Placer County Board of Supervisors. As part of the proposed annexation, the project would be subject to payment of applicable annexation fees pursuant to Section 13.12.260 of the Placer County Code.

#### Design Exception

The proposed project involves a request for an exception to the Placer County standards regarding design speed, as defined by Section 4.03 of the County's Land Development Manual, in two locations. More specifically, the project proposal requests a design exception to the 25-mph design speed requirement at each end of the private street (Road A), where the street transitions to a private lane serving the proposed low-density residential lots.

### **1.5 Requested Entitlements**

The project applicant is requesting Placer County approval of the following entitlements:

- General Plan Amendment from Agriculture/Timberland 10 Ac. Min. to MDR (13.85 acres) and LDR (11.10 acres);
- Rezone from F-B-X 10-Ac. Min. to RS-B-8 (13.85 acres) and RS-B-10 (11.10 acres); and,
- Vesting Tentative Subdivision Map.

And the following approval:

- Annexation into SMD 1

## 2.0 PROBABLE ENVIRONMENTAL EFFECTS AND SCOPE OF THE EIR

Based upon the Initial Study analysis conducted for the proposed project (see Attachment A to this NOP) and consistent with Appendix G of the CEQA Guidelines, the County anticipates that the EIR will contain the following chapters:

- Aesthetics
- Air Quality and Greenhouse Gas Emissions
- Biological Resources
- Transportation
- Wildfire
- Statutorily Required Sections
- Alternatives Analysis

For the remaining CEQA issue areas, the Initial Study determined that a less-than-significant impact or no impact would occur.

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, the BRSP, and the BRSP EIR (including the associated Addendum adopted in 2015). In addition to these County documents, project-specific technical studies are being prepared by various technical sub-consultants.

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.

The Aesthetics chapter of the EIR will be based in part on photo simulations showing pre- and post-project views of the project site from key public vantage points. Two renderings will be produced from each vantage point; one will illustrate the potential changes due to the residential development of the proposed project only; and one will illustrate the potential changes due to the residential development of the proposed project plus buildout of the adopted Bickford Ranch Specific Plan. The results of the analysis will be incorporated into the Aesthetics chapter of the EIR to determine whether the proposed project would substantially degrade the visual character or quality of the site and its surroundings.

*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 Study 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<sub>x</sub>, and PM<sub>10</sub>). 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 Study, and as quantified through the CalEEMod program. Construction emissions 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. In addition, the chapter will include an analysis of the project's consistency with the Placer County Sustainability Plan (PCSP).

*Biological Resources.* The Biological Resources chapter of the EIR will summarize the setting and describe the potential effects to plant communities, wildlife, oak woodlands, and wetlands, including adverse effects on any rare, endangered, candidate, sensitive, and special-status species potentially occurring within the project site and off-site improvement areas. Analysis in the chapter will be based on several technical reports, including an Arborist Report, Aquatic Resources Delineation Report, and Biological Resources Assessment. The project's consistency with the recently adopted Placer County Conservation Program, including applicable mitigation requirements, will be fully evaluated in this chapter of the EIR.

*Transportation.* The Transportation chapter of the EIR will be based on a Traffic Impact Study that has been prepared specifically for the proposed project. Impact determination for CEQA purposes will be based on vehicle miles traveled (VMT), consistent with CEQA Guidelines Section 15064.3. The VMT analysis will be quantitative in nature and will be prepared consistent with Placer County's current guidance regarding analysis of VMT.

While not required for CEQA impact determination purposes, this chapter of the EIR will include a level of service (LOS) analysis to be used solely to determine the project's consistency with the County's General Plan LOS standards. The following intersections will be analyzed in the EIR:

Intersections

- SR 193/Sierra College Boulevard (existing)
- Sierra College Boulevard/Bickford Ranch Road (future)

Roadways

- Sierra College Boulevard – SR 193 to the future Bickford Ranch Road; and
- Sierra College Boulevard – Future Bickford Ranch Road to existing Twelve Bridges Drive.

The traffic operations both with and without construction of the approved Bickford Ranch development under the following scenarios:

- Existing Conditions – scenario analyzing operations as they exist currently;
- Existing Plus Project Conditions – scenario analyzing existing operations with the addition of trips generated from the proposed project. This scenario will assume the construction of Bickford Ranch Road as part of the proposed project;
- Short-Term No Project Conditions –scenario assuming existing conditions with the addition of the Bickford Ranch development and construction of Bickford Ranch Road. It is assumed that intersection and roadway improvements identified in the Conditions of Approval for the Bickford Ranch Specific Plan Phase I (Placer County, 2017) will be constructed;
- Short-Term Plus Project Conditions – scenario assuming trips generated from the proposed project would be added to the Short-Term No Project scenario;
- Cumulative No Project – scenario assuming construction of the Bickford Ranch development, as well as other development anticipated to occur by 2025, will occur without the proposed project; and
- Cumulative Plus Project – scenario assuming trips generated from the proposed project would be added to the Cumulative No Project scenario.

The existing setting in regards to pedestrian, bicycle and transit facilities will also be discussed. The EIR chapter will include an analysis of the proposed project's potential impacts related to conflicting with applicable programs, policies, and ordinances addressing the circulation system, vehicle safety hazards, and emergency access.

Wildfire. The Wildfire chapter of the EIR will be based primarily on a Fire Safe Plan that has been prepared for the proposed project in coordination with the local fire service providers. Recommendations from the Fire Safe Plan will be incorporated into the EIR, as necessary, to mitigate potential impacts related to wildfire risk consistent with Section XX, Wildfire, of Appendix G of the CEQA Guidelines. Specifically, the proposed project will be evaluated to determine if the project would substantially impair an adopted emergency response plan or emergency evacuation plan. In addition, the chapter will consider whether the proposed project, including the proposed utility improvements and ongoing maintenance of the proposed Fuel Management Zone, would exacerbate fire risk, as well as whether the project would expose people or structures to significant risks, including downslope or downstream flooding or landslides.

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. 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.

## **ATTACHMENT**

Attachment A: Initial Study & Checklist



## **Attachment A**

### **Initial Study and Checklist**

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## **APPENDIX B**

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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](http://www.wildlife.ca.gov)

**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



January 25, 2021

Shirlee Herrington  
Placer County Community Development Resource Agency  
3091 County Center Drive, Suite 190  
Auburn, CA 95603  
[cdraecs@placer.ca.gov](mailto:cdraecs@placer.ca.gov)

Subject: THE RIDGE SUBDIVISION PROJECT  
NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT  
SCH # 2020120544

Dear Ms. Herrington:

The California Department of Fish and Wildlife (CDFW) received and reviewed the Notice of Preparation of an Environmental Impact Report (EIR) from the Placer County Community Development Resource Agency for the Ridge Subdivision Project (Project) in Placer County pursuant to the California Environmental Quality Act (CEQA) statute and guidelines.<sup>1</sup>

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.

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

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<sup>1</sup> 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.

## The Ridge Subdivision Project

January 25, 2021

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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 24.95-acre Project site consists of a horseshoe-shaped parcel located approximately one mile southeast of the intersection of State Route 193 and Clark Tunnel Road in unincorporated Placer County, California. The site is identified by Placer County Assessor's Parcel Number (APN) 031-106-030-000. The site is currently undeveloped, consisting primarily of grasses, oak woodland, and scattered rock outcroppings.

The Project consists of the subdivision of the project site to develop 34 single-family residential homes and associated improvements. The Project will require approval of a General Plan Amendment, Rezone, and a Vesting Tentative Subdivision Map. The proposed project also requires annexation into Placer County Sewer Maintenance District 1 and approval of a Design Exception Request.

The Project description should include the whole action as defined in the CEQA Guidelines § 15378 and should include appropriate detailed exhibits disclosing the Project area including temporary impacted areas such as equipment stage area, spoils areas, adjacent infrastructure development, staging areas and access and haul roads if applicable.

As required by § 15126.6 of the CEQA Guidelines, the EIR should include 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 offers the comments and recommendations presented below to assist the Lead Agency 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

## The Ridge Subdivision Project

January 25, 2021

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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 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 (CNDDDB), 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/CNDDDB/Maps-and-Data](http://www.wildlife.ca.gov/Data/CNDDDB/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 CNDDDB Field Survey Forms be completed and submitted to CNDDDB to document survey results. Online forms can be obtained and submitted at: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>.

Please note that CDFW's CNDDDB 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 and 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

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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](http://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](http://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

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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*), golden eagle (*Aquila chrysaetos*), bald eagle (*Haliaeetus leucocephalus*), American peregrine falcon

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(*Falco peregrinus anatum*), and California black rail (*Laterallus jamaicensis coturniculus*). 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 CNDDDB and are included in *The Manual of California Vegetation* (Sawyer 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, enhancement, or permanent protection 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;



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(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 appropriately timed to ensure the viability of the seeds when planted. 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-](http://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 it is 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.

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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 or their nests 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. In addition to larger, protocol level survey efforts (e.g. Swainson's hawk surveys) and scientific assessments, CDFW recommends a final preconstruction survey 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. CEQA Guidelines section 15126.4, subdivision (a)(1)(B) states that formulation of mitigation measures should not be deferred until some future time. To avoid deferring mitigation in this way, the EIR should describe avoidance, minimization and mitigation measures that would be implemented should the impact occur.

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### 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.

State-listed species with the potential to occur in the area include but are not limited to: foothill yellow-legged frog (*Rana boylei*), Swainson’s hawk (*Buteo swainsoni*), tricolored blackbird (*Agelaius tricolor*), California black rail (*Laterallus jamaicensis coturniculus*), bald eagle (*Haliaeetus leucocephalus*), Stebbin’s morning glory (*Calystegia stebbinsii*), and Boggs’s Lake hedge-hyssop (*Gratiola heterosepala*).

The EIR should disclose the potential of the Project to take State-listed species and how the impacts will be avoided, minimized, and mitigated. Please note that mitigation measures that are adequate to reduce impacts to a less-than significant level to meet CEQA requirements may not be enough for the issuance of an ITP. To issue an ITP, CDFW must demonstrate that the impacts of the authorized take will be minimized and fully mitigated (Fish & G. Code §2081 (b)). To facilitate the issuance of an ITP, if applicable, CDFW recommends the EIR include measures to minimize and fully mitigate the impacts to any State-listed species the Project has potential to take. CDFW encourages early consultation with staff to determine appropriate measures to 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 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 utilities, 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

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impacts to these resources the EIR shall propose appropriate avoidance, minimization and/or mitigation measures to reduce impacts to a less-than-significant level.

Section 1602 of the Fish and Game Code 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.

If CDFW determines that the Project activities may substantially adversely affect an existing fish or wildlife resource, a Lake and Streambed Alteration (LSA) Agreement will be issued which will include reasonable measures necessary to protect the resource. 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 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 section 1602. Therefore, CDFW does not recommend relying solely on methods developed specifically for delineating areas subject to other agencies' jurisdiction (such as United States Army Corps of Engineers) when mapping lakes, streams, wetlands, floodplains, riparian areas, etc. in preparation for submitting a Notification of an LSA.

CDFW relies on the lead agency environmental document analysis when acting as a responsible agency issuing an LSA Agreement. 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.

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

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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 may support unnamed tributaries to Clover Valley Creek, Ingram Slough, Auburn Ravine and associated riparian habitat and wetlands. CDFW recommends that the EIR fully identify the Project's potential impacts to the streams and/or associated vegetation and wetlands.

### **Placer County Conservation Program**

The Project is located within the Foothills portion of Plan Area A of the Placer County Conservation Program (PCCP). The PCCP was approved by the Placer County Board of Supervisors on September 1, 2020. It is anticipated that the PCCP will receive all permits/approvals from the associated state and federal regulatory agencies and begin implementation in early 2021. The PCCP comprises three planning documents published by Placer County: the Western Placer County Habitat Conservation Plan and Natural Community Conservation Plan (HCP/NCCP), the Western Placer County Aquatic Resources Program, and the Western Placer County In-Lieu Fee Program.

CEQA Guidelines section 15125(d) states that EIRs must discuss any inconsistencies between projects and applicable plans (including habitat conservation plans/natural community conservation plans). Because the PCCP is close to being implemented, CDFW recommends that the EIR include a discussion of each Project alternative's consistency with the PCCP and how Placer County will ensure that implementation of the Project alternatives do not impede the PCCP's ability to meet its biological goals and objectives.

### **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 (CNDDDB). The CNDDDB field survey form can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be submitted online or mailed electronically to CNDDDB at the following email address: [CNDDDB@wildlife.ca.gov](mailto:CNDDDB@wildlife.ca.gov).

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## 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 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 Patrick Moeszinger, Senior Environmental Scientist (Specialist) at (916) 767-3935 or [patrick.moeszinger@wildlife.ca.gov](mailto:patrick.moeszinger@wildlife.ca.gov).

Sincerely,

DocuSigned by:  
  
778EDA8AE45F4C9...

Kelley Barker  
Environmental Program Manager

ec: Juan Torres, Senior Environmental Scientist (Supervisory)  
[juan.torres@wildlife.ca.gov](mailto:juan.torres@wildlife.ca.gov)  
Patrick Moeszinger, Senior Environmental Scientist (Specialist)  
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*Department of Fish and Wildlife*

Christopher Schmidt, Supervising Planner  
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*Placer County Community Development Resource Agency*

Office of Planning and Research, State Clearinghouse, Sacramento

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Literature Cited

Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A Manual of California Vegetation, 2<sup>nd</sup> ed. California Native Plant Society Press, Sacramento, California.  
<http://vegetation.cnps.org/>

**DEPARTMENT OF TRANSPORTATION**

DISTRICT 3  
703 B STREET  
MARYSVILLE, CA 95901  
PHONE (530) 513-0584  
FAX (530) 741-4245  
TTY 711  
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*Making Conservation  
a California Way of Life.*

January 28, 2021

GTS# 03-PLA-2021-00307  
03-PLA-193-4.706  
SCH # N/A

Shirlee Herrington  
3091 County Center Drive Suite 190  
Auburn, CA 95603

**The Ridge Subdivision**

Dear Ms. Herrington:

Thank you for including the California Department of Transportation (Caltrans) in the Initial Consultation 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 proposed project would include subdivision of the project site to develop 34 single-family residential homes and associated improvements located on 24.95-acres approximately one mile southeast of the intersection of SR 193 and Clark Tunnel Road in unincorporated Placer County. The proposed project would require approval of a General Plan Amendment (GPA), Rezone, and a Vesting Tentative Subdivision Map. The project also requires annexation into Placer County Sewer Maintenance District 1 (SMD 1) for sewer service and approval of a Design Exception Request. This notice of preparation of an EIR has been reviewed by Traffic Operations (Highway Ops and Safety), Forecasting and Modeling as well as Hydraulics. Please see comments below.

***Traffic Operations (Highway Ops)***

Please provide referenced civil plans, a profile for the roadway, a more detailed view of the roadway and sidewalk as well as a Transportation Impact Study (TIS) when available.



### ***Traffic Operations (Safety)***

This project will not impact SR 193; primary access, when constructed will be onto Sierra College Blvd. Because there are only 34 units going into a rural area, trips in and out should be limited and not impact either the SR 193/Sierra College Blvd intersection nor the I-80/Sierra College Blvd intersection.

Traffic Safety does not foresee bike/ped issues related to the State highway for this, nor any additional collision issues at SR 193/Sierra College Blvd. Traffic Safety has no concerns with this document as written although we would like to review the Transportation Impact Study (TIS) when completed to confirm our beliefs on the limited trip generation numbers.

### ***Forecasting and Modeling***

This project will only generate 25 AM Peak Hr and 34 PM peak hour trips. It will not have any significant impact to the state highway system. We have no concerns about this project.

### ***Hydraulics***

The development of this site will increase impervious surface runoff due to the proposed construction. Increases in peak runoff discharge for the 10-year and 100-year storm events to the State's highway right of way and to Caltrans' highway drainage facilities must be reduced to at or below the pre-construction levels. Any cumulative impacts to Caltrans drainage facilities arising from effects of development on surface water runoff discharge from the 10-year and 100-year storm events should be minimized through project drainage mitigation measures.

All grading and/or drainage improvements must maintain or improve existing drainage pathways and may not result in adverse hydrologic or hydraulic conditions within the State's highway right of way or to Caltrans drainage facilities. The developer must maintain or improve existing drainage patterns and/or facilities affected by the proposed project to the satisfaction of the State and Caltrans. This may be accomplished through the implementation of storm water management Best Management Practices (i.e., detention/retention ponds or basins, sub-surface galleries, on-site storage and/or infiltration ditches, etc.). Once installed, the property owner must properly maintain these systems. The proponent/developer may be held liable for future damages due to impacts for which adequate mitigation was not undertaken or sustained.

Runoff from the proposed project that will enter the State's highway right of way and/or Caltrans drainage facilities must meet all regional water quality control board water quality standards prior to entering the State's highway right of way or Caltrans drainage facilities. Appropriate storm water quality Best Management Practices may be applied to ensure that runoff from the site meets these standards (i.e., is free of oils, greases, metals, sands, sediment, etc.). Once installed, the property owner must properly maintain these systems in perpetuity.

All work proposed and performed within the State's highway right of way must be in accordance with Caltrans' standards and require a Caltrans Encroachment Permit prior to commencing construction. For the encroachment permit application, provide drainage plans and calculations for the pre and post 10- and 100-year peak run-off (quantities and velocities) and water quality treatment for all discharge to the State's highway right of way and to Caltrans' highway drainage facilities.

If you have any questions regarding these comments or require additional information, please contact Fallon Cox, Intergovernmental Review Coordinator for Placer County, by phone (530) 741-5180 or via email to [Fallon.Cox@dot.ca.gov](mailto:Fallon.Cox@dot.ca.gov).

Sincerely,



KEVIN YOUNT, Branch Chief  
Office of Transportation Planning  
Regional Planning Branch—East



**Jared Blumenfeld**  
Secretary for  
Environmental Protection



## Department of Toxic Substances Control

Meredith Williams, Ph.D.  
Director  
8800 Cal Center Drive  
Sacramento, California 95826-3200



**Gavin Newsom**  
Governor

December 31, 2020

Ms. Shirlee Herrington  
Placer County  
3091 County Center Drive  
Auburn, CA 95603  
[cdraecs@placer.ca.gov](mailto:cdraecs@placer.ca.gov)

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT (EIR) FOR THE RIDGE (PLN19-00307) – DATED DECEMBER 28, 2020 (STATE CLEARINGHOUSE NUMBER: 2020120544)

Ms. Herrington:

The Department of Toxic Substances Control (DTSC) received a Notice of Preparation of an Environmental Impact Report (EIR) for The Ridge (PLN19-00307) (Project). The Lead Agency is receiving this notice from DTSC because the Project includes one or more of the following: groundbreaking activities, work in close proximity to a roadway, work in close proximity to mining or suspected mining or former mining activities, presence of site buildings that may require demolition or modifications, importation of backfill soil, and/or work on or in close proximity to an agricultural or former agricultural site.

DTSC recommends that the following issues be evaluated in the EIR Hazards and Hazardous Materials section:

1. The EIR should acknowledge the potential for historic or future activities on or near the project site to result in the release of hazardous wastes/substances on the project site. In instances in which releases have occurred or may occur, further studies should be carried out to delineate the nature and extent of the contamination, and the potential threat to public health and/or the environment should be evaluated. The EIR should also identify the mechanism(s) to initiate any required investigation and/or remediation and the government agency who will be responsible for providing appropriate regulatory oversight.
2. Refiners in the United States started adding lead compounds to gasoline in the 1920s in order to boost octane levels and improve engine performance. This practice did not officially end until 1992 when lead was banned as a fuel additive in California. Tailpipe emissions from automobiles using leaded gasoline

contained lead and resulted in aerially deposited lead (ADL) being deposited in and along roadways throughout the state. ADL-contaminated soils still exist along roadsides and medians and can also be found underneath some existing road surfaces due to past construction activities. Due to the potential for ADL-contaminated soil DTSC, recommends collecting soil samples for lead analysis prior to performing any intrusive activities for the project described in the EIR.

3. If any sites within the project area or sites located within the vicinity of the project have been used or are suspected of having been used for mining activities, proper investigation for mine waste should be discussed in the EIR. DTSC recommends that any project sites with current and/or former mining operations onsite or in the project site area should be evaluated for mine waste according to DTSC's 1998 Abandoned Mine Land Mines Preliminary Assessment Handbook ([https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/11/aml\\_handbook.pdf](https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/11/aml_handbook.pdf)).
4. If buildings or other structures are to be demolished on any project sites included in the proposed project, surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. Removal, demolition and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies. In addition, sampling near current and/or former buildings should be conducted in accordance with DTSC's 2006 *Interim Guidance Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electrical Transformers* ([https://dtsc.ca.gov/wpcontent/uploads/sites/31/2018/09/Guidance\\_Lead\\_Contamination\\_050118.pdf](https://dtsc.ca.gov/wpcontent/uploads/sites/31/2018/09/Guidance_Lead_Contamination_050118.pdf)).
5. If any projects initiated as part of the proposed project require the importation of soil to backfill any excavated areas, proper sampling should be conducted to ensure that the imported soil is free of contamination. DTSC recommends the imported materials be characterized according to *DTSC's 2001 Information Advisory Clean Imported Fill Material* ([https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/SMP\\_FS\\_Cleanfill-Schools.pdf](https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/SMP_FS_Cleanfill-Schools.pdf)).
6. If any sites included as part of the proposed project have been used for agricultural, weed abatement or related activities, proper investigation for organochlorinated pesticides should be discussed in the EIR. DTSC recommends the current and former agricultural lands be evaluated in accordance with DTSC's 2008 *Interim Guidance for Sampling Agricultural Properties (Third Revision)* (<https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/Ag-Guidance-Rev-3-August-7-2008-2.pdf>).

DTSC appreciates the opportunity to comment on the EIR. Should you need any assistance with an environmental investigation, please submit a request for Lead Agency Oversight Application, which can be found at: <https://dtsc.ca.gov/wp->

Ms. Shirlee Herrington  
December 31, 2020  
Page 3

[content/uploads/sites/31/2018/09/VCP\\_App-1460.doc](#). Additional information regarding voluntary agreements with DTSC can be found at: <https://dtsc.ca.gov/brownfields/>.

If you have any questions, please contact me at (916) 255-3710 or via email at [Gavin.McCreary@dtsc.ca.gov](mailto:Gavin.McCreary@dtsc.ca.gov).

Sincerely,

A handwritten signature in blue ink that reads "Gavin McCreary". The signature is written in a cursive style.

Gavin McCreary  
Project Manager  
Site Evaluation and Remediation Unit  
Site Mitigation and Restoration Program  
Department of Toxic Substances Control

cc: (via email)

Governor's Office of Planning and Research  
State Clearinghouse  
[State.Clearinghouse@opr.ca.gov](mailto:State.Clearinghouse@opr.ca.gov)

Mr. Dave Kereazis  
Office of Planning & Environmental Analysis  
Department of Toxic Substances Control  
[Dave.Kereazis@dtsc.ca.gov](mailto:Dave.Kereazis@dtsc.ca.gov)



# NATIVE AMERICAN HERITAGE COMMISSION

December 30, 2020

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

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CDFA - Planning

CHAIRPERSON  
**Laura Miranda**  
Luiseño

VICE CHAIRPERSON  
**Reginald Pagaling**  
Chumash

SECRETARY  
**Merri Lopez-Keifer**  
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COMMISSIONER  
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Chumash

COMMISSIONER  
[Vacant]

COMMISSIONER  
[Vacant]

EXECUTIVE SECRETARY  
**Christina Snider**  
Pomo

**NAHC HEADQUARTERS**  
1550 Harbor Boulevard  
Suite 100  
West Sacramento,  
California 95691  
(916) 373-3710  
[nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)  
[NAHC.ca.gov](http://NAHC.ca.gov)

**Re: 2020120544, The Ridge 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). [Andrew.Cass@nahc.ca.gov](mailto:Andrew.Cass@nahc.ca.gov)

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.**

**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](http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf)

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: [Nancy.Gonzalez-Lopez@nahc.ca.gov](mailto:Nancy.Gonzalez-Lopez@nahc.ca.gov).

Sincerely,



Nancy Gonzalez-Lopez  
Cultural Resources Analyst

cc: State Clearinghouse





February 17, 2021

Ms. Shirlee Herrington  
Environmental Coordination Services  
Placer County Community Development Resource Agency  
3091 County Center Drive  
Auburn, CA 95603

**Subject: PLN19-00307 Notice of Preparation of an Environmental Impact Report the Proposed Subdivision The Ridge**

Dear Ms. Herrington:

The Placer County Air Pollution Control District (District) thanks you for the opportunity to review and comment on the Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the proposed Subdivision The Ridge (Project). In addition to what has been identified in the Notice of Preparation document, the District has the following comments for your consideration.

1. Any project that includes the use of equipment capable of releasing emissions to the atmosphere may require permits(s) from the District. The applicant, developer, or operator of a project that includes a generator or boiler should contact the District early to determine if a permit is required, and to begin the permit application process. Portable construction equipment (e.g. generators, compressors, pile drivers, lighting equipment, etc.) with an internal combustion engine over 50 horsepower are required to have a PCAPCD permit or a California Air Resources Board portable equipment registration.
2. [District Rule 228, Fugitive Dust \(PDF\)](#), establishes standards to be met by activities generating fugitive dust. When an area to be disturbed is greater than one acre, and if required by a Condition of Approval of a discretionary permit, a dust control plan must be submitted to and approved by the District. The District has developed an application for this purpose, which can be found on the District website: <https://placerair.org/FormCenter/Air-Pollution-Control-6/Dust-Control-Form-52>.
3. In accordance with District Rule 225, only U.S. EPA Phase II certified wood burning devices shall be allowed in single-family residences. The emission potential from each residence shall not exceed a cumulative total of 7.5 grams per hour for all devices. Masonry fireplaces shall have either an EPA certified Phase II wood burning device or shall be a U.L. Listed Decorative Gas Appliance. (Based on APCD Rule 225).
4. The removal of vegetation is discussed in the project description. There was no information on disposal of this vegetation. The following is clarification from District Rule 304 Land Development Burning Section 304.3 Burn Permits "No permit shall be issued for land development burning, except for vegetation removed for residential development purposes from the property of a single- or two-family dwelling or when the burn permit applicant has provided a demonstration in Section 400 that there is no practical alternative to burning and the 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.” Therefore, the Project needs to identify the treatment of vegetation removal for land development clearing.

There was no discussion regarding residential outdoor burning since it is allowed in many of the unincorporated areas, including the project area in Placer County.

Lastly, with the identification of a Fire Management Zone where vegetation is to be maintained for fire resiliency, any consideration on the disposal of vegetation by burning would be required to have a burn permit conditionally issued from the Air District.

Thank you again for the opportunity to review and comment on the NOP. If you have any questions, please feel free to contact me at 530-745-2327 or [ahobbs@placer.ca.gov](mailto:ahobbs@placer.ca.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Ann Hobbs". The signature is written in a cursive, flowing style.

Ann Hobbs  
Associate Planner  
Planning and Monitoring Section  
Placer County Air Pollution Control District



PLACER COUNTY  
FLOOD CONTROL AND WATER CONSERVATION DISTRICT

---

Ken Grehm, Executive Director  
Brad Brewer, District Manager  
Katie Conkle, Development Coordinator

January 28, 2021

Shirlee Herrington  
Placer County  
Planning Services Division  
Community Development Resource Agency  
3091 County Center Drive  
Auburn, CA 95603

**RE: The Ridge (PLN19-00307), Notice of Preparation of an EIR**

Shirlee:

We have reviewed the Notice of Preparation (NOP) of an Environmental Impact Report (EIR) dated December 29, 2020 for the subject project and have the following comments.

- a) The proposed development has the potential to create the following impacts:
  - a.) Higher runoff peak flow rates at downstream locations.
  - b.) Increased volume of runoff at downstream locations.
  - c.) Overloading of the actual or designed capacity of existing stormwater and flood-carrying facilities.
- b) As outlined in the NOP, the EIR must specifically quantify the incremental efforts of each of the above impacts due to this development and must propose mitigation measurements where appropriate.

Please call me at (530) 745-7541 if you have any questions regarding these comments.

A handwritten signature in blue ink, appearing to read "Brad Brewer".

Brad Brewer, MS, PE, QSD/P  
District Manager

t:\dpw\fcd\development review\letters\planning\cn 21-06 The Ridge, NOP IS.docx



PLACER COUNTY WATER AGENCY  
SINCE 1957

BUSINESS CENTER

144 Ferguson Road

MAIL

P.O. Box 6570

Auburn, CA 95604

PHONE

530.823.4850

800.464.0030

WWW.PCWA.NET

October 16, 2019

File No: WA/Placer County

Map No. 24-B-16 & 29-A-13

Shirlee I. Herrington  
Environmental Coordination Services  
Placer County Community Development Resource Agency  
3091 County Center Drive, Suite #190  
Auburn, CA 95603

SUBJECT: The Ridge Subdivision - APN 031-106-030

Dear Ms. Herrington:

Thank you for the opportunity to review and comment on The Ridge Subdivision design review. This letter is written in response to your Request for Comment dated October 15, 2019 and is intended to provide a preliminary design review of the plans and documents provided with the request from the County regarding the proposed development located at APN 031-106-030 which is a mile southeast of the intersection of State Route 193 and Clark Tunnel Road, California. The Agency does not reserve water for prospective customers and this letter in no way confers any right or entitlement to receive water service in the future. The Agency makes commitments for service only upon execution of a facilities agreement and the payment of all fees and charges required by the Agency. All water availability is subject to the limitations described below and the prior use by existing customers.

Currently, there are no treated water facilities in close proximity to the property. The closest existing treated water facilities are located in English Colony Way to the south. Future treated water facilities are planned to be installed as part of the Bickford Ranch development, which could bring treated water facilities closer to the property. Once the first phase of Bickford Ranch is constructed and accepted by the Agency this would bring water facilities adjacent to the Ridge and provide a point of connection for the Ridge. If the Bickford Ranch development is not constructed, the applicant would need to install any on-site or off-site pipelines, or other facilities as required to supply water for domestic and fire protection purposes to serve their project from the line in English colony Way or the future Lincoln/Penryn Phase 3 pipeline and metering station project near Sierra College Boulevard.

In order to obtain service, the developer will have to enter into a facilities agreement with the Agency to provide any on site or off-site pipelines or other facilities that are needed to supply water for domestic or fire protection purposes and pay all fees and charges required by the Agency, including the Water Connection Charges. Please contact Customer Services at (530) 823-4850 for the required forms and fees.

Below are project specific comments on the utility plan provided:

- 1) All sewer pumped lots will be required to have reduced pressure backflow devices after the meter.
- 2) The HOA would have to be responsible for the replacement of the ornate entrance concrete should

the Agency need to repair its pipe in that location.

- 3) Hydrants and water services appear to be too close to a couple of the pumped sewer services, water and sewer facilities need to be a minimum of 10' away from each other.
- 4) The Agency is concerned that the proposed water quality infiltration trench(s) takes surface water and perk it into the ground just upstream of the Agency's Caperton Canal and possibly creating a slip plane situation that destabilized the ground above/under the canal which will lead to canal failure. The Agency will require a letter from a geotechnical engineer stating these trenches will not have an adverse effect on the stability of the canal. We suggest looking into installing a concrete lined ditch to the basin(s) instead.
- 5) The detention basin and the storm drain outfall cannot outlet into/above the canal as it would cause canal failure. The subdivision storm water needs to be plumbed another direction or under the canal.
- 6) Depending on the fire flow rate required by the fire department the size of the water mains might need to be oversized which will require water quality flushing stations on the end of the lines off the end of the cul-de-sacs.
- 7) Access easements to the Agency's Caperton canal through the development must be provided to allow the Agency to conduct routine maintenance and repair.
- 8) Parcels uphill of the Agency's canal must mitigate drainage from entering the canal.
- 9) Agency will require the access code for the gated entry to operate and maintain the water facilities.

General design comments that all treated water facilities shall be designed and constructed in accordance with the California State Water Resources Control Board Division of Drinking Water and the Agency's standards, which include but are not limited to the following:

- 1) Separation of treated water lines from other utilities. All dimensions are from the outside of pipes and structures.
  - a) Water facilities and sanitary sewer facilities must maintain a minimum separation of 10 feet horizontal and 1 foot vertical with water above.
  - b) Water facilities and storm drain facilities must maintain a minimum separation of 4 feet horizontal and 1 foot vertical with water above.
  - c) Water facilities and dry utility trench must have a minimum separation of 2 feet between trench walls.
  - d) Water facilities must cross above all wet utilities with a maximum 45-degree crossing angle from what would be perpendicular.
- 2) The distribution system shall be designed with looping pipelines such that all points within the distribution system are connected to a minimum of two source pipelines.
- 3) Treated water mains shall be located within public rights-of-way or easement, and out of residential lots and landscape areas. Structures, trees, and large shrubs shall be kept outside of easements containing water mains.
- 4) The Agency's minimum easement width is 20 feet centered over public facilities, with 10 feet minimum each side of the facilities.
  - a) Clearly show and label all easements and rights-of-ways on all plans showing water facilities.
- 5) Water mains within roadways, alleyways, parking lot drive isles, and other travel ways shall be located under pavement and at a minimum 3' from the edge of pavement.
- 6) Treated water main sizing for the distribution systems is based on the Agency's velocity maximum of 5 feet per second (fps) for maximum day demand in gallons per day (gpd) and 7 fps for fire flow demand.
  - a) Fire hydrant placement, spacing, and flow rate requirements are dictated by the local fire protection district and reviewed by the Agency to ensure compliance with the Agency's

maximum pipe velocity standards.

- i) Verify with the local fire protection district any fire hydrant spacing and flow rate requirements as well as fire sprinkler flow rate requirements.
- 7) Residential water services shall be located on the parcel for the house they serve.
  - a) Parcels with an alternate source of water or pumped sewer systems require a reduce pressure principal backflow prevention device.
- 8) Common site landscaping shall be a separately metered landscape service.
  - a) The landscape architect's calculations in conformance with the State of California's Model Water Efficient Landscape Ordinance (MWELO) are required to determine maximum day demand (in gpd) for the landscape service.
- 9) The Agency's standards are available online <http://www.pcwa.net/business/new-development>.

All water availability is subject to the limitations described above and the prior use by existing customers. If you have any questions, please call me at the Engineering Division at (530) 823-4886.

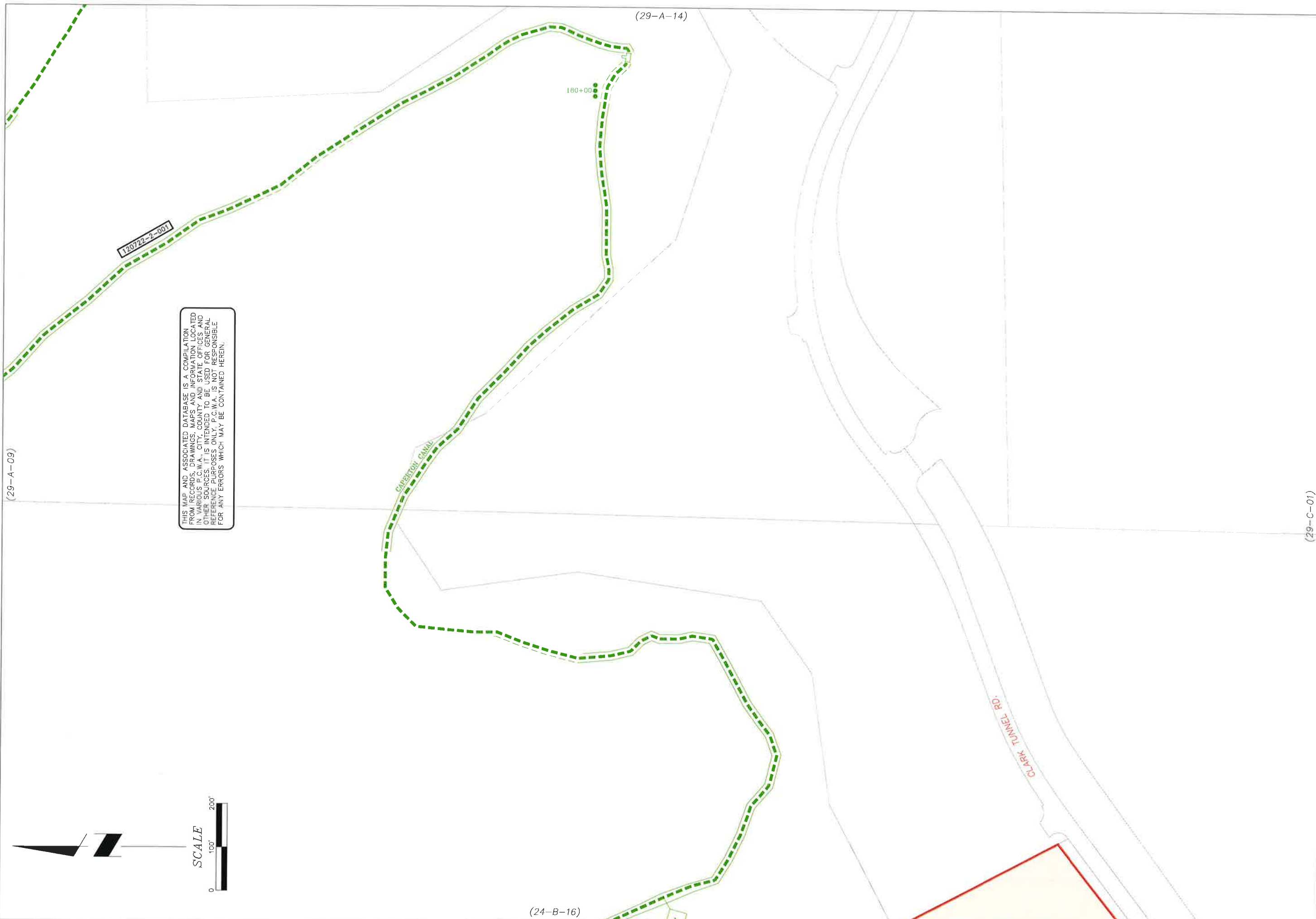
Sincerely,



Richard Wirth  
Assistant Engineer

JL: ts

pc: Daryl Hensler  
Ken Yunk  
Lance Hartung  
Field Services  
Customer Service  
Enc: Map No. 24-B-16 & 29-A-13



(29-A-09)

(29-A-14)

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THIS MAP AND ASSOCIATED DATABASE IS A COMPILATION FROM RECORDS, DRAWINGS, MAPS AND INFORMATION LOCATED IN VARIOUS P.C.W.A., CITY, COUNTY AND STATE OFFICES AND OTHER SOURCES. IT IS INTENDED TO BE USED FOR GENERAL REFERENCE PURPOSES ONLY. P.C.W.A. IS NOT RESPONSIBLE FOR ANY ERRORS WHICH MAY BE CONTAINED HEREIN.



CAPERTON CANAL

CLARK TUNNEL RD.

(24-B-16)

(29-C-01)

PROJECT MAPS PLACER COUNTY WATER AGENCY	DISCIPLINE WATER DISTRIBUTION	TITLE <b>CAPERTON CANAL AREA PENRYN</b>	REFERENCES	DRAWN BY: SED/LDH	REV. NO.
			COUNTY PARCELS 10/06	CHECKED BY: L. HAMMER	0
			DATE DRAWN SCALE	NO. DATE REV.	DRAWING NO.
			2/11/11 AS NOTED	0 2/11/11	<b>29-A-13</b>
				NEW MAP	0
				REVISION DESCRIPTION	0
				CHK	© 2010 P.C.W.A.



(24-B-12)

(29-A-13)

(24-B-15)



THIS MAP AND ASSOCIATED DATABASE IS A COMPILATION FROM RECORDS, DRAWINGS, MAPS AND INFORMATION LOCATED IN VARIOUS P.C.W.A., CITY, COUNTY AND STATE OFFICES AND OTHER SOURCES. IT IS INTENDED TO BE USED FOR GENERAL REFERENCE PURPOSES ONLY. P.C.W.A. IS NOT RESPONSIBLE FOR ANY ERRORS WHICH MAY BE CONTAINED HEREIN.

PROJECT MAPS PLACER COUNTY WATER AGENCY	DISCIPLINE WATER DISTRIBUTION	TITLE <b>CAPERTON CANAL AREA PENRYN</b>	
		REFERENCES COUNTY PARCELS 10/09	DRAWING NO. <b>24-B-16</b>
		DRAWN BY: SED/LDH	REV. NO. <b>0</b>
		CHECKED BY: L. HAMMER	
		DATE DRAWN: 02/04/11	
		DATE REV: 02/04/11	
		AS NOTED	
		REVISION DESCRIPTION	
		DATE	
		NO.	
		BY	



## Shirlee Herrington

---

**From:** pneifer <pneifer@gmail.com>  
**Sent:** Tuesday, January 12, 2021 8:41 AM  
**To:** Placer County Environmental Coordination Services  
**Cc:** Susan Mahoney  
**Subject:** [EXTERNAL] The Ridge. feedback and comments from Patty Neifer

Dear Shirlee,

I would be interested in more information about The Ridge proposed project. I was made aware of it just yesterday and cannot attend Thursday's zoom meeting.

Usually the Penryn MAC hears the projects in advance of the period for providing public comment. Is a MAC presentation by the developer planned for a future date?

This just came in as a project to us in an email from the county on Jan. 8th. That is not enough time to allow public comment on the EIR and provides no public notice for the opportunity to hear about the project. I checked with the Rural Lincoln MAC and they also have not received any public notification of a meeting for the public to include this project presentation.

Current access to the project site is listed via Clark Tunnel Road. Clark Tunnel from the English Coloney side was closed to construction, residential and survey traffic based on the Bickford Ranch permits due to environmental and safety concerns. This was done by an action of the Placer County Supervisors. Will this Clark Tunnel road closure apply to The Ridge construction as well?

Items to consider in the environmental review not only include the identified oaks and trees, but also the effect of the grading and construction on the environment. This 30 acres was referred to in the past as an area that would be left open and not built on due to the sensitivity of the ridges.

Other considerations include noise and light pollution resulting from the project.

Will Dark Sky guidelines be put into place?

The style of home, height, proximity to ridge and exterior colors should be discussed because of the visibility on the ridgeline.

Water table and quality of groundwater. Neighboring wells.

Run-off of fertilizer and pesticides.

How will this project effect the wildlife migration route?

How will artifacts found in this area be protected?

Why is there a change being proposed in the General Plan from farm to residential? The area in question is not included in the general plan for residential construction. Even when the 2000 acres of Bickford Ranch were designated as higher density for residential building by Placer County, the surrounding areas were left the same in the general plan. Why change that? The expansion of residential areas and general plan changes around Bickford Ranch was not proposed or even considered during the approval of that project. This seems like changing the General Plan as a matter of convenience and not as the result of comprehensive planning.

Please include these comments in the Zoom meeting on January 14th.

My contact information is below. Please keep me informed.

Patty Neifer  
Pneifer@gmail.com  
916 934-9050

Please include these questions in the EIR.

## Shirlee Herrington

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**Subject:** FW: [EXTERNAL] General Plan Amendments

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**From:** Leslie Warren <[lesliewarren52@gmail.com](mailto:lesliewarren52@gmail.com)>

**Sent:** Saturday, January 9, 2021 6:26:31 PM

**To:** Steve Pedretti <[SPedretti@placer.ca.gov](mailto:SPedretti@placer.ca.gov)>

**Cc:** Cindy Gustafson <[cindygustafson@placer.ca.gov](mailto:cindygustafson@placer.ca.gov)>; Jim Holmes <[JHolmes@placer.ca.gov](mailto:JHolmes@placer.ca.gov)>

**Subject:** [EXTERNAL] General Plan Amendments

Hi Steve,

Will you please provide me w County policy as it pertains to initiating General Plan amendments?  
Is there a criteria whereby the County will entertain a General Plan amendment? Ie public benefit?  
Does the County incur any staff costs and/or provide any analysis to the developer and/or Board pursuant to a  
NOP? Does the staff or an EIR consultant prepare the narrative w/in NOP?

Does the staff take an agenda item to the Board to secure a green light to release of the NOP?

I'm concerned about the General Plan amendment for the 34 unit high cost housing development proposed in rural Placer near Clark Tunnel Road. Is this project in Cindy or Jim's district? Did the Board authorize staff to begin processing the amendment? Which Supervisor made the motion?

The developer is proposing to pay in lieu fees rather than produce 3.4 units of affordable housing as required.  
Does the draft housing element allow for in lieu fee payment for General Plan amendments?

What a shame that in these stressful times, citizens must organize now, to resist a project that is a breach of the General Plan and the spirit of the Housing Element-plans towards which citizens already invested so much attention. One speculator can throw all that citizen faith in the General Plan/Housing Element and trust in the Board's promise to uphold the intent - out the window w a simple developer ask. How much staff time/cost has been devoted to this project to date?

Please advise me on these questions before the  
1/14/21 NOP scoping session. Additionally, pls. include these questions and your replies to these questions as a part of the scoping session text.

As a matter of policy, i recommend that the in lieu fee be permitted only if the developer pays to the County, a fee equivalent to the median sales price for other homes in the subdivision - for each affordable unit avoided or prorated share of the affordable unit - 3.4 in this case- that is not produced.

That is something we'll be recommending to Shawna and HCD.

Thanks, Steve.

Sincerely,

Leslie Warren

Auburn

Sent from my iPhone

# **The Ridge Project NOP Scoping Meeting Comment Summary**

**Date:** January 14, 2021

**Time:** 1:00 PM

**Location:** Virtually via Zoom

## **I. Presentation by Project Planner Christopher Schmidt**

## **II. Verbal Comments (arranged in order of “appearance” of commenter):**

### **1. Public Comments:**

#### Commenter 1: Gabriele Windgasse – Member of Horseshoe Bar-Penryn Municipal Advisory Council

- The commenter has concerns related to construction-related traffic, particularly related to Clark Tunnel Road.
- The commenter has concerns related to the connectivity of new trails throughout the subdivision and to the existing regional trail network.

#### Commenter 2: Karen Green – Member of Newcastle Ophir Municipal Advisory Council

- The commenter has concerns related to fire services from Penryn Fire Protection District.
- The commenter has concerns related to impacts to local schools.

## **III. Closing remarks by Christopher Schmidt**

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## **APPENDIX C**

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**COMMUNITY DEVELOPMENT/RESOURCE AGENCY**  
**Environmental Coordination Services**  
 County of Placer

<h1>INITIAL STUDY &amp; CHECKLIST</h1>
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This Initial Study has been prepared to identify and assess the anticipated environmental impacts of the following described project application. The document may rely on previous environmental documents (see Section D) and site-specific studies (see Section J) prepared to address in detail the effects or impacts associated with the project.

This document has been prepared to satisfy the California Environmental Quality Act (CEQA) (Public Resources Code, Section 21000 et seq.) and the State CEQA Guidelines (14 CCR 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects.

The Initial Study is a public document used by the decision-making lead agency to determine whether a project may have a significant effect on the environment. If the lead agency finds substantial evidence that any aspect of the project, either individually or cumulatively, may have a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial, the lead agency is required to prepare an Environmental Impact Report (EIR), use a previously-prepared EIR and supplement that EIR, or prepare a Subsequent EIR to analyze the project at hand. If the agency finds no substantial evidence that the project or any of its aspects may cause a significant effect on the environment, a Negative Declaration shall be prepared. If in the course of analysis, the agency recognizes that the project may have a significant impact on the environment, but that by incorporating specific mitigation measures the impact will be reduced to a less-than-significant effect, a Mitigated Negative Declaration shall be prepared.

Project Title: <b>The Ridge</b>	Project # PLN19-00307
Entitlement(s): General Plan Amendment, Rezone, Vesting Tentative Subdivision Map, Annexation into Placer County Sewer Maintenance District.	
Site Area: 24.95 acres	APN: 031-106-030-000
Location: South of State Route (SR) 193, east of Sierra College Boulevard, southeast of the terminus of the improved segment of Clark Tunnel Road in unincorporated Placer County. The project site is not located within one of Placer County's adopted Community Plan areas.	

**A. BACKGROUND:**

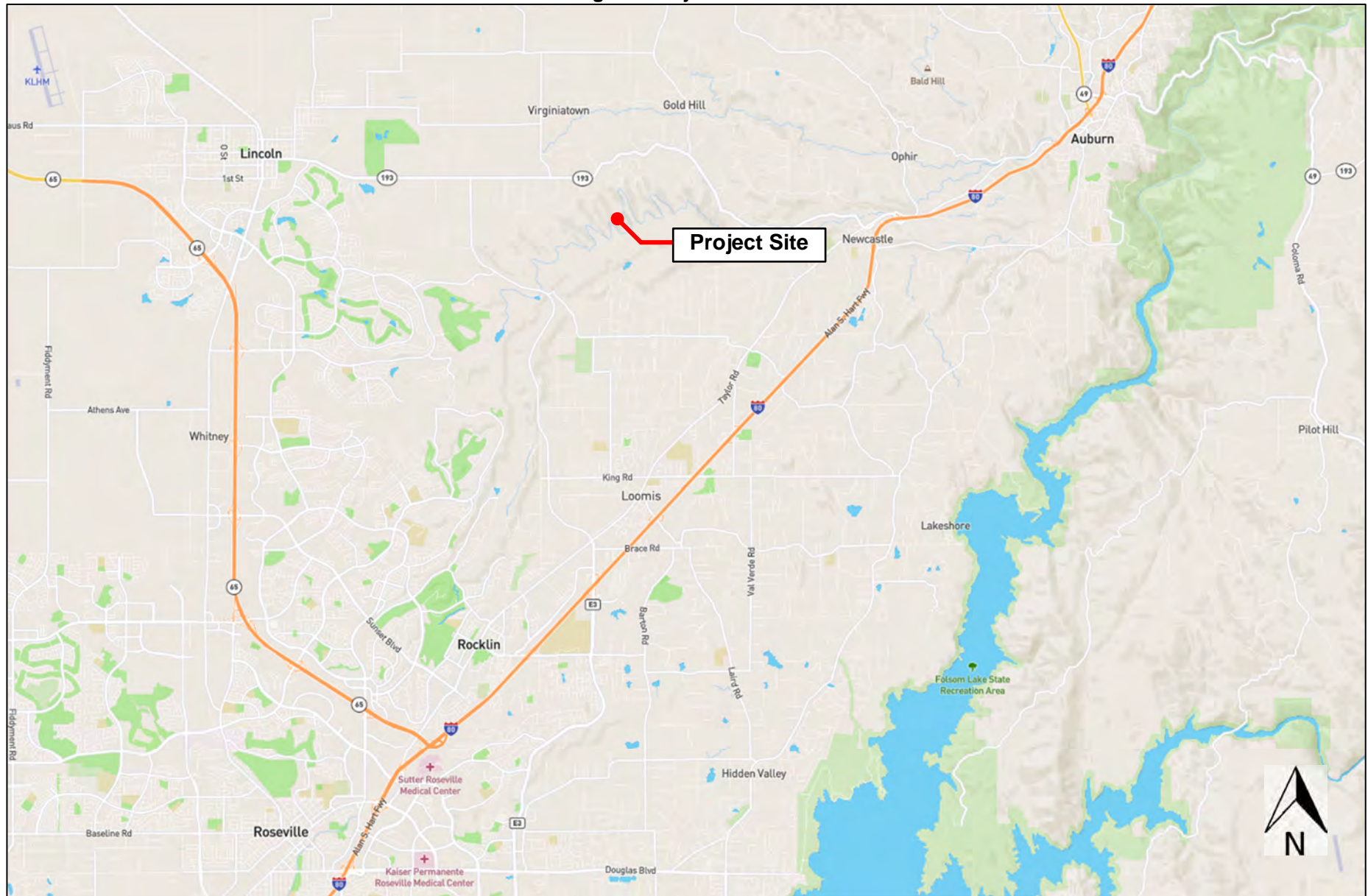
**Project Site** (Background/Existing Setting):

The 24.95-acre The Ridge project (proposed project) site consists of a horseshoe-shaped parcel located approximately one mile southeast of the intersection of State Route (SR) 193 and Clark Tunnel Road in unincorporated Placer County, California (see Figure 1 and Figure 2). The Placer County General Plan designates the site as Agriculture/Timberland 10-acre minimum and the site is zoned Farm, combining minimum Building Site of 10 acres (F-B-X 10-Ac. Min.). The site is identified by Placer County Assessor's Parcel Number (APN) 031-106-030-000.

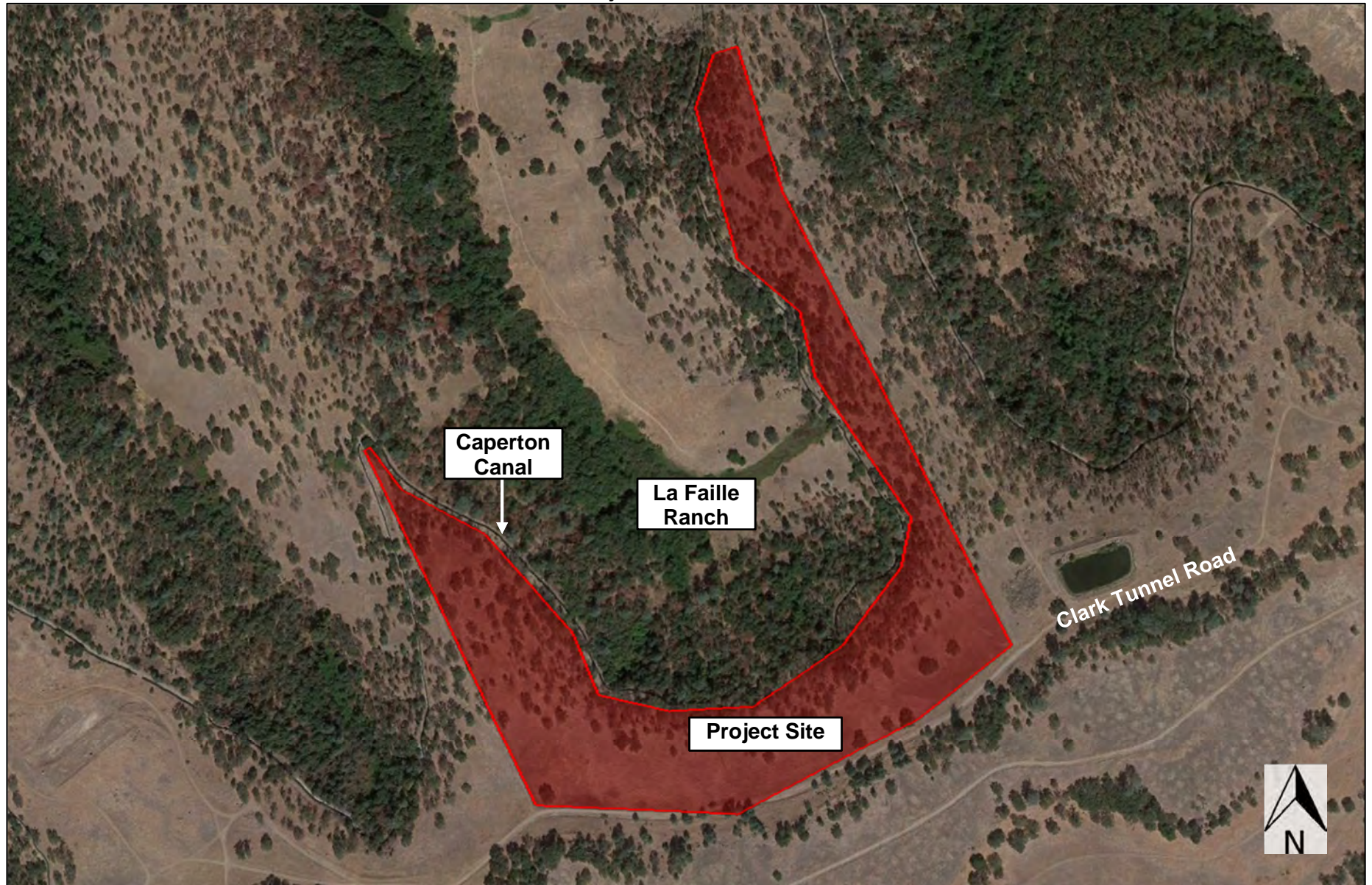
The project site is situated atop three interconnected ridges forming a horseshoe shape. The site is currently undeveloped, consisting primarily of grasses, oak woodland, and scattered rock outcroppings. Based on an Arborist Report prepared for the proposed project, the project site, along with an adjacent 50-foot survey area, contains a total of 46 oak trees with a single trunk diameter at breast height (DBH) of at least six inches or a cumulative trunk DBH of at least 10 inches.<sup>1</sup> The site is used for seasonal cattle grazing. Access to the project site is provided by Clark Tunnel Road, an unimproved dirt roadway that ultimately connects to the community of Penryn, further to the southeast of the project site.

<sup>1</sup> Helix Environmental Planning. *Arborist Report and Oak Woodland Inventory, The Ridge ±56.6-Acre Study Area Placer County, California*. April 2020.

**Figure 1**  
**Regional Project Location**



**Figure 2**  
**Project Site Boundaries**





The densely wooded area to the north of the project site slopes steeply downward towards the valley below. An undeveloped ranch (La Faille Ranch property), owned by the project applicant, which is also used for cattle grazing, is located within the valley to the north of the site. The southern boundary of the La Faille Ranch property includes the existing concrete-lined Caperton Canal, owned and operated by the Placer County Water Agency (PCWA), which bifurcates the ranch from the project site. The Caperton Canal is used to deliver untreated water to treatment plants in the Rocklin and Lincoln areas and is also sold to customers for irrigation, including supplying water to the pond on the La Faille Ranch property. The areas to the east, south, and west of the site are currently undeveloped, but are planned for buildout with future low-density residential and rural residential uses as part of the Bickford Ranch Specific Plan (BRSP), which was approved by the County in 2004 and amended as recently as 2015.

The above description of the current environmental conditions of the project site and its surroundings is provided for informational purposes and reflects the baseline conditions of the project site. The actual baseline conditions of the surrounding area for impact analysis purposes will be adjusted to reflect completion of Phase 1 BRSP, as discussed in the following section.

### **Approach to Baseline Analysis:**

According to the CEQA Guidelines Section 15125(a), "An EIR must include a description of the physical environmental conditions in the vicinity of the project. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant." Notably, the purpose of this requirement, "...is to give the public and decision makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts."

The CEQA Guidelines, and the courts, have noted that in some situations, the physical conditions existing at the time the environmental analysis commences (e.g., for an EIR, the Guidelines describe this as publication of the NOP) do not always provide the most accurate and understandable picture practically possible of the project's likely impacts. For example, Guidelines Section 15125(a)(1) states that, "...where necessary to provide the most accurate picture practically possible of the project's impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence."

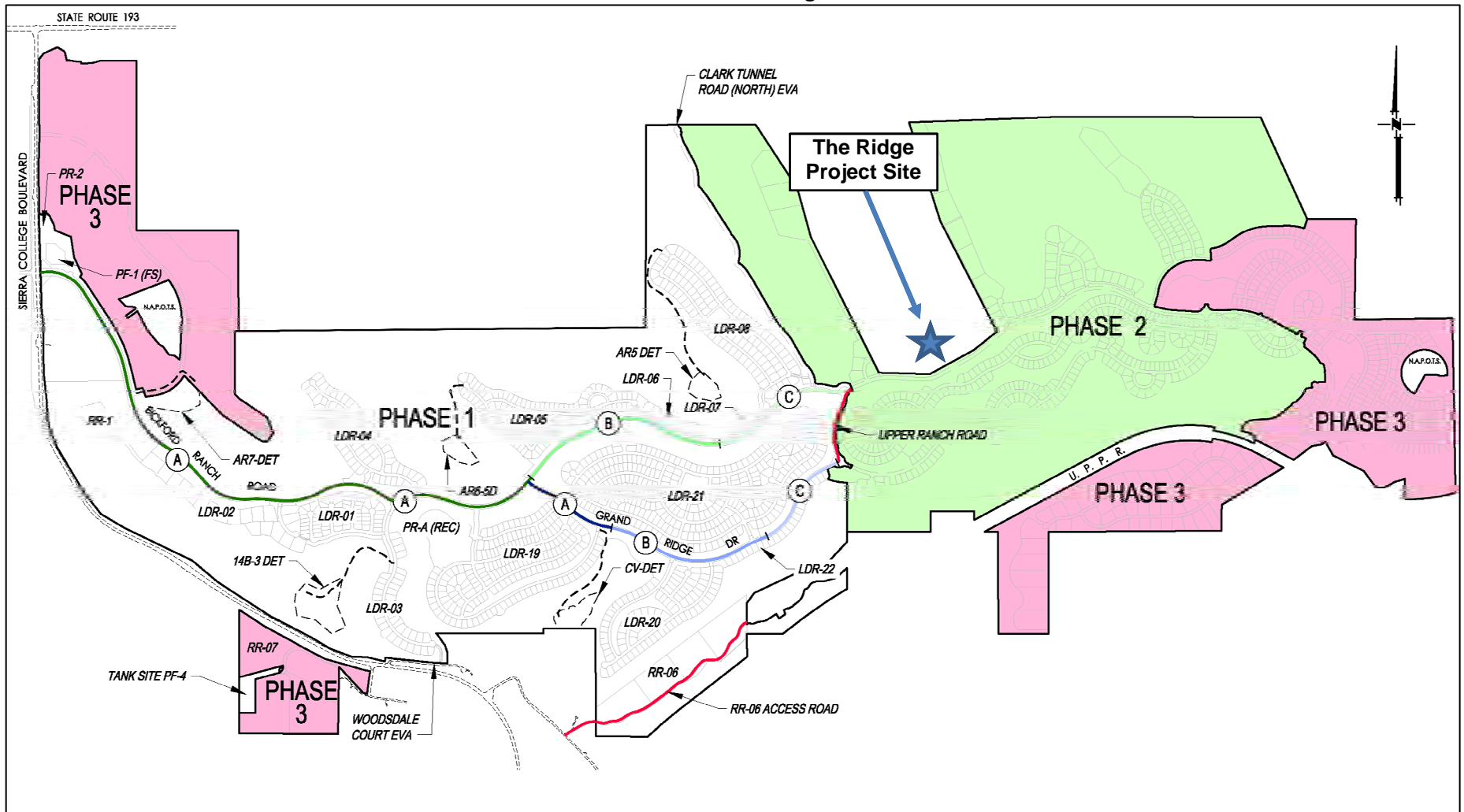
Similarly, in *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4<sup>th</sup> 439 (*Neighbors for Smart Rail*), the Supreme Court stated, "...we note that in appropriate circumstances an existing conditions analysis may take account of environmental conditions that will exist when the project begins operations; the agency is not strictly limited to those prevailing during the period of EIR preparation. An agency may, where appropriate, adjust its existing conditions baseline to account for a major change in environmental conditions that is expected to occur before project implementation." This is different than use of a future baseline, a subject dealt with in both the CEQA Guidelines Section 15125(a)(2) and *Neighbors for Smart Rail*. A future baseline is understood to be a point in time beyond the date of project operations, as was the case in *Neighbors for Smart Rail*.

For the following reasons, the existing conditions environmental baseline for the proposed project has been adjusted to be consistent with date-of-project implementation. As noted by the court, "...such a date-of-implementation baseline does not share the principal problem presented by a baseline of conditions expected to prevail in the more distant future following years of project operation - it does not omit impacts expected to occur during the project's early period of operation."

Importantly, development of the proposed project is dependent upon the installation of Bickford Ranch Road and associated utilities (water and sewer trunk mains) through Phase 1 of the BRSP and extension of such infrastructure through a portion of BRSP Phase 2 to the project entry (see Figure 3). The applicant for the proposed project has indicated that it is not financially feasible to proceed with the proposed project prior to the completion of Phase 1 of the approved BRSP project; specifically, the cost of the key backbone infrastructure needed to serve the proposed project cannot be borne by the 34-lot project alone. As a result, the proposed project would be developed subsequent to completion of the Phase 1 infrastructure for BRSP. It is therefore necessary to identify the number of residential units that could be built in BRSP Phase 1 and considered part of the baseline for the subject analysis. Per Table 1 below, the total possible number of units in Phase 1 of the BRSP is 1,010.

Consistent with the BRSP Infrastructure Phasing Plan (IPP), it is reasonable to assume that the BRSP owners would proceed by constructing homes along with Phase 1 backbone infrastructure in an effort to help finance the infrastructure costs.

Figure 3  
BRSP Phasing



**Table 1**  
**Bickford Ranch Phase 1 Development Area\***

<b>Parcel</b>	<b>Specific Plan Land Use</b>	<b># of Units</b>
RR-1	Rural Residential	1
RR-6	Rural Residential	4
LDR-01	Low Density Residential	26
LDR-02	Low Density Residential	20
LDR-03	Low Density Residential	35
LDR-04	Low Density Residential	72
LDR-05	Low Density Residential	103
LDR-06	Low Density Residential	8
LDR-07	Low Density Residential	3
LDR-08	Low Density Residential	103
LDR-19	Low Density Residential	196
LDR-20	Low Density Residential	89
LDR-21A	Low Density Residential	198
LDR-21B	Low Density Residential	128
LDR-22	Low Density Residential	24
<b>Total</b>		<b>1010</b>

\* Based on Table 3-2 of the BRSP (December 2015) and Exhibit 2 of BRSP Phase 1 Infrastructure Phasing Plan (April 4, 2017).

Furthermore, given the State of California's current housing crisis,<sup>2</sup> it is reasonable to assume that there will be sufficient demand for the homes. The weight of evidence suggests that it is more reasonable to assume that BRSP Phase 1 would include concomitant construction of homes and infrastructure, rather than just infrastructure. Assuming the latter could be considered speculative, which is discouraged by the CEQA Guidelines (Section 15145). Thus, substantial evidence exists to support use of the above-articulated adjustments to the existing conditions baseline for The Ridge EIR, as such adjustments will give the public and decision makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts (CEQA Guidelines Section 15125(a)). The approved land uses for the portions of BRSP adjacent to the project site are shown in Figure 4, which is an excerpt from the approved BRSP land use plan.

#### **Project Description:**

The proposed project would include subdivision of the project site to develop 34 single-family residential homes and associated improvements (see Figure 5). The proposed project would require approval of a General Plan Amendment (GPA), a Rezone, and a Vesting Tentative Subdivision Map. The project would also be annexed into Placer County Sewer Maintenance District 1 (SMD 1). The proposed project components, along with all required entitlements, are described in the following sections.

#### **General Plan Amendment/Rezone**

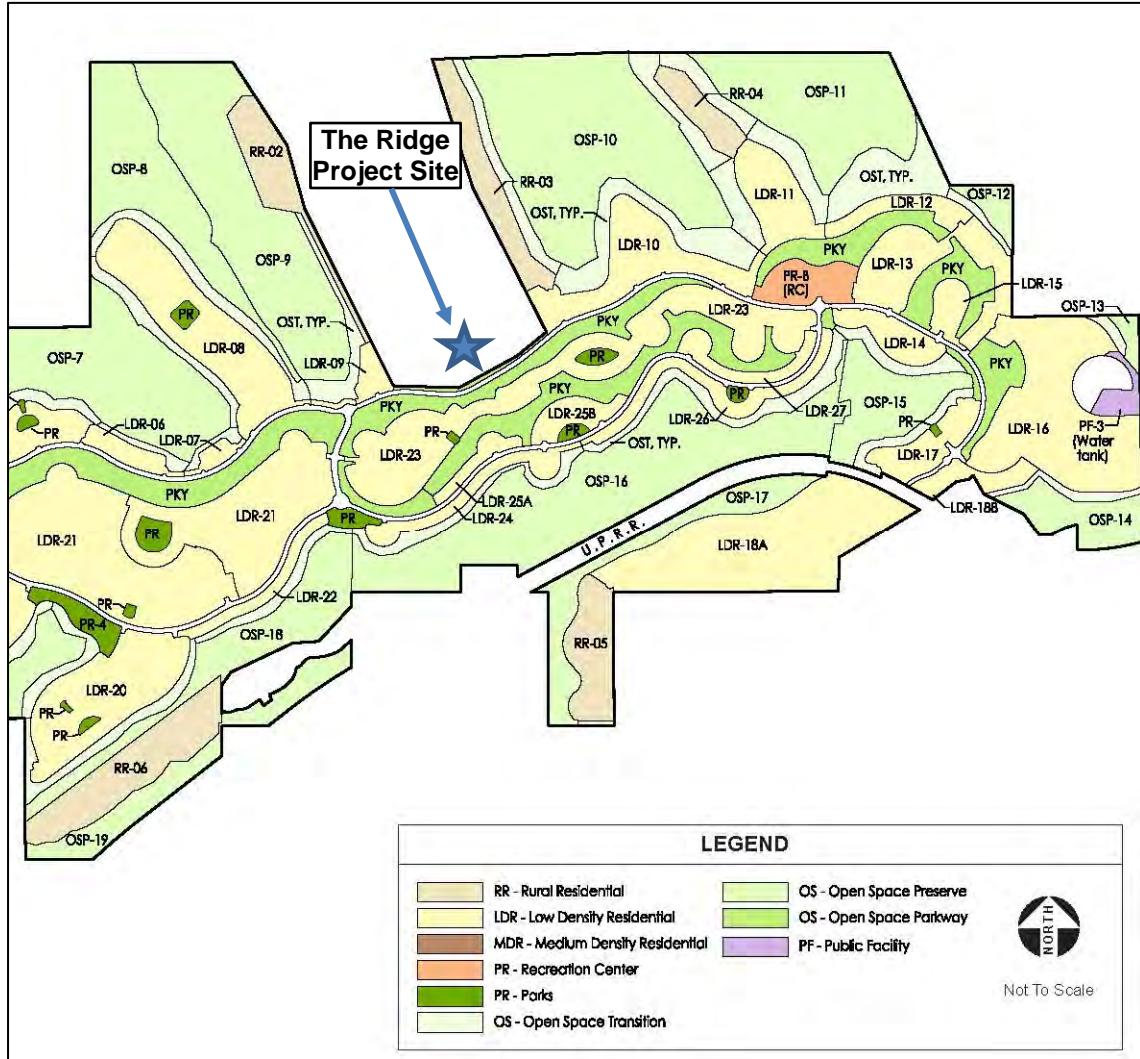
The proposed project would include a GPA to change the General Plan land use designation of the project site from Agriculture/Timberland 10 Ac. Min to Medium Density Residential (MDR) (13.85 acres) and Low Density Residential (LDR)(11.10 acres) (Figure 6). In addition, the project would include a Rezone to change the site's zoning designation from F-B-X 10-Ac. Min. to Residential Single-Family, combining minimum Building Site of 8,000 square feet (RS-B-8) (13.85 acres) and Residential Single-Family, combining minimum Building Site of 10,000 square feet (RS-B-10) (11.10 acres) (see Figure 7).

#### **Vesting Tentative Subdivision Map**











The proposed Vesting Tentative Subdivision Map would create 34 residential lots, an internal roadway (Lot A) and a detention/retention basin (Lot B). Of the 34 total residential lots, 28 would be medium density lots ranging in size from 13,700 square feet (sf) to 38,416 sf, with an average size of 18,206 sf and an average net density of 2.3 units per acre. The remaining six residential lots would be larger low density residential lots ranging in size from 1.1 to 2.2 acres, with an average net density of 0.60 units per acre, thus, greatly exceeding the allowable minimum lot size under the proposed rezone. The six low-density residential lots would be located along the ridges within the eastern and western portions of the site and are intended to be similar in size to the RR lots within the adjacent BRSP Phase 2 area. Combined, the proposed project would result in an average residential net density of 1.55 units per acre. The proposed lot sizes would be consistent with the BRSP parcels to the east and west of the project site. The proposed development standards for the proposed project, shown in Table 2 below, are generally similar with the County-approved development standards as set forth in the BRSP Development Standards for similar-sized lots. The proposed project would not include dedicated park space within the project site.

<sup>2</sup> See for example, the *Housing Crisis Act of 2019*.

**Figure 4  
BRSP Land Use Plan**



**LEGEND**

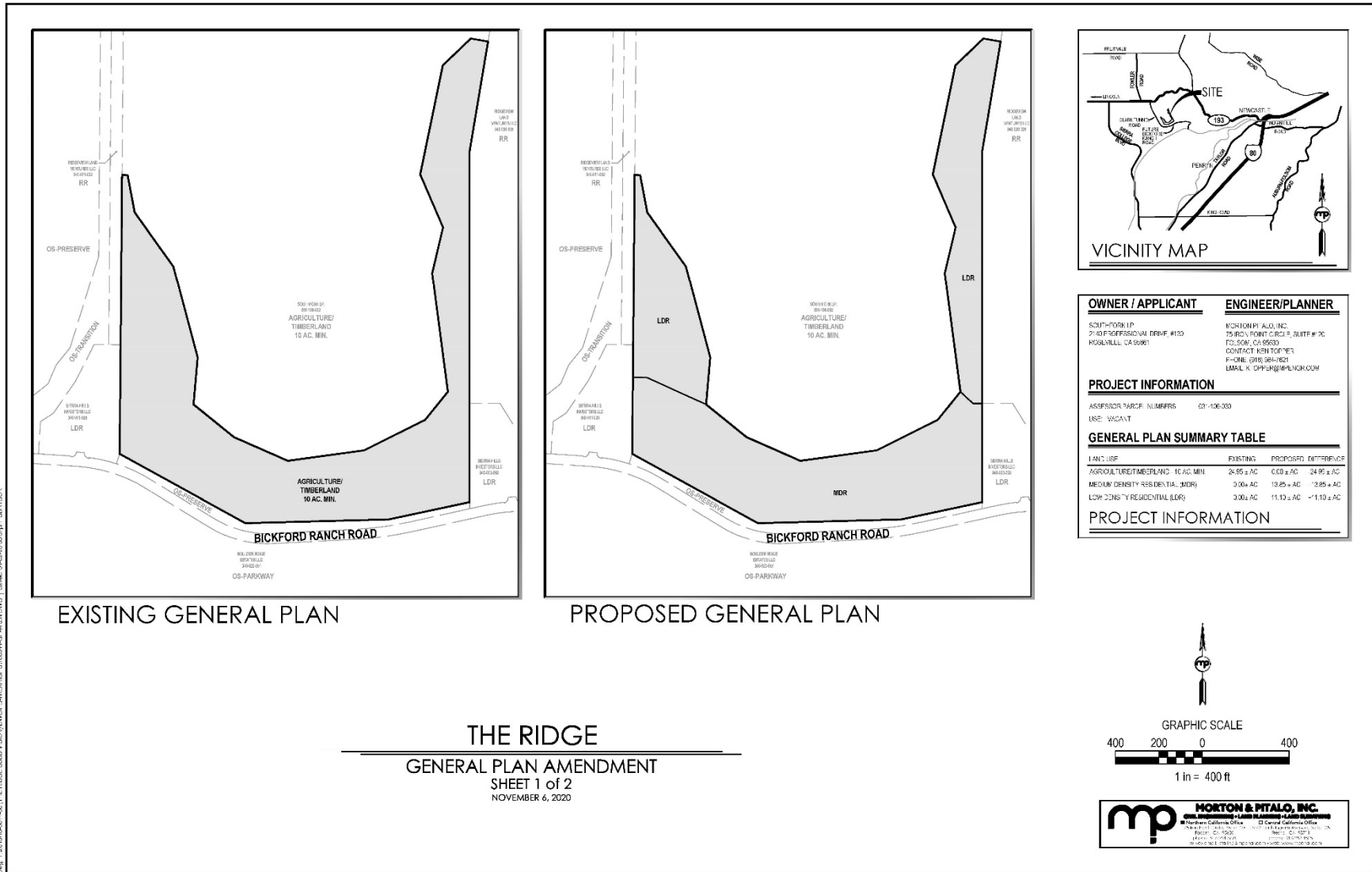
 RR - Rural Residential	 OS - Open Space Preserve	 Not To Scale
 LDR - Low Density Residential	 OS - Open Space Parkway	
 MDR - Medium Density Residential	 PF - Public Facility	
 PR - Recreation Center		
 PR - Parks		
 OS - Open Space Transition		

<b>Table 2 Proposed Development Standards</b>		
	<b>Low Density Single-Family Estate Low Density (RS-B-10)</b>	<b>Single-Family Traditional Medium Density Residential (RS-B-8)</b>
<b>Lot Sizes and Coverage</b>		
Lot area – minimum	1.1 acre	13,700 sf
Lot coverage – maximum	40% one-story, 35% two-story	40%
Lot width – interior lot minimum <sup>1</sup>	125 feet	90 feet
Lot width – corner lot – minimum <sup>1</sup>	N/A	90 feet
<b>Building Setbacks</b>		
Front <sup>2</sup>	25 feet	20 feet
Side	20 feet	10 feet
Rear <sup>3</sup>	30 feet	30 feet
Rear – accessory structure	15 feet <sup>3</sup>	15 feet <sup>3</sup>
<b>Building Height</b>		
	30 feet	30feet
<b>Parking Spaces – Minimum</b>		
Resident – in garage	2	2
Guest – on- or off-street	2	2
<sup>1.</sup> Measured at the front setback line. <sup>2.</sup> Measured from back of sidewalk or right-of-way line where there is no sidewalk, and the edge of pavement on the private lanes. <sup>3.</sup> Lots 15-25 and 29 – 34 shall have a minimum rear building setback of 30 feet or the top of slope of 30 percent, whichever is greater (as measured from the rear property line).		
Note: Setbacks subject to requirements of the Placer County Zoning Ordinance Section 17.54.150.		




Under the Placer County Conservation Plan (PCCP), watercourses such as canals, channels and flood water conveyances that are lined and non-earthen condition do not have watercourse setbacks. For the proposed project, the minimum setback distance is to be the defined 30 percent slope line extending along the rear of lots 15 through 25 and 29 through 34, or the 30-foot rear lot building setback line of said lots, whichever is greater, but not less than 50 feet from the centerline of the canal. PCWA must determine that the proposed minimum 50-foot setback is not likely to jeopardize the canal structure, nor threaten the quality of water in the canal, nor inhibit access to the canal.



**Figure 6**  
**Proposed General Plan Amendment**

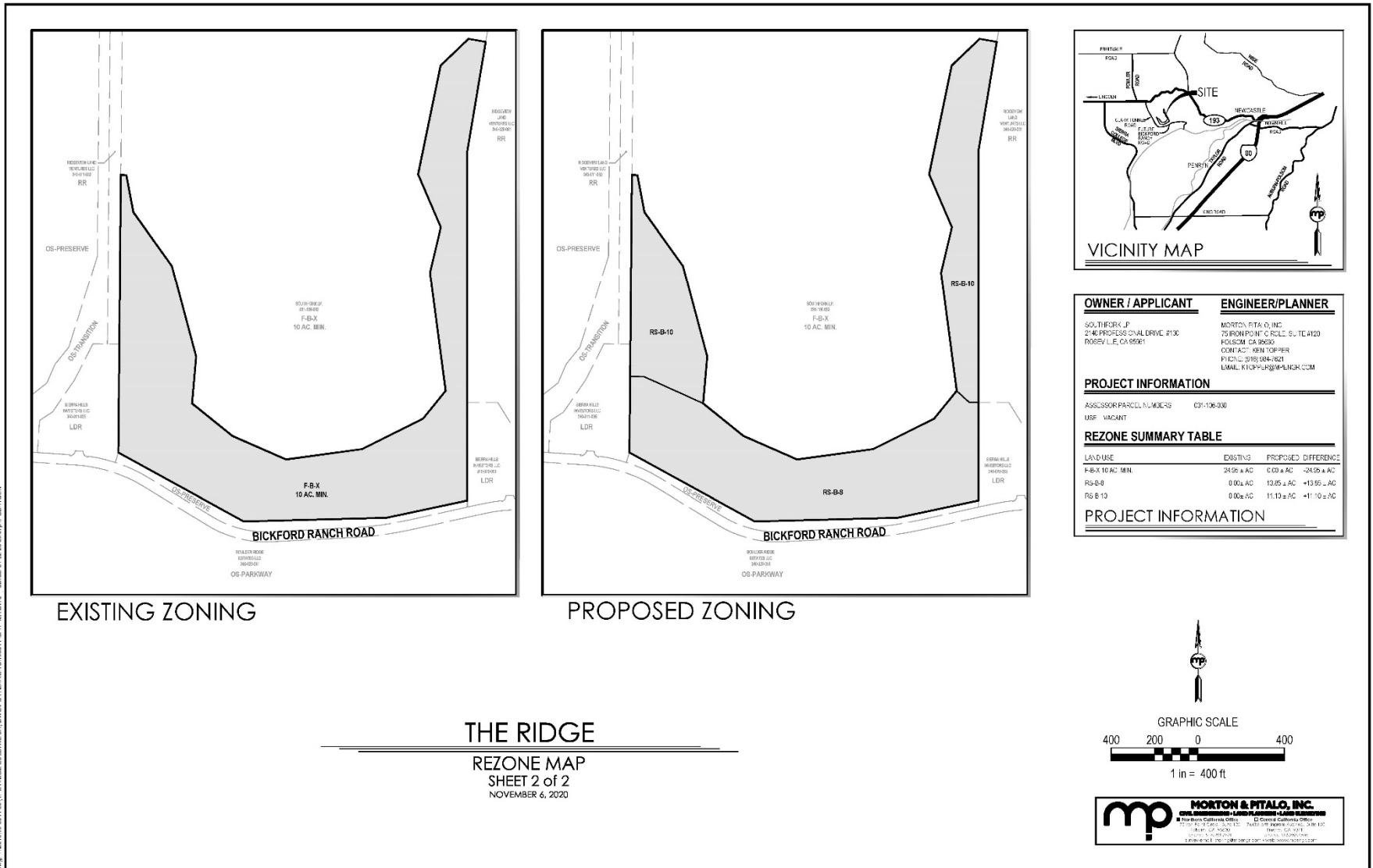


OWNER / APPLICANT	ENGINEER/PLANNER		
SCHULTZ/TPK LP 2140 PROFESSIONAL DRIVE, #100 ROSELVILLE, CA 95961	MORTON PI ALD, INC. 75 ROCKY POINT CIRCLE 2, SUITE # 20 FISHER, CA 95926 CONTACT: KEN TUCKER P-O BOX 2248, OAK HURST LAKELAND, FL 33409		
PROJECT INFORMATION			
ASSESSOR PARCEL NUMBER: 03-106-000			
USE: VACANT			
GENERAL PLAN SUMMARY TABLE			
LAND USE	EXISTING	PROPOSED	DIFFERENCE
AGRICULTURE/TIMBERLAND 10 AC. MIN.	26.95 ± AC	0.03 ± AC	-24.92 ± AC
MEDIUM DENSITY RESIDENTIAL (MDR)	0.00 ± AC	13.25 ± AC	+13.25 ± AC
LOW DENSITY RESIDENTIAL (LDR)	0.00 ± AC	11.13 ± AC	+11.13 ± AC
PROJECT INFORMATION			

  
 GRAPHIC SCALE  
  
 1 in = 400 ft  


**THE RIDGE**  
**GENERAL PLAN AMENDMENT**  
 SHEET 1 of 2  
 NOVEMBER 6, 2020

**Figure 7  
Proposed Rezone**





The proposed project would include construction of a six-foot masonry wall along the project frontage at Bickford Ranch Road. The remainder of the proposed development area would be surrounded by split rail fencing along the east and west boundaries where residential lots are proposed adjacent to Bickford Ranch Rural Residential lots and wrought-iron fencing elsewhere (see Figure 8). As shown in Figure 9, the proposed project would include new trees and other landscaping elements along Bickford Ranch Road, street trees internal to the site, and enhanced landscaping at the project entry.

#### Access and Circulation

The primary access for the proposed project would be provided by Bickford Ranch Road, which would be constructed from Sierra College Boulevard to a point near the southwestern corner of the project site during completion of Phase 1 improvements for BRSP. As previously discussed, The Ridge Project is reasonably anticipated to be developed after completion of BRSP Phase 1 infrastructure is installed and accepted as complete by the County. The terminus of Bickford Ranch Road after completion of Phase 1 BRSP improvements will stop short of The Ridge project site, leaving about 400 feet of unpaved roadway between the terminus and the southwestern corner of The Ridge project site. This 400-foot segment would either be constructed during commencement of Phase 2 of BRSP, or depending on the timing of BRSP Phase 2, potentially by The Ridge applicant. Analysis of the potential environmental impacts associated with construction of Bickford Ranch Road has already been conducted during the environmental review of the BRSP, and that analysis will be incorporated by reference in this IS, as necessary, pursuant to CEQA Guidelines Section 15150. Should The Ridge applicant pursue construction of the above-referenced 400-foot segment of Bickford Ranch Road, The Ridge applicant will be responsible for implementing all applicable mitigation measures adopted in the MMRP for the BRSP EIR and associated Addendum, prior to and during construction of the roadway segment. Thus, access to future Bickford Ranch Road is assumed in this analysis.

The project entry would connect to Bickford Ranch Road and include a gated entry feature and a village entrance monument, similar to those designed and included in the approved BRSP Development Standards and Design Guidelines. Pedestrian access would be provided by a sidewalk connecting the multi-purpose trail in the landscaped parkway corridor along Bickford Ranch Road and extending through a pedestrian gated entry feature to connect with the sidewalk adjoining the south side of the proposed private residential street within the project site.

The gated private two-way residential street fronting the proposed low density residential lots would include a 22-foot-wide travel lane with a three-foot-wide curb and gutter on the north side, an eight-foot-wide parallel parking lane along the south side of the travel area, and a five-foot-wide pedestrian sidewalk contiguous thereto. Two private lanes would extend from the westerly and easterly cul-de-sacs of the private residential street, each serving three rural residential lots. The two private roadways would include 20-foot-wide travel lanes with two-foot-wide shoulders on each side.

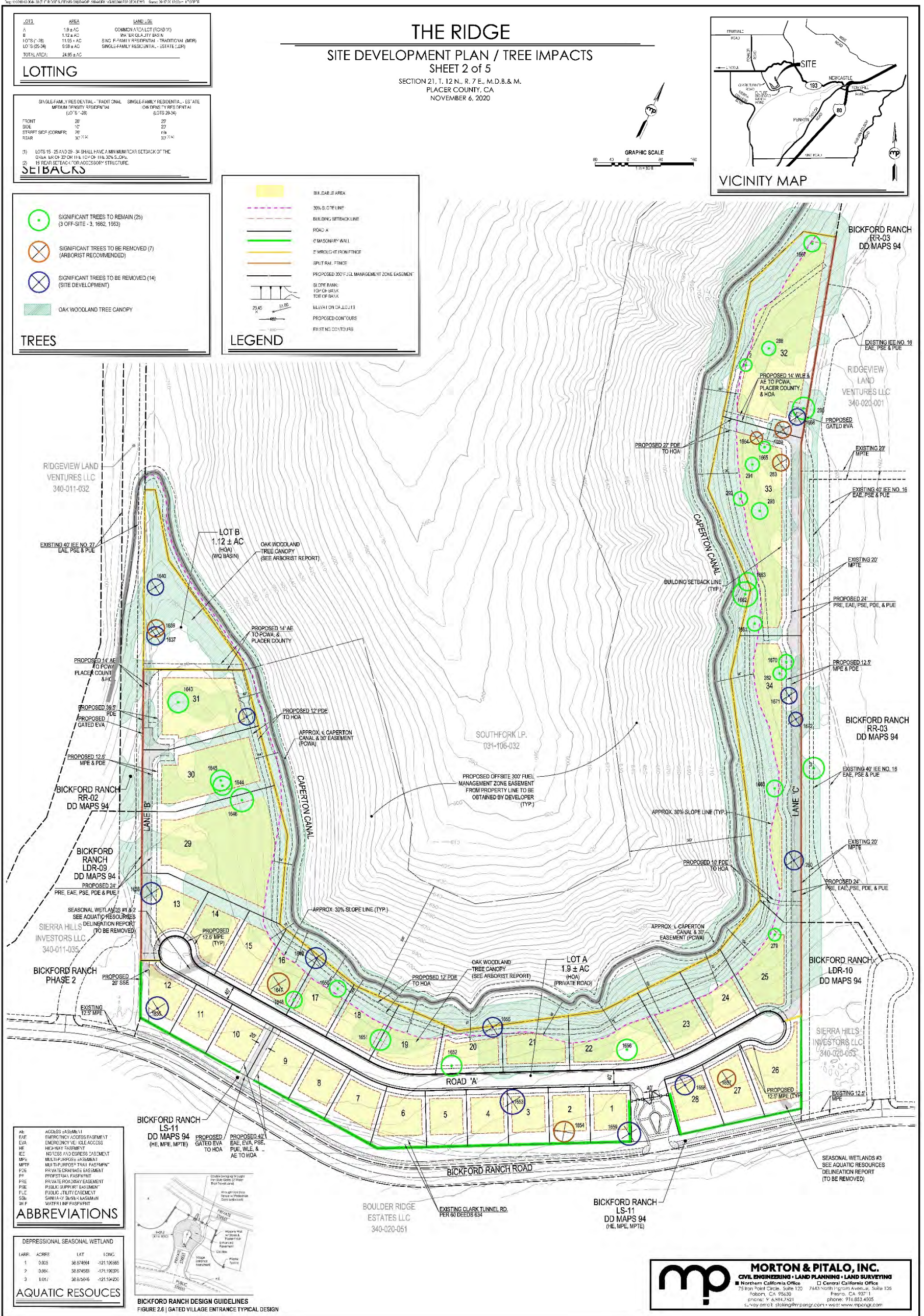
Contiguous to the interior of the private lanes (B and C) and shoulders, a drainage conveyance and treatment swale would be provided within a 12.5-foot-wide multipurpose easement and private drainage easement. Each of the private lanes would include vehicular turnouts for two-way emergency traffic and turn-arounds designed in accordance with the requirements of the governing fire and sewer districts. A gated, 20-foot-wide paved emergency vehicle access (EVA) road would connect the internal private residential street with Bickford Ranch Road. The EVA road would be located between Lots 9 and 10, near the southwest portion of the site. Locked gates for additional EVA purposes would be included as a part of the east and west project boundary fencing to allow access to and from the project's private lanes to the access roads designed along or near the project's common boundaries within the BRSP development. The specific location of the secondary EVA gates would be determined in accordance with County and the governing fire district requirements.

#### Utilities and Service Systems

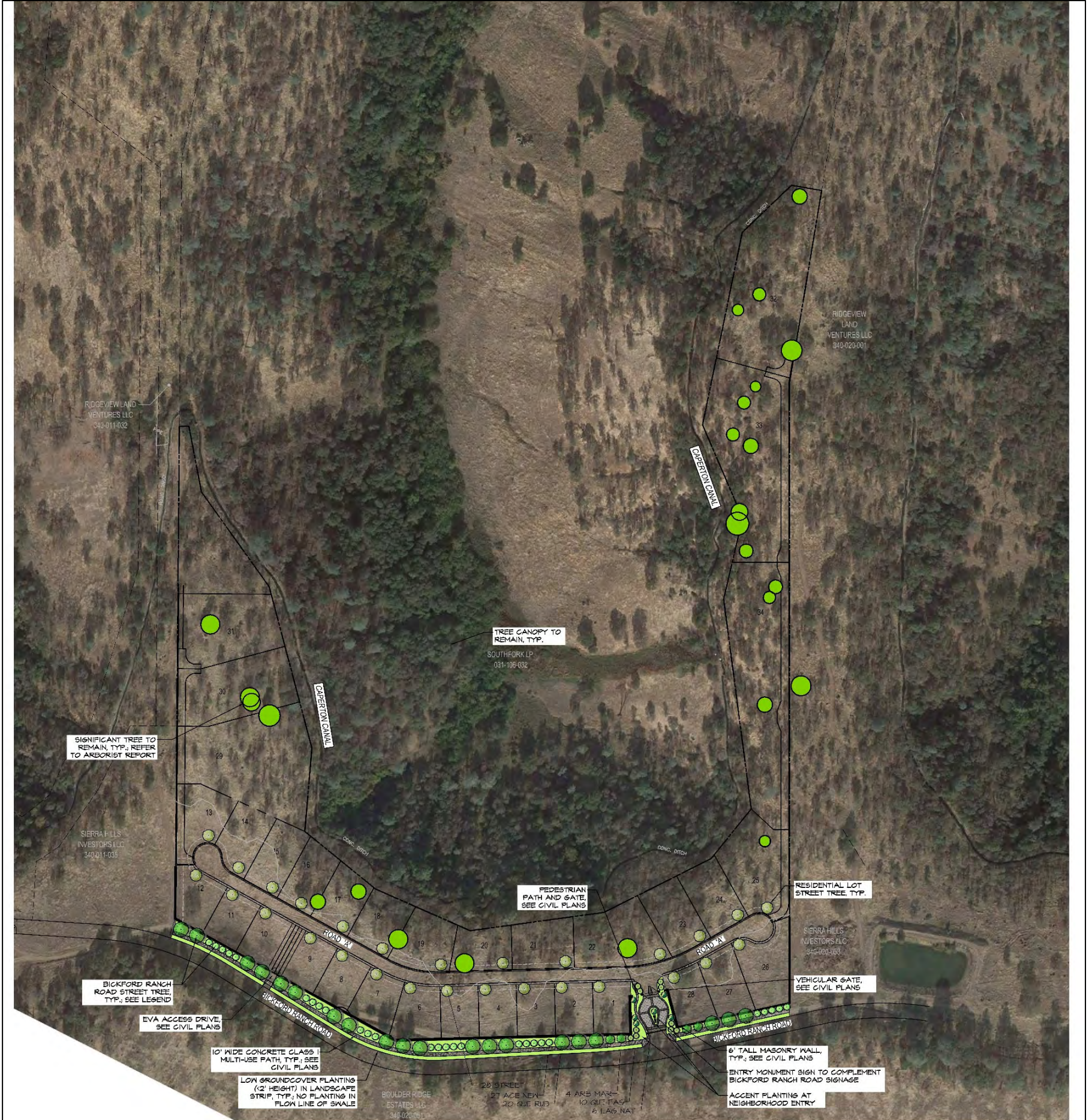
The proposed project would connect to public utilities that will be located within Bickford Ranch Road at the project frontage. Such utilities will be constructed as part of Phase 1 and Phase 2 of the BRSP. Completion of BRSP Phase 1 water and sewer infrastructure would bring the water and sewer trunk lines near the southwestern corner of The Ridge project site, leaving about a 400-foot gap between the stubbed lines and The Ridge project site. Again, depending on the timing of Phase 2 of BRSP, the Ridge applicant may choose to construct a portion of the water and sewer trunk lines to their property, which is discussed further under "Off-Site Improvements" below. Water would be provided by PCWA, and wastewater would be provided by the Placer County Department of Public Works Environmental Engineering Division.

The detention/retention basin included on Lot B would receive stormwater runoff from Pro1A (9.56 acres) and Pro1B (7.4 acres) (see Figure 10). Pro1A generally consists of the internal roadway (Road A), Lane B along the project's western boundary, Lots 1 through 13, and Lots 26 through 28.

**Figure 8**  
**Site Improvement Plan**



**Figure 9  
Proposed Landscaping**



**IRRIGATION NARRATIVE**

A new single point of connection for the irrigation system shall be tapped into the water mainline in the Bickford Ranch Road ROW. Irrigation system shall have its own dedicated irrigation water meter, backflow prevention device, master valve, and flow sensor consistent with current local codes.

Landscaping along Bickford Ranch Road and neighborhood entry drive will be serviced with a fully automatic irrigation system to include PVC mainline and lateral piping, remote control valves and wiring, bubblers at all new trees, and subsurface drip irrigation to all new shrub and groundcover plantings. Stations/hydrozones shall be delineated based on similar water demands, sun exposure, and microclimates. Street trees on residential lots along Road 'A' will be irrigated via each residential lot owner.

A new commercial-quality controller (minimum 18 stations) with wireless rain/freeze sensor will be installed in a metal pedestal near entry drive.

**TREE SCHEDULE**

TREE SPECIES ARE CONSISTENT WITH THE BICKFORD RANCH ROAD PLAN PALETTE

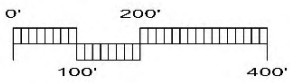
TREES	CODE	QTY	BOTAN CAL. / COMMON NAME	SIZE
	ACE NEA	27	Acer nitrum 'New Nor'd' / New Nordic Red Maple	15 gal
	ARB MAR	4	Arbutus x Marina / Garden Madrone - Standard	15 gal
	LAG NAT	6	Lagerstroemia x Natchez / Grape Myrtle	15 gal
	QUE FAS	10	Quercus robur 'Fastigiata' / Pyramidal English Oak	24" box
	QUE RUB	20	Quercus rubra / Red Oak	15 gal
	STREET	26	Street Tree	15 gal

**SHRUBS AND GROUNDCOVER**

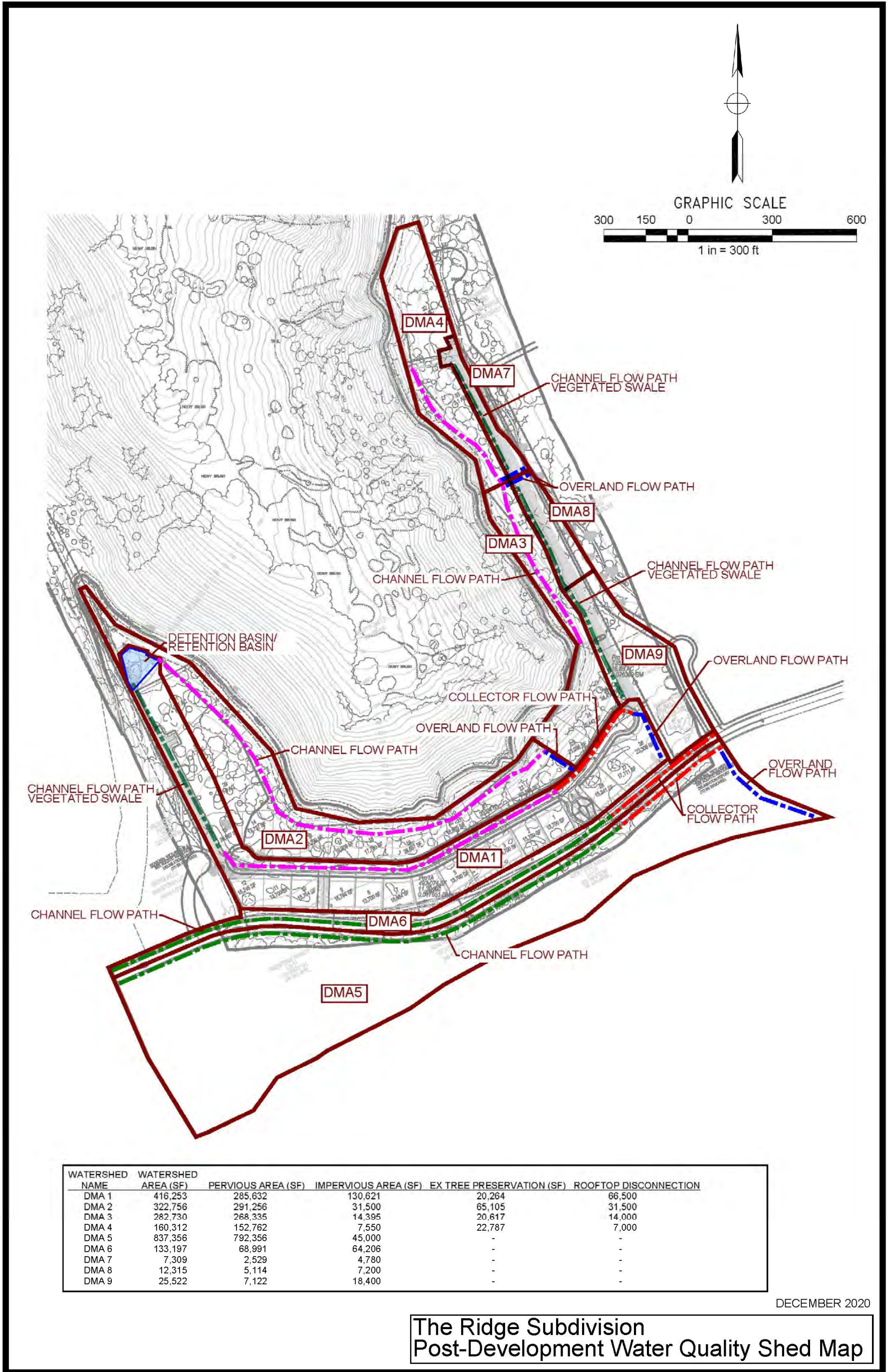
SHRUBS AND GROUNDCOVER PLANTINGS CONSISTENT WITH BICKFORD RANCH ROAD PLAN PALETTE 5,120 sq ft



**NORTH**



**Figure 10**  
**Post-Development Drainage**



Pro1B generally consists of Lots 14 through 23 and downslope portions of Lots 29 through 31. Stormwater runoff from Pro1A and Pro1B would flow to the detention/retention basin. Stormwater runoff from Pro1A would flow from the streets to the detention/retention basin via a vegetated swale. Stormwater runoff from Pro1B would be captured in the rock cobble cutoff v-ditch and directed to the detention/retention basin. The proposed rock cobble cutoff v-ditch has been sized to accommodate flow from a 100-year storm, with 0.50-feet of freeboard.

The proposed detention/retention basin has also been sized to mitigate the peak flow and volumetric impacts from the entire project. A 30-inch drainage discharge pipe would be directed to the flume over the Caperton Canal. The infiltration elevation of the basin, to be located upstream of the Caperton Canal, would be below the elevation of the existing canal. As such, infiltration from the detention/retention basin would not adversely affect the integrity of the canal.

Pro2 consists of the remainder of the subdivision (Lots 23 through 25, 32 through 34, and Lane C) and is divided into Pro2A (7.08 acres) and Pro2B (4.13 acres) (see Figure 10). Stormwater runoff from Pro2 would be captured in the rock cobble cutoff v-ditch and drain to two proposed Caperton Canal flume crossings without restriction; the crossings are identified as Point of Interest POI 3 and POI 5 on the Watershed Map (see Figure 10). Water treatment for the sheds would be provided by the vegetated swales adjacent to the roadway pavement and disconnected roof drains for the residential lots. The proposed cobble lined v-ditch along the downslope section of the lots will convey the flows to the point of discharge.

Pro3 (19.22 acres) is existing, and is not proposed for development as part of the project. Pro4 (3.06 acres) would be directed to the portion of Bickford Ranch Road along the project's frontage with construction of the roadway improvements. Treatment of runoff from Pro4 would be provided by the proposed roadside vegetated drainage swale.

#### Off-Site Improvements

Development of the proposed project is conditioned to be dependent upon the installation of Bickford Ranch Road and associated utilities through Phase 1 of the BRSP and extension of such infrastructure through a portion of BRSP Phase 2 to the project entry. In the event the Phase 2 improvements of Bickford Ranch have not yet been constructed, and the proposed project has obtained necessary entitlements and is ready to proceed, off-site improvements to a segment of Bickford Ranch Road would be required to extend services and complete access to the project site. Specifically, such improvements would include the approximately 400-foot extension of Bickford Ranch Road from the Phase 1 terminus thereof to the project site and along the entire frontage of the project, including all required water, sewer, drainage and dry utilities therein (see Figure 11, Figure 12, and Figure 13). In addition, improvements would be made to the BRSP landscape corridor parcel which fronts upon the project, including the landscaping thereof and the installation of the multi-purpose trail in accordance with the improvement concept set forth in the BRSP Development Standards and Design Guidelines. All off-site improvements would be constructed consistent with the BRSP and applicable mitigation measures.

#### Fuel Management Zone

The proposed project would include the establishment and on-going maintenance of an off-site, 300-foot wide Fuel Management Zone easement along the project's northern boundary, north of the Caperton Canal. The Fuel Management Zone would be accessed by maintenance crews by way of the access easements from Lanes B and C along Lot B and Lot 32, and over the canal at access points consistent with those constructed by PCWA to service the canal. Maintenance of the Fuel Management Zone would be the responsibility of the proposed project's homeowner's association and would include routine clearing of understory brush to reduce fire hazards, but would not include removal of mature trees or substantial ground-disturbing activities. During the California Department of Forestry and Fire Protection (CAL FIRE) declared fire season, understory brush within the Fuel Management Zone, including annual grasses and dead vegetation, would be maintained at a height of four inches or less. Maintenance would occur as frequently as necessary to ensure proper reduction of vegetation height, and no less than once per year, according to the Fire Safe Plan prepared for the project.

#### Grading Activities

Similar to the Bickford Ranch Development Standards and standard County requirements, which restrict any construction activities in areas with slopes greater than 30 percent, the identified 30 percent slope line within the project site, as shown on Figure 8, would serve as the building setback line, where the 30 percent slope edge is greater than the typical development standard defined setback. The only proposed grading disturbance in slope areas greater than 30 percent would be for the construction of the proposed drainage outfalls and flume crossings of the Caperton Canal and the proposed rock cobble cutoff v-ditch.

It should be noted that Lots 13 through 25 along the north side of Road A and the proposed low density residential lots (Lots 29 through 34) are proposed as custom, non-graded lots. Thus, grading activities would be primarily restricted to the upper elevations of the ridge predominantly within the southern portion of the project site.

Figure 11  
Utility Plan

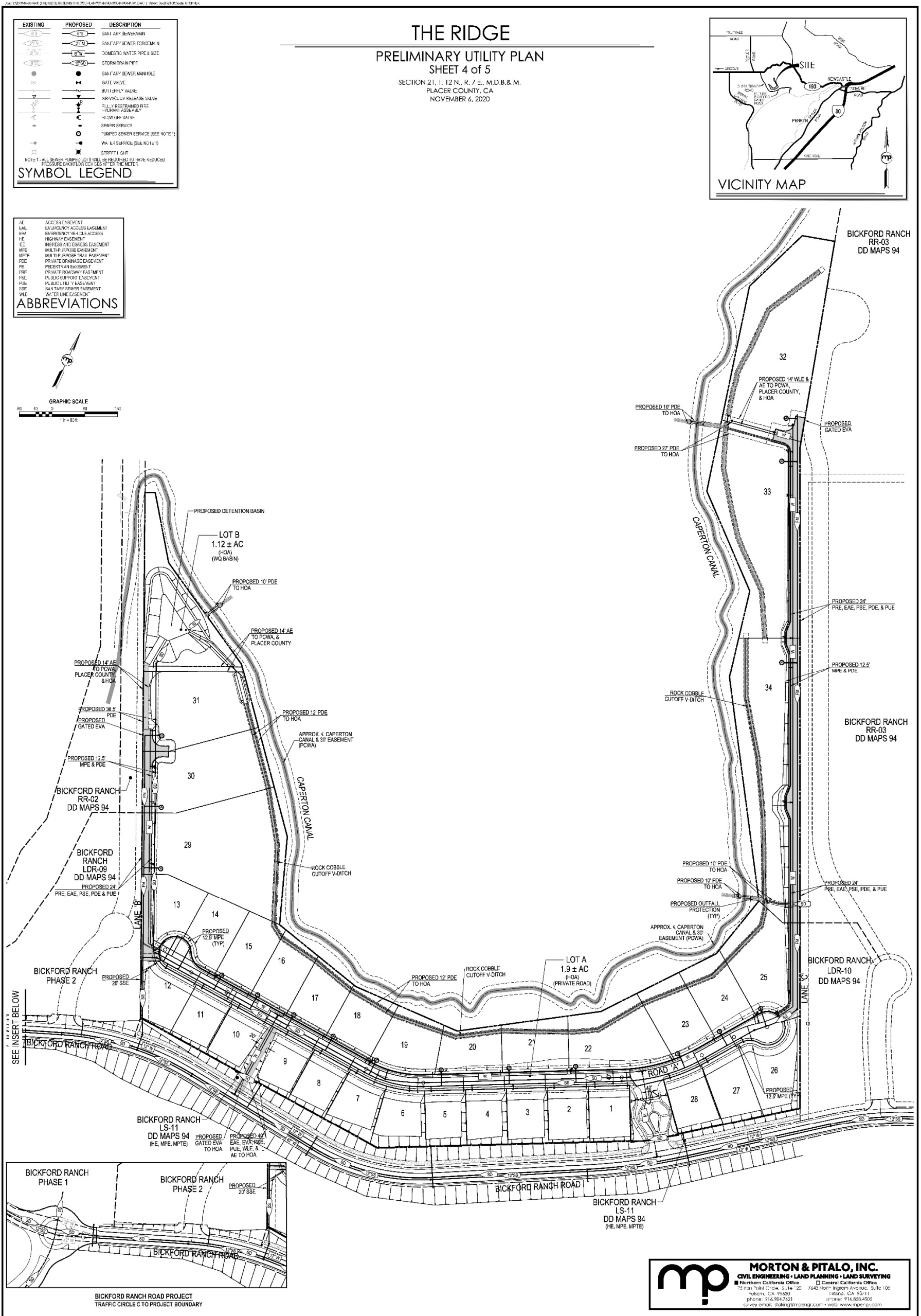


Figure 12  
BRSP Subphase 1C – Water Facilities

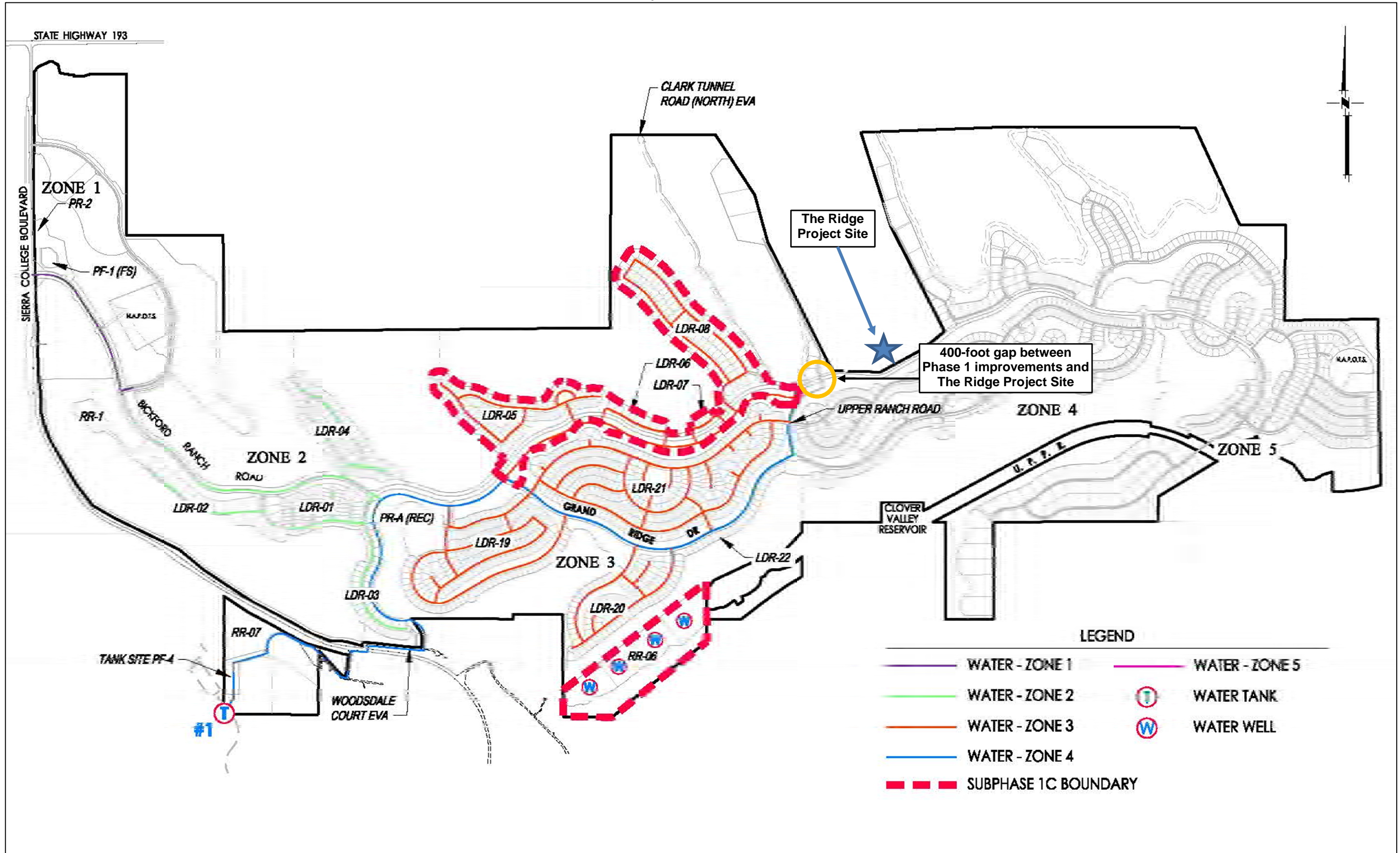
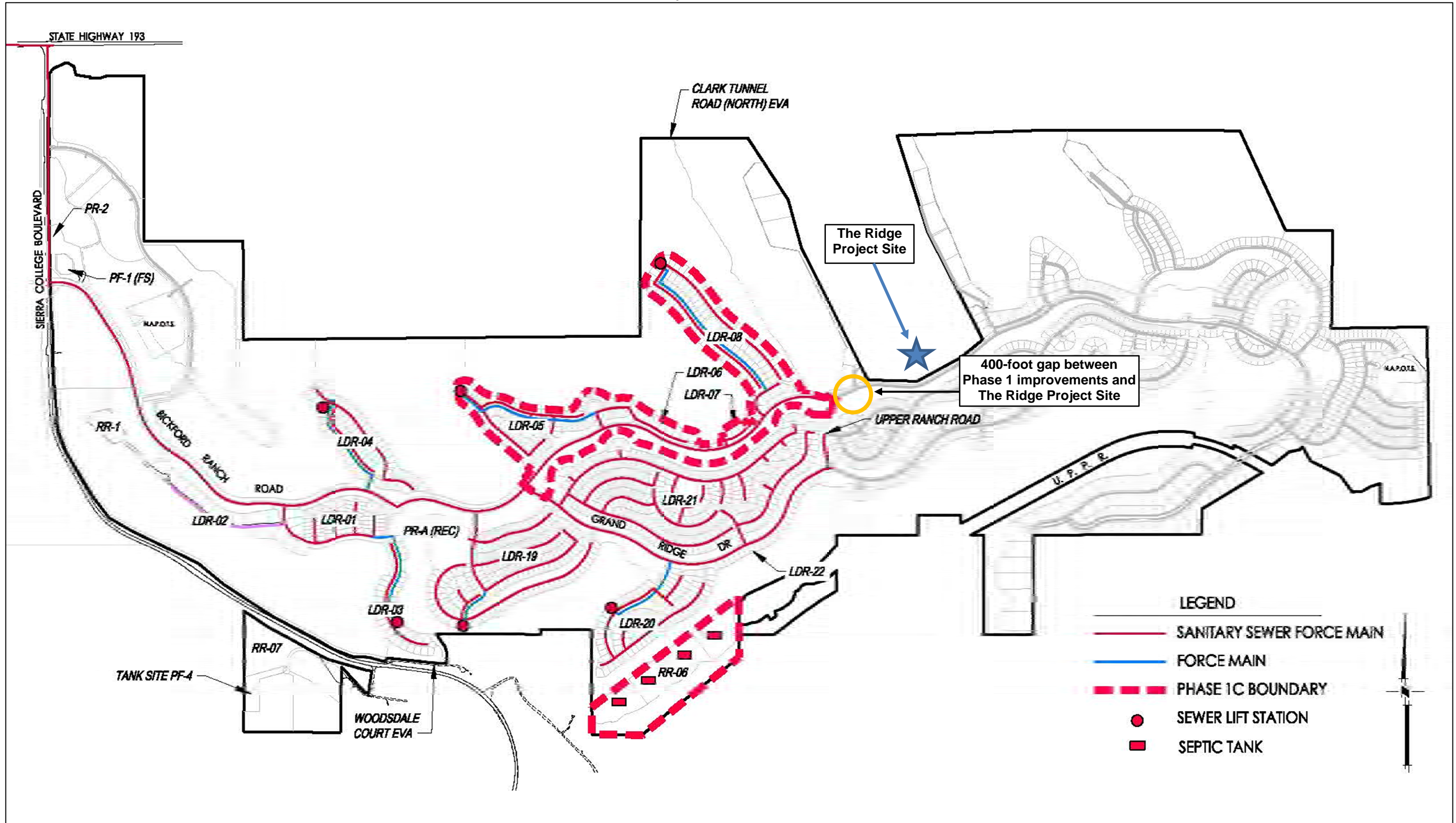




Figure 13  
BRSP Subphase 1C – Sewer Facilities



### Annexation

The proposed project would require annexation of the project site into Placer County SMD 1 for the provision of sewer services, subject to approval by the Placer County Board of Supervisors. As part of the proposed annexation, the project would be subject to payment of applicable annexation fees pursuant to Section 13.12.260 of the Placer County Code.

### Design Exception Request

The proposed project involves a request for an exception to the Placer County standards regarding design speed, as defined by Section 4.03 of the County's Land Development Manual, in two locations. The proposed private street and cul-de-sacs within the project site (Road A), which is fully consistent with the BRSP Development Standards, provides access to the 28 medium density residential lots, and the six low density lots. The cul-de-sacs at the east and west ends of Road A would serve as the primary access points for the project's proposed six low-density residential lots in excess of one acre in size, three of which are located on the eastern side of the project site and three on the western side. Access for each of the lots would be provided by private 20-foot paved lanes (Lanes B and C) located within a 24-foot private roadway easement.

While each of the proposed private street to private lane transitions is designed with a 25-foot minimum turning radius to allow for full emergency vehicle access, neither lane meets the 25 miles per hour (mph) design speed requirement for residential streets, as defined by Section 4.03. However, the terminus and transition from the 40-foot private street to a 20-foot private lane at a fully improved cul-de-sac would naturally serve to slow speeds to 15 mph or less. Additionally, the two locations cannot accommodate a turning radius that adheres to a 25-mph design speed. The design of the transition from the private street to the private lane requires the reduction of speed with a transition to what is intended to be effectively a private lot driveway. As such, the project proposal requests a design exception to the 25-mph design speed requirement to use a 15-mph design speed at the defined locations of each end of the private street (Road A).

### Requested Entitlements

The project applicant is requesting Placer County approval of the following entitlements:

- General Plan Amendment from Agriculture/Timberland 10 Ac. Min. to MDR (13.85 acres) and LDR (11.10 acres);
- Rezone from F-B-X 10-Ac. Min. to RS-B-8 (13.85 acres) and RS-B-10 (11.10 acres); and
- Vesting Tentative Subdivision Map.

And the following approval:

- Annexation into SMD 1

### B. ENVIRONMENTAL SETTING:

Location	Zoning	General Plan/Specific Plan Designations	Existing Conditions and Improvements
Site	F-B-X 10-Ac. Min. (Farm, combining minimum Building Site of 10 acres)	Agriculture/Timberland 10 Ac. Min.	Undeveloped
North	F-B-X 10-Ac. Min. (Farm, combining minimum Building Site of 10 acres)	Agriculture/Timberland 10 Ac. Min.	Undeveloped, Caperton Canal
South	SPL-BRSP (Bickford Ranch Specific Plan), F-B-X 10-Ac. Min. (Farm, combining minimum Building Site of 10 acres)	BRSP (Open Space Parkway)	Undeveloped, dirt road (Clark Tunnel Road)
East	SPL-BRSP (Bickford Ranch Specific Plan)	BRSP (RR and LDR)	Undeveloped
West	SPL-BRSP (Bickford Ranch Specific Plan)	BRSP (RR and LDR)	Undeveloped

**C. NATIVE AMERICAN TRIBES:** Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, is there a plan for

consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Pursuant to Assembly Bill 52, invitations to consult were sent to tribes who requested notification of proposed projects within this geographic area on December 20, 2019. The United Auburn Indian Community (UAIC) initiated consultation, requested a site visit, and requested copies of cultural searches/surveys. A site visit was conducted on January 29, 2020 and the County provided copies of the Paleontological Records Search and Cultural Resources Assessment prepared for the proposed project. The Shingle Springs Band of Miwok Indians (SSR) requested copies of cultural searches/surveys, which were provided.

**NOTE:** Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code Section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code Section 21082.3(c) contains provisions specific to confidentiality.

#### **D. PREVIOUS ENVIRONMENTAL DOCUMENT:**

The County has determined that an Initial Study shall be prepared in order to determine whether the potential exists for unmitigable impacts resulting from the proposed project. Relevant analysis from the County-wide General Plan and Specific Plan Certified EIRs, and other project-specific studies and reports that have been generated to date, were used as the database for the Initial Study. The decision to prepare the Initial Study utilizing the analysis contained in the General Plan Certified EIR, and project-specific analysis summarized herein, is sustained by Sections 15168 and 15183 of the CEQA Guidelines.

Section 15168 relating to Program EIRs indicates that where subsequent activities involve site-specific operations, the agency would use a written checklist or similar device to document the evaluation of the site and the activity, to determine whether the environmental effects of the operation were covered in the earlier Program EIR. A Program EIR is intended to provide the basis in an Initial Study for determining whether the later activity may have any significant effects. It will also be incorporated by reference to address regional influences, secondary effects, cumulative impacts, broad alternatives, and other factors that apply to the program as a whole.

The following documents serve as Program-level EIRs from which incorporation by reference will occur, pursuant to CEQA Guidelines Section 15150:

- ➔ Placer County General Plan EIR;
- ➔ BRSP EIR; and
- ➔ Addendum to the BRSP EIR.

It should be noted that the BRSP Draft EIR, BRSP Final EIR, and the 2015 Addendum to the BRSP EIR are referred to collectively within this Initial Study as the BRSP EIR. These documents are available at Placer County Community Development Resource Agency, 3091 County Center Drive, Suite 190, Auburn, CA 95603.

#### **E. EVALUATION OF ENVIRONMENTAL IMPACTS:**

The Initial Study checklist recommended by the State CEQA Guidelines is used to determine potential impacts of the proposed project on the physical environment. The checklist provides a list of questions concerning a comprehensive array of environmental issue areas potentially affected by the project (see CEQA Guidelines, Appendix G). Explanations to answers are provided in a discussion for each section of questions as follows:

- a) A brief explanation is required for all answers including "No Impact" answers.
- b) "Less Than Significant Impact" applies where the project's impacts are insubstantial and do not require any mitigation to reduce impacts.
- c) "Less Than Significant with Mitigation Measures" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The County, as lead agency, must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level (mitigation measures from earlier analyses may be cross-referenced).

- d) "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- e) All answers must take account of the entire action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts [CEQA Guidelines, Section 15063(a)(1)].
- f) Earlier analyses may be used where, pursuant to the tiering, Program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or Negative Declaration [CEQA Guidelines, Section 15063(c)(3)(D)]. A brief discussion should be attached addressing the following:
  - ➔ **Earlier analyses used** – Identify earlier analyses and state where they are available for review.
  - ➔ **Impacts adequately addressed** – Identify which effects from the above checklist were within the scope of, and adequately analyzed in, an earlier document pursuant to applicable legal standards. Also, state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - ➔ **Mitigation measures** – For effects that are checked as “Less Than Significant with Mitigation Measures,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- g) References to information sources for potential impacts (i.e. General Plans/Community Plans, zoning ordinances) should be incorporated into the checklist. Reference to a previously-prepared or outside document should include a reference to the pages or chapters where the statement is substantiated. A source list should be attached and other sources used, or individuals contacted, should be cited in the discussion.

**I. AESTHETICS** – Except as provided in Public Resources Code Section 21099, would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Have a substantial adverse effect on a scenic vista? (PLN)			X	
2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a state scenic highway? (PLN)				X
3. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? (PLN)	X			
4. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? (PLN)	X			

**Discussion Item I-1:**

Examples of typical scenic vistas would include mountain ranges, ridgelines, or bodies of water as viewed from a highway, public space, or other area designated for the express purpose of viewing and sightseeing. In general, a project's impact to a scenic vista would occur if development of the project would substantially change or remove a scenic vista. 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 proposed project site, the proposed project would not have a substantial adverse effect on a scenic vista, and a **less-than-significant** impact would occur. No mitigation measures are required.

**Discussion Item I-2:**

According to the California Scenic Highway Mapping System, Placer County does not contain officially designated State Scenic Highways. As such, the proposed project would not substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings, within a State Scenic Highway. Therefore, there is **no impact**.

**Discussion Item I-3:**

The 24.95-acre project site is located approximately one mile southeast of the intersection of SR 193 and Clark Tunnel Road. The project site is located atop three interconnected ridges forming a horseshoe shape. The site is currently undeveloped, consisting primarily of grasses, oak woodland, and scattered rock outcroppings. The densely wooded area to the north of the project site slopes steeply downward towards the La Faille Ranch property in the valley below.

Distinguishing between public and private views is important when evaluating changes to visual character or quality, because private views are views seen from privately-owned land and are typically associated with individual viewers, including views from private residences. Public views are experienced by the collective public, and include views of significant landscape features and along scenic roads. In the case of the proposed project, views from SR 193, north of the project site, and from roadways within the Bickford Ranch development, would be considered public views. According to CEQA (Pub. Resources Code, § 21000 et seq.) case law, 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.'" Therefore, it is appropriate to focus the aesthetic impact analysis on potential impacts to public views.

Public views of the project site are available from SR 193, which is located approximately one mile to the north of the project site. The proposed project would develop the project site with single-family homes and associated improvements, changing the visual character of the project site from rural, undeveloped oak woodland to a developed residential landscape. In addition, the adjusted baseline for this environmental analysis assumes completion of BRSP Phase 1, which would place homes and public roads (e.g., Bickford Ranch Road) in close proximity to the project site, where views of the site would be available. Further analysis is necessary to evaluate changes to the visual character and quality of the project site and its surroundings from SR 193 and future Bickford Ranch Road. Therefore, a **potentially significant** impact could occur.

*Further analysis of these impacts will be discussed in the Aesthetics chapter of The Ridge EIR.*

**Discussion Item I-4:**

The proposed project site is currently vacant. As such, sources of light and glare do not exist on the site. Development of the proposed project would introduce new sources of light to the site in the form of light fixtures on the exteriors of the buildings and motor vehicle traffic within internal roadways. Further analysis is required to ensure that the proposed project would comply with applicable standards related to light and glare and would not result in excess nighttime light pollution. Therefore, a **potentially significant** impact could occur.

*Further analysis of these impacts will be discussed in the Aesthetics chapter of The Ridge EIR.*

**II. AGRICULTURAL & FOREST RESOURCES – Would the project:**

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? (PLN)			<b>X</b>	
2. Conflict with existing zoning for agricultural use, a Williamson Act contract or a Right-to-Farm Policy? (PLN)			<b>X</b>	
3. 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))? (PLN)			<b>X</b>	
4. Result in the loss of forest land or conversion of forest land to non-forest use? (PLN)			<b>X</b>	
5. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use? (PLN)			<b>X</b>	
6. Conflict with General Plan or other policies regarding land use buffers for agricultural operations? (PLN)			<b>X</b>	

**Discussion Item II-1, 5:**

According to the Farmland Mapping and Monitoring Program, the project site is classified as Farmland of Local Importance, while the off-site improvement areas are classified as Grazing Land.<sup>3</sup> The project site and off-site improvement areas do not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Existing on-site agricultural uses are limited to seasonal cattle grazing. As such, development of the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide or Local Importance (Farmland) to non-agricultural use. Conversion of Grazing Land associated with buildout of the BRSP, including the Phase 2 extension

<sup>3</sup> Farmland Mapping and Monitoring Program. *California Important Farmland Finder*. Available at: <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed June 2020.

of Bickford Ranch Road up to the project frontage, was previously analyzed in the BRSP EIR. Impacts were determined to be less than significant, and mitigation was not required.

Based on the above, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance 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 or conversion of forest land to non-forest use. Therefore, a **less-than-significant** impact would occur. No mitigation measures are required.

#### **Discussion Item II-2, 6:**

The Placer County General Plan designates the site as Agriculture/Timberland 10-Ac. Min. and the site is zoned F-B-X 10-Ac. Min. The project site is not under a Williamson Act Contract.<sup>4</sup> The proposed project would include a GPA to change the General Plan land use designation of the project site from Agriculture/Timberland 10 Ac. Min to MDR (13.85 acres) and LDR (11.10 acres) (Figure 6). In addition, the project would include a Rezone to change the site's zoning designation from F-B-X 10-Ac. Min. to RS-B-8 (13.85 acres) and RS-B-10 (11.10 acres) (see Figure 7). While the project site's existing General Plan land use and zoning designations allow for commercial agricultural uses, on-site agricultural uses are currently limited to seasonal cattle grazing. Use of the site for other forms of commercial agriculture is limited by the on-site soil types, as indicated by the lack of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance. Furthermore, the areas to the east, south, and west of the project site have been approved for development with single-family residential uses as part of the BRSP.

Currently, seasonal cattle grazing occurs on the undeveloped ranch to the north of the project site, which is owned by the project applicant. 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. In addition, the Placer County General Plan includes policies to limit potential conflicts with agricultural uses. Policy 1.H.5 requires development within or adjacent to designated agricultural areas to incorporate design, construction, and maintenance techniques that protect agriculture and minimize conflicts with adjacent agricultural uses. Policy 7.B.1 states that 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.

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 parcel to the north 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. The proposed residential lots would be separated from the existing off-site grazing uses by the densely wooded and steep slope to the north of Caperton Canal, which provides a natural buffer between the site boundary and the La Faille Ranch property. The wooded slope would prevent cattle from grazing within 60 feet of the proposed residences. The County would require a standard condition of project approval to require notification to future homeowners of the County's Right-to-Farm Ordinance. Therefore, the proposed project would not conflict with the County's Right-to-Farm Ordinance provisions or County's agricultural buffer requirements.

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; or conflict with General Plan or other policies regarding land use buffers for agricultural operations. Therefore, a **less-than-significant** impact would occur. No mitigation measures are required.

#### **Discussion Item II-3, 4:**

Per Public Resources Code Section 12220(g), "forest land" is land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. Per Public Resources Code Section 4526, "Timberland" means land, other than land owned by the federal government and land designated by the State Board of Forestry and Fire Protection as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species are determined by the State Board of Forestry and Fire Protection on a district basis.

<sup>4</sup> California Department of Conservation. *Placer County Williamson Act FY 2015/2016, Sheet 1 of 2*. 2015

Per an Arborist Report prepared for the proposed project, the project site, the 50-foot area surrounding the project site, and the off-site Fuel Management Zone include a total of 37.82 acres of oak woodland habitat.<sup>5</sup> The native oak trees within the project footprint provide over 10 percent cover and, thus, are considered forest land, as defined by Public Resources Code Section 12220(g). In addition, the area is designated Timberland in the County General Plan. Per the General Plan, the Timberland designation is applied to mountainous areas of the County where the primary land uses relate to the growing and harvesting of timber and other forest products, together with limited, low-intensity public and commercial recreational uses.

The proposed project would be subject to the Placer County Conservation Plan (PCCP), which was adopted on September 1, 2020. The PCCP identifies oak woodland as a key natural community that defines the major biological values of the PCCP. Pursuant to the PCCP, impact to oak woodland is subject to payment of PCCP Development Fees – Land Conversion for the foothills, which would fully address potential forest land/oak woodland impacts through off-site purchase of oak woodland preserves. Further discussion of PCCP fee requirements will be provided in the Biological Resources chapter of The Ridge EIR.

Based on the above, the proposed project would not conflict with existing zoning for forest land or timberland, and would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, a **less-than-significant** impact would occur. No mitigation measures are required.

### III. AIR QUALITY – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Conflict with or obstruct implementation of the applicable air quality plan? (AQ)	X			
2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? (AQ)	X			
3. Expose sensitive receptors to substantial pollutant concentrations? (AQ)	X			
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? (AQ)			X	

#### Discussion Items III-1, 2:

The proposed project site is located within the boundaries of the Sacramento Valley Air Basin (SVAB) and under the jurisdiction of the Placer County Air Pollution Control District (PCAPCD). The federal Clean Air Act (CAA) and the California Clean Air Act (CCAA) require that federal and State ambient air quality standards (AAQS) be established, respectively, for six common air pollutants, known as criteria pollutants. The criteria pollutants include particulate matter (PM), ground-level ozone, carbon monoxide (CO), sulfur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), and lead. At the federal level, the SVAB area is designated as nonattainment for the 8-hour ozone and the 24-hour particulate matter 2.5 microns in diameter (PM<sub>2.5</sub>) AAQS, and attainment or unclassified for all other federal criteria pollutant AAQS. At the State level, the SVAB area is designated as nonattainment for the 1-hour ozone, 8-hour ozone, particulate matter 10 microns in diameter (PM<sub>10</sub>) AAQS, and attainment or unclassified for all other State AAQS.

During construction of the project, various types of equipment and vehicles would temporarily operate on the project site and off-site improvement areas. Construction exhaust emissions would be generated from construction equipment, vegetation clearing and earth movement activities, construction worker commutes, and construction material hauling for the entire construction period. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Project construction activities also represent sources of fugitive dust, which include PM emissions. As construction of the proposed project would generate air pollutant emissions intermittently within the site, and the vicinity of the site, until all construction has been completed, construction is a potential concern because the proposed project is in a non-attainment area for ozone and PM.

<sup>5</sup> Helix Environmental Planning. *Arborist Report and Oak Woodland Inventory, The Ridge ±56.6-Acre Study Area, Placer County, California.* April 2020.



Furthermore, development of the proposed project would result in an increased number of vehicle trips associated with traffic to and from the project site. Operation of the proposed project would result in emissions associated with area sources such as natural gas combustion from heating mechanisms, equipment used to routinely clear vegetation on the Fuel Management Zone to the north of the project site, and landscape maintenance equipment exhaust. The additional traffic and operations associated with the proposed project could result in increases in criteria pollutant emissions in the project vicinity above thresholds established by the PCAPCD. Therefore, the proposed project could conflict with or obstruct implementation of the applicable air quality plan.

Construction and operational emissions associated with the proposed project, in combination with other past, present, and reasonably foreseeable projects within the project region could either delay attainment of the standards or require the adoption of additional controls on existing and future air pollution sources to offset emission increases. Thus, the project could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. Based on the above, the proposed project could result in a **potentially significant** impact.

*Further analysis of these impacts will be discussed in the Air Quality and Greenhouse Gas Emissions chapter of The Ridge EIR.*

**Discussion Item III-3:**

The major pollutants of concern are localized CO emissions and toxic air contaminant (TAC) emissions. Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. Implementation of the proposed project could increase traffic volumes on streets near the project site. Thus, the project could potentially increase local CO concentrations. Further analysis is required to determine whether the levels of service at area intersections would be substantially degraded as a result of the proposed project such that the concentrations of CO at the intersections would be considered a significant increase. In addition to CO emissions, construction equipment exhaust associated with the proposed project could result in TAC emissions.

Because the proposed project could cause an increase in the localized CO concentrations at area intersections, and would involve temporary TAC emissions associated with construction equipment, the proposed project could expose existing sensitive receptors to substantial pollutant concentrations. Accordingly, impacts related to exposure of sensitive receptors to substantial pollutant concentrations could be **potentially significant**.

*Further analysis of these impacts will be discussed in the Air Quality and Greenhouse Gas Emissions chapter of The Ridge EIR.*

**Discussion Item III-4:**

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 are discussed under Items III-1, 2, and 3 above. Therefore, the following discussion focuses on emissions of odors and visible emissions.

Examples of common land use types that typically generate significant odor impacts include, but are not limited to wastewater treatment plants; composting/green waste facilities; recycling facilities; petroleum refineries; chemical manufacturing plants; painting/coating operations; rendering plants; and food packaging plants. The proposed project would not involve or be located in the vicinity of any such uses. 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.

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

Based on the above, construction and operation of the proposed project would have a **less-than-significant** impact with respect to resulting in emissions (such as those leading to odors) adversely affecting a substantial number of people. No mitigation measures are required.

#### IV. BIOLOGICAL RESOURCES – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish & Wildlife, U.S. Fish & Wildlife Service or National Marine Fisheries Service? (PLN)	X			
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community, identified in local or regional plans, policies or regulations, or regulated by the California Department of Fish & Wildlife, U.S. Fish & Wildlife Service, U.S. Army Corps of Engineers, or Regional Water Quality Control Board? (PLN)	X			
3. Have a substantial adverse effect on federal or state protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) or as defined by state statute, through direct removal, filling, hydrological interruption, or other means? (PLN)	X			
4. 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? (PLN)	X			
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (PLN)	X			
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (PLN)	X			
7. 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 restrict the range of an endangered, rare, or threatened species? (PLN)	X			
8. Have a substantial adverse effect on the environment by converting oak woodlands? (PLN)	X			

The following discussions are primarily based on a Biological Resources Assessment prepared for the proposed project by Helix Environmental Planning.<sup>6</sup>

**Discussion Items IV-1, -7:**

According to a Biological Resources Assessment prepared for the proposed project, a total of 11 special-status plant species and 10 special-status wildlife species have the potential to occur within the project site and off-site improvement areas. In addition, the existing trees within the proposed disturbance areas provide suitable habitat for nesting and migratory birds protected by the Migratory Bird Treaty Act and Fish and Game Code. Ground-disturbing activities and/or tree removal associated with the proposed project, as well as brush clearing within the off-site Fuel Management Zone, could result in adverse effects to special-status species or other nesting and migratory birds if such species are present within or near the disturbance area. Therefore, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on species identified as candidate, sensitive, or special-status species in local or regional plans, policies or regulations, or by the California Department of Fish & Wildlife (CDFW), U.S. Fish & Wildlife Service (USFWS), or National Marine Fisheries Service. The proposed project is in the recently-adopted Placer County Conservation Program (PCCP) plan area and is considered a covered activity; therefore, the project must comply with the provisions of the PCCP and associated permits. Some of the species having the potential to occur on the project site are Covered Species under the PCCP, and their potential for occurrence triggers species-specific avoidance and minimization measures (see Discussion Item IV-6 for additional detail regarding the PCCP). Furthermore, the proposed project could substantially reduce the habitat of fish or wildlife species, cause fish or wildlife populations to drop below self-sustaining levels, threaten to eliminate plant or animal communities, or substantially reduce the number of restrict the range of an endangered, rare, or threatened species. A **potentially significant** impact could occur.

*Further analysis of these impacts will be discussed in the Biological Resources chapter of The Ridge EIR.*

**Discussion Items IV-2, 3:**

Per an Aquatic Resources Delineation Report prepared for the proposed project, the project site contains 0.11-acre of depressional seasonal wetlands that could be subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE) and/or the Regional Water Quality Control Board (RWQCB).<sup>7</sup> Such features could be disturbed by development of the proposed project, which would require payment of applicable PCCP Special Habitat fees. The Fuel Management Zone easement area was formally delineated in 2010, and contains portions of two jurisdictional features in the form of seasonal wetlands totaling 0.25-acre; however, maintenance activities within the Fuel Management Zone are not anticipated to result in adverse effects to these sensitive habitats. Therefore, the proposed project could have a substantial adverse effect on riparian habitat or other sensitive natural communities identified in local or regional plans, policies or regulations, or regulated by the CDFW, USFWS, USACE, or RWQCB, and could have a substantial adverse effect on federal or State protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) or as defined by State statute, through direct removal, filling, hydrological interruption, or other means. A **potentially significant** impact could occur.

*Further analysis of these impacts will be discussed in the Biological Resources chapter of The Ridge EIR.*

**Discussion Item IV-4:**

Wildlife corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. Fragmentation can also occur when a portion of one or more habitats is converted into another habitat, such as when woodland or scrub habitat is altered or converted into grasslands after a disturbance such as fire, mudslide, or grading activities. Wildlife corridors mitigate the effects of this fragmentation by: (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events (such as fire or disease) on population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

According to the Biological Resources Assessment, the undeveloped private property surrounding the project site may be considered a wildlife migration corridor. Therefore, further analysis is required to ensure that the proposed project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. A **potentially significant** impact could occur.

<sup>6</sup> Helix Environmental Planning. *Biological Resources Assessment, The Ridge ±56.6-Acre Study Area, Placer County, California*. April 2020.

<sup>7</sup> Helix Environmental Planning. *The Ridge Aquatic Resources Delineation Report*. May 15, 2019.

*Further analysis of these impacts will be discussed in the Biological Resources chapter of The Ridge EIR.*

**Discussion Items IV-5, 8:**

Placer County evaluates impacts to oak woodlands under the recently adopted PCCP (see additional discussion of the PCCP under Discussion Item IV-6 below). The Arborist Report prepared for the proposed project included an evaluation of oak woodland resources present within the project site, the 50-foot area surrounding the project site, and the off-site Fuel Management Zone, referred to hereafter as the “Study Area”. Per the Arborist Report, the Study Area includes a total of 37.82 acres of oak woodland habitat.<sup>8</sup> Oak woodland is considered a Covered Natural Community under the PCCP. Impact to oak woodland is subject to payment of PCCP Development Fees – Land Conversion for the foothills.

Of the 37.82 acres of existing oak woodland within the Study Area, a total of 7.916 acres of oak woodland are anticipated to be directly impacted by the proposed project, and 7.618 acres of oak woodland are located within 50 feet of the project footprint and are therefore potentially subject to indirect impacts. Therefore, the proposed project could conflict with local policies and ordinances related to oak woodland protection, and could have a substantial adverse effect on the environment by converting oak woodlands. A **potentially significant** impact could occur.

*Further analysis of these impacts will be discussed in the Biological Resources chapter of The Ridge EIR.*

**Discussion Item IV-6:**

On September 1, 2020, Placer County adopted the PCCP, which is a Habitat Conservation Plan (HCP) under the Federal Endangered Species Act and a Natural Community Conservation Plan (NCCP) under the California Natural Community Conservation Planning Act. The PCCP includes the County Aquatic Resources Program (CARP) to issue permits related to the Federal Clean Water Act and the California Fish and Game Code. The proposed project would participate in the PCCP for incidental take coverage and mitigation for effects to waters of the U.S. and state and oak woodlands.

As a permittee under the PCCP, Placer County is able to provide take authorization to private entities conducting activities covered by this Plan and under their jurisdiction. Covered Activities are generally any actions undertaken in the Plan Area by or under the authority of the Permittees that may affect Covered Species or covered natural communities. The area proposed for permit coverage under the HCP/NCCP has two main parts and associated subcomponents. The project site is within Plan Area A, which is the main focus of the HCP/NCCP and where all future growth and most of the Covered Activities will take place. Plan Area A is covered by a comprehensive permit and is comprised of the city of Lincoln plus all unincorporated lands within western Placer County: approximately 210,000 acres, or roughly five-sixths of western Placer County.

The Foothills portion of Plan Area A, within which the project site is located, comprises the unincorporated communities along the Interstate 80 corridor, the unincorporated Auburn area, and the northern Foothills that support most of the woodland communities in the Plan Area. The Foothills portion comprises approximately 109,134 acres.

The PCCP addresses 14 Covered Species and several Covered Natural Communities, and includes conservation measures to protect all 14 Covered Species and their habitats. Some of the Covered Species have the potential to occur on the project site (e.g., Swainson’s hawk, valley elderberry longhorn beetle), and thus, will be subject to applicable avoidance and minimization measures set forth in Chapter 6 of the PCCP, which are intended to ensure that adverse effects on Covered Species and natural communities are avoided and minimized.

The applicant will be required to obtain a signed Certificate of PCCP Authorization form from Placer County for potential impacts to terrestrial and aquatic habitats. During the local impact authorization process, impact fees will be calculated utilizing land cover data. Anticipated fees include Land Conversion fees and Aquatic/Wetland Special Habitat fees. The project will comply with the requirements of the PCCP, including adherence to the Avoidance and Minimization Measures, as well as payment of fees to support the overall PCCP Conservation Strategy.

Further analysis is required to evaluate project compliance with the avoidance and minimization measures included in the PCCP. Thus, a **potentially significant** impact could occur.

*Further analysis of these impacts will be discussed in the Biological Resources chapter of The Ridge EIR.*

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<sup>8</sup> Helix Environmental Planning. *Arborist Report and Oak Woodland Inventory, The Ridge ±56.6-Acre Study Area, Placer County, California.* April 2020.

**V. CULTURAL RESOURCES** – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines, Section 15064.5? (PLN)			X	
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines, Section 15064.5? (PLN)		X		
3. Disturb any human remains, including those interred outside of dedicated cemeteries? (PLN)		X		
4. Have the potential to cause a physical change, which would affect unique ethnic cultural values? (PLN)		X		
5. Restrict existing religious or sacred uses within the potential impact area? (PLN)			X	

The following discussions are primarily based on a Cultural Resources Assessment prepared for the proposed project by Cogstone.<sup>9</sup>

**Discussion Item V-1:**

Section 15064.5 of the CEQA Guidelines provides instructions for a lead agency to consider the effects of projects on historical resources. A historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR) (Public Resources Code [PRC] Section 21084.1), a resource included in a local register of historical resources (PRC Section 15064.5[a][2]), or any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant (PRC Section 15064.5[a][3]).

Resources eligible for listing include buildings, sites, structures, objects, or historic districts that retain historical integrity and are historically significant at the local, state or national level under one or more of the following four criteria:

- 1) It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
- 2) It is associated with the lives of persons important to local, California, or national history;
- 3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
- 4) It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition to having significance, resources must have integrity for the period of significance. The period of significance is the date or span of time within which significant events transpired, or significant individuals made their important contributions. Integrity is the authenticity of a historical resource's physical identity as evidenced by the survival of characteristics or historic fabric that existed during the resource's period of significance.

Examples of typical historical resources include, but are not limited to, buildings, farmsteads, rail lines, bridges, and trash scatters containing objects such as colored glass and ceramics. Per NRHP eligibility criteria, a resource must be at least 50 years old in order to be considered historic, except in exceptional circumstances.

As part of the Cultural Resources Assessment, a search for archaeological and historical records was completed by the North Central Information Center (NCIC) on September 20, 2018 (NCIC File No: PLA-18-96). A total of 61 cultural resources have been previously recorded within the one-mile search radius surrounding the project site, including 15 prehistoric archaeological resources, six historic archaeological resources, three multicomponent (prehistoric/historic) resources, and 38 historic built environment resources. Of the 61 cultural resources, one historic built environment resource, a previously recorded segment of the Caperton Canal (P-31-000963, CA-PLA-000840H), is located immediately north of the project site. P-31-000963 was originally recorded in 1995, by R. Windmiller, as an

<sup>9</sup> Cogstone. *Cultural Resources Assessment for the Ridge Development Project, Penryn, Placer County, California*. Revised May 20, 2019.

approximately 900 foot-long segment located on the upper east slope of a steep-walled box canyon on the north side of Boulder Ridge (Windmiller 1995).

The following discussion of the Caperton Canal relies on Ric Windmiller's analysis in *Cultural Resources Assessment, La Faille Ranch, Placer County, California*, August 2012. Given that the Antelope Canal was constructed circa 1850s, and derives its water from the Caperton Canal, it is probable that the upper Caperton was constructed during a similar time period, or shortly thereafter. Whether its origins date back to the early mining era or to the beginning of the region's fruit industry, the Caperton Canal was one of the many peripheral ditches owned by the Bear River and Auburn Water and Mining Company, which was bought by George W. Reamer in 1868. Reamer extended the ditch system during his seven year ownership. In 1875, Reamer sold the system to F. Birdsall who focused on building an irrigation business in the fruit growing region from Clipper Gap to Penryn. Fifteen years later, in 1890, Birdsall sold the water system to the South Yuba Water Company.

While the Caperton Canal has ties to Placer County agriculture, it was not one of the principal canals, nor one of the best known laterals in the region. Completed in 1853, the Gold Hill and Bear River Canal was the first canal of importance in the region. The Boardman Canal, also part of the Bear River canal system, was built in 1893 and carried water from lake Theodore to the vicinity of Roseville. Along its route, there were many laterals. The main branches were: the Auburn, Freeman, Shirland, Newcastle, Greeley, Rock Springs, Red Ravine, Perry and Baughman Ditches.

Under Criterion 1, the La Faille Ranch segment of the Caperton Canal must have a significant association with a historically important event or pattern of events. Although the Caperton is associated with the development of water systems in Placer County and peripherally with mining and agriculture, that association is weak as the Caperton is not considered significant among the various laterals that brought water to the Newcastle-Penryn Area.

Under Criterion 2, the Caperton Canal would need to have an association with a specific person or persons significant in California's past and illustrative rather than commemorative of a person's important achievements. Generally, such an association would be with the project engineer or someone directly involved in the design or construction of the canal. No such association could be made with the Caperton.

Under Criterion 3, cultural resources like the Caperton Canal would be eligible for the California Register if they illustrated significant design or engineering innovation. As the Caperton is only a minor peripheral ditch with no features reflecting innovation, it would not be eligible under Criterion 3.

Under Criterion 4, the canal would need to be the principal source of information deemed important in history such as how local availability of materials or construction expertise affected the evolution of local water development. Such is not the case with the Caperton Canal segment on La Faille Ranch. Therefore, the canal segment is not eligible for the California Register under any criterion of eligibility.

An intensive pedestrian survey conducted by Cogstone confirmed the location of the previously recorded segment of the Caperton Canal. The canal was found to be in exceptional condition, appearing to be well-maintained and currently concreted. Shady sections of the canal have a moss/algae cover. This segment of the canal has two culverts, an overflow gate, and a spillway into the valley below. Two unpaved access roads were noted, each with associated bridges that cross the canal and allows repairs to the overflow gate. The recorded segment of the Caperton Canal was documented on a DPR 523 site form as part of the Cultural Resources Assessment. It should be noted that the BRSP EIR did not identify any known historic resources within the alignment of the planned Phase 2 Bickford Ranch Road extension.

The proposed project would include installation of three flumes over the top of the canal for drainage purposes. The flumes would be installed on concrete footings on either side of the Canal, such that the Canal would not be impacted during construction of the flumes. Further, as already discussed, the segment of the Caperton Canal along the project site is not considered historically significant.

In addition to the resources noted above, the pedestrian survey conducted by Cogstone resulted in the identification of a new historic site, Ridge FEA-02, within the project site boundaries. Ridge-FEA-02 is a historic trash scatter composed of fencing materials including barbed fencing and a post. Per the Cultural Resources Assessment, the historic trash scatter lacks specific associations and is not recommended eligible for the CRHR. Also identified during the survey was one isolated rusted metal enameled wash bucket along the western fence line of the project site. Soil changes or features were not found in association with the wash bucket.

Based on the above, the proposed project would not cause a substantial adverse change in the significance of a historical resource as defined per CEQA Guidelines, Section 15064.5, and a **less-than-significant** impact would occur. No mitigation measures are required.

**Discussion Items V-2, 4:**

While the record search completed as part of the Cultural Resources Assessment identified 61 historical and archaeological resources within one mile of the project site, the record search did not identify any recorded archaeological resources within the project site boundaries. In addition, a search of the Native American Heritage Commission (NAHC) Sacred Lands File did not identify any known sacred sites within the project area. The pedestrian survey conducted by Cogstone resulted in the identification of one new archaeological site, Ridge-FEA-01, within the project site boundaries. The archaeological site was recorded on DPR 523 site forms.

Within the project site, Ridge-FEA-01 is a prehistoric milling station, consisting of a single bedrock outcrop, with one oval mortar. Per the Cultural Resources Assessment, Ridge-FEA-01 is potentially eligible for the CRHR under Criteria 4, listed above under Discussion Item V-1. As part of the proposed project, Ridge-FEA-01 would be located within Lot B and surrounded by a new post-and-cable fence, providing a 20-foot buffer surrounding the resource. Therefore, Ridge-FEA-01 would not be exposed to future risk of disturbance associated with operation of the project. Nonetheless, the potential exists for Ridge-FEA-01 to be subject to disturbance during construction ground-disturbing activities.

With respect to off-site improvements, known archaeological resources are not located within the 300-foot wide Fuel Management Zone, north of the project site. Subsurface resources hitherto unknown could be located within the Fuel Management Zone and ground disturbing activities could expose and adversely affect such resources. The initial establishment of the Fuel Management Zone could involve ground disturbance, though it would be limited in nature, if at all.

For example, the Fire Safe Plan prepared for the project requires that all fuel reduction work be performed using every reasonable measure to minimize erosion, ground disturbing activities and soil damage. Fuel reduction work will include the mowing of annual grasses down to a height of four-inches or less, removal of dead and diseased trees, debris and the removal of tree limbs on live trees up to a height of 10-feet above the ground. In addition, understory fuels over 1-foot in height are to be removed in order to develop vertical separation and low horizontal continuity of fuels. Fuel reduction will also include the removal of all dead vegetation 4 inches or less in diameter. Notwithstanding the above, the possibility remains that the initial establishment of the Fuel Management Zone could result in limited ground disturbance, and thus, potential adverse effects to unknown cultural resources.

The remaining potential off-site improvements are limited to roadway, water, and sewer infrastructure improvements for a short section of Bickford Ranch Road. In the event the Phase 2 improvements of Bickford Ranch Road have not yet been constructed, and the proposed project has obtained necessary entitlements and is ready to proceed, the proposed project would require the extension of Bickford Ranch Road (and water and sewer lines within the road right-of-way) from the Phase 1 terminus eastward to the project site. The BRSP EIR included an evaluation of potential impacts to archaeological resources associated with buildout of the BRSP, including the construction of Bickford Ranch Road. No known archaeological resources were identified within the road right-of-way. The BRSP EIR concluded that with the implementation of Mitigation Measures C-A, C-B, C-C, and C-D, all impacts to cultural resources would be reduced to less-than-significant levels. Whichever party constructs said portion of Bickford Ranch Road, be it the BRSP applicant during Phase 2 improvements, or The Ridge applicant, would be legally required to implement the aforementioned mitigation measures.

Given the extent of documented Native American occupations within the project region, unknown archaeological resources have the potential to be uncovered during ground-disturbing activities associated with the proposed project. The proposed project would involve ground disturbance during site grading and excavation for utilities. Therefore, the proposed project could cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guidelines Section 15064.5 or cause a physical change which would affect unique ethnic cultural values, and a **potentially significant** impact could occur.

**Mitigation Measures Items V-2, 4:**

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

MM V-1

A Tribal Cultural Resource 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 by Native American Representatives, or Tribal Monitors from culturally affiliated Native American Tribes, before any stages of project implementation and construction activities begin on the project site. The training may be done in coordination with the project archaeologist.

The program shall include relevant information regarding sensitive Tribal Cultural Resources, applicable regulations and protocols for avoidance, as well as consequences of violating State laws and regulations. The 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 Tribal Cultural Resources or archaeological resources are encountered. The program shall underscore the requirement for confidentiality and culturally appropriate treatment of any find with cultural significance to Native Americans Tribal values. All ground-disturbing equipment operators shall be required to receive the training and sign a form that acknowledges receipt of the training.

#### MM V-2

The Improvement Plans shall include the following Cultural Resources notes to the satisfaction of the County:

- The project proponent shall contact the consulting tribe at least two weeks prior to project ground-disturbing activities in order to retain the services of one Tribal Monitor. The construction schedule shall be shared with the consulting tribe at time of contact.
- One Tribal Monitor from the traditionally and culturally affiliated Native American tribe shall be permitted to monitor all clearing, grubbing, and stripping of vegetation in the project area, as well as all grading activity associated with the project, including infrastructure and home construction, to a depth of two feet.
- Native American Monitors act as representatives of their tribal government and have the authority to direct that work be temporarily stopped, diverted, or slowed within 100 feet of any sites or objects of significance to Native Americans. Temporary construction interruption in the area of an identified resource shall not exceed a total of 24 hours without County concurrence. Only a Native American Monitor or Representative from a culturally affiliated tribe can recommend appropriate treatment and final disposition of Tribal Cultural Resources.
- The frequency and duration of monitoring shall be adjusted in accordance with survey results, the nature of construction activities, and the results of monitoring. The Tribal Monitor, in consultation with the County representative, shall be responsible for determining the duration and frequency of monitoring. If tribal monitoring during infrastructure work identifies limited or no cultural resources, continued monitoring may not be warranted. The consulting tribe and the County shall confer to establish protocols for future monitoring during home construction, if determined to be warranted. If monitoring is deemed necessary on individual lots, a minimum of seven calendar days prior to beginning earthwork or other soil disturbance activities on a lot, the construction manager or lot owner shall notify the County's representative of the proposed earthwork start-date, in order to provide the County with time to contact the tribe. A tribal representative shall be invited to inspect the work site, including any soil piles, trenches, or other disturbed areas, within the first five days of ground-breaking activity, at the discretion of the tribe.
- Field-monitoring activities shall be documented by the Tribal Monitor on a Tribal Monitor log. Copies of monitoring logs shall be submitted to the Community Development Resource Agency on a weekly basis. The Tribal Monitor shall wear appropriate construction safety equipment including steel-toed construction boots, safety vest and hard hat. Construction shall not be delayed in the event the Tribal Monitor is unavailable to report to the project site at the designated construction start time.

#### MM V-3

If potential Tribal Cultural Resources (TCRs), 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. The United Auburn Indian Community (UAIC) does not consider curation of TCRs to be appropriate or respectful and requests that materials not be permanently curated, unless specifically requested by the Tribe.



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.

The Improvement Plans shall include this information as a Cultural Resources note to the satisfaction of the County.

**MM V-4**

Prior to initiation of ground-disturbing activities at the project site, a temporary no-disturbance buffer with a radius of 20 feet shall be established around the prehistoric milling station (Ridge-FA-01) located on the site. The Improvement Plans shall show the extent of the buffer clearly marked with orange safety fencing or an alternative barrier of equal or greater effectiveness to the satisfaction of the County. The fencing shall remain in place until a new permanent post-and-cable fence is established around Ridge-FA-01.

**Discussion Item V-3:**

Procedures of conduct following the discovery of human remains on non-federal lands in California have been mandated by Health and Safety Code §7050.5, PRC §5097.98 and the California Code of Regulations (CCR) §15064.5(e) (CEQA). Although human remains or evidence thereof was not identified during the site surveys conducted by Cogstone, the potential for unknown human remains to be discovered during construction cannot be eliminated given the known prehistoric occupation of the vicinity by Native American tribes. As a result, in absence of appropriate mitigation, the proposed project could have a **potentially significant** impact to human remains.

**Mitigation Measures Item V-3:**

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

Implement MM V-3.

**Discussion Item V-5:**

The Cultural Resources Assessment prepared for the project site did not identify any known historic religious or sacred uses associated with the project site. As noted above, a search of the NAHC Sacred Lands File did not identify any known sacred sites within the project area. Furthermore, the known resource on the project site would be protected in perpetuity within Lot B, and during construction, as a result of MM V-4. As such, a **less-than-significant** impact would occur. No additional mitigation measures are required.

**VI. ENERGY** – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? (PLN)			X	
2. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? (PLN)	X			

**Discussion Item VI-1:**

The main forms of available energy supply are electricity, natural gas, and oil. Energy would be used to construct the proposed project, and once constructed, energy would be used for the lifetime of the proposed residences.

Construction of the proposed project is required to comply with the California Green Building Standards Code (CBSC, also known as the CALGreen Code) and the 2019 Building Energy Efficiency Standards (which is a portion of the CBSC). All construction equipment and operation thereof would be regulated per the California Air Resources Board (CARB) In-Use Off-Road Diesel Vehicle Regulation. The purpose of the CBSC 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. Building Energy Efficiency Standards achieve energy reductions through requiring high-efficacy lighting, improved water heating system efficiency, and high-performance attics and walls. CARB standards for construction equipment include 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. The proposed project construction would also be required to comply with all applicable PCAPCD rules and regulations related to energy efficiency, which would help to further reduce energy use associated with the proposed project.

Energy use associated with operation of the proposed project would be typical of single-family residential uses, requiring electricity and natural gas for interior and exterior building lighting, HVAC, electronic equipment, refrigeration, appliances, and security systems. In addition, maintenance activities during operations, such as landscape maintenance and brush clearing within the off-site Fuel Management Zone, would involve the use of electric or gas-powered equipment. While the proposed project would introduce new operational energy demands to the proposed project area, this demand does not necessarily mean that the proposed project would have an impact related to energy sources. The proposed project would result in an impact if the project would result in an inefficient use or waste of energy. The proposed project is required to comply with all applicable standards and regulations regarding energy conservation and fuel efficiency, including the CBSC, CARB, and PCAPCD standards noted above, which would ensure that the future uses would be designed to be energy efficient to the maximum extent practicable. Adherence to the most recent CALGreen and the 2019 Building Energy Efficiency Standards would require that 100 percent of the electricity required for operation of the proposed residences 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. Furthermore, given that the proposed project would only include 34 residences, the operational energy use associated with the project would be relatively minimal compared to overall demands associated with buildout of the BRSP.

Accordingly, the proposed project would not be considered to result in a wasteful, inefficient, or unnecessary use of energy, and impacts related to construction and operational energy would be considered **less than significant**. No mitigation measures are required.

**Discussion Item VI-2:**

The Placer County Sustainability Plan (PCSP), adopted by the Placer County Board of Supervisors on January 28, 2020, includes goals and policies for energy efficiency. Further analysis is required in order to ensure that the proposed project would be consistent with such goals and policies. Thus, a **potentially significant** impact could occur.

*Further analysis of these impacts will be discussed in the Air Quality, Greenhouse Gas Emissions, and Energy chapter of The Ridge EIR.*

**VII. GEOLOGY & SOILS** – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Result in substantial soil erosion or the loss of topsoil? (ESD)		X		
2. 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? (ESD)		X		
3. Be located on expansive soils, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial direct or indirect risks to life or property? (ESD)		X		

4. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? (EH)				X
5. Directly or indirectly destroy a unique paleontological resource or unique geologic or physical feature? (PLN)		X		
6. Result in significant disruptions, displacements, compaction or overcrowding of the soil? (ESD)		X		
7. Result in substantial change in topography or ground surface relief features? (ESD)		X		
8. Result in exposure of people or property to geologic and geomorphological (i.e. Avalanches) hazards such as earthquakes, landslides, mudslides, seismic-related ground failure, or similar hazards? (PLN, ESD)		X		

The following discussions are based primarily on the preliminary Grading Plan and BMP Plan and on a Geotechnical Exploration prepared for the proposed project by ENGEO Inc.<sup>10</sup>

#### Discussion Item VII-1:

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. 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 project's 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 Engineering and Surveying Division (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 site 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 during construction, including effective response actions if necessary. The SWPPP is considered a "living document" that could be modified as construction activities progress.

With respect to off-site improvements, while routine clearing of understory brush would be performed within the off-site 300-foot Fuel Management Zone to reduce fire hazards, such clearing would not involve substantial ground-disturbing activities. The Fire Safe Plan prepared for the project requires that all fuel reduction work be performed using every reasonable measure to minimize erosion, ground disturbing activities and soil damage, and where the ground is exposed by fuel reduction efforts, the area shall be revegetated and/or erosion control measures installed prior to October 15. Thus, the proposed brush clearing activities would not result in substantial soil erosion.

The remaining potential off-site improvements are limited to roadway, water, and sewer infrastructure improvements for a short section of Bickford Ranch Road to the project site and along the entire project frontage. In the event the Phase 2 improvements of Bickford Ranch Road have not yet been constructed, and the proposed project has obtained necessary entitlements and is ready to proceed, the proposed project would require the extension of Bickford Ranch Road (and water and sewer lines within the road right-of-way) from the Phase 1 terminus eastward to the project site and along the entire project frontage. The BRSP EIR included an evaluation of potential soil erosion associated with buildout of the BRSP, including the construction of Bickford Ranch Road. The BRSP EIR concluded that with the implementation of Mitigation Measures G-A through G-D, all impacts related to erosion would be reduced to less-than-significant levels. Whichever party constructs said portion of Bickford Ranch Road, be it the BRSP applicant during Phase 2 improvements, or The Ridge applicant, would be legally required to implement the aforementioned mitigation measures.

<sup>10</sup> ENGEO, Inc. *Preliminary Geotechnical Exploration, The Ridge Subdivision, Placer County, California*. April 12, 2019.

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 ***potentially significant***.

**Mitigation Measures Item VII-1:**

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

MM VII-1

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 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, etc.)
- F) Slope stability

Once approved by the Engineering and Surveying Division (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).

MM VII-2

Prior to any construction commencing, the applicant shall provide evidence to the Engineering and Surveying Division 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 storm water quality permit.

MM VII-3

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 Engineering and Surveying Division (ESD) for review and approval. 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 1<sup>st</sup> 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.

Conceptual landscape plans submitted prior to project approval may require modification during the Improvement Plan process to resolve issues of drainage and traffic safety.

The Final Subdivision Map(s) shall not be submitted to the Engineering and Surveying Division (ESD) until the Improvement Plans are submitted for the second review. Final technical review of the Final Subdivision Map(s) shall not conclude until after the Improvement Plans are approved by the ESD.

Any Building Permits associated with this project shall not be issued until, at a minimum, the Improvement Plans are approved by the Engineering and Surveying Division.

Prior to the County's final acceptance of the project's improvements, submit to the Engineering and Surveying Division one copy of the Record Drawings in digital format (on compact disc or other acceptable media) along with one blackline hardcopy (black print on bond paper) and one PDF copy. The digital format is to allow integration with Placer County's Geographic Information System (GIS). The final approved blackline hardcopy Record Drawings will be the official document of record.

#### MM VII-4

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 Engineering and Surveying Division (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 Engineering and Surveying Division (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 using the County's current Plan Check and Inspection Fee Spreadsheet for winterization and permanent erosion control work prior to Improvement Plan approval to guarantee protection against erosion and improper grading practices. For an improvement plan with a calculated security that exceeds \$100,000, a minimum of \$100,000 shall be provided as letter of credit or cash security and the remainder can be bonded. 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 or released, as applicable, 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.

#### **Discussion Items VII-2, 3, 8:**

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.<sup>11</sup> Per the Geotechnical Exploration prepared for the proposed project, 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 2019 CBSC. The 2019 CBSC contains provisions to safeguard against major structural failures or loss of life caused by earthquakes or other geologic hazards. The Geotechnical Exploration determined that based on site observations, topographic and lithologic data, subsurface data, and regional geology, the overall potential for landslides, lateral spreading, or subsidence at the site is low to negligible. The downslope area to the north of the project site does not contain any existing development that would be subject to potential landslide or mudslide hazards a result of the proposed project.

In order to evaluate the stability of the Caperton Canal within the site in relation to the proposed v-ditch construction upslope of the canal, ENGeo, Inc. has conducted an analysis of soil conditions underlying the canal. Subsurface

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<sup>11</sup> Placer County. *Countywide General Plan EIR* [pg. 9-1]. July 1994.

exploration conducted by ENGEО, Inc. in 2012 indicates that the section of the Caperton Canal within the project site is underlain by Mehrten Conglomerate Formation. Per ENGEО, Inc., the engineering properties of the Mehrten Conglomerate Formation include relatively low permeability, little soil development, and very robust strength (cemented matrix). The formation is not known to have significant slope instability within the project region. Furthermore, the physical alignment and geometry of the proposed v-ditch would be approximately 30 to 100 feet away (in plan view) and approximately 10 to 35 feet upslope from the canal. The construction of the ditch would involve cutting along the alignment and removal of material upslope of the Caperton Canal, thus, reducing overall driving forces from a slope stability perspective. Accordingly, ENGEО, Inc. concluded that the proposed drainage ditch would not have an adverse effect on the stability of Caperton Canal or the slope above the canal.

Soil liquefaction results from loss of strength during cyclic loading, such as loading imposed by earthquakes. Soils most susceptible to liquefaction are clean, loose, saturated, uniformly graded, fine-grained sands. Based on the results of soil borings conducted on the project site as part of the Geotechnical Exploration, the soils encountered within the project site are generally very dense/cemented and contained a significant proportion of fine-grained material. In addition, the sands were above the anticipated static groundwater elevation. Thus, ENGEО, Inc. concluded that the potential for liquefaction at the project site is relatively low during seismic shaking events.

Expansive soils shrink/swell when subjected to moisture fluctuations, which can cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. Laboratory testing conducted as part of the Geotechnical Exploration did not identify any highly expansive clay soils within any of the soil samples collected on the project site. Based on the local geology of the project area and experience with other residential development projects within the County, ENGEО concluded that any potentially expansive soils occurring within the project site could be managed through selective grading and pad reprocessing (blending of soil), and would not adversely affect the proposed development. The final geotechnical engineering report prepared for the proposed project would need to include project-specific design considerations to appropriately address expansive soils during grading activities.

Per the Geotechnical Exploration, from a geotechnical standpoint, the project site is preliminarily considered suitable for the proposed construction.<sup>12</sup> Based on the above, the proposed project would not likely be subject to issues associated with lateral spreading, subsidence, liquefaction, collapse, or expansive soils. However, implementation of the recommendations included in the Geotechnical Exploration 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. Because a final geotechnical engineering report has not yet been prepared, a **potentially significant** impact could occur related to being located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially resulting in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, exposing people or property to geologic and geomorphological (i.e. avalanches) hazards such as earthquakes, landslides, mudslides, seismic-related ground failure, or similar hazards, or being located on expansive soils, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial direct or indirect risks to life or property.

**Mitigation Measures Item VII-2, 3, 8:**

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

Implement MM VII-1

**Discussion Item VII-4:**

The proposed project would require annexation of the project site into Placer County SMD 1 for the provision of sewer service. As part of the proposed annexation, the project would be subject to payment of applicable annexation fees pursuant to Section 13.12.260 of the Placer County Code. Given that the proposed project would be served by a public sewer system, the project would not result in adverse effects related to having soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems. Therefore, there is **no impact**.

**Discussion Item VII-5:**

The Cultural Resources Assessment prepared for the proposed project included a paleontological resources assessment for the project area, based on the findings of a Paleontological Records Search. Per the Cultural Resources Assessment, the project site is underlain by Mehrten Formation. Two subunits of Mehrten Formation are present within the project area: a younger caprock of volcanic mudflow tuff breccia overlies a cemented, poorly bedded cobble to boulder conglomerate. Both of the units are assigned a low potential to contain paleontological

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<sup>12</sup> ENGEО, Inc. *Preliminary Geotechnical Exploration, The Ridge Subdivision, Placer County, California* [pg. 5]. April 12, 2019.

resources. 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.

With respect to off-site improvements, known paleontological resources are not located within the 300-foot wide Fuel Management Zone, north of the project site. While subsurface resources hitherto unknown could be located within the Fuel Management Zone, the initial establishment and ongoing maintenance of the Fuel Management Zone would not involve any ground disturbance. For example, fuel reduction work will include the mowing of annual grasses down to a height of four-inches or less, removal of dead and diseased trees, debris and the removal of tree limbs on live trees up to a height of 10-feet above the ground. In addition, understory fuels over 1-foot in height are to be removed in order to develop vertical separation and low horizontal continuity of fuels. Fuel reduction will also include the removal of all dead vegetation 4 inches or less in diameter. Thus, the proposed project would not have any potential to result in adverse effects to unknown paleontological resources within the Fuel Management Zone.

The remaining potential off-site improvements are limited to roadway, water, and sewer infrastructure improvements for a short section of Bickford Ranch Road. In the event the Phase 2 improvements of Bickford Ranch Road have not yet been constructed, and the proposed project has obtained necessary entitlements and is ready to proceed, the proposed project would require the extension of Bickford Ranch Road (and water and sewer lines within the road right-of-way) from the Phase 1 terminus eastward to the project site. The BRSP EIR included an evaluation of potential impacts related to paleontological resources and unique geologic features associated with buildout of the BRSP, including the construction of Bickford Ranch Road. The BRSP EIR concluded that with the implementation of Mitigation Measure C-F, all impacts to expansive soils would be reduced to less-than-significant levels. Whichever party constructs said portion of Bickford Ranch Road, be it the BRSP applicant during Phase 2 improvements or The Ridge applicant, would be legally required to implement the aforementioned mitigation measures.

Although the project site does not contain any known paleontological resources or unique geologic features, the potential exists, while unlikely, for paleontological resources to be found in the Mehrten Formation underlying the project site. Thus, a unique paleontological resource or site could be unearthed during project construction activities, and a ***potentially significant*** impact could occur.

**Mitigation Measures Item VII-5:**

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

MM VII-5

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 Improvement Plans shall include this information as a Cultural Resources note to the satisfaction of the County. Construction may continue in areas outside of the buffer zone.

**Discussion Items VII-6, 7:**

The most unique topographic feature within the project vicinity is the downward slope to the north of the project site boundaries. However, lots 15 to 25 and 29 to 34 would maintain a minimum rear building setback of 30 feet or the top of slope of 30 percent, whichever is greater. Within the project site, the proposed project would include removal of existing vegetation, grading for building pads, roads, and other associated project improvements. In addition, routine clearing of understory brush would be performed within the off-site 300-foot Fuel Management Zone, to reduce fire hazards. Substantial ground-disturbing activities would not be required within the Fuel Management Zone. While the proposed project may require extension of Bickford Ranch Road from the Phase 1 terminus eastward to the project site and along the project frontage, if the Phase 2 improvements of Bickford Ranch Road have not yet been constructed, the roadway improvements would be consistent with what has been anticipated per the approved BRSP. Given that the planned roadway alignment contains an existing dirt road, the necessary improvements would not result in substantial modifications to the existing topography.

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 **potentially significant** impact could occur.

**Mitigation Measures Item VII-6, 7:**

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

Implement MM VII-1, MM VII-3, and MM VII-4

**VIII. GREENHOUSE GAS EMISSIONS – Would the project:**

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? (PLN, Air Quality)	X			
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (PLN, Air Quality)	X			

**Discussion Items VIII-1, 2:**

Emissions of greenhouse gases (GHGs) contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on earth. An individual project’s GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

Recognizing the global scale of climate change, California has enacted several pieces of legislation in an attempt to address GHG emissions. Specifically, Assembly Bill (AB) 32 and Senate Bill (SB) 32 have established statewide GHG emissions reduction targets. Accordingly, the CARB has prepared the Climate Change Scoping Plan for California (Scoping Plan), which was updated in 2017. The Scoping Plan provides the outline for actions to reduce California’s GHG emissions and achieve the emissions reductions targets required by AB 32 and SB 32. In concert with statewide efforts to reduce GHG emissions, air districts, counties, and local jurisdictions throughout the State have implemented their own policies and plans to achieve emissions reductions in line with the Scoping Plan and emissions reductions targets, including AB 32 and SB 32.

Estimated GHG emissions attributable to future project development would be primarily associated with increases of carbon dioxide (CO<sub>2</sub>) and, to a lesser extent, other GHG pollutants, such as methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. Buildout of the proposed project would contribute to increases of GHG emissions that are associated with global climate change during construction and operations. As such, the proposed project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with applicable plans, policies, and regulations for the purpose of reducing the emissions of GHGs. Therefore, impacts related to GHG emissions and global climate change could be cumulatively considerable and considered **potentially significant**.

*Further analysis of these impacts will be discussed in the Air Quality, Greenhouse Gas Emissions, and Energy chapter of The Ridge EIR.*



**IX. HAZARDS & HAZARDOUS MATERIALS** – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (EH)			X	
2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (EH)			X	
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (AQ)			X	
4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (EH)			X	
5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? (PLN)				X
6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (PLN)			X	
7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? (PLN)	X			

The following discussions are primarily based on a Phase I Environmental Site Assessment (ESA) prepared for the proposed project by ENGEO, Inc.<sup>13</sup>

**Discussion Item IX-1:**

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 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.

Based on the above, the proposed 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. No mitigation measures are required.

**Discussion Item IX-2, 4:**

The proposed project site is currently undeveloped. The project site does not contain existing habitable structures, and, thus, asbestos containing materials (ACMs) or lead-based paints do not occur on-site. Features such as septic systems, wells, above-ground storage tanks (ASTs), underground storage tanks (USTs), or other features related to uses of environmental concern were not identified on the site per the Phase I ESA. In addition, given that the site has not been subject to previous development, the presence of such features on the site is unlikely. Furthermore, the

<sup>13</sup> ENGEO, Inc. *Phase I Environmental Site Assessment, The Ridge Subdivision, Placer County, California*. September 19, 2018.

project site is not included on any lists of hazardous material sites compiled pursuant to Government Code Section 65962.5. The Phase I ESA did not identify any historic recognized environmental concerns.

Construction activities associated with implementation of the proposed project, would involve the use of heavy equipment, which would contain fuels and oils, and various other products such as concrete, paints, and adhesives. 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),<sup>14</sup> 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, the Placer County Environmental Health Department [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, who would then monitor the conditions and recommend appropriate remediation measures.

With respect to off-site improvements, while routine clearing of understory brush would be performed within the off-site 300-foot Fuel Management Zone to reduce fire hazards, such clearing would not involve substantial ground-disturbing activities. Per the Fire Safe Plan prepared for the proposed project, the removal of annual grasses and other fine fuels would be completed through the use of plastic string weed trimmers or other Penryn Fire Protection District (PFPD) or CAL FIRE approved equipment. All chipped material would be removed from the site unless otherwise approved by the landowner representative. Prescribed burning and/or herbicide use would not be allowed within the Fuel Management Zone unless such use is approved by Placer County, PCWA, CAL FIRE, and the PFPD. Thus, CAL FIRE would approve the type of equipment used within the Fuel Management Zone, and herbicide use is not anticipated. Based on the above, off-site improvements within the Fuel Management Zone would not result in significant impacts related to the routine transport, use, or disposal of hazardous materials. In addition, the area has not been subject to prior development and, thus, is not likely to contain contaminated soils or other existing hazardous materials. Accordingly, the proposed brush clearing activities would not result in upset of existing hazardous materials within the Fuel Management Zone.

The remaining potential off-site improvements are limited to roadway, water, and sewer infrastructure improvements for a short section of Bickford Ranch Road. In the event the Phase 2 improvements of Bickford Ranch Road have not yet been constructed, and the proposed project has obtained necessary entitlements and is ready to proceed, the proposed project would require the extension of Bickford Ranch Road (and water and sewer lines within the road right-of-way) from the Phase 1 terminus eastward to the project site (a distance of approximately 400 linear feet). The BRSP EIR included an evaluation of potential upset of hazardous materials associated with buildout of the BRSP, including the construction of Bickford Ranch Road. The BRSP EIR concluded that impacts related to upset of hazardous materials during construction activities would be less than significant, and mitigation was not required. Known hazardous materials have not been identified within the 400-foot portion of Bickford Ranch Road between the project site boundaries and the limit of Phase 1 improvements associated with the BRSP.

Based on the above, 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 or through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment, and is not located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The project would not expose people to existing sources of potential health hazards, as such hazards do not exist. Thus, a **less-than-significant** impact would occur. No mitigation measures are required.

#### **Discussion Item IX-3:**

The proposed project site is not located within one-quarter mile of a school. The nearest school, Penryn Elementary, is located approximately 1.7 miles southeast of the project site. Therefore, the project would have a **less-than-significant** impact related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. No mitigation measures are required.

#### **Discussion Item IX-5:**

The proposed project is not located within an airport land use plan or within two miles of a public airport or public use

<sup>14</sup> 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.

airport. The nearest airports relative to the proposed project site are the Lincoln Regional Airport located 7.6 miles east of the project site and Auburn Municipal Airport, which is located approximately eight miles northeast of the site. Therefore, the proposed project would not result in a safety hazard associated with an airport or airstrip. There is **no impact**.

#### Discussion Item IX-6:

The primary access for the proposed project would be provided by a private entry street from Bickford Ranch Road, which is planned to be extended along the project frontage as part of the BRSP, roughly contiguous with the existing alignment of Clark Tunnel Road. In addition, a gated, 20-foot-wide paved EVA would connect the proposed internal private residential street with Bickford Ranch Road. The project would not include any substantial modifications to the Bickford Ranch Road alignment or configuration relative to what has been anticipated per the BRSP. Therefore, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and a **less-than-significant** impact would occur. No mitigation measures are required.

#### Discussion Item IX-7:

As part of the Fire and Resource Assessment Program, CAL FIRE identifies fire hazard severity zones in both State Responsibility Areas, which includes those portions of the State where CAL FIRE has the primary duty for wildland fire prevention and suppression, and Local Responsibility Areas, which include those parts of the State where a local jurisdiction, such as Placer County, has primary responsibility. Per the Fire Safe Plan prepared for the proposed project, the project site is in a State Responsibility Area, and is in an area rated Moderate for fire hazards.<sup>15</sup> Furthermore, the project site is located within a hillside area that has been previously designated by CAL FIRE and the PFPD as a potential Wildland Urban Interface (WUI) Zone, should buildings be constructed in the area. Given the fire risk present within the project area, further analysis is required to ensure that the proposed project would not result in the exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires, and a **potentially significant** impact could occur.

*Further analysis of these impacts will be discussed in the Wildfire chapter of The Ridge EIR.*

#### X. HYDROLOGY & WATER QUALITY – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade ground water quality? (EH)		X		
2. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? (EH)			X	
3. 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: a) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; b) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems? (ESD)		X		
4. Create or contribute runoff water which would include substantial additional sources of polluted runoff or otherwise substantially degrade surface water quality either during construction or in the post-construction condition? (ESD)		X		

<sup>15</sup> Philips Consulting Services. *Fire Safe Plan, The Ridge Subdivision Project*. September 2019.

5. 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: a) impede or redirect flood flows; b) expose people or structures to risk of loss, injury, or death involving flooding; or c) risk release of pollutants due to project inundation? (ESD)				<b>X</b>
6. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? (EH)			<b>X</b>	

The following discussions are primarily based on the preliminary Grading Plan, Utility Plan, BMP Plan, and preliminary Drainage Report prepared for the proposed project by Morton & Pitalo, Inc.<sup>16</sup>

#### Discussion Items X-1, 2, 6:

The 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 PCWA, 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.<sup>17</sup> 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.<sup>18</sup> 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.

Water supply service for the proposed project would be provided by the PCWA. According to the PCWA's *2015 Urban Water Management Plan*, the PCWA relies primarily on surface water for water supplies. PCWA does not anticipate utilizing groundwater to support normal year water deliveries. Existing groundwater wells maintained by PCWA are used for backup and dry-year supplies. As such, groundwater supplies would not typically be used to serve the project.<sup>19</sup> Per the Preliminary Drainage Report prepared for the proposed project, the on-site soils are characterized as Hydrologic Soils Group (HSG) D; such soils have a very slow infiltration rate (high runoff potential) when thoroughly wet and consist primarily of soils that have a very slow rate of water transmission. Given the limited infiltration potential of the on-site soils, development of the project site with impervious surfaces would not substantially interfere with the infiltration of stormwater into local groundwater. In addition, the proposed would not substantially degrade groundwater quality as groundwater was not observed on-site during subsurface explorations; thus, on-site construction and operation of the proposed project would not interact with underlying groundwater.

Therefore, the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin, or conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Thus, a **less-than-significant** impact would occur. No mitigation measures are required.

#### Discussion Items X-4:

The following sections provide an analysis of potential impacts to water quality associated with construction and operation of the proposed project.

#### Construction

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. All such activities have the

<sup>16</sup> Morton & Pitalo, Inc. *Preliminary Drainage Report, The Ridge Subdivision*. September 25, 2020.

<sup>17</sup> California Department of Water Resources. *California's Groundwater, Bulletin 118, Sacramento Valley Groundwater Basin, North American Subbasin*. January 20, 2006.

<sup>18</sup> San Juan Water District. *2015 Urban Water Management Plan* [pg. 6-3]. June 2016.

<sup>19</sup> Placer County Water Agency. *2015 Urban Water Management Plan*. Adopted June 2, 2016.

potential to affect water quality and contribute to localized violations of water quality standards if impacted stormwater runoff from construction activities enters downstream waterways.

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 be short-term and of limited duration. It should be noted that while routine clearing of understory brush would be performed within the off-site 300-foot Fuel Management Zone to reduce fire hazards, such clearing would not involve substantial ground-disturbing activities. Thus, the proposed brush clearing activities would not result in substantial soil erosion.

Because the proposed project would require construction activities that would result in a land disturbance of approximately 10.46 acres, 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 the RWQCB. 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.

The remaining potential off-site improvements are limited to roadway, water, and sewer infrastructure improvements for a short section, approximately 400 linear feet, of Bickford Ranch Road. In the event the Phase 2 improvements of Bickford Ranch Road have not yet been constructed, and the proposed project has obtained necessary entitlements and is ready to proceed, the proposed project would require the extension of Bickford Ranch Road (and water and sewer lines within the road right-of-way) from the Phase 1 terminus eastward to the project site and along the project frontage. The BRSP EIR included an evaluation of potential water quality impacts associated with buildout of the BRSP, including the construction of Bickford Ranch Road. The BRSP EIR concluded that implementation of Mitigation Measures G-B, H-D, and HE, all impacts to water quality due to erosion and sedimentation during construction activities would be reduced to less-than-significant levels. Whichever party constructs said portion of Bickford Ranch Road, be it the BRSP applicant during Phase 2 improvements, or The Ridge applicant, would be legally required to implement the aforementioned mitigation measures.

Implementation of BMPs to control erosion, and thus sediment related pollution, is further mandated by Mitigation Measures VII-1 through VII-4 within this Initial Study.

### Operation

Development of the proposed project would result in the conversion of a undeveloped parcel to single-family residential uses and associated improvements. 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.

### *Phase II MS4 Permit Requirements*

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 drainage management areas (DMAs) and implement and direct water to appropriately-sized site design measures (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.

### *Proposed Storm Drain System*

The detention/retention basin included on Lot B would receive stormwater runoff from Pro1A (9.56 acres) and Pro1B (7.4 acres) (see Figure 10). Pro1A generally consists of the internal roadway (Road A), Lane B along the project's western boundary, Lots 1 through 12, and Lots 26 through 28. Pro1B generally consists of Lots 14 through 23 and downslope portions of Lots 29 through 31. Stormwater runoff from Pro1A would flow from the streets to the detention/retention basin via a vegetated swale. Stormwater runoff from Pro1B would be captured in the rock cobble cutoff v-ditch and directed to the detention/retention basin.

The basin will be used to mitigate the peak flow volumetric impacts from the entire project. A 30-inch drainage discharge pipe would be directed to the flume over the Caperton Canal. The infiltration elevation of the basin, to be located upstream of the Caperton Canal, would be below the elevation of the existing canal. As such, infiltration from the detention/retention basin would not adversely affect the integrity of the canal.

Pro2 consists of the remainder of the subdivision (Lots 23 through 25, 32 through 34, and Lane C) and is divided into Pro2A (7.08 acres) and Pro2B (4.13 acres). Stormwater runoff from Pro2 would be captured in the rock cobble cutoff v-ditch and continue to drain to two proposed Caperton Canal flume crossings without restriction; the crossings are identified as POI 3 and POI 5 on the Watershed Map (see Figure 10). Water treatment for the sheds would be provided by the vegetated swales adjacent to the roadway pavement and disconnected roof drains for the residential lots. The proposed cobble-lined v-ditch along the downslope section of the lots will convey the flows to the point of discharge.

Pro3 (19.22 acres) is existing and is not proposed for development as part of the project. Pro4 (3.06 acres) would be directed to the portion of Bickford Ranch Road along the project's frontage with construction of the roadway improvements. Treatment of runoff from Pro4 would be provided by the proposed roadside vegetated drainage swale.

### Maintenance and Inspection

In order to ensure continued operation of the proposed detention/retention basin, the SWQP must include detailed, site-specific inspection and maintenance procedures to be implemented by the project applicant. Required maintenance activity should include, but not necessarily be limited to, removal of debris and sediment from the basin.

### Conclusion

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 VII-1 through VII-4, 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, without implementation of the following mitigation measures, a ***potentially significant*** impact related to water quality could occur.

### **Mitigation Measures Item X-4:**

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

Implement MM VII-1 through MM VII-4

### MM X-1

The Improvement Plans shall include the message details, placement, and locations showing that all storm drain inlets and vegetated swales 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). The Home Owners' association is responsible for maintaining the legibility of stamped messages and signs.

MM X-2

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.

MM X-3

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 Storm Water 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 (excepting projects that do not increase impervious surface area over the pre-project condition) are also required to demonstrate hydromodification management of storm water 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, bioretention, and other LID measures that result in post-project flows that mimic pre-project conditions.

MM X-4

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 Engineering and Surveying Division (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 or Final Subdivision Map approval, easements shall be created and offered for dedication to the County for maintenance and access to these facilities in anticipation of possible County maintenance.

**Discussion Item X-3:**

The project site is part of the overall Auburn Ravine watershed. The site drains into the Caperton Canal. The proposed project would include the creation of approximately 304,445 sf (6.99 acres) of impervious surface. Per the County's MS4 Permit, projects that create and/or replace one or more acres of impervious surface are considered regulated hydromodification management projects. As noted previously, regulated projects are required to divide the project area into DMAs and implement and direct water to appropriately-sized SDMs, additional treatment facilities as necessary, and Baseline Hydromodification Measures to each DMA.

### Hydromodification Management

To serve the project, Bickford Ranch Road will be required to be extended to the eastern limits of the project and along the project frontage. With the construction of Bickford Ranch Road, approximately 14.6 acres that were tributary to the project would be diverted to the west. This includes the landscape area located between the northern boundary of Bickford Ranch Road and the southern boundary of the project.

The detention/retention basin included on Lot B will receive stormwater runoff from drainage sheds Pro1A (9.56-acres) and Pro1B (7.4-acres). Pro1A generally consists of the internal roadway (Road 'A'), Lane B along the project's western boundary, Lots 1-12, and Lots 26-28. Stormwater runoff from these areas would flow from the streets to the detention/retention basin. Pro1B generally consists of Lots 14-23, and downslope portions of Lots 29-31. Stormwater runoff from Pro1B will be captured in the rock cobble cutoff V-ditch and directed to the detention/retention basin. The detention/retention basin will be used to mitigate the impacts from the entire project site. The proposed rock cobble cutoff v-ditch has been sized to accommodate flow from a 100-year storm, with 0.50 feet of freeboard. The proposed detention basin has also been sized to detain runoff from the 100-year storm event in the basin to ensure that post-development runoff does not exceed pre-development runoff.<sup>20</sup> From the basin (POI 2), drainage will be directed north over the Caperton Canal via a flume, then released to drain downhill to an existing natural drainage conveyance (labeled POI 4 on Figure 10).

Approximately 11.2 acres of the project site, labeled as Pro2 in Figure 10, would drain to two proposed Caperton Canal flume crossings (identified as Points of Interest 3 and 5 on Figure 10). Pro2 consists of the remainder of the subdivision (Lots 23-25, 32-34, and Lane C). Treated stormwater runoff from Pro2 will be captured in the rock cobble cutoff v-ditch and continue to drain to two proposed Caperton Canal flume crossings without restriction. From these flume crossings, drainage will be released to drain downhill to an existing natural drainage conveyance.

### Volumetric Reduction

The project will require the project to mitigate storm water volumetric increases to predevelopment levels for the 100-year, 8-day storm event. Per the Preliminary Drainage Report prepared for the proposed project, based on the 100-year, eight-day storm event, the project would be required to retain approximately 43,560 cubic feet (CF) on-site.

The project's detention/retention basin would provide volumetric storage by storing the stormwater within the bottom 4± feet of the basin.

### Conclusion

Based on the above, the proposed project would satisfy the treatment and flow control requirements set by the West Placer Storm Water Quality Design Manual and would appropriately manage runoff for 100-year storm events. Thus, the project would not substantially alter the existing drainage pattern of the project area or substantially increase the rate or amount of surface runoff. A final drainage report would be required with the project Improvement Plans to substantiate the preliminary drainage design. Without approval of a final drainage report, a **potentially significant** impact could occur.

### **Mitigation Measures Item X-3:**

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

Implement MM VII-1 through MM VII-4

### MM X-5

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. [If no Environmental Review, then use the following sentence instead of the first two sentences: The Improvement Plan submittal shall include a final Drainage Report for review and approval.] 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 and drainage easements 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

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<sup>20</sup> Morton & Pitalo, Inc. *Preliminary Drainage Report, The Ridge Subdivision, Placer County*. September 25, 2020.



conformance with the requirements of Section 5 of the Land Development Manual and the Placer County Stormwater Management Manual that are in effect at the time of Improvement Plan submittal.

#### MM X-6

The Improvement Plan submittal and final Drainage Report shall provide details showing that storm water run-off peak flows and volumes shall be reduced to pre-project conditions through the installation of detention/retention facilities. Detention/retention facilities shall be designed in accordance with the requirements of the Placer County Stormwater Management Manual that are in effect at the time of submittal, and to the satisfaction of the Engineering and Surveying Division (ESD) and shall be shown on the Improvement Plans. The ESD may, after review of the project's final Drainage Report, delete this requirement if it is determined that drainage conditions do not warrant installation of this type of facility. Maintenance of detention/retention facilities by the homeowner's association, property owner's association, property owner, or entity responsible for project maintenance shall be required. No detention/retention facility construction shall be permitted within any identified wetlands area, floodplain, or right-of-way, except as authorized by project approvals.

#### Discussion Item X-5:

According to the November 2, 2018 Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) number 06061C0740H, the proposed project site is located within Flood Hazard Zone X, which is described by FEMA as an area of minimal flood hazard, usually above the 500-year flood level. Furthermore, the project is not located within any local 100 year floodplain. Consequently, the proposed project would not place housing or improvements within a 100-year flood hazard area either as mapped on a federal Flood Hazard boundary, FIRM, or other flood hazard delineation map which would: a) impede or redirect flood flows; b) expose people or structures to risk of loss, injury, or death involving flooding; or c) risk release of pollutants due to project inundation. Therefore, there is **no impact**.

#### XI. LAND USE & PLANNING – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Physically divide an established community? (PLN)			X	
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? (EH, ESD, PLN)	X			
3. Result in the development of incompatible uses and/or the creation of land use conflicts? (PLN)			X	
4. Cause economic or social changes that would result in significant adverse physical changes to the environment such as urban decay or deterioration? (PLN)			X	

#### Discussion Item XI-1:

Currently, the project site is not located within or adjacent to an established community. In addition, the proposed project would be consistent with the type and intensity of land uses planned to the east, west, and south of the project site as part of the BRSP. Therefore, the proposed project would not physically divide an established community or disrupt or divide the physical arrangement of an established community, and a **less-than-significant** impact would occur. No mitigation measures are required.

#### Discussion Item XI-2:

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 this analysis 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.

The proposed project would include a GPA to change the General Plan land use designation of the project site from Agriculture/Timberland 10 Ac. Min to MDR (13.85 acres) and LDR (11.10 acres) (Figure 6). In addition, the project would include a Rezone to change the site's zoning designation from F-B-X 10-Ac. Min. to RS-B-8 (13.85 acres) and RS-B-10 (11.10 acres) (see Figure 7). Approval of the GPA and Rezone 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 General Plan and Zoning Ordinance.

As discussed throughout this Initial Study, the proposed project would be generally consistent with General Plan policies adopted for the purpose of avoiding or mitigating environmental effects. Per Section II, Agricultural and Forest Resources, of this Initial Study, the proposed project would comply with the agricultural buffer requirements included in General Plan Policies 1.H.5 and 7.B.1. While the proposed GPA and Rezone would result in a net loss of agriculturally-designated land in Placer County, such loss is not a physical environmental impact. The loss of valuable agricultural lands would be considered a physical environmental impact, but as demonstrated in Section II of this Initial Study, the project site is classified as Farmland of Local Importance, while the off-site improvement areas are classified as Grazing Land. The site has not historically been used for agricultural operations, nor is it reasonably foreseeable that the site or off-site improvement areas could be used for agricultural operations due to the poor soil quality, hilltop location, and immediate proximity to approved BRSP residential land uses. Given that the requested GPA and Rezone would not result in physical loss of valuable agricultural lands, the project would not conflict with General Plan Policy 7.A.1., which states that the County shall protect agriculturally-designated areas from conversion to non-agricultural uses. Because the project site and off-site improvement areas have not historically been used for agricultural operations and are not suitable for agricultural uses, the project would be consistent with General Plan Policy 7.A.3, which states that the County shall encourage continued and, where possible, increased agricultural activities on lands suited to agricultural uses.

Per Section IV, Biological Resources, of this Initial Study, the Biological Resources chapter of The Ridge EIR will include an analysis of whether the proposed tree removal activities would conflict with the County's Tree Ordinance or the 2007 Draft Guidelines for Evaluating Impacts to Oak Woodlands. Consistency with plans and policies related to GHG emissions will be evaluated in the Air Quality and Greenhouse Gas Emissions chapter of The Ridge EIR. As discussed in Section VII, Geology & Soils, of this Initial Study, 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. Thus, the project would not conflict with Policy I.K.6 related to erosion and sedimentation risks from new development on hillsides. Consistency with Policy I.K.6 is further supported by Section X, Hydrology & Water Quality, of this Initial Study, which notes that the project would be required to prepare a SWPPP that includes BMPs for stormwater runoff. Furthermore, as discussed in Section XIII, Noise, of this Initial Study, the proposed project would not conflict with any applicable County policies related to noise exposure. Consistency with General Plan policies related to transportation will be evaluated in the Transportation chapter of The Ridge EIR.

The proposed project is also required to comply with Placer County's adopted Affordable Housing and Employee Accommodation Fee Program. Ten percent of the project's units would be required to be affordable due to the requested land use designation and zoning changes that would increase permitted residential density. Four affordable housing units are required (3.4 rounded up). The applicant may build or acquire the units at the affordability guidelines on or off site or pay an in-lieu fee. A specific approach to meeting the affordable housing requirement has not been selected at this time.

Based on the above, the potential for the proposed project to 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 will be evaluated in the technical chapters of The Ridge EIR. Pending further analysis, a **potentially significant** impact could occur.

*Further analysis of applicable policies related to aesthetics, air quality, biological resources, transportation, and wildfire will be discussed in their respective chapters of The Ridge EIR.*

### **Discussion Item XI-3:**

Of the 34 total residential lots, 28 would be low-density lots ranging in size from 13,700 square feet (sf) to 38,416 sf, with an average size of 18,206 sf and an average net density of 2.3 units per acre. The remaining six residential lots would be rural residential lots ranging in size from 1.1 to 2.2 acres, with an average net density of 0.60 units per acre. Combined, the proposed project would result in an average net density of 1.55 units per acre. The proposed lot sizes would be consistent with the BRSP parcels to the east and west of the project site. The proposed development

standards for the proposed project are generally similar to the County-approved Rural Residential and Low Density Residential standards as set forth in the BRSP Development Standards. Therefore, the proposed project would not result in the development of incompatible uses and/or the creation of land use conflicts, and a **less-than-significant** impact would occur. No mitigation measures are required.

**Discussion Item XI-4:**

CEQA does not require an analysis of social issues unless a direct link to the physical environment exists. One way that social issues are typically handled in CEQA documents is to consider the potential for a project to change the socioeconomics of a community, which could lead to physical blight. In recent years, the State courts have identified the term urban decay as the physical manifestation of a project’s potential socioeconomic impacts and specifically identified the need to address the potential for urban decay in environmental documents for large retail projects. The leading case is *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, in which the court set aside two environmental impact reports for two proposed large retail projects that would have been located fewer than five miles from each other.

The proposed project would develop a residential subdivision within a portion of the County which is primarily characterized by existing rural residential land uses, as well as vacant grazing land. The proposed project would not develop retail uses that would result in increased vacancy rates or abandonment of commercial spaces in the project vicinity, resulting in urban decay. Therefore, the project would not cause economic or social changes that would result in significant adverse physical changes to the environment such as urban decay or deterioration, and a **less than significant** impact would occur. No mitigation measures are required.

**XII. MINERAL RESOURCES – Would the project:**

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. 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? (PLN)			X	
2. 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? (PLN)			X	

**Discussion Items XII-1, 2:**

Per the California Division of Mines and Geology (CDMG), the project site is classified as MRZ-3a for gold and chromite deposits.<sup>21</sup> The MRZ-3a designation is used to describe areas underlain by geologic settings within which undiscovered mineral resources similar to known deposits in the same producing district or region may be reasonably expected to exist. However, according to the Geotechnical Exploration prepared for the proposed project, the project site does not contain evidence of historic mining activities. Furthermore, the BRSP EIR concluded that based on the number of mine tunnels and prospects located within the project region, the potentially gold-bearing rocks within the MRZ-3a-designated portion of the project area have been reasonably explored. The General Plan does not identify any mineral resources within the planning area. As such, the proposed project would not result in the loss of availability of a known mineral resource or a local-important mineral resource recovery site, and a **less-than-significant** impact would occur. No mitigation measures are required.

<sup>21</sup> California Division of Mines and Geology. *Mineral Land Classification Map, Auburn 15-Minute Quadrangle, Plate 6, Placer Deposits (gold, chromite)*. 1984.

**XIII. NOISE** – Would the project result in:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. 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? (PLN)		X		
2. Generation of excessive groundborne vibration or groundborne noise levels? (PLN)			X	
3. 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? (PLN)				X

The following discussions are based primarily on an Environmental Noise Assessment prepared for the proposed project by j.c. brennan & associates, Inc.<sup>22</sup>.

**Discussion Item XIII-1:**

The following section includes a discussion of noise standards and criteria applicable to various land uses, as well as an analysis of railroad noise levels at the project site, project construction noise, and project traffic noise. 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 railroad noise is evaluated for the purposes of considering the project's consistency with policies in the County's General Plan.

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 types 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. The nearest existing sensitive receptor in the project vicinity is a single-family residence located approximately 1,000 feet to the north of the site. Under the environmental baseline used for this analysis, which includes buildout of Phase 1 of the BRSP, the nearest sensitive receptors would be the planned single-family residences located to the west of the project site boundaries within the LDR-08 area of Phase 1 shown in Figure 4 of this Initial Study.

Existing Noise Environment

On July 8, 2019, j.c. brennan & associates, Inc. staff conducted short-term noise level measurements on the project site to quantify the existing daytime ambient noise environment at the project site, and in the vicinity of the project site. The noise measurement locations are shown on Figure 14. The noise level measurement survey results are provided in Table 3. A Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meter was used for the ambient noise level measurement survey. The sound level meter was programmed to record the average, median, and maximum noise levels at each monitoring site during the survey.

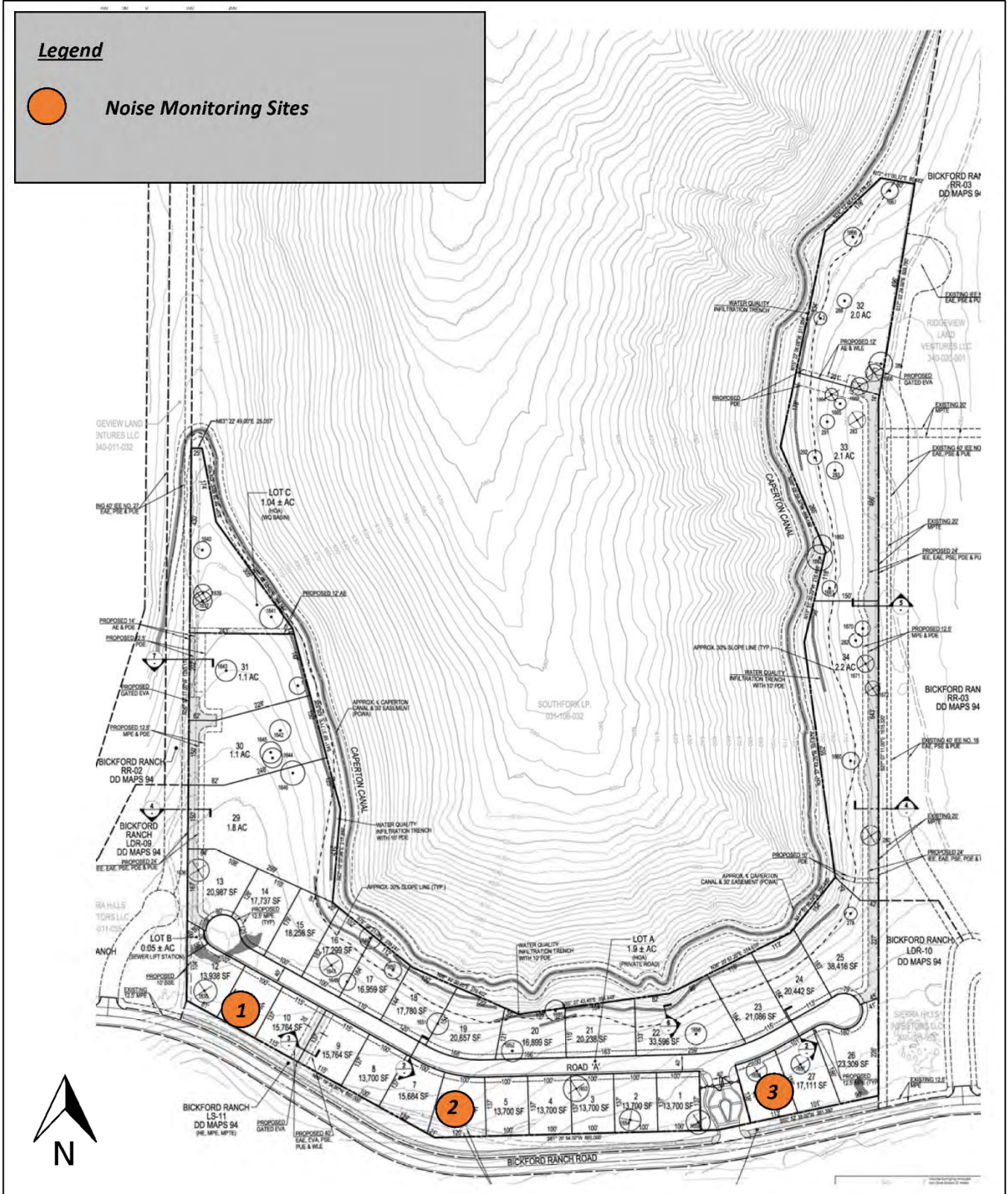
**Table 3  
Summary of Noise Level Measurements**

Site	Location	Time	Leq	L50	Lmax	Notes
1	West end of project site	8:10 AM	36.5 dB	34.0 dB	40.2 dB	Very quiet, distant traffic
2	South-central portion of project site	8:40 AM	42.3 dB	41.2 dB	44.0 dB	Distant train operation
3	East end of project site	9:30 AM	37.7 dB	35.1 dB	40.8 dB	Very quiet, distant traffic

Source: j.c. brennan & associates, Inc., 2020.

<sup>22</sup> j.c. brennan & associates, Inc. *Revised Environmental Noise Assessment, The Ridge Subdivision, Placer County, California*. March 3, 2020.

Figure 14  
Noise Measurement Locations



The average value, denoted  $L_{eq}$ , represents the energy average of all of the noise received by the sound level meter microphone during the monitoring period. The median value, denoted  $L_{50}$ , represents the sound level exceeded 50 percent of the time during the monitoring period. The maximum value, denoted  $L_{max}$ , represents the highest noise level measured.

Based upon Table 3, the noise environment is considered to be very quiet. Even distant railroad operations noise levels are considerably quiet. This is expected due to the distance of approximately 2,100 feet from the nearest railroad track to the project site.

#### County Noise Standards

Section 9.36.060 of the Placer County Code establishes non-transportation noise level standards for noise-sensitive receptors, as follows:

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
<i>Source: Placer County Noise Ordinance.</i>		

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.

With regard to residential uses affected by transportation noise sources, the Placer County General Plan Noise Element applies 60 dB day-night weighted average ( $L_{dn}/CNEL$ ) exterior and 45 dB  $L_{dn}/CNEL$  interior noise level standards. 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.

#### Substantial Noise 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 5 is used. This approach to assessing

the significance of increases in off-site traffic noise is also consistent with recent Placer County EIRs and the industry-standard approach in general.

<b>Ambient Noise Level Without Project, dB</b>	<b>Increase Required for Significant Impact</b>
<60	+5.0 dB or more
60-65	+3.0 dB or more
>65	+1.5 dB or more

#### Railroad Noise Levels at Project Site

Noise sources at the project site include railroad noise associated with the railroad tracks located approximately 2,000 feet to the southeast of the site. Per the Environmental Noise Assessment, the distance to the 60 dB  $L_{dn}$  noise contour associated with the railroad tracks is approximately 226 feet from the track centerline. Thus, noise associated with the railroad tracks does not exceed the County's 60 dB  $L_{dn}$ /CNEL exterior noise level standard at the project site.

#### Project Construction Noise

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 delivery trips would raise ambient noise levels along local roadways.

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 6 below, maximum noise levels generated by various types of construction equipment can range from 76 to 90 dB  $L_{max}$  at 50 feet.

<b>Type of Equipment</b>	<b>Noise Level at 50 feet (dB <math>L_{max}</math>)</b>
Backhoe	78
Compactor	83
Compressor (air)	78
Concrete Saw	90
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Jackhammer	89
Pneumatic Tools	85

*Source: j.c. brennan & associates, Inc., 2020.*

Given that construction equipment would operate at various locations 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 be lower than the reference levels in Table 6. The nearest existing sensitive receptor is located approximately 1,000 feet from the project site, where construction would take place. At such a distance, construction noise levels would be expected to range from approximately 50 dB to 64 dB  $L_{max}$ . In terms of BRSP Phase 1 residential receptors under the adjusted baseline, the nearest sensitive receptors would be the planned residences located approximately 900 feet west of the project site. At a distance of 900 feet, construction noise levels would be expected to range from approximately 51 dB to 65 dB  $L_{max}$ . It should be noted that neither of the above noise level estimates account for the topography of the intervening area between the noise source and the sensitive receptor.

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.

If such requirements are not met, construction of the proposed project could conflict with the Placer County Code, 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 potentially significant impact could occur.

The potential off-site improvements in the vicinity of the planned sensitive receptor locations are limited to roadway, water, and sewer infrastructure improvements for a short section of Bickford Ranch Road. In the event the Phase 2 improvements of Bickford Ranch Road have not yet been constructed, and the proposed project has obtained necessary entitlements and is ready to proceed, the proposed project would require the extension of Bickford Ranch Road (and water and sewer lines within the road right-of-way) from the Phase 1 terminus eastward to the project site. The BRSP EIR included an evaluation of potential construction noise impacts associated with buildout of the BRSP, including the construction of Bickford Ranch Road. The BRSP EIR concluded that with implementation of Mitigation Measures N-A, N-B, and T-B, all construction noise impacts would be reduced to less-than-significant levels. Whichever party constructs said portion of Bickford Ranch Road, be it the BRSP applicant during Phase 2 improvements, or The Ridge applicant, would be legally required to implement the aforementioned mitigation measures.

#### Project Operational Noise

The primary operational noise source associated with the proposed residential development would be traffic noise along area roadways.

j.c. brennan & associates, Inc. employed the Federal Highway Administration (FHWA) Traffic Noise Prediction Model (FHWA RD-77-108) for the prediction of traffic noise levels. The model is based upon the CALVENO noise emission 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 receiving area. Existing and future traffic volume data provided by Fehr & Peers traffic consultants was used as direct inputs to the model. The predicted traffic noise levels along Sierra College Boulevard are shown in Table 7 and Table 8 below.

Roadway	Segment	Traffic Noise Levels (L <sub>dn</sub> , dB)						
		Distance (feet)	Existing	Existing Plus Project	Change	Short Term No Project	Short Term Plus Project	Change
Sierra College Boulevard	SR 193 to Bickford Ranch Road	75	64	64	0	65	65	0
	Bickford Ranch Road to Oak Tree Lane	75	64	64	0	67	67	0
	Oak Tree Lane to Twelve Bridges Drive	75	64	64	0	67	67	0

Note: Distances to traffic noise contours are measured in feet from the centerline of Sierra College Boulevard.

Source: j.c. brennan & associates, Inc., 2020.

Roadway	Segment	Traffic Noise Levels (L <sub>dn</sub> , dB)			
		Distance (feet)	Cumulative No Project	Cumulative Plus Project	Change
Sierra College Boulevard	SR 193 to Bickford Ranch Road	75	66	66	0
	Bickford Ranch Road to Oak Tree Lane	75	67	67	0
	Oak Tree Lane to Twelve Bridges Drive	75	71	71	0

Note: Distances to traffic noise contours are measured in feet from the centerline of Sierra College Boulevard.

Source: j.c. brennan & associates, Inc., 2020.

As shown in the tables, the addition of traffic from the proposed project would not result in significant increases in traffic noise levels along Sierra College Boulevard. Therefore, the project would not result in substantial noise level increases at existing residences located along the roadway.

Similar to the above traffic noise level data for Sierra College Boulevard, given the low level of vehicle trips generated by the proposed project (322 average daily trips), traffic noise level increases on Bickford Ranch Road attributable to the project would not result in substantial traffic noise level increases to BRSP Phase 1 homes along the roadway,



especially considering that the BRSP includes construction of walls along the roadway.<sup>23</sup> It is also noted that the proposed project would include construction of a six-foot sound wall along its Bickford Ranch Road frontage, though environmental noise effects on the proposed project's future residents is not a CEQA issue.

### Conclusion

Based on the above, operation of the proposed project would not result in significant traffic noise level increases or cause new conflicts with the County's established noise level standards. However, compliance with applicable County standards would be necessary to ensure that the proposed construction activities would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. Thus, a **potentially significant** impact could occur.

### **Mitigation Measures Item XIII-1:**

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

#### MM XIII-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.
- 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.

### **Discussion Item XIII-2:**

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural. 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. The threshold for damage to structures ranges from 0.2 to 0.6 peak particle velocity in inches per second (in/sec p.p.v). Per the Environmental Noise Assessment, the threshold at which human annoyance can occur is 0.1 in/sec p.p.v. Table 9 shows the typical vibration levels produced by construction equipment.

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<sup>23</sup> See BRSP RDEIR, pg. 9-13, and Bickford Ranch Development Standards (December 8, 2015), Section 8.1.

Type of Equipment	p.p.v. at 25 feet (in/sec)	p.p.v. at 50 feet (in/sec)	p.p.v. at 100 feet (in/sec)
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.001	0.000
Auger/drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibratory Hammer	0.070	0.025	0.009
Vibratory Compactor/roller	0.210	0.074	0.026

*Source: j.c. brennan & associates, Inc., 2020.*

The primary vibration-generating activities associated with the proposed project would occur during construction, particularly during grading and utility placement. As shown in the table above, the greatest vibration levels would be associated with the use of vibratory compactors/rollers.

The nearest existing sensitive receptor in the project vicinity is a single-family residence located approximately 1,000 feet to the north of the site. Upon buildout of Phase 1 the BRSP, the nearest residences would be located over 900 feet from areas of the project site that might require grading or paving. In the event the Phase 2 improvements of Bickford Ranch Road have not yet been constructed, and the proposed project has obtained necessary entitlements and is ready to proceed, the proposed project would require the extension of Bickford Ranch Road (and water and sewer lines within the road right-of-way) from the Phase 1 terminus eastward to the project site. The Bickford Ranch Road extension would be located approximately 475 feet from the nearest BRSP sensitive receptors.

At distances of 475 feet or greater, vibration levels associated with project construction would be below 0.1 in/sec p.p.v. Thus, groundborne vibration associated with the proposed project would not result in human annoyance or damage to buildings. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours. Based on the above, a **less-than-significant** impact would occur. No mitigation measures are required.

#### **Discussion Item XIII-3:**

The project site is not covered by an airport land use plan and is not located within two miles of a private airstrip, public airport, or public use airport. As such, the proposed project would not expose people residing or working in the project area to excessive noise levels associated with air traffic. Therefore, there is **no impact**.

#### **XIV. POPULATION & HOUSING – Would the project:**

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Induce substantial unplanned population growth in an area, either directly (i.e., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)? (PLN)			X	
2. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? (PLN)			X	

#### **Discussion Item XIV-1:**

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 proposed 34-unit single-family development would increase the available housing within the project area, which would be expected to increase population in the area. Using the 2.6 persons/household average household size from

the BRSP EIR, the project would house an estimated 89 residents. Given that the project site is currently designated Agriculture/Timberland 10 Ac. Min. per the General Plan and zoned F-B-X 10-Ac. Min., residential uses have not been previously anticipated for the site. However, the relevant CEQA threshold is whether the proposed project would “induce” substantial population growth, which is more appropriately a question focused on the project’s ability to remove obstacles to growth, thus causing growth in other areas. The direct effects of the project’s population are evaluated throughout this Initial Study, and effects related to air quality, GHG emissions, energy, and transportation will be studied further in The Ridge EIR.

Development of the proposed project is dependent upon the installation of Bickford Ranch Road and associated utilities through Phase 1 of the BRSP and extension of such infrastructure through a portion of BRSP Phase 2 to the project entry. Extension of BRSP and associated infrastructure to the project site was analyzed in the BRSP EIR. Thus, the proposed project would not require extension of major infrastructure to serve the proposed development beyond what has been previously anticipated by the County and evaluated in the BRSP EIR. In addition, buildout of the BRSP will result in the construction of 1,890 new residential units in the project vicinity, accommodating a population of 4,154 people. The proposed development would represent approximately two percent of the growth already anticipated per the BRSP. Of the 1,890 BRSP units, 1,010 would be constructed as part of Phase 1 of the BRSP and, thus, are included in the environmental baseline for the analysis within this Initial Study.

Considering the above, the proposed project would include development that would result in direct on-site population growth. However, the proposed on-site infrastructure improvements would be sized to accommodate only the proposed 34 residential units. Off-site extension of Bickford Ranch Road and associated water and sewer lines between the BRSP Phase 1 boundaries and the project site boundaries have been previously planned per the BRSP and are anticipated to serve planned population growth within the BRSP 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. No mitigation measures are required. It should be noted that potential impacts related to growth inducement will be discussed further within the Statutorily Required Sections chapter of The Ridge EIR.

#### Discussion Item XIV-2:

The project site does not contain any existing housing. Therefore, the proposed project would not displace existing people or housing, necessitating the construction of replacement housing elsewhere, and a **less-than-significant** impact would occur. No mitigation measures are required.

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

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Fire protection? (ESD, PLN)			X	
2. Sheriff protection? (ESD, PLN)			X	
3. Schools? (ESD, PLN)			X	
4. Parks? (PLN)			X	
5. Other public facilities? (ESD, PLN)			X	
6. Maintenance of public facilities, including roads? (ESD, PLN)			X	

#### Discussion Item XV-1:

The project site is within PFPD jurisdiction. The BRSP area and adjoining unincorporated areas near the project site are served by the Placer County Fire Protection District (PCFD). Existing mutual aid agreements between PCFD and PFPD are in place. The closest fire station to the project site is PFPD Station No. 38 located on Church Street in the Penryn community. Upon completion of Phase 1 of Bickford Ranch Road to the project site, response times from PFPD Fire Station 38 will be on average 10 minutes or less for all fire and rescue emergencies.<sup>24</sup> Policy 4.1.2 of the Placer County General Plan states that the County shall encourage local fire protection agencies to maintain average response times to emergency calls at 10 minutes in rural areas. Thus, PFPD would be able to maintain acceptable response times to the project site within implementation of the proposed project.

<sup>24</sup> Phillips Consulting Services .The Ridge Subdivision Project Fire Safe Plan. September 2019, pg. 2-4.

The 2015 BRSP Development Agreement requires the BRSP applicant to commence construction of a new fire station within the BRSP (Parcel PF-1) no later than issuance of the 1,000<sup>th</sup> residential building permit for BRSP and diligently pursue its construction through to completion within 12 months of the fire station construction start date.<sup>25</sup> Given that Phase 1 of the BRSP includes 1,010 units, construction of the fire station is expected to commence before construction of the proposed project. Response times from the new BRSP fire station would be significantly improved, as compared to PFPD Fire Station 38, due to its closer proximity to the project site. PCFD would operate the new BRSP fire station, and thus, would be expected to be the first responder to any incidents at The Ridge project.

Because the PFPD response times from Station 38 to the project would meet the County's response time goal for rural areas, and these response times would be further improved upon construction of the new BRSP fire station, a **less-than-significant** impact would occur with respect to resulting in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services.

#### **Discussion Item XV-2:**

The proposed project would be primarily served by the Placer County Sheriff's South Placer Substation located in Loomis at the intersection of Horseshoe Bar Road and I-80, approximately four miles to the southeast 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. Thus, the proposed project, which would include 34 residential units, would not substantially increase demand for Sheriff services such that construction or expanded facilities would be required, construction of which could cause significant environmental impacts, and a **less-than-significant** impact would occur. No mitigation measures are required.

#### **Discussion Item XV-3:**

The project site is served by the Loomis Union School District and the Placer Union High School District. Based on student generation rates included in the BRSP EIR, the proposed project would add approximately 16 students to the Loomis Union School District (34 units X 0.46 students/unit) and eight students to the Placer Union High School District (34 units X 0.2362 students/unit). While the proposed 34-unit residential development would result in a slight increase in demand for school services associated with students housed by the project, the proposed project would not necessitate the construction of new school facilities. In addition, the proposed project would be subject to payment of applicable school impact fees to fund necessary facility improvements at both of the school districts serving the project.

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 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 schools. Thus, a **less-than-significant** impact would occur. No mitigation measures are required.

#### **Discussion Item XV-4:**

As noted above, the project would result in the construction of 34 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 87 new residents on the project site.<sup>26</sup> As noted in Section XIV, Population & Housing, of this Initial Study, the BRSP EIR identifies an average household size of 2.6 persons per household. However, the 2.54 persons per household figure is used in this section in order to maintain consistency with the Fee Study. The 34 proposed residences would only minimally increase demand on existing parks and recreational facilities, and, thus, the project is unlikely to require new facilities or expansion of existing facilities.

General Plan Policy 5.A.1 sets a standard of five acres of active parkland and 5 acres of passive recreation area or

<sup>25</sup> Placer County. *Amended and Restated Development Agreement by and between the County of Placer and LV Bickford Ranch, LLC, relative to the Bickford Ranch Specific Plan*. December 8, 2015.

<sup>26</sup> Placer County. *Placer County Park and Recreation Facilities Fee Study*. September 2003.

open space per 1,000 residents. Using 2.54 persons per household (*Placer County Park and Recreation Facilities Fee Study*), approximately 0.43-acre of active parkland and 0.43-acre of passive recreation area or open space would be required for the proposed 34 single-family unit project. With respect to active parkland, Section 16.08.100(D) of the County Code states that for 50 parcels or less, only the payment of in-lieu parkland fees is required rather than on-site dedication of active parkland. As the tentative map does not include active parkland or passive recreation area or open space, the applicant will be required to pay the full in-lieu parkland fees.

Given that the project’s relatively small increase in population would not result in the need for new or physically altered parks, the construction of which could have substantial adverse physical impacts, a **less-than-significant** impact would occur. No mitigation measures are required.

**Discussion Items XV-5, 6:**

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 34 new single-family residences and associated infrastructure, including a private internal road that would connect to a public road (Bickford Ranch Road) that has been planned for extension to the project site as part of the BRSP. All roadway improvements included in the proposed project would be funded by the project applicant.

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 due to the limited number of proposed residences and associated vehicle trips. Currently, the County uses gasoline tax and federal and State funding for transportation infrastructure maintenance.

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. 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.<sup>27</sup> 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. No mitigation measures are required.

**XVI. RECREATION:**

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (PLN)			X	
2. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? (PLN)			X	

<sup>27</sup> Placer County. *Memorandum, Office of the County Executive, FY 2014-15 Capital Facilities Impact Fee Annual Report*. September 15, 2015.

**Discussion Items XVI-1, 2:**

As discussed under Section XV above, the 34 proposed residences would only minimally increase demand on existing parks and recreational facilities, and, thus, the project is unlikely to require new facilities or expansion of existing facilities. In addition, the proposed project would be required to pay applicable in-lieu park fees pursuant to Section 16.08.100 of the Placer County Code. 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. Thus, the proposed project would result in a **less-than-significant** impact related to recreation. No mitigation measures are required.

**XVII. TRANSPORTATION – Would the project:**

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Conflict with a program, plan, ordinance or policy, except LOS (Level of Service) addressing the circulation system (i.e., transit, roadway, bicycle, pedestrian facilities, etc.)? (ESD)	X			
2. Substantially increase hazards to vehicle safety due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (ESD)	X			
3. Result in inadequate emergency access or access to nearby uses? (ESD)	X			
4. Result in insufficient parking capacity on-site or off-site? (ESD, PLN)			X	
5. Would the project result in VMT (Vehicle Miles Traveled) which exceeds an applicable threshold of significance, except as provided in CEQA Guidelines Section 15064.3, subdivision (b)? (ESD)	X			

**Discussion Item XVII-1:**

The proposed project would result in an increase in vehicle traffic on the street system surrounding the project area. In addition, the project has the potential to generate new bicycle and pedestrian traffic. As noted under Discussion Item XVII-2 below, determination of traffic impacts based solely on vehicle LOS is no longer allowable based on CEQA Guidelines Section 15064.3. However, the potential remains for the proposed project to result in conflicts with General Plan policies related to transportation facilities, including transit, roadway, bicycle, and pedestrian facilities. Therefore, a **potentially significant** impact could occur.

*Further analysis of these impacts will be discussed in the Transportation chapter of The Ridge EIR.*

**Discussion Items XVII-2, 3:**

The primary access for the proposed project would be provided by a private entry street from Bickford Ranch Road, which is planned to be extended along the project frontage as part of the BRSP, roughly contiguous with the existing alignment of Clark Tunnel Road. The project entry would include a gated entry feature and a village entrance monument, all similar to those designed and included in the approved BRSP Development Standards and Design Guidelines.

In the event the Phase 2 improvements of Bickford Ranch have not yet been constructed, and the proposed project has obtained necessary entitlements and is ready to proceed, off-site improvements to a segment of Bickford Ranch Road would be required to extend services and complete access to the project site. Specifically, such improvements would include the extension of Bickford Ranch Road from the Phase 1 terminus thereof, along the frontage of the project, the project entry street, and the emergency vehicle access road, including all required water, sewer, drainage and dry utilities therein. The extension of Bickford Ranch Road would be constructed in accordance with the cross-sections approved as part of the BRSP, and the County’s roadway standards.

Based on the above, the project would not result in substantial adverse effects to vehicle safety due to roadway design features or incompatible uses and/or inadequate emergency access or access to nearby uses. Therefore, a **less-than-significant** impact would occur.

**Discussion Item XVII-4:**

Per Section 17.54.060 of the Placer County Code, the proposed project would be required to provide a minimum of two spaces for each dwelling unit. As part of the proposed project, on-street parking would be provided along the south side of the proposed private roadway (Road A) within the project site. In addition, two private garage parking spaces would be provided on each of the proposed residential lots. On-street parking would not be permitted on the proposed private drives at the western and eastern site boundaries (Lane B and Lane C, respectively).

The County has determined that the proposed project would provide for sufficient on-site parking in accordance with Section 17.54.060 of the Placer County Code. Therefore, the proposed project would not result in insufficient parking capacity on-site or off-site, and a **less-than-significant** impact would occur. No mitigation measures are required.

**Discussion Item XVII-5:**

The proposed project would result in increased VMT associated with future residents travelling between the project site and other locations within the project region. While Placer County has not yet adopted a formal VMT threshold, further analysis is required to evaluate whether the proposed project would be consistent with the goals of the County and Sacramento Area Council of Governments (SACOG) related to VMT, including consistency with the Metropolitan Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Therefore, the proposed project could conflict with CEQA Guidelines Section 15064.3(b) related to VMT, and a **potentially significant** impact could occur.

*Further analysis of these impacts will be discussed in the Transportation chapter of The Ridge EIR.*

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

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or (PLN)		X		
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 Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. (PLN)		X		

**Discussion Items XVIII-1, 2:**

As discussed previously, the proposed project site does not contain any existing permanent structures. A search of the Sacred Lands File maintained by the NAHC returned negative results for the presence of known Native American sacred sites in the immediate project vicinity.

Pursuant to Assembly Bill 52, Placer County sent invitations to consult to tribes who requested notification of proposed projects on December 20, 2019. In addition, pursuant to SB 18, invitations to consult were sent to tribes traditionally and culturally affiliated with the project area on December 20, 2019. The United Auburn Indian Community of the Auburn Rancheria (UAIC) initiated consultation, requested a site visit, and requested copies of cultural searches/surveys. A site visit was conducted on January 29, 2020 and the County provided copies of the Paleontological Records Search and Cultural Resources Assessment prepared for the proposed project. The Shingle Springs Rancheria requested copies of cultural searches/surveys, which were provided, and no further consultation has been requested to date.

While none of the contacted tribes identified additional known Tribal Cultural Resources on the project site beyond the resources identified in the Paleontological Records Search and Cultural Resources Assessment prepared for the proposed project, the possibility exists that construction of the proposed project could result in a substantial adverse change in the significance of a tribal cultural resource if previously unknown tribal cultural resources are uncovered during grading or other ground-disturbing activities. Thus, a **potentially significant** impact could occur.

**Mitigation Measures Item XVIII-1, -2:**

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

Implement MM V-1 through MM V-4

**XIX. UTILITIES & SERVICE SYSTEMS – Would the project:**

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
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 telecommunication facilities, the construction or relocation of which could cause significant environmental effects? (EH, ESD, PLN)			X	
2. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? (EH)			X	
3. 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? (EH, ESD)			X	
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? (EH)			X	
5. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? (EH)			X	

**Discussion Item XIX-1:**

Currently, water, sewer, stormwater, and other utilities are not available in the project vicinity. However, under the adjusted baseline, water and sewer lines would be stubbed near the southwestern corner of the project site, in Bickford Ranch Road. An approximately 400-foot gap would exist between the terminus of the Phase 1 roadway segment and the southwestern corner of the project site. In the event the Phase 2 improvements of Bickford Ranch Road have not yet been constructed, and the proposed project has obtained necessary entitlements and is ready to proceed, the proposed project would require the extension of Bickford Ranch Road (and water and sewer lines within the road right-of-way) from the Phase 1 terminus eastward approximately 400 feet to the project site and along the project frontage. Water would be provided by PCWA, and wastewater service would be provided by the Placer County Department of Public Works Environmental Engineering Division. The proposed project would include annexation of the project site into Placer County SMD 1 for sewer service. In conjunction with the requested annexation into SMD 1 as part of the proposed project, the project applicant would be subject to payment of an annexation fee of \$6,344/acre. In addition, the proposed project would be subject to payment of applicable SMD 1 regional connection fees, currently assessed at \$3,628/equivalent dwelling unit.

The sewer infrastructure within Bickford Ranch Road will consist of a 12-inch sewer main. As noted in a memorandum prepared for the proposed project by Morton & Pitalo, Inc. (Sewer Memo),<sup>28</sup> the BRSP sewer facilities will convey

<sup>28</sup> Morton & Pitalo, Inc. *The Ridge Subdivision Sewer Master Plan*. September 25, 2019.



wastewater to a regional wastewater treatment facility located in the City of Lincoln. The City of Lincoln maintains and operates the treatment facility, while Placer County operates and maintains the trunk sewer facilities.

The Sewer Memo prepared for the proposed project includes an evaluation of the ability of the planned BRSP sewer infrastructure to accommodate wastewater generated by the proposed project. As noted in the Sewer Memo, per the 2014 Bickford Ranch Specific Plan Sanitary Sewer Master Plan Update (Sewer Master Plan), the average dry weather sewer flow for residential lots is 190 gallons per day (gpd) per dwelling unit. Accounting for factored flow rates and peaking factors, the proposed residential development would generate a design flow of 32.2 gallons per minute (gpm) (34 lots x 0.00019 million gallons per day x 2.0 factored flow x 3.59 peaking factor).

Based on a review of the topographic survey and proposed grades for the internal roadways on the project site and future Bickford Ranch Road, the proposed gravity sewer line within the project site would be able to drain into the future 12-inch gravity sewer main to be located in Bickford Ranch Road. Per the Sewer Memo, the contribution of the 32.2 gpm design flow associated with the proposed project would not cause the pipe capacity or depth/pipe diameter ratio to be exceeded for the planned BRSP sewer infrastructure; therefore, modifications to the BRSP sewer sizes and slopes would not be required.

On-site drainage facilities would be private and would consist of conventional subsurface and surface drainage facilities designed and installed in conformance with Placer County Standards. Runoff from impervious surfaces within the western portion of the project site would be routed to a new detention basin, located on Lot B. For the eastern portion of the site, runoff would flow through vegetated drainage swales. In addition, in order to protect the integrity of the existing Caperton Canal located just outside the northern property boundary, the current project proposal includes a rock cobble lined cutoff v-ditch designed to capture the drainage from the natural ungraded slope areas along the northern boundary of the project that flow toward the off-site Caperton Canal. For the western portion of the site, the newly proposed v-ditch would pass this ungraded slope area's drainage into the project's detention basin and to a new flume that would convey flows over the Caperton Canal; and for the eastern portion, the runoff from the vegetated drainage swales would be routed to the v-ditch and then to two new flumes over the canal. Soil erosion, slope stability, and potential effects to the canal have been addressed throughout this Initial Study and have been determined to be less than significant with implementation of mitigation. The remaining potential environmental effects related to air quality, GHG emissions, and biological resources will be evaluated in the project EIR as necessary.

Water conveyance infrastructure for the proposed project would consist of two new connections to the planned 12-inch water main to be located within Bickford Ranch Road. Given that the proposed project would only include 34 single-family residences, the water conveyance infrastructure planned as part of the BRSP, including the 12-inch water main at the project site frontage, would provide adequate flow and pressure to accommodate the relatively modest water demand associated with the proposed project. With regard to electrical, natural gas, and telecommunications infrastructure, planned BRSP infrastructure within the Bickford Ranch Road right-of-way would be adequate to serve the project without upsizing from what has been anticipated per the BRSP.

Given that all utilities necessary to serve the proposed project have been planned for extension to the project site as part of the BRSP, the proposed project would not require or result in the relocation or construction of new off-site utilities beyond what has been anticipated by the County and analyzed in the BRSP EIR. Impacts related to requiring or resulting in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects, would be **less-than-significant**. No mitigation measures are required.

#### **Discussion Item XIX-2:**

The proposed project would include development of a total of 34 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. Water supplies for the proposed project would be provided by PCWA.<sup>29</sup>

The PCWA service area includes five zones, which all have unique water supply characteristics. The proposed project site is located within Zone 1, which is the largest of the five zones, extending from the City of Auburn to the City of Lincoln and south to the border of the City of Roseville. Within Zone 1, the project site is located within the Horseshoe Bar/Penryn subarea, which receives "Retail Treated" water. Retail Treated water is water provided directly to PCWA's municipal and industrial customers that meets all requirements for potable water use. Currently, Zone 1 Retail Treated water demands account for over 96 percent of the Retail Treated demands in the entire PCWA service area.

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<sup>29</sup> Placer County Water Agency. *Water Availability for the Ridge*. April 1, 2019.

Per Tables 7-1 through 7-3 in the 2015 UWMP, PCWA has sufficient water supplies to accommodate projected demand within the PCWA service area, including Zone 1, during average year, single dry year, and multiple dry year conditions. Any potential shortfall in supply that may occur in Zone 1 in a dry year may be addressed through groundwater production. In addition, to accommodate potential additional demand created by future development not accounted for within the 2015 UWMP, the PCWA has established a placeholder of 2,000 acre-feet (af) of annual demand beginning in 2040, expanding to 4,000 af by build-out conditions. It should be noted that the future development evaluated in the 2015 UWMP demand projections includes buildout of the BRSP.

Per the 2015 UWMP, PCWA uses a future demand factor of 0.60 af/unit per year for residential lots between 10,000 and 17,000 sf within Lower Zone 1. For lots greater than 90,000 sf, a future demand factor of 0.85 af/unit is used.<sup>30</sup> Of the 34 total residential lots included in the proposed project, 28 would be low-density lots ranging in size from 13,700 sf to 38,416 sf, with an average size of 18,206 sf. The remaining six residential lots would be rural residential lots ranging in size from 1.1 to 2.2 acres. Thus, the proposed project would result in a future water demand of approximately 21.9 af per year. (28 units x 0.60 + six units x 0.85). Per Table 7-3 of the 2015 UWMP, the PCWA anticipates annual surpluses ranging from 12,759 af to 78,349 af for multiple dry year conditions. Thus, the increase in water demand associated with the proposed project would be accommodated by the projected water supply surplus. Adequate water supplies exist to serve buildout of the PCWA service area, including the proposed project site.

Furthermore, the project would be subject to the water efficiency requirements within the County's Water Efficient Landscaping Ordinance (WELO). 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 ensure that irrigation water consumption is minimized and occurs in compliance with the County's standards. According to preliminary landscaping water use calculations, the proposed project would have an estimated total water use (ETWU) approximately 30 percent lower than the maximum allowed water allowance (MAWA) for the project based on the total area of landscaped areas proposed.

Based on the above, sufficient water supplies would be available to serve the proposed project and reasonably foreseeable future development during normal, dry and multiple dry years. Thus, a **less-than-significant** impact would occur. No mitigation measures are required.

### Discussion Item XIX-3:

Wastewater from the proposed project would be conveyed to the City of Lincoln Wastewater Treatment Plant (LWWTP). Currently, the LWWTP has a capacity average dry weather flow (ADWF) of 5.9 MGD, and the facility receives an average of 4.2 MGD. The LWWTP is currently at the design capacity for biochemical oxygen demand (BOD); however, the City of Lincoln has plans designed to expand the plant in two phases of 1.2 MGD and 0.9 MGD, respectively.<sup>31</sup> The proposed project is required to pay the SMD-1 Regional Connection Fee to fund the purchase of treatment capacity from Lincoln. Payment of regional sewer fees would constitute the project's fair share contribution towards the expansions that have been designed for the LWWTP.

Given that the proposed residential development would be limited to 34 new units, the wastewater generated by the proposed project would be relatively minor compared to demands associated with the BRSP; buildout of BRSP Phase 1 would include construction of 1,010 new units. The BRSP EIR concluded that wastewater demands associated with buildout of the BRSP would be accommodated by the LWWTP. Thus, while buildout of the project site was not accounted for in the BRSP EIR analysis, similar to the BRSP, the proposed project would not cause the LWWTP to exceed the currently permitted capacity. The LWWTP would have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments, and a **less-than-significant** impact would occur. No mitigation measures are required.

### Discussion Item XIX-4, 5:

Solid waste would be collected by Recology Auburn Placer, a private collection firm, and transported to the Western Placer Waste Management Authority's Western Regional Sanitary Landfill located in the City of Lincoln, California. As of 2017, the year for which the most recent information is available, the remaining capacity of the landfill was 24,468,271 cubic yards (CY) with an estimated closure date of 2058. The landfill has a maximum permitted capacity

<sup>30</sup> Placer County Water Agency. *2015 Urban Water Management Plan* [Table 4-6]. Adopted June 2, 2016.

<sup>31</sup> Ray Leftwich, Public Works Director/City Engineer, City of Lincoln Public Works Department. Personal Communication [email] with Nick Pappani, Vice President, Raney Planning & Management, Inc. September 30, 2020.

of 36,350,000 CY; thus, approximately 70 percent of the permitted capacity was available in 2017.<sup>32</sup> Recology has issued a Will-Serve letter indicating that the firm is capable of providing service to the project.<sup>33</sup> Furthermore, given that the proposed residential development would be limited to 34 units, solid waste generation associated with construction and operation of the proposed project would be relatively minor. Based on the above, the proposed project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs in compliance with all applicable laws, and a **less-than-significant** impact would occur. No mitigation measures are required.

**XX. WILDFIRE** – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Substantially impair an adopted emergency response plan or emergency evacuation plan? (PLN)	X			
2. 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? (PLN)	X			
3. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) the construction or operation of which may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? (PLN)	X			
4. 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? (PLN)	X			

#### Discussion Items XX-1, 2, 3, 4:

Per the Fire Safe Plan prepared for the proposed project, the project site is in a State Responsibility Area, and is in an area rated Moderate for fire hazards.<sup>34</sup> Furthermore, proposed Lots 15 through 25 and 29 through 34 are located within a hillside area that has been previously designated by CAL FIRE and the PFPD as a potential Wildland Urban Interface (WUI) Zone, should buildings be constructed in the area. The WUI area includes the following undeveloped areas that have the potential to impact the structures constructed within the project due to the topography and vegetation types present:

- The 168-acre La Faille Ranch area that forms a canyon below the project site;
- An approximately 125+ acre designated open space area in BRSP west of the project site; and
- An approximately 80+ acre designated open space area in BRSP east of the project site.

The open space and undeveloped areas north of Bickford Ranch Road near the project site consist of a series of small canyons and drainages that flow north towards SR 193. The canyons in this area have steep topography on both sides of the drainage. The canyon areas have extensive vegetation and tree canopies in most areas, creating the potential for rapid wildfire growth that may quickly impact the project. The open space and undeveloped areas are of concern to the fire agencies due to the adjacent canyon steep slopes that limit fire apparatus access and can potentially create a "Chimney Effect" condition during intense wildland fire activity. The applicant intends to address this risk by creating a 300-foot wide Fuel Management Zone adjacent to the project's northern boundary. Additional evaluation related to the ability of the fuel break to address the wildfire risk posed by the WUI is required. Thus, a **potentially significant** impact could occur.

*Further analysis of these impacts will be discussed in the Wildfire chapter of The Ridge EIR.*

<sup>32</sup> Western Placer Waste Management Authority. *Joint Technical Document, Western Regional Sanitary Landfill, Placer County, California* [Table 4-1]. Revised August 2017.

<sup>33</sup> Recology Auburn Placer. *Will Serve, Project Site: The Ridge Project #PLN 18-00301*. May 17, 2019

<sup>34</sup> Philips Consulting Services. *Fire Safe Plan, The Ridge Subdivision Project*. September 2019.

**F. MANDATORY FINDINGS OF SIGNIFICANCE:**

Environmental Issue	Yes	No
1. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<b>X</b>	<input type="checkbox"/>
2. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<b>X</b>	<input type="checkbox"/>
3. Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<b>X</b>	<input type="checkbox"/>

**Discussion Item F-1:**

As discussed in Section V, Cultural Resources, of this Initial Study the proposed project would not result in significant impacts to historic resources. With implementation of MM V-1 and MM V-2, potential impacts to archaeological resources would be reduced to less-than-significant levels. However, further analysis is required to ensure that the proposed project would not substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce the number or restrict the range of a rare or endangered plant or animal.

*Further analysis of these impacts will be discussed in The Ridge EIR.*

**Discussion Item F-2:**

The proposed project in conjunction with other development within Placer County could incrementally contribute to cumulative impacts in the project area. In particular, as discussed in Section III, Air Quality, of this Initial Study, the proposed project could cumulatively contribute to regional air quality health effects through emissions of criteria and mobile source air pollutants. Per Section VIII, Greenhouse Gas Emissions, of this Initial Study, buildout of the proposed project would contribute to increases of GHG emissions that are associated with global climate change during construction and operations, and impacts related to GHG emissions and global climate change could be cumulatively considerable. In addition, per Section XVII, Transportation, of this Initial Study, the proposed project could result in a contribution to regional VMT.

*Further analysis of these impacts will be discussed in The Ridge EIR.*

**Discussion Item F-3:**

As described in this Initial Study, implementation of the proposed project could result in impacts related to air quality and wildfire. As such, in the absence of appropriate mitigation, the project could cause substantial adverse effects on human beings.

*Further analysis of these impacts will be discussed in The Ridge EIR.*

**G. OTHER RESPONSIBLE AND TRUSTEE AGENCIES** whose approval is required:

<input checked="" type="checkbox"/> California Department of Fish and Wildlife	<input type="checkbox"/> Local Agency Formation Commission (LAFCO)
<input checked="" type="checkbox"/> California Department of Forestry	<input type="checkbox"/> National Marine Fisheries Service
<input type="checkbox"/> California Department of Health Services	<input type="checkbox"/> Tahoe Regional Planning Agency
<input type="checkbox"/> California Department of Toxic Substances	<input checked="" type="checkbox"/> U.S. Army Corps of Engineers
<input type="checkbox"/> California Department of Transportation	<input type="checkbox"/> U.S. Fish and Wildlife Service
<input type="checkbox"/> California Integrated Waste Management Board	<input type="checkbox"/>
<input checked="" type="checkbox"/> California Regional Water Quality Control Board	<input type="checkbox"/>

**H. DETERMINATION** – The Environmental Review Committee finds that:

<b>X</b>	The proposed project <b>MAY</b> have a significant effect on the environment, and an <b>ENVIRONMENTAL IMPACT REPORT</b> is required.
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**I. ENVIRONMENTAL REVIEW COMMITTEE** (Persons/Departments consulted):

Planning Services Division, Christopher Schmidt, Chairperson  
 Planning Services Division-Air Quality, Angel Green  
 Engineering and Surveying Division, Phillip A. Frantz, P.E.  
 Department of Public Works-Transportation, Phil Vassion  
 DPW-Environmental Engineering Division, Sarah Gillmore, P.E.  
 Flood Control and Water Conservation District, Brad Brewer  
 DPW- Parks Division, Ted Rel  
 HHS-Environmental Health Services, Joseph Scarbrough  
 Placer County Fire Planning/CDF, Brian Skehan

Signature \_\_\_\_\_ Date \_\_\_\_\_  
 Leigh Chavez, Environmental Coordinator

**J. SUPPORTING INFORMATION SOURCES:** The following public documents were utilized and site-specific studies prepared to evaluate in detail the effects or impacts associated with the project. This information is available at the following web address: <https://www.placer.ca.gov/2526/Environmental-Impact-Reports>

<b>County Documents</b>	<input checked="" type="checkbox"/> Air Pollution Control District Rules & Regulations	
	<input checked="" type="checkbox"/> Community Plan	
	<input checked="" type="checkbox"/> Environmental Review Ordinance	
	<input checked="" type="checkbox"/> General Plan	
	<input checked="" type="checkbox"/> Grading Ordinance	
	<input checked="" type="checkbox"/> Land Development Manual	
	<input checked="" type="checkbox"/> Land Division Ordinance	
	<input checked="" type="checkbox"/> Stormwater Management Manual	
	<input checked="" type="checkbox"/> Tree Ordinance	
<input type="checkbox"/>		
<b>Trustee Agency Documents</b>	<input type="checkbox"/> Department of Toxic Substances Control	
<b>Site-Specific Studies</b>	Planning Services Division	<input checked="" type="checkbox"/> Biological Study
		<input checked="" type="checkbox"/> Cultural Resources Pedestrian Survey
		<input checked="" type="checkbox"/> Cultural Resources Records Search
		<input type="checkbox"/> Lighting & Photometric Plan
		<input checked="" type="checkbox"/> Paleontological Survey

		<input checked="" type="checkbox"/> Tree Survey & Arborist Report
		<input type="checkbox"/> Visual Impact Analysis
		<input checked="" type="checkbox"/> Wetland Delineation
		<input checked="" type="checkbox"/> Acoustical Analysis
		<input type="checkbox"/>
	Engineering & Surveying Division, Flood Control District	<input type="checkbox"/> Phasing Plan
		<input checked="" type="checkbox"/> Preliminary Grading Plan
		<input checked="" type="checkbox"/> Preliminary Geotechnical Report
		<input checked="" type="checkbox"/> Preliminary Drainage Report
		<input checked="" type="checkbox"/> Stormwater & Surface Water Quality BMP Plan
		<input checked="" type="checkbox"/> West Placer Storm Water Quality Design Manual
		<input checked="" type="checkbox"/> Traffic Study
		<input checked="" type="checkbox"/> Sewer Pipeline Capacity Analysis
		<input type="checkbox"/> Placer County Commercial/Industrial Waste Survey (where public sewer is available)
		<input type="checkbox"/> Sewer Master Plan
		<input checked="" type="checkbox"/> Utility Plan
		<input checked="" type="checkbox"/> Tentative Map
		<input checked="" type="checkbox"/> BMP Plan
		<input checked="" type="checkbox"/> SWQP
		Environmental Health Services
	<input type="checkbox"/> Hydro-Geological Study	
	<input checked="" type="checkbox"/> Phase I Environmental Site Assessment	
	<input type="checkbox"/> Soils Screening	
	<input type="checkbox"/> Preliminary Endangerment Assessment	
	<input type="checkbox"/>	
	Planning Services Division, Air Quality	<input type="checkbox"/> CALINE4 Carbon Monoxide Analysis
		<input type="checkbox"/> Construction Emission & Dust Control Plan
		<input type="checkbox"/> Geotechnical Report (for naturally occurring asbestos)
		<input type="checkbox"/> Health Risk Assessment
		<input type="checkbox"/> CalEEMod Model Output
		<input type="checkbox"/>
	Fire Department	<input type="checkbox"/> Emergency Response and/or Evacuation Plan
		<input type="checkbox"/> Traffic & Circulation Plan
<input type="checkbox"/> Fire Safe Plan		

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## **APPENDIX D**

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The Ridge Project - Placer County APCD Air District, Annual

**The Ridge Project**  
**Placer County APCD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.90	Acre	1.90	82,764.00	0
Other Non-Asphalt Surfaces	1,133.70	1000sqft	26.03	1,133,700.00	0
Single Family Housing	34.00	Dwelling Unit	21.92	61,200.00	97

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	74
<b>Climate Zone</b>	2			<b>Operational Year</b>	2026
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	222.25	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**



The Ridge Project - Placer County APCD Air District, Annual

Project Characteristics - CO2 intensity factor adjusted per PG&E's RPS projections.

Land Use - Lot acreage adjusted per site plan.

Construction Phase - Construction phase timing based on applicant-provided questionnaire.

Vehicle Trips - Trip generation rates adjusted to be consistent with project-specific traffic study prepared by F&P.

Area Mitigation -

Energy Mitigation - Title 24 exceedance used to reflect compliance with 2019 CBSC.

Water Mitigation - Water conservation strategy applied to reflect compliance with 2019 CalGreen Code and MWEL0.

Grading -

Land Use Change -

## The Ridge Project - Placer County APCD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	55.00	370.00
tblConstructionPhase	NumDays	740.00	370.00
tblConstructionPhase	NumDays	75.00	45.00
tblConstructionPhase	NumDays	55.00	21.00
tblConstructionPhase	PhaseEndDate	4/28/2028	6/29/2026
tblConstructionPhase	PhaseEndDate	11/26/2027	6/15/2026
tblConstructionPhase	PhaseEndDate	1/24/2025	12/13/2024
tblConstructionPhase	PhaseEndDate	2/11/2028	1/13/2025
tblConstructionPhase	PhaseStartDate	2/12/2028	1/28/2025
tblConstructionPhase	PhaseStartDate	1/25/2025	1/14/2025
tblConstructionPhase	PhaseStartDate	11/27/2027	12/14/2024
tblLandUse	LotAcreage	11.04	21.92
tblProjectCharacteristics	CO2IntensityFactor	641.35	222.25
tblVehicleTrips	ST_TR	9.91	9.44
tblVehicleTrips	SU_TR	8.62	9.44
tblVehicleTrips	WD_TR	9.52	9.44

## 2.0 Emissions Summary

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The Ridge Project - Placer County APCD Air District, Annual

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.1218	1.1946	1.0016	2.1600e-003	0.4725	0.0513	0.5238	0.2316	0.0472	0.2788	0.0000	189.5863	189.5863	0.0599	0.0000	191.0833
2025	0.8105	3.9979	4.0652	0.0158	0.7848	0.0805	0.8653	0.2128	0.0760	0.2888	0.0000	1,445.2103	1,445.2103	0.1023	0.0000	1,447.7685
2026	0.3968	1.8476	1.8503	7.3200e-003	0.3733	0.0371	0.4104	0.1012	0.0351	0.1363	0.0000	669.0382	669.0382	0.0461	0.0000	670.1907
<b>Maximum</b>	<b>0.8105</b>	<b>3.9979</b>	<b>4.0652</b>	<b>0.0158</b>	<b>0.7848</b>	<b>0.0805</b>	<b>0.8653</b>	<b>0.2316</b>	<b>0.0760</b>	<b>0.2888</b>	<b>0.0000</b>	<b>1,445.2103</b>	<b>1,445.2103</b>	<b>0.1023</b>	<b>0.0000</b>	<b>1,447.7685</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.1218	1.1946	1.0016	2.1600e-003	0.4725	0.0513	0.5238	0.2316	0.0472	0.2788	0.0000	189.5861	189.5861	0.0599	0.0000	191.0831
2025	0.8105	3.9979	4.0652	0.0158	0.7848	0.0805	0.8653	0.2128	0.0760	0.2888	0.0000	1,445.2099	1,445.2099	0.1023	0.0000	1,447.7681
2026	0.3968	1.8476	1.8503	7.3200e-003	0.3733	0.0371	0.4104	0.1012	0.0351	0.1363	0.0000	669.0380	669.0380	0.0461	0.0000	670.1905
<b>Maximum</b>	<b>0.8105</b>	<b>3.9979</b>	<b>4.0652</b>	<b>0.0158</b>	<b>0.7848</b>	<b>0.0805</b>	<b>0.8653</b>	<b>0.2316</b>	<b>0.0760</b>	<b>0.2888</b>	<b>0.0000</b>	<b>1,445.2099</b>	<b>1,445.2099</b>	<b>0.1023</b>	<b>0.0000</b>	<b>1,447.7681</b>

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2024	11-30-2024	1.0754	1.0754
2	12-1-2024	2-28-2025	0.8837	0.8837
3	3-1-2025	5-31-2025	1.2485	1.2485
4	6-1-2025	8-31-2025	1.2459	1.2459
5	9-1-2025	11-30-2025	1.2374	1.2374
6	12-1-2025	2-28-2026	1.2185	1.2185
7	3-1-2026	5-31-2026	1.2367	1.2367
8	6-1-2026	8-31-2026	0.2248	0.2248
		Highest	1.2485	1.2485

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**2.2 Overall Operational**  
**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.5148	0.0447	2.8960	4.7900e-003		0.3707	0.3707		0.3707	0.3707	35.1206	15.1617	50.2823	0.0329	2.7600e-003	51.9270
Energy	4.7400e-003	0.0405	0.0172	2.6000e-004		3.2700e-003	3.2700e-003		3.2700e-003	3.2700e-003	0.0000	75.8153	75.8153	4.6700e-003	1.6400e-003	76.4211
Mobile	0.0735	0.5304	0.8566	4.0200e-003	0.3418	2.7300e-003	0.3445	0.0919	2.5500e-003	0.0945	0.0000	370.5599	370.5599	0.0112	0.0000	370.8389
Waste						0.0000	0.0000		0.0000	0.0000	7.0884	0.0000	7.0884	0.4189	0.0000	17.5613
Water						0.0000	0.0000		0.0000	0.0000	0.7028	1.7012	2.4039	0.0724	1.7500e-003	4.7357
<b>Total</b>	<b>2.5930</b>	<b>0.6155</b>	<b>3.7699</b>	<b>9.0700e-003</b>	<b>0.3418</b>	<b>0.3767</b>	<b>0.7184</b>	<b>0.0919</b>	<b>0.3765</b>	<b>0.4684</b>	<b>42.9118</b>	<b>463.2381</b>	<b>506.1499</b>	<b>0.5400</b>	<b>6.1500e-003</b>	<b>521.4840</b>

The Ridge Project - Placer County APCD Air District, Annual

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.4969	0.0447	2.8960	4.7900e-003		0.3707	0.3707		0.3707	0.3707	35.1206	15.1617	50.2823	0.0329	2.7600e-003	51.9270
Energy	4.4400e-003	0.0379	0.0161	2.4000e-004		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003	0.0000	43.9338	43.9338	8.4000e-004	8.1000e-004	44.1949
Mobile	0.0735	0.5304	0.8566	4.0200e-003	0.3418	2.7300e-003	0.3445	0.0919	2.5500e-003	0.0945	0.0000	370.5599	370.5599	0.0112	0.0000	370.8389
Waste						0.0000	0.0000		0.0000	0.0000	7.0884	0.0000	7.0884	0.4189	0.0000	17.5613
Water						0.0000	0.0000		0.0000	0.0000	0.5622	1.3609	1.9232	0.0579	1.4000e-003	3.7885
<b>Total</b>	<b>2.5748</b>	<b>0.6130</b>	<b>3.7688</b>	<b>9.0500e-003</b>	<b>0.3418</b>	<b>0.3765</b>	<b>0.7182</b>	<b>0.0919</b>	<b>0.3763</b>	<b>0.4682</b>	<b>42.7712</b>	<b>431.0164</b>	<b>473.7876</b>	<b>0.5217</b>	<b>4.9700e-003</b>	<b>488.3106</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.70</b>	<b>0.41</b>	<b>0.03</b>	<b>0.22</b>	<b>0.00</b>	<b>0.05</b>	<b>0.03</b>	<b>0.00</b>	<b>0.05</b>	<b>0.04</b>	<b>0.33</b>	<b>6.96</b>	<b>6.39</b>	<b>3.39</b>	<b>19.19</b>	<b>6.36</b>

The Ridge Project - Placer County APCD Air District, Annual

**2.3 Vegetation**

Vegetation

	CO2e
Category	MT
Vegetation Land Change	-888.0000
<b>Total</b>	<b>-888.0000</b>

**3.0 Construction Detail**

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2024	10/11/2024	5	30	
2	Grading	Grading	10/12/2024	12/13/2024	5	45	
3	Building Construction	Building Construction	1/14/2025	6/15/2026	5	370	
4	Paving	Paving	12/14/2024	1/13/2025	5	21	
5	Architectural Coating	Architectural Coating	1/28/2025	6/29/2026	5	370	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 27.93**

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**Residential Indoor: 123,930; Residential Outdoor: 41,310; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 72,988 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**



The Ridge Project - Placer County APCD Air District, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	523.00	203.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	105.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2710	0.0000	0.2710	0.1490	0.0000	0.1490	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0399	0.4076	0.2750	5.7000e-004		0.0184	0.0184		0.0170	0.0170	0.0000	50.1856	50.1856	0.0162	0.0000	50.5914
<b>Total</b>	<b>0.0399</b>	<b>0.4076</b>	<b>0.2750</b>	<b>5.7000e-004</b>	<b>0.2710</b>	<b>0.0184</b>	<b>0.2894</b>	<b>0.1490</b>	<b>0.0170</b>	<b>0.1659</b>	<b>0.0000</b>	<b>50.1856</b>	<b>50.1856</b>	<b>0.0162</b>	<b>0.0000</b>	<b>50.5914</b>

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**3.2 Site Preparation - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	4.3000e-004	5.0300e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.5720	1.5720	3.0000e-005	0.0000	1.5727
<b>Total</b>	<b>7.2000e-004</b>	<b>4.3000e-004</b>	<b>5.0300e-003</b>	<b>2.0000e-005</b>	<b>2.1200e-003</b>	<b>1.0000e-005</b>	<b>2.1300e-003</b>	<b>5.6000e-004</b>	<b>1.0000e-005</b>	<b>5.8000e-004</b>	<b>0.0000</b>	<b>1.5720</b>	<b>1.5720</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.5727</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2710	0.0000	0.2710	0.1490	0.0000	0.1490	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0399	0.4076	0.2750	5.7000e-004		0.0184	0.0184		0.0170	0.0170	0.0000	50.1855	50.1855	0.0162	0.0000	50.5913
<b>Total</b>	<b>0.0399</b>	<b>0.4076</b>	<b>0.2750</b>	<b>5.7000e-004</b>	<b>0.2710</b>	<b>0.0184</b>	<b>0.2894</b>	<b>0.1490</b>	<b>0.0170</b>	<b>0.1659</b>	<b>0.0000</b>	<b>50.1855</b>	<b>50.1855</b>	<b>0.0162</b>	<b>0.0000</b>	<b>50.5913</b>

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**3.2 Site Preparation - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	4.3000e-004	5.0300e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.5720	1.5720	3.0000e-005	0.0000	1.5727
<b>Total</b>	<b>7.2000e-004</b>	<b>4.3000e-004</b>	<b>5.0300e-003</b>	<b>2.0000e-005</b>	<b>2.1200e-003</b>	<b>1.0000e-005</b>	<b>2.1300e-003</b>	<b>5.6000e-004</b>	<b>1.0000e-005</b>	<b>5.8000e-004</b>	<b>0.0000</b>	<b>1.5720</b>	<b>1.5720</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.5727</b>

**3.3 Grading - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1952	0.0000	0.1952	0.0809	0.0000	0.0809	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0724	0.7285	0.6238	1.4000e-003		0.0301	0.0301		0.0276	0.0276	0.0000	122.6689	122.6689	0.0397	0.0000	123.6608
<b>Total</b>	<b>0.0724</b>	<b>0.7285</b>	<b>0.6238</b>	<b>1.4000e-003</b>	<b>0.1952</b>	<b>0.0301</b>	<b>0.2252</b>	<b>0.0809</b>	<b>0.0276</b>	<b>0.1086</b>	<b>0.0000</b>	<b>122.6689</b>	<b>122.6689</b>	<b>0.0397</b>	<b>0.0000</b>	<b>123.6608</b>

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**3.3 Grading - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-003	7.2000e-004	8.3800e-003	3.0000e-005	3.5300e-003	2.0000e-005	3.5600e-003	9.4000e-004	2.0000e-005	9.6000e-004	0.0000	2.6199	2.6199	5.0000e-005	0.0000	2.6212
<b>Total</b>	<b>1.2000e-003</b>	<b>7.2000e-004</b>	<b>8.3800e-003</b>	<b>3.0000e-005</b>	<b>3.5300e-003</b>	<b>2.0000e-005</b>	<b>3.5600e-003</b>	<b>9.4000e-004</b>	<b>2.0000e-005</b>	<b>9.6000e-004</b>	<b>0.0000</b>	<b>2.6199</b>	<b>2.6199</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>2.6212</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1952	0.0000	0.1952	0.0809	0.0000	0.0809	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0724	0.7285	0.6238	1.4000e-003		0.0301	0.0301		0.0276	0.0276	0.0000	122.6688	122.6688	0.0397	0.0000	123.6606
<b>Total</b>	<b>0.0724</b>	<b>0.7285</b>	<b>0.6238</b>	<b>1.4000e-003</b>	<b>0.1952</b>	<b>0.0301</b>	<b>0.2252</b>	<b>0.0809</b>	<b>0.0276</b>	<b>0.1086</b>	<b>0.0000</b>	<b>122.6688</b>	<b>122.6688</b>	<b>0.0397</b>	<b>0.0000</b>	<b>123.6606</b>

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**3.3 Grading - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-003	7.2000e-004	8.3800e-003	3.0000e-005	3.5300e-003	2.0000e-005	3.5600e-003	9.4000e-004	2.0000e-005	9.6000e-004	0.0000	2.6199	2.6199	5.0000e-005	0.0000	2.6212
<b>Total</b>	<b>1.2000e-003</b>	<b>7.2000e-004</b>	<b>8.3800e-003</b>	<b>3.0000e-005</b>	<b>3.5300e-003</b>	<b>2.0000e-005</b>	<b>3.5600e-003</b>	<b>9.4000e-004</b>	<b>2.0000e-005</b>	<b>9.6000e-004</b>	<b>0.0000</b>	<b>2.6199</b>	<b>2.6199</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>2.6212</b>

**3.4 Building Construction - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1723	1.5712	2.0267	3.4000e-003		0.0665	0.0665		0.0625	0.0625	0.0000	292.2185	292.2185	0.0687	0.0000	293.9358
<b>Total</b>	<b>0.1723</b>	<b>1.5712</b>	<b>2.0267</b>	<b>3.4000e-003</b>		<b>0.0665</b>	<b>0.0665</b>		<b>0.0625</b>	<b>0.0625</b>	<b>0.0000</b>	<b>292.2185</b>	<b>292.2185</b>	<b>0.0687</b>	<b>0.0000</b>	<b>293.9358</b>

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**3.4 Building Construction - 2025**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0526	2.1356	0.3938	7.0900e-003	0.1670	2.2300e-003	0.1692	0.0483	2.1300e-003	0.0505	0.0000	673.5201	673.5201	0.0213	0.0000	674.0535
Worker	0.1664	0.0954	1.1394	4.0700e-003	0.5175	3.0900e-003	0.5206	0.1377	2.8400e-003	0.1406	0.0000	368.2027	368.2027	6.4500e-003	0.0000	368.3640
<b>Total</b>	<b>0.2190</b>	<b>2.2310</b>	<b>1.5332</b>	<b>0.0112</b>	<b>0.6845</b>	<b>5.3200e-003</b>	<b>0.6898</b>	<b>0.1861</b>	<b>4.9700e-003</b>	<b>0.1910</b>	<b>0.0000</b>	<b>1,041.7229</b>	<b>1,041.7229</b>	<b>0.0278</b>	<b>0.0000</b>	<b>1,042.4176</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1723	1.5712	2.0267	3.4000e-003		0.0665	0.0665		0.0625	0.0625	0.0000	292.2182	292.2182	0.0687	0.0000	293.9355
<b>Total</b>	<b>0.1723</b>	<b>1.5712</b>	<b>2.0267</b>	<b>3.4000e-003</b>		<b>0.0665</b>	<b>0.0665</b>		<b>0.0625</b>	<b>0.0625</b>	<b>0.0000</b>	<b>292.2182</b>	<b>292.2182</b>	<b>0.0687</b>	<b>0.0000</b>	<b>293.9355</b>

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**3.4 Building Construction - 2025**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0526	2.1356	0.3938	7.0900e-003	0.1670	2.2300e-003	0.1692	0.0483	2.1300e-003	0.0505	0.0000	673.5201	673.5201	0.0213	0.0000	674.0535
Worker	0.1664	0.0954	1.1394	4.0700e-003	0.5175	3.0900e-003	0.5206	0.1377	2.8400e-003	0.1406	0.0000	368.2027	368.2027	6.4500e-003	0.0000	368.3640
<b>Total</b>	<b>0.2190</b>	<b>2.2310</b>	<b>1.5332</b>	<b>0.0112</b>	<b>0.6845</b>	<b>5.3200e-003</b>	<b>0.6898</b>	<b>0.1861</b>	<b>4.9700e-003</b>	<b>0.1910</b>	<b>0.0000</b>	<b>1,041.7229</b>	<b>1,041.7229</b>	<b>0.0278</b>	<b>0.0000</b>	<b>1,042.4176</b>

**3.4 Building Construction - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0807	0.7357	0.9490	1.5900e-003		0.0311	0.0311		0.0293	0.0293	0.0000	136.8325	136.8325	0.0322	0.0000	137.6366
<b>Total</b>	<b>0.0807</b>	<b>0.7357</b>	<b>0.9490</b>	<b>1.5900e-003</b>		<b>0.0311</b>	<b>0.0311</b>		<b>0.0293</b>	<b>0.0293</b>	<b>0.0000</b>	<b>136.8325</b>	<b>136.8325</b>	<b>0.0322</b>	<b>0.0000</b>	<b>137.6366</b>

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**3.4 Building Construction - 2026**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0240	0.9887	0.1789	3.3000e-003	0.0782	1.0100e-003	0.0792	0.0226	9.7000e-004	0.0236	0.0000	313.6150	313.6150	9.6900e-003	0.0000	313.8573
Worker	0.0740	0.0409	0.4981	1.8400e-003	0.2423	1.4000e-003	0.2437	0.0645	1.2900e-003	0.0658	0.0000	166.0810	166.0810	2.7500e-003	0.0000	166.1498
<b>Total</b>	<b>0.0981</b>	<b>1.0296</b>	<b>0.6770</b>	<b>5.1400e-003</b>	<b>0.3205</b>	<b>2.4100e-003</b>	<b>0.3229</b>	<b>0.0871</b>	<b>2.2600e-003</b>	<b>0.0894</b>	<b>0.0000</b>	<b>479.6960</b>	<b>479.6960</b>	<b>0.0124</b>	<b>0.0000</b>	<b>480.0071</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0807	0.7357	0.9490	1.5900e-003		0.0311	0.0311		0.0293	0.0293	0.0000	136.8323	136.8323	0.0322	0.0000	137.6364
<b>Total</b>	<b>0.0807</b>	<b>0.7357</b>	<b>0.9490</b>	<b>1.5900e-003</b>		<b>0.0311</b>	<b>0.0311</b>		<b>0.0293</b>	<b>0.0293</b>	<b>0.0000</b>	<b>136.8323</b>	<b>136.8323</b>	<b>0.0322</b>	<b>0.0000</b>	<b>137.6364</b>



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**3.4 Building Construction - 2026**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0240	0.9887	0.1789	3.3000e-003	0.0782	1.0100e-003	0.0792	0.0226	9.7000e-004	0.0236	0.0000	313.6150	313.6150	9.6900e-003	0.0000	313.8573
Worker	0.0740	0.0409	0.4981	1.8400e-003	0.2423	1.4000e-003	0.2437	0.0645	1.2900e-003	0.0658	0.0000	166.0810	166.0810	2.7500e-003	0.0000	166.1498
<b>Total</b>	<b>0.0981</b>	<b>1.0296</b>	<b>0.6770</b>	<b>5.1400e-003</b>	<b>0.3205</b>	<b>2.4100e-003</b>	<b>0.3229</b>	<b>0.0871</b>	<b>2.2600e-003</b>	<b>0.0894</b>	<b>0.0000</b>	<b>479.6960</b>	<b>479.6960</b>	<b>0.0124</b>	<b>0.0000</b>	<b>480.0071</b>

**3.5 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.9300e-003	0.0572	0.0878	1.4000e-004		2.8100e-003	2.8100e-003		2.5900e-003	2.5900e-003	0.0000	12.0159	12.0159	3.8900e-003	0.0000	12.1131
Paving	1.4200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>7.3500e-003</b>	<b>0.0572</b>	<b>0.0878</b>	<b>1.4000e-004</b>		<b>2.8100e-003</b>	<b>2.8100e-003</b>		<b>2.5900e-003</b>	<b>2.5900e-003</b>	<b>0.0000</b>	<b>12.0159</b>	<b>12.0159</b>	<b>3.8900e-003</b>	<b>0.0000</b>	<b>12.1131</b>

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**3.5 Paving - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.4000e-004	1.6800e-003	1.0000e-005	7.1000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5240	0.5240	1.0000e-005	0.0000	0.5242
<b>Total</b>	<b>2.4000e-004</b>	<b>1.4000e-004</b>	<b>1.6800e-003</b>	<b>1.0000e-005</b>	<b>7.1000e-004</b>	<b>0.0000</b>	<b>7.1000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.5240</b>	<b>0.5240</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.5242</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.9300e-003	0.0572	0.0878	1.4000e-004		2.8100e-003	2.8100e-003		2.5900e-003	2.5900e-003	0.0000	12.0159	12.0159	3.8900e-003	0.0000	12.1131
Paving	1.4200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>7.3500e-003</b>	<b>0.0572</b>	<b>0.0878</b>	<b>1.4000e-004</b>		<b>2.8100e-003</b>	<b>2.8100e-003</b>		<b>2.5900e-003</b>	<b>2.5900e-003</b>	<b>0.0000</b>	<b>12.0159</b>	<b>12.0159</b>	<b>3.8900e-003</b>	<b>0.0000</b>	<b>12.1131</b>

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**3.5 Paving - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.4000e-004	1.6800e-003	1.0000e-005	7.1000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5240	0.5240	1.0000e-005	0.0000	0.5242
<b>Total</b>	<b>2.4000e-004</b>	<b>1.4000e-004</b>	<b>1.6800e-003</b>	<b>1.0000e-005</b>	<b>7.1000e-004</b>	<b>0.0000</b>	<b>7.1000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.5240</b>	<b>0.5240</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.5242</b>

**3.5 Paving - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.1200e-003	0.0386	0.0656	1.0000e-004		1.8800e-003	1.8800e-003		1.7300e-003	1.7300e-003	0.0000	9.0087	9.0087	2.9100e-003	0.0000	9.0815
Paving	1.0700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>5.1900e-003</b>	<b>0.0386</b>	<b>0.0656</b>	<b>1.0000e-004</b>		<b>1.8800e-003</b>	<b>1.8800e-003</b>		<b>1.7300e-003</b>	<b>1.7300e-003</b>	<b>0.0000</b>	<b>9.0087</b>	<b>9.0087</b>	<b>2.9100e-003</b>	<b>0.0000</b>	<b>9.0815</b>

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**3.5 Paving - 2025**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.0000e-004	1.1700e-003	0.0000	5.3000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3772	0.3772	1.0000e-005	0.0000	0.3773
<b>Total</b>	<b>1.7000e-004</b>	<b>1.0000e-004</b>	<b>1.1700e-003</b>	<b>0.0000</b>	<b>5.3000e-004</b>	<b>0.0000</b>	<b>5.3000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.3772</b>	<b>0.3772</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3773</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.1200e-003	0.0386	0.0656	1.0000e-004		1.8800e-003	1.8800e-003		1.7300e-003	1.7300e-003	0.0000	9.0087	9.0087	2.9100e-003	0.0000	9.0815
Paving	1.0700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>5.1900e-003</b>	<b>0.0386</b>	<b>0.0656</b>	<b>1.0000e-004</b>		<b>1.8800e-003</b>	<b>1.8800e-003</b>		<b>1.7300e-003</b>	<b>1.7300e-003</b>	<b>0.0000</b>	<b>9.0087</b>	<b>9.0087</b>	<b>2.9100e-003</b>	<b>0.0000</b>	<b>9.0815</b>

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**3.5 Paving - 2025**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.0000e-004	1.1700e-003	0.0000	5.3000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3772	0.3772	1.0000e-005	0.0000	0.3773
<b>Total</b>	<b>1.7000e-004</b>	<b>1.0000e-004</b>	<b>1.1700e-003</b>	<b>0.0000</b>	<b>5.3000e-004</b>	<b>0.0000</b>	<b>5.3000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.3772</b>	<b>0.3772</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3773</b>

**3.6 Architectural Coating - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3611					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0207	0.1386	0.2189	3.6000e-004		6.2300e-003	6.2300e-003		6.2300e-003	6.2300e-003	0.0000	30.8944	30.8944	1.6900e-003	0.0000	30.9365
<b>Total</b>	<b>0.3818</b>	<b>0.1386</b>	<b>0.2189</b>	<b>3.6000e-004</b>		<b>6.2300e-003</b>	<b>6.2300e-003</b>		<b>6.2300e-003</b>	<b>6.2300e-003</b>	<b>0.0000</b>	<b>30.8944</b>	<b>30.8944</b>	<b>1.6900e-003</b>	<b>0.0000</b>	<b>30.9365</b>

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**3.6 Architectural Coating - 2025**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0321	0.0184	0.2197	7.8000e-004	0.0998	6.0000e-004	0.1004	0.0266	5.5000e-004	0.0271	0.0000	70.9887	70.9887	1.2400e-003	0.0000	71.0198
<b>Total</b>	<b>0.0321</b>	<b>0.0184</b>	<b>0.2197</b>	<b>7.8000e-004</b>	<b>0.0998</b>	<b>6.0000e-004</b>	<b>0.1004</b>	<b>0.0266</b>	<b>5.5000e-004</b>	<b>0.0271</b>	<b>0.0000</b>	<b>70.9887</b>	<b>70.9887</b>	<b>1.2400e-003</b>	<b>0.0000</b>	<b>71.0198</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3611					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0207	0.1386	0.2189	3.6000e-004		6.2300e-003	6.2300e-003		6.2300e-003	6.2300e-003	0.0000	30.8943	30.8943	1.6900e-003	0.0000	30.9365
<b>Total</b>	<b>0.3818</b>	<b>0.1386</b>	<b>0.2189</b>	<b>3.6000e-004</b>		<b>6.2300e-003</b>	<b>6.2300e-003</b>		<b>6.2300e-003</b>	<b>6.2300e-003</b>	<b>0.0000</b>	<b>30.8943</b>	<b>30.8943</b>	<b>1.6900e-003</b>	<b>0.0000</b>	<b>30.9365</b>

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**3.6 Architectural Coating - 2025**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0321	0.0184	0.2197	7.8000e-004	0.0998	6.0000e-004	0.1004	0.0266	5.5000e-004	0.0271	0.0000	70.9887	70.9887	1.2400e-003	0.0000	71.0198
<b>Total</b>	<b>0.0321</b>	<b>0.0184</b>	<b>0.2197</b>	<b>7.8000e-004</b>	<b>0.0998</b>	<b>6.0000e-004</b>	<b>0.1004</b>	<b>0.0266</b>	<b>5.5000e-004</b>	<b>0.0271</b>	<b>0.0000</b>	<b>70.9887</b>	<b>70.9887</b>	<b>1.2400e-003</b>	<b>0.0000</b>	<b>71.0198</b>

**3.6 Architectural Coating - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1910					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0109	0.0733	0.1158	1.9000e-004		3.3000e-003	3.3000e-003		3.3000e-003	3.3000e-003	0.0000	16.3408	16.3408	8.9000e-004	0.0000	16.3631
<b>Total</b>	<b>0.2019</b>	<b>0.0733</b>	<b>0.1158</b>	<b>1.9000e-004</b>		<b>3.3000e-003</b>	<b>3.3000e-003</b>		<b>3.3000e-003</b>	<b>3.3000e-003</b>	<b>0.0000</b>	<b>16.3408</b>	<b>16.3408</b>	<b>8.9000e-004</b>	<b>0.0000</b>	<b>16.3631</b>

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**3.6 Architectural Coating - 2026**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0161	8.9100e-003	0.1085	4.0000e-004	0.0528	3.1000e-004	0.0531	0.0141	2.8000e-004	0.0143	0.0000	36.1689	36.1689	6.0000e-004	0.0000	36.1839
<b>Total</b>	<b>0.0161</b>	<b>8.9100e-003</b>	<b>0.1085</b>	<b>4.0000e-004</b>	<b>0.0528</b>	<b>3.1000e-004</b>	<b>0.0531</b>	<b>0.0141</b>	<b>2.8000e-004</b>	<b>0.0143</b>	<b>0.0000</b>	<b>36.1689</b>	<b>36.1689</b>	<b>6.0000e-004</b>	<b>0.0000</b>	<b>36.1839</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1910					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0109	0.0733	0.1158	1.9000e-004		3.3000e-003	3.3000e-003		3.3000e-003	3.3000e-003	0.0000	16.3408	16.3408	8.9000e-004	0.0000	16.3631
<b>Total</b>	<b>0.2019</b>	<b>0.0733</b>	<b>0.1158</b>	<b>1.9000e-004</b>		<b>3.3000e-003</b>	<b>3.3000e-003</b>		<b>3.3000e-003</b>	<b>3.3000e-003</b>	<b>0.0000</b>	<b>16.3408</b>	<b>16.3408</b>	<b>8.9000e-004</b>	<b>0.0000</b>	<b>16.3631</b>



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**3.6 Architectural Coating - 2026**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0161	8.9100e-003	0.1085	4.0000e-004	0.0528	3.1000e-004	0.0531	0.0141	2.8000e-004	0.0143	0.0000	36.1689	36.1689	6.0000e-004	0.0000	36.1839
<b>Total</b>	<b>0.0161</b>	<b>8.9100e-003</b>	<b>0.1085</b>	<b>4.0000e-004</b>	<b>0.0528</b>	<b>3.1000e-004</b>	<b>0.0531</b>	<b>0.0141</b>	<b>2.8000e-004</b>	<b>0.0143</b>	<b>0.0000</b>	<b>36.1689</b>	<b>36.1689</b>	<b>6.0000e-004</b>	<b>0.0000</b>	<b>36.1839</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0735	0.5304	0.8566	4.0200e-003	0.3418	2.7300e-003	0.3445	0.0919	2.5500e-003	0.0945	0.0000	370.5599	370.5599	0.0112	0.0000	370.8389
Unmitigated	0.0735	0.5304	0.8566	4.0200e-003	0.3418	2.7300e-003	0.3445	0.0919	2.5500e-003	0.0945	0.0000	370.5599	370.5599	0.0112	0.0000	370.8389

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	320.96	320.96	320.96	919,404	919,404
Total	320.96	320.96	320.96	919,404	919,404

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.515189	0.037254	0.221040	0.114665	0.016498	0.005188	0.033759	0.046875	0.001360	0.001132	0.005439	0.000735	0.000868
Single Family Housing	0.515189	0.037254	0.221040	0.114665	0.016498	0.005188	0.033759	0.046875	0.001360	0.001132	0.005439	0.000735	0.000868
Other Non-Asphalt Surfaces	0.515189	0.037254	0.221040	0.114665	0.016498	0.005188	0.033759	0.046875	0.001360	0.001132	0.005439	0.000735	0.000868

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	28.9417	28.9417	3.7800e-003	7.8000e-004	29.2689
NaturalGas Mitigated	4.4400e-003	0.0379	0.0161	2.4000e-004		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003	0.0000	43.9338	43.9338	8.4000e-004	8.1000e-004	44.1949
NaturalGas Unmitigated	4.7400e-003	0.0405	0.0172	2.6000e-004		3.2700e-003	3.2700e-003		3.2700e-003	3.2700e-003	0.0000	46.8737	46.8737	9.0000e-004	8.6000e-004	47.1522

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**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	878379	4.7400e-003	0.0405	0.0172	2.6000e-004		3.2700e-003	3.2700e-003		3.2700e-003	3.2700e-003	0.0000	46.8737	46.8737	9.0000e-004	8.6000e-004	47.1522
<b>Total</b>		<b>4.7400e-003</b>	<b>0.0405</b>	<b>0.0172</b>	<b>2.6000e-004</b>		<b>3.2700e-003</b>	<b>3.2700e-003</b>		<b>3.2700e-003</b>	<b>3.2700e-003</b>	<b>0.0000</b>	<b>46.8737</b>	<b>46.8737</b>	<b>9.0000e-004</b>	<b>8.6000e-004</b>	<b>47.1522</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	823288	4.4400e-003	0.0379	0.0161	2.4000e-004		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003	0.0000	43.9338	43.9338	8.4000e-004	8.1000e-004	44.1949
<b>Total</b>		<b>4.4400e-003</b>	<b>0.0379</b>	<b>0.0161</b>	<b>2.4000e-004</b>		<b>3.0700e-003</b>	<b>3.0700e-003</b>		<b>3.0700e-003</b>	<b>3.0700e-003</b>	<b>0.0000</b>	<b>43.9338</b>	<b>43.9338</b>	<b>8.4000e-004</b>	<b>8.1000e-004</b>	<b>44.1949</b>

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**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	287089	28.9417	3.7800e-003	7.8000e-004	29.2689
<b>Total</b>		<b>28.9417</b>	<b>3.7800e-003</b>	<b>7.8000e-004</b>	<b>29.2689</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

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**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.4969	0.0447	2.8960	4.7900e-003		0.3707	0.3707		0.3707	0.3707	35.1206	15.1617	50.2823	0.0329	2.7600e-003	51.9270
Unmitigated	2.5148	0.0447	2.8960	4.7900e-003		0.3707	0.3707		0.3707	0.3707	35.1206	15.1617	50.2823	0.0329	2.7600e-003	51.9270

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**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0552					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3177					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.1334	0.0417	2.6334	4.7700e-003		0.3692	0.3692		0.3692	0.3692	35.1206	14.7291	49.8496	0.0324	2.7600e-003	51.4831
Landscaping	8.5300e-003	3.0000e-003	0.2626	1.0000e-005		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	0.4327	0.4327	4.5000e-004	0.0000	0.4439
<b>Total</b>	<b>2.5148</b>	<b>0.0447</b>	<b>2.8960</b>	<b>4.7800e-003</b>		<b>0.3707</b>	<b>0.3707</b>		<b>0.3707</b>	<b>0.3707</b>	<b>35.1206</b>	<b>15.1617</b>	<b>50.2823</b>	<b>0.0329</b>	<b>2.7600e-003</b>	<b>51.9270</b>

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**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0552					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.1334	0.0417	2.6334	4.7700e-003		0.3692	0.3692		0.3692	0.3692	35.1206	14.7291	49.8496	0.0324	2.7600e-003	51.4831
Landscaping	8.5300e-003	3.0000e-003	0.2626	1.0000e-005		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	0.4327	0.4327	4.5000e-004	0.0000	0.4439
<b>Total</b>	<b>2.4969</b>	<b>0.0447</b>	<b>2.8960</b>	<b>4.7800e-003</b>		<b>0.3707</b>	<b>0.3707</b>		<b>0.3707</b>	<b>0.3707</b>	<b>35.1206</b>	<b>15.1617</b>	<b>50.2823</b>	<b>0.0329</b>	<b>2.7600e-003</b>	<b>51.9270</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy



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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.9232	0.0579	1.4000e-003	3.7885
Unmitigated	2.4039	0.0724	1.7500e-003	4.7357

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.21524 / 1.39656	2.4039	0.0724	1.7500e-003	4.7357
<b>Total</b>		<b>2.4039</b>	<b>0.0724</b>	<b>1.7500e-003</b>	<b>4.7357</b>

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**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.77219 / 1.11725	1.9232	0.0579	1.4000e-003	3.7885
<b>Total</b>		<b>1.9232</b>	<b>0.0579</b>	<b>1.4000e-003</b>	<b>3.7885</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

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**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	7.0884	0.4189	0.0000	17.5613
Unmitigated	7.0884	0.4189	0.0000	17.5613

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	34.92	7.0884	0.4189	0.0000	17.5613
<b>Total</b>		<b>7.0884</b>	<b>0.4189</b>	<b>0.0000</b>	<b>17.5613</b>

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**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	34.92	7.0884	0.4189	0.0000	17.5613
<b>Total</b>		<b>7.0884</b>	<b>0.4189</b>	<b>0.0000</b>	<b>17.5613</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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### 11.0 Vegetation

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	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-888.0000	0.0000	0.0000	-888.0000

### 11.1 Vegetation Land Change

#### Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Trees	8 / 0	-888.0000	0.0000	0.0000	-888.0000
<b>Total</b>		<b>-888.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>-888.0000</b>

The Ridge Project - Placer County APCD Air District, Summer

**The Ridge Project**  
**Placer County APCD Air District, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.90	Acre	1.90	82,764.00	0
Other Non-Asphalt Surfaces	1,133.70	1000sqft	26.03	1,133,700.00	0
Single Family Housing	34.00	Dwelling Unit	21.92	61,200.00	97

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	74
<b>Climate Zone</b>	2			<b>Operational Year</b>	2026
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	222.25	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

The Ridge Project - Placer County APCD Air District, Summer

Project Characteristics - CO2 intensity factor adjusted per PG&E's RPS projections.

Land Use - Lot acreage adjusted per site plan.

Construction Phase - Construction phase timing based on applicant-provided questionnaire.

Vehicle Trips - Trip generation rates adjusted to be consistent with project-specific traffic study prepared by F&P.

Area Mitigation -

Energy Mitigation - Title 24 exceedance used to reflect compliance with 2019 CBSC.

Water Mitigation - Water conservation strategy applied to reflect compliance with 2019 CalGreen Code and MWEL0.

Grading -

Land Use Change -

## The Ridge Project - Placer County APCD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	55.00	370.00
tblConstructionPhase	NumDays	740.00	370.00
tblConstructionPhase	NumDays	75.00	45.00
tblConstructionPhase	NumDays	55.00	21.00
tblConstructionPhase	PhaseEndDate	4/28/2028	6/29/2026
tblConstructionPhase	PhaseEndDate	11/26/2027	6/15/2026
tblConstructionPhase	PhaseEndDate	1/24/2025	12/13/2024
tblConstructionPhase	PhaseEndDate	2/11/2028	1/13/2025
tblConstructionPhase	PhaseStartDate	2/12/2028	1/28/2025
tblConstructionPhase	PhaseStartDate	1/25/2025	1/14/2025
tblConstructionPhase	PhaseStartDate	11/27/2027	12/14/2024
tblLandUse	LotAcreage	11.04	21.92
tblProjectCharacteristics	CO2IntensityFactor	641.35	222.25
tblVehicleTrips	ST_TR	9.91	9.44
tblVehicleTrips	SU_TR	8.62	9.44
tblVehicleTrips	WD_TR	9.52	9.44

## 2.0 Emissions Summary

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The Ridge Project - Placer County APCD Air District, Summer

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	3.2777	32.4051	28.1507	0.0635	18.2141	1.3364	19.4443	9.9699	1.2294	11.1017	0.0000	6,150.3633	6,150.3633	1.9463	0.0000	6,199.0206
2025	6.6989	31.2198	33.2467	0.1295	6.5336	0.6259	7.1595	1.7641	0.5915	2.3557	0.0000	13,052.1746	13,052.1746	0.8669	0.0000	13,073.8480
2026	6.5993	30.9666	32.3600	0.1276	6.5336	0.6246	7.1581	1.7641	0.5902	2.3544	0.0000	12,862.6115	12,862.6115	0.8552	0.0000	12,883.9910
<b>Maximum</b>	<b>6.6989</b>	<b>32.4051</b>	<b>33.2467</b>	<b>0.1295</b>	<b>18.2141</b>	<b>1.3364</b>	<b>19.4443</b>	<b>9.9699</b>	<b>1.2294</b>	<b>11.1017</b>	<b>0.0000</b>	<b>13,052.1746</b>	<b>13,052.1746</b>	<b>1.9463</b>	<b>0.0000</b>	<b>13,073.8480</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	3.2777	32.4051	28.1507	0.0635	18.2141	1.3364	19.4443	9.9699	1.2294	11.1017	0.0000	6,150.3632	6,150.3632	1.9463	0.0000	6,199.0206
2025	6.6989	31.2198	33.2467	0.1295	6.5336	0.6259	7.1595	1.7641	0.5915	2.3557	0.0000	13,052.1746	13,052.1746	0.8669	0.0000	13,073.8480
2026	6.5993	30.9666	32.3600	0.1276	6.5336	0.6246	7.1581	1.7641	0.5902	2.3544	0.0000	12,862.6115	12,862.6115	0.8552	0.0000	12,883.9910
<b>Maximum</b>	<b>6.6989</b>	<b>32.4051</b>	<b>33.2467</b>	<b>0.1295</b>	<b>18.2141</b>	<b>1.3364</b>	<b>19.4443</b>	<b>9.9699</b>	<b>1.2294</b>	<b>11.1017</b>	<b>0.0000</b>	<b>13,052.1746</b>	<b>13,052.1746</b>	<b>1.9463</b>	<b>0.0000</b>	<b>13,073.8480</b>



The Ridge Project - Placer County APCD Air District, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	54.1713	1.0495	67.1477	0.1165		9.0216	9.0216		9.0216	9.0216	944.2388	401.2993	1,345.5382	0.8769	0.0743	1,389.5925
Energy	0.0260	0.2218	0.0944	1.4200e-003		0.0179	0.0179		0.0179	0.0179		283.1199	283.1199	5.4300e-003	5.1900e-003	284.8023
Mobile	0.4932	2.8449	5.1126	0.0235	1.9625	0.0150	1.9775	0.5259	0.0140	0.5399		2,382.5102	2,382.5102	0.0675		2,384.1976
<b>Total</b>	<b>54.6905</b>	<b>4.1162</b>	<b>72.3546</b>	<b>0.1414</b>	<b>1.9625</b>	<b>9.0545</b>	<b>11.0170</b>	<b>0.5259</b>	<b>9.0535</b>	<b>9.5794</b>	<b>944.2388</b>	<b>3,066.9294</b>	<b>4,011.1682</b>	<b>0.9498</b>	<b>0.0795</b>	<b>4,058.5924</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	54.0734	1.0495	67.1477	0.1165		9.0216	9.0216		9.0216	9.0216	944.2388	401.2993	1,345.5382	0.8769	0.0743	1,389.5925
Energy	0.0243	0.2079	0.0885	1.3300e-003		0.0168	0.0168		0.0168	0.0168		265.3628	265.3628	5.0900e-003	4.8600e-003	266.9397
Mobile	0.4932	2.8449	5.1126	0.0235	1.9625	0.0150	1.9775	0.5259	0.0140	0.5399		2,382.5102	2,382.5102	0.0675		2,384.1976
<b>Total</b>	<b>54.5909</b>	<b>4.1023</b>	<b>72.3487</b>	<b>0.1413</b>	<b>1.9625</b>	<b>9.0534</b>	<b>11.0159</b>	<b>0.5259</b>	<b>9.0524</b>	<b>9.5783</b>	<b>944.2388</b>	<b>3,049.1723</b>	<b>3,993.4111</b>	<b>0.9494</b>	<b>0.0791</b>	<b>4,040.7298</b>

The Ridge Project - Placer County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.18	0.34	0.01	0.06	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.58	0.44	0.04	0.42	0.44

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2024	10/11/2024	5	30	
2	Grading	Grading	10/12/2024	12/13/2024	5	45	
3	Building Construction	Building Construction	1/14/2025	6/15/2026	5	370	
4	Paving	Paving	12/14/2024	1/13/2025	5	21	
5	Architectural Coating	Architectural Coating	1/28/2025	6/29/2026	5	370	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 27.93

Residential Indoor: 123,930; Residential Outdoor: 41,310; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 72,988 (Architectural Coating – sqft)

#### OffRoad Equipment

The Ridge Project - Placer County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	523.00	203.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	105.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

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**3.1 Mitigation Measures Construction**

**3.2 Site Preparation - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.010 0	3,688.010 0	1.1928		3,717.829 4
<b>Total</b>	<b>2.6609</b>	<b>27.1760</b>	<b>18.3356</b>	<b>0.0381</b>	<b>18.0663</b>	<b>1.2294</b>	<b>19.2956</b>	<b>9.9307</b>	<b>1.1310</b>	<b>11.0617</b>		<b>3,688.010 0</b>	<b>3,688.010 0</b>	<b>1.1928</b>		<b>3,717.829 4</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0536	0.0253	0.3851	1.2700e-003	0.1479	8.6000e-004	0.1487	0.0392	7.9000e-004	0.0400		126.5531	126.5531	2.3600e-003		126.6121
<b>Total</b>	<b>0.0536</b>	<b>0.0253</b>	<b>0.3851</b>	<b>1.2700e-003</b>	<b>0.1479</b>	<b>8.6000e-004</b>	<b>0.1487</b>	<b>0.0392</b>	<b>7.9000e-004</b>	<b>0.0400</b>		<b>126.5531</b>	<b>126.5531</b>	<b>2.3600e-003</b>		<b>126.6121</b>

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**3.2 Site Preparation - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310	0.0000	3,688.010 0	3,688.010 0	1.1928		3,717.829 4
<b>Total</b>	<b>2.6609</b>	<b>27.1760</b>	<b>18.3356</b>	<b>0.0381</b>	<b>18.0663</b>	<b>1.2294</b>	<b>19.2956</b>	<b>9.9307</b>	<b>1.1310</b>	<b>11.0617</b>	<b>0.0000</b>	<b>3,688.010 0</b>	<b>3,688.010 0</b>	<b>1.1928</b>		<b>3,717.829 4</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0536	0.0253	0.3851	1.2700e-003	0.1479	8.6000e-004	0.1487	0.0392	7.9000e-004	0.0400		126.5531	126.5531	2.3600e-003		126.6121
<b>Total</b>	<b>0.0536</b>	<b>0.0253</b>	<b>0.3851</b>	<b>1.2700e-003</b>	<b>0.1479</b>	<b>8.6000e-004</b>	<b>0.1487</b>	<b>0.0392</b>	<b>7.9000e-004</b>	<b>0.0400</b>		<b>126.5531</b>	<b>126.5531</b>	<b>2.3600e-003</b>		<b>126.6121</b>

The Ridge Project - Placer County APCD Air District, Summer

**3.3 Grading - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286		6,009.7487	6,009.7487	1.9437		6,058.3405
<b>Total</b>	<b>3.2181</b>	<b>32.3770</b>	<b>27.7228</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.3354</b>	<b>10.0087</b>	<b>3.5965</b>	<b>1.2286</b>	<b>4.8251</b>		<b>6,009.7487</b>	<b>6,009.7487</b>	<b>1.9437</b>		<b>6,058.3405</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0596	0.0281	0.4279	1.4100e-003	0.1643	9.5000e-004	0.1653	0.0436	8.8000e-004	0.0445		140.6146	140.6146	2.6200e-003		140.6801
<b>Total</b>	<b>0.0596</b>	<b>0.0281</b>	<b>0.4279</b>	<b>1.4100e-003</b>	<b>0.1643</b>	<b>9.5000e-004</b>	<b>0.1653</b>	<b>0.0436</b>	<b>8.8000e-004</b>	<b>0.0445</b>		<b>140.6146</b>	<b>140.6146</b>	<b>2.6200e-003</b>		<b>140.6801</b>



The Ridge Project - Placer County APCD Air District, Summer

**3.3 Grading - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286	0.0000	6,009.7487	6,009.7487	1.9437		6,058.3405
<b>Total</b>	<b>3.2181</b>	<b>32.3770</b>	<b>27.7228</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.3354</b>	<b>10.0087</b>	<b>3.5965</b>	<b>1.2286</b>	<b>4.8251</b>	<b>0.0000</b>	<b>6,009.7487</b>	<b>6,009.7487</b>	<b>1.9437</b>		<b>6,058.3405</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0596	0.0281	0.4279	1.4100e-003	0.1643	9.5000e-004	0.1653	0.0436	8.8000e-004	0.0445		140.6146	140.6146	2.6200e-003		140.6801
<b>Total</b>	<b>0.0596</b>	<b>0.0281</b>	<b>0.4279</b>	<b>1.4100e-003</b>	<b>0.1643</b>	<b>9.5000e-004</b>	<b>0.1653</b>	<b>0.0436</b>	<b>8.8000e-004</b>	<b>0.0445</b>		<b>140.6146</b>	<b>140.6146</b>	<b>2.6200e-003</b>		<b>140.6801</b>

The Ridge Project - Placer County APCD Air District, Summer

**3.4 Building Construction - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.474 4</b>	<b>2,556.474 4</b>	<b>0.6010</b>		<b>2,571.498 1</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4068	16.8015	2.8574	0.0571	1.3748	0.0174	1.3922	0.3958	0.0167	0.4124		5,977.147 8	5,977.147 8	0.1760		5,981.546 4
Worker	1.4737	0.6688	10.4063	0.0354	4.2963	0.0245	4.3208	1.1396	0.0226	1.1621		3,528.671 4	3,528.671 4	0.0622		3,530.226 4
<b>Total</b>	<b>1.8805</b>	<b>17.4703</b>	<b>13.2637</b>	<b>0.0925</b>	<b>5.6711</b>	<b>0.0419</b>	<b>5.7130</b>	<b>1.5354</b>	<b>0.0392</b>	<b>1.5746</b>		<b>9,505.819 2</b>	<b>9,505.819 2</b>	<b>0.2382</b>		<b>9,511.772 8</b>

The Ridge Project - Placer County APCD Air District, Summer

**3.4 Building Construction - 2025**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>	<b>0.0000</b>	<b>2,556.474 4</b>	<b>2,556.474 4</b>	<b>0.6010</b>		<b>2,571.498 1</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4068	16.8015	2.8574	0.0571	1.3748	0.0174	1.3922	0.3958	0.0167	0.4124		5,977.147 8	5,977.147 8	0.1760		5,981.546 4
Worker	1.4737	0.6688	10.4063	0.0354	4.2963	0.0245	4.3208	1.1396	0.0226	1.1621		3,528.671 4	3,528.671 4	0.0622		3,530.226 4
<b>Total</b>	<b>1.8805</b>	<b>17.4703</b>	<b>13.2637</b>	<b>0.0925</b>	<b>5.6711</b>	<b>0.0419</b>	<b>5.7130</b>	<b>1.5354</b>	<b>0.0392</b>	<b>1.5746</b>		<b>9,505.819 2</b>	<b>9,505.819 2</b>	<b>0.2382</b>		<b>9,511.772 8</b>

The Ridge Project - Placer County APCD Air District, Summer

**3.4 Building Construction - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.474 4</b>	<b>2,556.474 4</b>	<b>0.6010</b>		<b>2,571.498 1</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3970	16.6157	2.7740	0.0568	1.3747	0.0170	1.3917	0.3958	0.0162	0.4120		5,943.269 6	5,943.269 6	0.1707		5,947.536 7
Worker	1.3989	0.6127	9.7373	0.0341	4.2963	0.0238	4.3201	1.1396	0.0219	1.1615		3,399.016 6	3,399.016 6	0.0568		3,400.436 3
<b>Total</b>	<b>1.7959</b>	<b>17.2284</b>	<b>12.5113</b>	<b>0.0909</b>	<b>5.6710</b>	<b>0.0407</b>	<b>5.7117</b>	<b>1.5353</b>	<b>0.0381</b>	<b>1.5734</b>		<b>9,342.286 2</b>	<b>9,342.286 2</b>	<b>0.2275</b>		<b>9,347.973 0</b>

The Ridge Project - Placer County APCD Air District, Summer

**3.4 Building Construction - 2026**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>	<b>0.0000</b>	<b>2,556.474 4</b>	<b>2,556.474 4</b>	<b>0.6010</b>		<b>2,571.498 1</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3970	16.6157	2.7740	0.0568	1.3747	0.0170	1.3917	0.3958	0.0162	0.4120		5,943.269 6	5,943.269 6	0.1707		5,947.536 7
Worker	1.3989	0.6127	9.7373	0.0341	4.2963	0.0238	4.3201	1.1396	0.0219	1.1615		3,399.016 6	3,399.016 6	0.0568		3,400.436 3
<b>Total</b>	<b>1.7959</b>	<b>17.2284</b>	<b>12.5113</b>	<b>0.0909</b>	<b>5.6710</b>	<b>0.0407</b>	<b>5.7117</b>	<b>1.5353</b>	<b>0.0381</b>	<b>1.5734</b>		<b>9,342.286 2</b>	<b>9,342.286 2</b>	<b>0.2275</b>		<b>9,347.973 0</b>

The Ridge Project - Placer County APCD Air District, Summer

**3.5 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.2371					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2252</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>		<b>2,207.547 2</b>	<b>2,207.547 2</b>	<b>0.7140</b>		<b>2,225.396 3</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0447	0.0211	0.3209	1.0600e-003	0.1232	7.1000e-004	0.1239	0.0327	6.6000e-004	0.0333		105.4609	105.4609	1.9700e-003		105.5101
<b>Total</b>	<b>0.0447</b>	<b>0.0211</b>	<b>0.3209</b>	<b>1.0600e-003</b>	<b>0.1232</b>	<b>7.1000e-004</b>	<b>0.1239</b>	<b>0.0327</b>	<b>6.6000e-004</b>	<b>0.0333</b>		<b>105.4609</b>	<b>105.4609</b>	<b>1.9700e-003</b>		<b>105.5101</b>

The Ridge Project - Placer County APCD Air District, Summer

**3.5 Paving - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.2371					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2252</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>	<b>0.0000</b>	<b>2,207.547 2</b>	<b>2,207.547 2</b>	<b>0.7140</b>		<b>2,225.396 3</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0447	0.0211	0.3209	1.0600e-003	0.1232	7.1000e-004	0.1239	0.0327	6.6000e-004	0.0333		105.4609	105.4609	1.9700e-003		105.5101
<b>Total</b>	<b>0.0447</b>	<b>0.0211</b>	<b>0.3209</b>	<b>1.0600e-003</b>	<b>0.1232</b>	<b>7.1000e-004</b>	<b>0.1239</b>	<b>0.0327</b>	<b>6.6000e-004</b>	<b>0.0333</b>		<b>105.4609</b>	<b>105.4609</b>	<b>1.9700e-003</b>		<b>105.5101</b>

The Ridge Project - Placer County APCD Air District, Summer

**3.5 Paving - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.2371					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.1522</b>	<b>8.5816</b>	<b>14.5780</b>	<b>0.0228</b>		<b>0.4185</b>	<b>0.4185</b>		<b>0.3850</b>	<b>0.3850</b>		<b>2,206.745 2</b>	<b>2,206.745 2</b>	<b>0.7137</b>		<b>2,224.587 8</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0423	0.0192	0.2985	1.0100e-003	0.1232	7.0000e-004	0.1239	0.0327	6.5000e-004	0.0333		101.2047	101.2047	1.7800e-003		101.2493
<b>Total</b>	<b>0.0423</b>	<b>0.0192</b>	<b>0.2985</b>	<b>1.0100e-003</b>	<b>0.1232</b>	<b>7.0000e-004</b>	<b>0.1239</b>	<b>0.0327</b>	<b>6.5000e-004</b>	<b>0.0333</b>		<b>101.2047</b>	<b>101.2047</b>	<b>1.7800e-003</b>		<b>101.2493</b>



The Ridge Project - Placer County APCD Air District, Summer

**3.5 Paving - 2025**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.2371					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.1522</b>	<b>8.5816</b>	<b>14.5780</b>	<b>0.0228</b>		<b>0.4185</b>	<b>0.4185</b>		<b>0.3850</b>	<b>0.3850</b>	<b>0.0000</b>	<b>2,206.745 2</b>	<b>2,206.745 2</b>	<b>0.7137</b>		<b>2,224.587 8</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0423	0.0192	0.2985	1.0100e-003	0.1232	7.0000e-004	0.1239	0.0327	6.5000e-004	0.0333		101.2047	101.2047	1.7800e-003		101.2493
<b>Total</b>	<b>0.0423</b>	<b>0.0192</b>	<b>0.2985</b>	<b>1.0100e-003</b>	<b>0.1232</b>	<b>7.0000e-004</b>	<b>0.1239</b>	<b>0.0327</b>	<b>6.5000e-004</b>	<b>0.0333</b>		<b>101.2047</b>	<b>101.2047</b>	<b>1.7800e-003</b>		<b>101.2493</b>

The Ridge Project - Placer County APCD Air District, Summer

**3.6 Architectural Coating - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.9843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>3.1552</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2959	0.1343	2.0892	7.1000e-003	0.8626	4.9200e-003	0.8675	0.2288	4.5300e-003	0.2333		708.4331	708.4331	0.0125		708.7453
<b>Total</b>	<b>0.2959</b>	<b>0.1343</b>	<b>2.0892</b>	<b>7.1000e-003</b>	<b>0.8626</b>	<b>4.9200e-003</b>	<b>0.8675</b>	<b>0.2288</b>	<b>4.5300e-003</b>	<b>0.2333</b>		<b>708.4331</b>	<b>708.4331</b>	<b>0.0125</b>		<b>708.7453</b>

The Ridge Project - Placer County APCD Air District, Summer

**3.6 Architectural Coating - 2025**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.9843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>3.1552</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2959	0.1343	2.0892	7.1000e-003	0.8626	4.9200e-003	0.8675	0.2288	4.5300e-003	0.2333		708.4331	708.4331	0.0125		708.7453
<b>Total</b>	<b>0.2959</b>	<b>0.1343</b>	<b>2.0892</b>	<b>7.1000e-003</b>	<b>0.8626</b>	<b>4.9200e-003</b>	<b>0.8675</b>	<b>0.2288</b>	<b>4.5300e-003</b>	<b>0.2333</b>		<b>708.4331</b>	<b>708.4331</b>	<b>0.0125</b>		<b>708.7453</b>

The Ridge Project - Placer County APCD Air District, Summer

**3.6 Architectural Coating - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.9843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>3.1552</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2809	0.1230	1.9549	6.8400e-003	0.8626	4.7700e-003	0.8673	0.2288	4.3900e-003	0.2332		682.4030	682.4030	0.0114		682.6880
<b>Total</b>	<b>0.2809</b>	<b>0.1230</b>	<b>1.9549</b>	<b>6.8400e-003</b>	<b>0.8626</b>	<b>4.7700e-003</b>	<b>0.8673</b>	<b>0.2288</b>	<b>4.3900e-003</b>	<b>0.2332</b>		<b>682.4030</b>	<b>682.4030</b>	<b>0.0114</b>		<b>682.6880</b>

The Ridge Project - Placer County APCD Air District, Summer

**3.6 Architectural Coating - 2026**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.9843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>3.1552</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2809	0.1230	1.9549	6.8400e-003	0.8626	4.7700e-003	0.8673	0.2288	4.3900e-003	0.2332		682.4030	682.4030	0.0114		682.6880
<b>Total</b>	<b>0.2809</b>	<b>0.1230</b>	<b>1.9549</b>	<b>6.8400e-003</b>	<b>0.8626</b>	<b>4.7700e-003</b>	<b>0.8673</b>	<b>0.2288</b>	<b>4.3900e-003</b>	<b>0.2332</b>		<b>682.4030</b>	<b>682.4030</b>	<b>0.0114</b>		<b>682.6880</b>

**4.0 Operational Detail - Mobile**

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The Ridge Project - Placer County APCD Air District, Summer

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4932	2.8449	5.1126	0.0235	1.9625	0.0150	1.9775	0.5259	0.0140	0.5399		2,382.5102	2,382.5102	0.0675		2,384.1976
Unmitigated	0.4932	2.8449	5.1126	0.0235	1.9625	0.0150	1.9775	0.5259	0.0140	0.5399		2,382.5102	2,382.5102	0.0675		2,384.1976

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	320.96	320.96	320.96	919,404	919,404
Total	320.96	320.96	320.96	919,404	919,404

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

The Ridge Project - Placer County APCD Air District, Summer

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.515189	0.037254	0.221040	0.114665	0.016498	0.005188	0.033759	0.046875	0.001360	0.001132	0.005439	0.000735	0.000868
Single Family Housing	0.515189	0.037254	0.221040	0.114665	0.016498	0.005188	0.033759	0.046875	0.001360	0.001132	0.005439	0.000735	0.000868
Other Non-Asphalt Surfaces	0.515189	0.037254	0.221040	0.114665	0.016498	0.005188	0.033759	0.046875	0.001360	0.001132	0.005439	0.000735	0.000868

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0243	0.2079	0.0885	1.3300e-003		0.0168	0.0168		0.0168	0.0168		265.3628	265.3628	5.0900e-003	4.8600e-003	266.9397
NaturalGas Unmitigated	0.0260	0.2218	0.0944	1.4200e-003		0.0179	0.0179		0.0179	0.0179		283.1199	283.1199	5.4300e-003	5.1900e-003	284.8023

The Ridge Project - Placer County APCD Air District, Summer

**5.2 Energy by Land Use - Natural Gas**

**Unmitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2406.52	0.0260	0.2218	0.0944	1.4200e-003		0.0179	0.0179		0.0179	0.0179		283.1199	283.1199	5.4300e-003	5.1900e-003	284.8023
<b>Total</b>		<b>0.0260</b>	<b>0.2218</b>	<b>0.0944</b>	<b>1.4200e-003</b>		<b>0.0179</b>	<b>0.0179</b>		<b>0.0179</b>	<b>0.0179</b>		<b>283.1199</b>	<b>283.1199</b>	<b>5.4300e-003</b>	<b>5.1900e-003</b>	<b>284.8023</b>

**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.25558	0.0243	0.2079	0.0885	1.3300e-003		0.0168	0.0168		0.0168	0.0168		265.3628	265.3628	5.0900e-003	4.8600e-003	266.9397
<b>Total</b>		<b>0.0243</b>	<b>0.2079</b>	<b>0.0885</b>	<b>1.3300e-003</b>		<b>0.0168</b>	<b>0.0168</b>		<b>0.0168</b>	<b>0.0168</b>		<b>265.3628</b>	<b>265.3628</b>	<b>5.0900e-003</b>	<b>4.8600e-003</b>	<b>266.9397</b>

**6.0 Area Detail**



The Ridge Project - Placer County APCD Air District, Summer

**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	54.0734	1.0495	67.1477	0.1165		9.0216	9.0216		9.0216	9.0216	944.2388	401.2993	1,345.5382	0.8769	0.0743	1,389.5925
Unmitigated	54.1713	1.0495	67.1477	0.1165		9.0216	9.0216		9.0216	9.0216	944.2388	401.2993	1,345.5382	0.8769	0.0743	1,389.5925

The Ridge Project - Placer County APCD Air District, Summer

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.3025					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Consumer Products	1.7406					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Hearth	52.0334	1.0162	64.2296	0.1164		9.0056	9.0056		9.0056	9.0056	944.2388	396.0000	1,340.2388	0.8714	0.0743		1,384.1562
Landscaping	0.0948	0.0333	2.9180	1.6000e-004		0.0160	0.0160		0.0160	0.0160		5.2993	5.2993	5.4800e-003			5.4364
<b>Total</b>	<b>54.1713</b>	<b>1.0495</b>	<b>67.1477</b>	<b>0.1165</b>		<b>9.0216</b>	<b>9.0216</b>		<b>9.0216</b>	<b>9.0216</b>	<b>944.2388</b>	<b>401.2993</b>	<b>1,345.5382</b>	<b>0.8769</b>	<b>0.0743</b>		<b>1,389.5925</b>

The Ridge Project - Placer County APCD Air District, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3025					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6426					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	52.0334	1.0162	64.2296	0.1164		9.0056	9.0056		9.0056	9.0056	944.2388	396.0000	1,340.2388	0.8714	0.0743	1,384.1562
Landscaping	0.0948	0.0333	2.9180	1.6000e-004		0.0160	0.0160		0.0160	0.0160		5.2993	5.2993	5.4800e-003		5.4364
<b>Total</b>	<b>54.0734</b>	<b>1.0495</b>	<b>67.1477</b>	<b>0.1165</b>		<b>9.0216</b>	<b>9.0216</b>		<b>9.0216</b>	<b>9.0216</b>	<b>944.2388</b>	<b>401.2993</b>	<b>1,345.5382</b>	<b>0.8769</b>	<b>0.0743</b>	<b>1,389.5925</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## The Ridge Project - Placer County APCD Air District, Summer

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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The Ridge Project - Placer County APCD Air District, Winter

**The Ridge Project**  
**Placer County APCD Air District, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.90	Acre	1.90	82,764.00	0
Other Non-Asphalt Surfaces	1,133.70	1000sqft	26.03	1,133,700.00	0
Single Family Housing	34.00	Dwelling Unit	21.92	61,200.00	97

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	74
<b>Climate Zone</b>	2			<b>Operational Year</b>	2026
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	222.25	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

The Ridge Project - Placer County APCD Air District, Winter

Project Characteristics - CO2 intensity factor adjusted per PG&E's RPS projections.

Land Use - Lot acreage adjusted per site plan.

Construction Phase - Construction phase timing based on applicant-provided questionnaire.

Vehicle Trips - Trip generation rates adjusted to be consistent with project-specific traffic study prepared by F&P.

Area Mitigation -

Energy Mitigation - Title 24 exceedance used to reflect compliance with 2019 CBSC.

Water Mitigation - Water conservation strategy applied to reflect compliance with 2019 CalGreen Code and MWEL0.

Grading -

Land Use Change -

## The Ridge Project - Placer County APCD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	55.00	370.00
tblConstructionPhase	NumDays	740.00	370.00
tblConstructionPhase	NumDays	75.00	45.00
tblConstructionPhase	NumDays	55.00	21.00
tblConstructionPhase	PhaseEndDate	4/28/2028	6/29/2026
tblConstructionPhase	PhaseEndDate	11/26/2027	6/15/2026
tblConstructionPhase	PhaseEndDate	1/24/2025	12/13/2024
tblConstructionPhase	PhaseEndDate	2/11/2028	1/13/2025
tblConstructionPhase	PhaseStartDate	2/12/2028	1/28/2025
tblConstructionPhase	PhaseStartDate	1/25/2025	1/14/2025
tblConstructionPhase	PhaseStartDate	11/27/2027	12/14/2024
tblLandUse	LotAcreage	11.04	21.92
tblProjectCharacteristics	CO2IntensityFactor	641.35	222.25
tblVehicleTrips	ST_TR	9.91	9.44
tblVehicleTrips	SU_TR	8.62	9.44
tblVehicleTrips	WD_TR	9.52	9.44

## 2.0 Emissions Summary

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The Ridge Project - Placer County APCD Air District, Winter

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	3.2762	32.4121	28.0969	0.0633	18.2141	1.3364	19.4443	9.9699	1.2294	11.1017	0.0000	6,134.9648	6,134.9648	1.9460	0.0000	6,183.6153
2025	6.6855	31.4643	32.2101	0.1230	6.5336	0.6265	7.1601	1.7641	0.5921	2.3562	0.0000	12,386.4846	12,386.4846	0.8827	0.0000	12,408.5528
2026	6.5913	31.1894	31.3735	0.1212	6.5336	0.6251	7.1587	1.7641	0.5908	2.3549	0.0000	12,216.2730	12,216.2730	0.8708	0.0000	12,238.0429
<b>Maximum</b>	<b>6.6855</b>	<b>32.4121</b>	<b>32.2101</b>	<b>0.1230</b>	<b>18.2141</b>	<b>1.3364</b>	<b>19.4443</b>	<b>9.9699</b>	<b>1.2294</b>	<b>11.1017</b>	<b>0.0000</b>	<b>12,386.4846</b>	<b>12,386.4846</b>	<b>1.9460</b>	<b>0.0000</b>	<b>12,408.5528</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	3.2762	32.4121	28.0969	0.0633	18.2141	1.3364	19.4443	9.9699	1.2294	11.1017	0.0000	6,134.9648	6,134.9648	1.9460	0.0000	6,183.6153
2025	6.6855	31.4643	32.2101	0.1230	6.5336	0.6265	7.1601	1.7641	0.5921	2.3562	0.0000	12,386.4846	12,386.4846	0.8827	0.0000	12,408.5528
2026	6.5913	31.1894	31.3735	0.1212	6.5336	0.6251	7.1587	1.7641	0.5908	2.3549	0.0000	12,216.2730	12,216.2730	0.8708	0.0000	12,238.0429
<b>Maximum</b>	<b>6.6855</b>	<b>32.4121</b>	<b>32.2101</b>	<b>0.1230</b>	<b>18.2141</b>	<b>1.3364</b>	<b>19.4443</b>	<b>9.9699</b>	<b>1.2294</b>	<b>11.1017</b>	<b>0.0000</b>	<b>12,386.4846</b>	<b>12,386.4846</b>	<b>1.9460</b>	<b>0.0000</b>	<b>12,408.5528</b>





The Ridge Project - Placer County APCD Air District, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	54.1713	1.0495	67.1477	0.1165		9.0216	9.0216		9.0216	9.0216	944.2388	401.2993	1,345.5382	0.8769	0.0743	1,389.5925
Energy	0.0260	0.2218	0.0944	1.4200e-003		0.0179	0.0179		0.0179	0.0179		283.1199	283.1199	5.4300e-003	5.1900e-003	284.8023
Mobile	0.3876	2.9406	4.8601	0.0216	1.9625	0.0151	1.9776	0.5259	0.0141	0.5400		2,198.4110	2,198.4110	0.0700		2,200.1612
<b>Total</b>	<b>54.5849</b>	<b>4.2118</b>	<b>72.1022</b>	<b>0.1396</b>	<b>1.9625</b>	<b>9.0546</b>	<b>11.0171</b>	<b>0.5259</b>	<b>9.0536</b>	<b>9.5795</b>	<b>944.2388</b>	<b>2,882.8302</b>	<b>3,827.0690</b>	<b>0.9523</b>	<b>0.0795</b>	<b>3,874.5561</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	54.0734	1.0495	67.1477	0.1165		9.0216	9.0216		9.0216	9.0216	944.2388	401.2993	1,345.5382	0.8769	0.0743	1,389.5925
Energy	0.0243	0.2079	0.0885	1.3300e-003		0.0168	0.0168		0.0168	0.0168		265.3628	265.3628	5.0900e-003	4.8600e-003	266.9397
Mobile	0.3876	2.9406	4.8601	0.0216	1.9625	0.0151	1.9776	0.5259	0.0141	0.5400		2,198.4110	2,198.4110	0.0700		2,200.1612
<b>Total</b>	<b>54.4853</b>	<b>4.1979</b>	<b>72.0962</b>	<b>0.1395</b>	<b>1.9625</b>	<b>9.0535</b>	<b>11.0159</b>	<b>0.5259</b>	<b>9.0525</b>	<b>9.5784</b>	<b>944.2388</b>	<b>2,865.0731</b>	<b>3,809.3119</b>	<b>0.9520</b>	<b>0.0791</b>	<b>3,856.6934</b>

The Ridge Project - Placer County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.18	0.33	0.01	0.06	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.62	0.46	0.04	0.42	0.46

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2024	10/11/2024	5	30	
2	Grading	Grading	10/12/2024	12/13/2024	5	45	
3	Building Construction	Building Construction	1/14/2025	6/15/2026	5	370	
4	Paving	Paving	12/14/2024	1/13/2025	5	21	
5	Architectural Coating	Architectural Coating	1/28/2025	6/29/2026	5	370	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 27.93

Residential Indoor: 123,930; Residential Outdoor: 41,310; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 72,988 (Architectural Coating – sqft)

#### OffRoad Equipment

The Ridge Project - Placer County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	523.00	203.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	105.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

The Ridge Project - Placer County APCD Air District, Winter

**3.1 Mitigation Measures Construction**

**3.2 Site Preparation - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.010 0	3,688.010 0	1.1928		3,717.829 4
<b>Total</b>	<b>2.6609</b>	<b>27.1760</b>	<b>18.3356</b>	<b>0.0381</b>	<b>18.0663</b>	<b>1.2294</b>	<b>19.2956</b>	<b>9.9307</b>	<b>1.1310</b>	<b>11.0617</b>		<b>3,688.010 0</b>	<b>3,688.010 0</b>	<b>1.1928</b>		<b>3,717.829 4</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0523	0.0316	0.3367	1.1300e-003	0.1479	8.6000e-004	0.1487	0.0392	7.9000e-004	0.0400		112.6945	112.6945	2.1100e-003		112.7473
<b>Total</b>	<b>0.0523</b>	<b>0.0316</b>	<b>0.3367</b>	<b>1.1300e-003</b>	<b>0.1479</b>	<b>8.6000e-004</b>	<b>0.1487</b>	<b>0.0392</b>	<b>7.9000e-004</b>	<b>0.0400</b>		<b>112.6945</b>	<b>112.6945</b>	<b>2.1100e-003</b>		<b>112.7473</b>

The Ridge Project - Placer County APCD Air District, Winter

**3.2 Site Preparation - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294
<b>Total</b>	<b>2.6609</b>	<b>27.1760</b>	<b>18.3356</b>	<b>0.0381</b>	<b>18.0663</b>	<b>1.2294</b>	<b>19.2956</b>	<b>9.9307</b>	<b>1.1310</b>	<b>11.0617</b>	<b>0.0000</b>	<b>3,688.0100</b>	<b>3,688.0100</b>	<b>1.1928</b>		<b>3,717.8294</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0523	0.0316	0.3367	1.1300e-003	0.1479	8.6000e-004	0.1487	0.0392	7.9000e-004	0.0400		112.6945	112.6945	2.1100e-003		112.7473
<b>Total</b>	<b>0.0523</b>	<b>0.0316</b>	<b>0.3367</b>	<b>1.1300e-003</b>	<b>0.1479</b>	<b>8.6000e-004</b>	<b>0.1487</b>	<b>0.0392</b>	<b>7.9000e-004</b>	<b>0.0400</b>		<b>112.6945</b>	<b>112.6945</b>	<b>2.1100e-003</b>		<b>112.7473</b>

The Ridge Project - Placer County APCD Air District, Winter

**3.3 Grading - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286		6,009.7487	6,009.7487	1.9437		6,058.3405
<b>Total</b>	<b>3.2181</b>	<b>32.3770</b>	<b>27.7228</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.3354</b>	<b>10.0087</b>	<b>3.5965</b>	<b>1.2286</b>	<b>4.8251</b>		<b>6,009.7487</b>	<b>6,009.7487</b>	<b>1.9437</b>		<b>6,058.3405</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0581	0.0351	0.3741	1.2600e-003	0.1643	9.5000e-004	0.1653	0.0436	8.8000e-004	0.0445		125.2162	125.2162	2.3400e-003		125.2747
<b>Total</b>	<b>0.0581</b>	<b>0.0351</b>	<b>0.3741</b>	<b>1.2600e-003</b>	<b>0.1643</b>	<b>9.5000e-004</b>	<b>0.1653</b>	<b>0.0436</b>	<b>8.8000e-004</b>	<b>0.0445</b>		<b>125.2162</b>	<b>125.2162</b>	<b>2.3400e-003</b>		<b>125.2747</b>

The Ridge Project - Placer County APCD Air District, Winter

**3.3 Grading - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286	0.0000	6,009.7487	6,009.7487	1.9437		6,058.3405
<b>Total</b>	<b>3.2181</b>	<b>32.3770</b>	<b>27.7228</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.3354</b>	<b>10.0087</b>	<b>3.5965</b>	<b>1.2286</b>	<b>4.8251</b>	<b>0.0000</b>	<b>6,009.7487</b>	<b>6,009.7487</b>	<b>1.9437</b>		<b>6,058.3405</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0581	0.0351	0.3741	1.2600e-003	0.1643	9.5000e-004	0.1653	0.0436	8.8000e-004	0.0445		125.2162	125.2162	2.3400e-003		125.2747
<b>Total</b>	<b>0.0581</b>	<b>0.0351</b>	<b>0.3741</b>	<b>1.2600e-003</b>	<b>0.1643</b>	<b>9.5000e-004</b>	<b>0.1653</b>	<b>0.0436</b>	<b>8.8000e-004</b>	<b>0.0445</b>		<b>125.2162</b>	<b>125.2162</b>	<b>2.3400e-003</b>		<b>125.2747</b>



The Ridge Project - Placer County APCD Air District, Winter

**3.4 Building Construction - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.474 4</b>	<b>2,556.474 4</b>	<b>0.6010</b>		<b>2,571.498 1</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4332	16.8456	3.4283	0.0552	1.3748	0.0180	1.3928	0.3958	0.0172	0.4130		5,775.158 6	5,775.158 6	0.1999		5,780.154 8
Worker	1.4405	0.8357	9.0676	0.0315	4.2963	0.0245	4.3208	1.1396	0.0226	1.1621		3,142.500 1	3,142.500 1	0.0555		3,143.886 3
<b>Total</b>	<b>1.8737</b>	<b>17.6813</b>	<b>12.4958</b>	<b>0.0867</b>	<b>5.6711</b>	<b>0.0425</b>	<b>5.7136</b>	<b>1.5354</b>	<b>0.0398</b>	<b>1.5752</b>		<b>8,917.658 7</b>	<b>8,917.658 7</b>	<b>0.2553</b>		<b>8,924.041 1</b>

The Ridge Project - Placer County APCD Air District, Winter

**3.4 Building Construction - 2025**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>	<b>0.0000</b>	<b>2,556.474 4</b>	<b>2,556.474 4</b>	<b>0.6010</b>		<b>2,571.498 1</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4332	16.8456	3.4283	0.0552	1.3748	0.0180	1.3928	0.3958	0.0172	0.4130		5,775.158 6	5,775.158 6	0.1999		5,780.154 8
Worker	1.4405	0.8357	9.0676	0.0315	4.2963	0.0245	4.3208	1.1396	0.0226	1.1621		3,142.500 1	3,142.500 1	0.0555		3,143.886 3
<b>Total</b>	<b>1.8737</b>	<b>17.6813</b>	<b>12.4958</b>	<b>0.0867</b>	<b>5.6711</b>	<b>0.0425</b>	<b>5.7136</b>	<b>1.5354</b>	<b>0.0398</b>	<b>1.5752</b>		<b>8,917.658 7</b>	<b>8,917.658 7</b>	<b>0.2553</b>		<b>8,924.041 1</b>

The Ridge Project - Placer County APCD Air District, Winter

**3.4 Building Construction - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.474 4</b>	<b>2,556.474 4</b>	<b>0.6010</b>		<b>2,571.498 1</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4226	16.6552	3.3260	0.0549	1.3747	0.0175	1.3922	0.3958	0.0167	0.4125		5,743.496 2	5,743.496 2	0.1939		5,748.343 0
Worker	1.3710	0.7653	8.4560	0.0304	4.2963	0.0238	4.3201	1.1396	0.0219	1.1615		3,027.116 0	3,027.116 0	0.0505		3,028.378 2
<b>Total</b>	<b>1.7936</b>	<b>17.4206</b>	<b>11.7820</b>	<b>0.0852</b>	<b>5.6710</b>	<b>0.0413</b>	<b>5.7123</b>	<b>1.5353</b>	<b>0.0386</b>	<b>1.5739</b>		<b>8,770.612 2</b>	<b>8,770.612 2</b>	<b>0.2444</b>		<b>8,776.721 2</b>

The Ridge Project - Placer County APCD Air District, Winter

**3.4 Building Construction - 2026**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>	<b>0.0000</b>	<b>2,556.474 4</b>	<b>2,556.474 4</b>	<b>0.6010</b>		<b>2,571.498 1</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4226	16.6552	3.3260	0.0549	1.3747	0.0175	1.3922	0.3958	0.0167	0.4125		5,743.496 2	5,743.496 2	0.1939		5,748.343 0
Worker	1.3710	0.7653	8.4560	0.0304	4.2963	0.0238	4.3201	1.1396	0.0219	1.1615		3,027.116 0	3,027.116 0	0.0505		3,028.378 2
<b>Total</b>	<b>1.7936</b>	<b>17.4206</b>	<b>11.7820</b>	<b>0.0852</b>	<b>5.6710</b>	<b>0.0413</b>	<b>5.7123</b>	<b>1.5353</b>	<b>0.0386</b>	<b>1.5739</b>		<b>8,770.612 2</b>	<b>8,770.612 2</b>	<b>0.2444</b>		<b>8,776.721 2</b>

The Ridge Project - Placer County APCD Air District, Winter

**3.5 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.2371					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2252</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>		<b>2,207.547 2</b>	<b>2,207.547 2</b>	<b>0.7140</b>		<b>2,225.396 3</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0436	0.0264	0.2806	9.4000e-004	0.1232	7.1000e-004	0.1239	0.0327	6.6000e-004	0.0333		93.9121	93.9121	1.7600e-003		93.9560
<b>Total</b>	<b>0.0436</b>	<b>0.0264</b>	<b>0.2806</b>	<b>9.4000e-004</b>	<b>0.1232</b>	<b>7.1000e-004</b>	<b>0.1239</b>	<b>0.0327</b>	<b>6.6000e-004</b>	<b>0.0333</b>		<b>93.9121</b>	<b>93.9121</b>	<b>1.7600e-003</b>		<b>93.9560</b>

The Ridge Project - Placer County APCD Air District, Winter

**3.5 Paving - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.2371					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2252</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>	<b>0.0000</b>	<b>2,207.547 2</b>	<b>2,207.547 2</b>	<b>0.7140</b>		<b>2,225.396 3</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0436	0.0264	0.2806	9.4000e-004	0.1232	7.1000e-004	0.1239	0.0327	6.6000e-004	0.0333		93.9121	93.9121	1.7600e-003		93.9560
<b>Total</b>	<b>0.0436</b>	<b>0.0264</b>	<b>0.2806</b>	<b>9.4000e-004</b>	<b>0.1232</b>	<b>7.1000e-004</b>	<b>0.1239</b>	<b>0.0327</b>	<b>6.6000e-004</b>	<b>0.0333</b>		<b>93.9121</b>	<b>93.9121</b>	<b>1.7600e-003</b>		<b>93.9560</b>

The Ridge Project - Placer County APCD Air District, Winter

**3.5 Paving - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.2371					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.1522</b>	<b>8.5816</b>	<b>14.5780</b>	<b>0.0228</b>		<b>0.4185</b>	<b>0.4185</b>		<b>0.3850</b>	<b>0.3850</b>		<b>2,206.745 2</b>	<b>2,206.745 2</b>	<b>0.7137</b>		<b>2,224.587 8</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0413	0.0240	0.2601	9.0000e-004	0.1232	7.0000e-004	0.1239	0.0327	6.5000e-004	0.0333		90.1291	90.1291	1.5900e-003		90.1688
<b>Total</b>	<b>0.0413</b>	<b>0.0240</b>	<b>0.2601</b>	<b>9.0000e-004</b>	<b>0.1232</b>	<b>7.0000e-004</b>	<b>0.1239</b>	<b>0.0327</b>	<b>6.5000e-004</b>	<b>0.0333</b>		<b>90.1291</b>	<b>90.1291</b>	<b>1.5900e-003</b>		<b>90.1688</b>

The Ridge Project - Placer County APCD Air District, Winter

**3.5 Paving - 2025**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.2371					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.1522</b>	<b>8.5816</b>	<b>14.5780</b>	<b>0.0228</b>		<b>0.4185</b>	<b>0.4185</b>		<b>0.3850</b>	<b>0.3850</b>	<b>0.0000</b>	<b>2,206.745 2</b>	<b>2,206.745 2</b>	<b>0.7137</b>		<b>2,224.587 8</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0413	0.0240	0.2601	9.0000e-004	0.1232	7.0000e-004	0.1239	0.0327	6.5000e-004	0.0333		90.1291	90.1291	1.5900e-003		90.1688
<b>Total</b>	<b>0.0413</b>	<b>0.0240</b>	<b>0.2601</b>	<b>9.0000e-004</b>	<b>0.1232</b>	<b>7.0000e-004</b>	<b>0.1239</b>	<b>0.0327</b>	<b>6.5000e-004</b>	<b>0.0333</b>		<b>90.1291</b>	<b>90.1291</b>	<b>1.5900e-003</b>		<b>90.1688</b>



The Ridge Project - Placer County APCD Air District, Winter

**3.6 Architectural Coating - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.9843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>3.1552</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2892	0.1678	1.8204	6.3300e-003	0.8626	4.9200e-003	0.8675	0.2288	4.5300e-003	0.2333		630.9035	630.9035	0.0111		631.1818
<b>Total</b>	<b>0.2892</b>	<b>0.1678</b>	<b>1.8204</b>	<b>6.3300e-003</b>	<b>0.8626</b>	<b>4.9200e-003</b>	<b>0.8675</b>	<b>0.2288</b>	<b>4.5300e-003</b>	<b>0.2333</b>		<b>630.9035</b>	<b>630.9035</b>	<b>0.0111</b>		<b>631.1818</b>

The Ridge Project - Placer County APCD Air District, Winter

**3.6 Architectural Coating - 2025**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.9843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>3.1552</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2892	0.1678	1.8204	6.3300e-003	0.8626	4.9200e-003	0.8675	0.2288	4.5300e-003	0.2333		630.9035	630.9035	0.0111		631.1818
<b>Total</b>	<b>0.2892</b>	<b>0.1678</b>	<b>1.8204</b>	<b>6.3300e-003</b>	<b>0.8626</b>	<b>4.9200e-003</b>	<b>0.8675</b>	<b>0.2288</b>	<b>4.5300e-003</b>	<b>0.2333</b>		<b>630.9035</b>	<b>630.9035</b>	<b>0.0111</b>		<b>631.1818</b>

The Ridge Project - Placer County APCD Air District, Winter

**3.6 Architectural Coating - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.9843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>3.1552</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2752	0.1537	1.6977	6.0900e-003	0.8626	4.7700e-003	0.8673	0.2288	4.3900e-003	0.2332		607.7384	607.7384	0.0101		607.9918
<b>Total</b>	<b>0.2752</b>	<b>0.1537</b>	<b>1.6977</b>	<b>6.0900e-003</b>	<b>0.8626</b>	<b>4.7700e-003</b>	<b>0.8673</b>	<b>0.2288</b>	<b>4.3900e-003</b>	<b>0.2332</b>		<b>607.7384</b>	<b>607.7384</b>	<b>0.0101</b>		<b>607.9918</b>

The Ridge Project - Placer County APCD Air District, Winter

**3.6 Architectural Coating - 2026**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.9843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>3.1552</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2752	0.1537	1.6977	6.0900e-003	0.8626	4.7700e-003	0.8673	0.2288	4.3900e-003	0.2332		607.7384	607.7384	0.0101		607.9918
<b>Total</b>	<b>0.2752</b>	<b>0.1537</b>	<b>1.6977</b>	<b>6.0900e-003</b>	<b>0.8626</b>	<b>4.7700e-003</b>	<b>0.8673</b>	<b>0.2288</b>	<b>4.3900e-003</b>	<b>0.2332</b>		<b>607.7384</b>	<b>607.7384</b>	<b>0.0101</b>		<b>607.9918</b>

**4.0 Operational Detail - Mobile**

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The Ridge Project - Placer County APCD Air District, Winter

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3876	2.9406	4.8601	0.0216	1.9625	0.0151	1.9776	0.5259	0.0141	0.5400		2,198.4110	2,198.4110	0.0700		2,200.1612
Unmitigated	0.3876	2.9406	4.8601	0.0216	1.9625	0.0151	1.9776	0.5259	0.0141	0.5400		2,198.4110	2,198.4110	0.0700		2,200.1612

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	320.96	320.96	320.96	919,404	919,404
Total	320.96	320.96	320.96	919,404	919,404

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

The Ridge Project - Placer County APCD Air District, Winter

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.515189	0.037254	0.221040	0.114665	0.016498	0.005188	0.033759	0.046875	0.001360	0.001132	0.005439	0.000735	0.000868
Single Family Housing	0.515189	0.037254	0.221040	0.114665	0.016498	0.005188	0.033759	0.046875	0.001360	0.001132	0.005439	0.000735	0.000868
Other Non-Asphalt Surfaces	0.515189	0.037254	0.221040	0.114665	0.016498	0.005188	0.033759	0.046875	0.001360	0.001132	0.005439	0.000735	0.000868

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0243	0.2079	0.0885	1.3300e-003		0.0168	0.0168		0.0168	0.0168		265.3628	265.3628	5.0900e-003	4.8600e-003	266.9397
NaturalGas Unmitigated	0.0260	0.2218	0.0944	1.4200e-003		0.0179	0.0179		0.0179	0.0179		283.1199	283.1199	5.4300e-003	5.1900e-003	284.8023

The Ridge Project - Placer County APCD Air District, Winter

**5.2 Energy by Land Use - Natural Gas**

**Unmitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2406.52	0.0260	0.2218	0.0944	1.4200e-003		0.0179	0.0179		0.0179	0.0179		283.1199	283.1199	5.4300e-003	5.1900e-003	284.8023
<b>Total</b>		<b>0.0260</b>	<b>0.2218</b>	<b>0.0944</b>	<b>1.4200e-003</b>		<b>0.0179</b>	<b>0.0179</b>		<b>0.0179</b>	<b>0.0179</b>		<b>283.1199</b>	<b>283.1199</b>	<b>5.4300e-003</b>	<b>5.1900e-003</b>	<b>284.8023</b>

**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.25558	0.0243	0.2079	0.0885	1.3300e-003		0.0168	0.0168		0.0168	0.0168		265.3628	265.3628	5.0900e-003	4.8600e-003	266.9397
<b>Total</b>		<b>0.0243</b>	<b>0.2079</b>	<b>0.0885</b>	<b>1.3300e-003</b>		<b>0.0168</b>	<b>0.0168</b>		<b>0.0168</b>	<b>0.0168</b>		<b>265.3628</b>	<b>265.3628</b>	<b>5.0900e-003</b>	<b>4.8600e-003</b>	<b>266.9397</b>

**6.0 Area Detail**

The Ridge Project - Placer County APCD Air District, Winter

**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	54.0734	1.0495	67.1477	0.1165		9.0216	9.0216		9.0216	9.0216	944.2388	401.2993	1,345.5382	0.8769	0.0743	1,389.5925
Unmitigated	54.1713	1.0495	67.1477	0.1165		9.0216	9.0216		9.0216	9.0216	944.2388	401.2993	1,345.5382	0.8769	0.0743	1,389.5925



## The Ridge Project - Placer County APCD Air District, Winter

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.3025					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Consumer Products	1.7406					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Hearth	52.0334	1.0162	64.2296	0.1164		9.0056	9.0056		9.0056	9.0056	944.2388	396.0000	1,340.2388	0.8714	0.0743		1,384.1562
Landscaping	0.0948	0.0333	2.9180	1.6000e-004		0.0160	0.0160		0.0160	0.0160		5.2993	5.2993	5.4800e-003			5.4364
<b>Total</b>	<b>54.1713</b>	<b>1.0495</b>	<b>67.1477</b>	<b>0.1165</b>		<b>9.0216</b>	<b>9.0216</b>		<b>9.0216</b>	<b>9.0216</b>	<b>944.2388</b>	<b>401.2993</b>	<b>1,345.5382</b>	<b>0.8769</b>	<b>0.0743</b>		<b>1,389.5925</b>

The Ridge Project - Placer County APCD Air District, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3025					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6426					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	52.0334	1.0162	64.2296	0.1164		9.0056	9.0056		9.0056	9.0056	944.2388	396.0000	1,340.2388	0.8714	0.0743	1,384.1562
Landscaping	0.0948	0.0333	2.9180	1.6000e-004		0.0160	0.0160		0.0160	0.0160		5.2993	5.2993	5.4800e-003		5.4364
<b>Total</b>	<b>54.0734</b>	<b>1.0495</b>	<b>67.1477</b>	<b>0.1165</b>		<b>9.0216</b>	<b>9.0216</b>		<b>9.0216</b>	<b>9.0216</b>	<b>944.2388</b>	<b>401.2993</b>	<b>1,345.5382</b>	<b>0.8769</b>	<b>0.0743</b>	<b>1,389.5925</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

## The Ridge Project - Placer County APCD Air District, Winter

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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## The Ridge Project

### Placer County APCD Air District, Mitigation Report

#### Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

#### OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	2	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	4	No Change	0.00
Scrapers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	9	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	3.16100E-002	2.11920E-001	3.34690E-001	5.50000E-004	9.53000E-003	9.53000E-003	0.00000E+000	4.72352E+001	4.72352E+001	2.58000E-003	0.00000E+000	4.72996E+001
Cranes	5.06400E-002	5.12810E-001	2.81090E-001	9.30000E-004	2.18000E-002	2.00500E-002	0.00000E+000	8.20639E+001	8.20639E+001	2.65400E-002	0.00000E+000	8.27275E+001
Excavators	8.11000E-003	6.31300E-002	1.46930E-001	2.30000E-004	3.11000E-003	2.86000E-003	0.00000E+000	2.04225E+001	2.04225E+001	6.61000E-003	0.00000E+000	2.05876E+001
Forklifts	4.82200E-002	4.54290E-001	6.29230E-001	8.50000E-004	2.43200E-002	2.23700E-002	0.00000E+000	7.45317E+001	7.45317E+001	2.41100E-002	0.00000E+000	7.51343E+001
Generator Sets	4.92800E-002	4.43160E-001	6.77010E-001	1.22000E-003	1.76500E-002	1.76500E-002	0.00000E+000	1.04563E+002	1.04563E+002	3.86000E-003	0.00000E+000	1.04660E+002
Graders	7.98000E-003	9.35000E-002	3.72700E-002	1.50000E-004	3.03000E-003	2.79000E-003	0.00000E+000	1.30738E+001	1.30738E+001	4.23000E-003	0.00000E+000	1.31795E+001
Pavers	3.77000E-003	3.51500E-002	6.07800E-002	1.00000E-004	1.64000E-003	1.51000E-003	0.00000E+000	8.66986E+000	8.66986E+000	2.80000E-003	0.00000E+000	8.73996E+000
Paving Equipment	3.30000E-003	2.93400E-002	5.37600E-002	9.00000E-005	1.43000E-003	1.32000E-003	0.00000E+000	7.51371E+000	7.51371E+000	2.43000E-003	0.00000E+000	7.57446E+000
Rollers	2.98000E-003	3.12800E-002	3.88200E-002	6.00000E-005	1.62000E-003	1.49000E-003	0.00000E+000	4.84102E+000	4.84102E+000	1.57000E-003	0.00000E+000	4.88016E+000
Rubber Tired Dozers	4.69200E-002	4.81120E-001	2.11350E-001	5.80000E-004	2.16800E-002	1.99400E-002	0.00000E+000	5.06402E+001	5.06402E+001	1.63800E-002	0.00000E+000	5.10496E+001
Scrapers	3.42000E-002	3.46310E-001	2.68520E-001	6.80000E-004	1.36900E-002	1.25900E-002	0.00000E+000	5.99735E+001	5.99735E+001	1.94000E-002	0.00000E+000	6.04584E+001
Tractors/Loaders/Backhoes	7.92800E-002	8.00420E-001	1.31752E+000	1.84000E-003	3.32500E-002	3.05900E-002	0.00000E+000	1.61816E+002	1.61816E+002	5.23300E-002	0.00000E+000	1.63124E+002
Welders	4.06600E-002	2.48280E-001	3.05550E-001	4.70000E-004	7.56000E-003	7.56000E-003	0.00000E+000	3.48208E+001	3.48208E+001	3.31000E-003	0.00000E+000	3.49035E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	3.16100E-002	2.11920E-001	3.34690E-001	5.50000E-004	9.53000E-003	9.53000E-003	0.00000E+000	4.72351E+001	4.72351E+001	2.58000E-003	0.00000E+000	4.72996E+001
Cranes	5.06400E-002	5.12810E-001	2.81090E-001	9.30000E-004	2.18000E-002	2.00500E-002	0.00000E+000	8.20638E+001	8.20638E+001	2.65400E-002	0.00000E+000	8.27274E+001
Excavators	8.11000E-003	6.31300E-002	1.46930E-001	2.30000E-004	3.11000E-003	2.86000E-003	0.00000E+000	2.04225E+001	2.04225E+001	6.61000E-003	0.00000E+000	2.05876E+001
Forklifts	4.82200E-002	4.54290E-001	6.29230E-001	8.50000E-004	2.43200E-002	2.23700E-002	0.00000E+000	7.45316E+001	7.45316E+001	2.41100E-002	0.00000E+000	7.51342E+001
Generator Sets	4.92800E-002	4.43160E-001	6.77010E-001	1.22000E-003	1.76500E-002	1.76500E-002	0.00000E+000	1.04563E+002	1.04563E+002	3.86000E-003	0.00000E+000	1.04660E+002
Graders	7.98000E-003	9.35000E-002	3.72700E-002	1.50000E-004	3.03000E-003	2.79000E-003	0.00000E+000	1.30738E+001	1.30738E+001	4.23000E-003	0.00000E+000	1.31795E+001
Pavers	3.77000E-003	3.51500E-002	6.07800E-002	1.00000E-004	1.64000E-003	1.51000E-003	0.00000E+000	8.66985E+000	8.66985E+000	2.80000E-003	0.00000E+000	8.73995E+000
Paving Equipment	3.30000E-003	2.93400E-002	5.37600E-002	9.00000E-005	1.43000E-003	1.32000E-003	0.00000E+000	7.51370E+000	7.51370E+000	2.43000E-003	0.00000E+000	7.57445E+000
Rollers	2.98000E-003	3.12800E-002	3.88200E-002	6.00000E-005	1.62000E-003	1.49000E-003	0.00000E+000	4.84101E+000	4.84101E+000	1.57000E-003	0.00000E+000	4.88015E+000
Rubber Tired Dozers	4.69200E-002	4.81120E-001	2.11350E-001	5.80000E-004	2.16800E-002	1.99400E-002	0.00000E+000	5.06401E+001	5.06401E+001	1.63800E-002	0.00000E+000	5.10496E+001
Scrapers	3.42000E-002	3.46310E-001	2.68510E-001	6.80000E-004	1.36900E-002	1.25900E-002	0.00000E+000	5.99734E+001	5.99734E+001	1.94000E-002	0.00000E+000	6.04583E+001
Tractors/Loaders/Balckhoes	7.92800E-002	8.00420E-001	1.31752E+000	1.84000E-003	3.32500E-002	3.05900E-002	0.00000E+000	1.61816E+002	1.61816E+002	5.23300E-002	0.00000E+000	1.63124E+002
Welders	4.06600E-002	2.48280E-001	3.05550E-001	4.70000E-004	7.56000E-003	7.56000E-003	0.00000E+000	3.48208E+001	3.48208E+001	3.31000E-003	0.00000E+000	3.49035E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.05853E-006	1.05853E-006	0.00000E+000	0.00000E+000	1.26851E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21856E-006	1.21856E-006	0.00000E+000	0.00000E+000	1.20879E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.79313E-007	9.79313E-007	0.00000E+000	0.00000E+000	1.45719E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20754E-006	1.20754E-006	0.00000E+000	0.00000E+000	1.19786E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.24327E-006	1.24327E-006	0.00000E+000	0.00000E+000	1.24212E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.52977E-006	1.52977E-006	0.00000E+000	0.00000E+000	1.51750E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.15342E-006	1.15342E-006	0.00000E+000	0.00000E+000	1.14417E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.33090E-006	1.33090E-006	0.00000E+000	0.00000E+000	1.32023E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.06568E-006	2.06568E-006	0.00000E+000	0.00000E+000	2.04911E-006
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18483E-006	1.18483E-006	0.00000E+000	0.00000E+000	1.17533E-006
Scrapers	0.00000E+000	0.00000E+000	3.72412E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.16718E-006	1.16718E-006	0.00000E+000	0.00000E+000	1.15782E-006
Tractors/Loaders/Balckhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23597E-006	1.23597E-006	0.00000E+000	0.00000E+000	1.22606E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.43592E-006	1.43592E-006	0.00000E+000	0.00000E+000	1.14602E-006

**Fugitive Dust Mitigation**

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction	
No	Water Exposed Area	PM10 Reduction	PM2.5 Reduction	Frequency (per day)



No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.15	0.04	0.15	0.04	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	1.00	0.27	1.00	0.27	0.00	0.00
Grading	Fugitive Dust	0.20	0.08	0.20	0.08	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.27	0.15	0.27	0.15	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Percent Reduction Summary**

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	5.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00	100.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	6.33	6.25	6.27	7.69	6.12	6.12	0.00	6.27	6.27	6.67	5.81	6.27
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	20.00	20.00	20.01	20.00	20.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Mobile Mitigation**

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.04	0.21		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
Yes	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
Yes	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
Yes	Use Low VOC Paint (Non-residential Exterior)	100.00
Yes	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	7.00	
No	Install High Efficiency Lighting	0.00	
Yes	On-site Renewable	0.00	100.00

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

### Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Apply Water Conservation on Strategy	20.00	20.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

### Solid Waste Mitigation

Mitigation Measures	Input Value
---------------------	-------------

Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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## **APPENDIX E**

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# The Ridge

## Biological Resources Assessment

September 2021 | 04301.00001.001

*Prepared for:*

**Southfork, L.P.**  
2140 Professional Drive  
Roseville, CA 95661

*Prepared by:*

**HELIX Environmental Planning, Inc.**  
1677 Eureka Road, Suite 100  
Roseville, CA 95661



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# The Ridge

## Biological Resources Assessment

*Prepared for:*

**Southfork, L.P.**  
2140 Professional Drive  
Roseville, CA 95661

*Prepared by:*

**HELIX Environmental Planning, Inc.**  
1677 Eureka Road, Suite 100  
Roseville, CA 95661

September 2021 | 04301.00001.001

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## ACRONYMS AND ABBREVIATIONS

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APN	Assessor's Parcel Number
BRSP	Bickford Ranch Specific Plan
CARP	County Aquatic Resources Program
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CRZ	Critical Root Zone
CSA	California Special Animal
CWA	Clean Water Act
DBH	Diameter at Breast Height
DGL	Diameter at Ground Level
EPA	Environmental Protection Agency
EVA	Emergency Vehicle Access
FESA	Federal Endangered Species Act
GPS	Global Positioning System
HELIX	HELIX Environmental Planning, Inc.
HCP	Habitat Conservation Plan
HUC	Hydrologic Unit Code
IPaC	Information for Planning and Conservation
LDR	low-density residential
MBTA	Migratory Bird Treaty Act
MSL	Mean Sea Level
NCCP	Natural Community Conservation Plan
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NPDES	National Pollution Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NWPR	Navigable Waters Protection Rule

## ACRONYMS AND ABBREVIATIONS (cont.)

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OHWM	Ordinary High Water Mark
PCC	prior converted cropland
PCCP	Placer County Conservation Program
PCWA	Placer County Water Agency
RR	rural residential
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
sf	square feet
SSC	Species of Special Concern
SWRCB	State Water Resources Control Board
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VELB	Valley Elderberry Longhorn Beetle
WOTUS	Waters of the U.S.
WQC	Water Quality Certification
WUI	Wildlife Urban Interface



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## EXECUTIVE SUMMARY

HELIX Environmental Planning, Inc. (HELIX) (formerly Foothill Associates) biologists conducted a biological resources assessment, oak resource survey, and wetland delineation on September 11 and 12, 2018 on The Ridge project site located along Clark Tunnel Road (Assessor's Parcel Number (APN) 031-106-030-000) in Placer County, California. The purpose of this document is to summarize the general biological resources on the site, to assess the suitability of the site to support special-status species and sensitive habitat types, and to provide recommendations for regulatory permitting or further analysis that may be required prior to development activities occurring on the site. This document follows the Placer County Conservation Program (PCCP) requirements for vegetation community nomenclature, impact assessment, and implementation of avoidance and minimization measures.

The approximate 56.6-acre Study Area includes the 25-acre proposed project site plus a 50-foot buffer area. Additionally, this document includes an assessment of the 24.9-acre, 300-foot wide Fire Safe Plan (FSP) easement area bordering the interior of the project footprint (Figure 1). The FSP easement area includes the area covered by the proposed Fire Management Plan for the project where vegetation management activities may occur to reduce fire danger. The areas outside the site boundary to the east, west, and south that occur inside the Study Area are part of the Bickford Ranch Specific Plan (BRSP) area. The proposed project is located within a rural residential property comprising annual grassland, mixed oak woodland, Caperton Canal, and Urban (roads). The surrounding land uses consist of undeveloped land to the east, west, and south which lies within Bickford Ranch, and California State Route 193 is situated less than one mile north of the site.

Known or potential biological constraints in the Study Area include the following:

- Potential habitat for special-status plants: Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*), big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*), Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeae*), Butte County fritillary (*Fritillaria eastwoodiae*), dubious pea (*Lathyrus sulphureus* var. *argillaceus*), dwarf downingia (*Downingia pusilla*), Humboldt lily (*Lilium humboldtii* ssp. *humboldtii*), oval-leaved viburnum (*Viburnum ellipticum*), Red Hills soaproot (*Chlorogalum grandiflorum*), streambank spring beauty (*Claytonia parviflora* ssp. *grandiflora*), and valley brodiaea (*Brodiaea rosea* ssp. *vallicola*);
- Potential habitat for western spadefoot (*Spea hammondi*);
- Potential habitat for special-status invertebrates: andrenid bee (*Andrena subapasta*), Morrison bumble bee (*Bombus morrisoni*), and western bumble bee (*Bombus occidentalis*);
- Potential nesting and foraging habitat for special-status and migratory bird species: grasshopper sparrow (*Ammodramus savannarum*), northern harrier (*Circus hudsonius*), purple martin (*Progne subis*), and white-tailed kite (*Elanus leucurus*); and
- Sensitive habitats including non-vernal pool seasonal wetlands and oak woodland.

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# 1.0 INTRODUCTION

This report summarizes the findings of a biological resources assessment completed for the ±56.6-acre Study Area, including the 24.9-acre, 300-foot wide FSP easement area bordering the interior of the Study Area for The Ridge proposed project site, located within Placer County, California. This document addresses the onsite physical features, as well as plant communities present and the common plant and wildlife species occurring, or potentially occurring, in the Study Area. Furthermore, the suitability of habitats to support special-status species and sensitive habitats are analyzed and recommendations are provided for any regulatory permitting or further analysis required prior to development activities occurring on the site consistent with Placer County Conservation Program (PCCP) requirements.

## 1.1 PROJECT DESCRIPTION

The Project proposes to develop a residential village comprising 34 single-family lots, consisting of 28 low-density residential (LDR) lots and six rural residential (RR) lots. In addition, there would be two common lots to accommodate a private road (Lot A) and a water quality basin (Lot B).

The primary access to the Project site would be provided by connection of the private road to Bickford Ranch Road, which is planned to be constructed immediately south of the Project site as part of the BRSP. The Project access road entrance will be gated. This road and the private road (Lot A) will serve the 28 LDR parcels. It is designed to have a 22-foot wide travel lane with a curb and gutter on the north side and an 8-foot parallel parking lane and a 5-foot wide pedestrian sidewalk on the south side. The road will terminate in cul-de-sacs at its eastern and western most ends. The right-of-way will be 40 feet wide.

Private lanes will extend from the cul-de-sacs to the RR parcels (three parcels on the west and three on the east). Each private lane will have a 20-foot wide travel lane with 2-foot-wide shoulders. The right-of-way will be 24 feet wide. The private lanes will have vehicular turnouts for two-way emergency traffic and turn-arounds, sized to meet the requirements of the fire department and sewer district.

Emergency access will be provided via the primary gated entry and a separate 40-foot wide emergency vehicle access easement (EVA) with a paved 20-foot travel lane that will connect to Bickford Ranch Road west of the primary entry. In addition, EVA's will be provided along the northwest boundary of the Project site at Lot 31 and the northeast boundary line at Lot 32. The EVA accesses will also be gated as a part of the boundary line fencing for the Project.

A pedestrian gate and sidewalk will connect the on-site sidewalk to the planned multipurpose trail in a landscaped corridor along Bickford Ranch Road.

The parcels would have minimum sizes of one acre for RR and 12,000 square feet (sf) for LDR. The LDR parcels would range in size from 13,700 sf to 38,416 sf, with an average lot size of 18,206 sf and an average density of 2.3 units per acre. The RR lots would range from 1.1 to 2.2 acres in size, with an average density of 1.67 units per acre. The combined average density would be 1.55 units per acre. The minimum width of interior lots (as opposed to corner lots) would be 125 feet for the RR parcels and 90 feet for the LDR parcels, measured at the front setback line. Corner LDR parcels would also have a minimum width of 90 feet.

## 2.0 REGULATORY FRAMEWORK

Federal, state, and local environmental laws, regulations, and policies relevant to the California Environmental Quality Act (CEQA) review process are summarized below. The applicable CEQA significance criteria are also included in this section.

### 2.1 FEDERAL REGULATIONS

#### 2.1.1 Federal Endangered Species Act

The U.S. Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect those species that are endangered or threatened with extinction. FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

FESA prohibits the “take” of endangered or threatened wildlife species. “Take” is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA Section 3 [(3) (19)]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 CFR §17.3). Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR §17.3). Actions that result in take can result in civil or criminal penalties.

For federally listed species covered under the PCCP, the Biological Opinion issued by the U.S. Fish and Wildlife Service (USFWS) for the PCCP provides take coverage for covered projects under the PCCP that may impact federally listed species that are covered species under the PCCP and no further consultation is required as long as the covered project complies with PCCP requirements. For federally listed species that are not covered species under the PCCP, take coverage is required as outlined below.

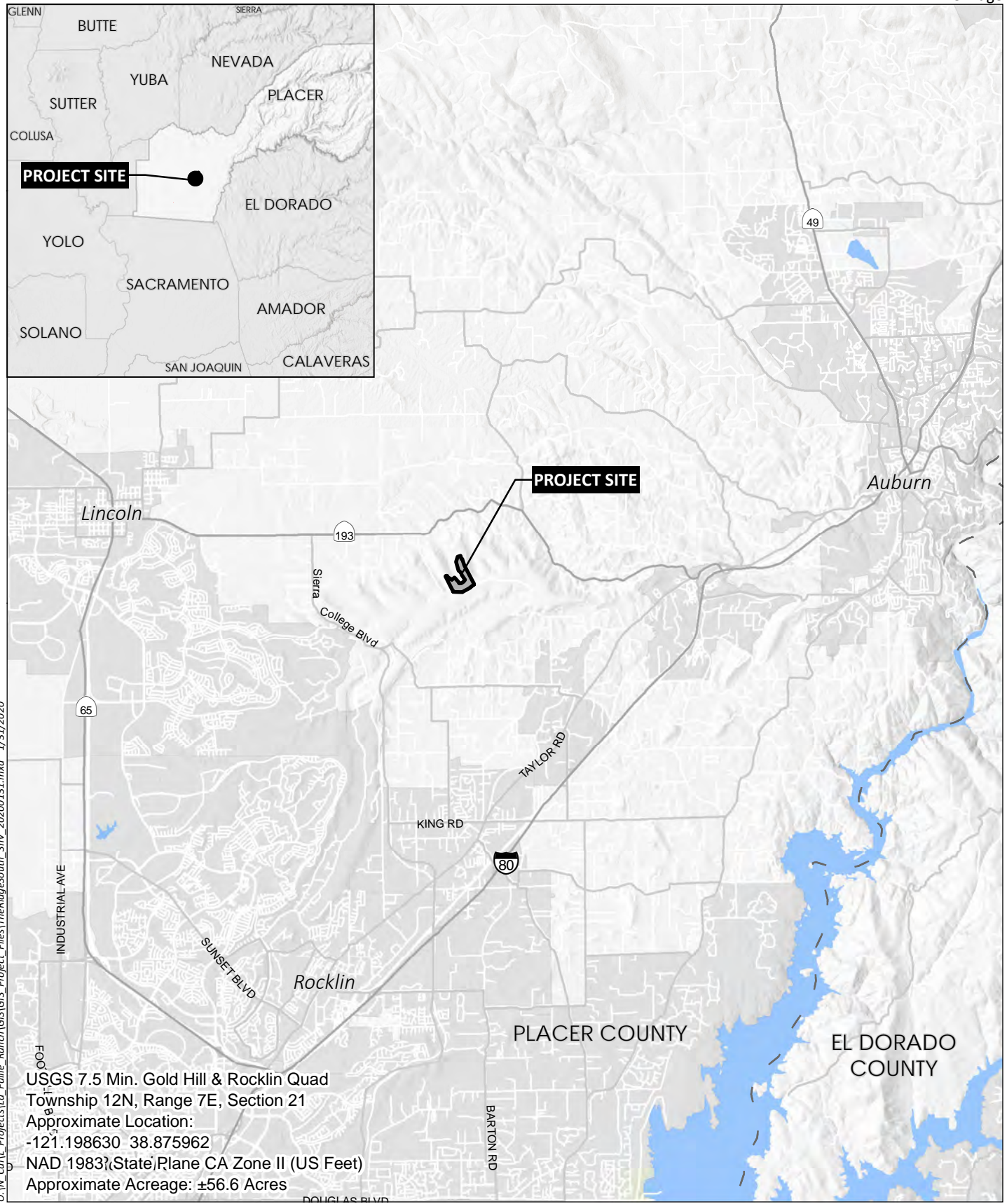
In the context of the proposed project, FESA consultation with USFWS or the National Marine Fisheries Service (NMFS) would be initiated if development resulted in take of a threatened or endangered species not covered under the PCCP or if issuance of a Section 404 permit or other federal agency action could result in take of an endangered species not covered under the PCCP or adversely modify critical habitat of such a species.

#### 2.1.2 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.

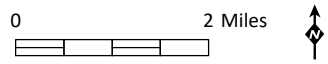
#### 2.1.3 The Bald and Golden Eagle Protection Act





The Bald and Golden Eagle Protection Act (Eagle Act) prohibits the taking or possession of and commerce in bald and golden eagles with limited exceptions. Under the Eagle Act, it is a violation to “take, possess, sell, purchase, barter, offer to sell, transport, export or import, at any time or in any manner, any bald eagle commonly known as the American eagle, or golden eagle, alive or dead, or any part, nest, or egg, thereof.” Take is defined to include pursue, shoot, shoot at, poison, wound, kill,

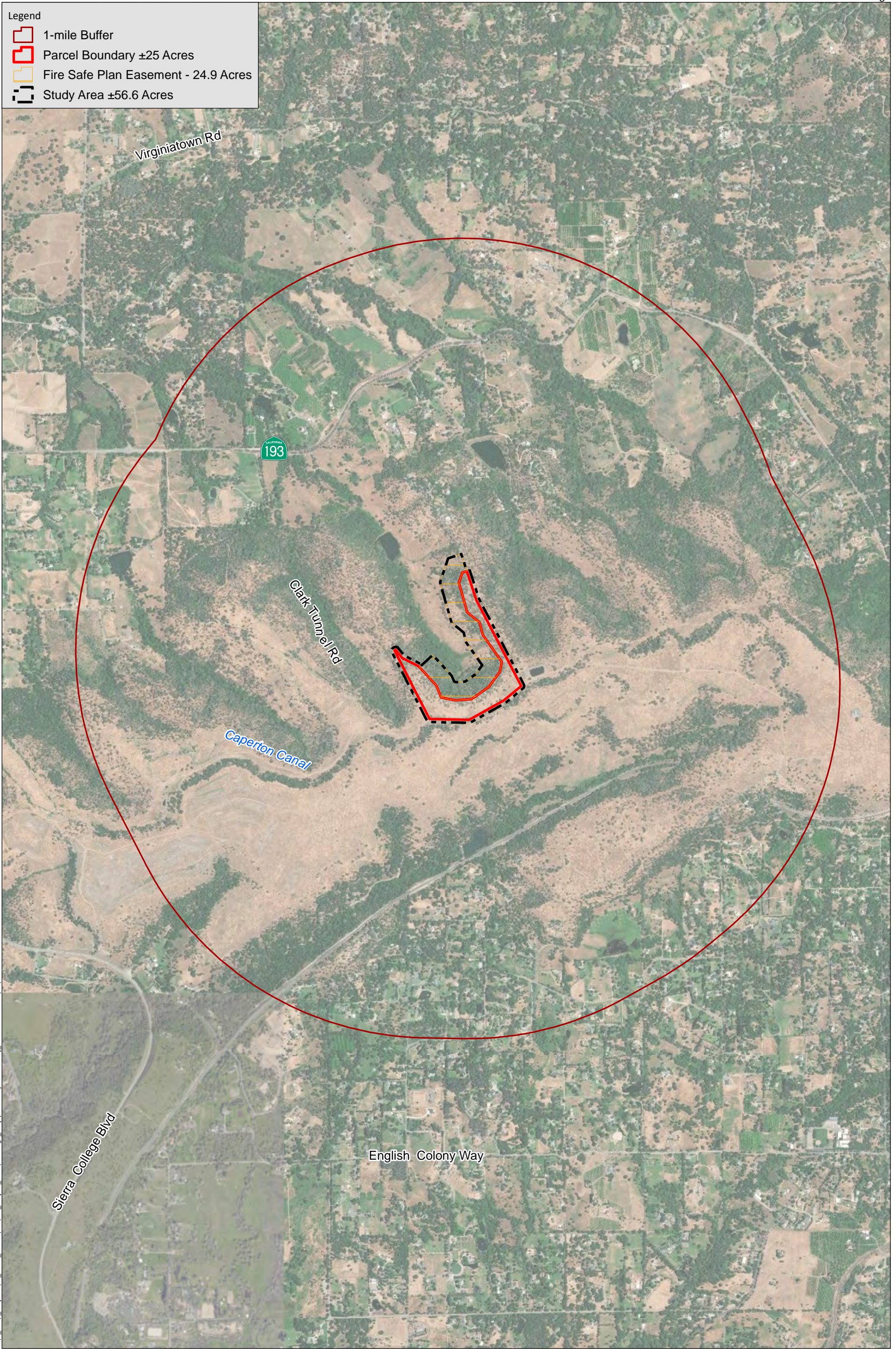


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Source: Base Map Layers (Esri, USGS, NGA, NASA)



- Legend
-  1-mile Buffer
  -  Parcel Boundary ±25 Acres
  -  Fire Safe Plan Easement - 24.9 Acres
  -  Study Area ±56.6 Acres



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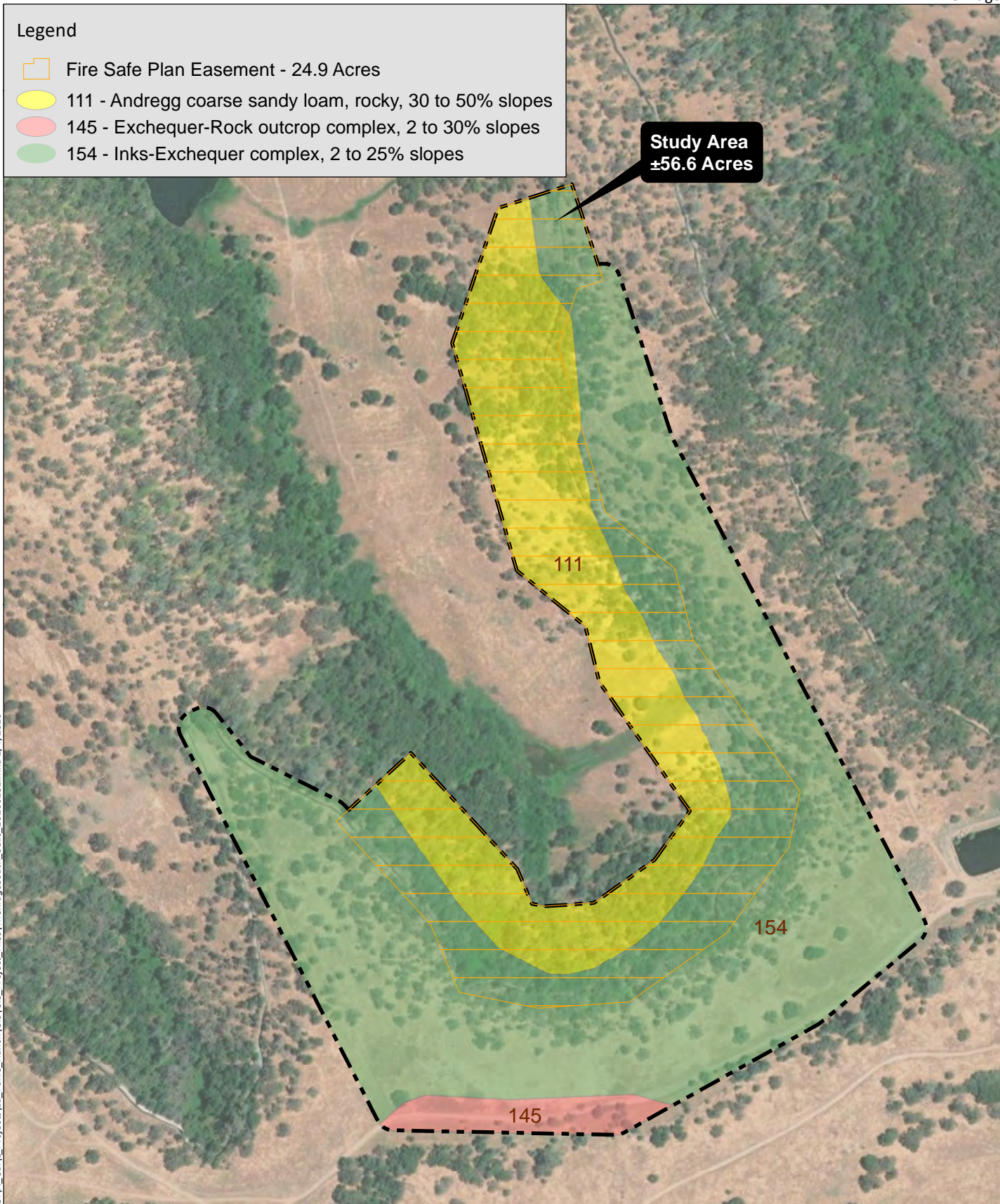
Source: Aerial Image (DigitalGlobe, 6/10/2018)

Legend

- Fire Safe Plan Easement - 24.9 Acres
- 111 - Andregg coarse sandy loam, rocky, 30 to 50% slopes
- 145 - Exchequer-Rock outcrop complex, 2 to 30% slopes
- 154 - Inks-Exchequer complex, 2 to 25% slopes

Study Area  
±56.6 Acres






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Source: Aerial (DigitalGlobe, 6/10/2018); NRCS 2019



**Legend**

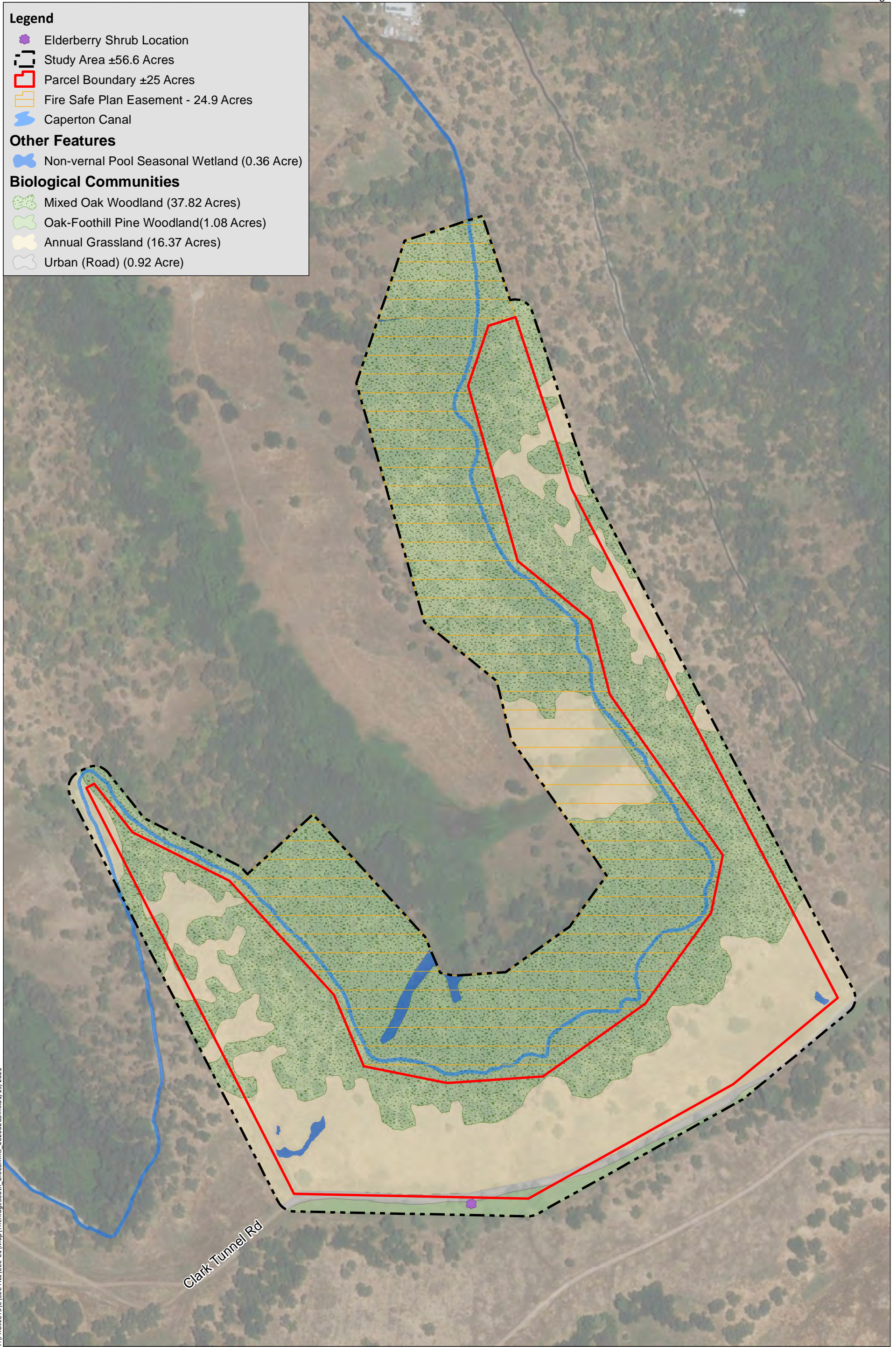
-  Elderberry Shrub Location
-  Study Area ±56.6 Acres
-  Parcel Boundary ±25 Acres
-  Fire Safe Plan Easement - 24.9 Acres
-  Caperton Canal

**Other Features**

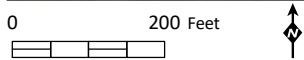
-  Non-vernal Pool Seasonal Wetland (0.36 Acre)

**Biological Communities**

-  Mixed Oak Woodland (37.82 Acres)
-  Oak-Foothill Pine Woodland(1.08 Acres)
-  Annual Grassland (16.37 Acres)
-  Urban (Road) (0.92 Acre)



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Source: Aerial (DigitalGlobe 6/10/2018)

capture, trap, collect, destroy, molest, and disturb. Disturb is further defined in 50 CFR Part 22.3 as *“to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.”*

## 2.2 STATE JURISDICTION

### 2.2.1 California Endangered Species Act

The State of California enacted the California Endangered Species Act (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 the California Department of Fish and Wildlife (CDFW), when preparing CEQA documents. The purpose is to ensure that the State lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction, or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code §2080). As with FESA, for covered projects that may impact state-listed species under CESA that are also covered species under the PCCP, direct consultation with CDFW for state-listed take authorization is not required as long as the covered project complies with PCCP requirements. For projects that may result in take of state-listed species that are not PCCP covered species, CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur and allows CDFW to identify “reasonable and prudent alternatives” to the project consistent with conserving the species. CESA allows CDFW to authorize exceptions to the State’s prohibition against take of a listed species if the “take” of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (Fish & Game Code § 2081).

### 2.2.2 California Department of Fish and Game Codes

A number of species have been designated “fully protected” species under Sections 5515, 5050, 3511, and 4700 of the Fish and Game Code, but are not listed as endangered (Section 2062) or threatened (Section 2067) species under CESA. Except for take related to scientific research, all take of fully protected species is prohibited. The California Fish and Game Code defines take as *“hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.”* Additionally, Section 3503 of the California Fish and Game Code prohibits the killing of birds or the destruction of bird nests.

### 2.2.3 Native Plant Protection Act

The Native Plant Protection Act (NPPA), enacted in 1977, allows the Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants protected under the NPPA. The NPPA prohibits take of endangered or rare native plants, with some exceptions for agricultural and nursery operations and emergencies. Vegetation removal from canals, roads, and other sites, changes in land use, and certain other situations require proper advance notification to CDFW.

## 2.3 JURISDICTIONAL WATERS

### 2.3.1 Federal Jurisdiction

Any person, firm, or agency planning to alter or work in “waters of the U.S.,” including the discharge of dredged or fill material, must first obtain authorization from the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA; 33 USC 1344). Permits, licenses, variances, or similar authorization may also be required by other federal, state, and local statutes. Section 10 of the Rivers and Harbors Act prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from USACE (33 USC 403).

On April 21, 2020, the Environmental Protection Agency (EPA) and USACE published the Navigable Waters Protection Rule to define “Waters of the United States” in the Federal Register. On June 22, 2020, the Navigable Waters Protection Rule: Definition of “Waters of the United States” (NWPR) became effective in 49 states, including California, and in all US territories.

The NWPR regulates traditional navigable waters and perennial or intermittent tributary systems, and defines four categories of regulated waters including:

- The territorial seas and traditional navigable waters;
- Perennial and intermittent tributaries to those waters;
- Certain lakes, ponds, and impoundments; and
- Wetlands adjacent to jurisdictional waters.

The NWPR also defines 12 categories of exempted aquatic resources:

- Waters not listed as WOTUS
- Groundwater
- Ephemeral features
- Diffuse stormwater run-off
- Ditches not identified as WOTUS
- Prior converted cropland (PCC)
- Artificially irrigated areas
- Artificial lakes and ponds
- Water-filled depressions incidental to mining or construction activity
- Stormwater control features
- Groundwater recharge, water reuse, and wastewater recycling structures
- Waste treatment systems

With non-tidal waters, in the absence of adjacent wetlands, the extent of USACE jurisdiction extends to the ordinary high-water mark (OHWM) – the line on the shore established by fluctuations of water and indicated by a clear, natural line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, or the presence of litter and debris. Wetlands are defined in 33 CFR Part 328 as:

“those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.”

Federal and state regulations pertaining to waters of the U.S., including wetlands, are discussed below.

Clean Water Act (33 USC 1251-1376). The CWA provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters.

Section 401 requires that an applicant for a federal license or permit that allows activities resulting in a discharge to waters of the U.S. must obtain a state certification that the discharge complies with other provisions of CWA. The Regional Water Quality Control Board (RWQCB) administers the certification program in California and may require State Water Quality Certification before other permits are issued.

Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the U.S.

Section 404 establishes a permit program administered by USACE that regulates the discharge of dredged or fill material into waters of the U.S. (including wetlands). Implementing regulations by USACE are found at 33 CFR Parts 320-332. The Section 404 (b)(1) Guidelines were developed by the USEPA in conjunction with USACE (40 CFR Part 230), allowing the discharge of dredged or fill material for non-water dependent uses into special aquatic sites only if there is no practicable alternative that would have less adverse impacts. For covered projects under the PCCP, impacts to 404 jurisdictional waters are addressed under the County Aquatic Resources Program (CARP) which allows a streamlined 404 permitting process for covered activities under the PCCP that will result in impacts to aquatic resources subject to 404 jurisdiction.

## 2.3.2 State Jurisdiction

### 2.3.2.1 Waters of the State

Any action requiring a CWA Section 404 permit, or a Rivers and Harbors Act Section 10 permit, must also obtain a CWA Section 401 Water Quality Certification. The State of California Water Quality Certification (WQC) Program was formally initiated by the State Water Resources Control Board (SWRCB) in 1990 under the requirements stipulated by Section 401 of the Federal CWA. Although the Clean Water Act is a Federal law, Section 401 of the CWA recognizes that states have the primary authority and responsibility for setting water quality standards. In California, under Section 401, the State and Regional Water Boards are the authorities that certify that issuance of a federal license or permit does not violate California's water quality standards (i.e., that they do not violate Porter-Cologne and the Water Code). The WQC Program currently issues the WQC for discharges requiring USACE's permits for fill and dredge discharges within Waters of the United States, and now also implements the State's wetland protection and hydromodification regulation program under the Porter Cologne Water Quality Control Act.

On April 2, 2019, the SWRCB adopted a State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures), for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California. The Procedures consist of four major elements: 1) a wetland definition; 2) a framework for determining if a feature that meets the wetland definition is a water of the state; 3) wetland delineation procedures; and 4) procedures for the submittal, review, and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities. The Office of administrative Law approved the Procedures on August 28, 2019, and the Procedures became effective May 28, 2020.

Under the Procedures and the State Water Code (Water Code §13050(e)), “Waters of the State” are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state.” Unless excluded by the Procedures, any activity that could result in discharge of dredged or fill material to Waters of the State, which includes Waters of the U.S. and non-federal Waters of the State, requires filing of an application under the Procedures.

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act, Water Code Section 13000 et seq.) is California’s statutory authority for the protection of water quality in conjunction with the federal CWA. The Porter-Cologne Act requires the SWRCB and RWQCBs under the CWA to adopt and periodically update water quality control plans, or basin plans. Basin plans are plans in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The Porter-Cologne Act also requires dischargers of pollutants or dredged or fill material to notify the RWQCBs of such activities by filing Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, National Pollution Discharge Elimination System (NPDES) permits, Section 401 water quality certifications, or other approvals.

### 2.3.2.2 California Department of Fish and Wildlife

The CDFW is a trustee agency that has jurisdiction under Section 1600 et seq. of the California Fish and Game Code. Under Sections 1602 and 1603, a private party must notify CDFW if a proposed project will “*substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds...except when the department has been notified pursuant to Section 1601.*” Additionally, CDFW asserts jurisdiction over native riparian habitat adjacent to aquatic features, including native trees over 4-inches in diameter at breast height (DBH). If an existing fish or wildlife resource may be substantially adversely affected by the activity, CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the parties involved, they may enter into an agreement with CDFW identifying the approved activities and associated mitigation measures. Generally, CDFW recommends submitting an application for a Streambed Alteration Agreement (SAA) for any work done within the lateral limit of water flow or the edge of riparian vegetation, whichever is greater.

## 2.4 CEQA SIGNIFICANCE

Section 15064.7 of the State CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study Checklist contained in Appendix G of the State CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by 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; and
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously, conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, an important resource on a population-wide or region-wide basis. The PCCP has conducted an analysis under CEQA of the impacts to covered species that will result from implementation of the PCCP and determined that covered projects that comply with PCCP requirements and mitigation measures will have a less than significant impact on PCCP-covered species.

### 2.4.1 California Native Plant Society

The California Native Plant Society (CNPS) maintains a rank of plant species native to California that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the *Inventory of Rare and Endangered Vascular Plants of California*. Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. The following identifies the definitions of the CNPS Rare Plant Ranking System:

- Rank 1A: Plants presumed Extinct in California and either rare or extinct elsewhere
- Rank 1B: Plants Rare, Threatened, or Endangered in California and elsewhere
- Rank 2A: Plants presumed extirpated in California but common elsewhere
- Rank 2B: Plants Rare, Threatened, or Endangered in California, but more common elsewhere
- Rank 3: Plants about which we need more information – A Review List
- Rank 4: Plants of limited distribution – A Watch List

All plants appearing on CNPS Rank 1 or 2 are considered to meet CEQA Guidelines Section 15380 criteria. While only some of the plants ranked 3 and 4 meet the definitions of threatened or endangered species, the CNPS recommends that all Rank 3 and Rank 4 plants be evaluated for consideration under

CEQA. Furthermore, the CNPS Rare Plant Rankings include levels of threat for each species. These threat ranks include the following:

0.1 - Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat);

0.2 - Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat); and

0.3 - Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known).

Threat ranks do not designate a change of environmental protections, so that each species (i.e., CRPR 1B.1, CRPR 1B.2, CRPR 1B.3, etc.), be fully-considered during preparation of environmental documents under CEQA.

## 2.4.2 California Department of Fish and Wildlife Species of Concern

Some additional fish, amphibian, reptile, bird, and mammal species may receive consideration by CDFW and lead agencies during the CEQA process, in addition to species that are formally listed under FESA and CESA or are fully protected. These species are included on the *Special Animals List*, which is maintained by CDFW. This list tracks species in California whose numbers, reproductive success, or habitat may be in decline. In addition to “Species of Special Concern” (SSC), the *Special Animals List* includes species that are tracked in the California Natural Diversity Database (CNDDDB) but warrant no legal protection. These species are identified as “California Special Animals” (CSA).

## 2.5 PLACER COUNTY POLICIES AND REGULATIONS

### 2.5.1 Placer County General Plan

In addition to federal and state regulations, *The Placer County General Plan* (General Plan) (Placer County 2013) includes goals and policies regarding biological resources, and includes Water Resources, Wetland and Riparian Areas, Fish and Wildlife Habitat, Vegetation and Open Space for the Preservation of Natural Resources. Complete descriptions of each of these goals and policies are provided in Appendix A.

### 2.5.2 Conservation, Open Space and Woodland Conservation

The Project is subject to Placer County Code, Chapter 19, *Conservation, Open Space and Woodland Conservation*. (19.10.010). Impacts to oak woodlands and oak trees are addressed through impact fee assessment according to the PCCP (see Section 2.5.3 below). A tree permit is not required for the Project since it is a covered activity under the PCCP.

### 2.5.3 Placer County Conservation Program

Placer County has approved the PCCP that will protect, enhance, and restore targeted special-status species and natural communities while streamlining both state and federal permitting for covered development activities. The PCCP covers approximately 201,000 acres that occur in the western portion

of unincorporated Placer County, as well as within areas of the City of Lincoln. The PCCP contains three components which include, the Habitat Conservation Plan/Natural Communities Conservation Plan (HCP/NCCP), the Aquatic Resources Program (CARP), and an in-lieu fee program. Resources that are protected under the PCCP include, targeted special-status wildlife and fish, sensitive habitats, and aquatic resources (PCCP 2018 and Placer County 2018). The proposed project is subject to the requirements of the PCCP.

#### 2.5.4 The Ridge Subdivision: Fire Safe Plan

The FSP was prepared for The Ridge Subdivision Project due to the Project's creation of a wildland urban interface (WUI), which is vulnerable to wildland fire. At the request of Placer County, an assessment of potential environmental impacts within the 24.9-acre, 300-foot FSP easement is included as part of this report (see Appendix E).

The goals for the FSP are to:

- Ensure that the Plan is generally consistent with applicable Placer County policies, Development Agreement terms, and project development standards and guidelines;
- Limit the risk of direct and indirect wildland fire impacts to people, property, and sensitive areas (e.g., preserve lands, cultural sites, steep slopes, etc.);
- Strive to support PFPD and CalFire in their goal of extinguishing 95% of all wildland fires in the Project area at 10 acres or less through community education, fuel modification, fire safe landscaping and construction, and other planned efforts;
- Implement Fire Safe strategies that will reduce wildland fire intensity and associated greenhouse gas emissions within open space areas; yet minimize costs and requirements for maintenance when it is feasible; and
- Minimize the fuel management treatments and fire suppression impacts on the environment through the use of effective industry best management practices.

Additionally, the FSP easement includes the following elements:

- Planning;
- Fire Apparatus Access;
- Water Supply System;
- Building in the WUI;
- Fuel Management; and
- Evacuation Plan.

Details of these elements can be found within the FSP (Graham, AICP and Phillips Consulting Services 2019).



## 3.0 METHODS

Available information pertaining to the natural resources of the region was reviewed. All references reviewed for this assessment are listed in the References section. Prior to the biological survey, a U.S. Fish and Wildlife Service list for federally-listed species in the vicinity of the Study Area and CNDDDB, and CNPS lists of special-status species within the *Gold Hill* and surrounding eight quadrangles (*Auburn, Camp Far West, Lake Combie, Lincoln, Pilot Hill, Rocklin, Roseville, and Wolf*) were compiled. Site-specific information was reviewed including the following sources:

- California Department of Fish and Wildlife (CDFW). 2020. *California Natural Diversity Data Base (CNDDDB)*. Sacramento, California. Accessed [02/17/2020];
- California Native Plant Society (CNPS). 2020. *Inventory of Rare and Endangered Plants* (online edition, v8-03 0.39). California Native Plant Society. Sacramento, CA. Accessed [02/17/2020];
- Placer County Conservation Program and associated biological technical reports. 2003;
- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 2020. *Web Soil Survey: Placer County, Western Part* (version 9). Available online at: <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.html>. Accessed [02/17/2020];
- U.S. Fish and Wildlife Service (USFWS). 2020. *Information for Planning and Conservation (IPaC) Trust Resource Report: The Ridge, Placer County*. Accessed [02/17/2020]; and
- U.S. Geological Survey (USGS). 2015. *Gold Hill, California*. 7.5-minute series topographic quadrangle. United States Department of Interior.

Existing information, including Google Earth aerial imagery and soil maps, was reviewed and the results of the records search and five-mile radius CNDDDB query were summarized in a table (Appendix B). A biological field survey of the Study Area was conducted on September 11 and 12, 2018. The project footprint portion of the Study Area was systematically surveyed on foot, using binoculars to identify birds and other animal species with special attention given to identifying those portions of the Study Area with the potential for supporting special-status species and sensitive habitats. Existing biological data collected by Foothill Associates during previous surveys of the larger La Faille Ranch site was utilized for the FSP easement area. During the field survey, biologists recorded plant and animal species observed, as well as characterized biological communities occurring on the site. Plant and wildlife species observed within the Study Area are listed in Appendix C. Biological features, such as sensitive habitats, nests, or dens, were mapped using a Trimble GeoXT Global Positioning System (GPS) hand-held unit. Following the site survey, the potential for each species identified in the records search to occur in the Study Area was determined based on the site survey, soils, and species-specific information, as shown in Appendix B.

A wetland delineation was conducted within the portions of the Study Area on September 11, 2018. Results are discussed under separate cover in the Aquatic Resources Delineation Report prepared for the project (Foothill Associates 2018). The larger La Faille Ranch site (including the FSP easement) was formally delineated by Gibson and Skordal, LLC in June of 2010. Results are contained under a separate cover (Gibson and Skordal, LLC 2010).

An oak tree and oak woodland assessment were conducted within the Study Area on September 11 and 12, 2018. Results are discussed under separate cover in the Arborist Report and Oak Woodland Inventory report prepared for the project (HELIX 2020). An oak woodland inventory was conducted within the larger La Faille Ranch site (including the FSP easement) by Foothill Associates in March 2011 and updated in June 2014. Results are discussed under a separate cover in the Oak Woodland Inventory report prepared for the project (Foothill Associates 2014).

## 4.0 RESULTS

### 4.1 SITE LOCATION AND DESCRIPTION

The Study Area is located immediately north of Clark Tunnel Road in Placer County, California. The Study Area is located within Township 12 North, Range 7 East, Section 21 of the USGS 7.5-minute series *Gold Hill* and *Rocklin* quadrangles. The approximate central location of the site is 38° 52' 33.46" North, 121° 11' 55.07" West (Figure 1). The approximate 56.6-acre Study Area comprises annual grassland, mixed oak woodland, oak-foothill pine woodland, urban (roads), and the Caperton Canal. The Study Area is bound to the north, east, and west by undeveloped land, and to the south by Clark Tunnel Road (Figure 2). The FSP easement is composed of oak woodland and areas of annual grassland.

### 4.2 PHYSICAL FEATURES

#### 4.2.1 Topography and Drainage

The general topography of the Study Area is moderate to steeply sloped hillsides with variable aspects. Portions of the Study Area in the south and southeast, while not level, are moderately undulating with irregular microtopography and, by and large, lack significant topographic depressions or folds. The elevations range between approximately 718 feet (219 meters) above mean sea level (MSL) in the south-central portion to 830 feet (253 meters) above MSL in the southeastern portion of the Study Area. The topography of the FSP easement, located within the interior borders of the Study Area, is steep, with elevations ranging from 615 feet (187 meters) to 705 feet (215 meters), and a mean slope of approximately 37 percent.

The Study Area is located within the Dutch Ravine-Auburn Ravine watershed, USGS National Hydrologic Unit Code (HUC) 180201610102.

#### 4.2.2 Soils

The Natural Resources Conservation Service (NRCS) mapped three soil units occurring in the Study Area (Figure 3): **Andregg Coarse Sandy Loam, Rocky, 30 to 50 Percent Slopes**; **Exchequer-Rock Outcrop Complex, 2 to 30 Percent Slopes**; and **Inks-Exchequer Complex, 2 to 25 Percent Slopes**. The general characteristics and properties associated with these soils are described below (USDA, NRCS 2020).

- **(111) Andregg Coarse Sandy Loam, Rocky, 30 to 50 Percent Slopes:** This soil type consists of well-drained soils located on hills from 200 to 1,500 feet above MSL. This soil type has a low water storage availability (approximately 3.5 inches). The underlying parent material consists of residuum weathered from granite. This soil type is composed of 85 percent Andregg and similar soils, ten percent Caperton coarse sandy loam, three percent Unnamed soil, and two percent

Sierra sandy loam. This soil type is not hydric (USDA, NRCS 2020). This soil is found in a small section in the northern portion of the Study Area.

- **(145) Exchequer-Rock Outcrop Complex, 2 to 30 Percent Slopes:** The Exchequer soil type consists of somewhat excessively-drained soils located on ridges from 400 to 4,000 feet above MSL. This soil type has a very low water storage availability (approximately 1.2 inches). The underlying parent material consists of residuum weathered from volcanic breccia. The rock outcrop consists of unweathered bedrock. This soil type is composed of 60 percent Exchequer and similar soils, 15 percent rock outcrop, ten percent Inks soil, and 15 percent Unnamed soils. A portion of the Unnamed soil component is hydric and is found along drainageway land formations (USDA, NRCS 2020). This soil is found along a small portion of the southern border in the Study Area.
- **(154) Inks-Exchequer Complex, 2 to 25 Percent Slopes:** The Inks soil type consists of well-drained soils located on ridges from 200 to 2,000 feet above MSL. This soil type has a very low water storage availability (approximately 1.8 inches). The underlying parent material consists of residuum weathered from conglomerate. The Exchequer soil type consists of somewhat excessively-drained soils located on ridges from 200 to 2,000 feet above MSL. This soil type has a very low water storage availability (approximately 1.2 inches). The underlying parent material consists of residuum weathered from volcanic breccia. This soil type is composed of 40 percent Inks and similar soils, 30 percent Exchequer and similar soils, 25 percent Unnamed soils, and 5 percent Alamo variant. The Alamo variant soil component is hydric and is found in depressional land formations (USDA, NRCS 2020). This soil type is located within the majority of the Study Area.

## 4.3 BIOLOGICAL COMMUNITIES

There are four major biological communities as described in the PCCP that occur within the Study Area including annual grassland, mixed oak woodland, oak-foothill pine woodland and urban (roads) (Figure 4). These communities provide habitat to a number of common species of wildlife and may provide suitable habitat for special-status species. Dominant vegetation observed within each biological community is discussed in detail below. A comprehensive list of plants and wildlife observed within the Study Area is provided in Appendix C. Plant nomenclature is derived from Baldwin et al. 2012. The location and extent of each biological community are depicted in Figure 3. Representative site photographs are included in Appendix D.

### 4.3.1 Annual Grassland

A total of 16.37 acres of annual grassland occurs within the Study Area. Annual grassland consists of several native and non-native annual plant species and occurs in a majority of the State of California at elevations from sea level to approximately 4,000 feet above MSL. Composition of this vegetation community varies depending on distribution, geographic location, and land use. Dominant vegetation present in the annual grassland within the Study Area includes soft chess (*Bromus hordeaceus*), ripgut grass (*Bromus diandrus*), slender oat (*Avena barbata*), yellow star thistle (*Centaurea solstitialis*), medusahead (*Elymus caput-medusae*), and Italian thistle (*Carduus pycnocephalus*).

### 4.3.2 Mixed Oak Woodland

A total of 37.82 acres of mixed oak woodland habitat occurs within the majority of the Study Area. This vegetative community is composed primarily of an overstory of interior live oak (*Quercus wislizeni*) and blue oak (*Quercus douglasii*) trees. The main understory comprises species as described in the annual grassland community.

### 4.3.3 Oak-Foothill Pine Woodland

A total of 1.08 acres of oak-foothill pine woodland habitat occurs within the Study Area. This vegetative community is comprised primarily of an overstory of foothill pine (*Pinus sabiniana*) and a few scattered interior live oak and tree of heaven (*Ailanthus altissima*) trees. The main understory comprises a scattered shrub layer of coyote brush (*Baccharis pilularis*), Himalayan blackberry (*Rubus armeniacus*), and a short herbaceous layer of species as described in the annual grassland community.

### 4.3.4 Urban (Roads)

A total of 0.92 acre of urban (roads) areas occur within the Study Area. This area is as associated with Clark Tunnel Road. This community includes minimal vegetation coverage and is similar in composition to the annual grassland community.

## 4.4 AQUATIC RESOURCES

Aquatic resources, including three non-vernal pool seasonal wetlands occur within the project footprint of the Study Area. Caperton Canal exists within the Study Area, but lies outside of the project footprint. A comprehensive assessment of aquatic resources within the Study Area is discussed further within the wetland delineation report prepared by Foothill Associates in 2018 (Foothill Associates 2018). Potential aquatic resources within the FSP easement were not assessed by Foothill Associates; however, a comprehensive assessment of aquatic resources included the FSP easement area is discussed within the wetland delineation report by Gibson and Skordal, LLC in June of 2010. A summary of mapped aquatic resources within the FSP boundary are summarized here.

### 4.4.1 Caperton Canal

Caperton Canal is a cement-lined canal that is managed by Placer County Water Agency (PCWA). Water flows in a general northeast to southwest direction towards the Caperton Reservoir approximately 1.4 miles southwest of the Study Area. Caperton Canal occurs, in general, within the center of the Study Area along the border of the FSP easement. There is no vegetation within Caperton Canal.

### 4.4.2 Non-Vernal Pool Seasonal Wetlands

Three depressional non-vernal pool seasonal wetlands totaling 0.11 acre occur within the annual grassland habitat within the southwest and southeast portions of the Study Area. These features were dry at the time of the survey. Vegetation associated with these wetlands include Italian rye grass (*Festuca perennis*), slender oat, medusahead, and ripgut grass. Portions of two non-vernal pool seasonal wetlands totaling 0.25 acre occur within the FSP easement in the mixed oak woodland habitat within the northern southwest portions of the easement, as mapped in by Gibson and Skordal (Gibson and Skordal,

LLC 2010). Vegetation associated with these features is similar to those described for seasonal wetlands within the impact footprint.

## 4.5 SPECIAL-STATUS SPECIES

Special-status species are plant and animal species that have been afforded special recognition by federal, state, or local resource agencies or organizations. Listed and special-status species are of relatively limited distribution and may require specialized habitat conditions. Special-status species are defined as meeting one or more of the following criteria:

- Listed or proposed for listing under CESA or FESA;
- Protected under other regulations (e.g., Migratory Bird Treaty Act);
- Included on the CDFW Special Animals List;
- Identified as Rank 1 through 4 by CNPS;
- Covered species under the PCCP; or
- Receive consideration during environmental review under CEQA.

Special-status species considered for this analysis are based on queries of the CNDDDB, the USFWS, and CNPS ranked species (online versions) for the *Gold Hill* quadrangle and the eight surrounding quadrangles. Appendix B includes the common name and scientific name for each species, regulatory status (federal, state, local, CNPS), habitat descriptions, and potential for occurrence in the Study Area. The following set of criteria has been used to determine each species' potential for occurrence in the Study Area:

- **Present:** Species known to occur within the Study Area based on CNDDDB records and/or observed within the Study Area during the biological surveys.
- **High:** Species known to occur on or in the vicinity of the Study Area (based on CNDDDB records within five miles and/or based on professional expertise specific to the Study Area or species) and there is suitable habitat within the Study Area.
- **Low:** Species known to occur in the vicinity of the Study Area and there is marginal habitat within the Study Area **-OR-** Species is not known to occur in the vicinity of the Study Area, however, there is suitable habitat on the Study Area.
- **None:** Species is not known to occur on or in the vicinity of the Study Area and there is no suitable habitat within the Study Area **-OR-** Species was surveyed for during the appropriate season with negative results **-OR-** The Study Area occurs outside of the known elevation or geographic ranges.

Only those species that are known to be present or have a *high* or *low* potential for occurrence are discussed further in the following sections.

### 4.5.1 Listed and Special-Status Plants

According to the records search, 29 special-status plant species have the potential to occur on or in the vicinity of the Study Area. Based on field observations and literature review, 11 special-status plant species were determined to have the potential to occur in the Study Area. Species that are considered

to have a *high* potential to occur onsite include: big-scale balsamroot and Brandegee's clarkia. Species that are considered to have a *low* potential to occur onsite include: Ahart's dwarf rush, Butte County fritillary, dwarf downingia, dubious pea, Humboldt lily, oval-leaved viburnum, Red Hills soaproot, streambank spring beauty, and valley brodiaea.

#### 4.5.1.1 Special-Status Plant Species with a High Potential for Occurrence

##### Big-Scale Balsamroot

Big-scale balsamroot is ranked as a CNPS 1B.2 species. It is a perennial herb found sometimes in serpentine soils within chaparral, cismontane woodland, and valley and foothill grassland habitats from 295 to 5,102 feet (90 to 1,555 meters) above MSL. The identification period for this species is from March through June. There is one documented CNDDDB record for this species occurring within five miles of the Study Area (CDFW 2020). The mixed oak woodland within the Study Area provides habitat for this species. This species was not observed within the Study Area during the September 11 and 12, 2018 biological surveys. However, the survey was conducted outside of the evident and identifiable period for this species. Therefore, big-scale balsamroot has a *high* potential for occurrence within the Study Area.

##### Brandegee's Clarkia

Brandegee's clarkia is ranked as a CNPS 4.2 species, which are plants of limited distribution that are on a watch list. It is an annual herb found often in roadcuts within chaparral, cismontane woodland, and lower montane coniferous forest habitats from 250 to 3,000 feet (75 to 915 meters) above MSL. The identification period for this species is from May through July. There are two documented CNDDDB records of this species occurring within five miles of the Study Area (CDFW 2020). The urban (roads), annual grassland, and mixed oak woodland within the Study Area provides habitat for this species. This species was not observed within the Study Area during the September 11 and 12, 2018 biological surveys; however, the survey was conducted outside of the evident and identifiable period for this species. Therefore, Brandegee's clarkia has a *high* potential for occurrence within the Study Area.

#### 4.5.1.2 Special-Status Plant Species with a Low Potential for Occurrence

##### Ahart's Dwarf Rush

Ahart's dwarf rush is ranked as a CNPS 1B.2 species, which are plants that are rare, threatened or endangered in California and elsewhere. It is an annual herb found in mesic areas within valley and foothill grasslands from 98 to 751 feet (30 to 229 meters) above MSL. The identification period for this species is from March through May. There are no documented CNDDDB records for this species within five miles of the Study Area (CDFW 2020). The non-vernal pool seasonal wetlands within the annual grassland in the Study Area provide suitable habitat for this species. This species was not observed within the Study Area during the September 11 and 12, 2018 biological surveys; however, the survey was conducted outside of the evident and identifiable period for this species. Therefore, Ahart's dwarf rush has a *low* potential for occurrence within the Study Area.

##### Butte County Fritillary

Butte County fritillary is ranked as a CNPS 3.2 species, which are plants on a review list that require more information. It is a perennial bulbiferous herb found occasionally in serpentine soil within openings of chaparral, cismontane woodland, and lower montane coniferous forest from 164 to

4,921 feet (50 to 1,500 meters) above MSL. The identification period for this species is from March through June. There are no documented CNDDDB records for this species occurring within five miles of the Study Area (CDFW 2020). The mixed oak woodland within the Study Area provides habitat for this species. This species was not observed within the Study Area during the September 11 and 12, 2018 biological surveys. However, the survey was conducted outside of the evident and identifiable period for this species. Therefore, Butte County fritillary has a *low* potential for occurrence within the Study Area.

### Dubious Pea

Dubious pea is ranked as a CNPS 3 species. It is a perennial herb found in cismontane woodland and montane coniferous forests from 165 feet to 1,020 feet (150 to 930 meters) above MSL. The identification period for this species is from April to May. There are no documented CNDDDB record for this species within five miles of the Study Area (CDFW 2020). The mixed oak woodland within the Study Area provides habitat for this species. This species was not observed within the Study Area during the September 11 and 12, 2018 biological surveys. However, the survey was conducted outside of the evident and identifiable period for this species. Therefore, dubious pea has a *low* potential for occurrence within the Study Area.

### Dwarf Downingia

Dwarf downingia is ranked as a CNPS 2B.2 species, which are plants that are rare, threatened or endangered in California, but are more common elsewhere. It is an annual herb found in mesic areas within vernal pools and valley and foothill grassland from 3 to 1,460 feet (1 to 445 meters) above MSL. The identification period for this species is from March through June. There are no documented CNDDDB records for this species within five miles of the Study Area (CDFW 2020). The non-vernal pool seasonal wetlands within the annual grassland within the Study Area provide suitable habitat for this species. This species was not observed within the Study Area during the September 11 and 12, 2018 biological surveys. However, the survey was conducted outside of the evident and identifiable period for this species. Therefore, dwarf downingia has a *low* potential for occurrence within the Study Area.

### Humboldt Lily

Humboldt lily is a CNPS 4.2 species. It is a perennial bulbiferous herb found in openings of chaparral, cismontane woodland, and lower montane coniferous forests from 90 to 1,280 feet (27 to 335 meters) above MSL. The blooming period for this species is from May through July and may sometimes extend into August. There are no documented CNDDDB records for this species occurring within five miles of the Study Area (CDFW 2020). The mixed oak woodland within the Study Area provides habitat for this species. This species was not observed within the Study Area during the September 11 and 12, 2018 biological surveys. However, the survey was conducted outside of the evident and identifiable period for this species. Therefore, this species has a *low* potential to occur within the Study Area.

### Oval-leaved Viburnum

Oval-leaved viburnum is ranked as a CNPS 2B.3 species. It is a perennial deciduous shrub found in cismontane woodland, lower montane coniferous forest, and chaparral from 705 to 4,600 feet (215 to 1,400 meters) above MSL. The identification period for this species is from May through June. There are no documented CNDDDB records for this species occurring within five miles of the Study Area (CDFW 2020). The mixed oak woodland within the Study Area provides habitat for this species. This species was not observed within the Study Area during the September 11 and 12, 2018 biological surveys. However,

the survey was conducted outside of the evident and identifiable period for this species. Therefore, oval-leaved viburnum has a *low* potential for occurrence within the Study Area.

### Red Hills Soaproot

Red Hills soaproot is ranked as a CNPS 1B.2 species. It is a perennial bulbiferous herb often found on gabbro, serpentine, or other soils in chaparral, cismontane woodland, and lower montane coniferous forest from 800 to 4,070 feet (245 to 1,240 meters) above MSL. The identification period for this species is from May through June. There are no documented CNDDDB occurrences within five miles of the Study Area (CDFW 2021). The nearest documented occurrence is approximately 11.9 miles from the Study Area. The mixed oak woodland within the Study Area provides suitable habitat for this species although the Study Area does not contain serpentinite and gabbroic soils that is often associated with this species. This species was not observed within the Study Area during the September 11 and 12, 2018 biological surveys. However, the survey was conducted outside of the evident and identifiable period for this species. Given the lack of CNDDDB records in the immediate vicinity of the Study Area and a lack of preferred soil types for this species, Red Hills soaproot has a *low* potential for occurrence within the Study Area.

### Streambank Spring Beauty

Streambank spring beauty is ranked as a CNPS 4.2 species. It is an annual herb found in rocky habitat within cismontane woodland from 820 to 3,937 feet (250 to 1,200 meters) above MSL. The identification period for this species is from February through May. There are no documented CNDDDB records for this species occurring within five miles of the Study Area (CDFW 2020). The mixed oak woodland within the Study Area provides habitat for this species. This species was not observed within the Study Area during the September 11 and 12, 2018 biological surveys. However, the survey was conducted outside of the evident and identifiable period for this species. Therefore, streambank spring beauty has a *low* potential for occurrence within the Study Area.

### Valley Brodiaea

Valley brodiaea is ranked as a CNPS 4.2 species. It is a perennial bulbiferous herb found on silty, sandy, and gravelly loam on old alluvial terraces within swales in valley and foothill grassland and vernal pools from 33 to 1,099 feet (10 to 335 meters) above MSL. The identification period for this species is from April through May (sometimes June). The mesic areas of the annual grassland within the Study Area provide suitable habitat for this species. There are no known CNDDDB occurrences for this species within five miles of the Study Area (CDFW 2020). Therefore, valley brodiaea has a *low* potential for occurrence within the Study Area.

## 4.5.2 Listed and Special-Status Wildlife

According to the records search, 36 special-status wildlife species have the potential to occur onsite or in the vicinity of the Study Area. Based on field observations and literature review, ten special-status wildlife species were determined to have the potential to occur in the Study Area, including five birds, one amphibian, and four invertebrates. Species that are considered to have a *high* potential to occur onsite include: migratory bird species. Species that are considered to have a *low* potential to occur onsite include: Swainson's hawk, western spadefoot, andrenid bee, Morrison bumble bee, valley elderberry longhorn beetle, and western bumble bee.



#### 4.5.2.1 Wildlife Species with a High Potential for Occurrence

##### Nesting Birds

The nests of most birds are protected under the MBTA. Additionally, the USFWS and CDFW identified a number of avian species of conservation concern that do not have specific statutory protection. Avian species forage and nest in a variety of habitats throughout Placer County. The trees within the mixed oak woodland, and the annual grassland within the Study Area provide nesting and foraging habitat for protected birds. Protected migratory birds identified to potentially occur within the Study Area include grasshopper sparrow, northern harrier, purple martin, and white-tailed kite. There is one documented occurrence for grasshopper sparrow and one occurrence for white-tailed kite within five miles of the Study Area. While there are no documented occurrences for purple martin within five miles of the Study Area migratory birds can occupy a wide range of territories as long as there is suitable nesting and foraging habitat present. Therefore, these protected migratory birds have a *high* potential to forage and nest within the Study Area.

#### 4.5.2.2 Wildlife Species with a Low Potential for Occurrence

##### Swainson's Hawk

Swainson's hawk is a California threatened species and is a PCCP covered species. This hawk migrates from their wintering grounds in the La Pampas Region in Argentina to their breeding grounds in western North America, including the Central Valley of California, from early March through early April. On breeding grounds, Swainson's hawk prefer open habitats including mixed and short grass grasslands, with scattered trees or shrubs for perching; dry grasslands; irrigated meadows; and edges between two habitat types. Breeding occurs from late March to late August, peaking in late May through July (Zeiner et al. 1990). In the Central Valley of California, Swainson's hawk nest in stands with few trees in juniper-sage flats, riparian woodlands, and oak woodlands. This species nests in close proximity to suitable foraging habitat, which can be located within a 10-mile radius of an active nesting site. Swainson's hawk leave their breeding grounds to return to their wintering grounds in late August or early September.

There are no CNDDDB occurrences within five miles of the Study Area; however, there are six recorded CNDDDB occurrences with identified active nests that occur within 10 miles of the Study Area (CDFW 2020). The nearest occurrence is approximately 6.18 miles to the west of the Study Area. This species was not observed within the Study Area during the biological survey. However, the site visits were conducted when this species would not be expected to be present within the Study Area due to fall migration patterns. The trees within the mixed oak woodland habitat provide potential nesting habitat and the annual grassland habitat in the valley to the north and east of the project footprint provides potential foraging habitat for this species. Annual grassland within the Study Area is composed of small patches within larger patches of oak woodland. This mosaic of small openings of annual grassland and oak woodland is not ideal for Swainson's hawks that typically forage in open grasslands and agricultural fields. In addition, the Project area is located on the far eastern edge of the known range of this species. Areas to the west and north of the Study Area provide more suitable foraging habitat for this species as these areas contain more open habitat with more scattered woodlands. Therefore, this species has a *low* potential to nest within the Study Area but would not be expected to forage within the Study Area.

## Western Spadefoot

Western spadefoot is a California Species of Special Concern. This species occurs throughout the Central Valley and on the coast from Point Conception south to the Mexican border. This species occurs from sea level up to 4,500 feet above MSL, in the southern Sierra foothills. Western spadefoot individuals are most commonly found in grassland habitats with temporary pools of water, but they have also been found in open chaparral and valley-foothill pine-oak woodlands (Stebbins 2003). This species spends most of the year underground, where members seek refuge from desiccation through constructing and residing in small burrows. This species often breeds in temporary pools and quiet streams between the months of October and May depending on rainfall (California Herps 2018). There are no CNDDDB records of this species within five miles of the Study Area (CDFW 2020). This species was not observed within the Study Area during the biological survey. The small burrows throughout the mixed oak woodland and annual grassland provide aestivation habitat and non-vernal pool seasonal wetlands could provide marginal potential breeding habitat for this species. Therefore, this species has a *low* potential to occur within the Study Area.

## Andrenid Bee

The andrenid bee is on the California Special Animals List as designated by CDFW. This species is found in grassland habitats within El Dorado, Placer, Sacramento, and San Joaquin counties (CDFW 2018). Andrenid bees are ground nesters, and will typically stay underground from summer, fall, and winter and emerge in spring to forage on blooming flowers. They are the earliest to emerge in the spring and will often pollinate willows, maples, violets, and other early blooming wildflowers (Moisset, B., and S. Buchmann 2011). There are no CNDDDB occurrences for this species within five miles of the Study Area (CDFW 2020). Small burrows present within the Study Area provide nesting habitat. The annual grassland within the Study Area provides suitable foraging and nesting habitat for this species. This species was not observed onsite during the biological survey. This species has a *low* potential to occur within the Study Area.

## Morrison Bumble Bee

The Morrison bumble bee is on the California Special Animals List as designated by CDFW. This species often nests underground, in abandoned rodent nests, but also above ground in open dry scrub habitat in tufts of grass, old bird nests, rock piles or cavities in dead trees. Plants that this species is associated with include: milkweed (*Asclepias* sp.), milkvetch (*Astragalus* sp.), rabbitbrush (*Chrysothamnus* sp.), thistle (*Cirsium* sp.), goldenbush (*Ericameria* sp.), sunflower (*Helianthus* sp.), sweetclover (*Melilotus* sp.), and ragwort (*Senecio* sp.). There are no CNDDDB occurrences for this species within five miles of the Study Area (CDFW 2020). Small burrows present within the Study Area provide nesting habitat and the annual grassland and food plants (e.g., thistle) identified within the Study Area provides suitable foraging habitat for this species. The species was not observed onsite during the biological survey. This species has a *low* potential to occur within the Study Area.

## Valley Elderberry Longhorn Beetle

Valley elderberry longhorn beetle (VELB) is a federally-threatened species and is a PCCP covered species. This beetle depends on elderberry (*Sambucus* sp.) shrubs for its entire lifecycle. Adults are typically active from March through May during the flowering period of the elderberry shrub. The female lays its eggs on the leaves and stems of the elderberry shrub. The larvae emerge within a few days and burrow

into the elderberry stem. The larvae feed on the stem pith until they pupate. When the host shrub begins flowering, the pupa emerges from the stem as an adult (Barr 1991). VELB require elderberry stems with at least one-inch diameter at ground level (DGL) in order for the larvae to utilize the stems (USFWS 1999). VELB are usually found on elderberry shrubs within riparian plant communities, which include California sycamore (*Platanus racemosa*), willow (*Salix* spp.), blackberry (*Rubus* sp.), and western poison oak (*Toxicodendron diversilobum*) (USFWS 1984). Multiple elderberry shrubs clumped together provide superior habitat for VELB, while isolated elderberry shrubs are less likely to support VELB populations. Historically, the range of VELB includes the American, the San Joaquin, and Sacramento Rivers and their tributaries up to approximately 3,000 feet above MSL (USFWS 1980). Current USFWS guidance states that VELB are typically not found above 500 feet in elevation (USFWS 2017).

There is one CNDDDB record for VELB documented within five miles of the Study Area (CDFW 2020). The documented occurrence is located approximately 1.10 miles (1,777 meters) southwest of the Study Area. There is one elderberry shrub within the Study Area, but outside the parcel boundary of the project site, that provides potential habitat for this species. The elderberry shrub includes several stems with diameters of less than one and up to five inches, and approximately six stems were observed with potential exit holes. The observed holes in the stems could have potentially been created by invertebrates other than VELB. Since the elderberry shrub is isolated, occurs outside of a riparian zone, and is located above an elevation of 500 feet, the elderberry shrub provides marginal habitat for VELB. Therefore, this species has a *low* potential to occur within the Study Area.

### Western Bumble Bee

The western bumble bee is on the California Special Animals List as designated by CDFW. This species is found in open grassy areas, urban parks and gardens, chaparral and shrub areas, and mountain meadows. This species nests underground in abandoned rodent burrows or other cavities. Plants that this species is associated with include: ceanothus (*Ceanothus* sp.), thistle (*Centaurea* sp.), rabbitbrush (*Chrysothamnus* sp.), geranium (*Geranium* sp.), gumplant (*Grindelia* sp.), lupine (*Lupinus* sp.), sweetclover, monardella (*Monardella* sp.), blackberry (*Rubus* sp.), goldenrod (*Solidago* sp.), and clover (*Trifolium* sp.). There are no CNDDDB occurrences for this species within five miles of the Study Area (CDFW 2020). Small burrows present within the Study Area provide nesting habitat and the annual grassland and food plants (i.e., thistle, ceanothus, blackberry, and clover) identified within the Study Area provides suitable foraging habitat for this species. The species was not observed onsite during the biological survey. This species has a *low* potential to occur within the Study Area.

## 4.6 SENSITIVE HABITATS

Sensitive habitats include those that are of special concern to resource agencies or those that are protected under CEQA, Section 1600 of the California Fish and Game Code, and/or Sections 401 and 404 of the Clean Water Act. Additionally, sensitive habitats are protected under the specific policies outlined in the *Placer County General Plan*. Sensitive habitats present within the Study Area include non-vernal pool seasonal wetlands and mixed oak woodland and oak-foothill pine woodland. These communities are discussed in further detail below. Because the FSP easement is not expected to implement vegetation management that would result in fill of aquatic features, jurisdictional aquatic features identified in 2010 by Gibson and Skordal, LLC, are not discussed in further detail.

#### 4.6.1 Potential Jurisdictional Waters of the U.S. and State

Three non-vernal pool seasonal wetlands, totaling 0.11 acre, and Caperton Canal were identified within the Study Area during 2018 site surveys. The proposed project is expected to result in impacts to these non-vernal pool seasonal wetlands based on the current project footprint (Figure 5). Caperton Canal is within the Study Area, but outside of the site boundary and therefore is not expected to be impacted by the proposed project.

As previously mentioned, the FSP easement area was formally delineated in 2010, and contains portions of two jurisdictional features in the form of non-vernal pool seasonal wetlands totaling 0.25 acre. Detailed information of these features can be found in the 2010 aquatic resources delineation by Gibson and Skordal, LLC. Work within the FSP easement, including slash and brush removal and creation of shaded fuel breaks, is not expected to result in fill of these wetlands since ground disturbance is not anticipated to occur during fuel management activities.

#### 4.6.2 Oak Trees and Woodlands

A total of approximately 37.82 acres of mixed oak woodland habitat, and 1.08 acres of oak-foothill pine woodland habitat and a total of 88 significant oak trees occur within or overhanging the Study Area. While major tree removal within the FSP easement is not expected, there may still be impacts to protected trees and oak woodland within the FSP easement if deemed necessary to minimize crown overlap.

#### 4.6.3 Wildlife Migration Corridors

Wildlife corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. Fragmentation can also occur when a portion of one or more habitats is converted into another habitat, such as when woodland or scrub habitat is altered or converted into grasslands after a disturbance such as fire, mudslide, or grading activities. Wildlife corridors mitigate the effects of this fragmentation by: (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events (such as fire or disease) on population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs. During the September 11 and 12, 2018 surveys, several mobile wildlife species including, coyote, were observed, and presence of black-tailed mule deer, bear, racoon, and skunk were observed within the Study Area. Undeveloped private property occurs immediately surrounding the site, which link the surrounding habitats, including the mixed-oak woodland, oak-foothill pine woodland, and annual grassland, which may be considered as wildlife migration corridor. The development of the proposed project is not expected to result in the creation of extensive barriers or impacts to wildlife migration corridors since the surrounding landscape will continue to contain undeveloped natural habitat on the larger La Faille Ranch Property. The La Faille Ranch contains a drainage course outside of the Study Area for the proposed project that likely serves as a local wildlife movement corridor and that drainage course will not be affected by the proposed project.

The majority of the oak woodland within the interior of the project site and within the FSP easement, along the steep slopes to the north and west of the proposed development, will also remain intact. The

oak woodland and annual grassland surrounding the proposed development to the south and east will remain unimpacted by the proposed project. However, the proposed Bickford Ranch project will develop the areas to the west, south, and east of the Study Area. Despite this, the potential existing wildlife movement corridors along creek boundaries on La Faille Ranch will remain intact.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

As discussed, the Study Area consists of annual grassland, mixed oak woodland, oak-foothill pine woodland, and urban (road) areas. The FSP easement, contained within the Study Area, consists of mixed oak woodland and annual grassland, with non-vernal pool seasonal wetlands occurring within the mixed oak woodland habitat. Although vegetation management activities will occur within the FSP easement, they are not expected to result in permanent loss of oak woodland or annual grassland. Table 1 below provides a summary of the estimated extent of direct impacts by biological community within the Study Area for the Project. Indirect impacts were not assessed based on habitats impacted. See Figures 5 and 6 for a summary of community impacts.











**Table 1**  
**IMPACTS TO BIOLOGICAL COMMUNITIES**

<b>Biological Communities</b>	<b>Direct Impacts (acres)</b>	<b>Avoided Acreage</b>	<b>Total Acreage*</b>
Mixed Oak Woodland	7.916	29.904	37.82
Oak-Foothill Pine Woodland	0.069	1.009	1.08
Annual Grassland	10.887	5.483	16.37
Non-Vernal Pool Depressional Seasonal Wetland	0.106	0.254	<b>0.36</b>
Urban (Roads)	0.297	0.628	<b>0.92</b>
<b>TOTAL</b>	<b>19.275</b>	<b>37.278</b>	<b>56.55</b>

Known or potential biological constraints in the Study Area include the following:





- Potential habitat for special-status plants: Ahart’s dwarf rush, big-scale balsamroot, Brandegees clarkia, Butte County fritillary, dubious pea, dwarf downingia, Humboldt lily, oval-leaved viburnum, Red Hills soaproot, and streambank spring beauty;
- Potential habitat for western spadefoot;
- Potential habitat for special-status invertebrates: andrenid bee, Morrison bumble bee, valley elderberry longhorn beetle, and western bumble bee;
- Potential nesting and foraging habitat for special-status and migratory bird species: grasshopper sparrow, northern harrier, purple martin, and white-tailed kite; and
- Potential nesting habitat for Swainson’s hawk (Study Area is not expected to provide suitable foraging habitat due to small patch sizes of open grassland although suitable foraging habitat is present to the north and west of Study Area).

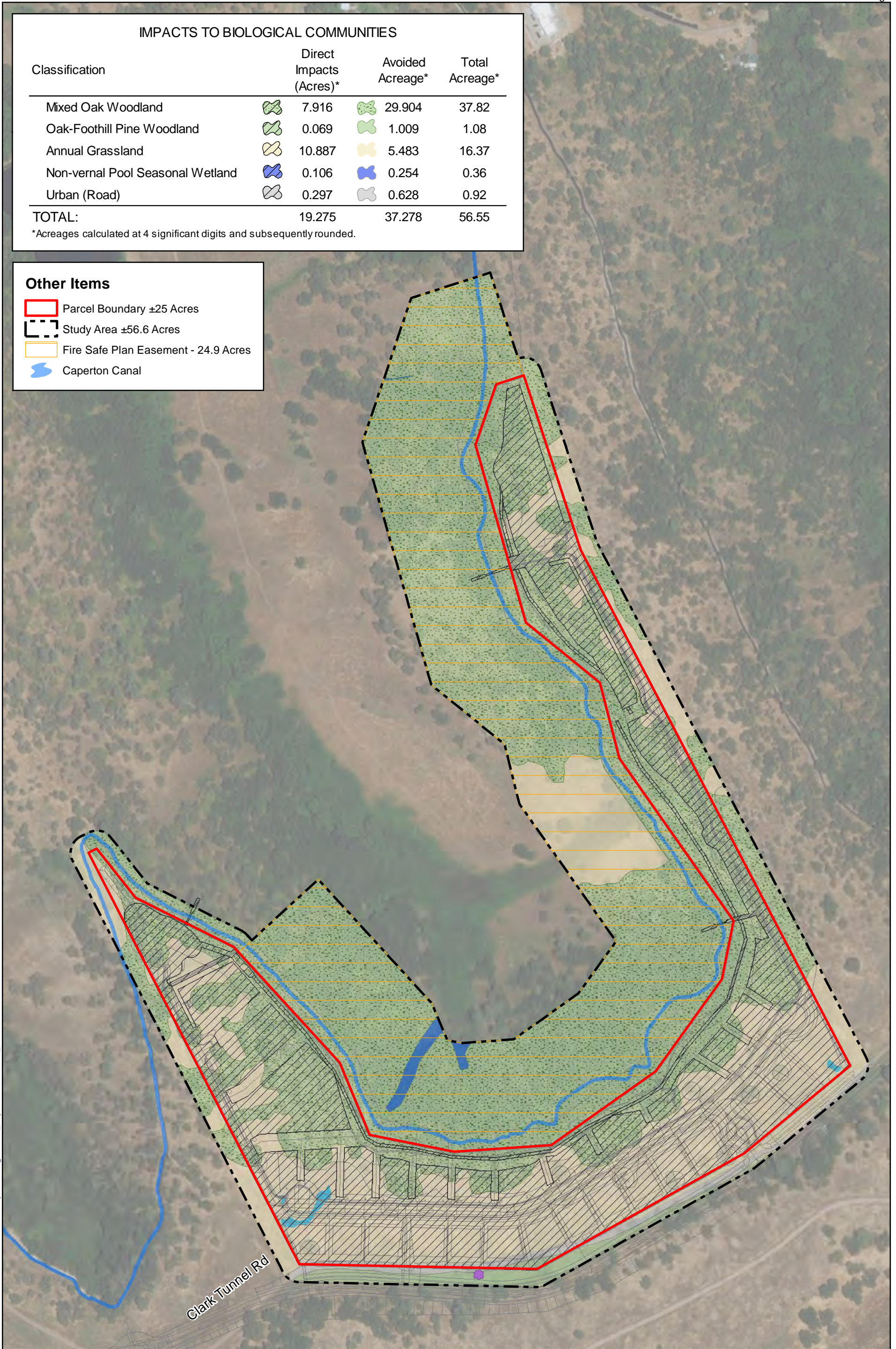
IMPACTS TO BIOLOGICAL COMMUNITIES

Classification		Direct Impacts (Acres)*	Avoided Acreage*	Total Acreage*
Mixed Oak Woodland		7.916	 29.904	37.82
Oak-Foothill Pine Woodland		0.069	 1.009	1.08
Annual Grassland		10.887	 5.483	16.37
Non-vernal Pool Seasonal Wetland		0.106	 0.254	0.36
Urban (Road)		0.297	 0.628	0.92
<b>TOTAL:</b>		<b>19.275</b>	<b>37.278</b>	<b>56.55</b>

\*Acreages calculated at 4 significant digits and subsequently rounded.

Other Items

-  Parcel Boundary ±25 Acres
-  Study Area ±56.6 Acres
-  Fire Safe Plan Easement - 24.9 Acres
-  Caperton Canal



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0 200 Feet



Source: Aerial (DigitalGlobe 6/10/2018)

IMPACTS TO OAK WOODLANDS

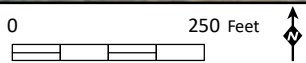
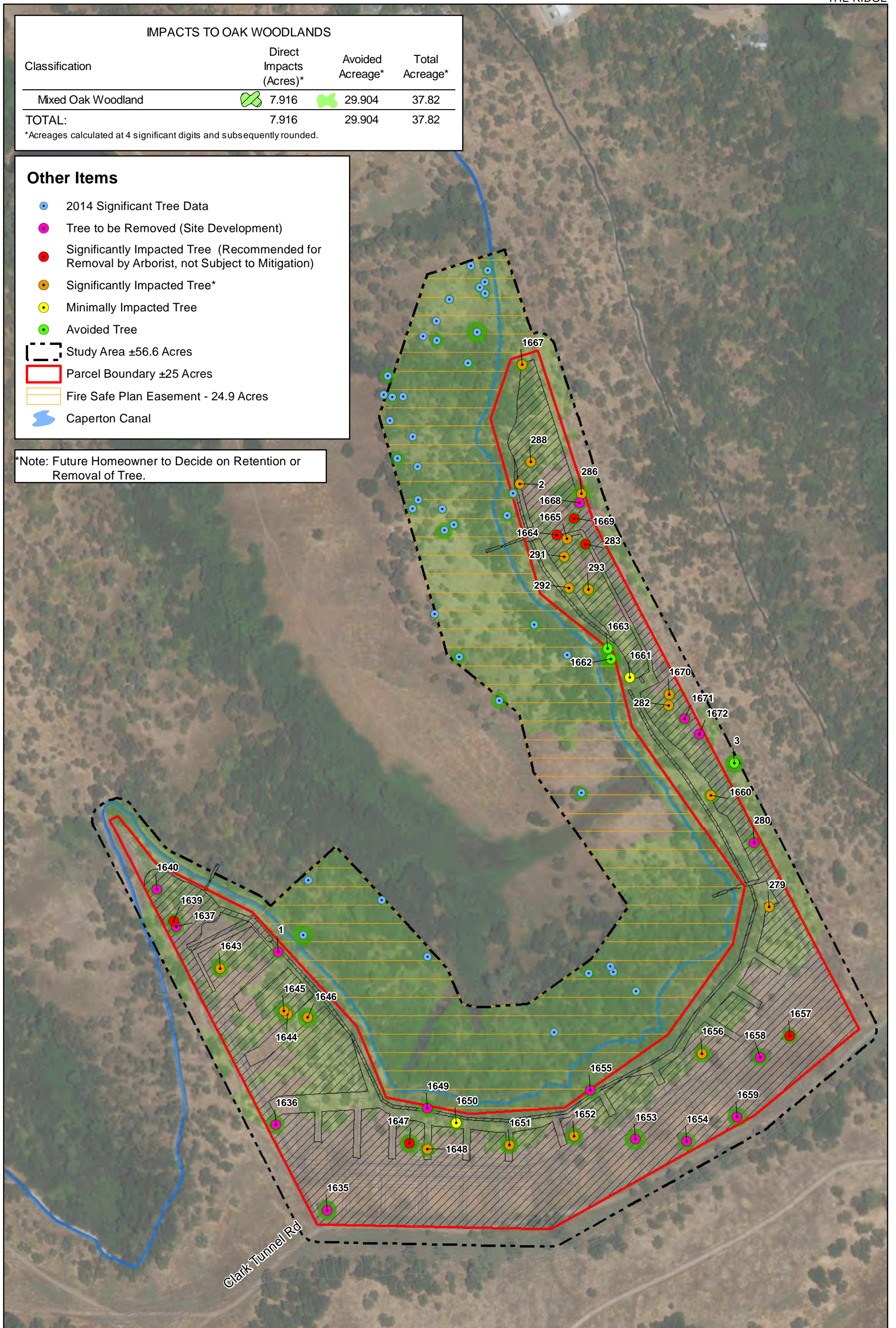
Classification	Direct Impacts (Acres)*	Avoided Acreage*	Total Acreage*
Mixed Oak Woodland	7.916	29.904	37.82
<b>TOTAL:</b>	<b>7.916</b>	<b>29.904</b>	<b>37.82</b>

\*Acreages calculated at 4 significant digits and subsequently rounded.

Other Items

- 2014 Significant Tree Data
- Tree to be Removed (Site Development)
- Significantly Impacted Tree (Recommended for Removal by Arborist, not Subject to Mitigation)
- Significantly Impacted Tree\*
- Minimally Impacted Tree
- Avoided Tree
- Study Area ±56.6 Acres
- ▭ Parcel Boundary ±25 Acres
- ▭ Fire Safe Plan Easement - 24.9 Acres
- ▭ Caperton Canal

\*Note: Future Homeowner to Decide on Retention or Removal of Tree.



Source: Aerial (DigitalGlobe 6/10/2018)

## 5.1 APPLICABLE PCCP AVOIDANCE AND MINIMIZATION MEASURES

Applicable Avoidance and Minimization Measures for the Project as contained in Chapter 4 of the PCCP are provided below for potential project-related impacts to PCCP covered species and habitats.

### 5.1.1 Valley Elderberry Longhorn Beetle

There is one isolated elderberry shrub within the Study Area, however, the shrub occurs outside of the parcel boundary for the project site. This shrub is within the proposed footprint of the adjacent Bickford Ranch Road improvements lying within the approved Bickford Ranch development footprint. Construction of this segment of Bickford Ranch Road is a pre-requisite to development of the proposed Project. While it is possible that construction of this segment of Bickford Ranch Road could be implemented concurrently with the proposed Project by the project proponent, any such construction will be pursuant to the certified EIR for Bickford Ranch.

The PCCP only requires surveys for elderberry shrubs occurring below 650 feet in elevation. The Project site elevation ranges from approximately 700 to 800 feet in elevation. Therefore, PCCP avoidance measures for VELB will not apply for the Project.

### 5.1.2 Swainson's Hawk

Although no Swainson's hawks were observed during the biological survey, this species has a low potential to nest within the Study Area and forage in areas adjacent to the Study Area based on habitats present within and adjacent to the Study Area and known occurrences of the species within ten miles. The PCCP only requires focused nesting surveys for Swainson's hawk to be conducted within areas of the Central Valley within the Plan Area. Therefore, since the Project is located in the foothills, focused nest surveys for this species according to PCCP requirements are not expected to be necessary. However, nesting bird surveys for other protected avian species not covered by the PCCP will be conducted (see Mitigation Measure BIO-3 below).

### 5.1.3 Oak Trees and Oak Woodland

A total of 37.82 acres of mixed-oak woodland habitat, 1.08 acres of oak-foothill pine woodland, and 88 significant oak trees were mapped within the Study Area. A total of 7.985 acres of oak woodland are anticipated to be directly impacted by the Project (Figure 6).

Activities within the FSP easement are expected to be restricted to brush clearing and removal of downed/dead trees, with the goal of creating shaded fuel breaks for public safety. However, individual trees have the potential to be subject to removal if deemed necessary for crown clearance.

Since the PCCP has been adopted, development fees will be applied for vegetation community impacts according to PCCP guidelines including for oak woodland as well as other natural and semi-natural habitats. As per Table 9-6 of the PCCP, the proposed project site falls under Plan Area A – Foothills, 2d for "Single Family Residential on Existing Parcel Subdivided into Five or More Total Parcels and Multi-Family Residential" projects.



Mitigation responsibilities for impacts associated with the 28 single-family residential lots and the common area lots will be the responsibility of the project developer. Mitigation responsibilities for the six rural residential lots will be executed at the time of lot development and will be the responsibility of each individual lot owner. Final mitigation requirements will be determined by the Placer County Planning Department upon finalization of project design and consideration of oak woodland canopy and/or significant tree avoidance during project construction.

#### 5.1.4 PCCP Development Fees

The PCCP has been adopted and Chapter 19 of the PCCP is in effect. PCCP development fees will be applied to the following types of habitats that may be affected by development: land conversions of natural and semi-natural habitats, vernal pool special habitats, aquatic and wetland habitats, and streams and watershed habitats. For the Project, these include impacts to annual grassland, mixed oak woodland, oak-foothill pine woodland, and non-vernal pool seasonal wetlands. As per Table 9-6 of the PCCP, the proposed project site falls under Plan Area A – Foothills, 2d for “*Single Family Residential on Existing Parcel Subdivided into Five or More Total Parcels and Multi-Family Residential*” projects. Fees applied per Plan A (2d) – Foothills PFG are \$2,279 per development unit +\$7,560 per acre plus any applicable special habitat fees. Special habitat fees will apply for impacts to non-vernal pool seasonal wetlands (\$121,025 per acre).

## 5.2 BIOLOGICAL MITIGATION MEASURES

The following are mitigation measures to address potentially significant impacts to biological resources that may result from Project construction.

### 5.2.1 Special-Status Plants

If special-status plants are present within areas subject to permanent ground disturbance, they could be subject to impact or removal. This is a potentially significant impact. No special-status plant species were observed in the Study Area during the biological survey. It should be reiterated that the FSP easement was not included as part of the 2018 survey. As previously mentioned, the FSP easement is not expected to incur significant impacts to special-status plants related to brush-clearing work due to no loss of soil or seedbank and no complete removal of understory vegetation. Mitigation Measure BIO-1 as outlined below is included to address potentially significant impacts to special-status plants from the residential portion of the Project.

#### **Mitigation Measure BIO-1: Special-status Plants**

In order to reduce potential impacts to special-status plants during project development, the project proponent shall enlist a qualified botanist to conduct a botanical survey within the appropriate evident and identifiable blooming periods for special-status plant species having the potential to occur within the Study Area including the FSP easement prior to ground disturbance or vegetation management activities. The proposed project is expected to impact portions of the annual grassland, mixed oak woodland, and urban (roads) habitats. The species that have the potential to occur within these habitats include: Ahart’s dwarf rush (blooms March through May), big-scale balsamroot (blooms March through June), Brandegee’s clarkia (blooms May through July), Butte County fritillary, (blooms March through June), dubious pea (blooms April through May), dwarf downingia (blooms March through May), Humboldt lily (blooms May through August), oval-leaved viburnum (blooms May through June), Red Hills

soaproot (blooms May through June), and streambank spring beauty blooms (February through May). One survey shall be conducted in May by the qualified botanist satisfy the blooming periods for all ten plants. If no special-status plants are observed, the botanist shall document the findings in a letter report within two weeks of the final survey and no additional measures are required.

If any of the non-listed special-status plants are identified within areas of potential construction disturbance, they shall be avoided to the greatest extent feasible. If the plants cannot be avoided, the plants and/or the seedbank via topsoil salvage shall be transplanted to suitable habitat near the project site but outside of the construction footprint. If non-listed special-status plants are found during the recommended botanical surveys, a qualified biologist shall prepare an avoidance and mitigation plan detailing protection and avoidance measures. The plan may include measures such as transplanting individual plants, transplanting the seed bank through topsoil salvage and transplanting to suitable habitat outside of the project footprint, or use of appropriate nursery stock. The plan shall include at a minimum: transplantation procedures success criteria, and long-term monitoring protocols for plant species subject to mitigation. In addition, a pre-construction worker awareness training shall be conducted alerting workers to the presence of and protections for special-status plants. The mitigation plan shall be submitted to and approved by the County prior to implementation of plant mitigation procedures. Implementation of Mitigation Measure BIO-1 is expected to reduce potential impacts to special-status plants to a less than significant level.

### 5.2.2 Western Spadefoot

Western spadefoot has the potential to breed within the non-vernal pool seasonal wetlands and aestivate within the burrows throughout the annual grassland and mixed oak woodland habitats within the Study Area. Western spadefoot adults, juveniles, and egg masses would be potentially subject to injury or mortality if present during construction activities. These impacts would be potentially significant. Therefore, implementation of Mitigation Measure BIO-2 would be required.

#### **BIO-2 Western Spadefoot**

Prior to implementation of ground disturbance, the project applicant shall enlist a qualified biologist to conduct a pre-construction survey for western spadefoot within existing suitable habitat within the Study Area during the appropriate survey season prior to the anticipated start of construction. The survey will generally be conducted between February 1 and March 31 when western spadefoots are above ground and identifiable. Construction may begin within one year after this survey is conducted and construction is not required to be started immediately after the survey is completed.

If no western spadefoots are found within the Study Area, then a letter report shall be prepared to document the survey, and no additional mitigation is required.

If western spadefoots are found during the focused survey, then a qualified biologist shall conduct an environmental awareness training to all construction personnel. The training shall include information on the identification of the special-status species including western spadefoot, required practices before the start of construction, general measures that are being implemented to conserve the species as they relate to the project, penalties for non-compliance, and boundaries of the Study Area and of the permitted disturbance zones. Supporting materials containing training information shall be prepared and distributed to construction personnel during the training. Upon completion of training, all

construction personnel shall sign a form stating that they have attended the training and understand all the measures. Proof of this instruction should be kept on file with the project proponent.

Furthermore, a qualified biologist shall be present on-site during initial ground-clearing and grading activities for the purpose of relocating any western spadefoot found within the construction footprint to suitable habitat away from the construction zone, but within the Study Area. The biologist shall obtain permission for relocation from CDFW prior to relocation of western spadefoots. A brief letter report documenting the implementation of relocation procedures and results of the relocation shall be provided to the County within 14 days of translocation activities. A copy of the letter shall be provided to CDFW if requested.

### 5.2.3 Migratory Birds

Migratory birds may forage and nest in the Study Area, including, grasshopper sparrow, northern harrier, purple martin, and white-tailed kite. Active nests are protected by the California Fish and Game Code Section 3503.5 and the MBTA. Construction activities could result in disturbance of nest sites through temporary increases in ambient noise levels and increased human activity. In addition, vegetation clearing and ground-disturbing operations could impact nesting birds if these activities occur during the nesting season (February 1 to August 31). Project-related impacts to nesting birds are potentially significant. Mitigation Measure BIO-3 shall be implemented to mitigate for potentially significant impacts to nesting birds.

#### **Mitigation Measure BIO-3: Nesting Birds**

All vegetation clearing shall be completed between September 1 through January 31, if feasible to avoid impacts to suitable nesting habitat during the typical nesting season.

If vegetation removal and grading activities must occur during the nesting season (February 1 to August 31), the project applicant shall enlist a qualified biologist to conduct a pre-construction survey of the Study Area (project footprint and 100-foot buffer area) for active nests. The pre-construction survey shall be conducted within three days prior to commencement of ground-disturbing activities as per current CDFW guidance. If the pre-construction survey shows that there is no evidence of active nests, a letter report shall be prepared to document the survey and submitted to the County within 10 days of completion of the survey and no additional mitigation measures are required. If construction does not commence within three days of the pre-construction survey, or halts for more than 14 days, an additional survey will be required prior to starting work.

If vegetation removal within the FSP easement will occur during the nesting season, a pre-construction survey for active nests shall be conducted within three days prior to the start of vegetation removal including removal of trees, shrubs, or understory as outlined above.

If nests are found during the survey and considered to be active, the project biologist shall establish species-appropriate buffer zones to prohibit construction or vegetation management activities and minimize nest disturbance until the young have successfully fledged or until the biologist determines that the nest is no longer active. Buffer width will depend on the species in question, surrounding existing disturbances, and specific site characteristics. If active nests are found within any trees slated for removal, then an appropriate buffer shall be established around the trees and the trees shall not be removed until a biologist determines that the nestlings have successfully fledged or until the nest is no longer active. A brief letter report documenting the results of the nesting bird survey shall be provided

to the County within 14 days of the completion of the survey. In addition, a pre-construction worker awareness training shall be conducted alerting workers to the presence of and protections for the active avian nests. If construction activities are proposed to begin during the non-breeding season (September 1 through January 31), a survey is not required and no further mitigation is necessary. Implementation of Mitigation Measure BIO-2 is expected to reduce project-related impacts to nesting birds to a less than significant level.

#### 5.2.4 Sensitive Invertebrate Species

Andrenid bee, Morrison bumble bee, and western bumble bee have a *low* potential to occur within the Study Area. None of these species were observed during the biological survey. Small burrows within the Study Area provide nesting habitat and the non-native annual grassland and food plants (i.e., thistle, ceanothus, blackberry, and clover) identified within the Study Area provides suitable foraging habitat for this species. Vegetation clearing and construction activities could impact potential nesting habitat and foraging vegetation for these species, if present. However, since similar habitats and vegetation species are present immediately adjacent to the Study Area, it is not expected to have a significant impact to nesting and foraging habitat for these species. Therefore, no mitigation measures are recommended for these species.

#### 5.2.5 Potential Jurisdictional Waters of the U.S. and State

Three non-vernal pool seasonal wetlands occur within the proposed project portion of Study Area, which are expected to be impacted based on the current site plan (Figure 5). No jurisdictional waters within the FSP easement are expected to be impacted by activities within the easement because soil disturbance will not occur during vegetation management activities within the FSP easement. Should the proposed project result in impacts (i.e., discharge of dredged or fill material) to waters of the U.S. or waters of the State, this impact would be considered significant.

In order to address potentially significant impacts to jurisdictional waters, implementation of Mitigation Measure BIO-4 will be required.

#### **Mitigation Measure BIO-4: Aquatic Resource Mitigation**

Prior to issuance of a grading permit, the Project applicant shall obtain a Section 404 Clean Water Act Permit and a Section 401 Water Quality Certification for any project-related fill of waters of the U.S. In the event that aquatic resources are deemed to not be waters of the U.S., the project applicant shall obtain a WDR from the RWQCB for any impacts to waters of the State. Any waters of the U.S. or State that would be lost or impacted shall be replaced or rehabilitated on a “no-net-loss” basis in accordance with USACE and/or RWQCB mitigation guidelines. Mitigation shall be accomplished through payment of applicable PCCP habitat mitigation fees for aquatic resources in accordance with the CARP or as otherwise required by the USACE and/or the RWQCB. Documentation of completion of any mitigation requirements shall be provided to the County and resource agencies prior to fill of jurisdictional aquatic features. Implementation of Mitigation Measure BIO-4 is expected to reduce the level of impacts to aquatic resources to less than significant.

### 5.3 SUMMARY OF AVOIDANCE AND MINIMIZATION MEASURES

Implementation of the following measures is recommended to minimize impacts to biological resources within the project site:

- Conduct one special-status plant survey in May, prior to the start of construction;
- Conduct a pre-construction survey for western spadefoot between February 1 to March 31 prior to commencement of construction activities.;
- Conduct a pre-construction survey for nesting birds within 14 days prior to the start of construction, if work begins between February 1 and August 31;
- Based on results of pre-construction surveys, conduct worker awareness training for plants, western spadefoot, and nesting migratory birds, prior to the start of construction, if needed;
- Mitigate for impacts to vegetation communities as required by the PCCP;
- Conduct clearing and tree and shrub removal operations between September 16 and January 31, if feasible, to minimize potential impacts to nesting birds; and
- Obtain 404 and 401 permits for any impacts to jurisdictional wetlands and other waters of the U.S. and State under the CARP program of the PCCP or as required by the USACE and/or RWQCB.

## 6.0 REFERENCES

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# Appendix A

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## Placer County General Plan Regulations



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**Attachment A**  
**Placer County General Plan Regulations**

**The Placer County General Plan (General Plan)**

**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.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.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*
- d) Pay a mitigation fee for in-kind restoration elsewhere (e.g., mitigation banks).*

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*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.*

**Attachment A (cont.)**  
**Placer County General Plan Regulations**

- Policy 6.A.6 - The County shall require development projects to comply with the municipal and construction storm water 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.*
- Policy 6.A.7 - All new development and redevelopment projects shall be designed so as to minimize the introduction of pollutants into storm water runoff, to the maximum extent practicable, as well as minimize the amount of runoff through the incorporation of appropriate Best Management Practices.*
- Policy 6.A.8 - The County shall support implementation of Low Impact Development site design and Watershed Process Management requirements for new and redevelopment projects in accordance with the NPDES Phase I and II programs, and applicable NPDES permits.*
- Policy 6.A.9 - The County shall require that natural watercourses be integrated into new development in such a way that they are accessible to the public and provide a positive visual element.*
- Policy 6.A.10 - The County shall discourage grading activities during the rainy season, unless adequately mitigated, to avoid sedimentation of creeks and damage to riparian habitat.*
- Policy 6.A.11 - Where the stream zone has previously been modified by channelization, fill, or other human activity, the County shall require project proponents to restore such areas by means of landscaping, revegetation, or similar stabilization techniques as a part of development activities.*
- Policy 6.A.12 - The County shall require that newly-created parcels include adequate space outside of watercourses' setback areas to ensure that property owners will not place improvements (e.g., pools, patios, and appurtenant structures), within areas that require protection.*
- Policy 6.A.13 - The County shall protect groundwater resources from contamination and further overdraft by pursuing the following efforts:*
- a. Identifying and controlling sources of potential contamination;*
  - b. Protecting important groundwater recharge areas;*
  - c. Encouraging the use of surface water to supply major municipal and industrial consumptive demands;*

**Attachment A (cont.)**  
**Placer County General Plan Regulations**

- d. *Encouraging the use of treated wastewater for groundwater recharge; and*
- e. *Supporting major consumptive use of groundwater aquifer(s) in the western part of the County only where it can be demonstrated that this use does not exceed safe yield and is appropriately balanced with surface water supply to the same area.*

*Policy 6.A.14 - The County shall help ensure that open space located in reservoir is preserved and protected to assure adequate performance of those reservoirs. The watershed is defined as those lands draining into a reservoir and having an immediate effect upon the quality of water within that reservoir. Those lands located within the watershed and within 5,000 feet of the reservoir shall be considered as having an immediate effect. Following are key watersheds labeled "immediate," because of their current domestic usage and proximity to urban areas and "future," because of current nondomestic usage and/or distance from urban areas.*

*Policy 6.A.15 - The County shall encourage the protection of floodplain lands and, where appropriate, acquire public easements for purposes of flood protection, public safety, wildlife preservation, groundwater recharge, access and recreation.*

**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.*

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*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.*

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- 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.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.5 - The County shall require mitigation for development projects where isolated segments of stream habitat are unavoidably altered. Such impacts should be mitigated on-site with in-kind habitat replacement or elsewhere in the stream system through stream or riparian habitat restoration work where it is clear that offsite replacement provides greater functions and values than onsite replacement.*

*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.8 - The County shall support the preservation or reestablishment of fisheries in the rivers and streams within the County, whenever possible.*

*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*

**Attachment A (cont.)**  
**Placer County General Plan Regulations**

*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.10 - The County will use the California Wildlife Habitat Relationships (WHR) system as a standard descriptive tool and guide for environmental assessment in the absence of a more detailed site-specific system.*

*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.12 - The County shall cooperate with, encourage, and support the plans of other public agencies to acquire fee title or conservation easements to privately-owned lands in order to preserve important wildlife corridors and to provide habitat protection of California Species of Concern and state or federally listed threatened, or endangered plant and animal species, or any species listed in an implementing agreement for a habitat conservation plan and natural communities conservation plan.*



## Attachment A (cont.) Placer County General Plan Regulations

*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.*

*Policy 6.C.14 - The County shall support the management efforts of the California Department of Fish and Wildlife to maintain and enhance the productivity of important fish and game species (such as the Blue Canyon and Loyalton Truckee deer herds) by protecting important natural communities for these species from incompatible urban/suburban, rural residential, agricultural, or recreational development.*

### **VEGETATION**

**GOAL 6.D:** To preserve and protect the valuable vegetation resources of Placer County.

*Policy 6.D.1 - The County shall encourage landowners and developers to preserve the integrity of existing terrain and natural vegetation in visually-sensitive areas such as hillsides, ridges, and along important transportation corridors.*

*Policy 6.D.2 - The County shall require developers to use native and compatible non-native species, especially drought-resistant species, to the extent possible in fulfilling landscaping requirements imposed as conditions of discretionary permits or for project mitigation.*

*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 establish procedures for identifying and preserving special status, threatened, and endangered plant species that may be adversely affected by public or private development projects.*

*Policy 6.D.6 - The County shall ensure the conservation of sufficiently large, continuous expanses of native vegetation to provide suitable habitat for maintaining abundant and diverse wildlife.*

**Attachment A (cont.)**  
**Placer County General Plan Regulations**

*Policy 6.D.7 - The County shall support the management of wetland and riparian plant communities for passive recreation, groundwater recharge, nutrient catchment, and wildlife habitats. Such communities shall be restored or expanded, where possible.*

*Policy 6.D.8 - The County shall require that new development preserve natural woodlands to the maximum extent possible.*

*Policy 6.D.9 - The County shall require that development on hillsides be limited to maintain valuable natural vegetation, especially forests and open grasslands, and to control erosion.*

*Policy 6.D.10 - The County shall encourage the planting of native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native wildlife, and ensure that a maximum number and variety of well-adapted plants are maintained.*

*Policy 6.D.11 - The County shall support the continued use of prescribed burning, mastication, chipping, and other methods to mimic the effects of natural fires to reduce fuel loads and associated fire hazard to human residents and to enhance the health of biotic communities.*

*Policy 6.D.12 - The County shall support the retention of vegetated corridors, consistent with Fire Safe Practices, along circulation routes in order to preserve their rural character.*

*Policy 6.D.13 - The County shall support the preservation of native trees and the use of native, drought-tolerant plant materials in all revegetation/landscaping projects.*

*Policy 6.D.14 - The County shall require that new development avoid ecologically-fragile areas (e.g., areas of special status, threatened, or endangered species of plants, and riparian areas). Where feasible, these areas should be protected through public or private acquisition of fee title or conservation easements to ensure protection.*

**OPEN SPACE FOR THE PRESERVATION OF NATURAL RESOURCES**

**GOAL 6.E:** To preserve and protect the valuable vegetation resources of Placer County.

*Policy 6.E.1 - The County shall support the preservation and enhancement of natural land forms, natural vegetation, and natural resources as open space to the maximum extent feasible. The County shall permanently protect, as open space, areas of natural resource value, including wetlands, riparian corridors, unfragmented woodlands, and floodplains.*

**Attachment A (cont.)**  
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*Policy 6.E.2 - The County shall require that new development be designed and constructed to preserve the following types of areas and features as open space to the maximum extent feasible:*

- a) High erosion hazard areas;*
- b) Scenic and trail corridors;*
- c) Streams, riparian vegetation;*
- d) Wetlands;*
- e) Significant stands of vegetation;*
- f) Wildlife corridors; and*
- g) Any areas of special ecological significance.*

*Policy 6.E.3 - The County shall support the maintenance of open space and natural areas that are interconnected and of sufficient size to protect biodiversity sustain viable populations, accommodate wildlife movement, and sustain ecosystems.*

*Policy 6.E.4 - The County shall coordinate with local, state, and federal agencies and private organizations to establish visual and physical links among open space areas. Where appropriate, these open space areas are to be connected by scenic corridors, wildlife corridors, and trails. Dedication of easements shall be encouraged, and in many cases, required as lands are developed and built.*

## Appendix B

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### Regionally Occurring Listed and Special-status Species

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## Appendix B Regionally Occurring Listed and Special-status Species

Table 1 — Legally Protected Species

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/Survey Period	Potential for Occurrence
<b>Plants</b>				
Bogg's Lake hedge-hyssop <i>Gratiola heterosepala</i>	--; CE; 1B	Annual herb found on clay soils in vernal pools, marshes, and swamps, occasionally along the lake margins, from 10 to 2,375 meters in elevation.	Blooming period: April – August	<b>None</b> ; the Study Area does not contain suitable habitat to support this species.
El Dorado bedstraw <i>Galium californicum</i> ssp. <i>sierrae</i>	FE; CR; 1B	Perennial herb found on gabbroic soil in chaparral, cismontane woodland, lower montane coniferous forest from 100 to 585 meters in elevation.	Blooming period: May – June	<b>None</b> ; the Study Area does not contain gabbroic soils to support this species.
Layne's ragwort <i>Packera layneae</i>	FT; CR; 1B	Perennial herb found on serpentine or gabbroic rocky soil in chaparral and cismontane woodland from 200 to 1,085 meters in elevation.	Blooming period: April – August	<b>None</b> ; the Study Area does not contain serpentine or gabbroic soils to support this species.
Pine Hill ceanothus <i>Ceanothus roderickii</i>	FE; CR; 1B	Perennial evergreen shrub found on serpentinite or gabbroic (nutrient-deficient forms of gabbro-derived soils characterized by low concentrations of available K, P, S, Fe, and Zn) in chaparral, cismontane woodland from 245 to 1,090 meters in elevation.	Blooming period: April – June	<b>None</b> ; the Study Area does not contain serpentine or gabbroic soils to support this species.
Stebbins' morning-glory <i>Calystegia stebbinsii</i>	FE; CE; 1B	Perennial rhizomatous herb found on gabbroic or serpentinite soil in chaparral openings in cismontane woodlands from 185 to 1,090 meters in elevation.	Blooming period: April – July	<b>None</b> ; the Study Area does not contain serpentine or gabbroic soils to support this species.
<b>Invertebrates</b>				
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT; --; --	Sole hosts are elderberry ( <i>Sambucus</i> sp.) shrubs typically associated with riparian areas. This species is known from portions of the Central Valley of California. This species has an elevational range limit of 500 feet above MSL (USFWS).	Adults emerge in spring until June. Exit holes visible year-round.	<b>Low</b> ; one elderberry shrub with exit holes was observed within the Study Area during the September 12, 2018 biological survey. Since the shrub is isolated, occurs above 500 feet and outside of a riparian zone, then this shrub provides marginal habitat for this species within the Study Area.  There is one known CNDDB occurrence for this species within five miles of the Study Area (CDFW 2020).
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT; --; --	Typically found in vernal pools, but can also be found in other natural ephemeral habitats (alkali pools, seasonal drainages, stock ponds, vernal swales and rock outcrops), and artificial ephemeral habitats (railroad toe-drains, roadside ditches, abandoned agricultural drains, deep tire ruts, and firebreak depressions).	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	<b>None</b> ; the seasonal wetland features do not contain vegetation indicative of suitable habitat for this species. Additionally, these features are too shallow to support a full life cycle for this species.  There are four known CNDDB occurrences for this species within five miles of the Study Area (CDFW 2020).
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	FE; --; --; --	Inhabits vernal pools, swales, and ephemeral freshwater habitat. Known from Alameda, Butte, Colusa, Contra Costa, Fresno, Glenn, Kings, Merced, Placer, Fresno, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Yolo, and Yuba counties.	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	<b>None</b> ; the seasonal wetland features do not contain vegetation indicative of suitable habitat for this species. Additionally, these features are too shallow to support a full life cycle for this species.
<b>Fish</b>				
Central Valley steelhead DPS <i>Oncorhynchus mykiss irideus</i>	FT; --; --; --	Found in cool, clear, fast-flowing permanent streams and rivers with riffles and ample cover from riparian vegetation or overhanging banks. Spawning occurs in streams with pool and riffle complexes. The species requires cold water and gravelly streambed to successfully breed. Spawn in the Fresno and San Joaquin rivers and tributaries before migrating to the Delta and Bay Area.	Spawns in winter and spring.	<b>None</b> ; the Study Area does not contain suitable habitat for this species.  There are two known CNDDB occurrence for this species within five miles of the Study Area (CDFW 2020).
Delta smelt <i>Hypomesus transpacificus</i>	FT; CE; --	Found in estuarine waters. Majority of life span is spent within the freshwater outskirts of the mixing zone (saltwater-freshwater interface) within the Delta.	December – July (Spawn)  Year-round (Present in delta)	<b>None</b> ; the Study Area does not contain suitable habitat for this species.

## Appendix B Regionally Occurring Listed and Special-status Species

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
<b>Amphibians/ Reptiles</b>				
California red-legged frog <i>Rana draytonii</i>	FT; CSC; --	Breeding sites are in aquatic habitats including pools and backwaters within streams and creeks, ponds, marshes, springs, sag ponds, dune ponds and lagoons from 0 to 1,500 meters. Additionally, frequently breed in artificial impoundments such as stock ponds. Typically found in or within 300 feet of aquatic habitat, but may disperse up to two miles between suitable aquatic habitat.	November – March (Breeding)  June – August (Non-breeding)	<b>None;</b> the Study Area does not contain suitable habitat for this species.
Foothill yellow-legged frog <i>Rana boylei</i>	--; CCT; --	Found in streams and rivers with rocky substrate and open, sunny banks in forests, chaparral and woodlands. Sometimes found in isolated pools, vegetated backwaters and deep shaded spring fed pools. Occurs from 0 to 1,830 meters. Rarely encountered far from permanent water sources. Inactive periods (e.g. overwintering during cold weather) will seek refuge under rocks in streams or along the shore within a few meters from water.	April – July (Breeding)	<b>None;</b> the Study Area does not contain suitable habitat for this species.
Giant garter snake <i>Thamnophis gigas</i>	FT; CT; --; --	Found in agricultural wetlands and other wetlands such as irrigation and drainage canals, low gradient streams, marshes, ponds, sloughs, small lakes, and their associated uplands. Upland habitat should have burrows or other soil crevices suitable for snakes to reside during their dormancy period (November – mid March). This species is known from Sacramento, Sutter, Butte, Colusa, and Glenn counties.	Dormancy period November – mid March  Active March – October	<b>None;</b> the Study Area is outside the known geographical distribution for this species and does not contain suitable habitat.
<b>Birds</b>				
Bald eagle <i>Haliaeetus leucocephalus</i>	FD; CE; --	Breeding habitat most commonly includes areas within 2.5 miles (4.0 kilometers) of coastal areas, bays, rivers, lakes, and reservoirs. Nests usually are in tall trees or on pinnacles or cliffs near water.	Winter (Non-Breeding)	<b>None;</b> the Study Area does not contain suitable habitat for this species.
Bank swallow <i>Riparia riparia</i>	--; CT; --	Colonial breeder found in open and partly open situations, frequently near flowing water. Nests on steep sand, dirt, or gravel banks, in burrows dug near the top of the bank, along the edge of inland water, or along the coast, or in gravel pits or road embankments.	April – September (Breeding)	<b>None;</b> the Study Area does not contain suitable habitat for this species.
California black rail <i>Laterallus jamaicensis coturniculus</i>	FSC; CT; --	Inhabits saltwater, brackish, and freshwater marshes. Nesting occurs on the ground within dense vegetation in high spots of salt marshes (i.e. pickleweed), in shallow areas of freshwater marshes, in wet meadows and in flooded grassy vegetation.	Year-round	<b>None;</b> the Study Area does not contain suitable habitat for this species.  There is one known CNDDB occurrence for this species within five miles of the Study Area (CDFW 2020).
American peregrine falcon <i>Falco peregrinus</i>	BCC; CFP; --	Found in areas containing cliffs and almost always nest near water. Use open habitats for foraging. Non-breeding peregrine falcons may also occur in open areas without cliffs. Many artificial habitats like towers, bridges and buildings are also used.	Year-round	<b>None;</b> the Study Area does not contain suitable habitat for this species.  There is one known CNDDB occurrence for this species within five miles of the Study Area (CDFW 2020).
Swainson's hawk <i>Buteo swainsoni</i>	--; CT; --; --	Nest peripherally to Valley riparian systems lone trees or groves of trees in agricultural fields. Most commonly used nest trees in the Central Valley, include valley oak, Fremont cottonwood, walnut, and large willows, and occasionally eucalyptus, pine and redwood trees. Forages in row, hay and grain agricultural crops, especially post-harvest when the height of the vegetation is short and easy to observe prey.	March – October (Breeding)	<b>Low;</b> the mixed oak woodland within the Study Area provides potential nesting habitat. The project footprint does not provide suitable foraging habitat although there is suitable foraging habitat to the north and west of the project footprint.
Tricolored blackbird <i>Agelaius tricolor</i>	--; CCE; CSA; --	Breeding habitat is freshwater marshes that include cattails, tules, bulrushes and sedges. Nests are made in the dense vegetation of the marsh or thickets, and sometimes on the ground. In migration and winter, will inhabit open cultivated lands and pastures as well as marshes.	Year-round	<b>None;</b> the Study Area does not contain suitable habitat for this species.  There are three known CNDDB occurrence for this species within five miles of the Study Area (CDFW 2020).

## Appendix B Regionally Occurring Listed and Special-status Species

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
White-tailed kite <i>Elanus leucurus</i>	PT; CFP; -- (nesting)	Inhabit savanna, open woodlands, marshes, desert grassland, partially cleared lands and cultivated fields. Nests in trees, often near a marsh in savanna, open woodland, partially cleared lands, and cultivated fields. Foraging occurs within ungrazed or lightly-grazed fields and pastures.	February 15 – August 31 (Breeding)	<b>High</b> ; the mixed oak woodland within the Study Area provides suitable nesting habitat and the annual grassland provides foraging habitat for this species.  There is one known CNDDB occurrence for this species within five miles of the Study Area (CDFW 2020).

**Table 1** includes federal threatened or endangered species and eagles, and state threatened, endangered, candidate or fully protected species.



## Appendix B Regionally Occurring Listed and Special-status Species

Table 2 — Species Subject to CEQA Review

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/Survey Period	Potential for Occurrence
<b>Plants</b>				
Big-scale balsamroot <i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>	--; --; 1B	Perennial herb sometimes found on serpentinite soil in chaparral, cismontane woodland, and valley and foothill grassland from 90 to 1,555 meters in elevation.	Blooming period: March – June	<b>Low</b> ; the mixed oak woodland and annual grassland within the Study Area provides habitat for this species.  There is one known CNDDDB occurrence for this species within five miles of the Study Area (CDFW 2020).
Hispid bird's beak <i>Chloropyron molle</i> ssp. <i>hispidum</i>	--; --; 1B	An annual hemi-parasitic herb found in alkaline soils within meadows and seeps, playas, and valley and foothill grassland from 1 to 155 meters in elevation.	Blooming period: June – September	<b>None</b> ; the Study Area does not contain alkaline soils to support this species.
Legenere <i>Legenere limosa</i>	--; --; 1B	Annual herb found in vernal pools from 1 to 880 meters in elevation.	Blooming period: April – June	<b>None</b> ; the Study Area does not contain vernal pools to support this species.
Pincushion navarretia <i>Navarretia myersii</i> ssp. <i>myersii</i>	--; --; --; 1B	Annual herb often found in acidic soils within vernal pools from 20 to 330 meters in elevation.	Blooming period: April – May	<b>None</b> ; the Study Area does not contain acidic soils or vernal pools to support this species.  There is one known CNDDDB occurrence for this species within five miles of the Study Area (CDFW 2020).
Red Bluff dwarf rush <i>Juncus leiospermus</i> var. <i>leiospermus</i>	--; --; --; 1B	Annual herb found in vernal mesic chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools from 35 to 1,250 meters in elevation.	Blooming period: March – June	<b>None</b> ; the Study Area does not contain suitable habitat to support this species.
Ahart's dwarf rush <i>Juncus leiospermus</i> var. <i>ahartii</i>	--; --; --; 1B	Annual herb found in mesic areas in valley and foothill grassland from 30 to 229 meters in elevation.	Blooming period: March – May	<b>Low</b> ; the seasonal wetlands within the annual grassland in the Study Area provides habitat for this species.
Dwarf downingia <i>Downingia pusilla</i>	--; --; --; 2B	An annual herb found in mesic areas within valley and foothill grassland and vernal pool habitats from 1 to 445 meters in elevation.	Blooming period: March – May	<b>Low</b> ; the seasonal wetlands within the annual grassland in the Study Area provides habitat for this species.
Chaparral sedge <i>Carex xerophila</i>	--; --; 1B	Perennial herb found on serpentine and gabbroic soils in chaparral, cismontane woodland, lower montane coniferous forest from 440 to 770 meters in elevation.	Blooming period: March – June	<b>None</b> ; the Study Area does not contain serpentine or gabbroic soils to support this species.
El Dorado County mule ears <i>Wyethia reticulata</i>	--; --; 1B	Perennial herb found on clay or gabbroic soil in chaparral, cismontane woodland, lower montane coniferous forests from 185 to 630 meters in elevation.	Blooming period: April – August	<b>None</b> ; the Study Area does not contain clay or gabbroic soils to support this species.
Jepson's onion <i>Allium jepsonii</i>	--; --; 1B	A perennial bulbiferous herb found on serpentine or volcanic soils within chaparral, cismontane woodland, and lower montane coniferous forest from 300 to 1,320 meters in elevation.	Blooming period: April – August	<b>None</b> ; the Study Area does not contain serpentine or volcanic soils to support this species.
Oval-leaved viburnum <i>Viburnum ellipticum</i>	--; --; 2B	A perennial deciduous shrub found within chaparral, cismontane woodland, and lower montane coniferous forests from 215 to 1,400 meters in elevation.	Blooming period: May – June	<b>Low</b> ; the mixed oak woodland and foothill pine within the Study Area provides habitat for this species.
Red Hills soaproot <i>Chlorogalum grandiflorum</i>	--; --; 1B	Perennial bulbiferous herb sometimes found on serpentinite and gabbroic soil in chaparral, cismontane woodland, lower coniferous forests from 245 to 1,690 meters in elevation.	Blooming period: May – June	<b>Low</b> ; the mixed oak woodland and foothill pine within the Study Area provides habitat for this species.
Brazilian watermeal <i>Wolffia brasiliensis</i>	--; --; 2B	An aquatic perennial herb found in assorted shallow and freshwater marshes and swamps from 20 to 100 meters in elevation.	Blooming period: April and December	<b>None</b> ; the Study Area does not provide suitable habitat and is outside of the known elevational range for this species.
<b>Invertebrates</b>				
California linderiella <i>Linderiella occidentalis</i>	--; CSA; --; --	Found in a variety of natural, and artificial seasonally ponded freshwater habitats, including vernal pools, swales, ephemeral drainages, stock ponds, reservoirs, ditches, backhoe pits, and ruts caused by vehicular activity.	Wet-season sampling and/or dry season cyst identification.	<b>None</b> ; the seasonal wetland features do not contain vegetation indicative of suitable habitat for this species. Additionally, these features are too shallow to support a full life cycle for this species.  There are four known CNDDDB occurrences for this species within five miles of the Study Area (CDFW 2020).

## Appendix B Regionally Occurring Listed and Special-status Species

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
<b>Amphibians/ Reptiles</b>				
Western pond turtle <i>Emys marmorata</i>	--; CSC; --	Typically associated with permanent ponds, lakes, streams, irrigation ditches and canals, and marshes, or pools in intermittent drainages, usually lined with abundant vegetation and either rocky or muddy bottom substrates. Requires aquatic basking sites, such as logs, rocks, cattail mats or exposed banks. Turtles are active from February to November, in which breeding occurs from April to May. Overwintering occurs in upland terrestrial habitats (approximately 300 feet) close to water sources, in which they will bury themselves under loose soil.	February – November (Active)	<b>None</b> ; the Study Area does not contain suitable habitat for this species.  There are two known CNDDDB occurrences for this species within five miles of the Study Area (CDFW 2020).
Western spadefoot <i>Spea hammondi</i>	--; CSC; --; --	Found in a variety of upland habitats, including lowlands, foothills, grasslands, open chaparral, and pine-oak woodlands. Habitat preferences include shortgrass plains, and sandy or gravelly soils for burrowing (e.g. alkali flats, washes, alluvial fans). Fossorial species that hibernates/aestivates for most of the year underground. Breeds temporary rain pools, and slow-moving streams (e.g. areas flooded by intermittent streams), and other artificial bodies of water as long as surrounding habitat is not developed or irrigated for agricultural purposes.	Breeding: January – May	<b>Low</b> ; the seasonal wetlands within the Study Area provide marginal breeding habitat and the small underground burrows throughout the mixed oak woodland and annual grassland provide upland habitat for this species.
<b>Birds</b>				
Burrowing owl <i>Athene cunicularia</i>	BCC; CSC; --	Nests in burrows in the ground, often in old ground squirrel burrows or badger, within open dry grassland and desert habitat. The burrows are found in dry, level, open terrain, including prairie, plains, desert, and grassland with low height vegetation for foraging and available perches, such as fences, utility poles, posts, or raised rodent mounds.	Year-round; Breeding season surveys between March – August	<b>None</b> ; while the non-native annual grassland may provide habitat, the underground burrows that were identified within the Study Area are not large enough to provide nesting habitat for this species.
Grasshopper sparrow <i>Ammodramus savannarum</i>	--; CSC; --; --	Frequents dense, dry, or well drained grassland, especially native grassland. Nests at base of overhanging clump of grass. This species is known from Los Angeles, Mendocino, Orange, Placer, Sacramento, San Diego, San Luis Obispo, Solano, and Yuba counties, in California.	Year-round	<b>High</b> ; the annual grassland, and mixed oak woodland within the Study Area provides habitat for this species.  There is one known CNDDDB occurrence for this species within five miles of the Study Area (CDFW 2020).
Great blue heron <i>Ardea herodias</i>	--; CSA; -- (Nesting colony)	Variety of habitats close to bodies of water including fresh and saltwater marshes, wet meadows, lake edges and shorelines. Colonial nester in tall trees, cliff sides and sequestered spots on marshes.	Year-round	<b>None</b> ; the Study Area does not contain suitable habitat for this species.
Northern harrier <i>Circus cyaneus</i>	--; CSC; --; --	Found in coastal scrub, Great Basin grassland, marsh and swamp, riparian scrub, valley and foothill grassland, wetland. Nests and forages in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation usually at marsh edge; nests built of a large mound of sticks in wet areas.	Year-round	<b>High</b> ; the annual grassland within the Study Area provides habitat for this species.
Osprey <i>Pandion haliaetus</i>	--; CSA; --; --	Found near a water source, either freshwater or salt water, such as coastal estuaries, salt marshes, large lakes, reservoirs, and rivers, where large numbers of fish are present. Sometimes seen in desert habitat during migration.	Winter (Non-breeding)	<b>None</b> ; the Study Area does not contain suitable habitat for this species.  There is one known CNDDDB occurrence for this species within five miles of the Study Area (CDFW 2020).
Purple martin <i>Progne subis</i>	--; CSC; --; --	Nests in wide variety of open and partly open habitats that are often near water or around towns. Nests in tree cavities, abandoned woodpecker holes, crevices in rocks, and sometimes in bird houses or gourds put up by humans.	Summer (Breeding)	<b>High</b> ; the trees within the mixed oak woodland in the Study Area provides nesting habitat for this species.
Song sparrow <i>Melospiza melodia</i> (Modesto population)	--; CSC; --; --	Found in a wide range of habitats including forest, shrub, and riparian habitat. Early in the season will nest on the ground on clumps of dead grasses and weeds, and later in the season will nest in thorny bushes, willows, cattails, cordgrass, and small conifers (0.5-10 meters high).	Year-round	<b>None</b> ; the Study Area does not contain suitable habitat for this species.

**Appendix B**  
**Regionally Occurring Listed and Special-status Species**

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/Survey Period	Potential for Occurrence
Yellow-breasted chat <i>Icteria virens</i>	--; CSC; --; --	Found in dense shrubby areas, often containing blackberry bushes, along rivers. Breeding habitat is second growth areas, shrubby old pastures, thickets, bushy areas, scrub, woodland undergrowth, and fence rows near low wet places near streams, pond edges, or swamps. Will also breed in thickets with few tall trees that are commonly close to human habitation. Nests in bushes, brier tangles, vines, and low trees generally within dense vegetation that is less than 2 meters above the ground.	Breeding (Summer)	<b>None;</b> the Study Area does not contain suitable habitat for this species.
Yellow warbler <i>Setophaga petechia</i>	BCC; CSC; --; --	Nests in thickets and other disturbed or re-growing habitats, particularly along streams and wetlands in elevations up to 9,000 feet. Overwintering can occur in mangrove forests, dry scrub, marshes, and forests, typically in lowlands but occasionally up to 8,500 feet.	Breeding (Summer)	<b>None;</b> the Study Area does not contain suitable habitat for this species.
<b>Mammals</b>				
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	--; CSC; --	Found in subalpine and alpine habitats. Requires caves, mines, tunnels, buildings, or other human-made structures for roosting. Hibernation sites are cold, but not below freezing temperatures. Maternity sites are warm and similar to roosting sites.	Year-round	<b>None;</b> the Study Area does not contain suitable habitat for this species.  There is one known CNDDB occurrence for this species within five miles of the Study Area (CDFW 2020).

**Table 2** includes state and federal species of concern and Rank 1 and 2 CNPS species.

## Appendix B Regionally Occurring Listed and Special-status Species

Table 3 — Other Species of Interest

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
<b>Plants</b>				
Adobe navarretia <i>Navarretia nigelliformis</i> ssp. <i>nigelliformis</i>	--; --; --; 4	Annual herb found in clay soils, sometimes serpentinite, within vernal mesic valley and foothill grassland and sometimes vernal pools from 100 to 1,000 meters.	Blooming period: April – June	<b>None</b> ; the Study Area does not contain clay or serpentine soil to support this species.
Brandegge's clarkia <i>Clarkia biloba</i> ssp. <i>brandegeae</i>	--; --; 4.2	Annual herb often found in roadcuts in the chaparral, cismontane woodland, lower montane coniferous forest from 75 to 915 meters in elevation.	Blooming period: May – July	<b>High</b> ; the disturbed/developed, and mixed oak woodland within the Study Area provides suitable habitat for this species.  There are two known CNDDDB occurrences for this species within five miles of the Study Area (CDFW 2020).
Bisbee Peak rush-rose <i>Crocathemum suffrutescens</i>	--; --; --; 3	Perennial evergreen shrub found often on gabbroic or lone soils, often in burned or disturbed areas and chaparral from 75 to 670 meters.	Blooming period: April – August.	<b>None</b> ; the Study Area does not contain suitable habitat or soils for this species.
Brewer's calandrinia <i>Calandrinia breweri</i>	--; --; --; 4	Annual herb found on sandy or loamy, disturbed sites and burns within chaparral and coastal scrub from 10 to 1,220 meters.	Blooming period: March – June.	<b>None</b> ; the Site does not provide suitable habitat for this species.
Butte County fritillary <i>Fritillaria eastwoodiae</i>	--; --; 3	A perennial bulbiferous herb found sometimes in serpentinite soils within chaparral, cismontane woodland, and openings of lower montane coniferous forests from 50 to 1,500 meters in elevation.	Blooming period: March – June	<b>Low</b> ; the mixed oak woodland within the Study Area provides suitable habitat for this species.
Dubious pea <i>Lathyrus sulphureus</i> var. <i>argillaceus</i>	--; --; 3	A perennial herb found within cismontane woodland, and upper and lower montane coniferous forests from 150 to 930 meters in elevation.	Blooming period: April – May	<b>Low</b> ; the mixed oak woodland within the Study Area provides suitable habitat for this species.
Humboldt lily <i>Lilium humboldtii</i> ssp. <i>humboldtii</i>	--; --; 4.2	Perennial bulbiferous herb found in openings in chaparral, cismontane woodland, lower montane coniferous forest from 90 to 1,280 meters in elevation.	Blooming period: May – August	<b>Low</b> ; the mixed oak woodland within the Study Area provides suitable habitat for this species.
Mexican mosquitofern <i>Azolla microphylla</i>	--; --; 4.2	An annual and perennial herb found in slow-moving water and ponded areas within marshes and swamps from 30 to 100 meters in elevation.	Blooming period: August	<b>None</b> ; the Study Area does not provide habitat for this species.
Sanborn's onion <i>Allium sanbornii</i> var <i>sanbornii</i>	--; --; 4.2	Perennial bulbiferous herb usually found on serpentinite or gravelly soil in chaparral, cismontane woodlands, lower montane coniferous forests from 260 to 1,510 meters in elevation.	Blooming period: May – September	<b>None</b> ; the Study Area does not contain serpentine or gravelly soils to support this species.
Stinkbells <i>Fritillaria agrestis</i>	--; --; --; 4.2	Perennial bulbiferous herb found in clay soils, sometimes in serpentinite, chaparral, cismontane woodland, pinyon and juniper woodland, and valley and foothill grassland from 10 to 1,555 meters.	Blooming period: March – June	<b>None</b> ; the Study Area does not contain clay or serpentine soils to support this species.
Streambank spring beauty <i>Claytonia parviflora</i> ssp. <i>grandiflora</i>	--; --; 4.2	An annual herb found on rocky soil in cismontane woodland from 250 to 1,200 meters in elevation.	Blooming period: February – May	<b>Low</b> ; the mixed oak woodland within the Study Area provides suitable habitat for this species.
Valley brodiaea <i>Brodiaea rosea</i> ssp. <i>vallicola</i>	--; --; --; 4.2	Perennial bulbiferous herb found on silty, sandy, and gravelly loam on old alluvial terraces within swales in valley and foothill grassland and vernal pools from 10 to 335 meters.	Blooming period: April – May (June)	<b>Low</b> ; the Study Area provides suitable habitat for this species within mesic topographical folds in the annual grassland.
<b>Invertebrates</b>				
Alabaster Cave Harvestman <i>Banksula californica</i>	--; CSA; --	Habitat is restricted to Alabaster Cave (limestone) in the central Sierra Nevada.	Year-round	<b>None</b> ; the Study Area is outside of the known geographical range (Alabaster Cave) for this species.
Andrenid bee <i>Andrena subapasta</i>	--; CSA; --	Found in grassland habitats within El Dorado, Placer, Sacramento, and San Joaquin counties. Ground nesters that will be underground from summer, fall and winter and emerge in early spring to forage and pollinate early bloomers, such as willows, maples, violets and other early blooming wildflowers.	Year-round	<b>Low</b> ; the burrows and annual grassland within the Study Area provides suitable nesting and foraging habitat for this species.
Cosumnes stripetail <i>Cosumnoperla hypocrenea</i>	--; CSA; --	Found in springs and intermittent streams in the Cosumnes and American River basins.	Spring – Summer	<b>None</b> ; the Study Area is outside of the known geographical range (Cosumnes and American River watersheds) for this species.
Galile's cave harvestman <i>Banksula galilei</i>	--; CSA; --	Habitat is restricted to caves (limestone) in the central Sierra Nevada.	Year-round	<b>None</b> ; the Study Area does not contain limestone caves to support this species.

**Appendix B**  
**Regionally Occurring Listed and Special-status Species**

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/Survey Period	Potential for Occurrence
Ricksecker's water scavenger beetle <i>Hydrochara rickseckeri</i>	--; CSA; --	An aquatic beetle known to occur in shallow lacustrine waters of creeks, artificial ponds, springs and brooks. Known to occur along the San Francisco Bay within Alameda, Marin, San Mateo and Sonoma counties. Can also be found in Lake, Placer, Sacramento, San Joaquin, and Solano counties.	Year-round	<b>None</b> ; the Study Area does not contain suitable habitat for this species.  There is one known CNDDDB occurrence for this species within five miles of the Study Area (CDFW 2020).
Tight coin (=Yate's snail) <i>Ammonitella yatesii</i>	--; CSA; --	Small air-breathing terrestrial snail often found on limestone substrate. Known to occur within Calaveras, El Dorado and Fresno counties.	Year-round	<b>None</b> ; the Study Area does not contain limestone substrate and is outside of the known geographical range for this species.
Morrison bumble bee <i>Bombus morrisoni</i>	--; CSA; --	Inhabits open dry scrub where it nests underground, in structures and on grass hummocks. Nests are often underground, abandoned rodent nests or above ground in tufts of grass, old bird nests, rock piles or cavities in dead trees. Associated food plants include <i>Asclepias</i> , <i>Astragalus</i> , <i>Chrysothamnus</i> , <i>Cirsium</i> , <i>Ericameria</i> , <i>Helianthus</i> , <i>Melilotus</i> , and <i>Senecio</i> .	Year-round  Spring – Fall (queens only)	<b>Low</b> ; the burrows and annual grassland within the Study Area provides suitable nesting and foraging habitat for this species.
Western bumble bee <i>Bombus occidentalis</i>	--; CSA; --	Found in open grassy areas, urban parks and gardens, chaparral and shrub areas, and mountain meadow. Nest underground in abandoned rodent burrows or other cavities. Associated food plants include <i>Ceanothus</i> , <i>Centaurea</i> , <i>Chrysothamnus</i> , <i>Geranium</i> , <i>Grindellia</i> , <i>Lupinus</i> , <i>Melilotus</i> , <i>Monardella</i> , <i>Rubus</i> , <i>Solidago</i> , and <i>Trifolium</i> .	February – November	<b>Low</b> ; the burrows and annual grassland within the Study Area provides suitable nesting and foraging habitat for this species.

**Table 3** includes Rank 3 and 4 CNPS species and non-listed invertebrates, which may not be subject to CEQA review.

## Appendix C

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Plants and Wildlife Species Observed  
in the Study Area

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Appendix C  
Plants Observed in the Study Area

The Ridge

Family	Scientific Name	Common Name	Native(N) / Non-Native(NN) / Invasive(I)
Fabaceae	<i>Acmispon americanus var. americanus</i>	Spanish lotus	N
Pteridaceae	<i>Adiantum jordanii</i>	California maidenhair fern	N
Sapindaceae	<i>Aesculus californica</i>	California buckeye	N
Simaroubaceae	<i>Ailanthus altissima</i>	Tree of Heaven	NN
Poaceae	<i>Aira caryophyllea</i>	Silver hair grass	NN
Boraginaceae	<i>Amsinckia cf. menziesii</i>	Menzies' fiddleneck	N
Apiaceae	<i>Anthriscus caucalis</i>	Bur chervil	NN
Viscaceae	<i>Arceuthobium camylopodum</i>	Western dwarf mistletoe	N
Asteraceae	<i>Artemisia douglasiana</i>	Douglas' sage wort	N
Poaceae	<i>Avena barbata</i>	Slender oats	I
Asteraceae	<i>Baccharis pilularis ssp. consanguinea</i>	Coyote brush	N
Poaceae	<i>Brachypodium distachyon</i>	False brome	I
Poaceae	<i>Briza minor</i>	Little quaking grass	I
Poaceae	<i>Bromus diandrus</i>	Ripgut brome	I
Poaceae	<i>Bromus hordeaceus</i>	Soft brome	I
Asteraceae	<i>Carduus pycnocephalus ssp. pycnocephalus</i>	Italian thistle	I
Rhamnaceae	<i>Ceanothus cuneatus var. cuneatus</i>	Buckbrush	N
Asteraceae	<i>Centaurea solstitialis</i>	Yellow star thistle	I
Asteraceae	<i>Centromadia fitchii</i>	Spikeweed	N
Agavaceae	<i>Chlorogalum pomeridianum var. pomeridianum</i>	Common soap plant	N
Asteraceae	<i>Chondrilla juncea</i>	Skeleton weed	I
Euphorbiaceae	<i>Croton setiger</i>	Turkey mullein	N
Poaceae	<i>Cynosurus echinatus</i>	Dog tail grass	I
Cyperaceae	<i>Cyperus eragrostis</i>	Tall cyperus	N
Themidaceae	<i>Dichelostemma capitatum</i>	Blue dicks	N
Asteraceae	<i>Dittrichia graveolens</i>	Stinkwort	I
Poaceae	<i>Elymus caput-medusae</i>	Medusahead	I
Onagraceae	<i>Epilobium brachycarpum</i>	Autumn willow weed	N
Asteraceae	<i>Erigeron canadensis</i>	Horseweed	N
Poaceae	<i>Festuca myurus</i>	Rat tail six weeks grass	I
Poaceae	<i>Festuca perennis</i>	Italian rye grass	I
Moraceae	<i>Ficus carica</i>	Edible fig	I
Rhamnaceae	<i>Frangula californica</i>	California coffeeberry	N
Poaceae	<i>Gastridium phleoides</i>	Nit grass	NN
Rosaceae	<i>Heteromeles arbutifolia</i>	Toyon	N
Asteraceae	<i>Holocarpha virgata ssp. virgata</i>	Narrow tarplant	N
Poaceae	<i>Hordeum marinum ssp. gussoneanum</i>	Seaside barley	I
Poaceae	<i>Hordeum murinum</i>	Foxtail barley	I
Hypericaceae	<i>Hypericum perforatum</i>	Klamath weed	I
Juncaceae	<i>Juncus bufonius</i>	Toad rush	N
Juncaceae	<i>Juncus sp.</i>	Rush	~
Asteraceae	<i>Lactuca serriola</i>	Prickly lettuce	NN
Asteraceae	<i>Madia elegans</i>	Common madia	N
Poaceae	<i>Melica sp.</i>	Melica	N
Lamiaceae	<i>Mentha pulegium</i>	Pennyroyal	I



**Appendix C**  
**Plants Observed in the Study Area**

Family	Scientific Name	Common Name	Native(N) / Non-Native(NN) / Invasive(I)
Poaceae	<i>Paspalum dilatatum</i>	Dallisgrass	NN
Viscaceae	<i>Phoradendron leucarpum</i>	American mistletoe	N
Pinaceae	<i>Pinus sabiniana</i>	Foothill pine	N
Boraginaceae	<i>Plagiobothrys cf. nothofulvus</i>	Rusty popcornflower	N
Polygonaceae	<i>Polygonum aviculare</i>	Knotweed	NN
Poaceae	<i>Polypogon monspeliensis</i>	Rabbit's foot grass	I
Fagaceae	<i>Quercus douglasii</i>	Blue oak	N
Fagaceae	<i>Quercus kelloggii</i>	California black oak	N
Fagaceae	<i>Quercus wislizeni var. wislizeni</i>	Interior live oak	N
Rosaceae	<i>Rubus armeniacus</i>	Himalayan blackberry	I
Polygonaceae	<i>Rumex pulcher</i>	Fiddle dock	NN
Asteraceae	<i>Silybum marianum</i>	Sow thistle	I
Caryophyllaceae	<i>Spergularia rubra</i>	Purple sand spurry	NN
Apiaceae	<i>Torilis arvensis</i>	Hedge field parsley	I
Anacardiaceae	<i>Toxicodendron diversilobum</i>	Western poison oak	N
Lamiaceae	<i>Trichostema lanceolatum</i>	Vinegar weed	N
Fabaceae	<i>Trifolium hirtum</i>	Rose clover	I
Fabaceae	<i>Trifolium sp.</i>	Clover	~
Themidaceae	<i>Triteleia sp.</i>	Triteleia	N
Scrophulariaceae	<i>Verbascum thapsus</i>	Woolly mullein	I
Verbenaceae	<i>Verbena sp.</i>	Vervain	~
Fabaceae	<i>Vicia villosa</i>	Hairy vetch	NN
Vitaceae	<i>Vitis californica</i>	California wild grape	N

## Appendix C

### Wildlife Observed in the Study Area

Scientific Name	Common Name
<i>Aphelocoma californica</i>	California scrub jay
<i>Bombus</i> sp.	Bee
<i>Bos taurus</i>	Domestic cattle
<i>Buteo jamaicensis</i>	Red-tailed hawk
<i>Calypte anna</i>	Anna's hummingbird
<i>Canis latrans</i>	Coyote
<i>Cathartes aura</i>	Turkey vulture
<i>Equus ferus</i>	Domestic horse
<i>Lithobates catesbeianus</i>	Bullfrog
<i>Melanerpes formicivorus</i>	Acorn woodpecker
<i>Mephitis mephitis</i>	Striped skunk
<i>Mimus polyglottos</i>	Northern mockingbird
<i>Odocoileus hemionus columbianus</i>	Black-tailed mule deer
<i>Papilio polyxenes</i>	Black swallowtail
<i>Procyon lotor</i>	Raccoon
<i>Sayornis nigricans</i>	Black phoebe
<i>Sceloporus occidentalis</i>	Western fence lizard
<i>Sciurus griseus</i>	Western gray squirrel
<i>Sitta carolinensis</i>	White-breasted nuthatch
<i>Sphyrapicus</i> sp.	Sapsucker
<i>Tyto alba</i>	Barn owl
<i>Ursus americanus</i>	Black bear
<i>Zenaida macroura</i>	Mourning dove

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# Appendix D

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## Representative Site Photos

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Photo 1. Looking west across non-native annual grassland within the Study Area.

Date: September 11, 2018

Photographer: Charlotte Marks



Photo 2. Looking northeast across oak woodland within the Study Area.

Date: September 11, 2018

Photographer: Charlotte Marks

## REPRESENTATIVE SITE PHOTOS



Photo 3. Looking northwest along the Caperton Canal within the Study Area.

Date: September 11, 2018

Photographer: Charlotte Marks



Photo 4. Looking west across the Foothill Pine habitat located along Clark Tunnel Road within the Study Area.

Date: September 12, 2018

Photographer: Charlotte Marks

## REPRESENTATIVE SITE PHOTOS

# Appendix E

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Fire Safe Plan



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# **The Ridge Subdivision Project**

## **Fire Safe Plan**

Prepared for Southfork LP

Prepared by  
Adrienne L. Graham, AICP  
&  
Phillips Consulting Services

September 2019

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1. Fire Risk Analysis
2. Building Access and Separation Requirements for Wildlife Protection
3. Fuel Management Plan and Recommended Maintenance Frequency
4. Wildfire Evacuation Planning and Fire Safety Zones
5. Fire Safety Plan Recommendations

Attachments

- A. Glossary
- B. Critical Assets/Infrastructure at Risk Table
- C. Penryn Fire Protection District Will Serve Letter
- D. The Ridge Subdivision Site Development Plan

B. Applicable Fire Codes and Ordinances and Programs

- California Public Resources Code Section 4291
- California Building Code, Chapter 7A, Materials and Construction Methods for Exterior Wildfire Exposure
- Placer County Code, Excerpts from Chapter 9 (Fire Code)

C. CalFire Ready Set Go Pamphlet

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### 1.1 Overview

This Fire Safety Plan (FSP) has been prepared for the Ridge Subdivision Project (Project). At present, the Project site is undeveloped; it has historically been used for grazing. The Project would replace the existing grasslands and woodlands with residential development, creating a wildland urban interface (WUI), which will be vulnerable to wildland fire. The Project site is vulnerable to wildland fire throughout the year subject to a variety of conditions including, but not limited to:

- Daily weather conditions such as air temperature, humidity, wind speed and direction;
- Climatic conditions such as drought, extended seasonal periods of hot, dry weather typically found in the summer and fall months, or seasonal rains typically found in the winter and spring months;
- Fuel moisture and growth cycle periods, especially in fine fuels such as the annual grasslands; and
- Human caused ignition factors such as arson, escaped debris burns and unsafe equipment operation.

These factors are discussed in more detail in Chapter 2, Environmental Conditions.

As part of the FSP preparation, four technical memoranda were prepared by Ronald A. Phillips of Phillips Consulting Services, a former Fire Chief with 35 years of experience in fire services in California. The technical memoranda address the following topics:

1. Fire Risk Analysis,
2. Hazardous Fuel Reduction Plan and Recommended Maintenance Frequency,
3. Wildfire Evacuation Planning and Fire Safety Zones, and
4. Fire Safety Plan Recommendations.

The information, analysis and measures identified in this FSP are based on those memoranda. The technical memoranda can be found in Appendix A of this FSP.

### 1.2 Purpose

This FSP specifically applies to properties within the Project site. The primary purposes of the FSP are to minimize the risk of wildland fires within and adjacent to the developed Project site and to ensure that there is adequate access to fire-prone areas in the event of a fire.

### 1.3 Project Summary

#### Location

The Project site is located on approximately 25 acres in southern Placer County, between the communities of Lincoln to the west, Newcastle to the east and Penryn to the south. The site is located approximately one mile southeast of the intersection of State Route (SR) 193 and Clark Tunnel Road (see Figure 1-1 at the end of this chapter).

The Bickford Ranch Specific Plan (BRSP) area borders the Project site to the west, east and south (see Figure 2-2 in Chapter 2).

Current access to the Project site is from Clark Tunnel Road, which is unpaved except for a segment connecting to SR 193. As discussed below, when developed, access will be provided from Sierra College Boulevard, via the future Bickford Ranch Road.

### **Project Description**

The Project proposes to develop a residential village comprised of 34 single-family homes on 28 low-density residential (LDR) lots and six rural residential (RR) lots (Lots 1 through 34 on (see Figure 1-2). In addition, there would be two common lots to accommodate a private road (Lot A) and a water quality basin (Lot B) .

The primary access to the Project site would be provided by connection of the private road to Bickford Ranch Road, which is planned to be constructed immediately south of the Project site as part of the BRSP. The Project access road entrance will be gated. This road and the private road (Lot A) will serve the 28 LDR parcels. It is designed to have a 22-foot wide travel lane with a curb and gutter on the north side and an 8-foot parallel parking lane and a 5-foot wide pedestrian sidewalk on the south side.. The road will terminate in cul-de-sacs at its eastern and western most ends. The right-of-way will be 40 feet wide.

Private lanes will extend from the cul-de-sacs to the RR parcels (three parcels on the west and three on the east). Each private lane will have a 20-foot wide travel lane with 2-foot-wide shoulders. The right-of-way will be 24 feet. The private lanes will have vehicular turnouts for two-way emergency traffic and turn-arounds, sized to meet the requirements of the fire department and sewer district.

Emergency access will be provided via the primary gated entry and a separate 40-foot wide emergency access easement (EVA) with a paved 20-foot travel lane that will connect to Bickford Ranch Road west of the primary entry. In addition, an EVA will be provided to a future roads in the BRSP along the northwest boundary of the Project site at Lot 32 and the northeast boundary at Lot 31. The EVA accesses will also be gated.

A pedestrian gate and sidewalk will connect the on-site sidewalk to the planned multipurpose trail in a landscaped corridor along Bickford Ranch Road.

The parcels would have minimum sizes of one acre for RR and 12,000 square feet (sf) for LDR. The LDR parcels would range in size from 13,700 sf to 38,416 sf, with an average lot size of 18,206 sf and an average density of 2.3 units per acre. The RR lots would range from 1.1 to 2.2 acres in size, with an average density of 1.67 units per acre. The combined average density would be 1.55 units per acre. The minimum width of interior lots (as opposed to corner lots) would be 125 feet for the RR parcels and 90 feet for the LDR parcels, measured at the front setback line. Corner LDR parcels would also have a minimum width of 90 feet.

Buildings would be limited to heights of 35 feet. The layout of each residence would be subject to the building setbacks shown in Table 1-1.

	<b>RR Parcels</b>	<b>LDR Parcels</b>
Front <sup>1</sup>	25	20
Side	20	10
Rear <sup>2</sup>	30	30
Accessory Structures	15	15
Notes:		
1. Measured from the back of sidewalk, right of way line or private lane easement if no sidewalk		
2. Lots 15 through 25 and 29 through 34 minimum rear building setback of 30 feet or the top of slope of 30%, whichever is greater.		

Water supply will be provided by Placer County Water Agency through a connection to a water line in Bickford Ranch Road and conveyed through water lines following the private road and private lanes. The BRSP will install a new 18-inch water transmission pipeline in Bickford Ranch Road, and provide a water storage system within the BRSP area. The new transmission and storage system provided by BRSP will connect to an existing PCWA 30-inch pipeline. Water storage in the BRSP area will meet both fire-flow requirements and domestic water consumption requirements.

The Project water pipeline will meet and/or exceed fire-flow requirements of 1,000 gallons per minute (GPM) at 20 pounds per square inch gauge (PSIG) for 2 hours duration as identified in the California Fire Code (CFC). Fire hydrants meeting PCWA, PFPD and CalFire requirements will be spaced on average every 500-feet along the proposed private road and two lanes in accordance with the CFC. Six fire hydrants have been tentatively identified for placement along Project roads/lanes at the following locations:

- Along the private road near Lots 22/23,
- Along the private road near Lots 6/7,
- In the turnout along the private lane at Lot 34,
- In the turnaround along the private lane at Lot 32,
- Near the private lane entrance at Lot 13, and
- In the turnaround along the private lane at Lot 31.

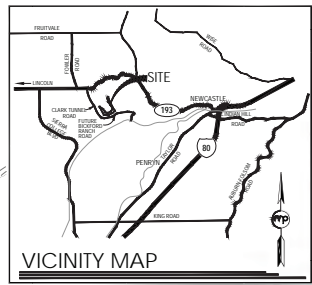
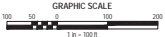




Source: Bickford Ranch Specific Plan, 2015;  
Morton & Pitalo, Inc., 2019

Figure 1-1  
The Ridge Project Location

# Figure 1-2 THE RIDGE VESTING TENTATIVE SUBDIVISION MAP SHEET 1 of 4 SECTION 21, T. 12 N., R. 7 E., M.D.B. & M. PLACER COUNTY, CA SEPTEMBER 16, 2019



OWNER / APPLICANT	ENGINEER/PLANNER
SOUTHFORK LP 2140 PROFESSIONAL DRIVE, #130 ROSEVILLE, CA 95661	MORTON & PITALO INC. P.O. BOX 10001, SUITE #100 FOLSOM, CA 95630 CONTACT: KEN TOPPER PHONE: (916) 964-7427 EMAIL: KTOPPER@MORTON.COM

UTILITY PROVIDERS
WATER: P.C.W.A. SEWER: PLACER COUNTY GAS: PG&E ELECTRIC: PG&E TELEPHONE: SBC

SERVICE PROVIDERS
SCHOOL DISTRICT: Loomis Union School District PLACER HIGH SCHOOL DISTRICT FIRE PROTECTION: FIRE FIGHTER PROTECTION DISTRICT

PROJECT INFORMATION	
ASSESSOR PARCEL NUMBER(S): 031-106-030-000	
USE: VACANT	
EXISTING ZONING: F.B.V. 10 AC. RM	
PROPOSED ZONING: RURAL RESIDENTIAL (RR)	
EXISTING GENERAL PLAN: AGRICULTURE/RECREATION	
PROPOSED GENERAL PLAN: RURAL RESIDENTIAL (RR)	
EXISTING NUMBER OF PARCELS: 1	24.95 ± AC
PROPOSED NUMBER OF LOTS: 28	RURAL RESIDENTIAL DENSITY
	1 RURAL RESIDENTIAL
	1 WATER QUALITY BASIN
	1 WATER QUALITY BASIN

- ### PROJECT INFORMATION
- THIS EXHIBIT IS FOR TENTATIVE MAP PURPOSES ONLY. ALL SITE CHARACTERISTICS ARE TO BE VERIFIED PRIOR TO FINAL MAP.
  - BOUNDARY INFORMATION MAY BE MADE TO LOT LINES AT FINAL MAP.
  - FOR PRELIMINARY PLANNING PURPOSES ONLY. BOUNDARY, TOPOG, EASEMENTS AND SITE CONDITIONS TO BE VERIFIED PRIOR TO FINAL MAP AND ENGINEERING.
  - PURSUANT TO GOVERNMENT CODE SECTION 44641.1 THE SUBDIVIDER MAY FILE MULTIPLE FINAL MAPS BASED UPON THIS TENTATIVE MAP. THE FILING OF A FINAL MAP IN PORTION OF THIS TENTATIVE MAP SHALL NOT INVALIDATE ANY PART OF THIS TENTATIVE MAP INCLUDING THE AUTHORITY OF THE LOCAL AGENCY TO PROPOSE REASONABLE CONDITIONS RELATING TO THE FILING OF MULTIPLE FINAL MAPS.
  - LOT A IS A COMMON AREA LOT TO BE CONVEYED IN FEE BY SEPARATE GRANT DEED TO THE HOMEOWNERS ASSOCIATION FOR ROADWAY PURPOSES AND APPURTENANCE THERETO.
  - LOT B IS A COMMON AREA LOT TO BE CONVEYED IN FEE BY A SEPARATE GRANT DEED TO THE HOMEOWNERS ASSOCIATION FOR A WATER QUALITY BASIN AND APPURTENANCE THERETO.
  - INGRESS AND EGRESS EASEMENTS (SEE AREAS) ARE PRIVATE EASEMENTS FOR INGRESS AND EGRESS WHICH ARE APPURTENANCE TO AND FOR THE BENEFIT OF LOTS 29 TO 31, INCLUDE AND 32 TO INCLUDE, AN EASEMENT FOR THE MAINTENANCE, REPAIR AND REPLACEMENT OF ROAD AND DRAINAGE IMPROVEMENTS WILL BE CONVEYED BY SEPARATE INSTRUMENT TO THE HOMEOWNERS ASSOCIATION.
  - EASEMENT FOR RIGHTS OF INGRESS AND EGRESS GRANTED TO PLACER COUNTY WATER AGENCY, IN GRANT EASEMENT RECORDED FEBRUARY 6, 1998, INSTRUMENT NO. W0400221. OFFICIAL RECORD, THE EXACT LOCATION OF SAID EASEMENT IS NOT DISCLOSED OF RECORD AND IS NOT SHOWN HEREON.
  - PROPOSED 300' OFFSET FUEL MANAGEMENT ZONE EASEMENT IS APPURTENANCE TO AND FOR THE BENEFIT OF LOTS 1-3, 4-34 INCLUDE AND IS TO BE CONVEYED BY SEPARATE INSTRUMENT TO THE HOA.
  - PURSUANT TO SECTION 44642 OF THE GOVERNMENT CODE, THE FOLLOWING EASEMENTS ARE PROPOSED TO BE ABANDONED:
    - EASEMENT TO COUNTY PLACER FOR ROAD AND INCIDENTAL PURPOSES RECORDED NOVEMBER 15, 1999 IN BOOK 04 OF DEEDS, PAGE 624 FOR CLARK TUNNEL ROAD TO BE ABANDONED UPON COMPLETION AND ACCEPTANCE BY PLACER COUNTY OF BICKFORD RANCH ROAD.

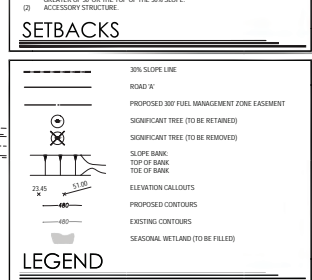
### NOTES

LOTS	AREA	LAND USE
A	1.9 ± AC	COMMON AREA LOT (ROAD & WATER QUALITY BASIN)
LOTS 1-28	11.95 ± AC	LOW DENSITY RESIDENTIAL (LDR)
LOTS 29-34	10.9 ± AC	RURAL RESIDENTIAL USE
TOTAL AREA	24.95 ± AC	

### LOTGING

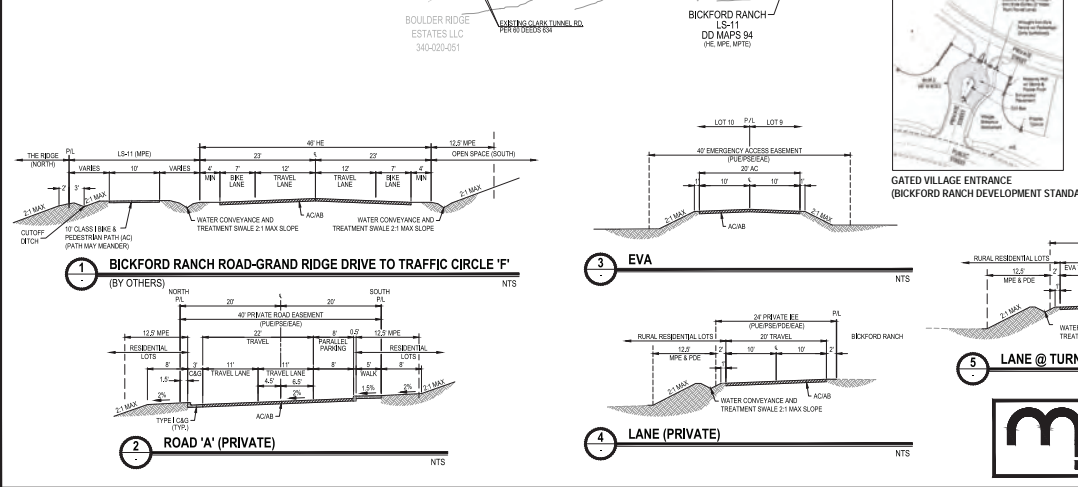
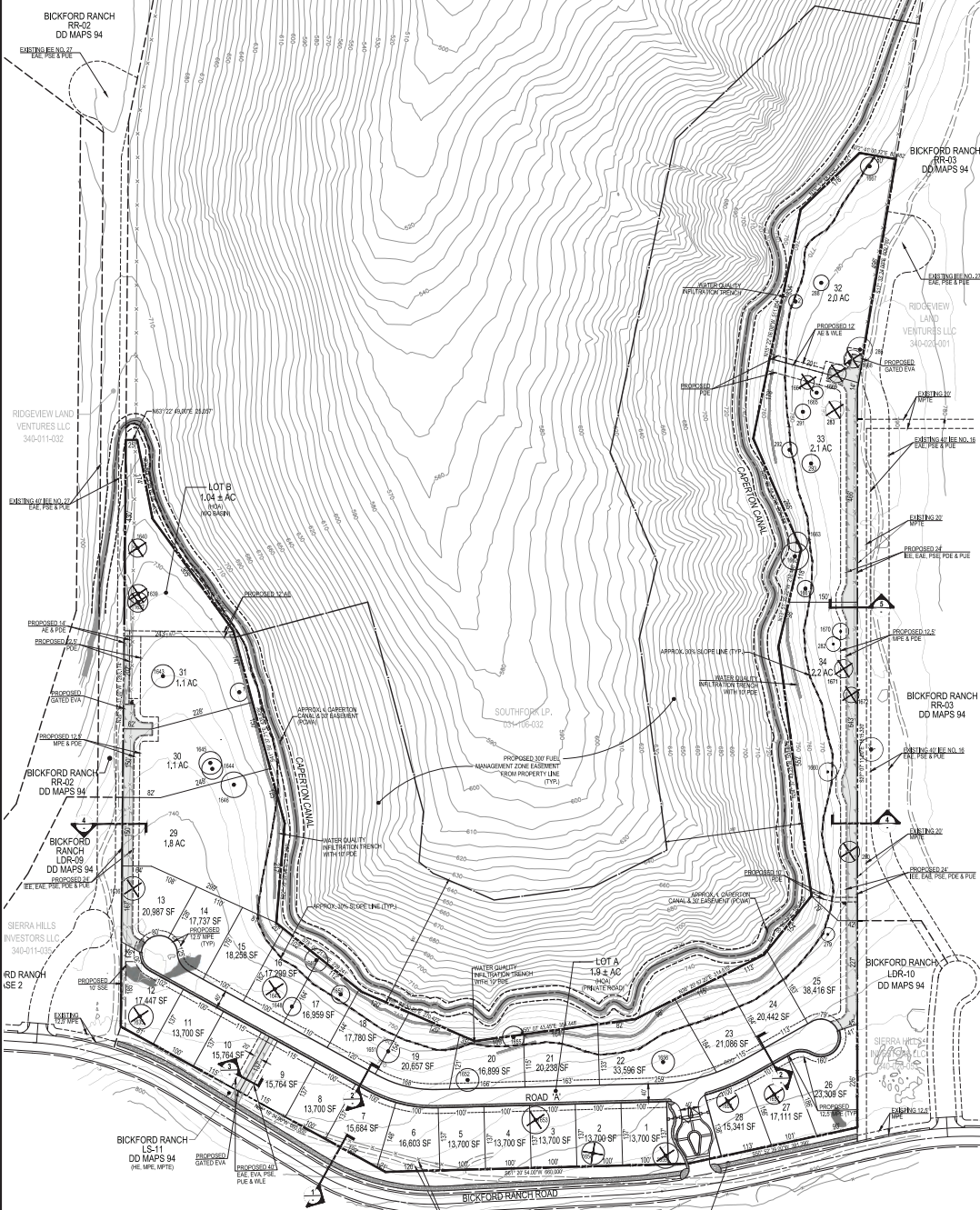
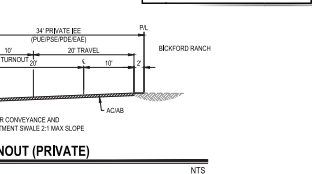
	LOW DENSITY RESIDENTIAL (LOTS 1-28)	RURAL RESIDENTIAL (LOTS 29-34)
FRONT SIDE	10'	25'
STREET SIDE (CORNER)	20'	30'
REAR	20'	15'

(1) LOTS 15, 25 AND 29-34 SHALL HAVE A MINIMUM REAR SETBACK OF THE GREATER OF 30' OR THE TOP OF THE 30% SLOPE.



### LEGEND

AE	ACCESS EASEMENT
EA	EMERGENCY ACCESS EASEMENT
EVA	EMERGENCY VEHICLE ACCESS
HE	HIGHWAY EASEMENT
IE	INGRESS AND EGRESS EASEMENT
MPE	MULTI-PURPOSE TRAIL EASEMENT
MPEL	MULTI-PURPOSE TRAIL EASEMENT
PDE	PRIVATE DRAINAGE EASEMENT
PFE	PRIVATE FUEL EASEMENT
PSE	PUBLIC SUPPORT EASEMENT
PSE	PRIVATE SEWER EASEMENT
SSE	SANITARY SEWER EASEMENT
WEE	WATER EASEMENT



**MORTON & PITALO, INC.**  
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 phone: (916) 964-7427  
 fax: (916) 964-7428  
 e-mail: info@morton.com  
 website: www.morton.com

## 2. EXISTING CONDITIONS

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This chapter describes those conditions that are present in the Project site and that could affect the likelihood of wildland fire occurring. Information for this section is based primarily on Technical Memorandum #1 (see Appendix A), information contained in Environmental Impact Report for the adjacent Bickford Ranch Specific Plan, public sources and information prepared for the Project.

### 2.1 Vegetation

Vegetation in the Project site and vicinity is dominated by non-native annual grassland and oak woodlands. Portions of the Project site are heavily wooded while others have a fairly extensive grassland understory. The surrounding area is composed largely of blue oak woodland, non-native grasslands and mixed interior live oak-blue oak woodland. The Caperton Canal is located just offsite, roughly parallel to the northerly Project boundaries. A small valley is located between the east and west ridges; this valley is composed largely of annual grassland. An impoundment is located within the valley, north of the Project site.

The oak woodlands and underlying grasslands provide the potential for an intense wildfire, particularly when combined with the steep topography and critical fire weather conditions.

### 2.2 Climate

Predominant weather patterns in south Placer County are characterized by hot dry summers and mild to cool winters.<sup>1</sup> Dry conditions traditionally begin around the end of May and last into October. An average summer day is 90°- 95° Fahrenheit, winds from the southwest at 0-10 miles per hour, and relative humidity levels in the 15 to 25 percent range. Summer lightning storms are infrequent in the area. On average, the strongest wind speeds in South Placer occur in March through May, but winds can exceed 20 mph during the fire season.<sup>2</sup>

Critical fire weather conditions become more frequent starting in July and extending through October each year. Critical fire weather conditions are typically associated with very low humidity and strong north winds. The ignition potential and fire spread rates during these conditions is high and can easily lead to large wildfires occurring.

### 2.3 Topography

The Project site forms a horseshoe pattern along several ridgelines. Site elevations range from approximately 720 feet near the northwest corner of the site to 815 feet near the southeast corner.<sup>3</sup> The southern portion of the site and the outer edges of the western and eastern arms of the horseshoe are relatively flat to gently sloping. The Project site is located at the top of a topographical drainage that forms a canyon with steep slopes ( $\geq 30\%$ ) bordering the Project<sup>4</sup> (see Figure 2-1). These steep slopes continue offsite toward the Caperton Canal on the La Faille Ranch property and the

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1 National Weather Service, Lincoln Remote Automated Weather Station Site; <https://raws.dri.edu/cgi-bin/rawMAIN.pl?caCLIN>.

2 <http://www.usa.com/roseville-ca-weather.htm>, accessed June 22, 2018.

3 Engeo, *The Ridge Subdivision, Placer County, California, Preliminary Geotechnical Exploration*, April 12, 2019, page 3.

4 Engeo, *The Ridge Subdivision, Placer County, California, Preliminary Geotechnical Exploration*, April 12, 2019, page 3.

valley floor. This canyon forms a natural “chimney” that can enhance fire intensity and spread to hazardous levels. Project Lots 15 through 25 and 29 through 34 abut this canyon on the north side of each lot and are therefore at greatest risk of an intense wildfire.

#### **2.4 Existing and Planned Land Use Pattern**

The Project site is undeveloped, and has been unimproved since at least 1891. It is periodically used for grazing, which is the primary agricultural operation in the vicinity. There are no structures on the Project site. The Project site is zoned FBX-10 acre minimum.

The Project site is located in rural Placer County, and in an area of steep ridges and small valleys that is largely undeveloped. The La Faille Ranch occupies the area to the north, and is owned by the Ridge Project applicant. The ranch is undeveloped and used for cattle grazing. The Caperton Canal, a concrete-lined canal that conveys raw water for local irrigation and domestic water uses is located within a 30-foot easement on the La Faille Ranch. The canal runs roughly parallel with the Project boundary with the ranch.

The area to the south, east and west is undeveloped grazing land. The Bickford Ranch Specific Plan (BRSP) area bounds the Project site on the west, south and east. The BRSP provides for development of up to 1,890 low, medium and rural density residential units on a 1,928-acre site. In addition, the BRSP includes over 780 acres of open space preserve, approximately 287 acres of Open Space-Transition and –Parkway, neighborhood parks and two recreation centers. As shown in Figure 2-2, the primary BRSP roadway, Bickford Ranch Road, and a linear parkway would border the southern edge of the Project site. Access to the Project site would be via a connection to this road. The southeast and southwest edges of the Project site would be bordered by Low Density Residential development, similar to the residences proposed for the Project. The northeast and northwest arms of the Project site would be bordered by Rural Residential development, which would also mirror the Project land use pattern.

The nearest existing homes to the Project site are located almost one mile north along CA Highway 193.

There are no high-voltage electric power lines, essential service facilities, populations at risk, or critical infrastructure within the Project site. The Caperton Canal is considered an *Infrastructure at Risk* site, because it is a source of municipal water supply.

#### **2.5 Fire History**

Wildland fires have occurred within the Project site and vicinity. The majority of these fires originated near existing roadways<sup>5</sup>. Table 2-1 identifies significant wildland fires that have occurred in the Project vicinity since 1950.

Common fire ignition sources have included arson, equipment failure, escaped debris burns, and vehicle related causes. No large wildfires (i.e. >300 acres) were reported in the Project vicinity between 2009-2019. The “Beacon” fire in 1950 burned the Project site and much of the Bickford Ranch area. No smaller fires have been reported within the Project vicinity during this same timeframe. Three smaller fires of between 10-300 acres occurred in the Project vicinity between 2003 and 2018 (the 2003 and 2013 Sierra

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<sup>5</sup> CalFire, *Unit Strategic Fire Plan Nevada-Yuba-Placer Unit*; July 2017, page 48.

Year	Fire Name	Acres Damaged
1950	Beacon	500+
2003	Sierra	27
2008	Gladding	1,090
2008	Ravine	343
2013	Sierra	19
Source: CalFire, <i>Strategic Fire Plan Nevada-Yuba-Placer Unit</i> , Battalion 18 Fire History Map, page 128.		

fires and the 2008 Ravine fire)<sup>6</sup>. A review of public source documents did not identify a major wildland fire in the Project site that caused the loss of a structure, or injury/death of a civilian or firefighter, within the last 20 years.

The Placer County Fire Department (PCFD), with the assistance of local landowners, has implemented a voluntary roadside disking program in the southwestern Placer County area to reduce the probability of a wildfire spreading to undeveloped lands<sup>7</sup>. Disking includes an area approximately 20 feet wide along existing roadside properties. According to statistics provided for 2011 this program has led to a 50% reduction of roadside wildland fires burning more than 1 acre of land in the southwest Placer County area<sup>8</sup>.

## 2.6 Fire Hazard Severity Zones

CalFire identifies fire hazard severity zones in both State Responsibility Areas, which includes those portions of the state where the California Department of Forestry and Fire Protection (CalFire) has the primary duty for wildland fire prevention and suppression, and Local Responsibility Areas, which include those parts of the state where a local jurisdiction, such as Placer County, has primary responsibility. The Project site is in a State Responsibility Area, and is in an area rated Moderate for fire hazard.<sup>9</sup>

## 2.7 Wildland Urban Interface Zone

The Project site is located within a hillside area that has been previously designated by CalFire and the Penryn Fire Protection District (PFPD) as a potential Wildland Urban Interface (WUI) Zone should buildings be constructed in the area. The WUI area includes the following undeveloped areas that could increase fire risk of fire spreading to the Project site, due to the topography and vegetation types present:

- The 168-acre LaFaille Ranch area that forms a canyon below the Project site;
- An approximately 125-acre designated open space area proposed for in BRSP west of the Project site; and

6 CalFire, *Unit Strategic Fire Plan, Nevada-Yuba-Placer Unit*, Battalion 18 Fire History Map, July 2017, page 128.

7 CalFire, *Unit Strategic Fire Plan, Nevada-Yuba-Placer Unit*, July 2017, page 48.

8 Placer County, *California Community Wildfire Protection Plan*; December, 2012, page 83.

9 CalFire, *Fire Hazard Severity Zone Map for Placer County*, November, 2007. Note that CalFire is currently updating its Fire Hazard Severity Zone map for State Responsibility Areas.

- An approximately 80-acre designated open space area proposed in the BRSP east of the Project site.

The open space and undeveloped areas north of Bickford Ranch Road near the Project site consist of a series of small canyons and drainages that flow north towards Highway 193. The canyons in this area have steep topography on both sides of the drainage, and extensive vegetation and tree canopies in most areas. This creates the potential for rapid wildfire growth that could quickly reach the Project site. These open space and undeveloped areas are also of concern to the fire agencies due to the adjacent canyon steep slopes that limit fire apparatus access and that can potentially create a “Chimney Effect” condition during intense wildland fire activity.

## 2.8 Fire and Emergency Response

Fire and rescue services for the Project site are the responsibility of the PFPD. The BRSP area and adjoining unincorporated areas near the Project site are served by the Placer County Fire Protection District (PCFD). Existing mutual aid agreements between PCFD and PFPD are in place.

The closest fire station to the Project site is PFPD Station No. 38 located on Church Street in the Penryn community<sup>10</sup>. Services are provided by one Type I /III fire engine staffed daily by a minimum of two full-time firefighters. These firefighters are augmented by resident firefighters that support the emergency response capabilities of the district. Upon completion of Phase 1 of Bickford Ranch Road to the Project site, response times from PFPD Fire Station 38 will be on average 10 minutes or less for all fire and rescue emergencies.

CalFire Station No. 70 is located near the City of Lincoln on Wise Road. This fire station is jointly operated with the Placer County Fire Department (PCFD) and provides services to the unincorporated areas of Placer County, including the BRSP area. This station provides wildfire protection responsibilities for all State Responsibility Area (SRA) lands near the Project site. Station No. 70 has one Type I/III fire engine staffed daily by a minimum of two full-time firefighters. These firefighters are augmented by seasonal and volunteer firefighters that support the emergency response capabilities of CalFire and PCFD. Upon completion of Phase 1 of the Bickford Ranch Road to the Project site, response times from CalFire Station 70 will be on average 20 minutes or less for all wildfires and other emergencies.

Upon the issuance of 1,000 building permits in BRSP one new fire station will be constructed and staffed in the area<sup>11</sup>. The fire station is planned to be located on a 1.4-acre site at the northeast corner of Bickford Ranch Road and Sierra College Boulevard<sup>12</sup>. The conceptual design of the fire station is described in Section 3.8 of the Bickford Ranch Development Standards.

## 2.9 Emergency Vehicle Access

Fire access can be described as the means (e.g., roads, bike paths, trails, etc.) by which firefighters can enter an area to quickly mitigate a wildfire incident before it spreads to adjacent properties and critical assets/infrastructure at risk. Joint efforts to develop and

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<sup>10</sup> Penryn Fire Protection District; <http://www.penryrfire.org/>.

<sup>11</sup> Placer County, *Bickford Ranch Specific Plan*, December 8, 2015, page 6-9.

<sup>12</sup> Placer County, *Bickford Ranch Specific Plan*, December 8, 2015, page 6-4.

maintain ingress/egress for local evacuation and fire suppression response are required to ensure that both public and firefighter safety is provided.

The main emergency response route into the BRSP area and the Project site will be Sierra College Boulevard. This public road will connect to Bickford Ranch Road, which will provide access to the Project site through connections to the Project entrance and EVAs. The BRSP area will be served by a network of additional arterial, collector and local streets. This circulation design will help to reduce traffic congestion and aid PFPD and CalFire in providing emergency services to the Project site and surrounding area in acceptable response timeframes.

Three BRSP Emergency Vehicle Access (EVA) roads are planned for the area. These EVA roads will also be able to provide emergency vehicle access to the Project site, and serve as secondary evacuation routes for the public, if and when Bickford Ranch Road and the other primary roads in the area are obstructed or heavily congested during an emergency. These EVA locations are (a) Clark Tunnel Road to Highway 193, (b) Clark Tunnel Road at the southeast corner of the BRSP area, and (c) the southernmost portion of the BRSP area to Woodsdale Court in Penryn.

The Project's private road will be 40' in width and will meet the fire apparatus access requirements found in the California Fire Code (CFC). Two private lanes, 20' in width (with a 24' wide private easement), which will also meet the fire apparatus access requirements found in the CFC, will be constructed and maintained to serve Ridge Subdivision Lots 29-32 and Lots 25, 32-34. All proposed fire apparatus access routes in the Project site have been reviewed and approved by PFPD and CalFire as part of the preliminary project review process.

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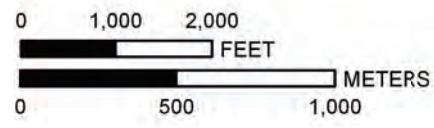
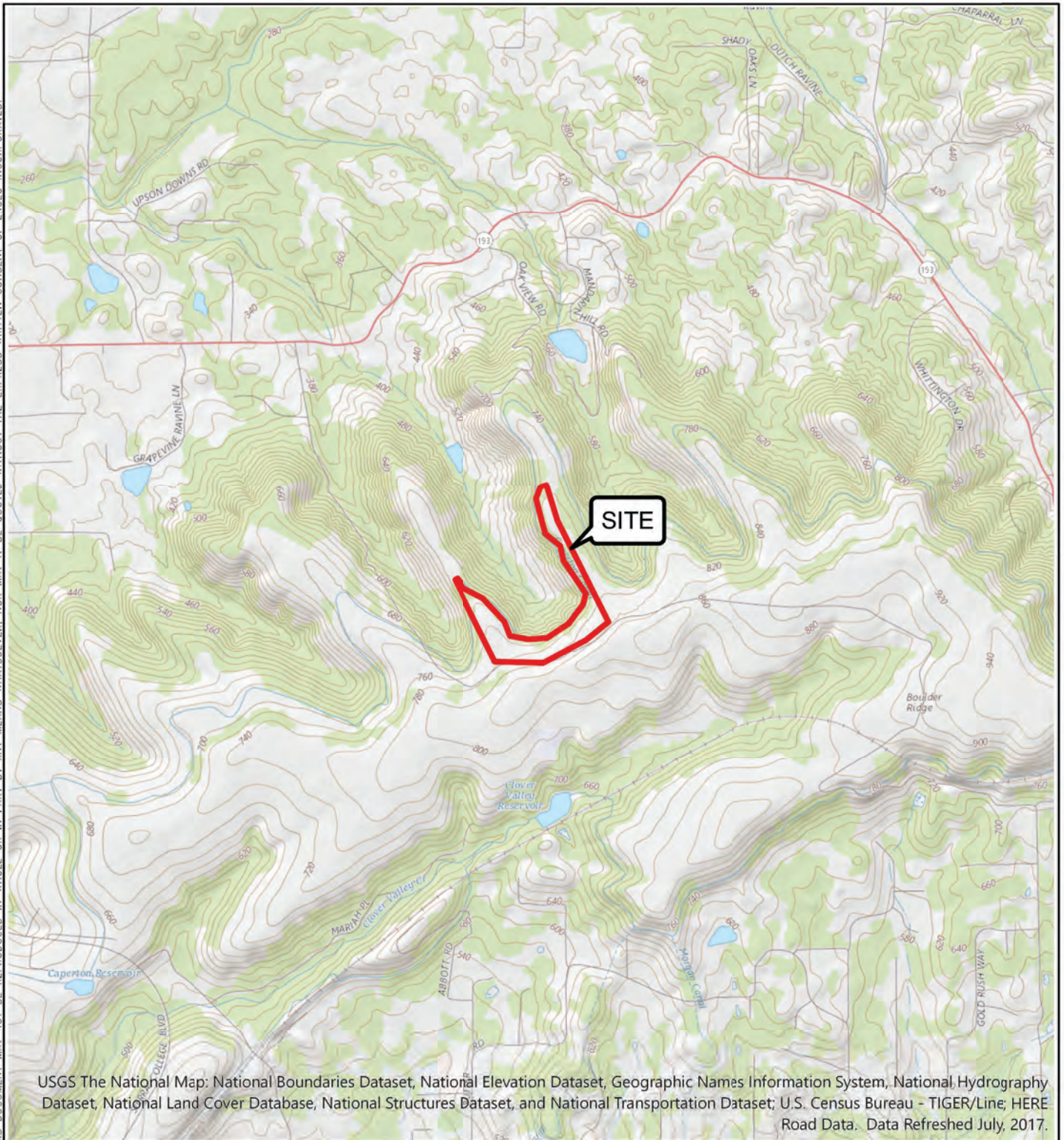


Figure 2-1



TOPOGRAPHIC MAP  
 THE RIDGE SUBDIVISION  
 PLACER COUNTY, CALIFORNIA

PROJECT NO. : 15407.000.000	
SCALE: AS SHOWN	
DRAWN BY: QRL	CHECKED BY: JCB

FIGURE NO.  
**3**





Source: Bickford Ranch Specific Plan, 2015.

Figure 2-2  
Bickford Ranch Specific Plan Site

## 3.0 REGULATORY REQUIREMENTS

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Development of the Project will be subject to federal and State laws and County ordinances and regulations. The key provisions that will address fire prevention and response within the Project site are summarized below, and, where indicated, reproduced in the appendices.

### 3.1 California Public Resources Code Section 4291

California Public Resources Code (PRC) Section 4291 sets forth minimum fire safety standards for development in or adjoining mountainous areas and forest-covered lands. Provisions that would apply to the Project include:

- ▲ Defensible space must be maintained 100 feet from the side, front and rear of a structure, or up to the property line where the property line is less than 100 feet from the structure;
- ▲ Any portion of a tree that extends within 10 feet of the outlet of a chimney or stovepipe must be removed;
- ▲ Any tree, shrub, or other plant adjacent to or overhanging a structure must be free of dead or dying wood;
- ▲ Prior to constructing a new structure, the owner shall obtain a certification from the local structure official that the dwelling or structure, as proposed to be built, complies with all applicable State and local structure standards; and
- ▲ Prior to final inspection approval of any structure, the Fire Department must inspect the structure and the fire suppression facilities to certify that the fire suppression improvements comply with Building Code and fire department service requirements.

Violation of the above provisions may result in a fine. PRC Section 4291 also requires the Department of Forestry and Fire Protection (CalFire) to develop, periodically update and post on the internet a guidance document regarding fuels management. The full text of the statute is provided in Appendix B.

### 3.2 California Building Code

California Building Code (CBC) Chapter 7A (Materials and Construction Methods for Exterior Wildfire Exposure) establishes minimum standards for protection of life and property by increasing the ability of a structure located in a Fire Hazard Severity Zone within State Responsibility Areas or any Wildland Urban Interface (WUI) area. The goal of these provisions is to resist the intrusion of flames or burning embers projected by a vegetation fire and that contributes to a systematic reduction in conflagration losses. The full text of the Chapter 7A is provided in Appendix B.

### 3.3 Placer County General Plan

The Placer County General Plan (2013) contains a Public Facilities and Services Element that includes the following policies related to fire protection services that are applicable to the proposed project:

**Policy 4.I.1:** The County shall encourage local fire protection agencies in Placer County to maintain the following minimum fire protection standards

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(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.

In addition, the Health and Safety Element of the General Plan includes the following policies regarding fire hazards within Placer County:

**Policy 8.C.1.** The County shall ensure that development in high-fire-hazard areas is designed and constructed in a manner that minimizes the risk from fire hazards and meets all applicable state and county fire standards.

**Policy 8.C.2.** The County shall require that discretionary permits for new development in fire hazard areas be conditioned to include requirements for fire-resistant vegetation, cleared fire breaks, or a long-term comprehensive fuel management program. Fire hazard reduction measures shall be incorporated into the design of development projects in fire hazard areas.

**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.4.** The County shall refer development proposals in the unincorporated county to the appropriate local fire agencies for review for compliance with fire safety standards. If dual responsibility exists, then both agencies shall review and comment relative to their area of responsibility. If standards are different or conflicting, the more stringent standards shall be applied.

**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.

### **3.4 Placer County Ordinances**

#### **Building Code**

Buildings constructed within the Project site will be subject to the current building

standards found in both the California Building Code and Chapter 15 of the Placer County Code. The PFPD enforces standards associated with the installation of residential fire sprinkler systems and the installation of Class A roofing materials within all residential units. Both of these requirements will significantly assist in reducing the threat of a wildfire spreading from undeveloped land to a nearby building.

**Fire Code**

Placer County has adopted the 2016 California Building Code, Title 24 of the California Code of Regulations, and the 2016 Fire Code (Sections 15.04.700 and 15.04.710 Fire Code Amendment). The Fire Code addresses emergency access, access gates, sprinkler systems, fire alarms within buildings, and construction of access roads to accommodate fire apparatus. The Fire Code requires that an automatic fire sprinkler and/or fire extinguishing system be installed throughout new one- and two-family dwellings and commercial buildings 3,600 square feet and larger.

**Fire Prevention Code**

Chapter 9, Article 9.32, Part 3 of the Placer County Code requires the maintenance of "fire breaks" around structures and the clearing of roofs to prevent structural fires in the Wildland-Urban Interface Zone. These provisions will apply to all structures to be built within the Project site.

Chapter 9, Article 9.32, Part 4 of the Placer County Code requires that hazardous vegetation be abated on unimproved parcels in the county. Abatement of hazardous fuels is required if the unimproved parcel is adjacent to an improved parcel where implementation of required defensible space would extend onto the unimproved parcel. Abatement is also required along roads if in the opinion of the county fire warden the presence of hazardous fuels constitutes a potential obstacle to emergency access. These provisions apply to Project lands and any proposed fuel treatments, including the shaded fuel break on the adjacent Lafaille Ranch property, must be compatible with the code requirements.

The full text of Chapter 9, Article 9.32, parts 3 and 4 is provided in Appendix B.

**3.4 Placer County Office of Emergency Services**

Placer County's Office of Emergency Services provides emergency management services in cooperation with local cities and special districts, including fire agencies. During an active incident, such as fire or flood, the Office of Emergency Services helps initiate first responses. The functions of the Office of Emergency Services include emergency planning, response, recovery, and mitigation, including preparation of a Local Hazard Mitigation Plan. The Placer County Local Hazard Mitigation Plan, which was updated in 2016, is a joint effort between Placer County and 15 other jurisdictions, and is intended to guide hazard mitigation planning to reduce the effects of hazard events, including wildfires.

## 4. FIRE RISK ANALYSIS

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In order to prepare the Fire Safe Plan, an evaluation of the fire hazards and risk was prepared, as documented in Technical Memorandum #1 (see Appendix A). The following information is based primarily on Technical Memorandum #1. For a full discussion of the fire risk analysis, please see Appendix A.

### 4.1 Fire Hazard Versus Fire Risk

The threat of wildfire exposure to people, critical infrastructure, structures and communities is based upon a comprehensive vulnerability assessment of an area. This vulnerability assessment is usually completed through the evaluation of both fire hazard and fire risk factors. The term “hazard” describes the density of live or dead vegetation that could be ignited by the various fire risks or causes that can increase a fire’s intensity or rate of spread such as topography or weather conditions. The term “risk” describes the potential damage a fire can do to structures, critical assets/infrastructure and other values at risk in individual open space areas and other wildland urban interface (WUI) areas.

Land owners, managers and fire officials need to consider the potential wildfire hazard and risk factors that could make their community vulnerable to a wildfire when making land management and development decisions in fire-prone areas<sup>1</sup>. This assessment also aids fire agencies in the preparation of pre-incident plans and resource deployment actions such as fire equipment staffing levels and resource placement during critical fire periods. This assessment should consider both existing conditions described in Chapter 2, such as vegetation, topography and climate, and the future built environment, including the size and configuration of the WUI, proximity of structures to the WUI, defensible space, emergency access and water supply.

### 4.2 The Ridge Project Risk Analysis

The risk factor ratings described below and in Technical Memorandum #1 are based on current conditions without fuel modification or other risk reduction strategies being implemented. The overall risk rating can be described as Low (0-29), Moderate (30-59), High (60-79) and Very-High (80-100). Fire Risk ratings within the Project site are generally expressed using these terms:

- **Low Risk** – Fire risk factors present typically do not support rapid fire spread.
- **Moderate Risk** – Fire risk factors present may support moderate fire spread, but burning ember distribution is limited to less than ½ mile.
- **High Risk** – Fire risk factors present may support rapid fire spread and ember distribution beyond ½ mile.
- **Very High Risk** – Fire risk factors present may support extreme fire spread and intensity.

No Very High-Risk areas are currently identified within the Project site.

Risk factors examined as part of this analysis are identified in Table 4-1. A detailed description of each factor can be found in Chapter 2 and Technical Memorandum #1 in Appendix A. The ratings for each of the factors considered in the risk analysis are

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<sup>1</sup> United Nations Office for Disaster Risk Reduction, *Wildfire Hazard and Risk Assessment*, 2017.

Table 4-1 Fire Risk Factor Rating for the Ridge Subdivision Project						
No.	Risk Factor	Low 0-3	Moderate 4-6	High 7-8	Very-High 9-10	Total
1	Fire Hazard Severity Rating	○	⑥	○	○	6
2	Local Fire Department Capabilities	○	⑥	○	○	6
3	Local Fire History	○	⑥	○	○	6
4	Size / Configuration of the WUI	○	○	⑦	○	7
5	Proximity of Structures s to WUI	○	○	⑦	○	7
6	Building Construction Meets CBC CH 7A	○	⑥	○	○	6
7	Defensible Space Complies with PRC 4291	○	⑥	○	○	6
8	Emergency Access to WUI	○	⑥	○	○	6
9	Water Supply for Fire Suppression	○	⑥	○	○	6
10	Critical Assets / Infrastructure at Risk	①	○	○	○	1
	<b>Total</b>	<b>1</b>	<b>42</b>	<b>14</b>	<b>0</b>	<b>57 / 100</b>

Source: Technical Memorandum #1 (Appendix A)

provided in Table 4-1. As shown, the overall Wildfire Risk Rating is Moderate for the Project site. Explanations for each of these risk factors and ratings as they pertain to the Project are summarized below. For a more detailed discussion of each risk factor rating, please see Technical Memorandum #1 in Appendix A.

It is important to remember that the risk factor ratings described do not infer that a community is at greater or less risk due to its overall rating. Fires can, and do, cause significant damage to property even when they occur in areas that may receive an overall low or moderate rating. Failure to maintain adequate defensible space, critical fire weather conditions and/or lack of available fire suppression resources due to other emergency incidents may cause a fire to increase its intensity and fire spread beyond the capabilities of firefighters on scene.

### 1. Fire Hazard Severity Rating

As discussed in Chapter 2, the Project site is rated Moderate for fire hazard by CalFire.

### 2. Local Fire Department Capabilities

The Project site is currently within the emergency response goals of the Penryn Fire Protection District (PFPD). With the addition of a new fire station in the

BRSP area emergency response times will improve further. Therefore, this fire risk factor is considered Moderate.

### **3. Local Fire History**

The Project site and vicinity have been subject to wildfire in the past, although these fires have been relatively small (19 to 1,090 acres between 1950 and 2013). Therefore, this fire risk factor is considered Moderate.

### **4. Size/Configuration of the WUI**

This fire risk factor should be considered “High” unless adequate preparedness measures are undertaken by the Project and subsequent property owners. This includes all structures being constructed to resist exterior wildfire exposure and maintaining adequate defensible space within 300-feet of structures facing the LaFaille Ranch undeveloped canyon area, as discussed in more detail in Chapter 5.

### **5. Proximity of Structures to WUI**

Similar to #4, this fire risk factor is considered “High” unless adequate preparedness measures are undertaken, such as maintaining a 30-foot setback between the primary structure and the WUI Zone and limiting the use of combustible materials such as accessory structures, decks cantilevered over the rear-yard natural slope and other uses that can contribute to fire spread (see Chapter 5 for more detail).

### **6. Building Construction Meets CBC CH 7A**

All structures built on the Project site must comply with State laws and regulations, including the provision of sprinklers within residential units. As delineated in Chapter 5, the use of ignition-resistant building materials and design will further reduce the risk of fire spreading. With the use of building and design measures identified in Chapter 5, this fire risk factor should be considered “Moderate” for the Project.

### **7. Defensible Space Complies with PRC 4291**

The Project must comply with the defensible space requirements of PRC 4291 (described in Chapter 3 and provided in Appendix B), which addresses fuel reduction and management within 100 feet from structure. For the Project, additional fuel reduction activities would occur immediately offsite as well, as delineated in Chapter 5 and TM #2, which would reduce the risk of a wildfire affecting the Project. Therefore, with compliance with State law and implementation of the Fuel Management Plan described in Chapter 5 and TM #2, this fire risk factor should be considered “Moderate” for the Project.

### **8. Emergency Access to WUI**

Access to the Project via Bickford Ranch Road will be available as part of Phase I of the BRSP area. The Clark-Tunnel Road to Highway 193 EVA will also be constructed and available for use by emergency responders as part of BRSP Phase I. The private road and two lanes serving the Project will comply with current CFC requirements prior to the construction of any dwellings on each lot. Both private lanes are proposed to be interconnected to the adjoining BRSP

subdivisions (parcels RR-02 and RR-03 shown in Figure 2-2 in Chapter 2) via a proposed gated EVA. For these reasons, the fire risk rating should be considered Moderate.

#### **9. Water Supply for Fire Suppression**

Reliability and maintenance of the water supply is a key factor for the water supply system to work as designed during the height of a wildfire. The Project as proposed would have access to water supply via a connection in Bickford Ranch Road, and would meet fire flow demands, minimum operating pressures and storage capacity to support fire suppression activities during a wildfire. The Project proposes six fire hydrants that will be distributed to allow firefighters to access a fire hydrant quickly. All dwellings constructed in the Project site will be protected by a residential fire sprinkler system meeting current CBC design standards to reduce the risk of a fire inside the home when it is occupied. For these reasons, this risk factor should be considered “Moderate”.

#### **10. Critical Assets / Infrastructure at Risk**

The fire risk factor associated with Critical Assets/Infrastructure at Risk sites within the Project site should be considered “Low”, because the only identified infrastructure site of concern during a wildfire would be the Caperton Canal. This canal provides raw water for municipal water and irrigation purposes in the area, The canal is not composed of flammable materials, such as a wooden flume, and as part of a much larger water system, would not be considered a critical piece of infrastructure that would need to be protected during a fire.



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## 5.0 FIRE SAFE PLAN

This section addresses steps to be taken in the planning, design and construction of development within the project site in order to minimize fire hazards, as well as ongoing maintenance activities to be undertaken after the Project is built and occupied. The measures identified below are taken primarily from the Technical Memoranda (Appendix A), and are based on California State law, Placer County regulations, input from the Penryn Fire Protection District (PFPD) and CalFire and best practices.

### 5.1 Fire Safe Plan Goals

The goals for the Fire Safe Plan are to:

- Ensure that the Plan is generally consistent with applicable Placer County policies, Development Agreement terms, and project development standards and guidelines.
- Limit the risk of direct and indirect wildland fire impacts to people, property and sensitive areas (e.g. preserve lands, cultural sites, steep slopes, etc.).
- Strive to support PFPD and CalFire in their goal of extinguishing 95% of all wildland fires in the Project area at 10 acres or less through community education, fuel modification, fire safe landscaping and construction, and other planned efforts<sup>1</sup>.
- Implement Fire Safe strategies that will reduce wildland fire intensity and associated greenhouse gas emissions within open space areas; yet minimize costs and requirements for maintenance when it is feasible.
- Minimize the fuel management treatments and fire suppression impacts on the environment through the use of effective industry best management practices.

### 5.2 Required Actions

The Fire Safe Plan includes the following elements, each of which are discussed in more detail below:

- Planning,
- Fire Apparatus Access,
- Water Supply System,
- Building in the Wildlife Urban Interface (WUI),
- Fuel Management, and
- Evacuation Plan.

Compliance with State and local laws and regulations require a number of measures to reduce the risk of and damage from wildfire, such as sprinklers in all new residential units and fuel reduction prescriptions in fire hazard areas. Additional Action items are identified to reinforce those laws and regulations where applicable and/or to address fire safety concerns that are not covered by existing laws or regulations.

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<sup>1</sup> CalFire, *Unit Strategic Fire Plan, Nevada-Yuba-Placer Unit*, Battalion 18 Fire History Map, July 2017, page 12.

### 5.2.1 Planning

A coordinated planning effort between the PFPD and the landowners will contribute to a timely and effective fire suppression response. Pre-planning consultation with the PFPD and CalFire has occurred as part of the preparation and review of the Project Small Lot Tentative Map. Additional consultation during the Improvement Plan process, when final adjustments to road layouts, lot lines and infrastructure placement will take place, will ensure that any changes to these features do not reduce fire safety. The RR lots will be developed individually, and separately from the LDR lots, so review of the plans for each RR parcel is also warranted.

#### FSP Action #1

Applicants shall consult with the PFPD during preparation of Improvement Plans for the Low Density Residential development and individual site plans for the RR parcels. Issues to be addressed during the planning process shall include, but would not be limited to:

- Fire apparatus access,
- Available water supply,
- Evacuation routes, and
- Safe refuge areas.

To the extent possible, electronic GIS files should be shared to improve mapping accuracy

### 5.2.2 Fire Apparatus Access

Fire access is the means (e.g., roads, bike paths, trails) by which firefighters can enter an area to quickly mitigate a wildfire incident before it spreads to adjacent properties and/or critical assets and infrastructure. Adequate ingress/egress is necessary for both local evacuation and fire suppression response in order to ensure both the public safety and firefighter safety.

As discussed in Chapter 1, the primary private road and two private lanes will provide access to all Project residences. These facilities must comply with California Fire Code (CFC) requirements. The private road serving the project is planned to be 40-foot wide. Two private lanes serving the Rural Residential (RR) lots are planned to be 20-foot wide with a 24-foot easement. These road designs have been reviewed by PFPD and CalFire as part of the preliminary project review process and found to be satisfactory.

Three Emergency Vehicle Access (EVA) easements through the BRSP area will provide additional access to the Project site from Highway 193 and Sierra College Boulevard (via Bickford Ranch Road). In order to ensure that adequate access is maintained, these facilities shall be constructed and maintained in accordance with Penryn Fire Protection District (PFPD) and CalFire requirements.

The Project road and lanes and the access point to the BRSP EVAs will be gated.

#### FSP Action #2

The Project lanes, private road and Project EVAs shall be constructed to PFPD and CalFire standards. If any changes are made to the proposed design with respect to width or turning radius, the changes shall be reviewed by PFPD and CalFire prior to final approval.

### 5.2.3 Water Supply System

As discussed in Chapter 1, the Project will connect to the water line in Bickford Ranch Road. On-site water lines will then convey water to individual parcels. As required by the California Fire Code (CFC), the Project must meet minimum fire-flow requirements of 1,000 GPM @ 20 PSIG for 2 hours duration. Fire hydrants must meet PCWA, PFPD and CalFire requirements, and are planned to be spaced on average every 500 feet along the private road and lanes.

#### FSP Action #3

Fire hydrants serving the site shall be provided at the following locations in the Project site, or equivalent locations subject to approval of PCWA and County Public Works:

- Along the private road near Lots 22/23,
- Along the private road near Lots 6/7,
- In the turnout along the private lane at Lot 34,
- In the turnaround along the private lane at Lot 32,
- Near the private lane entrance at Lot 13, and
- In the turnaround along the private lane at Lot 31.

In addition, as required by State law, all residences will have sprinkler systems installed. In order to ensure that these systems remain operable, the following measure shall be implemented:

#### FSP Action #4

Individual building sprinkler systems used for fire suppression shall remain operable and shall be maintained by the individual homeowners at all times.

### 5.2.4 Building in the Wildlife Urban Interface Zone

As discussed in Chapter 4, the proximity of Project structures to the Wildlife Urban Interface (WUI) and the size and configuration of the WUI are the highest rated among elements that were considered when determining the fire risk rating for the Project site. Fire spread during a wildfire is typically from one or more ignition sources. The most likely ignition factors present during a wildfire are direct flame impingement on combustible materials such as building construction materials or ember broadcast that ignites combustible on or near the structure. Buildings in the WUI Zone are at greater risk of damage or loss as a result of fire spread through either surface burning or ember broadcast. Building separation between the building envelope and the adjoining WUI must be maintained to reduce the threat of a wildfire damaging individual structures or multiple structures.

As stated previously, for development within fire hazard zones, State and local laws and regulations require measures to reduce the risk of buildings igniting or fire spreading (see Chapter 3 and Appendix B). Project construction must comply with the applicable building standards, such as installing sprinklers in residential buildings. The following measures are intended to address specific elements of the Project, and would further reduce the risk of damage due to a wildfire and/or its spread throughout the Project site and into adjacent areas.

#### FSP Action #5

All structures constructed on lots facing the WUI Zone (Lots 15 through 25 and

29 through 34) shall have a minimum 30-foot setback from the rear property line to reduce the threat of a wildfire impinging directly on the primary building. Setback areas may contain driveways, parking areas and/or other non-combustible surfaces.

FSP Action #6

Fencing materials located along the side and rear yard property lines facing the WUI on Ridge Subdivision Lots 15 through 25 and 29 through 34 shall be constructed of non-combustible materials.

FSP Action #7

Dwellings located on Project Lots 15 through 25 and 29 through 34 shall be constructed and maintained in accordance with the current design standards found in California Building Code (CBC) Chapter 7A (Materials and Construction Methods for Exterior Wildfire Exposure), which is provided in Appendix B.

**5.2.5 Fuel Management**

A Fuel Management Plan (FMP) for the Project has been prepared to address the fuels that are of concern both within the Project site and in the adjacent WUI, specifically the LaFaille Ranch area. The Fuel Management Plan is provided in Technical Memorandum #2 in Appendix A.

As discussed in Chapter 3, California Public Resource Code (PRC) 4291 states that property owners must maintain a 100-foot defensible space perimeter around all structures on their property if they are in proximity to forests, grasslands or similar undeveloped areas. Defensible space on each lot is the responsibility of the individual property owner. Defensible space within the Project site will start at the structure and extend 100 feet or to the property line, whichever is closer.

In addition, Placer County Code Section 9.32.120 extends these requirements to adjacent unimproved properties when an *extra hazardous* fire condition exists. In consultation with PFPD and CalFire officials they have determined that the undeveloped land on the LaFaille Ranch property constitutes an *extra hazard* fire condition to the Project. Fire officials have also identified the LaFaille Ranch undeveloped lands, and Project Lots 15-25 and 29-34, as a WUI Zone.

In addition, PFPD and CalFire will require the construction and on-going maintenance of a Modified Shaded Fuel Break<sup>2</sup> (MSFB) to protect the structures and population in the Project site and vicinity from an advancing wildfire. The MSFB will originate at the rear property line of Lots 15 through 25 and 29 through 34, and extend nominally 300-feet into the LaFaille Ranch undeveloped land area.

The following actions are intended to insure that the FMP and MSFB are fully implemented throughout the life of the Project.

Action #8

A Fuel Management Program shall be established to ensure implementation of the Fuel Management Plan and Modified Shaded Fuel Break, described below and in Technical Memorandum #2. The program shall be designed to ensure the following fuel management activities are completed in a timely manner:

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<sup>2</sup> A Modified Shaded Fuel Break is a wildfire preparedness action designed to decrease the intensity of a wildfire burning in a natural open space area through the removal of dead fuels, pruning of trees, and removal of shrubs, brush and other vegetative growth.

- a. Provide administrative oversight and coordination of fuel management projects within the Project area.
- b. Confirm that fuel management projects are identified, scheduled and completed in accordance with this Fuel Management Plan.
- c. Coordinate the use of resources (e.g. crews, mechanical equipment, domestic livestock, prescribed fire, etc.) that are most appropriate for the fuel management work that is required.
- d. Ensure that sensitive biological resources within each area are identified in advance of the fuel management project. Complete pre/post project inspections of these areas to safeguard sensitive areas from damage and/or destruction.
- e. Verify that each fuel management project has sufficient fiscal resources available to it using industry best practices that are most appropriate for the Project area.
- f. Ensure the safe disposal (e.g. hauling it to a landfill, chipping/mulching on site, etc.) of biomass materials removed as part of a fuel management project.

#### Action #9

The Ridge Fuel Management Plan (FMP) described in Technical Memorandum #2 (TM #2, August 22, 2019, in Appendix A) shall be implemented by the Project Applicant during project construction and until the Project is fully developed and occupied. Upon acquiring a parcel, the parcel owner shall become responsible for complying with the Fuel Management Plan (and any and all State or local laws and regulations governing fuel maintenance on private property). After construction, maintenance activities within the common lots and the MSFB shall be the responsibility of the Homeowners Association (HOA) or its designee. The FMP shall be adequately funded to ensure that all hazardous fuel reduction work is completed per the prescription requirements identified in TM #2.

#### Action #10

A 300-foot wide MSFB that reduces hazardous live and dead vegetation near the Project site shall be constructed and maintained in accordance with the FMP in the canyon below Project Lots 15 through 25 and 29-34. The shaded fuel break shall meet the following criteria:

- The construction of the shaded fuel break shall commence at the property line between the lot(s) and adjoining LaFaille Ranch property.
- The MSFB shall extend nominally 300-feet except when variances are allowed due to topographical issues, sensitive cultural resources present, or environmental concerns.
- The shaded fuel break shall be constructed and accepted by PFPD and CAL FIRE prior to the issuance of the first building permit within the Project site. See TM #2 for shaded fuel break prescriptive requirements.
- A "Fuel Management Zone" easement shall be recorded on the LaFaille Ranch property that is subject of the MSFB. The easement shall allow right of entry to conduct fuel management activities in perpetuity.

#### Action #11

All hazardous fuels, including annual grasses and dead vegetation, on undeveloped lots within the Project site shall be reduced to 4-inches or less during the CalFire-declared fire season.

### 5.2.6 Evacuation Plan

Wildfires are an increasing concern with California, particularly in the WUI where development occurs adjacent to open, undeveloped lands. The measures described in this FSP should minimize the spread of wildfire, were one to occur within Project site or adjacent area. Under certain conditions (e.g., extremely high winds), it is possible that a wildfire with potential to spread to a developed area will occur, requiring evacuation of some areas.

Based on the wildfire risk factors discussed in Chapter 4 (e.g. WUI Zone less than 300 acres, fire severity is generally moderate, fuel modification efforts in place, building construction using current codes, etc.), it is likely that most evacuations will affect fewer than 88 residents during the duration of the wildfire event. It is anticipated that most evacuations due to a wildfire threat will be less than 12 hours in duration.

The decision to initiate a local evacuation during a wildfire emergency rests with the public safety agencies (law enforcement and fire) based on a comprehensive threat assessment made in the field. The implementation and enforcement of evacuation orders rests with law enforcement. Evacuation types typically focus on one or more of the following methods:

- Voluntary evacuation,
- Mandatory evacuation, and
- Shelter in place or safe refuge.

There are existing and planned roads (e.g. thoroughfare, arterial and collector) that can serve as primary evacuation routes during a wildfire event, specifically:

- Highway 193,
- Sierra College Boulevard,
- Bickford Ranch Road, and
- School Ranch Road.

In addition, there are three emergency vehicle access roads identified within the BRSP that can be used for emergency evacuation efforts when deemed appropriate by public safety officials. The Project would also construct EVAs connecting to the above roads via BRSP roads.

If an incident requiring evacuation occurs, it will go more smoothly if residents and property owners have made preparations. The following steps will help prepare for such an event by educating homeowners.

#### Action #12

The Project Applicant and/or the HOA shall provide a mechanism for distributing the following information to new homeowners.

- Encourage homeowners to subscribe to Placer Alert (<https://www.placer.ca.gov/departments/sheriff/citizenalert>) to register land lines and/or cell phone to receive emergency notifications.
- Provide CalFire's Ready/Set/Go pamphlet (provided in Appendix C) to each new homeowner owner.
- The HOA managers should provide public safety updates and fire-related information in HOA forums, such as an HOA website, newsletters and/or at

- HOA meetings, as needed. This should include links to OES and/or other appropriate emergency websites during emergencies.
- Encourage homeowners to assemble Emergency Supply Kits—keeping one in the house and one in the car and one for pets. The following websites have suggested contents for such kits:
    - <https://www.ready.gov/build-a-kit>
    - <http://www.redcross.org/get-help/how-to-prepare-for-emergencies/survival-kit-supplies>
  - Encourage homeowners to take the follow steps to be prepared in case of an emergency, including:
    - Have fire extinguishers on hand and train everyone in the household to use them,
    - Keep emergency contact numbers and a portable radio handy, and
    - Know evacuation routes and shelter locations.
  - An exhibit showing evacuation routes shall be provided to each homeowner. The exhibit shall identify Highway 193, Sierra College Boulevard, Bickford Ranch Road and School Ranch Road as the primary community evacuation routes for Project residents, and the routes from the project site to these roads. The location of temporary refuge areas (discussed below) shall also be identified. The exhibit shall be made available as part of the new homeowner information packet and through the Project HOA newsletter or website, if available.

#### Action #13

PFPD and CalFire should be encouraged to visit the neighborhood annually to discuss this material and answer questions by the homeowners.

#### Temporary Safe Refuge Area

Temporary Safe Refuge Areas are areas initially designated by public safety officials as locations for evacuated individuals to gather for a period of 12 hours or less, or as a measure of last resort should evacuation routes be obstructed or unsafe as a result of a wildfire. It is anticipated that one or more temporary safe refuge areas may be established in the BRSP area for potential use by the public if a situation arose when Bickford Ranch Road and the three EVA's are unavailable for public use. Temporary safe refuge areas could be established at, for example, the following public locations in the future in the BRSP area:

- Bickford Ranch Community Park located at Bickford Ranch Road and Sierra College Boulevard; and
- Bickford Ranch Recreation Center East located at Bickford Ranch Road and 19A Lane.

Additional temporary refuge areas may also be established at local public schools in the BRSP area as the need arises.

#### Evacuation Shelters

The wildfire risk for the Project site is moderate. A wildfire in this area will likely result in the temporary (<12 hour) evacuation of 88 or fewer persons. A local dedicated evacuation center within the Project site is not warranted for this type of hazard.

The decision to open an evacuation center rests with Placer County OES. This agency has previously designated the Gold Country Fairgrounds in Auburn for use as an

evacuation center for long duration emergency events. This facility is properly designed to handle the evacuation of general population, special need population and domestic animal groups.

The Gold County Fairground site is located within 30 minutes' drive time from the Project site based on routine traffic conditions in the area. Emergency transportation of persons without vehicles to this location can be addressed through coordinated planning efforts between County OES, regional and local transit agencies, private ambulance operators and/or property/business owners who need to complete this evacuation planning effort.



## 6.0 REFERENCES

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## **APPENDIX F**

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## MEMORANDUM

Date: August 6, 2020  
To: Mr. Robert B. Coker, Jr., Southfork Partnership  
From: David B. Robinson and Carly Panos, Fehr & Peers  
Subject: **Draft Technical Memorandum - The Ridge Subdivision**

*RS18-3725*

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This memorandum presents the results of the traffic impact analysis to support the proposed General Plan Amendment and Rezone to allow a 34-unit subdivision (referenced as "The Ridge") in Placer County. This memorandum documents the inputs, methodologies, and findings of the traffic impact analysis.

### Project Description

The proposed project is located south of State Route 193 and east of Sierra College Boulevard in Placer County, directly adjacent to the Bickford Ranch development that was approved in 2004 and amended in 2015. The project will be bordered by the Bickford Ranch development, which will include 1,890 residential units, on the south, east and west. The proposed project includes the following:

- General Plan Amendment to change the General Plan designation from Agriculture/Timberland 10 Acre Minimum to Residential
- Rezone to change the zoning from FBX 10 Acre Minimum to Rural Residential/Low Density Residential
- A tentative subdivision map to allow one 24.9-acre parcel to be subdivided into 34 residential lots and three common lot

The proposed project anticipates using the future Bickford Ranch Road for primary access and future North Clark Tunnel Road for emergency vehicle access. Both roads are anticipated to be constructed with the Bickford Ranch development; however, in the event Bickford Ranch is not developed or the proposed project moves ahead of Bickford Ranch, the proposed project would be required to construct both roads.

Therefore, this traffic impact analysis studied traffic operations both with and without construction of the approved Bickford Ranch development.



## Study Intersections and Roadways

The existing and future study intersections and roadways were identified based on the proposed project and conversations with Placer County's Public Works Department. Study intersections and roadways are identified below:

### Intersections

- 1) State Route 193 / Sierra College Boulevard (existing)
- 2) Sierra College Boulevard / Bickford Ranch Road (future)

### Roadways

- 1) Sierra College Boulevard – State Route 193 to the future Bickford Ranch Road
- 2) Sierra College Boulevard – Future Bickford Ranch Road to existing Twelve Bridges Drive

## Scenarios

As described above, this traffic impact analysis studied traffic operations both with and without construction of the approved Bickford Ranch development. The following scenarios were analyzed:

- Existing Conditions – This scenario analyzes operations as they exist today.
- Existing Plus Project Conditions – This scenario analysis existing operations with the addition of trips generated from The Ridge. This scenario assumes the proposed project will construct Bickford Ranch Road and North Clark Tunnel Road.
- Short-Term No Project Conditions - This scenario assumes existing conditions with the addition of the Bickford Ranch development and construction of Bickford Ranch Road. Intersection and roadway improvements identified in the Conditions of Approval for the *Bickford Ranch Specific Plan Phase I* (Placer County, 2017) are assumed to be constructed with this scenario.
- Short-Term Plus Project Conditions –Trips generated from The Ridge were added to the Short-Term No Project scenario.
- Cumulative No Project – This scenario assumes construction of the Bickford Ranch development, as well as other planned development in South Placer County, without the proposed project.
- Cumulative Plus Project – Trips generated from The Ridge were added to the Cumulative No Project scenario.



## Analysis Methodology

This study analyzes traffic operations using level of service (LOS) as the primary measure of performance. Automobile LOS is a qualitative description of traffic flow from the perspective of motorists. The *Highway Capacity Manual* (HCM) defines six levels of service from LOS A representing the least congested traffic conditions to LOS F representing the most congested traffic conditions. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving, as well as speed, travel time, traffic interruptions, and freedom to maneuver.

## Intersection Operations

Intersection capacity was analyzed using methodologies from the *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016). The analysis procedures were applied using the Synchro 10 software, which considers traffic volumes, lane configurations, signal timings, and other parameters. Since the study intersections are isolated, the use of Synchro was considered sufficient for analysis needs.

Intersection LOS is based on the control delay experienced by motorists traveling through the intersection. At signalized intersections or intersections with an all-way stop control, the LOS is determined by the average control delay per vehicle experienced by all motorists traveling through the intersection. For side-street stop control intersections, the overall weighted average delay for movements yielding the right-of-way is reported per Placer County guidance. Table 1 shows the intersection LOS thresholds.

**Table 1: LOS Thresholds for Intersections**

LOS	Average Control Delay		Description
	Signalized Intersection	Unsignalized Intersection	
A	< 10	< 10	Very low delay occurs due to little or no conflicting traffic.
B	> 10 to 20	> 10 to 15	Low delay occurs although conflicting traffic becomes noticeable.
C	> 20 to 35	> 15 to 25	Average delays result from increased conflicting traffic.
D	> 35 to 55	>25 to 35	Longer delays occur due to a reduction in available gaps. At signals, individual cycle failures are noticeable.
E	> 55 to 80	> 35 to 50	High delays and extensive queues occur. This value indicates volume-to-capacity ratios. This is considered to be the limit of acceptable delay.
F	> 80	> 50	Delays are unacceptable to most drivers due to over-saturation.

Note: Average control delay is listed in seconds per vehicle.

Source: *Highway Capacity Manual* (Transportation Research Board, 2016)



## Roadway Operations

Roadway segment operations were determined using the thresholds provided in the Placer County General Plan Final EIR. Sierra College Boulevard is defined as a High Access Control (less than 2 stops per mile) Principle Arterial in the Placer County General Plan EIR. LOS thresholds for a High Access Control Arterial and identified in Table 2.

**Table 2: LOS Thresholds for Roadway Level of Service**

Roadway Capacity Class	Maximum Daily Traffic Volume Per Lane				
	LOS A	LOS B	LOS C	LOS D	LOS E
Arterial - High Access Control	6,000	7,000	8,000	9,000	10,000

Source: Placer County General Plan Final EIR, 1994

## Traffic Forecasting

Traffic volume forecasts were developed using the following steps:

1. Trip Generation – We calculated the expected number of trips to be generated by the proposed project using the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (10<sup>th</sup> Edition).
2. Trip Distribution – Existing Plus Project trips were distributed based on existing travel patterns. Short-Term No Project and Cumulative No Project trip distribution was obtained using a modified version of the Placer County travel demand model. This is described in more detail later in this memorandum.
3. Assignment – For the Short-Term No Project and Cumulative No Project scenarios, project trips were assigned based on the travel demand model. The Ridge project trips were added to each scenario and assigned based on the model for the Short-Term Plus Project and Cumulative Plus Project scenarios. It should be noted that two access points were approved with the Bickford Ranch development, one at the future unsignalized intersection of Sierra College Boulevard / School Ranch Road and one at the future signalized intersection of Sierra College Boulevard / Bickford Ranch Road. Because it is uncertain if/when the Sierra College Boulevard / School Ranch Road intersection will be constructed and because the Sierra College Boulevard / Bickford Ranch Road intersection was anticipated to be the primary access road for the Bickford Ranch development in the 2015 EIR Addendum, all trips were assigned to this intersection in all scenarios. This is consistent with the 2015 EIR Addendum and provides a more conservative estimate of potential impacts at Sierra College Boulevard / Bickford Ranch Road.



To develop traffic volume forecasts for the Short-Term No Project conditions, trips generated from the Bickford Ranch development (i.e., that was approved in 2015) were added to existing traffic counts, using a trip distribution developed through the application of a select zone analysis.

Traffic volume forecasts for the Cumulative scenarios, were developed using a cumulative version of the 2008 Placer County Travel Demand Forecasting (TDF) model that was updated in 2016 for the City of Lincoln Village 5 Specific Plan. The model includes buildout of the Bickford Ranch Specific Plan, the Bickford Ranch Marketplace, Lincoln Village 1 and Village 7 Specific Plans, the Amoruso Ranch Specific Plan, and the Placer Ranch Specific Plan. The land use growth in the modified version of the 2008 Placer County TDF model exceeds the development levels in the SACOG 2035 MTP/SCS. Consequently, the traffic volume forecasts in the study area are well beyond 2035 conditions. The analysis also includes financially constrained transportation projects, consistent with the SACOG 2035 MTP/SCS.

## Significance Criteria

Policy 3.A.7 of the Placer County General Plan requires intersections and roadways operate at:

- LOS "C" on rural roadways, except within one-half mile of state highways where the standard shall be LOS "D";
- LOS "C" on urban/suburban roadways except within one-half mile of state highways where the standard shall be LOS "D".

The LOS standard for the study intersections and roadways are identified in Table 3:

**Table 3: Intersection and Roadway LOS Standard**

Intersection/Roadway		LOS Standard
<b>Intersection</b>	State Route 193 / Sierra College Boulevard	D
	Sierra College Boulevard / Bickford Ranch Road	C
<b>Roadway</b>	Sierra College Boulevard - State Route 193 to the future Bickford Ranch Road	D
	Sierra College Boulevard – Future Bickford Ranch Road to existing Twelve Bridges Drive	C

Source: Placer County General Plan Final EIR, 1994

The following impact criteria are based on the *Placer County Impact Analysis Methodology of Assessment* (September 2015) and apply to the study intersections and roadways:

A significant impact would occur on a roadway segment if:



- a) the roadway worsens from LOS C or better to LOS D or worse,
- b) the roadway operating at LOS D or worse experiences an increase in the v/c ratio by 0.05 or more,  
or
- c) the roadway operating at LOS D or worse has an increase in 100 or more vehicle trips per lane.

A significant impact would occur at a signalized intersection if:

- a) the intersection worsens from LOS C or better to LOS D or worse or
- b) the intersection operating at LOS D or worse experiences an increase in the average intersection delay by 4 seconds per vehicle or more.

A significant impact would occur at a stop controlled intersection if:

- a) the intersection worsens from LOS C or better to LOS D or worse and the MUTCD peak hour signal warrant is met or
- b) the intersection operating at LOS D or worse and meeting the MUTCD peak hour signal warrant experiences an increase in the average intersection delay by 2.5 seconds per vehicle or more.

## Existing Conditions

Intersection turning movement counts at the State Route 193 / Sierra College Boulevard intersection and daily roadway segment counts on Sierra College Boulevard between State Route 193 and Twelve Bridges Drive were collected on November 15, 2018, a regular weekday with clear weather conditions and local schools in session. The observed peak hours are summarized below:

- Intersection Counts (AM) – between 7:00 AM and 9:00 AM the AM peak hour was 7:00 AM to 8:00 AM
- Intersection Counts (PM) – between 4:00 PM and 6:00 PM the PM peak hour was 4:45 PM to 5:45 PM
- Roadway Segment Counts – the AM peak hour was 6:45 AM to 7:45 AM and the PM peak hour was 6:30 PM to 7:30 PM

## Intersection Operations

Table 4 shows the intersection LOS under existing conditions. As shown, the intersection operates acceptably under both peak hours. Turning movement volumes are provided on Figure 1. Technical calculations are provided in Attachment 1.





**Table 4: Intersection Operations – Existing Conditions**

Intersection	Traffic Control	Peak Hour	Delay	LOS
1. State Route 193 / Sierra College Boulevard	AWSC	AM	12.8	B
		PM	30.7	D

Notes: 1. Average control delay for all-way stop intersections is the weighted average for all movements.  
 2. Delay in seconds per vehicle calculated based on methodologies contained in the *Highway Capacity Manual (HCM) 6<sup>th</sup> Edition*.

Source: Fehr & Peers, 2019

## Roadway Operations

Table 5 shows the roadway segment LOS using the Placer County roadway thresholds. As shown, the existing roadway segment operates acceptably at LOS A.

**Table 5: Roadway Operations – Existing Conditions**

Roadway	Capacity Class	Lanes	Daily Volume	V/C Ratio	LOS
Sierra College Boulevard – State Route 193 to Twelve Bridges Drive	Arterial – High Access Control	2	8,648	0.43	A

Source: Fehr & Peers, 2019



## Existing Plus Project Conditions

We estimated project trips using rates published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (10<sup>th</sup> Edition). Table 6 shows the project's expected daily, weekday AM and weekday PM trip generation. Project trips were added to the study intersections and roadway segments based on existing travel patterns.

**Table 6: Trip Generation**

ITE Land Use Code and Category	Project	Quantity (D/U)	Time Period	Trip Rate <sup>1</sup>			Vehicle Trips		
				In	Out	Total	In	Out	Total
210 – Single-Family Detached Residential	The Ridge	34	Daily	4.72	4.72	9.44	161	161	322
			AM	0.19	0.55	0.74	6	19	25
			PM	0.62	0.37	0.99	21	13	34

Notes:

<sup>1</sup> Trip rates from Trip Generation Manual, 10<sup>th</sup> Edition (Institute of Transportation Engineers, 2017).

Source: Fehr & Peers, 2019

## Intersection Operations

Table 7 shows the intersection LOS under Existing Plus Project conditions. As shown, both intersections operate acceptably under both peak hours. Therefore, the proposed project has **no impact** to intersection operations under the Existing Plus Project scenario, since the additional delay is less than 4 seconds. Intersection turning movement volumes are provided on Figure 1. Technical calculations are provided in Attachment 1.



**Table 7: Intersection Operations – Existing Plus Project Conditions**

Intersection	Traffic Control	Peak Hour	Existing		Existing Plus Project	
			Delay	LOS	Delay	LOS
1. State Route 193 / Sierra College Boulevard	AWSC	AM	12.8	B	13.0	B
		PM	30.7	D	32.3	D
2. Sierra College Boulevard / Bickford Ranch Road	SSSC	AM	N/A	N/A	13.8	B
		PM	N/A	N/A	13.1	B

Notes: 1. Average control delay for all-way stop intersections is the weighted average for all movements. For side-street stop control intersections, the overall weighted average delay for movements yielding the right-of-way is reported per Placer County guidance

2. Delay in seconds per vehicle calculated based on methodologies contained in the *Highway Capacity Manual (HCM) 6<sup>th</sup> Edition*.

Source: Fehr & Peers, 2019

## Roadway Operations

Table 8 shows the roadway segment LOS using the Placer County roadway thresholds. As shown, the roadway segments operate acceptably under Existing Plus Project conditions. Therefore, the proposed project has **no impact** to roadway capacity under the Existing Plus Project scenario.

**Table 8: Roadway Operations – Existing Plus Project Conditions**

Roadway	Segment	Existing				Existing Plus Project			
		Lanes	Daily Volume	V/C Ratio	LOS	Lanes	Daily Volume	V/C Ratio	LOS
Sierra College Boulevard	State Route 193 to Bickford Ranch Road	2	8,648	0.43	A	2	8,819	0.44	A
	Bickford Ranch Road to Twelve Bridges Drive	2	8,648	0.43	A	2	8,799	0.44	A

Source: Fehr & Peers, 2019

## Short-Term No Project Conditions

The Short-Term No Project scenario assumes existing conditions plus trips generated from the Bickford Ranch development that was approved in 2015. A select zone analysis was used to determine peak hour



turning movement volumes and the total number of daily trips generated by the Bickford Ranch development. Project trips associated with Bickford Ranch were added to existing volumes and distributed based on the models trip distribution.

Roadway and infrastructure improvements identified in the Conditions of Approval for *Bickford Ranch Specific Plan Phase I* (Placer County, 2017) were assumed to be in place. These improvements include:

- Traffic Signal at Sierra College Boulevard / Bickford Ranch Road
- Construction of Bickford Ranch Road as a four lane roadway (near the Sierra College Boulevard / Bickford Ranch Road intersection)
- Widening of Sierra College Boulevard from two lanes to four lanes from just south of the State Route 193 / Sierra College Boulevard intersection to just south of the Sierra College Boulevard / Bickford Ranch Road intersection

## Intersection Operations

Table 9 shows the intersection LOS under Short-Term No Project conditions. Intersection turning movement volumes are provided on Figure 1. Technical calculations are provided in Attachment 1. As shown, most intersections operate acceptably except for State Route 193 / Sierra College Boulevard which operates unacceptably at LOS F during the PM peak hour.

**Table 9: Intersection Operations – Short-Term No Project Conditions**

Intersection	Traffic Control	Peak Hour	Existing		Short-Term No Project	
			Delay	LOS	Delay	LOS
1. State Route 193 / Sierra College Boulevard	AWSC	AM	12.8	B	21.2	C
		PM	30.7	D	<b><u>61.4</u></b>	<b><u>F</u></b>
2. Sierra College Boulevard / Bickford Ranch Road	Signal	AM	N/A	N/A	7.8	A
		PM	N/A	N/A	9.6	A

- Notes: 1. Average control delay for signalized intersections and all-way stop intersections is the weighted average for all movements.  
 2. Delay in seconds per vehicle calculated based on methodologies contained in the *Highway Capacity Manual (HCM) 6<sup>th</sup> Edition*.  
 3. **Bold and underlined** represents unacceptable LOS.

Source: Fehr & Peers, 2019



## Roadway Operations

Table 10 compares roadway segment traffic operations with the addition of Bickford Ranch daily trips. As shown, all roadways operate acceptably.

**Table 10: Roadway Operations – Short-Term No Project Conditions**

Roadway	Segment	Existing				Short-Term No Project			
		Lanes	Daily Volume	V/C Ratio	LOS	Lanes	Daily Volume	V/C Ratio	LOS
Sierra College Boulevard	State Route 193 to Bickford Ranch Road	2	8,648	0.43	A	4	11,848	0.30	A
	Bickford Ranch Road to Oak Tree Lane	2	8,648	0.43	A	4	16,648	0.42	A
	Oak Tree Lane to Twelve Bridges Drive	2	8,648	0.43	A	4	15,948	0.40	A

Source: Fehr & Peers, 2019

## Short-Term Plus Project Conditions

To develop the Short-Term Plus Project conditions, project trips from The Ridge were added to the Short-Term No Project scenario. Project trips associated with The Ridge were assigned based on the models trip distribution.

### Intersection Operations

Table 11 shows the intersection LOS under Short-Term Plus Project conditions. As shown, the State Route 193 / Sierra College Boulevard intersection continues to operate unacceptably at LOS F during the PM peak hour. Because this intersection operates unacceptably under Short-Term No Project conditions and the project will not increase delay by greater than 4 seconds, this is a **less than significant** impact.

Intersection turning movement volumes are provided on Figure 1. Technical calculations are provided in Attachment 1.



**Table 11: Intersection Operations – Short-Term Plus Project Conditions**

Intersection	Traffic Control	Peak Hour	Short-Term No Project		Short-Term Plus Project	
			Delay	LOS	Delay	LOS
1. State Route 193 / Sierra College Boulevard	AWSC	AM	21.2	C	21.8	C
		PM	<b><u>61.4</u></b>	<b><u>F</u></b>	<b><u>61.4</u></b>	<b><u>F</u></b>
2. Sierra College Boulevard / Bickford Ranch Road	Signal	AM	7.8	A	7.9	A
		PM	9.6	A	9.8	A

- Notes: 1. Average control delay for signalized intersections and all-way stop intersections is the weighted average for all movements.  
 2. Delay in seconds per vehicle calculated based on methodologies contained in the *Highway Capacity Manual (HCM) 6<sup>th</sup> Edition*.  
 3. **Bold and underlined** represents unacceptable LOS.

Source: Fehr & Peers, 2019

## Roadway Operations

Table 12 compares roadway segment traffic operations with the addition of both Bickford Ranch daily trips and The Ridge daily trips. As shown, the roadway segments operate acceptably and therefore, the proposed project has **no impact** to roadway capacity.

**Table 12: Roadway Operations – Short-Term Plus Project Conditions**

Roadway	Segment	Short-Term No Project				Short-Term Plus Project			
		Lanes	Daily Volume	V/C Ratio	LOS	Lanes	Daily Volume	V/C Ratio	LOS
Sierra College Boulevard	State Route 193 to Bickford Ranch Road	4	11,848	0.30	A	4	12,019	0.30	A
	Bickford Ranch Road to Oak Tree Lane	4	16,648	0.42	A	4	16,799	0.42	A
	Oak Tree Lane to south of Bickford Ranch Road	4	15,948	0.40	A	4	16,099	0.40	A

Notes: Bold and underline font indicate unacceptable operations.

Source: Fehr & Peers, 2019



## Cumulative No Project Conditions

The Cumulative No Project scenario assumes that the current land uses and transportation network on the project site are maintained. That is, the project site remains vacant and the 34 units are not constructed.

### Cumulative Traffic Forecasts

The traffic forecasting process utilizes the difference method calculation to develop cumulative forecasts. This procedure adds the growth in traffic between the base and future year traffic models to the existing traffic volume. This process accounts for the difference in the base year model forecast and existing traffic volumes, which if not accounted for, would translate into the future year model.

### Intersection Operations

The intersection LOS under the Cumulative No Project conditions is compared with Existing Conditions in Table 13. Figure 1 shows the intersection turning movement forecasts for the Cumulative No Project conditions. To remain consistent with the Bickford Ranch approval, the intersection lane configurations assumed in the 2015 EIR were assumed in this analysis. As shown, all intersections operate acceptably under the Cumulative No Project Conditions.

**Table 13: Intersection Operations – Cumulative No Project Conditions**

Intersection	Control	Peak Hour	Existing		Cumulative No Project	
			Delay	LOS	Delay	LOS
1. State Route 193 / Sierra College Boulevard	Signal	AM	12.8	B	22.4	C
		PM	30.7	D	15.5	B
2. Sierra College Boulevard / Bickford Ranch Road	Signal	AM	N/A	N/A	8.5	A
		PM	N/A	N/A	10.8	B

- Notes: 1. Average control delay for signalized and all-way stop intersections is the weighted average for all movements.  
 2. Delay in seconds per vehicle calculated based on methodologies contained in the *Highway Capacity Manual (HCM) 6<sup>th</sup> Edition*.  
 3. Bold and underline font indicates unacceptable operations.

Source: Fehr & Peers, 2019



## Roadway Operations

The roadway segment operations for Cumulative No Project conditions is compared with Existing Conditions in Table 14. As shown, most segments operate acceptably except for the segment between Oak Tree Lane and Twelve Bridges Drive which operates unacceptably at LOS F.

**Table 14: Roadway Operations – Cumulative No Project Conditions**

Roadway	Segment	Existing				Cumulative No Project			
		Lanes	Daily Volume	V/C Ratio	LOS	Lanes	Daily Volume	V/C Ratio	LOS
Sierra College Boulevard	State Route 193 to Bickford Ranch Road	2	8,648	0.43	A	4	14,300	0.36	A
	Bickford Ranch Road to Oak Tree Lane	2	8,648	0.43	A	4	18,700	0.47	A
	Oak Tree Lane to Twelve Bridges Drive	2	8,648	0.43	A	4	42,400	1.06	<b><u>F</u></b>

Notes: **Bold and underlined** indicates unacceptable LOS.

Source: Fehr & Peers, 2019

## Cumulative Plus Project Conditions

To develop Cumulative Plus Project forecasts, project trips from The Ridge were added to the Cumulative No Project conditions forecasts.

### Intersection Operations

Table 15 shows the intersection LOS under the Cumulative Plus Project scenario. Figure 1 shows the intersection turning movement forecasts. As shown, all intersections operate acceptably and there is minimal increase in delay with no change in LOS with the proposed project. Therefore, the proposed project has **no impact** on intersection operations under the Cumulative Plus Project scenario.





**Table 15: Intersection Operations – Cumulative Plus Project Conditions**

Intersection	Control	Peak Hour	Cumulative No Project		Cumulative Plus Project	
			Delay	LOS	Delay	LOS
1. State Route 193 / Sierra College Boulevard	Signal	AM	22.4	C	22.5	C
		PM	15.5	B	15.7	B
2. Sierra College Boulevard / Bickford Ranch Road	Signal	AM	8.5	A	8.6	A
		PM	10.8	B	11.1	B

Notes: 1. Average control delay for signalized is the weighted average for all movements.  
 2. Delay in seconds per vehicle calculated based on methodologies contained in the *Highway Capacity Manual (HCM) 6<sup>th</sup> Edition*.  
 3. Bold and underline font indicates unacceptable operations.

Source: Fehr & Peers, 2019

## Roadway Operations

The roadway segment operations for Cumulative Plus Project scenario are shown in Table 16. The approved land use would add fewer than 400 ADT (100 ADT per lane) and would increase the v/c ratio by less than 0.05. Therefore, the proposed project has a **less than significant** impact on roadway capacity under the Cumulative Plus Project conditions.

**Table 16: Roadway Operations – Cumulative Plus Project Conditions**

Roadway	Segment	Cumulative No Project				Cumulative Plus Project			
		Lanes	Daily Volume	V/C Ratio	LOS	Lanes	Daily Volume	V/C Ratio	LOS
Sierra College Boulevard	State Route 193 to Bickford Ranch Road	4	14,300	0.36	A	4	14,390	0.36	A
	Bickford Ranch Road to Oak Tree Lane	4	18,700	0.47	A	4	18,932	0.47	A
	Oak Tree Lane to Twelve Bridges Drive	4	42,400	1.06	<b><u>F</u></b>	4	42,632	1.07	<b><u>F</u></b>

Notes: **Bold and underlined** indicates unacceptable LOS.

Source: Fehr & Peers, 2019



## Traffic Impact Analysis Findings

### Intersection Operations

The proposed project results in **no impact** to intersection operations under Existing Plus Project and Cumulative Plus Project conditions because all study intersections operate acceptably with and without the project.

However, under Short-Term No Project conditions, the State Route 193 / Sierra College Boulevard intersection operates unacceptably at LOS F during the PM peak hour. While the proposed project would add vehicle trips to the study intersection, it does not increase average delay at the intersection. Therefore, this is a **less-than significant** impact and no mitigation is required.

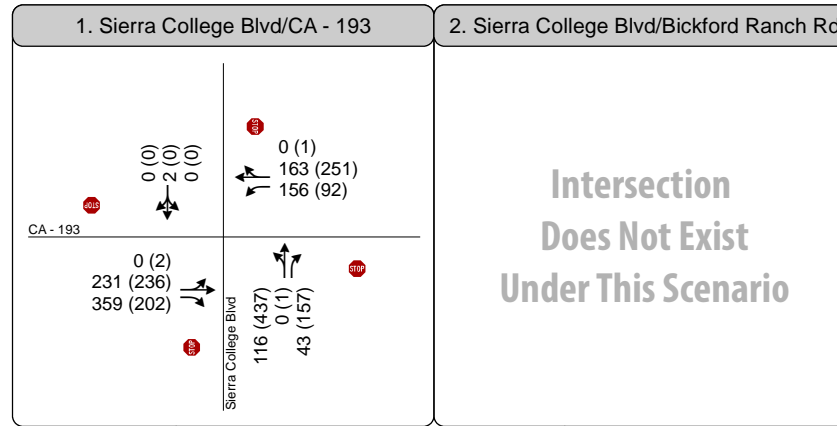
### Roadway Operations

The proposed project results in **no impact** to roadway operations under Existing Plus Project and Short-Term Plus Project conditions because all study roadway segments operate acceptably with and without the project. However, under Cumulative No Project conditions, Sierra College Boulevard between Oak Tree Lane and Twelve Bridges Drive operates unacceptably at LOS F. Because the proposed project would add less than 400 daily trips (100 ADT per lane) to the roadway segment and the V/C ratio increases by less than 0.05, this is a **less-than significant** impact and no mitigation is required.

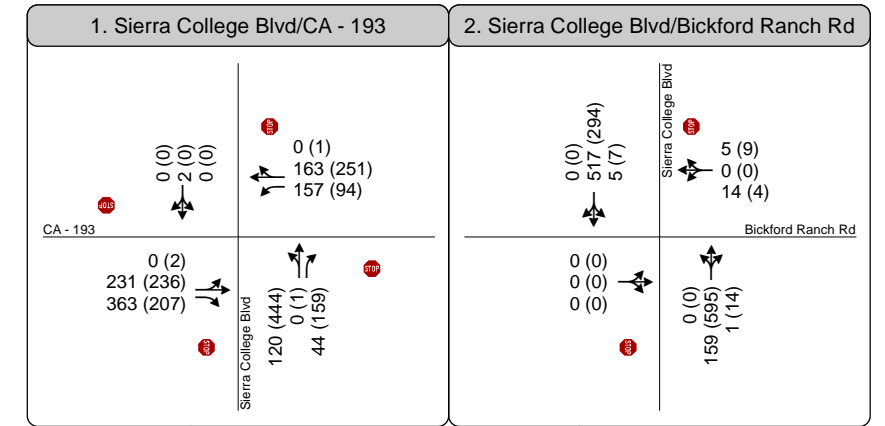
N:\2018 Projects\3725 The Ridge Placer County\Graphics\GISMXD\Fig01\_PHTV.mxd



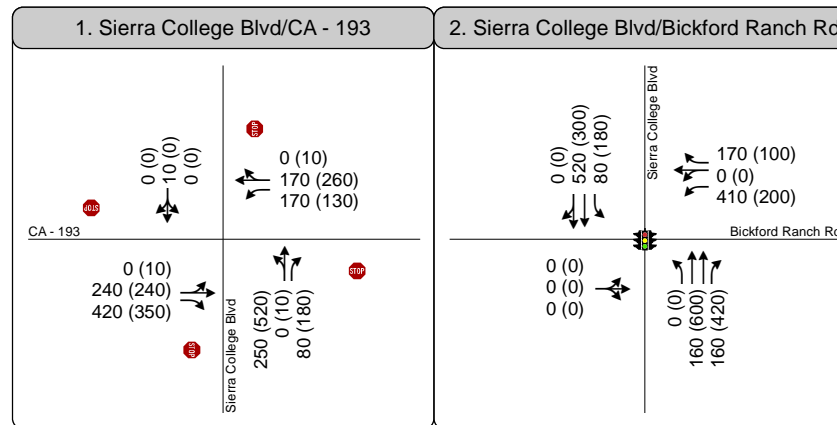
### Existing No Project



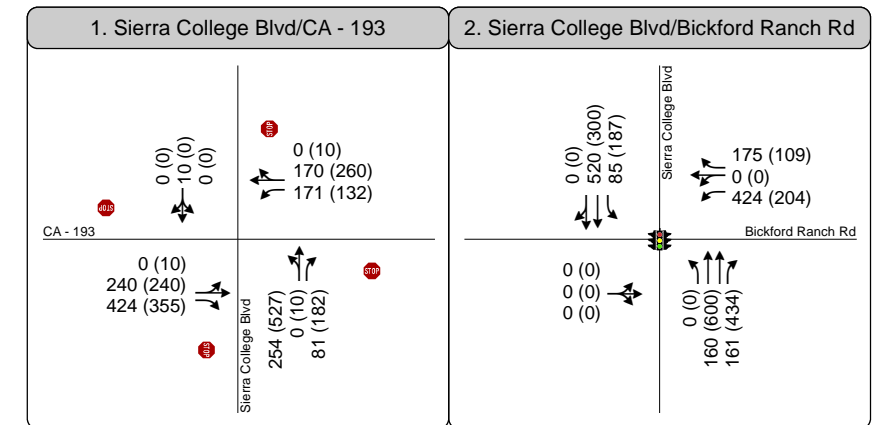
### Existing Plus Project



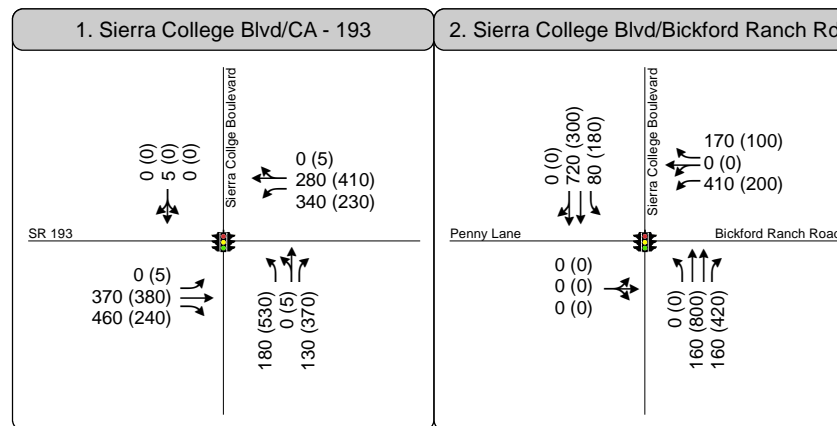
### Short-Term No Project



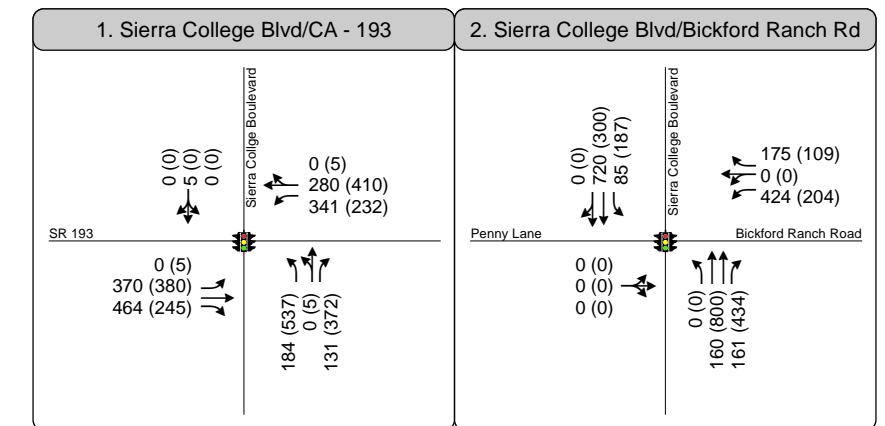
### Short-Term Plus Project



### Cumulative No Project



### Cumulative Plus Project



- Turn Lane
- AM (PM) Peak Hour Traffic Volume
- Traffic Signal
- Stop Sign



Figure 1

Peak Hour Traffic Volumes and Lane Configurations



# Attachment 1- Technical Calculations

Intersection	
Intersection Delay, s/veh	12.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↑	↑	↑			↑	↑		↑	
Traffic Vol, veh/h	0	231	359	156	163	0	116	0	43	0	2	0
Future Vol, veh/h	0	231	359	156	163	0	116	0	43	0	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	263	408	177	185	0	132	0	49	0	2	0
Number of Lanes	0	1	1	1	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay	13.5	11.9	12.1	10.4
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	100%	0%	0%	0%	100%	0%	0%
Vol Thru, %	0%	0%	100%	0%	0%	100%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	116	43	231	359	156	163	2
LT Vol	116	0	0	0	156	0	0
Through Vol	0	0	231	0	0	163	2
RT Vol	0	43	0	359	0	0	0
Lane Flow Rate	132	49	262	408	177	185	2
Geometry Grp	7	7	7	7	7	7	6
Degree of Util (X)	0.273	0.085	0.418	0.57	0.321	0.31	0.005
Departure Headway (Hd)	7.448	6.229	5.734	5.026	6.526	6.019	7.355
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	482	575	627	718	551	596	486
Service Time	5.188	3.968	3.466	2.758	4.264	3.757	5.411
HCM Lane V/C Ratio	0.274	0.085	0.418	0.568	0.321	0.31	0.004
HCM Control Delay	13	9.5	12.5	14.2	12.3	11.5	10.4
HCM Lane LOS	B	A	B	B	B	B	B
HCM 95th-tile Q	1.1	0.3	2.1	3.6	1.4	1.3	0

Intersection	
Intersection Delay, s/veh	30.7
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↖	↑			↖	↗		↕	
Traffic Vol, veh/h	2	236	202	92	251	1	437	1	157	0	0	0
Future Vol, veh/h	2	236	202	92	251	1	437	1	157	0	0	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	2	251	215	98	267	1	465	1	167	0	0	0
Number of Lanes	0	1	1	1	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay	16.2	17.8	48.8	0
HCM LOS	C	C	E	-

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	100%	0%	1%	0%	100%	0%	0%
Vol Thru, %	0%	0%	99%	0%	0%	100%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	438	157	238	202	92	252	0
LT Vol	437	0	2	0	92	0	0
Through Vol	1	0	236	0	0	251	0
RT Vol	0	157	0	202	0	1	0
Lane Flow Rate	466	167	253	215	98	268	0
Geometry Grp	7	7	7	7	7	7	6
Degree of Util (X)	0.974	0.292	0.523	0.4	0.219	0.561	0
Departure Headway (Hd)	7.523	6.303	7.434	6.709	8.05	7.532	8.68
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	485	573	486	537	446	480	0
Service Time	5.223	4.003	5.176	4.45	5.793	5.275	6.743
HCM Lane V/C Ratio	0.961	0.291	0.521	0.4	0.22	0.558	0
HCM Control Delay	62.1	11.6	18.1	13.9	13	19.5	11.7
HCM Lane LOS	F	B	C	B	B	C	N
HCM 95th-tile Q	12.5	1.2	3	1.9	0.8	3.4	0

Intersection	
Intersection Delay, s/veh	13
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↖	↑			↖	↗		↕	
Traffic Vol, veh/h	0	231	363	157	163	0	120	0	44	0	2	0
Future Vol, veh/h	0	231	363	157	163	0	120	0	44	0	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	263	413	178	185	0	136	0	50	0	2	0
Number of Lanes	0	1	1	1	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay	13.8	11.9	12.2	10.5
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	100%	0%	0%	0%	100%	0%	0%
Vol Thru, %	0%	0%	100%	0%	0%	100%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	120	44	231	363	157	163	2
LT Vol	120	0	0	0	157	0	0
Through Vol	0	0	231	0	0	163	2
RT Vol	0	44	0	363	0	0	0
Lane Flow Rate	136	50	262	412	178	185	2
Geometry Grp	7	7	7	7	7	7	6
Degree of Util (X)	0.283	0.087	0.42	0.579	0.325	0.311	0.005
Departure Headway (Hd)	7.467	6.248	5.763	5.056	6.56	6.054	7.393
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	481	574	625	714	548	595	483
Service Time	5.206	3.986	3.495	2.787	4.298	3.792	5.448
HCM Lane V/C Ratio	0.283	0.087	0.419	0.577	0.325	0.311	0.004
HCM Control Delay	13.1	9.6	12.6	14.5	12.4	11.5	10.5
HCM Lane LOS	B	A	B	B	B	B	B
HCM 95th-tile Q	1.2	0.3	2.1	3.7	1.4	1.3	0

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	14	0	5	0	159	1	5	517	0
Future Vol, veh/h	0	0	0	14	0	5	0	159	1	5	517	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	0	0	16	0	6	0	181	1	6	588	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	785	782	588	782	782	182	588	0	0	182	0	0
Stage 1	600	600	-	182	182	-	-	-	-	-	-	-
Stage 2	185	182	-	600	600	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	307	322	503	308	322	853	973	-	-	1375	-	-
Stage 1	483	485	-	813	743	-	-	-	-	-	-	-
Stage 2	810	743	-	483	485	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	304	320	503	306	320	853	973	-	-	1375	-	-
Mov Cap-2 Maneuver	304	320	-	306	320	-	-	-	-	-	-	-
Stage 1	483	482	-	813	743	-	-	-	-	-	-	-
Stage 2	805	743	-	480	482	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	0		15.4		0		0.1	
HCM LOS	A		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	973	-	-	-	368	1375	-
HCM Lane V/C Ratio	-	-	-	-	0.059	0.004	-
HCM Control Delay (s)	0	-	-	0	15.4	7.6	0
HCM Lane LOS	A	-	-	A	C	A	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0	-



Intersection	
Intersection Delay, s/veh	32.3
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↑	↑	↑			↑	↑		↑	
Traffic Vol, veh/h	2	236	207	94	251	1	444	1	159	0	0	0
Future Vol, veh/h	2	236	207	94	251	1	444	1	159	0	0	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	2	251	220	100	267	1	472	1	169	0	0	0
Number of Lanes	0	1	1	1	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay	16.4	17.9	52.3	0
HCM LOS	C	C	F	-

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	100%	0%	1%	0%	100%	0%	0%
Vol Thru, %	0%	0%	99%	0%	0%	100%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	445	159	238	207	94	252	0
LT Vol	444	0	2	0	94	0	0
Through Vol	1	0	236	0	0	251	0
RT Vol	0	159	0	207	0	1	0
Lane Flow Rate	473	169	253	220	100	268	0
Geometry Grp	7	7	7	7	7	7	6
Degree of Util (X)	0.993	0.297	0.526	0.413	0.225	0.564	0
Departure Headway (Hd)	7.548	6.328	7.478	6.752	8.098	7.58	8.737
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	483	572	484	533	444	477	0
Service Time	5.248	4.028	5.221	4.495	5.844	5.325	6.803
HCM Lane V/C Ratio	0.979	0.295	0.523	0.413	0.225	0.562	0
HCM Control Delay	66.8	11.7	18.3	14.2	13.2	19.7	11.8
HCM Lane LOS	F	B	C	B	B	C	N
HCM 95th-tile Q	13.1	1.2	3	2	0.9	3.4	0

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	4	0	9	0	595	14	7	294	0
Future Vol, veh/h	0	0	0	4	0	9	0	595	14	7	294	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	0	0	4	0	10	0	633	15	7	313	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	973	975	313	968	968	641	313	0	0	648	0	0
Stage 1	327	327	-	641	641	-	-	-	-	-	-	-
Stage 2	646	648	-	327	327	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	232	252	730	234	255	477	1253	-	-	943	-	-
Stage 1	688	650	-	465	471	-	-	-	-	-	-	-
Stage 2	462	468	-	688	650	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	226	250	730	232	253	477	1253	-	-	943	-	-
Mov Cap-2 Maneuver	226	250	-	232	253	-	-	-	-	-	-	-
Stage 1	688	644	-	465	471	-	-	-	-	-	-	-
Stage 2	453	468	-	682	644	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	0		15.4		0		0.2	
HCM LOS	A		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1253	-	-	-	360	943	-
HCM Lane V/C Ratio	-	-	-	-	0.038	0.008	-
HCM Control Delay (s)	0	-	-	0	15.4	8.8	0
HCM Lane LOS	A	-	-	A	C	A	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-

**PLACER COUNTY SSSC INTERSECTION DELAY & LOS**

**Intersection** 2. Sierra College Blvd & Bickford Ranch Rd  
**Scenario** Existing Plus Project

<b>Movement</b>	<b>NBL</b>	<b>NBT</b>	<b>NBR</b>	<b>SBL</b>	<b>SBT</b>	<b>SBR</b>	<b>EBL</b>	<b>EBT</b>	<b>EBR</b>	<b>WBL</b>	<b>WBT</b>	<b>WBR</b>
<b>Control</b>	<i>Yield</i>	<i>Free</i>	<i>Free</i>	<i>Yield</i>	<i>Free</i>					<i>Stop</i>		<i>Stop</i>
<b>AM Peak Hour Volume</b>		159	1	5	517					14		5
<b>AM Peak Hour Delay (s)</b>				7.6						15.4		15.4
<b>PM Peak Hour Volume</b>		595	14	7	294					4		9
<b>PM Peak Hour Delay (s)</b>				8.8						15.4		15.4

**AM Delay** 13.8  
**AM LOS** B

**PM Delay** 13.1  
**PM LOS** B

Intersection	
Intersection Delay, s/veh	21.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↖	↑			↖	↗		↕	
Traffic Vol, veh/h	0	240	420	170	170	0	250	0	80	0	10	0
Future Vol, veh/h	0	240	420	170	170	0	250	0	80	0	10	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	273	477	193	193	0	284	0	91	0	11	0
Number of Lanes	0	1	1	1	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay	24.8	15.2	20.5	11.9
HCM LOS	C	C	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	100%	0%	0%	0%	100%	0%	0%
Vol Thru, %	0%	0%	100%	0%	0%	100%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	250	80	240	420	170	170	10
LT Vol	250	0	0	0	170	0	0
Through Vol	0	0	240	0	0	170	10
RT Vol	0	80	0	420	0	0	0
Lane Flow Rate	284	91	273	477	193	193	11
Geometry Grp	7	7	7	7	7	7	6
Degree of Util (X)	0.633	0.171	0.516	0.808	0.415	0.387	0.027
Departure Headway (Hd)	8.017	6.791	6.806	6.091	7.726	7.214	8.619
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	452	530	532	597	468	500	415
Service Time	5.737	4.51	4.524	3.809	5.462	4.949	6.67
HCM Lane V/C Ratio	0.628	0.172	0.513	0.799	0.412	0.386	0.027
HCM Control Delay	23.6	10.9	16.6	29.5	15.9	14.5	11.9
HCM Lane LOS	C	B	C	D	C	B	B
HCM 95th-tile Q	4.3	0.6	2.9	8	2	1.8	0.1

# HCM 6th Signalized Intersection Summary

## 2: Sierra College Blvd & Bickford Ranch Rd

Short Term No Project AM  
The Ridge



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↗	↖	↗	↗	↕	↗	↗	↕	↕
Traffic Volume (veh/h)	0	0	0	410	0	170	0	160	160	80	520	0
Future Volume (veh/h)	0	0	0	410	0	170	0	160	160	80	520	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	0	0	0	466	0	38	0	182	16	91	591	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	0	7	0	890	0	396	6	692	309	190	1574	0
Arrive On Green	0.00	0.00	0.00	0.26	0.00	0.26	0.00	0.20	0.20	0.11	0.45	0.00
Sat Flow, veh/h	0	1826	0	3478	0	1547	1739	3469	1547	1739	3561	0
Grp Volume(v), veh/h	0	0	0	466	0	38	0	182	16	91	591	0
Grp Sat Flow(s),veh/h/ln	0	1826	0	1739	0	1547	1739	1735	1547	1739	1735	0
Q Serve(g_s), s	0.0	0.0	0.0	3.2	0.0	0.5	0.0	1.2	0.2	1.4	3.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	3.2	0.0	0.5	0.0	1.2	0.2	1.4	3.1	0.0
Prop In Lane	0.00		0.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	7	0	890	0	396	6	692	309	190	1574	0
V/C Ratio(X)	0.00	0.00	0.00	0.52	0.00	0.10	0.00	0.26	0.05	0.48	0.38	0.00
Avail Cap(c_a), veh/h	0	1225	0	2334	0	1039	347	2328	1039	347	2328	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	8.8	0.0	7.8	0.0	9.3	8.9	11.5	5.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.1	0.0	0.2	0.1	1.9	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.8	0.0	0.1	0.0	0.2	0.0	0.4	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	9.3	0.0	7.9	0.0	9.5	9.0	13.4	5.1	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	B	A	A
Approach Vol, veh/h		0			504			198			682	
Approach Delay, s/veh		0.0			9.2			9.5			6.2	
Approach LOS					A			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	9.5		0.0	0.0	16.5		11.1				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	18.0		18.0	5.0	18.0		18.0				
Max Q Clear Time (g_c+I1), s	3.4	3.2		0.0	0.0	5.1		5.2				
Green Ext Time (p_c), s	0.0	0.8		0.0	0.0	2.8		1.5				

### Intersection Summary

HCM 6th Ctrl Delay	7.8
HCM 6th LOS	A

### Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	61.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔	↔	↔			↔	↔		↔	
Traffic Vol, veh/h	10	240	350	130	260	10	520	10	180	0	0	0
Future Vol, veh/h	10	240	350	130	260	10	520	10	180	0	0	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	11	255	372	138	277	11	553	11	191	0	0	0
Number of Lanes	0	1	1	1	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay	23.5	20.9	116.3	0
HCM LOS	C	C	F	-

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	98%	0%	4%	0%	100%	0%	0%
Vol Thru, %	2%	0%	96%	0%	0%	96%	100%
Vol Right, %	0%	100%	0%	100%	0%	4%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	530	180	250	350	130	270	0
LT Vol	520	0	10	0	130	0	0
Through Vol	10	0	240	0	0	260	0
RT Vol	0	180	0	350	0	10	0
Lane Flow Rate	564	191	266	372	138	287	0
Geometry Grp	7	7	7	7	7	7	6
Degree of Util (X)	1.242	0.357	0.555	0.703	0.316	0.615	0
Departure Headway (Hd)	7.929	6.713	8.113	7.366	8.858	8.311	9.732
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	462	536	447	495	408	437	0
Service Time	5.677	4.46	5.813	5.066	6.558	6.011	7.732
HCM Lane V/C Ratio	1.221	0.356	0.595	0.752	0.338	0.657	0
HCM Control Delay	151.3	13.2	20.5	25.7	15.6	23.4	12.7
HCM Lane LOS	F	B	C	D	C	C	N
HCM 95th-tile Q	22.9	1.6	3.3	5.5	1.3	4	0

HCM 6th Signalized Intersection Summary  
2: Sierra College Blvd & Bickford Ranch Rd

Short Term No Project PM  
The Ridge



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↗	↖	↗	↗	↕	↗	↗	↕	↕
Traffic Volume (veh/h)	0	0	0	200	0	100	0	600	420	180	300	0
Future Volume (veh/h)	0	0	0	200	0	100	0	600	420	180	300	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	0	0	0	213	0	3	0	638	150	191	319	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	0	6	0	536	0	238	6	1166	520	268	2150	0
Arrive On Green	0.00	0.00	0.00	0.15	0.00	0.15	0.00	0.33	0.33	0.15	0.60	0.00
Sat Flow, veh/h	0	1885	0	3591	0	1598	1795	3582	1598	1795	3676	0
Grp Volume(v), veh/h	0	0	0	213	0	3	0	638	150	191	319	0
Grp Sat Flow(s),veh/h/ln	0	1885	0	1795	0	1598	1795	1791	1598	1795	1791	0
Q Serve(g_s), s	0.0	0.0	0.0	1.7	0.0	0.1	0.0	4.7	2.2	3.2	1.2	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.7	0.0	0.1	0.0	4.7	2.2	3.2	1.2	0.0
Prop In Lane	0.00		0.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	6	0	536	0	238	6	1166	520	268	2150	0
V/C Ratio(X)	0.00	0.00	0.00	0.40	0.00	0.01	0.00	0.55	0.29	0.71	0.15	0.00
Avail Cap(c_a), veh/h	0	1092	0	2081	0	926	309	2076	926	309	2150	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	12.3	0.0	11.6	0.0	8.8	8.0	12.9	2.8	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.4	0.3	6.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.8	0.4	1.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	12.8	0.0	11.6	0.0	9.2	8.3	19.2	2.8	0.0
LnGrp LOS	A	A	A	B	A	B	A	A	A	B	A	A
Approach Vol, veh/h		0			216			788			510	
Approach Delay, s/veh		0.0			12.7			9.1			9.0	
Approach LOS					B			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.8	14.4		0.0	0.0	23.2		8.8				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	18.0		18.0	5.0	18.0		18.0				
Max Q Clear Time (g_c+I1), s	5.2	6.7		0.0	0.0	3.2		3.7				
Green Ext Time (p_c), s	0.0	3.2		0.0	0.0	1.4		0.6				

Intersection Summary

HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	21.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↖	↑			↖	↗		↕	
Traffic Vol, veh/h	0	240	424	171	170	0	254	0	81	0	10	0
Future Vol, veh/h	0	240	424	171	170	0	254	0	81	0	10	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	273	482	194	193	0	289	0	92	0	11	0
Number of Lanes	0	1	1	1	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay	25.6	15.3	21	12
HCM LOS	D	C	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	100%	0%	0%	0%	100%	0%	0%
Vol Thru, %	0%	0%	100%	0%	0%	100%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	254	81	240	424	171	170	10
LT Vol	254	0	0	0	171	0	0
Through Vol	0	0	240	0	0	170	10
RT Vol	0	81	0	424	0	0	0
Lane Flow Rate	289	92	273	482	194	193	11
Geometry Grp	7	7	7	7	7	7	6
Degree of Util (X)	0.644	0.174	0.518	0.819	0.419	0.389	0.027
Departure Headway (Hd)	8.035	6.809	6.835	6.12	7.761	7.248	8.662
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	450	528	529	593	464	496	413
Service Time	5.755	4.528	4.554	3.839	5.497	4.984	6.713
HCM Lane V/C Ratio	0.642	0.174	0.516	0.813	0.418	0.389	0.027
HCM Control Delay	24.2	11	16.7	30.7	16	14.5	12
HCM Lane LOS	C	B	C	D	C	B	B
HCM 95th-tile Q	4.4	0.6	2.9	8.3	2	1.8	0.1



HCM 6th Signalized Intersection Summary  
2: Sierra College Blvd & Bickford Ranch Rd

Short Term + Project AM  
The Ridge



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↗	↖	↗	↗	↕	↗	↗	↕	↕
Traffic Volume (veh/h)	0	0	0	424	0	175	0	160	161	85	520	0
Future Volume (veh/h)	0	0	0	424	0	175	0	160	161	85	520	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	0	0	0	482	0	44	0	182	17	97	591	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	0	7	0	908	0	404	6	683	305	196	1570	0
Arrive On Green	0.00	0.00	0.00	0.26	0.00	0.26	0.00	0.20	0.20	0.11	0.45	0.00
Sat Flow, veh/h	0	1826	0	3478	0	1547	1739	3469	1547	1739	3561	0
Grp Volume(v), veh/h	0	0	0	482	0	44	0	182	17	97	591	0
Grp Sat Flow(s),veh/h/ln	0	1826	0	1739	0	1547	1739	1735	1547	1739	1735	0
Q Serve(g_s), s	0.0	0.0	0.0	3.3	0.0	0.6	0.0	1.2	0.2	1.5	3.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	3.3	0.0	0.6	0.0	1.2	0.2	1.5	3.1	0.0
Prop In Lane	0.00		0.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	7	0	908	0	404	6	683	305	196	1570	0
V/C Ratio(X)	0.00	0.00	0.00	0.53	0.00	0.11	0.00	0.27	0.06	0.50	0.38	0.00
Avail Cap(c_a), veh/h	0	1209	0	2303	0	1025	342	2297	1025	342	2297	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	8.9	0.0	7.9	0.0	9.5	9.1	11.7	5.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.1	0.0	0.2	0.1	1.9	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.8	0.0	0.1	0.0	0.2	0.0	0.4	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	9.3	0.0	8.0	0.0	9.7	9.2	13.6	5.2	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	B	A	A
Approach Vol, veh/h		0			526			199			688	
Approach Delay, s/veh		0.0			9.2			9.7			6.4	
Approach LOS					A			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	9.5		0.0	0.0	16.6		11.3				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	18.0		18.0	5.0	18.0		18.0				
Max Q Clear Time (g_c+I1), s	3.5	3.2		0.0	0.0	5.1		5.3				
Green Ext Time (p_c), s	0.0	0.8		0.0	0.0	2.8		1.6				

Intersection Summary

HCM 6th Ctrl Delay	7.9
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	64.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↖	↑			↖	↗		↕	
Traffic Vol, veh/h	10	240	355	132	260	10	527	10	182	0	0	0
Future Vol, veh/h	10	240	355	132	260	10	527	10	182	0	0	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	11	255	378	140	277	11	561	11	194	0	0	0
Number of Lanes	0	1	1	1	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay	24	20.9	122	0
HCM LOS	C	C	F	-

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	98%	0%	4%	0%	100%	0%	0%
Vol Thru, %	2%	0%	96%	0%	0%	96%	100%
Vol Right, %	0%	100%	0%	100%	0%	4%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	537	182	250	355	132	270	0
LT Vol	527	0	10	0	132	0	0
Through Vol	10	0	240	0	0	260	0
RT Vol	0	182	0	355	0	10	0
Lane Flow Rate	571	194	266	378	140	287	0
Geometry Grp	7	7	7	7	7	7	6
Degree of Util (X)	1.261	0.362	0.555	0.713	0.321	0.616	0
Departure Headway (Hd)	7.946	6.729	8.15	7.404	8.899	8.353	9.776
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	457	534	447	491	407	437	0
Service Time	5.692	4.475	5.85	5.104	6.599	6.053	7.776
HCM Lane V/C Ratio	1.249	0.363	0.595	0.77	0.344	0.657	0
HCM Control Delay	158.8	13.3	20.5	26.4	15.7	23.5	12.8
HCM Lane LOS	F	B	C	D	C	C	N
HCM 95th-tile Q	23.7	1.6	3.3	5.6	1.4	4	0

HCM 6th Signalized Intersection Summary  
2: Sierra College Blvd & Bickford Ranch Rd

Short Term + Project PM  
The Ridge



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↖	↖	↖	↖	↑↑	↖	↖	↖	↖
Traffic Volume (veh/h)	0	0	0	204	0	109	0	600	434	187	300	0
Future Volume (veh/h)	0	0	0	204	0	109	0	600	434	187	300	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	0	0	0	217	0	13	0	638	165	199	319	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	0	6	0	540	0	240	6	1161	518	278	2158	0
Arrive On Green	0.00	0.00	0.00	0.15	0.00	0.15	0.00	0.32	0.32	0.15	0.60	0.00
Sat Flow, veh/h	0	1885	0	3591	0	1598	1795	3582	1598	1795	3676	0
Grp Volume(v), veh/h	0	0	0	217	0	13	0	638	165	199	319	0
Grp Sat Flow(s),veh/h/ln	0	1885	0	1795	0	1598	1795	1791	1598	1795	1791	0
Q Serve(g_s), s	0.0	0.0	0.0	1.8	0.0	0.2	0.0	4.7	2.5	3.4	1.3	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.8	0.0	0.2	0.0	4.7	2.5	3.4	1.3	0.0
Prop In Lane	0.00		0.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	6	0	540	0	240	6	1161	518	278	2158	0
V/C Ratio(X)	0.00	0.00	0.00	0.40	0.00	0.05	0.00	0.55	0.32	0.72	0.15	0.00
Avail Cap(c_a), veh/h	0	1077	0	2052	0	913	305	2047	913	305	2158	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	12.4	0.0	11.8	0.0	9.0	8.2	13.0	2.8	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.1	0.0	0.4	0.4	7.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.6	0.0	0.1	0.0	0.9	0.4	1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	12.9	0.0	11.9	0.0	9.4	8.6	20.1	2.8	0.0
LnGrp LOS	A	A	A	B	A	B	A	A	A	C	A	A
Approach Vol, veh/h		0			230			803			518	
Approach Delay, s/veh		0.0			12.9			9.2			9.5	
Approach LOS					B			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	14.5		0.0	0.0	23.5		8.9				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	18.0		18.0	5.0	18.0		18.0				
Max Q Clear Time (g_c+I1), s	5.4	6.7		0.0	0.0	3.3		3.8				
Green Ext Time (p_c), s	0.0	3.3		0.0	0.0	1.4		0.6				

Intersection Summary























HCM 6th Ctrl Delay	9.8
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary  
 1: Sierra Collge Boulevard & SR 193

Cumulative No Project AM  
 The Ridge

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	390	480	360	300	0	200	0	150	0	5	0
Future Volume (veh/h)	0	390	480	360	300	0	200	0	150	0	5	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	443	0	409	341	0	227	0	25	0	6	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	531		472	1151	0	395	0	172	0	136	0
Arrive On Green	0.00	0.28	0.00	0.26	0.62	0.00	0.11	0.00	0.11	0.00	0.07	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1870	0	3563	0	1549	0	1870	0
Grp Volume(v), veh/h	0	443	0	409	341	0	227	0	25	0	6	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	0	1781	0	1549	0	1870	0
Q Serve(g_s), s	0.0	13.3	0.0	13.1	5.1	0.0	3.6	0.0	0.9	0.0	0.2	0.0
Cycle Q Clear(g_c), s	0.0	13.3	0.0	13.1	5.1	0.0	3.6	0.0	0.9	0.0	0.2	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	3	531		472	1151	0	395	0	172	0	136	0
V/C Ratio(X)	0.00	0.83		0.87	0.30	0.00	0.57	0.00	0.15	0.00	0.04	0.00
Avail Cap(c_a), veh/h	298	720		656	1151	0	1014	0	441	0	376	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	20.1	0.0	20.9	5.4	0.0	25.2	0.0	24.0	0.0	25.8	0.0
Incr Delay (d2), s/veh	0.0	6.3	0.0	8.9	0.1	0.0	1.3	0.0	0.4	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.7	0.0	5.7	1.2	0.0	1.4	0.0	0.3	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	26.3	0.0	29.8	5.5	0.0	26.5	0.0	24.4	0.0	25.9	0.0
LnGrp LOS	A	C		C	A	A	C	A	C	A	C	A
Approach Vol, veh/h		443	A		750			252			6	
Approach Delay, s/veh		26.3			18.8			26.3			25.9	
Approach LOS		C			B			C			C	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		10.6	19.8	20.9		8.3	0.0	40.8				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		17.0	22.0	23.0		12.0	10.0	35.0				
Max Q Clear Time (g_c+I1), s		5.6	15.1	15.3		2.2	0.0	7.1				
Green Ext Time (p_c), s		0.6	0.7	1.5		0.0	0.0	1.9				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			22.4									
HCM 6th LOS			C									
<b>Notes</b>												
User approved pedestrian interval to be less than phase max green.												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

HCM 6th Signalized Intersection Summary  
 2: Sierra College Boulevard & Penny Lane/Bickford Ranch Road

Cumulative No Project AM  
 The Ridge



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↵	↵	↵	↵	↑↑	↵	↵	↑↔	
Traffic Volume (veh/h)	0	0	0	410	0	170	0	200	160	80	750	0
Future Volume (veh/h)	0	0	0	410	0	170	0	200	160	80	750	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	0.99		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1796	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	466	0	40	0	227	42	91	852	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	5	0	905	0	404	5	899	399	250	1813	0
Arrive On Green	0.00	0.00	0.00	0.26	0.00	0.26	0.00	0.25	0.25	0.14	0.51	0.00
Sat Flow, veh/h	0	1796	0	3528	0	1576	1781	3554	1576	1781	3647	0
Grp Volume(v), veh/h	0	0	0	466	0	40	0	227	42	91	852	0
Grp Sat Flow(s),veh/h/ln	0	1796	0	1764	0	1576	1781	1777	1576	1781	1777	0
Q Serve(g_s), s	0.0	0.0	0.0	3.9	0.0	0.7	0.0	1.7	0.7	1.6	5.3	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	3.9	0.0	0.7	0.0	1.7	0.7	1.6	5.3	0.0
Prop In Lane	0.00		0.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	5	0	905	0	404	5	899	399	250	1813	0
V/C Ratio(X)	0.00	0.00	0.00	0.51	0.00	0.10	0.00	0.25	0.11	0.36	0.47	0.00
Avail Cap(c_a), veh/h	0	293	0	2952	0	1319	312	3108	1378	571	3626	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	10.9	0.0	9.7	0.0	10.2	9.8	13.4	5.4	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.1	0.0	0.1	0.1	0.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	1.1	0.0	0.2	0.0	0.5	0.2	0.5	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	11.4	0.0	9.8	0.0	10.4	9.9	14.2	5.6	0.0
LnGrp LOS	A	A	A	B	A	A	A	B	A	B	A	A
Approach Vol, veh/h		0			506			269			943	
Approach Delay, s/veh		0.0			11.3			10.3			6.4	
Approach LOS					B			B			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.8	12.7		0.0	0.0	21.5		12.8				
Change Period (Y+Rc), s	6.5	6.5		* 4.7	6.0	6.5		4.7				
Max Green Setting (Gmax), s	8.5	27.5		* 4.9	4.0	32.5		28.0				
Max Q Clear Time (g_c+I1), s	3.6	3.7		0.0	0.0	7.3		5.9				
Green Ext Time (p_c), s	0.1	1.4		0.0	0.0	5.8		1.8				

Intersection Summary























HCM 6th Ctrl Delay	8.5
HCM 6th LOS	A

Notes

- User approved pedestrian interval to be less than phase max green.
- User approved volume balancing among the lanes for turning movement.
- \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
1: Sierra Collge Boulevard & SR 193

Cumulative No Project PM  
The Ridge

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	400	250	270	480	5	550	5	380	0	0	0
Future Volume (veh/h)	5	400	250	270	480	5	550	5	380	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	0.99		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	426	0	287	511	4	589	0	77	0	0	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	10	555		357	911	7	846	0	377	0	4	0
Arrive On Green	0.01	0.30	0.00	0.20	0.49	0.49	0.24	0.00	0.24	0.00	0.00	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1853	15	3525	0	1569	0	1870	0
Grp Volume(v), veh/h	5	426	0	287	0	515	589	0	77	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1868	1763	0	1569	0	1870	0
Q Serve(g_s), s	0.1	9.5	0.0	7.0	0.0	8.8	7.0	0.0	1.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.1	9.5	0.0	7.0	0.0	8.8	7.0	0.0	1.8	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	10	555		357	0	918	846	0	377	0	4	0
V/C Ratio(X)	0.52	0.77		0.80	0.00	0.56	0.70	0.00	0.20	0.00	0.00	0.00
Avail Cap(c_a), veh/h	156	902		547	0	1310	1468	0	653	0	779	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	22.6	14.6	0.0	17.4	0.0	8.1	15.8	0.0	13.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	37.6	2.3	0.0	5.0	0.0	0.5	1.0	0.0	0.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	3.3	0.0	2.7	0.0	2.2	2.3	0.0	0.5	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.2	16.9	0.0	22.4	0.0	8.7	16.9	0.0	14.1	0.0	0.0	0.0
LnGrp LOS	E	B		C	A	A	B	A	B	A	A	A
Approach Vol, veh/h		431	A		802			666			0	
Approach Delay, s/veh		17.4			13.6			16.5			0.0	
Approach LOS		B			B			B				
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		15.0	13.1	17.5		0.0	4.2	26.4				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		19.0	14.0	22.0		19.0	4.0	32.0				
Max Q Clear Time (g_c+I1), s		9.0	9.0	11.5		0.0	2.1	10.8				
Green Ext Time (p_c), s		1.8	0.4	1.7		0.0	0.0	2.9				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			15.5									
HCM 6th LOS			B									
<b>Notes</b>												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

HCM 6th Signalized Intersection Summary  
 2: Sierra College Boulevard & Penny Lane/Bickford Ranch Road

Cumulative No Project PM  
 The Ridge



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↖	↖	↖	↖	↑↑	↖	↖	↖	↖
Traffic Volume (veh/h)	0	0	0	200	0	100	0	820	420	180	350	0
Future Volume (veh/h)	0	0	0	200	0	100	0	820	420	180	350	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	0.98		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1796	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	213	0	15	0	872	161	191	372	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	4	0	481	0	216	4	1475	656	334	2449	0
Arrive On Green	0.00	0.00	0.00	0.14	0.00	0.14	0.00	0.42	0.42	0.19	0.69	0.00
Sat Flow, veh/h	0	1796	0	3498	0	1568	1781	3554	1579	1781	3647	0
Grp Volume(v), veh/h	0	0	0	213	0	15	0	872	161	191	372	0
Grp Sat Flow(s),veh/h/ln	0	1796	0	1749	0	1568	1781	1777	1579	1781	1777	0
Q Serve(g_s), s	0.0	0.0	0.0	2.6	0.0	0.4	0.0	8.8	3.1	4.5	1.7	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	2.6	0.0	0.4	0.0	8.8	3.1	4.5	1.7	0.0
Prop In Lane	0.00		0.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	4	0	481	0	216	4	1475	656	334	2449	0
V/C Ratio(X)	0.00	0.00	0.00	0.44	0.00	0.07	0.00	0.59	0.25	0.57	0.15	0.00
Avail Cap(c_a), veh/h	0	206	0	1945	0	872	231	2153	957	578	2845	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	18.3	0.0	17.3	0.0	10.5	8.8	17.1	2.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.1	0.0	0.4	0.2	1.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.9	0.0	0.1	0.0	2.4	0.7	1.6	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	18.9	0.0	17.5	0.0	10.9	9.0	18.6	2.5	0.0
LnGrp LOS	A	A	A	B	A	B	A	B	A	B	A	A
Approach Vol, veh/h		0			228			1033			563	
Approach Delay, s/veh		0.0			18.8			10.6			8.0	
Approach LOS					B			B			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.7	23.2		0.0	0.0	35.9		10.4				
Change Period (Y+Rc), s	6.5	6.5		* 4.7	6.0	6.5		4.7				
Max Green Setting (Gmax), s	12.5	25.5		* 4.6	4.0	34.5		25.0				
Max Q Clear Time (g_c+I1), s	6.5	10.8		0.0	0.0	3.7		4.6				
Green Ext Time (p_c), s	0.2	5.3		0.0	0.0	2.3		0.7				

Intersection Summary























HCM 6th Ctrl Delay	10.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
 1: Sierra Collge Boulevard & SR 193

Cumulative Plus Project AM  
 The Ridge

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	390	484	361	300	0	204	0	151	0	5	0
Future Volume (veh/h)	0	390	484	361	300	0	204	0	151	0	5	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	443	0	410	341	0	232	0	25	0	6	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	527		474	1150	0	402	0	175	0	134	0
Arrive On Green	0.00	0.28	0.00	0.27	0.61	0.00	0.11	0.00	0.11	0.00	0.07	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1870	0	3563	0	1550	0	1870	0
Grp Volume(v), veh/h	0	443	0	410	341	0	232	0	25	0	6	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	0	1781	0	1550	0	1870	0
Q Serve(g_s), s	0.0	13.3	0.0	13.1	5.1	0.0	3.7	0.0	0.9	0.0	0.2	0.0
Cycle Q Clear(g_c), s	0.0	13.3	0.0	13.1	5.1	0.0	3.7	0.0	0.9	0.0	0.2	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	3	527		474	1150	0	402	0	175	0	134	0
V/C Ratio(X)	0.00	0.84		0.86	0.30	0.00	0.58	0.00	0.14	0.00	0.04	0.00
Avail Cap(c_a), veh/h	298	688		685	1150	0	1072	0	466	0	344	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	20.2	0.0	20.9	5.4	0.0	25.2	0.0	23.9	0.0	25.9	0.0
Incr Delay (d2), s/veh	0.0	7.2	0.0	8.0	0.1	0.0	1.3	0.0	0.4	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.9	0.0	5.6	1.2	0.0	1.5	0.0	0.3	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	27.4	0.0	28.9	5.6	0.0	26.5	0.0	24.3	0.0	26.0	0.0
LnGrp LOS	A	C		C	A	A	C	A	C	A	C	A
Approach Vol, veh/h		443	A		751			257			6	
Approach Delay, s/veh		27.4			18.3			26.3			26.0	
Approach LOS		C			B			C			C	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		10.7	19.9	20.9		8.3	0.0	40.8				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		18.0	23.0	22.0		11.0	10.0	35.0				
Max Q Clear Time (g_c+I1), s		5.7	15.1	15.3		2.2	0.0	7.1				
Green Ext Time (p_c), s		0.6	0.8	1.3		0.0	0.0	1.9				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			22.5									
HCM 6th LOS			C									
<b>Notes</b>												
User approved pedestrian interval to be less than phase max green.												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												



HCM 6th Signalized Intersection Summary  
 2: Sierra College Boulevard & Penny Lane/Bickford Ranch Road

Cumulative Plus Project AM  
 The Ridge



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↵	↵	↵	↵	↑↑	↵	↵	↑↔	
Traffic Volume (veh/h)	0	0	0	424	0	175	0	200	161	85	750	0
Future Volume (veh/h)	0	0	0	424	0	175	0	200	161	85	750	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	0.99		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1796	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	482	0	41	0	227	35	97	852	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	5	0	921	0	411	5	891	395	253	1806	0
Arrive On Green	0.00	0.00	0.00	0.26	0.00	0.26	0.00	0.25	0.25	0.14	0.51	0.00
Sat Flow, veh/h	0	1796	0	3528	0	1576	1781	3554	1576	1781	3647	0
Grp Volume(v), veh/h	0	0	0	482	0	41	0	227	35	97	852	0
Grp Sat Flow(s),veh/h/ln	0	1796	0	1764	0	1576	1781	1777	1576	1781	1777	0
Q Serve(g_s), s	0.0	0.0	0.0	4.1	0.0	0.7	0.0	1.8	0.6	1.7	5.4	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	4.1	0.0	0.7	0.0	1.8	0.6	1.7	5.4	0.0
Prop In Lane	0.00		0.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	5	0	921	0	411	5	891	395	253	1806	0
V/C Ratio(X)	0.00	0.00	0.00	0.52	0.00	0.10	0.00	0.25	0.09	0.38	0.47	0.00
Avail Cap(c_a), veh/h	0	290	0	2921	0	1305	308	3075	1363	565	3588	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	11.0	0.0	9.7	0.0	10.4	10.0	13.5	5.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.1	0.0	0.1	0.1	1.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	1.2	0.0	0.2	0.0	0.5	0.1	0.5	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	11.4	0.0	9.8	0.0	10.5	10.0	14.4	5.7	0.0
LnGrp LOS	A	A	A	B	A	A	A	B	B	B	A	A
Approach Vol, veh/h		0			523			262			949	
Approach Delay, s/veh		0.0			11.3			10.5			6.6	
Approach LOS					B			B			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	12.7		0.0	0.0	21.6		13.0				
Change Period (Y+Rc), s	6.5	6.5		* 4.7	6.0	6.5		4.7				
Max Green Setting (Gmax), s	8.5	27.5		* 4.9	4.0	32.5		28.0				
Max Q Clear Time (g_c+I1), s	3.7	3.8		0.0	0.0	7.4		6.1				
Green Ext Time (p_c), s	0.1	1.3		0.0	0.0	5.8		1.9				

Intersection Summary























HCM 6th Ctrl Delay	8.6
HCM 6th LOS	A

Notes

- User approved pedestrian interval to be less than phase max green.
- User approved volume balancing among the lanes for turning movement.
- \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
 1: Sierra Collge Boulevard & SR 193

Cumulative Plus Project PM  
 The Ridge

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	400	255	272	480	5	557	5	382	0	0	0
Future Volume (veh/h)	5	400	255	272	480	5	557	5	382	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	0.99		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	426	0	289	511	4	597	0	79	0	0	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	10	554		358	911	7	853	0	379	0	4	0
Arrive On Green	0.01	0.30	0.00	0.20	0.49	0.49	0.24	0.00	0.24	0.00	0.00	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1853	15	3526	0	1569	0	1870	0
Grp Volume(v), veh/h	5	426	0	289	0	515	597	0	79	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1868	1763	0	1569	0	1870	0
Q Serve(g_s), s	0.1	9.5	0.0	7.1	0.0	8.9	7.1	0.0	1.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.1	9.5	0.0	7.1	0.0	8.9	7.1	0.0	1.8	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	10	554		358	0	918	853	0	379	0	4	0
V/C Ratio(X)	0.52	0.77		0.81	0.00	0.56	0.70	0.00	0.21	0.00	0.00	0.00
Avail Cap(c_a), veh/h	155	895		543	0	1300	1457	0	648	0	773	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	22.8	14.7	0.0	17.5	0.0	8.2	15.9	0.0	13.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	37.6	2.3	0.0	5.3	0.0	0.5	1.1	0.0	0.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	3.3	0.0	2.8	0.0	2.2	2.3	0.0	0.5	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.4	17.0	0.0	22.8	0.0	8.7	17.0	0.0	14.2	0.0	0.0	0.0
LnGrp LOS	E	B		C	A	A	B	A	B	A	A	A
Approach Vol, veh/h		431	A		804			676			0	
Approach Delay, s/veh		17.5			13.8			16.6			0.0	
Approach LOS		B			B			B				
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		15.1	13.2	17.6		0.0	4.2	26.6				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		19.0	14.0	22.0		19.0	4.0	32.0				
Max Q Clear Time (g_c+I1), s		9.1	9.1	11.5		0.0	2.1	10.9				
Green Ext Time (p_c), s		1.8	0.4	1.7		0.0	0.0	2.9				

Intersection Summary

HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.  
 Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
 2: Sierra College Boulevard & Penny Lane/Bickford Ranch Road

Cumulative Plus Project PM  
 The Ridge



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↖	↖	↖	↖	↑↑	↖	↖	↖	↖
Traffic Volume (veh/h)	0	0	0	204	0	109	0	820	434	187	350	0
Future Volume (veh/h)	0	0	0	204	0	109	0	820	434	187	350	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	0.98		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1796	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	217	0	23	0	872	166	199	372	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	4	0	488	0	219	4	1466	652	342	2451	0
Arrive On Green	0.00	0.00	0.00	0.14	0.00	0.14	0.00	0.41	0.41	0.19	0.69	0.00
Sat Flow, veh/h	0	1796	0	3499	0	1568	1781	3554	1579	1781	3647	0
Grp Volume(v), veh/h	0	0	0	217	0	23	0	872	166	199	372	0
Grp Sat Flow(s),veh/h/ln	0	1796	0	1749	0	1568	1781	1777	1579	1781	1777	0
Q Serve(g_s), s	0.0	0.0	0.0	2.7	0.0	0.6	0.0	8.9	3.2	4.8	1.7	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	2.7	0.0	0.6	0.0	8.9	3.2	4.8	1.7	0.0
Prop In Lane	0.00		0.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	4	0	488	0	219	4	1466	652	342	2451	0
V/C Ratio(X)	0.00	0.00	0.00	0.44	0.00	0.11	0.00	0.59	0.25	0.58	0.15	0.00
Avail Cap(c_a), veh/h	0	203	0	1920	0	860	228	2124	944	570	2807	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	18.5	0.0	17.6	0.0	10.7	9.0	17.2	2.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.2	0.0	0.4	0.2	1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	1.0	0.0	0.2	0.0	2.4	0.8	1.7	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	19.1	0.0	17.8	0.0	11.1	9.2	18.8	2.5	0.0
LnGrp LOS	A	A	A	B	A	B	A	B	A	B	A	A
Approach Vol, veh/h		0			240			1038			571	
Approach Delay, s/veh		0.0			19.0			10.8			8.2	
Approach LOS					B			B			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.0	23.3		0.0	0.0	36.3		10.5				
Change Period (Y+Rc), s	6.5	6.5		* 4.7	6.0	6.5		4.7				
Max Green Setting (Gmax), s	12.5	25.5		* 4.6	4.0	34.5		25.0				
Max Q Clear Time (g_c+I1), s	6.8	10.9		0.0	0.0	3.7		4.7				
Green Ext Time (p_c), s	0.2	5.3		0.0	0.0	2.3		0.8				

Intersection Summary

HCM 6th Ctrl Delay	11.1
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

## TECHNICAL MEMORANDUM

**Date:** March 3, 2021

**To:** Mr. Robert B. Coker, Jr., Southfork Partnership

**From:** David B. Robinson – Fehr & Peers

**Subject:** The Ridge Subdivision VMT Analysis

RS18-3725

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This memorandum presents vehicle miles traveled (VMT) analysis for the proposed Ridge Subdivision in Placer County.

With the implementation of Senate Bill (SB) 743, local agencies such as Placer County may no longer rely on vehicular delay or capacity-based analyses for California Environmental Quality Act (CEQA) impact determination. Instead, agencies must analyze transportation impacts utilizing VMT, a measure of the total distance traveled by vehicles for trips beginning or ending in the County on a typical weekday. This memorandum covers the following topics:

- SB 743
- VMT Thresholds of Significance
- VMT Estimation Methodology
- Project Summary
- VMT for The Ridge Subdivision

### **SB 743**

Passed in 2013, SB 743 changes the focus of transportation impact analysis in CEQA from measuring impacts to drivers, to measuring the impact of driving. The change is being made by replacing LOS with vehicle miles of travel (VMT). This shift in transportation impact focus is intended to better align transportation impact analysis and mitigation outcomes with the State's goals to reduce greenhouse gas (GHG) emissions, encourage infill development, and improve public health through more active transportation. Level of service or other delay metrics may still be used to evaluate the impact of projects on drivers as part of land use entitlement review and impact fee programs.

In January 2019, the Natural Resources Agency finalized updates to the CEQA Guidelines including the incorporation of SB 743 modifications. The Guidelines' changes were approved by the Office of

Administrative Law and are now in effect. Specific to SB 743, Section 15064.3(c) states, “A lead agency may elect to be governed by the provisions of this section immediately. The provisions went into effect statewide as of July 1, 2020.

To help aid lead agencies with SB 743 implementation, the Governor’s Office of Planning and Research (OPR) produced the *Technical Advisory on Evaluating Transportation Impacts in CEQA*<sup>1</sup> (December 2018) that provides guidance about the variety of implementation questions they face with respect to shifting to a VMT metric. Key guidance from this document includes:

- VMT is the most appropriate metric to evaluate a project’s transportation impact.
- OPR recommends tour- and trip-based travel models to estimate VMT, but ultimately defers to local agencies to determine the appropriate tools.
- OPR recommends measuring VMT for residential and office projects on a “per rate” basis.
- OPR recommends that a per capita or per employee VMT that is fifteen percent below that of existing development may be a reasonable threshold. In other words, an office project that generates VMT per employee that is more than 85 percent of the regional VMT per employee could result in a significant impact. OPR notes that this threshold is supported by evidence that connects this level of reduction to the State’s emissions goals.
- OPR recommends that where a project replaces existing VMT-generating land uses, if the replacement leads to a net overall decrease in VMT, the project would lead to a less-than-significant transportation impact. If the project leads to a net overall increase in VMT, then the thresholds described above should apply.
- Lead agencies have the discretion to set or apply their own significance thresholds.

### ***VMT Thresholds of Significance***

On December 1, 2020, with the passage of Resolution 2020-250, the County of Placer Board of Supervisors adopted VMT thresholds of significance, screening criteria, and Transportation Study Guidelines for analyzing transportation impacts under CEQA. The *County of Placer Transportation Study Guidelines*<sup>2</sup> (November 2020) includes guidance for the following aspects of VMT impact analysis:

- Screening Criteria
- Significance Thresholds

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<sup>1</sup> Governor’s Office of Planning and Research. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. December 2018. [https://opr.ca.gov/docs/20190122-743\\_Technical\\_Advisory.pdf](https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf)

<sup>2</sup> Placer County Development and Department of Public Works *County of Placer Transportation Study Guidelines* (November 2020). <https://www.placer.ca.gov/7087/Transportation-Study-Guidelines>

- Analysis Methodology
- Mitigation

**Table 1** summarizes the VMT thresholds of significance for Western Placer County:

<b>Table 1: VMT Thresholds of Significance by Project Type for Western Placer County</b>		
<b>Land Use/Project Type</b>	<b>Recommended Metric</b>	<b>Threshold of Significance</b>
Residential	Household or Home-based VMT per Capita	15% Below Unincorporated County Baseline
Commercial Retail	Total VMT	Zero Net Increase
Office Employment	Work VMT per Employee	15% Below Unincorporated County Baseline
Industrial/Agricultural Employment	Work VMT per Employee	
Hotel/Campground	VMT per Room or per Site	

***VMT Estimation Methodology***

After coordination with Placer County DPW, the Project was determined to be generally consistent in size and land use (i.e., density, mix or uses, transit accessibility, etc.) with the surrounding built environment. Therefore, the Placer VMT Estimation Tool was used to analyze the VMT performance of the proposed Project.

The Placer VMT Estimation Tool is an interactive web-based tool that estimates a project’s VMT performance based on the VMT performance of adjacent existing development. The Tool is based on data from SACOG’s SACSIM 19 regional travel demand model.

The Ridge Subdivision is in unincorporated Placer County, on assessor’s parcel number 031-106-030-000, which is in traffic analysis zone (TAZ) 205 in the SACSIM 19 regional travel demand model.

***Project Summary***

The proposed Project is located south of State Route 193 and east of Sierra College Boulevard in Placer County, directly adjacent to the Bickford Ranch development that was approved in 2004 and amended in 2015. The Project will be bordered by the Bickford Ranch development, which will include 1,890 residential units, on the south, east, and west. The proposed Project includes the following:

- General Plan Amendment to change the General Plan designation from Agriculture/Timberland 10 Acre Minimum to Residential

- Rezone to change the zoning from FBX 10 Acre Minimum to Rural Residential/Low Density Residential
- A tentative subdivision map to allow one 24.9-acre parcel to be subdivided into 34 residential lots and three common lots.

The proposed Project anticipates using the future Bickford Ranch Road for primary access and future North Clark Tunnel Road for emergency vehicle access. Both roads are anticipated to be constructed with the Bickford Ranch development; however, in the event Bickford Ranch is not developed or the proposed Project moves ahead of Bickford Ranch, the proposed Project would be required to construct both roads.

***VMT for The Ridge Subdivision***

**Table 2** summarize the VMT performance of The Ridge Subdivision, based on the output from the Placer VMT Evaluation Tool. The analysis was conducted under 2021 baseline conditions with and without the proposed Project. As shown, the VMT per Capita for The Ridge Subdivision exceeds the established threshold for residential land use by 12%. Therefore, the Project’s impact on VMT would be **significant**.

<b>Table 2: The Ridge Subdivision VMT per Capita</b>				
<b>Analysis Baseline</b>	<b>Analysis Geography</b>	<b>Analysis Scenario</b>		
		<b>No Project</b>	<b>Plus Project</b>	<b>Plus Project (Mitigation)</b>
2021	Jurisdiction: Unincorporated County APN 031-106-030-000 TAZ 205	29.57	29.55	28.15
2021 Baseline Threshold (85% of Unincorporated Placer Total Average VMT per Capita)		26.39		
<b>VMT Limit Exceeded? (Percent of Threshold)</b>		<b>Yes (112%)</b>	<b>Yes (112%)</b>	<b>Yes (107%)</b>

The VMT calculations for all analysis scenarios are included in **Attachment A**.

***Mitigation***

Mitigation for the VMT impact will require reducing the number of automobile trips generated by the residents of the project or reducing the distance that residents drive. The Placer VMT Evaluation Tool includes the following categories of mitigation that are feasible in the context of unincorporated Placer County:

- Tier 1 – Project Characteristics
- Tier 2 – Multimodal Infrastructure
- Tier 3 – Parking

- Tier 4 – Travel Demand Management (TDM) Programs

Based on the Project’s land use, location, and size, the Tier 4 (TDM Programs) measures summarized in **Table 3** are considered feasible for the project and were evaluated to determine their effectiveness in reducing the Project’s VMT impact. As shown in **Table 2**, implementation of these TDM measures would reduce the Project’s VMT per Capita by about 5%. However, the Project’s VMT per Capita would still exceed the 2021 Baseline VMT Threshold of 26.39 by about 7%.

<b>Table 3: Feasible VMT Reduction Strategy<sup>1</sup></b>			
<b>Strategy</b>	<b>Measure/Grouping</b>	<b>Strategy Description</b>	
		<b>Description</b>	<b>Assumed Implementation Level</b>
Tier 4 TDM Programs	TP01 – School Pool Programs	Organize a program that matches families in carpools for school pick-up and drop-off.	100% Household Participating
	TP07 – Subsidized Transit Program	Provide either partially or fully subsidized transit passes for all residents.	100% Subsidy
	TP12 – Neighborhood Schools	Project contributes to the development of a neighborhood school that would serve families living in the development.	Neighborhood School 34 Families
	TP18 – Voluntary Travel Behavior Change Program	Provide a program that targets individual attitudes towards travel and providing tools for individuals to analyze and alter their travel behavior	100% Participation
<sup>1</sup> Placer County VMT Evaluation Tool			

The effectiveness of TDM Strategies will depend on the level of implementation. The analysis outlined above assumes the maximum level of implementation. Consequently, the analysis represents a best-case scenario relative to the TDM measure effectiveness, since many TDM strategies are not just site-specific, but also rely on implementation and/or adoption by residents to use non-automobile modes to travel outside the Project. Furthermore, a portion of the TDM strategies may prove to be economically infeasible. Due to uncertainties regarding the ability for the mitigation measure to reduce VMT to a less-than-significant level, the residential VMT impact would be considered **significant and unavoidable**.



## Attachment A

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**2021 Baseline Conditions**

**No Project –**

**Plus Project –**

---

## Project Details

Timestamp of Analysis: March 03, 2021, 07:00:27 AM

Project Name: The Ridge Subdivision

Project Description: 34 Single Family Residential Dwelling Units

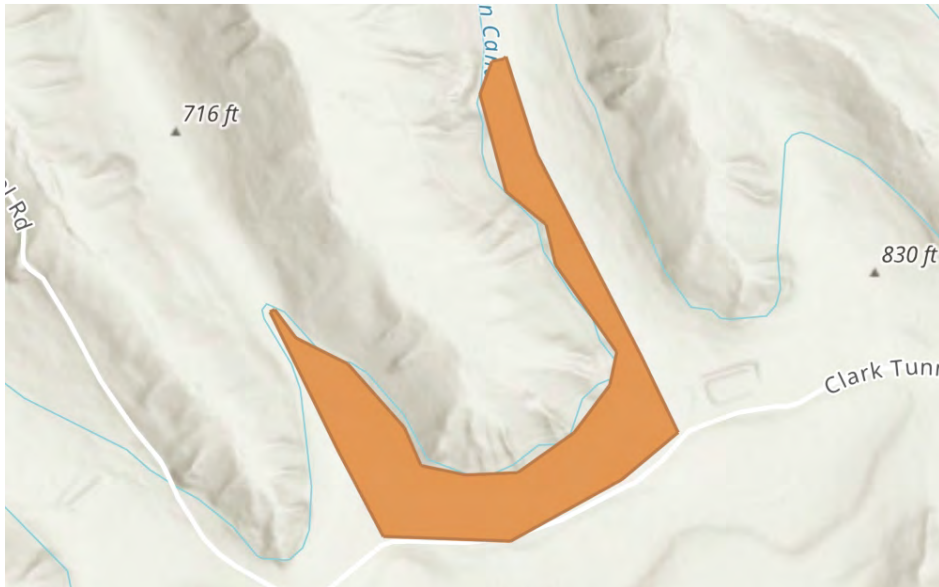
## Project Location

Jurisdiction:  
Unincorporated County

APN	TAZ
031-106-030-000	205

Inside a TPA?

No (Fail)



## Analysis Details

Data Version: Sacramento Activity-Based Travel Simulation Model - SACSIM19

Analysis Methodology: TAZ

Baseline Year: 2021

## Project Land Use

### Residential:

Single Family DU: 34

Multifamily DU:

---

Total DUs: 34

### Non-Residential:

Office KSF:

Industrial KSF:

### Residential Affordability (percent of all units):

Extremely Low Income: 0 %

Very Low Income: 0 %

Low Income: 0 %

### Parking:

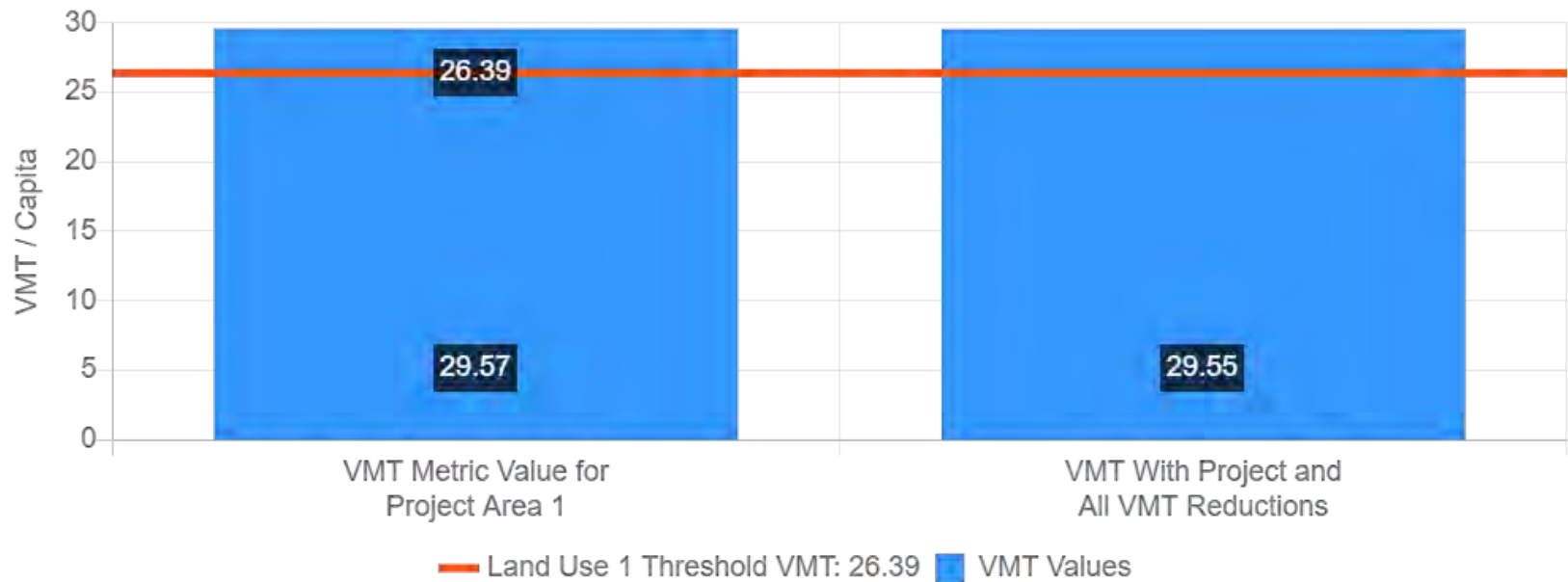
Motor Vehicle Parking:

Bicycle Parking:

## Residential Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 1:	Residential
VMT Metric 1:	Household VMT per Resident
VMT Baseline Description 1:	Unincorporated Average
VMT Baseline Value 1:	31.05
VMT Threshold Description 1:	-15%

	Project Area	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	29.57	29.55
Is VMT Below Threshold?	No (Fail)	No (Fail)



## Tier 1 Project Characteristics

### PC01 Increase Residential Density

Existing Residential Density:	0.34
With Project Residential Density:	0.35

**2021 Baseline Conditions (With Mitigation)**

**No Project –**

**Plus Project –**

**Plus Project (With Mitigation) –**

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## Project Details

Timestamp of Analysis: March 03, 2021, 07:18:17 AM

Project Name: The Ridge Subdivision (Mitigation)

Project Description: 34 Single Family Residential Dwelling Units

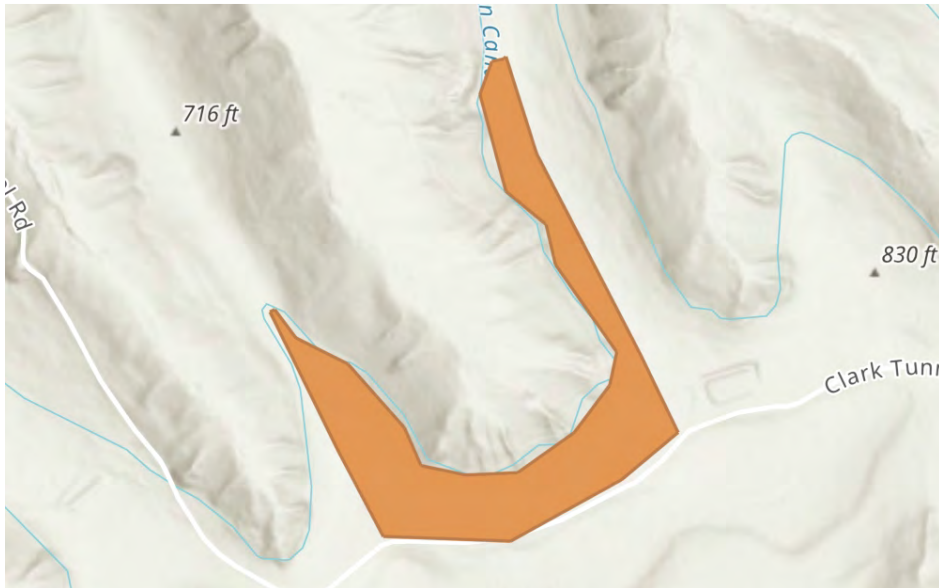
## Project Location

Jurisdiction:  
Unincorporated County

APN	TAZ
031-106-030-000	205

Inside a TPA?

**No (Fail)**



## Analysis Details

Data Version: Sacramento Activity-Based Travel Simulation Model - SACSIM19

Analysis Methodology: TAZ

Baseline Year: 2021

## Project Land Use

Residential:

Single Family DU: 34

Multifamily DU:

---

Total DUs: 34

Non-Residential:

Office KSF:

Industrial KSF:

Residential Affordability (percent of all units):

Extremely Low Income: 0 %

Very Low Income: 0 %

Low Income: 0 %

Parking:

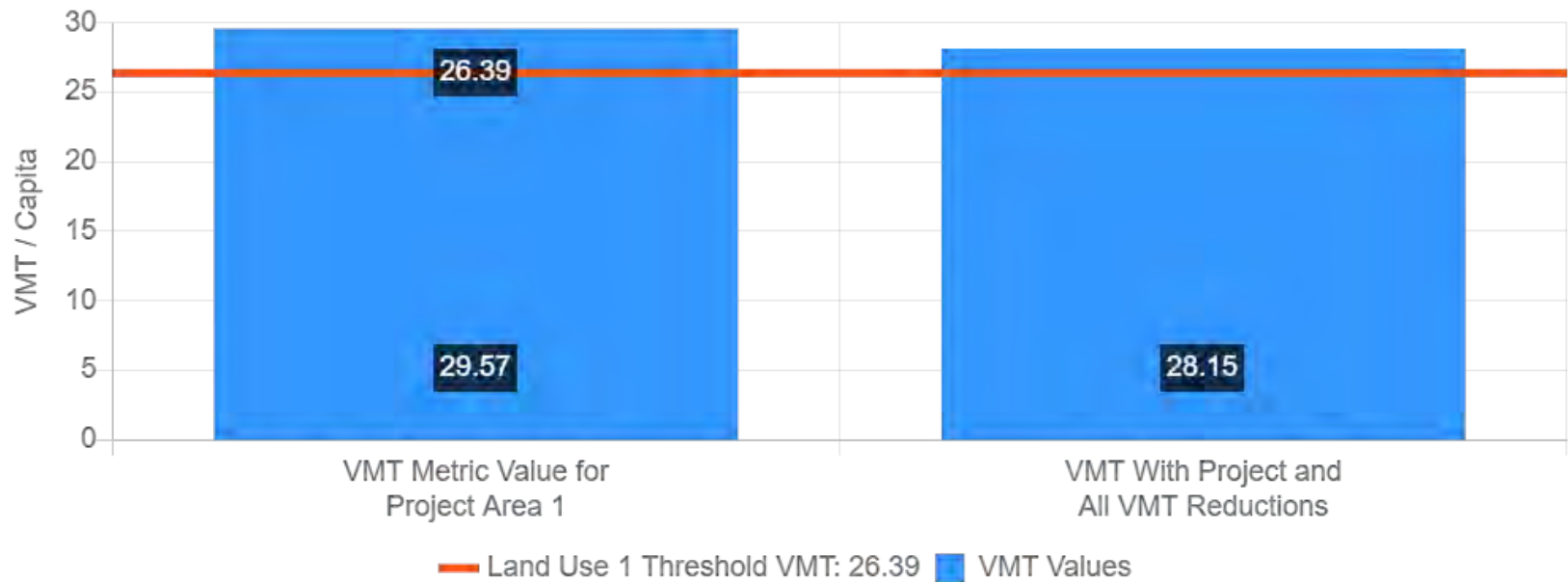
Motor Vehicle Parking:

Bicycle Parking:

## Residential Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 1:	Residential
VMT Metric 1:	Household VMT per Resident
VMT Baseline Description 1:	Unincorporated Average
VMT Baseline Value 1:	31.05
VMT Threshold Description 1:	-15%

	Project Area	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	29.57	28.15
Is VMT Below Threshold?	No (Fail)	No (Fail)





## Tier 1 Project Characteristics

### PC01 Increase Residential Density

Existing Residential Density:	0.34
With Project Residential Density:	0.35

## Tier 4 TDM Programs

### TP01 School Pool Programs

School Pool Program Percent of Expected Participant Households:	100 %
---	-------

### TP07 Subsidized Transit Program

Percent of Transit Subsidy:	100 %
-----------------------------	-------

### TP12 Neighborhood Schools

Type of School Served By the Project:	Neighborhood School
Families With School-Aged Children in the Project:	34 Families

### TP18 Voluntary Travel Behavior Change Program

Percent of Behavior Program Participants :	100 %
--	-------

**Attachment B**  
**Mitigation Measures**

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### TP01 School Pool Program

**Description:** Organize a program that matches families in carpools for school pick-up and drop-off. Organizing a School Pool Program helps match parents who transport students to schools without a busing program, including private schools, charter schools, and neighborhood schools where students cannot walk or bike. The school pool program would be open to all families in the development. School pools reduce the total number of vehicle trips traveling to and from schools, thereby reducing VMT. Strategy applies to residential land uses only. Subject to negotiations with the local agency and possible negotiations with schools serving the Project.

**Overlap:**

None

**Formula:** % VMT Reduction = 8.25% \* % of households expected to participate

**Source:** DRCOG. WayToGo 2015 Annual Report. Accessed on July, 2017.

### TP07 Subsidized or Discounted Transit Program

**Description:** Provide either partially or fully subsidized transit passes for all Project affiliates (employees and/or residents). Providing subsidies for transit use encourages people to use transit rather than driving, thereby reducing VMT. Strategy differs from the "Subsidize Public Transit Service Upgrades" in that subsidies are provided to the employees, not the public transit agency. Strategy applies to residential and employment land uses.

**Overlap:**

Alternative Transportation Commuter Benefits

**Formula:** % VMT Reduction = (% Vehicle Share / (1 - % Transit Share)) \* (0.43 \* % fare subsidy \* % Transit Share)

**Source:** Handy, Lovejoy, Boarnet, Spears. 2013. "Impacts of Transit Service Strategies on Passenger Vehicle Use and Greenhouse Gas Emissions."

[http://www.arb.ca.gov/cc/sb375/policies/transitservice/transit\\_brief.pdf](http://www.arb.ca.gov/cc/sb375/policies/transitservice/transit_brief.pdf)

### **TP12 Access to Neighborhood Schools**

**Description:** Project contributes to the development of a neighborhood school that would serve families living in the development. Neighborhood schools primarily serve the neighborhoods immediately surrounding the school and allow students to walk or bike to school, reducing the use of automobiles for drop-off and pick-up trips and thereby reducing VMT. Strategy applies to residential land uses only.

**Overlap:**

None

**Formula:** % VMT Reduction = 77.7% \* 2.3% \* % of household with school aged children living in project

**Source:** Wilson, Elizabeth J., Ryan Wilson, and Kevin J. Krizek. "The implications of school choice on travel behavior and environmental emissions." *Transportation Research Part D: Transport and Environment* 12.7 (2007): 506-518.

### **TP18 Voluntary Travel Behavior Change Program**

**Description:** Provide a program that targets individual attitudes towards travel and providing tools for individuals to analyze and alter their travel behavior. Voluntary Travel Behavior Change programs include mass communication campaigns and travel feedback programs such as travel diaries or feedback on calories burned from activities and travel. This strategy encourages the use of shared ride modes, transit, walking, and biking, thereby reducing VMT. Strategy applies to residential and employment land uses.

**Overlap:**

Commuter Trip Reduction Marketing/Education

Commuter Trip Reduction Program

**Formula:** % VMT Reduction = 4% \* percent of participants

**Source:** Spears, Boarnet, Handy. 2013. "Policy Brief on the Impacts of Voluntary Travel Behavior Change Programs Based on a Review of the Empirical Literature."

[https://www.arb.ca.gov/cc/sb375/policies/vtbc/vtbc\\_brief120313.pdf](https://www.arb.ca.gov/cc/sb375/policies/vtbc/vtbc_brief120313.pdf)

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## **APPENDIX G**

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# **The Ridge Subdivision Project**

## **Fire Safe Plan**

Prepared for Southfork LP

Prepared by  
Adrienne L. Graham, AICP  
&  
Phillips Consulting Services

July 2021

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1. Fire Risk Analysis
2. Building Access and Separation Requirements for Wildlife Protection
3. Fuel Management Plan and Recommended Maintenance Frequency
4. Wildfire Evacuation Planning and Fire Safety Zones
5. Fire Safety Plan Recommendations

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- A. Glossary
- B. Critical Assets/Infrastructure at Risk Table
- C. Penryn Fire Protection District Will Serve Letter
- D. The Ridge Subdivision Site Development Plan

B. Applicable Fire Codes and Ordinances and Programs

- California Public Resources Code Section 4291
- California Building Code, Chapter 7A, Materials and Construction Methods for Exterior Wildfire Exposure
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D. Biological Resource Measures

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### 1.1 Overview

This Fire Safety Plan (FSP) has been prepared for the Ridge Subdivision Project (Project). At present, the Project site is undeveloped; it has historically been used for grazing. The Project would replace the existing grasslands and woodlands with residential development, creating a wildland urban interface (WUI), which will be vulnerable to wildland fire. The Project site is vulnerable to wildland fire throughout the year subject to a variety of conditions including, but not limited to:

- Daily weather conditions such as air temperature, humidity, wind speed and direction;
- Climatic conditions such as drought, extended seasonal periods of hot, dry weather typically found in the summer and fall months, or seasonal rains typically found in the winter and spring months;
- Fuel moisture and growth cycle periods, especially in fine fuels such as the annual grasslands; and
- Human caused ignition factors such as arson, escaped debris burns and unsafe equipment operation.

These factors are discussed in more detail in Chapter 2, Environmental Conditions.

As part of the FSP preparation, four technical memoranda were prepared by Ronald A. Phillips of Phillips Consulting Services, a former Fire Chief with 35 years of experience in fire services in California. The technical memoranda address the following topics:

1. Fire Risk Analysis,
2. Hazardous Fuel Reduction Plan and Recommended Maintenance Frequency,
3. Wildfire Evacuation Planning and Fire Safety Zones, and
4. Fire Safety Plan Recommendations.

The information, analysis and measures identified in this FSP are based on those memoranda. The technical memoranda can be found in Appendix A of this FSP.

### 1.2 Purpose

This FSP specifically applies to properties within the Project site. The primary purposes of the FSP are to minimize the risk of wildland fires within and adjacent to the developed Project site and to ensure that there is adequate access to fire-prone areas in the event of a fire.

### 1.3 Project Summary

#### Location

The Project site is located on approximately 25 acres in southern Placer County, between the communities of Lincoln to the west, Newcastle to the east and Penryn to the south. The site is located approximately one mile southeast of the intersection of State Route (SR) 193 and Clark Tunnel Road (see Figure 1-1 at the end of this chapter).

The Bickford Ranch Specific Plan (BRSP) area borders the Project site to the west, east and south (see Figure 2-2 in Chapter 2).

Current access to the Project site is from Clark Tunnel Road, which is unpaved except for a segment connecting to SR 193. As discussed below, when developed, access will be provided from Sierra College Boulevard, via the future Bickford Ranch Road.

### **Project Description**

The Project proposes to develop a residential village comprised of 34 single-family homes on 28 low-density residential (LDR) lots and six rural residential (RR) lots (Lots 1 through 34 on (see Figure 1-2). In addition, there would be two common lots to accommodate a private road (Lot A) and a water quality basin (Lot B) .

The primary access to the Project site would be provided by connection of the private road to Bickford Ranch Road, which is planned to be constructed immediately south of the Project site as part of the BRSP. The Project access road entrance will be gated. This road and the private road (Lot A) will serve the 28 LDR parcels. It is designed to have a 22-foot wide travel lane with a curb and gutter on the north side and an 8-foot parallel parking lane and a 5-foot wide pedestrian sidewalk on the south side.. The road will terminate in cul-de-sacs at its eastern and western most ends. The right-of-way will be 40 feet wide.

Private lanes will extend from the cul-de-sacs to the RR parcels (three parcels on the west and three on the east). Each private lane will have a 20-foot wide travel lane with 2-foot-wide shoulders. The right-of-way will be 24 feet. The private lanes will have vehicular turnouts for two-way emergency traffic and turn-arounds, sized to meet the requirements of the fire department and sewer district.

Emergency access will be provided via the primary gated entry and a separate 40-foot wide emergency access easement (EVA) with a paved 20-foot travel lane that will connect to Bickford Ranch Road west of the primary entry. In addition, an EVA will be provided to a future roads in the BRSP along the northwest boundary of the Project site at Lot 32 and the northeast boundary at Lot 31. The EVA accesses will also be gated.

A pedestrian gate and sidewalk will connect the on-site sidewalk to the planned multipurpose trail in a landscaped corridor along Bickford Ranch Road.

The parcels would have minimum sizes of one acre for RR and 12,000 square feet (sf) for LDR. The LDR parcels would range in size from 13,700 sf to 38,416 sf, with an average lot size of 18,206 sf and an average density of 2.3 units per acre. The RR lots would range from 1.1 to 2.2 acres in size, with an average density of 1.67 units per acre. The combined average density would be 1.55 units per acre. The minimum width of interior lots (as opposed to corner lots) would be 125 feet for the RR parcels and 90 feet for the LDR parcels, measured at the front setback line. Corner LDR parcels would also have a minimum width of 90 feet.

Buildings would be limited to heights of 35 feet. The layout of each residence would be subject to the building setbacks shown in Table 1-1.

<b>Table 1-1 Building Setbacks (Feet)</b>		
	<b>RR Parcels</b>	<b>LDR Parcels</b>
Front <sup>1</sup>	25	20
Side	20	10
Rear <sup>2</sup>	30	30
Accessory Structures	15	15
Notes:		
1. Measured from the back of sidewalk, or right of way line where there is no sidewalk, and edge of pavement on private lanes.		
2. Lots 15 through 25 and 29 through 34 minimum rear building setback of 30 feet or the top of slope of 30%, whichever is greater.		

Water supply will be provided by Placer County Water Agency through a connection to a water line in Bickford Ranch Road and conveyed through water lines following the private road and private lanes. The BRSP will install a new 18-inch water transmission pipeline in Bickford Ranch Road, and provide a water storage system within the BRSP area. The new transmission and storage system provided by BRSP will connect to an existing PCWA 30-inch pipeline. Water storage in the BRSP area will meet both fire-flow requirements and domestic water consumption requirements.

The Project water pipeline will meet and/or exceed fire-flow requirements of 1,000 gallons per minute (GPM) at 20 pounds per square inch gauge (PSIG) for 2 hours duration as identified in the California Fire Code (CFC). Fire hydrants meeting PCWA, PFPD and CalFire requirements will be spaced on average every 500-feet along the proposed private road and two lanes in accordance with the CFC. Eight fire hydrants have been tentatively identified for placement along Project roads/lanes at the following locations:

- Along the private road near Lots 14/15,
- Along the private road near Lots 18/19,
- Along the private road near Lots 21/22,
- Along the private road near Lots 24/25,
- In the turnaround along the private lane at Lot 30,
- In the turnaround along the private lane at Lot 33,
- In the turnout along the private lane at Lot 33/34, and
- In the turnaround along the private lane at Lot 34.

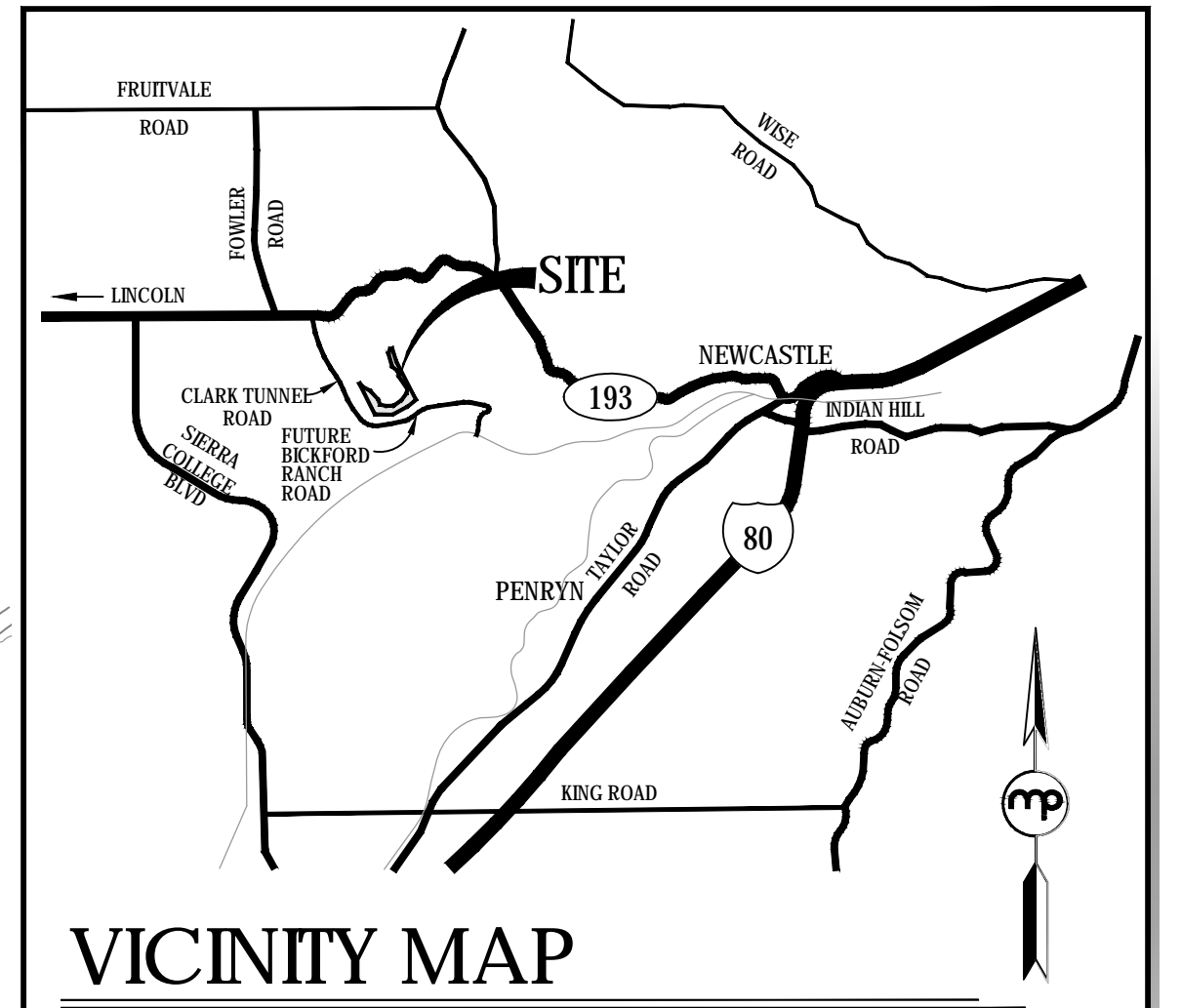


Source: Bickford Ranch Specific Plan, 2015;  
 Morton & Pitalo, Inc., 2019

Figure 1-1  
 The Ridge Project Location

# Figure 1-2 THE RIDGE VESTING TENTATIVE SUBDIVISION MAP SHEET 1 of 4

SECTION 21, T. 12 N., R. 7 E., M.D.B. & M.  
PLACER COUNTY, CA  
SEPTEMBER 27, 2019



**OWNER / APPLICANT**  
SOUTHFORK LP  
2140 PROFESSIONAL DRIVE, # 130  
ROSEVILLE, CA 95661

**ENGINEER/PLANNER**  
MORTON & PITALO INC.  
75 IRON POINT CIRCLE, SUITE #120  
FOLSOM, CA 95630  
CONTACT: KEN TOPPER  
PHONE: (916) 984-7821  
EMAIL: KTOPPER@MPENGR.COM

**UTILITY PROVIDERS**

WATER:	P.C.W.A.
SEWER:	PLACER COUNTY
GAS:	PG&E
ELECTRIC:	PG&E
TELEPHONE:	AT&T

**SERVICE PROVIDERS**

SCHOOL DISTRICT: LOOMIS UNION SCHOOL DISTRICT  
PLACER UNION HIGH SCHOOL DISTRICT  
PENYRN FIRE PROTECTION DISTRICT

**PROJECT INFORMATION**

ASSESSOR PARCEL NUMBERS: 031-106-030-000

USE: VACANT  
EXISTING ZONING: F 8 X 10 AC. MIN  
PROPOSED ZONING: LOW DENSITY RESIDENTIAL (LDR) / RURAL RESIDENTIAL (RR)  
EXISTING GENERAL PLAN: AGRICULTURE/TIMBERLAND 10 AC. MIN  
PROPOSED GENERAL PLAN: RESIDENTIAL

**PROJECT INFORMATION**

EXISTING NUMBER OF PARCELS	1	24,05± AC
PROPOSED NUMBER OF LOTS	28	RESIDENTIAL LOW DENSITY RURAL RESIDENTIAL
	6	ROADWAY (PRIVATE)
	1	WATER QUALITY BASIN
	36	TOTAL

- NOTES**
- THIS EXHIBIT IS FOR TENTATIVE MAP PURPOSES ONLY. ALL SITE CHARACTERISTICS ARE TO BE VERIFIED PRIOR TO FINAL MAP.
  - MINOR MODIFICATION MAY BE MADE TO LOT LINES AT FINAL MAP.
  - FOR PRELIMINARY PLANNING PURPOSES ONLY. BOUNDARY, TOPO, EASEMENTS AND SITE CONDITIONS TO BE VERIFIED PRIOR TO FINAL MAP AND ENGINEERING.
  - PURSUANT TO GOVERNMENT CODE SECTION 66454.1 THE SUBDIVIDER MAY FILE MULTIPLE FINAL MAPS BASED UPON THIS TENTATIVE MAP. THE FILING OF A FINAL MAP ON A PORTION OF THIS TENTATIVE MAP SHALL NOT INVALIDATE ANY PART OF THIS TENTATIVE MAP, INCLUDING THE AUTHORITY OF THE LOCAL AGENCY TO IMPOSE REASONABLE CONDITIONS RELATING TO THE FILING OF MULTIPLE FINAL MAPS.
  - LOT A IS A COMMON AREA LOT TO BE CONVEYED IN FEE BY SEPARATE GRANT DEED TO THE HOMEOWNERS ASSOCIATION FOR ROADWAY PURPOSES AND APPURTENANCE THERETO.
  - LOT B IS A COMMON AREA LOT TO BE CONVEYED IN FEE BY A SEPARATE GRANT DEED TO THE HOMEOWNERS ASSOCIATION FOR A WATER QUALITY BASIN AND APPURTENANCES THERETO.
  - INGRESS AND EGRESS EASEMENTS (IEE) ARE PRIVATE EASEMENTS FOR INGRESS AND EGRESS WHICH ARE APPURTENANT TO AND FOR THE BENEFIT OF LOTS 29 TO 31, INCLUSIVE AND 32 TO 34, INCLUSIVE. AN EASEMENT FOR THE MAINTENANCE, REPAIR AND REPLACEMENT OF ROAD AND DRAINAGE IMPROVEMENTS WILL BE CONVEYED BY SEPARATE INSTRUMENT TO THE HOMEOWNERS ASSOCIATION.
  - EASEMENT FOR RIGHTS OF INGRESS AND EGRESS GRANTED TO PLACER COUNTY WATER AGENCY. IN GRANT EASEMENT RECORDED FEBRUARY 8, 1998, INSTRUMENT NO. 98-0008233. OFFICIAL RECORDS. THE EXACT LOCATION OF SAID EASEMENT IS NOT DISCLOSED OF RECORD AND IS NOT SHOWN HEREON.
  - PROPOSED 300' OFFSET FUEL MANAGEMENT ZONE EASEMENT IS APPURTENANT TO AND FOR THE BENEFIT OF LOTS 1-34 INCLUSIVE AND IS TO BE CONVEYED BY SEPARATE INSTRUMENT TO THE HOA.
  - PURSUANT TO SECTION 66445 (J) OF THE GOVERNMENT CODE, THE FOLLOWING EASEMENTS ARE PROPOSED TO BE ABANDONED:
    - EASEMENT TO COUNTY PLACER FOR ROAD AND INCIDENTAL PURPOSES RECORDED NOVEMBER 15, 1992 IN BOOK 05 DEEDS, PAGE 834 FOR CLARK TUNNEL ROAD & IS TO BE ABANDONED UPON COMPLETION AND ACCEPTANCE BY PLACER COUNTY OF BICKFORD RANCH ROAD.

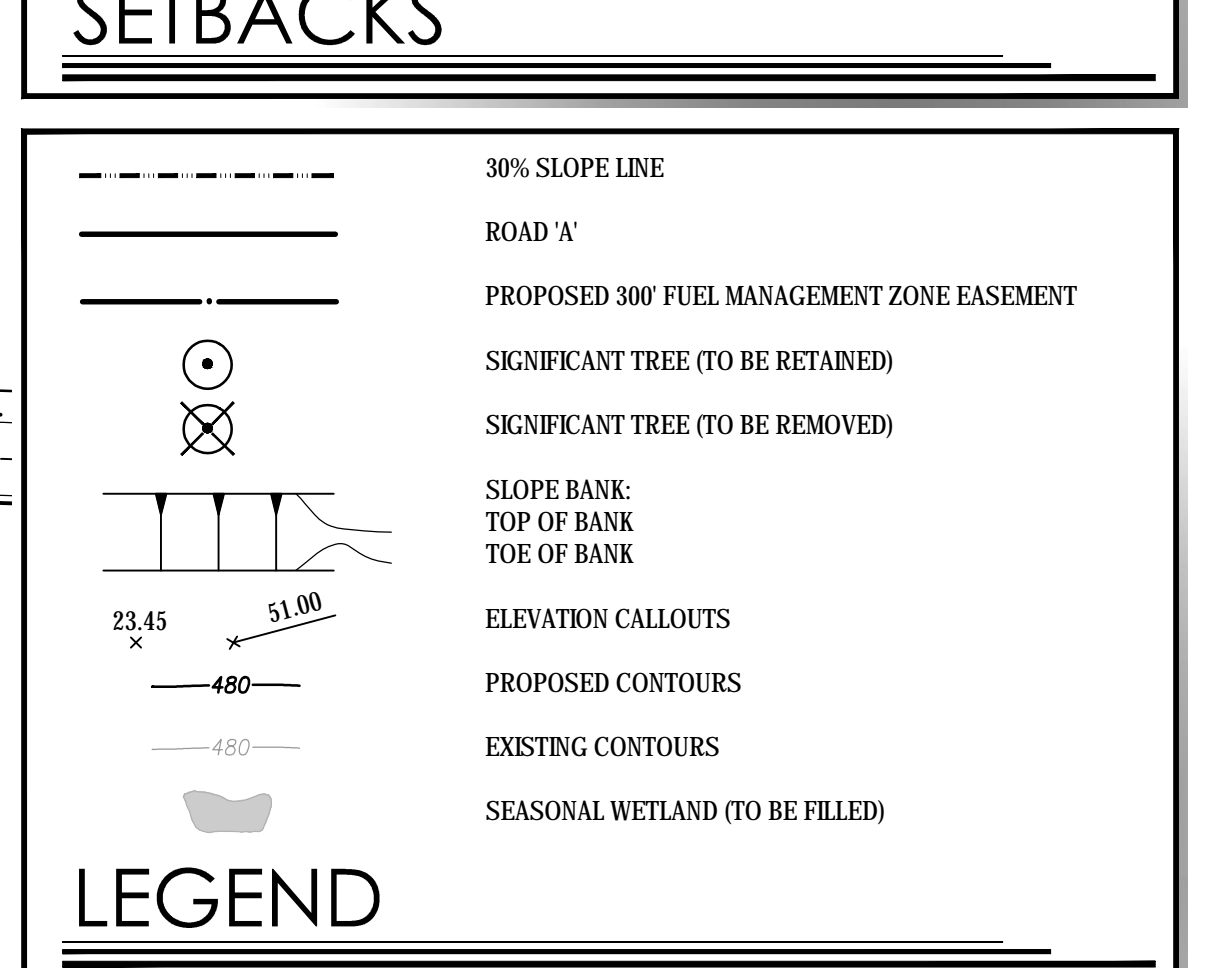
**NOTES**

LOTS:	AREA	LAND USE
A	1.9± AC	COMMON AREA LOT (ROAD 'A')
B	1.04± AC	WATER QUALITY BASIN
LOTS (1-28)	11,55± AC	LOW DENSITY RESIDENTIAL (LDR)
LOTS (29-34)	1,00± AC	RURAL RESIDENTIAL (RR)
TOTAL AREA:	24,05± AC	

**LOTGING**

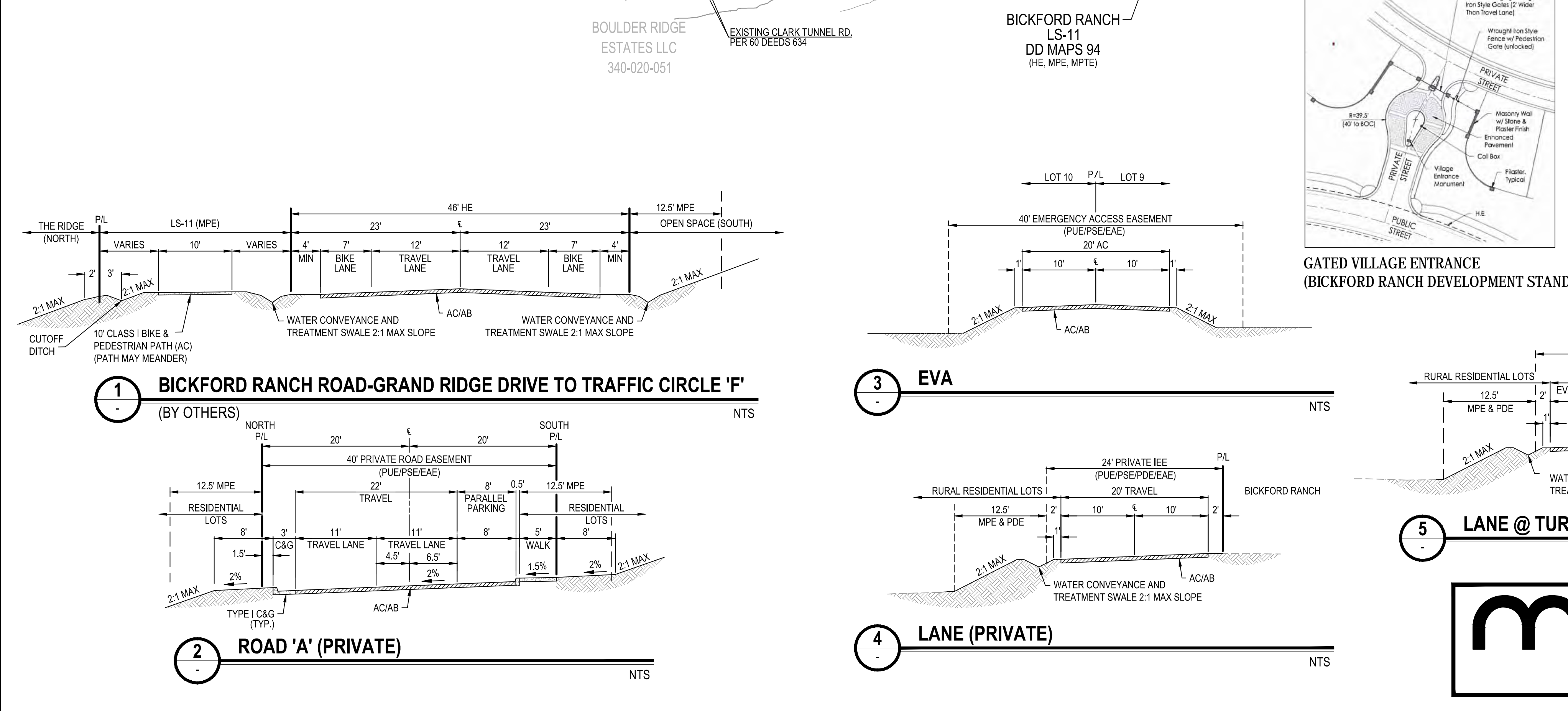
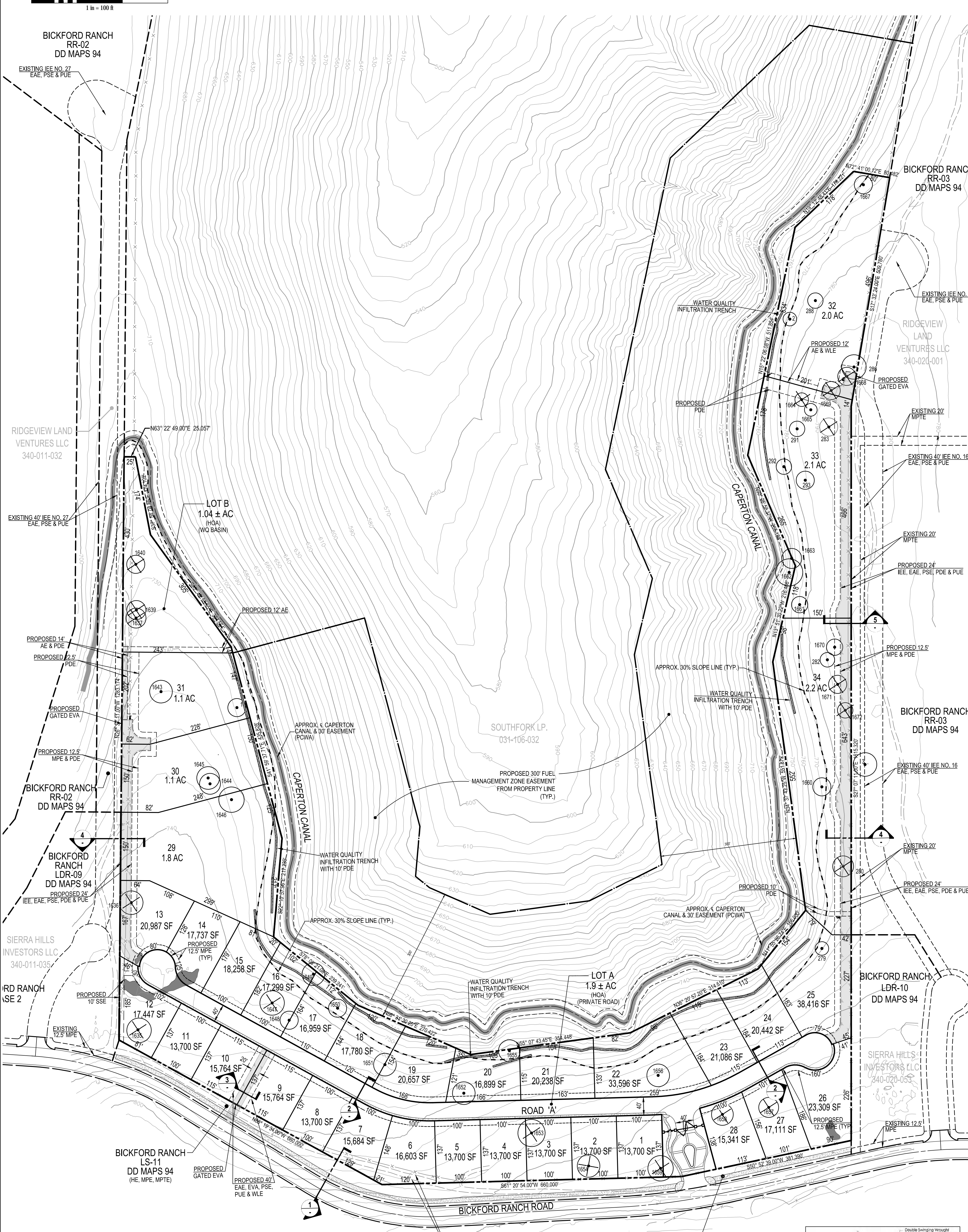
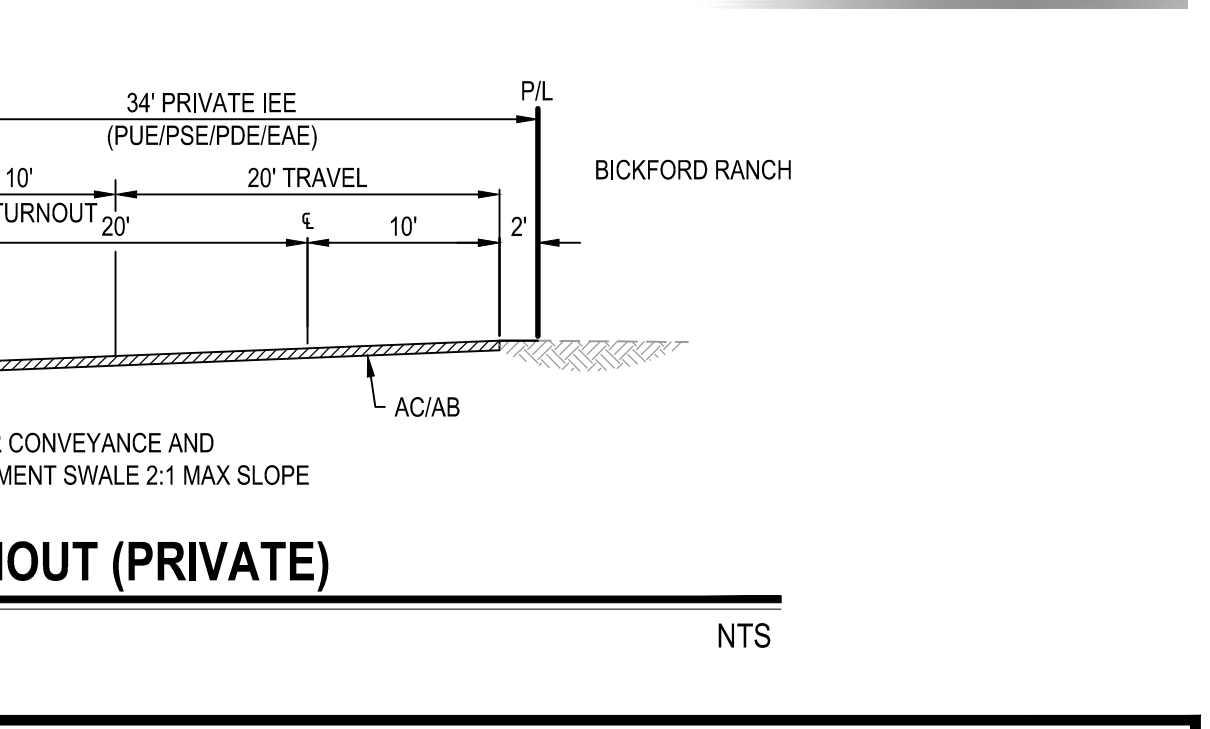
	LOW DENSITY RESIDENTIAL (LOTS 1-28)	RURAL RESIDENTIAL (LOTS 29-34)
FRONT	20'	25'
SIDE	10'	20'
STREET SIDE (CORNER)	20'	n/a
REAR	30'(1)	30'(1)
	15'(2)	15'(2)

(1) LOTS 15, 25 AND 29 - 34 SHALL HAVE A MINIMUM REAR SETBACK OF THE GREATER OF 30' OR THE TOP OF THE 30% SLOPE.  
(2) ACCESSORY STRUCTURE.



**LEGEND**

AE	ACCESS EASEMENT
EAE	EMERGENCY ACCESS EASEMENT
EVA	EMERGENCY VEHICLE ACCESS
HE	HIGHWAY EASEMENT
IEE	INGRESS AND EGRESS EASEMENT
MPE	MULTI-PURPOSE EASEMENT
MPPE	MULTI-PURPOSE TRAIL EASEMENT
PDE	PRIVATE DRAINAGE EASEMENT
PE	PEDESTRIAN EASEMENT
PSE	PUBLIC SUPPORT EASEMENT
PUE	PUBLIC UTILITY EASEMENT
SSE	SANITARY SEWER EASEMENT
WLE	WATER LINE EASEMENT



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Northern California Office: 75 Iron Point Circle, Suite 120, Folsom, CA 95630, phone: 916.984.7821, survey email: staking@mpengr.com • web: www.mpengr.com

Central California Office: 7845 North Ingram Avenue, Suite 105, Fresno, CA 93711, phone: 916.853.4505

## 2. EXISTING CONDITIONS

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This chapter describes those conditions that are present in the Project site and that could affect the likelihood of wildland fire occurring. Information for this section is based primarily on Technical Memorandum #1 (see Appendix A), information contained in Environmental Impact Report for the adjacent Bickford Ranch Specific Plan, public sources and information prepared for the Project.

### 2.1 Vegetation

Vegetation in the Project site and vicinity is dominated by non-native annual grassland and oak woodlands. Portions of the Project site are heavily wooded while others have a fairly extensive grassland understory. The surrounding area is composed largely of blue oak woodland, non-native grasslands and mixed interior live oak-blue oak woodland. The Caperton Canal is located just offsite, roughly parallel to the northerly Project boundaries. A small valley is located between the east and west ridges; this valley is composed largely of annual grassland. An impoundment is located within the valley, north of the Project site.

The oak woodlands and underlying grasslands provide the potential for an intense wildfire, particularly when combined with the steep topography and critical fire weather conditions.

### 2.2 Climate

Predominant weather patterns in south Placer County are characterized by hot dry summers and mild to cool winters.<sup>1</sup> Dry conditions traditionally begin around the end of May and last into October. An average summer day is 90°- 95° Fahrenheit, winds from the southwest at 0-10 miles per hour, and relative humidity levels in the 15 to 25 percent range. Summer lightning storms are infrequent in the area. On average, the strongest wind speeds in South Placer occur in March through May, but winds can exceed 20 mph during the fire season.<sup>2</sup>

Critical fire weather conditions become more frequent starting in July and extending through October each year. Critical fire weather conditions are typically associated with very low humidity and strong north winds. The ignition potential and fire spread rates during these conditions is high and can easily lead to large wildfires occurring.

### 2.3 Topography

The Project site forms a horseshoe pattern along several ridgelines. Site elevations range from approximately 720 feet near the northwest corner of the site to 815 feet near the southeast corner.<sup>3</sup> The southern portion of the site and the outer edges of the western and eastern arms of the horseshoe are relatively flat to gently sloping. The Project site is located at the top of a topographical drainage that forms a canyon with steep slopes ( $\geq 30\%$ ) bordering the Project<sup>4</sup> (see Figure 2-1). These steep slopes continue offsite toward the Caperton Canal on the La Faille Ranch property and the valley floor. This canyon forms a natural “chimney” that can enhance fire intensity and spread to hazardous

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1 National Weather Service, Lincoln Remote Automated Weather Station Site; <https://raws.dri.edu/cgi-bin/rawMAIN.pl?caCLIN>.

2 <http://www.usa.com/roseville-ca-weather.htm>, accessed June 22, 2018.

3 Engeo, *The Ridge Subdivision, Placer County, California, Preliminary Geotechnical Exploration*, April 12, 2019, page 3.

4 Engeo, *The Ridge Subdivision, Placer County, California, Preliminary Geotechnical Exploration*, April 12, 2019, page 3.



levels. Project Lots 15 through 25 and 29 through 34 abut this canyon on the north side of each lot and are therefore at greatest risk of an intense wildfire.

## 2.4 Existing and Planned Land Use Pattern

The Project site is undeveloped, and has been unimproved since at least 1891. It is periodically used for grazing, which is the primary agricultural operation in the vicinity. There are no structures on the Project site. The Project site is zoned FBX-10 acre minimum.

The Project site is located in rural Placer County, and in an area of steep ridges and small valleys that is largely undeveloped. The La Faille Ranch occupies the area to the north, and is owned by the Ridge Project applicant. The ranch is undeveloped and used for cattle grazing. The Caperton Canal, a concrete-lined canal that conveys raw water for local irrigation and domestic water uses is located within a 30-foot easement on the La Faille Ranch. The canal runs roughly parallel with the Project boundary with the ranch.

The area to the south, east and west is undeveloped grazing land. The Bickford Ranch Specific Plan (BRSP) area bounds the Project site on the west, south and east. The BRSP provides for development of up to 1,890 low, medium and rural density residential units on a 1,928-acre site. In addition, the BRSP includes over 780 acres of open space preserve, approximately 287 acres of Open Space-Transition and –Parkway, neighborhood parks and two recreation centers. As shown in Figure 2-2, the primary BRSP roadway, Bickford Ranch Road, and a linear parkway would border the southern edge of the Project site. Access to the Project site would be via a connection to this road. The southeast and southwest edges of the Project site would be bordered by Low Density Residential development, similar to the residences proposed for the Project. The northeast and northwest arms of the Project site would be bordered by Rural Residential development, which would also mirror the Project land use pattern.

The nearest existing homes to the Project site are located almost one mile north along CA Highway 193.

There are no high-voltage electric power lines, essential service facilities, populations at risk, or critical infrastructure within the Project site. The Caperton Canal is considered an *Infrastructure at Risk* site, because it is a source of municipal water supply.

## 2.5 Fire History

Wildland fires have occurred within the Project site and vicinity. The majority of these fires originated near existing roadways<sup>5</sup>. Table 2-1 identifies significant wildland fires that have occurred in the Project vicinity since 1950.

Common fire ignition sources have included arson, equipment failure, escaped debris burns, and vehicle related causes. No large wildfires (i.e., >300 acres) were reported in the Project vicinity between 2009-2019. The “Beacon” fire in 1950 burned the Project site and much of the Bickford Ranch area. No smaller fires have been reported within the Project vicinity during this same timeframe. Three smaller fires of between 10-300 acres occurred in the Project vicinity between 2003 and 2018 (the 2003 and 2013 Sierra fires and the 2008 Ravine fire)<sup>6</sup>. A review of public source documents did not identify a major

5 CalFire, *Unit Strategic Fire Plan Nevada-Yuba-Placer Unit*; July 2017, page 48.

6 CalFire, *Unit Strategic Fire Plan, Nevada-Yuba-Placer Unit*, Battalion 18 Fire History Map, July 2017, page 128.

Year	Fire Name	Acres Damaged
1950	Beacon	500+
2003	Sierra	27
2008	Gladding	1,090
2008	Ravine	343
2013	Sierra	19
Source: CalFire, <i>Strategic Fire Plan Nevada-Yuba-Placer Unit</i> , Battalion 18 Fire History Map, page 128.		

wildland fire in the Project site that caused the loss of a structure, or injury/death of a civilian or firefighter, within the last 20 years.

The Placer County Fire Department (PCFD), with the assistance of local landowners, has implemented a voluntary roadside disking program in the southwestern Placer County area to reduce the probability of a wildfire spreading to undeveloped lands<sup>7</sup>. Disking includes an area approximately 20 feet wide along existing roadside properties. According to statistics provided for 2011 this program has led to a 50% reduction of roadside wildland fires burning more than 1 acre of land in the southwest Placer County area<sup>8</sup>.

## 2.6 Fire Hazard Severity Zones

CalFire identifies fire hazard severity zones in both State Responsibility Areas, which includes those portions of the state where the California Department of Forestry and Fire Protection (CalFire) has the primary duty for wildland fire prevention and suppression, and Local Responsibility Areas, which include those parts of the state where a local jurisdiction, such as Placer County, has primary responsibility. The Project site is in a State Responsibility Area, and is in an area rated Moderate for fire hazard.<sup>9</sup>

## 2.7 Wildland Urban Interface Zone

The Project site is located within a hillside area that has been previously designated by CalFire and the Penryn Fire Protection District (PFPD) as a potential Wildland Urban Interface (WUI) Zone should buildings be constructed in the area. The WUI area includes the following undeveloped areas that could increase fire risk of fire spreading to the Project site, due to the topography and vegetation types present:

- The 168-acre LaFaille Ranch area that forms a canyon below the Project site;
- An approximately 125-acre designated open space area proposed for in BRSP west of the Project site; and
- An approximately 80-acre designated open space area proposed in the BRSP east of the Project site.

The open space and undeveloped areas north of Bickford Ranch Road near the Project

<sup>7</sup> CalFire, *Unit Strategic Fire Plan, Nevada-Yuba-Placer Unit*, July 2017, page 48.

<sup>8</sup> Placer County, *California Community Wildfire Protection Plan*; December, 2012, page 83.

<sup>9</sup> CalFire, *Fire Hazard Severity Zone Map for Placer County*, November, 2007. Note that CalFire is currently updating its Fire Hazard Severity Zone map for State Responsibility Areas.

site consist of a series of small canyons and drainages that flow north towards Highway 193. The canyons in this area have steep topography on both sides of the drainage, and extensive vegetation and tree canopies in most areas. This creates the potential for rapid wildfire growth that could quickly reach the Project site. These open space and undeveloped areas are also of concern to the fire agencies due to the adjacent canyon steep slopes that limit fire apparatus access and that can potentially create a “Chimney Effect” condition during intense wildland fire activity.

## 2.8 Fire and Emergency Response

Fire and rescue services for the Project site are the responsibility of the PFPD. The BRSP area and adjoining unincorporated areas near the Project site are served by the Placer County Fire Protection District (PCFD). Existing mutual aid agreements between PCFD and PFPD are in place.

The closest fire station to the Project site is PFPD Station No. 38 located on Church Street in the Penryn community<sup>10</sup>. Services are provided by one Type I /III fire engine staffed daily by a minimum of two full-time firefighters. These firefighters are augmented by resident firefighters that support the emergency response capabilities of the district. Upon completion of Phase 1 of Bickford Ranch Road to the Project site, response times from PFPD Fire Station 38 will be on average 10 minutes or less for all fire and rescue emergencies.

CalFire Station No. 70 is located near the City of Lincoln on Wise Road. This fire station is jointly operated with the Placer County Fire Department (PCFD) and provides services to the unincorporated areas of Placer County, including the BRSP area. This station provides wildfire protection responsibilities for all State Responsibility Area (SRA) lands near the Project site. Station No. 70 has one Type I/III fire engine staffed daily by a minimum of two full-time firefighters. These firefighters are augmented by seasonal and volunteer firefighters that support the emergency response capabilities of CalFire and PCFD. Upon completion of Phase 1 of the Bickford Ranch Road to the Project site, response times from CalFire Station 70 will be on average 20 minutes or less for all wildfires and other emergencies.

Upon the issuance of 1,000 building permits in BRSP one new fire station will be constructed and staffed in the area<sup>11</sup>. The fire station is planned to be located on a 1.4-acre site at the northeast corner of Bickford Ranch Road and Sierra College Boulevard<sup>12</sup>. The conceptual design of the fire station is described in Section 3.8 of the Bickford Ranch Development Standards.

## 2.9 Emergency Vehicle Access

Fire access can be described as the means (e.g., roads, bike paths, trails, etc.) by which firefighters can enter an area to quickly mitigate a wildfire incident before it spreads to adjacent properties and critical assets/infrastructure at risk. Joint efforts to develop and maintain ingress/egress for local evacuation and fire suppression response are required to ensure that both public and firefighter safety is provided.

The main emergency response route into the BRSP area and the Project site will be Sierra College Boulevard. This public road will connect to Bickford Ranch Road, which will provide access to the Project site through connections to the Project entrance and EVAs.

10 Penryn Fire Protection District; <http://www.penrynfire.org/> .

11 Placer County, *Bickford Ranch Specific Plan*, December 8, 2015, page 6-9.

12 Placer County, *Bickford Ranch Specific Plan*, December 8, 2015, page 6-4.

The BRSP area will be served by a network of additional arterial, collector and local streets. This circulation design will help to reduce traffic congestion and aid PFPD and CalFire in providing emergency services to the Project site and surrounding area in acceptable response timeframes.

Three BRSP Emergency Vehicle Access (EVA) roads are planned for the area. These EVA roads will also be able to provide emergency vehicle access to the Project site, and serve as secondary evacuation routes for the public, if and when Bickford Ranch Road and the other primary roads in the area are obstructed or heavily congested during an emergency. These EVA locations are (a) Clark Tunnel Road to Highway 193, (b) Clark Tunnel Road at the southeast corner of the BRSP area, and (c) the southernmost portion of the BRSP area to Woodsdale Court in Penryn.

The Project's private road will be 40' in width and will meet the fire apparatus access requirements found in the California Fire Code (CFC). Two private lanes, 20' in width (with a 24' wide private easement), which will also meet the fire apparatus access requirements found in the CFC, will be constructed and maintained to serve Ridge Subdivision Lots 29-32 and Lots 25, 32-34. All proposed fire apparatus access routes in the Project site have been reviewed and approved by PFPD and CalFire as part of the preliminary project review process.

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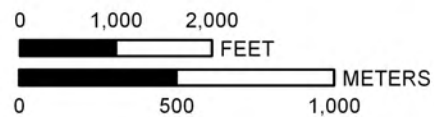
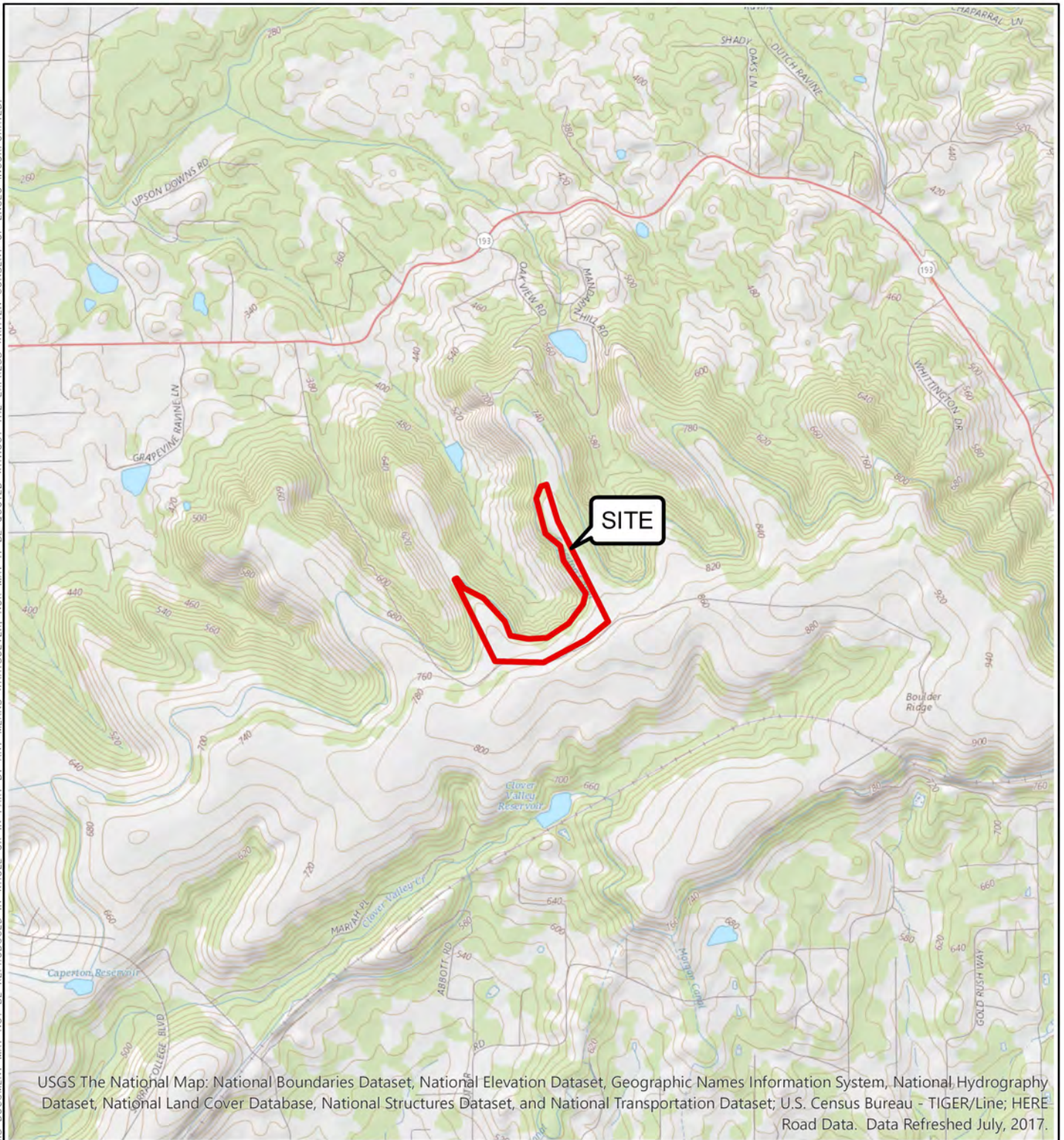


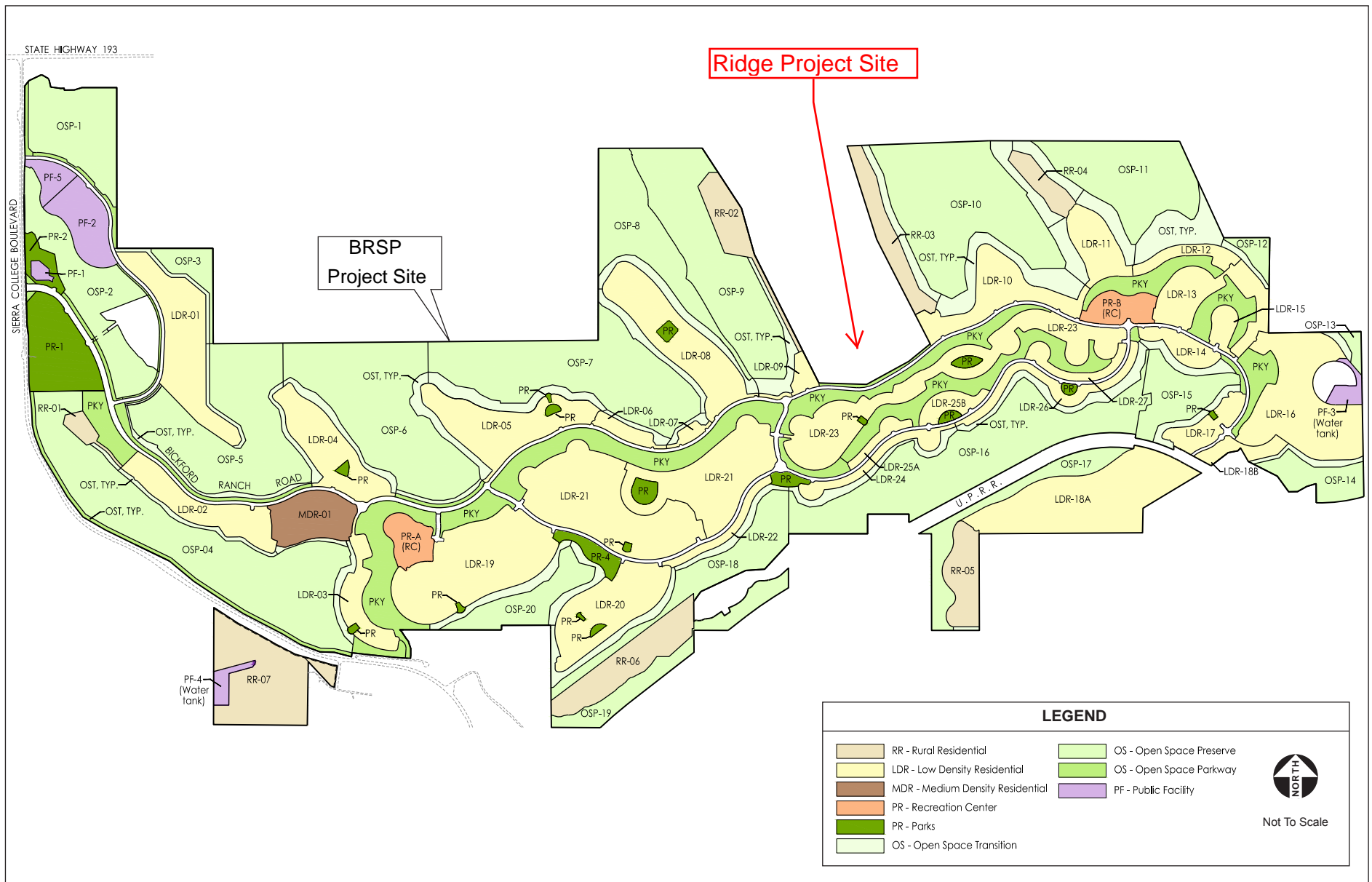
Figure 2-1



TOPOGRAPHIC MAP  
THE RIDGE SUBDIVISION  
PLACER COUNTY, CALIFORNIA

PROJECT NO. : 15407.000.000  
SCALE: AS SHOWN  
DRAWN BY: QRL CHECKED BY: JCB

FIGURE NO.  
**3**



Source: Bickford Ranch Specific Plan, 2015.

Figure 2-2  
Bickford Ranch Specific Plan Site

## 3.0 REGULATORY REQUIREMENTS

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Development of the Project will be subject to federal and State laws and County ordinances and regulations. The key provisions that will address fire prevention and response within the Project site are summarized below, and, where indicated, reproduced in the appendices.

### 3.1 California Public Resources Code Section 4291

California Public Resources Code (PRC) Section 4291 sets forth minimum fire safety standards for development in or adjoining mountainous areas and forest-covered lands. Provisions that would apply to the Project include:

- ▲ Defensible space must be maintained 100 feet from the side, front and rear of a structure, or up to the property line where the property line is less than 100 feet from the structure;
- ▲ Any portion of a tree that extends within 10 feet of the outlet of a chimney or stovepipe must be removed;
- ▲ Any tree, shrub, or other plant adjacent to or overhanging a structure must be free of dead or dying wood;
- ▲ Prior to constructing a new structure, the owner shall obtain a certification from the local structure official that the dwelling or structure, as proposed to be built, complies with all applicable State and local structure standards; and
- ▲ Prior to final inspection approval of any structure, the Fire Department must inspect the structure and the fire suppression facilities to certify that the fire suppression improvements comply with Building Code and fire department service requirements.

Violation of the above provisions may result in a fine. PRC Section 4291 also requires the Department of Forestry and Fire Protection (CalFire) to develop, periodically update and post on the internet a guidance document regarding fuels management. The full text of the statute is provided in Appendix B.

### 3.2 California Building Code

California Building Code (CBC) Chapter 7A (Materials and Construction Methods for Exterior Wildfire Exposure) establishes minimum standards for protection of life and property by increasing the ability of a structure located in a Fire Hazard Severity Zone within State Responsibility Areas or any Wildland Urban Interface (WUI) area. The goal of these provisions is to resist the intrusion of flames or burning embers projected by a vegetation fire and that contributes to a systematic reduction in conflagration losses. The full text of the Chapter 7A is provided in Appendix B.

### 3.3 Placer County General Plan

The Placer County General Plan (2013) contains a Public Facilities and Services Element that includes the following policies related to fire protection services that are applicable to the proposed project:

**Policy 4.1.1:** The County shall encourage local fire protection agencies in Placer County to maintain the following minimum fire protection standards (expressed as

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Insurance Service Organization [ISO] ratings):

- a. ISO 4 in urban areas
- b. ISO 6 in suburban areas
- c. ISO 8 in rural areas

**Policy 4.1.2:** 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 4.1.3:** 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 4.1.9:** 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.

In addition, the Health and Safety Element of the General Plan includes the following policies regarding fire hazards within Placer County:

**Policy 8.C.1.** The County shall ensure that development in high-fire-hazard areas is designed and constructed in a manner that minimizes the risk from fire hazards and meets all applicable state and county fire standards.

**Policy 8.C.2.** The County shall require that discretionary permits for new development in fire hazard areas be conditioned to include requirements for fire-resistant vegetation, cleared fire breaks, or a long-term comprehensive fuel management program. Fire hazard reduction measures shall be incorporated into the design of development projects in fire hazard areas.

**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.4.** The County shall refer development proposals in the unincorporated county to the appropriate local fire agencies for review for compliance with fire safety standards. If dual responsibility exists, then both agencies shall review and comment relative to their area of responsibility. If standards are different or conflicting, the more stringent standards shall be applied.

**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.

### **3.4 Placer County Ordinances**

#### **Building Code**

Buildings constructed within the Project site will be subject to the current building standards found in both the California Building Code and Chapter 15 of the Placer County



Code. The PFPD enforces standards associated with the installation of residential fire sprinkler systems and the installation of Class A roofing materials within all residential units. Both of these requirements will significantly assist in reducing the threat of a wildfire spreading from undeveloped land to a nearby building.

**Fire Code**

Placer County has adopted the 2016 California Building Code, Title 24 of the California Code of Regulations, and the 2016 Fire Code (Sections 15.04.700 and 15.04.710 Fire Code Amendment). The Fire Code addresses emergency access, access gates, sprinkler systems, fire alarms within buildings, and construction of access roads to accommodate fire apparatus. The Fire Code requires that an automatic fire sprinkler and/or fire extinguishing system be installed throughout new one- and two-family dwellings and commercial buildings 3,600 square feet and larger.

**Fire Prevention Code**

Chapter 9, Article 9.32, Part 3 of the Placer County Code requires the maintenance of "fire breaks" around structures and the clearing of roofs to prevent structural fires in the Wildland-Urban Interface Zone. These provisions will apply to all structures to be built within the Project site.

Chapter 9, Article 9.32, Part 4 of the Placer County Code requires that hazardous vegetation be abated on unimproved parcels in the county. Abatement of hazardous fuels is required if the unimproved parcel is adjacent to an improved parcel where implementation of required defensible space would extend onto the unimproved parcel. Abatement is also required along roads if in the opinion of the county fire warden the presence of hazardous fuels constitutes a potential obstacle to emergency access. These provisions apply to Project lands and any proposed fuel treatments, including the shaded fuel break on the adjacent Lafaille Ranch property, must be compatible with the code requirements.

The full text of Chapter 9, Article 9.32, parts 3 and 4 is provided in Appendix B.

**3.4 Placer County Office of Emergency Services**

Placer County's Office of Emergency Services provides emergency management services in cooperation with local cities and special districts, including fire agencies. During an active incident, such as fire or flood, the Office of Emergency Services helps initiate first responses. The functions of the Office of Emergency Services include emergency planning, response, recovery, and mitigation, including preparation of a Local Hazard Mitigation Plan. The Placer County Local Hazard Mitigation Plan, which was updated in 2016, is a joint effort between Placer County and 15 other jurisdictions, and is intended to guide hazard mitigation planning to reduce the effects of hazard events, including wildfires.

## 4. FIRE RISK ANALYSIS

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In order to prepare the Fire Safe Plan, an evaluation of the fire hazards and risk was prepared, as documented in Technical Memorandum #1 (see Appendix A). The following information is based primarily on Technical Memorandum #1. For a full discussion of the fire risk analysis, please see Appendix A.

### 4.1 Fire Hazard Versus Fire Risk

The threat of wildfire exposure to people, critical infrastructure, structures and communities is based upon a comprehensive vulnerability assessment of an area. This vulnerability assessment is usually completed through the evaluation of both fire hazard and fire risk factors. The term “hazard” describes the density of live or dead vegetation that could be ignited by the various fire risks or causes that can increase a fire’s intensity or rate of spread such as topography or weather conditions. The term “risk” describes the potential damage a fire can do to structures, critical assets/infrastructure and other values at risk in individual open space areas and other wildland urban interface (WUI) areas.

Land owners, managers and fire officials need to consider the potential wildfire hazard and risk factors that could make their community vulnerable to a wildfire when making land management and development decisions in fire-prone areas<sup>1</sup>. This assessment also aids fire agencies in the preparation of pre-incident plans and resource deployment actions such as fire equipment staffing levels and resource placement during critical fire periods. This assessment should consider both existing conditions described in Chapter 2, such as vegetation, topography and climate, and the future built environment, including the size and configuration of the WUI, proximity of structures to the WUI, defensible space, emergency access and water supply.

### 4.2 The Ridge Project Risk Analysis

The risk factor ratings described below and in Technical Memorandum #1 are based on current conditions without fuel modification or other risk reduction strategies being implemented. The overall risk rating can be described as Low (0-29), Moderate (30-59), High (60-79) and Very-High (80-100). Fire Risk ratings within the Project site are generally expressed using these terms:

- **Low Risk** – Fire risk factors present typically do not support rapid fire spread.
- **Moderate Risk** – Fire risk factors present may support moderate fire spread, but burning ember distribution is limited to less than ½ mile.
- **High Risk** – Fire risk factors present may support rapid fire spread and ember distribution beyond ½ mile.
- **Very High Risk** – Fire risk factors present may support extreme fire spread and intensity.

No Very High-Risk areas are currently identified within the Project site.

Risk factors examined as part of this analysis are identified in Table 4-1. A detailed description of each factor can be found in Chapter 2 and Technical Memorandum #1 in Appendix A. The ratings for each of the factors considered in the risk analysis are

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<sup>1</sup> United Nations Office for Disaster Risk Reduction, *Wildfire Hazard and Risk Assessment*, 2017.

Table 4-1 Fire Risk Factor Rating for the Ridge Subdivision Project						
No.	Risk Factor	Low 0-3	Moderate 4-6	High 7-8	Very-High 9-10	Total
1	Fire Hazard Severity Rating	○	⑥	○	○	6
2	Local Fire Department Capabilities	○	⑥	○	○	6
3	Local Fire History	○	⑥	○	○	6
4	Size / Configuration of the WUI	○	○	⑦	○	7
5	Proximity of Structures to WUI	○	○	⑦	○	7
6	Building Construction Meets CBC CH 7A	○	⑥	○	○	6
7	Defensible Space Complies with PRC 4291	○	⑥	○	○	6
8	Emergency Access to WUI	○	⑥	○	○	6
9	Water Supply for Fire Suppression	○	⑥	○	○	6
10	Critical Assets / Infrastructure at Risk	①	○	○	○	1
	<b>Total</b>	<b>1</b>	<b>42</b>	<b>14</b>	<b>0</b>	<b>57 / 100</b>

Source: Technical Memorandum #1 (Appendix A)

provided in Table 4-1. As shown, the overall Wildfire Risk Rating is Moderate for the Project site. Explanations for each of these risk factors and ratings as they pertain to the Project are summarized below. For a more detailed discussion of each risk factor rating, please see Technical Memorandum #1 in Appendix A.

It is important to remember that the risk factor ratings described do not infer that a community is at greater or less risk due to its overall rating. Fires can, and do, cause significant damage to property even when they occur in areas that may receive an overall low or moderate rating. Failure to maintain adequate defensible space, critical fire weather conditions and/or lack of available fire suppression resources due to other emergency incidents may cause a fire to increase its intensity and fire spread beyond the capabilities of firefighters on scene.

### 1. Fire Hazard Severity Rating

As discussed in Chapter 2, the Project site is rated Moderate for fire hazard by CalFire.

### 2. Local Fire Department Capabilities

The Project site is currently within the emergency response goals of the Penryn Fire Protection District (PFPD). With the addition of a new fire station in the BRSP

area emergency response times will improve further. Therefore, this fire risk factor is considered Moderate.

### **3. Local Fire History**

The Project site and vicinity have been subject to wildfire in the past, although these fires have been relatively small (19 to 1,090 acres between 1950 and 2013). Therefore, this fire risk factor is considered Moderate.

### **4. Size/Configuration of the WUI**

This fire risk factor should be considered “High” unless adequate preparedness measures are undertaken by the Project and subsequent property owners. This includes all structures being constructed to resist exterior wildfire exposure and maintaining adequate defensible space within 300-feet of structures facing the LaFaille Ranch undeveloped canyon area, as discussed in more detail in Chapter 5.

### **5. Proximity of Structures to WUI**

Similar to #4, this fire risk factor is considered “High” unless adequate preparedness measures are undertaken, such as maintaining a 30-foot setback between the primary structure and the WUI Zone and limiting the use of combustible materials such as accessory structures, decks cantilevered over the rear-yard natural slope and other uses that can contribute to fire spread (see Chapter 5 for more detail).

### **6. Building Construction Meets CBC CH 7A**

All structures built on the Project site must comply with State laws and regulations, including the provision of sprinklers within residential units. As delineated in Chapter 5, the use of ignition-resistant building materials and design will further reduce the risk of fire spreading. With the use of building and design measures identified in Chapter 5, this fire risk factor should be considered “Moderate” for the Project.

### **7. Defensible Space Complies with PRC 4291**

The Project must comply with the defensible space requirements of PRC 4291 (described in Chapter 3 and provided in Appendix B), which addresses fuel reduction and management within 100 feet from structure. For the Project, additional fuel reduction activities would occur immediately offsite as well, as delineated in Chapter 5 and TM #2, which would reduce the risk of a wildfire affecting the Project. Therefore, with compliance with State law and implementation of the Fuel Management Plan described in Chapter 5 and TM #2, this fire risk factor should be considered “Moderate” for the Project.

### **8. Emergency Access to WUI**

Access to the Project via Bickford Ranch Road will be available as part of Phase I of the BRSP area. The Clark-Tunnel Road to Highway 193 EVA will also be constructed and available for use by emergency responders as part of BRSP Phase I. The private road and two lanes serving the Project will comply with current CFC requirements prior to the construction of any dwellings on each lot. Both private lanes are proposed to be interconnected to the adjoining BRSP

subdivisions (parcels RR-02 and RR-03 shown in Figure 2-2 in Chapter 2) via a proposed gated EVA. For these reasons, the fire risk rating should be considered Moderate.

#### **9. Water Supply for Fire Suppression**

Reliability and maintenance of the water supply is a key factor for the water supply system to work as designed during the height of a wildfire. The Project as proposed would have access to water supply via a connection in Bickford Ranch Road, and would meet fire flow demands, minimum operating pressures and storage capacity to support fire suppression activities during a wildfire. The Project proposes eight fire hydrants that will be distributed to allow firefighters to access a fire hydrant quickly. All dwellings constructed in the Project site will be protected by a residential fire sprinkler system meeting current CBC design standards to reduce the risk of a fire inside the home when it is occupied. For these reasons, this risk factor should be considered “Moderate”.

#### **10. Critical Assets / Infrastructure at Risk**

The fire risk factor associated with Critical Assets/Infrastructure at Risk sites within the Project site should be considered “Low”, because the only identified infrastructure site of concern during a wildfire would be the Caperton Canal. This canal provides raw water for municipal water and irrigation purposes in the area, The canal is not composed of flammable materials, such as a wooden flume, and as part of a much larger water system, would not be considered a critical piece of infrastructure that would need to be protected during a fire.

## 5.0 FIRE SAFE PLAN

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This section addresses steps to be taken in the planning, design and construction of development within the project site in order to minimize fire hazards, as well as ongoing maintenance activities to be undertaken after the Project is built and occupied. The measures identified below are taken primarily from the Technical Memoranda (Appendix A), and are based on California State law, Placer County regulations, input from the Penryn Fire Protection District (PFPD) and CalFire and best practices.

### 5.1 Fire Safe Plan Goals

The goals for the Fire Safe Plan are to:

- Ensure that the Plan is generally consistent with applicable Placer County policies, Development Agreement terms, and project development standards and guidelines.
- Limit the risk of direct and indirect wildland fire impacts to people, property and sensitive areas (e.g. preserve lands, cultural sites, steep slopes, etc.).
- Strive to support PFPD and CalFire in their goal of extinguishing 95% of all wildland fires in the Project area at 10 acres or less through community education, fuel modification, fire safe landscaping and construction, and other planned efforts<sup>1</sup>.
- Implement Fire Safe strategies that will reduce wildland fire intensity and associated greenhouse gas emissions within open space areas; yet minimize costs and requirements for maintenance when it is feasible.
- Minimize the fuel management treatments and fire suppression impacts on the environment through the use of effective industry best management practices.

### 5.2 Required Actions

The Fire Safe Plan includes the following elements, each of which are discussed in more detail below:

- Planning,
- Fire Apparatus Access,
- Water Supply System,
- Building in the Wildlife Urban Interface (WUI),
- Fuel Management, and
- Evacuation Plan.

Compliance with State and local laws and regulations require a number of measures to reduce the risk of and damage from wildfire, such as sprinklers in all new residential units and fuel reduction prescriptions in fire hazard areas. Additional Action items are identified to reinforce those laws and regulations where applicable and/or to address fire safety concerns that are not covered by existing laws or regulations.

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<sup>1</sup> CalFire, *Unit Strategic Fire Plan, Nevada-Yuba-Placer Unit*, Battalion 18 Fire History Map, July 2017, page 12.

### 5.2.1 Planning

A coordinated planning effort between the PFPD and the landowners will contribute to a timely and effective fire suppression response. Pre-planning consultation with the PFPD and CalFire has occurred as part of the preparation and review of the Project Small Lot Tentative Map. Additional consultation during the Improvement Plan process, when final adjustments to road layouts, lot lines and infrastructure placement will take place, will ensure that any changes to these features do not reduce fire safety. The RR lots will be developed individually, and separately from the LDR lots, so review of the plans for each RR parcel is also warranted.

#### FSP Action #1

Applicants shall consult with the PFPD during preparation of Improvement Plans for the Low Density Residential development and individual site plans for the RR parcels. Issues to be addressed during the planning process shall include, but would not be limited to:

- Fire apparatus access,
- Available water supply,
- Evacuation routes, and
- Safe refuge areas.

To the extent possible, electronic GIS files should be shared to improve mapping accuracy

### 5.2.2 Fire Apparatus Access

Fire access is the means (e.g., roads, bike paths, trails) by which firefighters can enter an area to quickly mitigate a wildfire incident before it spreads to adjacent properties and/or critical assets and infrastructure. Adequate ingress/egress is necessary for both local evacuation and fire suppression response in order to ensure both the public safety and firefighter safety.

As discussed in Chapter 1, the primary private road and two private lanes will provide access to all Project residences. These facilities must comply with California Fire Code (CFC) requirements. The private road serving the project is planned to be 40-foot wide. Two private lanes serving the Rural Residential (RR) lots are planned to be 20-foot wide with a 24-foot easement. These road designs have been reviewed by PFPD and CalFire as part of the preliminary project review process and found to be satisfactory.

Three Emergency Vehicle Access (EVA) easements through the BRSP area will provide additional access to the Project site from Highway 193 and Sierra College Boulevard (via Bickford Ranch Road). In order to ensure that adequate access is maintained, these facilities shall be constructed and maintained in accordance with Penryn Fire Protection District (PFPD) and CalFire requirements.

The Project road and lanes and the access point to the BRSP EVAs will be gated.

#### FSP Action #2

The Project lanes, private road and Project EVAs shall be constructed to PFPD and CalFire standards. If any changes are made to the proposed design with respect to width or turning radius, the changes shall be reviewed by PFPD and CalFire prior to final approval.

### 5.2.3 Water Supply System

As discussed in Chapter 1, the Project will connect to the water line in Bickford Ranch Road. On-site water lines will then convey water to individual parcels. As required by the California Fire Code (CFC), the Project must meet minimum fire-flow requirements of 1,000 GPM @ 20 PSIG for 2 hours duration. Fire hydrants must meet PCWA, PFPD and CalFire requirements, and are planned to be spaced on average every 500 feet along the private road and lanes.

#### FSP Action #3

Fire hydrants serving the site shall be provided at the following locations in the Project site, or equivalent locations subject to approval of PCWA and County Public Works:

- Along the private road near Lots 14/15,
- Along the private road near Lots 18/19,
- Along the private road near Lots 21/22,
- Along the private road near Lots 24/25,
- In the turnaround along the private lane at Lot 30,
- In the turnaround along the private lane at Lot 33,
- In the turnout along the private lane at Lot 33/34, and
- In the turnaround along the private lane at Lot 34.

In addition, as required by State law, all residences will have sprinkler systems installed. In order to ensure that these systems remain operable, the following measure shall be implemented:

#### FSP Action #4

Individual building sprinkler systems used for fire suppression shall remain operable and shall be maintained by the individual homeowners at all times.

### 5.2.4 Building in the Wildlife Urban Interface Zone

As discussed in Chapter 4, the proximity of Project structures to the Wildlife Urban Interface (WUI) and the size and configuration of the WUI are the highest rated among elements that were considered when determining the fire risk rating for the Project site. Fire spread during a wildfire is typically from one or more ignition sources. The most likely ignition factors present during a wildfire are direct flame impingement on combustible materials such as building construction materials or ember broadcast that ignites combustible on or near the structure. Buildings in the WUI Zone are at greater risk of damage or loss as a result of fire spread through either surface burning or ember broadcast. Building separation between the building envelope and the adjoining WUI must be maintained to reduce the threat of a wildfire damaging individual structures or multiple structures.

As stated previously, for development within fire hazard zones, State and local laws and regulations require measures to reduce the risk of buildings igniting or fire spreading (see Chapter 3 and Appendix B). Project construction must comply with the applicable building standards, such as installing sprinklers in residential buildings. The following measures are intended to address specific elements of the Project, and would further reduce the risk of damage due to a wildfire and/or its spread throughout the Project site and into adjacent areas.

#### FSP Action #5

All structures constructed on lots facing the WUI Zone (Lots 15 through 25 and 29



through 34) shall have a minimum 30-foot setback from the rear property line to reduce the threat of a wildfire impinging directly on the primary building. Setback areas may contain driveways, parking areas and/or other non-combustible surfaces.

FSP Action #6

Fencing materials located along the side and rear yard property lines facing the WUI on Ridge Subdivision Lots 15 through 25 and 29 through 34 shall be constructed of non-combustible materials.

FSP Action #7

Dwellings located on Project Lots 15 through 25 and 29 through 34 shall be constructed and maintained in accordance with the current design standards found in California Building Code (CBC) Chapter 7A (Materials and Construction Methods for Exterior Wildfire Exposure), which is provided in Appendix B.

### **5.2.5 Fuel Management**

A Fuel Management Plan (FMP) for the Project has been prepared to address the fuels that are of concern both within the Project site and in the adjacent WUI, specifically the LaFaille Ranch area. The Fuel Management Plan is provided in Technical Memorandum #2 in Appendix A.

As discussed in Chapter 3, California Public Resource Code (PRC) 4291 states that property owners must maintain a 100-foot defensible space perimeter around all structures on their property if they are in proximity to forests, grasslands or similar undeveloped areas. Defensible space on each lot is the responsibility of the individual property owner. Defensible space within the Project site will start at the structure and extend 100 feet or to the property line, whichever is closer.

In addition, Placer County Code Section 9.32.120 extends these requirements to adjacent unimproved properties when an *extra hazardous* fire condition exists. In consultation with PFPD and CalFire officials they have determined that the undeveloped land on the LaFaille Ranch property constitutes an *extra hazard* fire condition to the Project. Fire officials have also identified the LaFaille Ranch undeveloped lands, and Project Lots 15-25 and 29-34, as a WUI Zone.

In addition, PFPD and CalFire will require the construction and on-going maintenance of a Modified Shaded Fuel Break<sup>2</sup> (MSFB) to protect the structures and population in the Project site and vicinity from an advancing wildfire. The MSFB will originate at the rear property line of Lots 15 through 25 and 29 through 34, and extend nominally 300-feet into the LaFaille Ranch undeveloped land area. In addition to the fuel management activities identified in Technical Memorandum #2, Appendix D identifies steps to be taken to protect sensitive species that have a moderate or high potential to occur within the MSFB from harm during fuel management activities.

The following actions are intended to insure that the FMP and MSFB are fully implemented throughout the life of the Project.

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<sup>2</sup> A Modified Shaded Fuel Break is a wildfire preparedness action designed to decrease the intensity of a wildfire burning in a natural open space area through the removal of dead fuels, pruning of trees, and removal of shrubs, brush and other vegetative growth.

Action #8

A Fuel Management Program shall be established to ensure implementation of the Fuel Management Plan and Modified Shaded Fuel Break, described below and in Technical Memorandum #2. The program shall be designed to ensure the following fuel management activities are completed in a timely manner:

- a. Provide administrative oversight and coordination of fuel management projects within the Project area.
- b. Confirm that fuel management projects are identified, scheduled and completed in accordance with this Fuel Management Plan.
- c. Coordinate the use of resources (e.g. crews, mechanical equipment, domestic livestock, prescribed fire, etc.) that are most appropriate for the fuel management work that is required.
- d. Ensure that sensitive biological resources within each area are identified in advance of the fuel management project. Complete pre/post project inspections of these areas to safeguard sensitive areas from damage and/or destruction.
- e. Verify that each fuel management project has sufficient fiscal resources available to it using industry best practices that are most appropriate for the Project area.
- f. Ensure the safe disposal (e.g. hauling it to a landfill, chipping/mulching on site, etc.) of biomass materials removed as part of a fuel management project.

Action #9

The Ridge Fuel Management Plan (FMP) described in Technical Memorandum #2 (TM #2, August 22, 2019, in Appendix A) shall be implemented by the Project Applicant during project construction and until the Project is fully developed and occupied. Upon acquiring a parcel, the parcel owner shall become responsible for complying with the Fuel Management Plan (and any and all State or local laws and regulations governing fuel maintenance on private property). After construction, maintenance activities within the common lots and the MSFB shall be the responsibility of the Homeowners Association (HOA) or its designee. The FMP shall be adequately funded to ensure that all hazardous fuel reduction work is completed per the prescription requirements identified in TM #2.

Action #10

A 300-foot wide MSFB that reduces hazardous live and dead vegetation near the Project site shall be constructed and maintained in accordance with the FMP in the canyon below Project Lots 15 through 25 and 29-34. The shaded fuel break shall meet the following criteria:

- The construction of the shaded fuel break shall commence at the property line between the lot(s) and adjoining LaFaille Ranch property.
- The MSFB shall extend nominally 300-feet except when variances are allowed due to topographical issues, sensitive cultural resources present, or environmental concerns.
- The shaded fuel break shall be constructed and accepted by PFPD and CAL FIRE prior to the issuance of the first building permit within the Project site. See TM #2 for shaded fuel break prescriptive requirements.
- A "Fuel Management Zone" easement shall be recorded on the LaFaille Ranch property that is subject of the MSFB. The easement shall allow right of entry to conduct fuel management activities in perpetuity.

Action #11

All hazardous fuels, including annual grasses and dead vegetation, on undeveloped lots within the Project site shall be reduced to 4-inches or less during the CalFire-declared fire season.

**5.2.6 Evacuation Plan**

Wildfires are an increasing concern with California, particularly in the WUI where development occurs adjacent to open, undeveloped lands. The measures described in this FSP should minimize the spread of wildfire, were one to occur within Project site or adjacent area. Under certain conditions (e.g., extremely high winds), it is possible that a wildfire with potential to spread to a developed area will occur, requiring evacuation of some areas.

Based on the wildfire risk factors discussed in Chapter 4 (e.g. WUI Zone less than 300 acres, fire severity is generally moderate, fuel modification efforts in place, building construction using current codes, etc.), it is likely that most evacuations will affect fewer than 88 residents during the duration of the wildfire event. It is anticipated that most evacuations due to a wildfire threat will be less than 12 hours in duration.

The decision to initiate a local evacuation during a wildfire emergency rests with the public safety agencies (law enforcement and fire) based on a comprehensive threat assessment made in the field. The implementation and enforcement of evacuation orders rests with law enforcement. Evacuation types typically focus on one or more of the following methods:

- Voluntary evacuation,
- Mandatory evacuation, and
- Shelter in place or safe refuge.

There are existing and planned roads (e.g. thoroughfare, arterial and collector) that can serve as primary evacuation routes during a wildfire event, specifically:

- Highway 193,
- Sierra College Boulevard,
- Bickford Ranch Road, and
- School Ranch Road.

In addition, there are three emergency vehicle access roads identified within the BRSP that can be used for emergency evacuation efforts when deemed appropriate by public safety officials. The Project would also construct EVAs connecting to the above roads via BRSP roads.

If an incident requiring evacuation occurs, it will go more smoothly if residents and property owners have made preparations. The following steps will help prepare for such an event by educating homeowners.

Action #12

The Project Applicant and/or the HOA shall provide a mechanism for distributing the following information to new homeowners.

- Encourage homeowners to subscribe to Placer Alert (<https://www.placer.ca.gov/departments/sheriff/citizenalert>) to register land lines and/or cell phone to receive emergency notifications.

- Provide CalFire’s Ready/Set/Go pamphlet (provided in Appendix C) to each new homeowner owner.
- The HOA managers should provide public safety updates and fire-related information in HOA forums, such as an HOA website, newsletters and/or at HOA meetings, as needed. This should include links to OES and/or other appropriate emergency websites during emergencies.
- Encourage homeowners to assemble Emergency Supply Kits—keeping one in the house and one in the car and one for pets. The following websites have suggested contents for such kits:
  - <https://www.ready.gov/build-a-kit>
  - <http://www.redcross.org/get-help/how-to-prepare-for-emergencies/survival-kit-supplies>
- Encourage homeowners to take the follow steps to be prepared in case of an emergency, including:
  - Have fire extinguishers on hand and train everyone in the household to use them,
  - Keep emergency contact numbers and a portable radio handy, and
  - Know evacuation routes and shelter locations.
- An exhibit showing evacuation routes shall be provided to each homeowner. The exhibit shall identify Highway 193, Sierra College Boulevard, Bickford Ranch Road and School Ranch Road as the primary community evacuation routes for Project residents, and the routes from the project site to these roads. The location of temporary refuge areas (discussed below) shall also be identified. The exhibit shall be made available as part of the new homeowner information packet and through the Project HOA newsletter or website, if available.

#### Action #13

PFPD and CalFire should be encouraged to visit the neighborhood annually to discuss this material and answer questions by the homeowners.

#### Temporary Safe Refuge Area

Temporary Safe Refuge Areas are areas initially designated by public safety officials as locations for evacuated individuals to gather for a period of 12 hours or less, or as a measure of last resort should evacuation routes be obstructed or unsafe as a result of a wildfire. It is anticipated that one or more temporary safe refuge areas may be established in the BRSP area for potential use by the public if a situation arose when Bickford Ranch Road and the three EVA’s are unavailable for public use. Temporary safe refuge areas could be established at, for example, the following public locations in the future in the BRSP area:

- Bickford Ranch Community Park located at Bickford Ranch Road and Sierra College Boulevard; and
- Bickford Ranch Recreation Center East located at Bickford Ranch Road and 19A Lane.

Additional temporary refuge areas may also be established at local public schools in the BRSP area as the need arises.

Evacuation Shelters

The wildfire risk for the Project site is moderate. A wildfire in this area will likely result in the temporary (<12 hour) evacuation of 88 or fewer persons. A local dedicated evacuation center within the Project site is not warranted for this type of hazard.

The decision to open an evacuation center rests with Placer County OES. This agency has previously designated the Gold Country Fairgrounds in Auburn for use as an evacuation center for long duration emergency events. This facility is properly designed to handle the evacuation of general population, special need population and domestic animal groups.

The Gold County Fairground site is located within 30 minutes' drive time from the Project site based on routine traffic conditions in the area. Emergency transportation of persons without vehicles to this location can be addressed through coordinated planning efforts between County OES, regional and local transit agencies, private ambulance operators and/or property/business owners who need to complete this evacuation planning effort.

## 6.0 REFERENCES

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# The Ridge Subdivision Project

## Fire Safe Plan

### APPENDICES

Prepared for Southfork LP

Prepared by  
Adrienne L. Graham, AICP  
&  
Phillips Consulting Services

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July 2021

**APPENDIX A**  
**TECHNICAL MEMORANDA**



## TECHNICAL MEMORANDUM

DATE: October 6, 2019  
TO: Adrienne L. Graham, A.I.C.P.  
FROM: Ronald A. Phillips  
RE: **Ridge Subdivision Fire Safe Plan / TM1: Fire Risk Analysis**

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### 1.0 Introduction

The following series of technical memos has been prepared to assist in the development of a Fire Safe Plan for the Ridge Subdivision area:

- TM1: *Fire Risk Analysis*
- TM2: *Hazardous Fuel Reduction Plan and Recommended Maintenance Frequency*
- TM3: *Wildfire Evacuation Planning and Fire Safety Zones.*
- TM4: *Fire Safety Plan Recommendations*

All of the technical memos prepared are designed to work in unison with each other. Information found within each memo is designed to support overall recommendations for inclusion in the Fire Safe Plan. The reader is also encouraged to review Attachment A (Glossary) for an understanding of specific terms used throughout the TM documents.

For the purpose of interpreting and applying the provisions found within each technical memo the terms *will*, *shall* and *should* are found throughout. The use of the term *will* refers to a requirement found within a governmental regulation or standard that is cited in the document. The use of the term *shall* refers to a requirement of the Plan by the author. The use of the term *should* refers to a recommendation cited in the document by the author.

### 2.0 Ridge Subdivision Project Description

The Ridge Subdivision (Project) is located within the unincorporated area of South Placer County near Penryn, CA. The Project is located south of the 168-acre LaFaille Ranch, approximately one mile southeast of the intersection of Highway 193 and Clark Tunnel Road in unincorporated Placer County. The current Placer County Assessor Parcel for the Project site is #031-106-030-000.

The Project is currently proposed as a 34-lot single-family planned residential community with several associated improvements including a private road system, water quality basin and various utilities. The Project is currently zoned FBX-10-acre minimum, but is proposed to be rezoned Low-

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Density Residential (LDR) and Rural Residential (RR). The Project is approximately 24.95 ± acres in size.

A population of approximately 88 persons<sup>1</sup> will live in the subdivision at build-out.

The Project is found within a hillside plateau area identified as *Boulder Ridge*<sup>2</sup>. This ridge runs generally east to west parallel to CA Highway 193. The Project has two smaller ridges that run north towards CA Highway 193. These ridges form a small canyon that originates on the LaFaille Ranch property and extends south onto the Project site.



*Figure 1: LaFaille Ranch Project Along Highway 193, Looking South Towards the Ridge Subdivision Project*

The Project is adjacent to the Bickford Ranch Specific Plan<sup>3</sup> (BRSP) area. BRSP is a master planned community of approximately 1,928 acres. BRSP has proposed neighborhood villages adjacent to the Project on three sides (east, west and south), that make up part of the 1,890 dwelling units approved within the BRSP area. The Project is not within the BRSP area.

The Project<sup>4</sup> is not currently located within a designated earthquake fault zone. No seismic ground rupture is anticipated. The area is not identified within a designated flood zone. No historic mining sites were observed within the Project area.

The Project is located in a designated **Wildfire Urban-Interface (WUI) Zone**.

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<sup>1</sup> Based on a calculation of 2.6 persons per household for residential uses; *Bickford Ranch Specific Plan*, Chapter 3, P3-6.

<sup>2</sup> *Bickford Ranch Addendum to EIR (Oct, 2004)*; Chapter 2, P.2-1

<sup>3</sup> *Bickford Ranch Specific Plan*; Chapter 2, P.2-4

<sup>4</sup> *Ridge Subdivision Preliminary Geotechnical Exploration Report (April 12, 2019)*; Chapter 3, P.5

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Local government fire protection and rescue services for the Project are provided by the Penryn Fire Protection District (PFPD)<sup>5</sup>. Wildland fire protection responsibility remains under the authority of the California Department of Forestry and Fire Protection, Nevada-Yuba-Placer Ranger Unit (CAL FIRE). Emergency medical services, including ground ambulance transport, are provided to the Project under the authority of Placer County.

### **3.0 Fire Safe Plan Goals**

The following goals should be included within the Ridge Subdivision Fire Safe Plan.

- 3.1 Ensure that the Plan is generally consistent with applicable Placer County policies, Development Agreement terms, and project development standards and guidelines.
- 3.2 Limit the risk of direct and indirect wildland fire impacts to people, property and sensitive areas (e.g. preserve lands, cultural sites, steep slopes, etc.).
- 3.3 Strive to support PFPD and CAL FIRE in their goal of extinguishing 95% of all wildland fires in the Ridge Subdivision area at 10 acres or less through community education, fuel modification, fire safe landscaping and construction, and other planned efforts<sup>6</sup>.
- 3.4 Implement Fire Safe strategies that will reduce wildland fire intensity and associated greenhouse gas emissions within open space areas; yet minimize costs and requirements for maintenance when it is feasible.
- 3.5 Minimize the fuel management treatments and fire suppression impacts to the environment through the use of effective industry best management practices.

### **4.0 Policies and Ordinances Providing Plan Guidance**

The following policies and ordinances are applicable and shall be included in the Ridge Subdivision Fire Safe Plan.

- 4.1 Section 4291 of the California Public Resources Code requires that a person who owns or operates a land that is covered with flammable material shall maintain defensible space of 100 feet from each side and from the front and rear of structures, but not beyond the property line unless required by State law, local ordinance or other regulation, and when there is no other feasible mitigation measure to reduce the risk of ignition or spread of wildfire to the structure. The intensity of fuels management may vary within the 100-foot perimeter of the structure, the most intense being within the first 30-feet around the structure. A greater distance than that required under this paragraph may be required by state law, local ordinance, rule or regulation. The Ridge Subdivision project shall meet the requirements found within this code section.

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<sup>5</sup> Penryn Fire Protection District "Will Serve" Letter to Placer County; July 22, 2019.

<sup>6</sup> Cal Fire Nevada-Yuba-Placer Unit. *Unit Strategic Fire Plan Nevada-Yuba-Placer Unit*. (2017): P.12 <http://cdfdata.fire.ca.gov/pub/fireplan/fpupload/fpppdf1596.pdf>.

- 4.2 Chapter 9, Article 9.32, Part 3 of the Placer County Code requires the maintenance of "fire breaks" around structures and the clearing of roofs to prevent structural fires in the "Wildland-Urban Interface" Zone<sup>7</sup>. The Ridge Subdivision project will comply with this requirement.
- 4.3 Chapter 9, Article 9.32, Part 4 of the Placer County Code requires that "hazardous vegetation be abated on unimproved parcels in the county. Abatement of hazardous fuels is required if the unimproved parcel is adjacent to an improved parcel where implementation of required defensible space would extend onto the unimproved parcel. Abatement is also required along roads if in the opinion of the county fire warden the presence of hazardous fuels constitutes a potential obstacle to emergency access." These provisions apply to the Ridge Subdivision including all unimproved parcels. Proposed fuel treatments such as a shaded fuel break required on the Lafaille Ranch property for the protection of the Ridge Subdivision shall be compatible with the code requirements found in this article.
- 4.4 California Building Code (CBC) Chapter 7A (Materials and Construction Methods for Exterior Wildfire Exposure) establishes "*minimum standards for protection of life and property by increasing the ability of a structure located in a Fire Hazard Severity Zone within State Responsibility Areas or any Wildland Urban Interface fire area. The goal of these provisions is to resist the intrusion of flames or burning embers projected by a vegetation fire and that contributes to a systematic reduction in conflagration losses*"<sup>8</sup>.

## 5.0 Fire Hazard Versus Fire Risk

The threat of wildfire exposure to people, critical infrastructure, structures and communities is based upon a comprehensive vulnerability assessment of an area. This vulnerability assessment is usually completed through the evaluation of both *fire hazard* and *fire risk* factors. The term "hazard" describes the density of live or dead vegetation that may be ignited by the various fire risks or causes that can increase a fire's intensity or rate of spread such as topography or weather conditions. The term "risk" describes the potential damage a fire can do to buildings, critical assets/infrastructure and other values at risk in individual open space areas and other wildland urban interface areas.

Landowners, managers and fire officials need to consider the potential fire hazard and risk factors that may make their community vulnerable to a wildfire when making land management and development decisions in fire-prone areas<sup>9</sup>. This assessment also aids fire agencies in the preparation of pre-incident plans and resource deployment actions such as fire equipment

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<sup>7</sup> Describes locations in which the fire warden determines the topographical features, vegetation fuel types, local weather conditions, and prevailing winds can result in the potential for ignition of the structures within the area from flames and firebrands of a wildland fire.

<sup>8</sup> *UpCodes* (accessed June, 2019); California Building Code Chapter 7A; <https://up.codes/viewer/california/ca-building-code-2016-v1/chapter/7A/sfm-materials-and-construction-methods-for-exterior-wildfire-exposure#7A>

<sup>9</sup> Wildfire Hazard and Risk Assessment, United Nations Office for Disaster Risk Reduction, 2017

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staffing levels and resource placement during critical fire periods. This assessment should consider the following factors when assessing the wildfire exposure potential for an area:

*Table 1: Hazard and Risk Assessment Factors*

<b>Hazard Assessment Factors</b>	<b>Risk Assessment Factors</b>
<ul style="list-style-type: none"><li>• Vegetation (fuel) types present</li><li>• Topography of the area</li><li>• Weather conditions present during both seasonal and critical fire weather periods</li><li>• Other criteria as determined by the Fire Agency</li></ul>	<ul style="list-style-type: none"><li>• Size and configuration of the WUI</li><li>• Proximity of structures to the WUI</li><li>• Building construction and defensible space provisions for structures near the WUI</li><li>• Emergency access including public/private roads and trails</li><li>• Local Fire Protection Capabilities</li><li>• Water supply sources and other risk factors</li></ul>

Fire Hazard ratings are provided by CAL FIRE as part of their *Fire Hazard Zone Severity Mapping* program. See Section 6 for additional details pertaining to the hazard assessment for the Project area. The Fire Risk Assessment for the Project is found within Section 7 of this report.

## 6.0 Fire Hazard Assessment for the Ridge Subdivision Project

One of the major hazards in the southwestern Placer County region is the threat of a disastrous wildfire endangering both people and property. The area is vulnerable to the threat of wildfire throughout the year subject to a variety of conditions including, but not limited to:

- Daily weather conditions such as air temperature, humidity, wind speed and direction.
- Climatic conditions such as drought, extended seasonal periods of hot, dry weather typically found in the summer and fall months, or seasonal rains typically found in the winter and spring months.
- Fuel moisture and growth cycle periods, especially in fine fuels such as the California Annual Grasslands that are prevalent in the area.
- Human caused ignition factors such as arson, escaped debris burns and unsafe equipment operation.

Under extreme weather conditions, such as high winds or hot dry weather, or when fire suppression resources are limited due to emergency incident activity, a small percentage of wildfires in southwestern Placer County can become large and damaging. It is therefore imperative that efforts be made in this area to establish and maintain communities, neighborhoods and individual homes that can withstand this wildfire risk.

The Project area is located within State Responsibility Area. The current CAL FIRE Hazard Severity Zone<sup>10</sup> Map for Placer County identifies the Project as being inside the *Moderate* Fire Hazard rating area.

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<sup>10</sup> CAL FIRE; Fire Hazard Severity Zone Map for Placer County (November, 2007); [http://frap.fire.ca.gov/webdata/maps/placer/fhszs\\_map.31.pdf](http://frap.fire.ca.gov/webdata/maps/placer/fhszs_map.31.pdf).

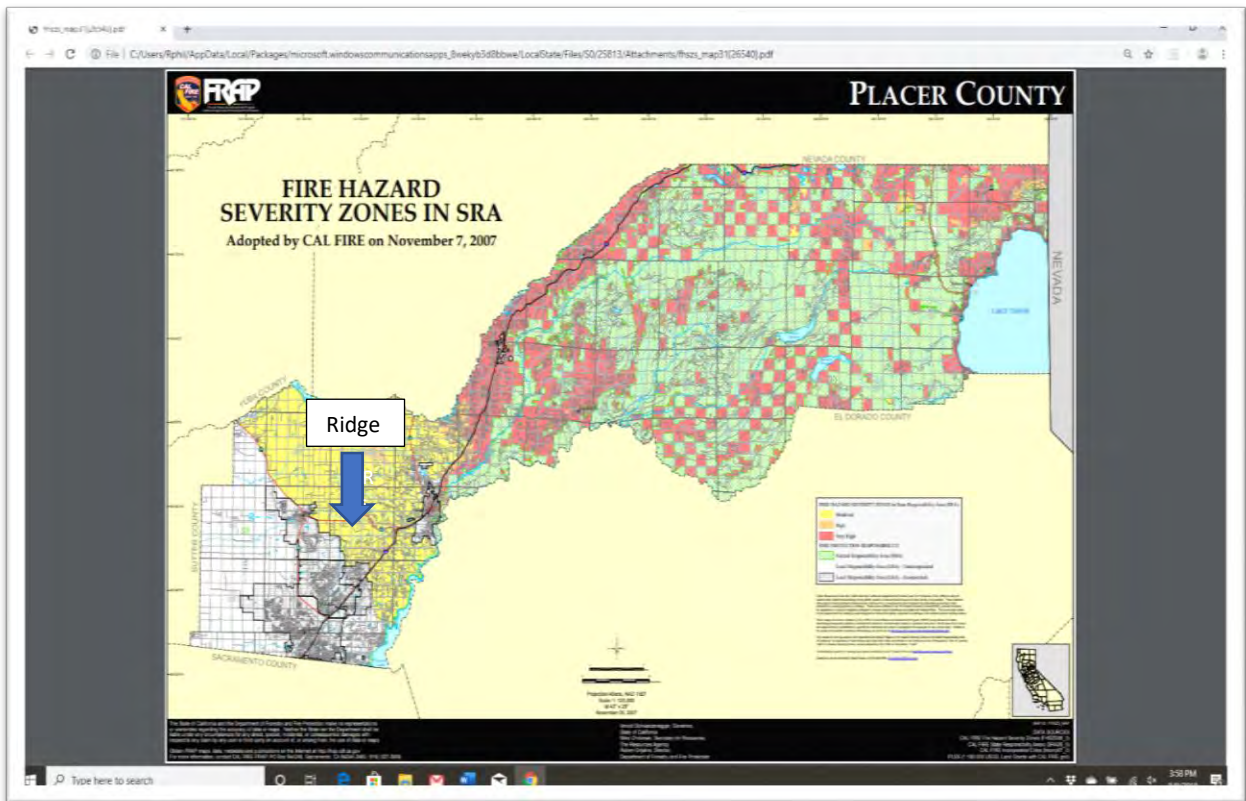


Figure 2: Cal Fire - Fire Hazard Severity Zone Map for Placer County

Specific fire hazard assessment criteria used for the Project area to assist in the determination of the current<sup>11</sup> Moderate rating include the following:

### 6.1 Historical Fire Weather Conditions in the Ridge Subdivision Project Area

Predominant weather patterns in the Project area<sup>12</sup> are characterized by hot dry summers and mild to cool winters. Dry conditions traditionally begin around the end of May and last into October. An average summer day is 90°- 95° Fahrenheit, winds from the southwest at 0-10 miles per hour, and relative humidity levels in the 15-25 percent range. Summer lightning storms are infrequent in the area. On average, the strongest wind speeds in South Placer occur in March through May, but winds can exceed 20 mph during the fire season.<sup>13</sup>

Critical fire weather conditions become more frequent starting in July through October each year. Critical fire weather conditions are typically associated with very low humidity and

<sup>11</sup> CAL FIRE is currently updating its Fire Hazard Severity Zone Map for all areas Statewide.

<sup>12</sup> Lincoln Remote Automated Weather Station Site; National Weather Service; <https://raws.dri.edu/cgi-bin/rawMAIN.pl?caCLIN>

<sup>13</sup> <http://www.usa.com/roseville-ca-weather.htm>, accessed June 22, 2018/2019

strong north winds. The ignition potential and fire spread rates during these conditions is high and can easily lead to large wildfires occurring.

### 6.2 Vegetation (Fuels)

The predominant fire fuel types found in the Project area include California annual grasses and oak woodlands.



Figure 3: Ridge Subdivision, Existing Vegetation Found on Property

California annual grasses cover the majority of the Project site. Dominant trees in the grassy savannas along the north side of Lots 15-25 and 29-34 are Blue Oak and Interior Live Oak. These open groves of oaks are underlain by grasslands creating the potential for an intense wildfire, burning in alignment with the topography and critical fire weather conditions present, that can potentially place the proposed structures on each lot at risk.

### 6.3 Topography

As stated previously the Project is found within a hillside plateau area identified as *Boulder Ridge*. This ridge runs generally east to west parallel to CA Highway 193. The Project has two smaller ridges that run north towards CA Highway 193. These ridges form a small canyon that originates on the LaFaille Ranch property and extends south onto the Project site.

The Project site is located at the top of a topographical drainage designated as a “canyon” that has steep slopes ( $\geq 30\%$ ) bordering the project. This canyon forms a natural “chimney”

that can enhance fire intensity and spread to hazardous levels. Lots 15-25 and 29-34 abut this canyon on the north side of each lot and are at greatest risk of an intense wildfire impacting structures on these properties.



Figure 4: Ridge Subdivision, Existing Topography Along North Property Boundary

#### 6.4 Wildfire History

According to CAL FIRE statistics the majority of wildland fires that have occurred in the Southwest Placer County area originated near existing roadways<sup>14</sup>. Common fire ignition sources have included arson, equipment failure, escaped debris burns, and vehicle related causes. Table 2 describes the significant wildland fire history in the vicinity of the Ridge Subdivision project area:

Table 2: Ridge Subdivision Fire History<sup>15</sup>

Year	Fire Name	Acres Damaged
1950	Beacon	500+
2003	Sierra	27
2008	Gladding	1,090
2008	Ravine	343
2013	Sierra	19

No large wildfires (>300 acres) have been reported in the Project area between 2009-2019. The “Beacon” fire in 1950 burned much of the Bickford Ranch area including the project site.

<sup>14</sup> -Strategic Fire Plan Nevada-Yuba-Placer Unit; P.48.

<sup>15</sup> -Strategic Fire Plan Nevada-Yuba-Placer Unit; P.128. **Battalion 18 Fire History Map**



No smaller fires have been reported within the project area during this same timeframe. Three smaller fires of between 10-300 acres occurred in the area between 2003-2018<sup>16</sup>. A review of public source documents did not identify a major wildland fire in the Ridge Subdivision area that caused the loss of a structure, or injury/death of a civilian or firefighter, within the last 20 years.

## 7.0 Fire Risk Assessment for the Ridge Subdivision Project Area

A comprehensive fire risk analysis is an important component of the Fire Safety Plan for the Project. The term “risk<sup>17</sup>” describes the probability of adverse wildfire exposure to people, to structures, critical assets/infrastructure and other values at risk located in the WUI Zone. This fire risk assessment was performed for the Project to determine relative risk, the extent of the wildfire hazards present, and applicable mitigation measures as outlined in National Fire Protection Association Standard No. 1144 (*Assessing Wildland Fire Hazards in the Structure Ignition Zone*), 2018 Edition.

Risk factors examined as part of this Project analysis include the following:

- Existing Conditions Found on the Project Site
- Size and configuration of the Wildland Urban Interface (WUI) Zone Adjacent to the Project
- Proximity of Structures Within the Project to the WUI Zone
- Building Construction of Structures and Hazardous Fuel Reduction Strategies Required to Reduce the Risk of Fire
- Emergency Vehicle Access Including Public/ Private Roads
- Local Fire Protection Capabilities
- Water Supply Sources for Fire Protection
- Critical Assets / Infrastructure at Risk

A detailed risk analysis of each of these points can be found below within this section.

### 7.1 Existing Conditions Found on the Project Site

The approximately 25 acres of land associated with the Project are generally described as undeveloped agriculture and livestock grazing land<sup>18</sup>. The nearest existing homes to the Project site are located nearly one mile north along CA Highway 193. Emergency vehicle access to the Project site is currently available via Clark-Tunnel Road. This is an unimproved public road that serves the Boulder Ridge area.

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<sup>16</sup> Sierra (2003) – 19 ac, Ravine (2008) – 300 ac, Sierra (2013) – 19 ac; *A History of California Wildfires*, Capital Public Radio, 2018.

<sup>17</sup> National Fire Protection Association Standard No 1144 (2018); Chapter 3, Section 3.3.19

<sup>18</sup> *Bickford Ranch Specific Plan*; Chapter 1, P.1-1

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No high-voltage electric power lines, essential service facilities, populations at risk, or critical infrastructure were identified within the current lands of the Project. Caperton Canal, an existing concrete-lined open-air canal that conveys raw water for local irrigation and domestic water uses, is located within a 30-foot easement generally north and west of the Project. The canal is identified as an *Infrastructure at Risk* site later in this report.

### *7.2 Size and Configuration of the Wildland Urban Interface (WUI) Zone Adjacent to the Project*

The Project is located within a hillside area that has been previously designated by CAL FIRE and PFPD as a potential Wildland Urban Interface (WUI) Zone should structures be built in the area. The WUI area includes the following undeveloped areas that have the potential to impact the structures constructed within the Project due to the topography and vegetation types present:

- The 168-acre LaFaille Ranch area that forms a canyon below the Project
- An approximately 125-acre plus designated open space area in BRSP west of the Project
- An approximately 80-acre plus designated open space area in BRSP east of the Project

The open space and undeveloped areas north of Bickford Ranch Road near the Project consist of a series of small canyons and drainages that flow north towards CA Highway 193. The canyons in this area were viewed to have steep topography on both sides of the drainage. These canyon areas were found to have extensive vegetation and tree canopies in most areas creating the potential for rapid wildfire growth that may quickly impact the Project. These open space and undeveloped areas are of concern to the fire agencies due to the adjacent canyon steep slopes that limit fire apparatus access and can potentially create a “Chimney Effect”<sup>19</sup> condition during intense wildland fire activity.

### *7.3 Proximity of Structures Within the Project to the WUI Zone*

The Project is planned for low density residential uses on Lots 1-28 and rural residential uses on Lots 29-34. Structures constructed on Lots 1-28 will be built by the lot owner or by a builder(s). Structures constructed on Lots 29-34 are planned as custom-built homes by future landowners.

All structures constructed on lots facing the WUI Zone (Lots 15-25 and 29-34) shall have a minimum 30-foot setback from the rear property line to reduce the threat of a wildfire impinging directly on the primary structure. This setback area is located on slopes that approach 30%. Accessory structures, decks, flammable landscape materials, wood piles and other potential combustible uses of this area that can contribute to fire spread from the WUI Zone to the primary structure should be avoided unless additional wildfire preparedness actions are approved by PFPD and CAL FIRE.

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<sup>19</sup> Verbal communications with Cal Fire / PCFD Captain Mike DiMaggio (June, 2019).

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*7.4 Building Construction and Hazardous Fuel Reduction Strategies Required to Reduce the Risk of Fire*

Structures constructed within the Project will comply with the current requirements of the California Building Code (CBC). All dwellings in the Project shall be provided with an approved residential fire sprinkler system, as required by State law. Accessory structures, detached garages, outdoor living space structures, and other miscellaneous structures located on the property shall be constructed in accordance with the current CBC requirements to reduce the risk of a fire spreading to the primary structure on-site.

Dwellings located on Ridge Subdivision Lots 15-25 and 29-34 will be constructed and maintained in accordance with the current design standards found in *California Building Code (CBC) Chapter 7A (Materials and Construction Methods for Exterior Wildfire Exposure)*. Examples of where construction methods and other development activities will meet the ignition resistant requirements found in this chapter include, but are not limited to, the following:

- Class A roof coverings, fire resistant valley flashings, and an approved means to prevent the accumulation of leaves and debris in roof gutters.
- Ventilation openings into enclosed attics, enclosed eave soffit spaces, enclosed rafter spaces and underfloor ventilation openings.
- Exterior wall materials, decks, porches, balconies, stairs and other projections.
- Roof eaves and exterior porch ceilings.
- Exterior windows, doors, glazing and skylights.
- Accessory buildings and miscellaneous structures located within 50' of another building.

Fencing materials located along the side and rear yard property lines facing the WUI on Ridge Subdivision Lots 15-25 and 29-34 shall be constructed of non-combustible materials. Areas located between 0-feet and 5-feet from the dwelling shall remain non-combustible. Landscape materials and other vegetation located within 30' of dwellings shall comply with the fire-resistant standards of PFPD and CAL FIRE. Exterior combustible decks that cantilever over the natural slope of the property shall be enclosed to reduce the potential of burning embers from a wildfire creating spot fires that can extend into the building.

A 300-foot wide shaded fuel break that reduces hazardous live and dead vegetation near the project shall be constructed and maintained in accordance with PFPD and CAL FIRE standards in the canyon below Ridge Subdivision Lots 15-25 and 29-34. The construction of the shaded fuel break will commence at the property line between the lot(s) and adjoining LaFaille Ranch property. It will extend nominally 300-feet except when variances are allowed due to topographical issues, sensitive cultural resources present, or environmental concerns. The shaded fuel break will be constructed and accepted by PFPD and CAL FIRE prior to the issuance of the first building permit within the Project. Maintenance of the shaded fuel break will be the responsibility of the local Homeowners Association and will require the

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recordation of an “Fuel Management Zone” easement along with a right of entry approval from the adjoining property owner(s).

### *7.5 Emergency Vehicle Access Including Public/Private Roads*

Fire access is an important element to the overall fire safe plan for the Project area. Fire access can be described as the means (e.g., roads, bike paths, trails, etc.) by which firefighters can enter an area to quickly mitigate a wildfire incident before it spreads to adjacent properties and critical assets / infrastructure at risk. Joint efforts to develop and maintain ingress/egress for local evacuation and fire suppression response are required to ensure that both public and firefighter safety is provided.

The main emergency response route into the BRSP area and this Project will be Sierra College Boulevard. This public road connects to Bickford Ranch Road which serves as the primary arterial access / egress road to the Project site. BRSP will also be served by a network of additional arterial, collector and local streets. This circulation design will help to reduce traffic congestion and aid PFPD and CAL FIRE in providing emergency services to the Project and surrounding area in acceptable response timeframes.

Three BRSP Emergency Vehicle Access (EVA) roads are planned for the area. These EVA roads will also serve the Project and can provide emergency vehicle access to the Project, and serve as secondary evacuation routes for the public, when Bickford Ranch Road and the other primary roads in the area are obstructed or heavy congested. These EVA locations are: [a] Clark Tunnel Road to Highway 193, and [b] Clark Tunnel Road at the southeast corner of that project, and [c] the southernmost portion of the BRSP to Woodsdale Court in Penryn.

The Project will be served by one private fire apparatus road. The private *road* will be 40' in width and will meet the fire apparatus access requirements found in the California Fire Code (CFC). Two private *lanes*, 20' in width (24' wide private easement), meeting the fire apparatus access requirements found in the CFC, will be constructed and maintained to serve Ridge Subdivision Lots 29-32 and Lots 25, 32-34. All proposed fire apparatus access routes in the project have been reviewed and approved by PFPD and CAL FIRE as part of the preliminary project review process.

A coordinated pre-planning effort between PFPD, CAL FIRE and the landowners will contribute to a timely and effective fire suppression response. The pre-planning efforts include accurate mapping that identifies the fire access system and available water supplies. It also identifies community evacuation routes and safe refuge areas. The sharing of electronic site files can enhance GIS efforts and ensure accurate mapping is completed.

### *7.6 Local Fire Protection Capabilities*

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Fire and rescue services for the project site are the responsibility of the **Penryn Fire Protection District (PFPD)**<sup>20</sup>. The BRSP area and adjoining unincorporated areas near the project site are served by the Placer County Fire Protection District (PCFD). Existing mutual aid agreements between PCFD and PFPD are in place.

The closest fire station to the project area is PFPD Station No. 38 located on Church Street in the Penryn community<sup>21</sup>. Services are provided by one Type I /III fire engine staffed daily by a minimum of two full-time firefighters. These firefighters are augmented by resident firefighters that support the emergency response capabilities of the district. Upon completion of Phase 1 of Bickford Ranch Road to the Project site response times from PFPD Fire Station 38 will be on average 10 minutes or less for all fire and rescue emergencies.

CAL FIRE Station No. 70 is located near the City of Lincoln on Wise Road. This fire station is jointly operated with PCFD and provides services to the unincorporated areas of Placer County, including the BRSP area. This station provides wildfire protection responsibilities for all State Responsibility Area (SRA) lands near the Project.

Services are provided by one Type I/III fire engine staffed daily by a minimum of two full-time firefighters. These firefighters are augmented by seasonal and volunteer firefighters that support the emergency response capabilities of CAL FIRE and PCFD. Upon completion of Phase 1 of the Bickford Ranch Road to the Project site, response times from CAL FIRE Station 70 will be on average 20 minutes or less for all wildfires and other emergencies.

Upon the issuance of 1,000 building permits in BRSP one new fire station will be constructed and staffed in the area<sup>22</sup>. The fire station is planned on a 1.4-acre site (Parcel PF-1) at the northeast corner of Bickford Ranch Road and Sierra College Boulevard<sup>23</sup>. The conceptual design of the fire station is described in Section 3.8 of the Bickford Ranch Development Standards.

### *7.7 Water Supply Sources for Fire Protection*

The Project will be served by a municipal water supply system provided by the Placer County Water Agency (PCWA). The Project will receive its water supply through a new 18-inch water transmission pipeline in Bickford Ranch Road and stored within new water infrastructure in the BRSP area. The new transmission and storage system provided by BRSP will connect to an existing PCWA 30-inch pipeline off-site of both the BRSP area and this Project. Water will be stored locally within the BRSP area via the new Storage Tank and Pump Station to meet both fire-flow requirements and domestic water consumption requirements.

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<sup>20</sup> Penryn Fire Protection District Zone (June, 2019); Source PFPD Chief Higgins.

<sup>21</sup> Penryn Fire Protection District; <http://www.penrynfir.org/>

<sup>22</sup> *Bickford Ranch Specific Plan*; Chapter 6, P.6-9

<sup>23</sup> *Ibid.*, Chapter 6, P.6-4

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The Project will provide a municipal water distribution pipeline meeting PCWA standards that will be connected to the BRSP system. This water main system will be capable of meeting and/or exceeding the Project fire-flow requirements of 1,000 GPM @ 20 PSIG for 2 hours duration as identified in the California Fire Code (CFC). Fire hydrants meeting PCWA, PFPD and CAL FIRE requirements will be spaced on average every 500-feet along the proposed private road and two lanes in accordance with the CFC. Eight fire hydrants have been tentatively identified for placement along Project roads/lanes at the following locations:

- Along the private road near Lots 14/15
- Along the private road near Lots 18/19
- Along the private road near Lots 21/22
- Along the private road near Lots 24/25
- In the turnaround along the private lane at Lot 30
- In the turnaround along the private lane at Lot 33
- In the turnout along the private lane at Lots 33/34
- In the turnaround along the private lane at Lot 34

#### 7.8 Critical Assets / Infrastructure at Risk

The identification and analysis of Critical Assets and Infrastructure at Risk is an important part of a comprehensive fire risk analysis. This analysis also looks at potential risks associated with public service sites designated in California as being “Essential” that must conform to current seismic design criteria. Refer to *Attachment B: Critical Assets / Infrastructure at Risk Table* for additional information on the various categories of uses that have been identified within the Project area.

The Project has no proposed uses that are identified as *Critical Assets* that could be at risk during a wildfire<sup>24</sup>. No *Essential Service* building uses<sup>25</sup> are proposed within the Project. One *Infrastructure at Risk* site, the Caperton Canal, has been identified as a location within the Project area that could be adversely impacted by a wildfire.

The Caperton Canal is located north of the Project and conveys raw water for the Placer County Water Agency (PCWA) to the PCWA Sunset Water Treatment site for municipal water supply and irrigation purposes in the region<sup>26</sup>. The canal lies within the 168-acre LaFaille Ranch property and a portion of the water from the canal is used to also irrigate the ranch.

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<sup>24</sup> Critical Assets and Infrastructure is defined by the U.S. Department of Homeland Security as those sites that are vital to national security, governance, public safety, energy, telecommunications and public transportation.

<sup>25</sup> “Essential Services Building” means any building, including buildings designed and constructed, for public agencies used, or designed to be used, or any building a portion of which is used or designed to be used, as a fire station, police station, emergency operations center, California Highway Patrol office, sheriff’s office, or emergency communication dispatch center.

<sup>26</sup> *Bickford Ranch Specific Plan*; Chapter 6, P.6-9

Although the canal is indirectly associated with the Project through common ownership there are currently no design plans to utilize the water contract right to serve the Project<sup>27</sup>.



*Figure 5: Caperton Canal, North of Ridge Subdivision Project*

The PCWA Caperton Canal is located within an approximately 30-foot wide easement that is designed to allow access to it for maintenance and repair purposes. The canal easement is located between 54-feet and 150-feet from the building setback line on Lots 15-25 and 29-34 in the Project. This easement area contains California Annual Grasses and other vegetation that can allow for rapid fire spread into the Project area. To reduce this risk defensible space work should be performed in the easement area on a yearly basis prior to the start of the declared “Fire Season” in Placer County<sup>28</sup>.

## 8.0 Fire Risk Rating for the Ridge Subdivision Project

The fire risk factor scoring for the project is found in Table 3. The overall risk rating can be described as Low (0-29), Moderate (30-59), High (60-79) and Very-High (80-100). When analyzing individual fire risk factor ratings within the Project area the following terms are used:

- **LOW RISK** – Fire risk factors present typically do not support rapid fire spread.
- **MODERATE RISK** – Fire risk factors present may support moderate fire spread, but burning ember distribution is limited to less than ½ mile.
- **HIGH RISK** – Fire risk factors present may support rapid fire spread and ember distribution beyond ½ mile.

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<sup>27</sup> Written communications with Bob Nielebeck, July 2, 2019

<sup>28</sup> The CAL FIRE Unit Chief for Placer County makes this official designation annually based on local wildfire probability criteria.

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- **VERY-HIGH RISK** – Fire risk factors present may support extreme fire spread and intensity.

NOTE: No **Very High-Risk** factors are currently identified within the Project area.

Table 3: Fire Risk Factor Rating for the Ridge Subdivision Project

No.	Risk Factor	Low 0-3	Moderate 4-6	High 7-8	Very-High 9-10	Total
1	Fire Hazard Severity Rating	○	⑥	○	○	6
2	Local Fire Department Capabilities	○	⑥	○	○	6
3	Local Fire History	○	⑥	○	○	6
4	Size / Configuration of the WUI	○	○	⑦	○	7
5	Proximity of Structures to WUI	○	○	⑦	○	7
6	Building Construction Meets CBC CH 7A	○	⑥	○	○	6
7	Defensible Space Complies with PRC 4291	○	⑥	○	○	6
8	Emergency Access to WUI	○	⑥	○	○	6
9	Water Supply for Fire Suppression	○	⑥	○	○	6
10	Critical Assets / Infrastructure at Risk	①	○	○	○	1
	<b>Total</b>	<b>1</b>	<b>42</b>	<b>14</b>	<b>0</b>	<b>57 / 100</b>

**Overall Wildfire Risk Rating:** *Moderate (30-59)*

The fire risk factor associated with the *Size and Configuration of the WUI Zone* should be considered “High” unless adequate preparedness measures are undertaken by the Project and subsequent property owners. This includes all structures being constructed to resist exterior wildfire exposure and maintaining adequate defensible space within 300-feet of buildings facing the LaFaille Ranch undeveloped canyon area.

The fire risk factor associated with the *Proximity of Structures within the Project to the WUI Zone* should be considered “High” unless adequate preparedness measures are undertaken. This includes maintaining a 30-foot setback between the primary structure and the WUI Zone and limiting the use of combustible materials such as accessory structures, decks cantilevered over the rear-yard natural slope and other uses that can contribute to fire spread.

The fire risk factor associated with *Building Construction and Hazardous Fuel Reduction Strategies* for the Project should be considered “Moderate” for the project. Preparedness actions such as ensuring all structures constructed on a property meet current CBC standards, providing adequate defensible space, and the construction and maintenance of a shaded fuel break will limit the risk of a wildfire impacting the Project.

The fire risk factor associated with *Emergency Vehicle Access* needs for the Project should be considered “Moderate”. Access to the Project via Bickford Ranch Road will be available as part of Phase I of the BRSP area. The Clark-Tunnel Road to CA Highway 193 EVA will be constructed and available for use by emergency responders as part of BRSP Phase I. The private road and two lanes serving the Project will comply with current CFC requirements prior to the construction of



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structures on each lot. Both private lanes can also be interconnected to the adjoining BRSP subdivisions<sup>29</sup> via a proposed gated EVA.

The fire risk factor associated with *Local Fire Protection Capabilities* meeting the needs of the Project should be considered “Moderate”. The Project area is currently within the emergency response goals of the Penryn Fire Protection District. With the addition of a new fire station in the BRSP area emergency response times will improve further.

The risk factor associated with *Water Supply for Fire Suppression* should be considered “Moderate”. The Project is proposed to meet the required fire flow demands, minimum operating pressures and storage capacity to support fire suppression activities during a wildfire. The Project proposes six fire hydrants that will be distributed to allow firefighters to access a fire hydrant quickly. All dwellings constructed in the Project will be protected by a residential fire sprinkler system meeting current CBC design standards to reduce the risk of a fire inside the home when it is occupied. Reliability and maintenance of the water supply is a key factor for the water supply system to work as designed during the height of a wildfire.

The fire risk factor associated with *Critical Assets / Infrastructure at Risk* sites in the Project should be considered “Low”. The only identified infrastructure site of concern during a wildfire impacting the area is the PCWA Caperton Canal. This canal provides raw water for municipal water and irrigation purposes in the area and may serve both the BRSP area and the Project.

It is important to remember that the risk factor ratings described do not infer that a community is at greater or less risk due to its overall rating. Fires can, and do, cause significant damage to property even when they occur in areas that may receive an overall low or moderate rating. Failure to maintain adequate defensible space, critical fire weather conditions and/or lack of available fire suppression resources due to other emergency incidents may cause a fire to increase its intensity and fire spread beyond the capabilities of firefighters on scene.

END

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<sup>29</sup> BRSP Villages RR-02 and RR-03

## TECHNICAL MEMORANDUM

DATE: June 7, 2021

TO: Adrienne L. Graham, A.I.C.P.

FROM: Ronald A. Phillips

RE: **Ridge Subdivision Fire Safe Plan / TM2: Fuel Management Plan and Recommended Maintenance Frequency**

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### 9.0 Introduction

The purpose of this memo is to describe the recommended fuel management best practices that form the **Ridge Fuel Management Plan** (Plan). This Plan will reduce the risk of a wildfire damaging structures within the Ridge Subdivision (Project). The best practices include [1] adequate defensible space near structures and [2] a Modified Shaded Fuel Break. The fuel management recommendations found in the Plan are based on the following assumptions:

- The undeveloped land located on LaFaille Ranch, and Project Lots 15-25 and 29-34, are designated by local fire officials as a Wildland Urban Interface (WUI) Zone.
- State law and Placer County Code do not modify their existing requirements for fuel management in areas at risk to a wildfire.
- Fuel management activities are done in a manner that can reduce the wildfire risk and limit the impact to sensitive biological resources found in the WUI Zone.
- The recommended best practices described in the Ridge Subdivision Fuel Management Plan are implemented and maintained.

### 10.0 Fuel Management Regulations Applicable to the Ridge Subdivision

California Public Resource Code (PRC) 4291 states that property owners will maintain a 100-foot defensible space perimeter around all structures<sup>1</sup> on their property if they are in proximity to forests, grasslands or similar undeveloped areas. All structures constructed on lots facing the LaFaille Ranch undeveloped land area (Lots 15-25 and 29-34) shall comply with the regulations found in PRC 4291. Defensible space on each lot is the responsibility of the individual property owner. Defensible space within the Project starts at the structure and extends out 100-feet or to the property line that faces the undeveloped area if the property line is less than 100 feet from the structure.

In addition, Placer County Code Section 9.32.120 extends these requirements to adjacent unimproved properties when an *extra hazardous* fire condition exists. In consultation with

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<sup>1</sup> Defensible space is required on each side, and from the front and rear, of all structures.

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Penryn Fire Protection District (PFPD) and CAL FIRE officials they have determined that the undeveloped land on the LaFaille Ranch property constitutes an *extra hazard* fire condition to the Project. Fire officials have also identified the LaFaille Ranch undeveloped lands, and Project Lots 15-25 and 29-34, as a WUI Zone. This finding is based on the following conditions identified by fire officials to exist below the Project on LaFaille Ranch: [1] local topography, including a canyon and slopes 30%±, that can intensify burning conditions near the lots identified; [2] limited emergency vehicle access into the undeveloped land; and [3] natural vegetation including grassland, dense shrubbery and oak woodlands. These conditions have the potential to create dangerous fire conditions that may impact the nearby structures and endanger the resident population in the Project. The Project therefore should meet both State and Placer County requirements.

PFD and CAL FIRE will require the construction and on-going maintenance of a *Modified Shaded Fuel Break*<sup>2</sup> (MSFB) to protect the structures and population in the Project from an advancing wildfire. The MSFB originates at the rear property line of Lots 15-25 and 29-34, and extends nominally 300-feet into the LaFaille Ranch undeveloped land area. See the **Ridge Subdivision Site Development Plan** found in TM Attachment D for addition information on the general location of the MSFB.

## 11.0 Fuel Management Program

A *Ridge Subdivision Fuel Management Program*<sup>3</sup> shall be established to maintain defensible space and the MSFB in the Project. The program shall be designed to ensure the following fuel management activities are completed in a timely manner:

- a. Provide administrative oversight and coordination of fuel management projects within the Project area.
- b. Confirm that fuel management projects are identified, scheduled and completed in accordance with this Fuel Management Plan.
- c. Coordinate the use of resources (e.g. crews, mechanical equipment, domestic livestock, prescribed fire, etc.) that are most appropriate for the fuel management work that is required.
- d. Ensure that sensitive biological resources within each area are identified in advance of the fuel management project. Complete pre/post project inspections of these areas to safeguard sensitive areas from damage and/or destruction.
- e. Verify that each fuel management project has sufficient fiscal resources available to it using industry best practices that are most appropriate for the Project area.

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<sup>2</sup> A *Modified Shaded Fuel Break* is a wildfire preparedness action designed to decrease the intensity of a wildfire burning in a natural open space area through the removal of dead fuels, pruning of trees, and removal of shrubs, brush and other vegetative growth.

<sup>3</sup> The program includes the administration, resource types used and funding sources to apply the Fuel Management Plan described here.

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- f. Ensure the safe disposal (e.g. hauling it to a landfill, chipping/mulching on site, etc.) of biomass materials removed as part of a fuel management project.

## 12.0 Fuel Management Plan Elements

The *Ridge Subdivision Fuel Management Plan* (Plan) is envisioned to serve as a master plan for the implementation of wildfire safeguards in the Project area. The Plan includes the following fuel management elements:

- a. Defensible space requirements as identified in PRC 4291 and Placer County Code Chapter 9, Article 9.32, Part 3 and 4.
- b. Modified Shaded Fuel Break requirements
- c. Fuel Management on vacant properties and during construction activities.
- d. Maintenance frequencies for all areas.

A detailed description of each element is provided below.

### 12.1 *Defensible Space Requirements*

The term “Defensible Space” refers to reducing the wildfire vulnerability in WUI Zones by actions that will decrease the potential of heat, flames and embers spreading to structures. Defensible space work around structures should be performed within 2 zone areas based on the fire risk reduction efforts necessary to protect the occupants and property. Those 2 zones are:

- **Zone 1:** areas between 0-feet and 30-feet from dwellings, decks and other structures. The goal is to avoid structure ignition from burning embers. Defensible space efforts include using fire resistive landscape materials as recommended by PFPD and CAL FIRE. Use noncombustible materials such as rock, stone pavers, cement, bare earth, gravel or sand within 5 feet of the structure. Use fire resistive landscape materials and plants within 5-feet of window openings. Remove leaves and needles from the roof and gutters. Clear vegetation and combustible items such as furniture that could catch fire from around and under decks. Remove dead branches that overhang or touch the roof. Keep branches 10-feet or more away from wood burning chimneys. Remove all dead vegetation, grass, dry leaves and pine needles from the yard. Relocate wood piles outside this zone. Do not use bark mulch materials that can contribute to burning embers landing near structures. Use non-combustible materials such as rock instead. Trim trees and shrubs regularly to maintain a minimum 10-foot clearance between branches of adjoining trees or shrubs
- **Zone 2:** areas between 30-feet and 100-feet of dwelling, decks, other structures or to the property line. The goal is to reduce heat and the movement of flame towards structures. Defensible space efforts include the cutting of annual grasses down to a height of 4-inches or less, creating 10-foot horizontal spacing between shrubs and trees, removing debris piles of dead materials, and the removal of ground ladder fuels within 10-feet of the ground between shrubs and trees. Remove dead trees and shrubs.

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Many of these efforts shall be performed by the individual property owner except in cases whereby the setback distance of the structure extends onto another property and/or undeveloped land. In those cases, a coordinated effort will be required between the individual property owners and the Ridge HOA.

Figure 6 provides additional information on defensible zone spaces around structures.

#### *12.2 Modified Shaded Fuel Break Requirements*

A 300-foot wide Modified Shaded Fuel Break (MSFB) that reduces hazardous live and dead vegetation near the Project shall be constructed and maintained in accordance with PFPD and CAL FIRE standards in the canyon below Ridge Subdivision Lots 15-25 and 29-34. The construction of the MSFB shall commence at the property line between the lot(s) and adjoining property, and will extend nominally 300' except when variances are allowed due to topographical issues, sensitive cultural resources present, and/or environmental concerns such as the presence of protected species. The MSFB shall be constructed and accepted by PFPD and CAL FIRE prior to the issuance of the first building permit within the Project. Maintenance of the shaded fuel break shall be the responsibility of the Ridge HOA and shall require the recordation of a "Fuel Management Zone" easement along with a right of entry approval from the adjoining property owner(s). See the MSFB Criteria for the Project below for additional details.

#### **Modified Shaded Fuel Break Criteria for the Project**

- 12.2.1 Fuel reduction work shall include the cutting of annual grasses down to a height of 4-inches or less through grazing, mowing or comparable means, removal of dead and diseased trees, debris and the removal of tree limbson live trees up to a height of 10-feet above the ground. Tree branches are to be limbedto at least 10-feet when possible. The minimum height may be lowered when trees areyoung or small; or if it is unsafe to reach a 10-foot height due to terrain, equipment, orskill level.
- 12.2.2 Understory fuels over 1-foot in height are to be removed in order to develop vertical separation and low horizontal continuity of fuels. Individual plants or pairs of plants may be retained provided there is a horizontal separation between plants of 3 to 5 times the height of the residual plants and the residual plants are not within the drip lines of an overstory tree.
- 12.2.3 Fuel reduction shall include the removal of all dead vegetation 4 inches or less in diameter. Trunks shall be cut flush with the ground. The removal of additional trees shall be done in consultation with CAL FIRE and Placer County staff.
- 12.2.4 Threatened and/or endangered species may be present within the MSFB area. The recommendations of the Project biologist shall be implemented with respect to avoiding loss or harm to the affected species, or restoration and/or compensation measures to be undertaken if the species' habitat cannot be avoided. For example, if nesting raptors are present, the nesting tree shall not be removed and no tree removal or mechanical activity shall occur within a buffer zone established around the nest until

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the young have fledged. The Federal and/or State agency with jurisdiction over the affected protected species shall also be consulted. See Appendix D for additional measures to be taken to address protected species.

- 12.2.5 Annual grasses shall be maintained below 4-inches in height just after the grasses cure in early summer. Additional fuel treatment work may be necessary throughout the year within 100-feet of structures to maintain defensible space requirements.
- 12.2.6 It is desirable to remove as much brush and large vegetation as possible within the modified shaded fuel break area. However, if individual plants or pairs of plants are desired to be left, leave plants with the following characteristics: young plants less than 5 feet tall and individual or pairs of plants that are no more than 5-feet in width.
- 12.2.7 Tree snags shall be removed when they meet one or more of the following criteria:
  - a. Snags 17-inch Diameter Breast Height (DBH) or smaller
  - b. Snags greater than 30-feet in height
  - c. Snags which are capable of reaching a structure
  - d. Snags closer than 100-feet from adjoining snags.
- 12.2.8 The cutting of vegetation materials shall be done with CAL FIRE approved spark arrestors.
- 12.2.9 The removal of annual grasses and other fine fuels shall be completed through the use of plastic string weed trimmers or other PFPD or CAL FIRE approved equipment.
- 12.2.10 Chipping of material is permitted. Chipped material shall be removed from the site unless otherwise approved by the landowner representative.
- 12.2.11 Prescribed burning and / or herbicide use is not allowed within the MSFB area unless such use is approved by Placer County, PCWA, CAL FIRE and the PFPD.
- 12.2.12 Approved fire suppression equipment is required on-site at all times during the fuel-reduction activities
- 12.2.13 All fuel reduction work shall be performed using every reasonable measure to minimize erosion, ground disturbing activities and soil damage. Where the ground is exposed by fuel reduction efforts, the area shall be revegetated and/or erosion control measures shall be installed prior to October 15.
- 12.2.14 Pruning on live trees shall be performed in accordance with the Best Management Practices set forth by the International Society of Arboriculture (ISA) and conform to ANSI A300 Standards for Tree Care.
- 12.2.15 The following tree-spacing guidelines are recommended when feasible; when not in conflict with applicable standards or codes; and after consultation with the CAL FIRE, Placer County, or the respective agency representative(s):
  - a. Intermediate Zone (5-feet to 30-feet from structures) - trees / clumps of trees should have a minimum of 18 feet between tree tops. This provision would typically include those trees on private property that extend into the open space.
  - b. Extended zone (30-feet to 100 feet from structures) - trees/clumps of trees should have a minimum of 12 feet between tree tops.
  - c. Extended Zone (100-feet to 300-feet from structures) - trees/clumps of trees should have a minimum of 6 feet between tree tops.

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*12.3 Fuel Management on Vacant Properties / During Construction*

Undeveloped parcels adjacent to structures, either when vacant or under construction, can pose a significant fire risk to adjacent occupied structures. To reduce the risk of wildfires spreading to nearby structures a 100-foot defensible space zone shall be established and maintained between developed parcels and adjacent undeveloped parcels or during construction activities. Construction related work such as welding and other “hot work” activities during critical fire periods can pose an increased risk of fire ignition that can lead to a significant wildfire risk. Construction activities shall conform to the current Fire Code provision required by PFPD and CAL FIRE.

*12.4 Fuel Management Maintenance Frequency*

The effectiveness of the Fuel Management plan requires certain elements to be maintained on an annual or otherwise noted frequency. The coordination of fuel management work between the Ridge HOA, PFPD and CAL FIRE staff, and the adjacent land owner(s) to complete these projects in a timely fashion is imperative for the success in minimizing the wildfire risk in the Project area.

Table 4 provides additional details regarding the recommended maintenance frequency for various activities described in the Plan.

*Table 4: Maintenance Frequency for the Modified Shaded Fuel Break (MSFB)*

<b>Action Item</b>	<b>Party Responsible</b>	<b>Frequency</b>
<b>Complete annual inspection of the MSFB using the criteria found in Section 12.2 prior to the declaration of fire season by CAL FIRE to identify the scope of maintenance work required.</b>	<b>Ridge HOA</b>	<b>Annual</b>
<b>Obtain approval from LaFaille Ranch land owner(s) to access the MSFB to perform annual maintenance.</b>	<b>Ridge HOA</b>	<b>Annual</b>
<b>Remove/trim annual grasses to less than 4-inches height within 300-feet of adjacent property lines.</b>	<b>Ridge HOA</b>	<b>Annual</b>
<b>Remove debris piles, dead trees (snags) or dying trees, down trees and limbs.<sup>4</sup></b>	<b>Ridge HOA PFPD / CAL FIRE</b>	<b>Annual</b>
<b>Removal of understory fuels that contribute to fire spread.</b>	<b>Ridge HOA</b>	<b>Annual</b>

<sup>4</sup> This plan recognizes that dead and dying trees may provide a beneficial use for the habitat. The removal of this vegetation should be completed after an annual inspection by representatives from CAL FIRE and the HOA Manager has been completed and a scope of work agreed on by both parties.

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Action Item	Party Responsible	Frequency
Removal or treatment of invasive exotic plant species that may invade the area cleared in the MSFB.	Ridge HOA	Annual
Remove biomass materials from the site and dispose of in accordance with best practices.	Ridge HOA	Annual
Remove ladder fuels (tree limbs) to 10-foot DBH and increase tree canopy spacing.	Ridge HOA	10 Year



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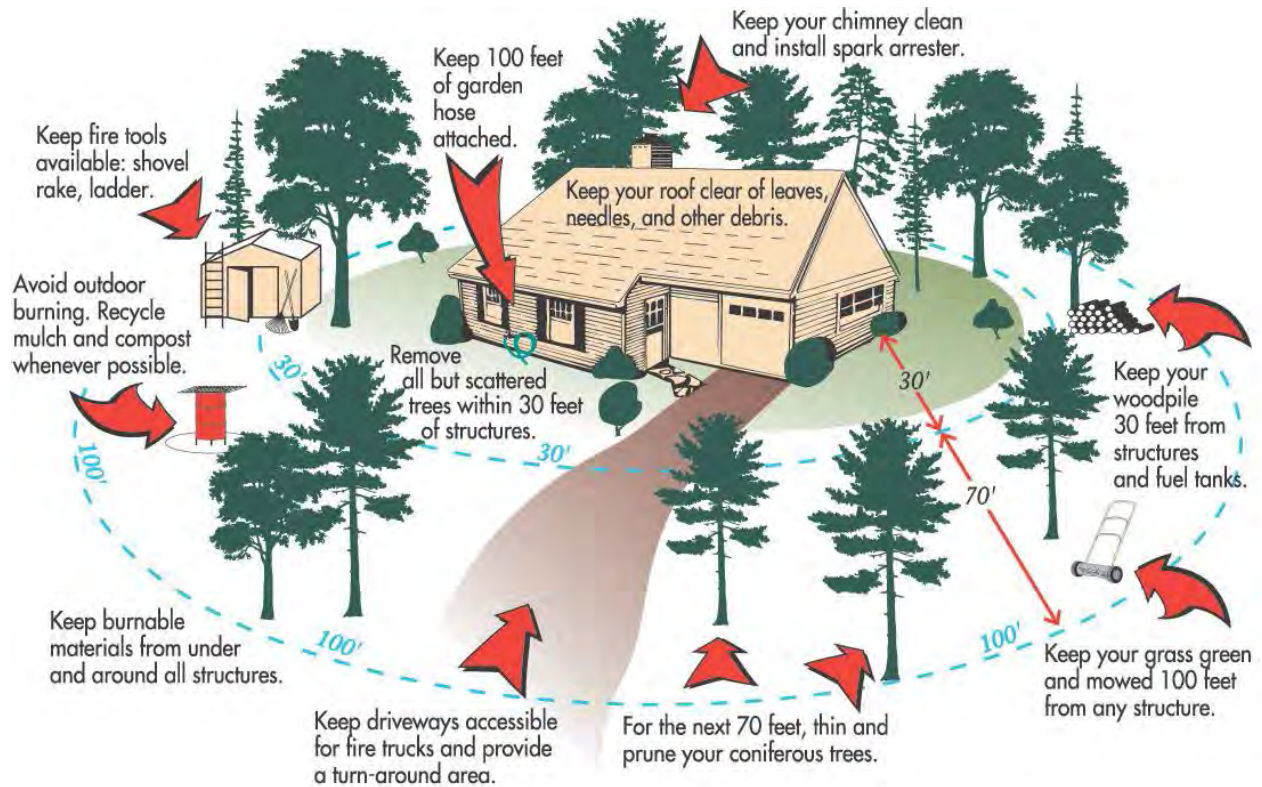


Figure 6: Defensible Space Zones, Information Provided by Cal Fire Readyforwildfire.org

END

## TECHNICAL MEMORANDUM

DATE: August 22, 2019  
TO: Adrienne L. Graham, A.I.C.P.  
FROM: Ronald A. Phillips  
RE: **Ridge Subdivision Fire Safe Plan / TM3: Wildfire Evacuation Planning and Fire Safety Zones**

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### 13.0 Introduction

The purpose of this memo is to describe the community evacuation plan for the Ridge Subdivision in the event of a mandatory or voluntary evacuation of the neighborhood as a result of a local wildfire. The *Ridge Subdivision Wildfire Evacuation Plan* is built upon the following assumptions:

- An evacuation order for a wildfire related incident will last less than 12 hours in duration due to the fire threat and mitigation measures employed in the project vicinity.
- An evacuation order impacting one or more neighborhoods (100 homes or 275-300 persons) within the BRSP and Ridge Subdivision areas.
- One or more evacuation transportation routes are available to the Ridge Subdivision residents as part of this plan.
- One or more safe refuge areas may be available for residents of the Ridge Subdivision to seek temporary relocation (< 12 hours), or as a measure of last resort should evacuation routes be obstructed or unsafe.
- An evacuation center for general populations, special need populations and domestic animals exists within 30 minutes travel time from the Ridge Subdivision area.

### 14.0 Community Evacuation Types and Decision Making

The decision to initiate a local evacuation during a wildfire emergency rests with the public safety agencies (law enforcement and fire) based on a comprehensive threat assessment made in the field. The implementation and enforcement of evacuation orders rests with law enforcement. Evacuation types typically focus on one or more of the following methods:

- Shelter in place
- Voluntary evacuation
- Mandatory evacuation

Based on the wildfire risk factors present in Ridge Subdivision (e.g. WUI Zone less than 300 acres, fire severity is generally moderate, fuel modification efforts in place, building construction using current codes, etc.), it is likely that most evacuations will impact fewer than 88 residents during

the duration of the wildfire event. It is anticipated that most evacuations due to a wildfire threat will be less than 12 hours in duration.

### **15.0 Community Evacuation Routes**

During each phase of the Ridge Subdivision project there are existing and new major roads (e.g. thoroughfare, arterial and collector) that can serve as primary evacuation routes during a wildfire event. The following major road(s) should be identified in the evacuation plan as primary evacuation routes in the Project area:

- CA Highway 193
- Sierra College Boulevard
- Bickford Ranch Road
- School Ranch Road

In addition to the designated evacuation routes identified there are three emergency vehicle access roads<sup>1</sup> identified within the BRSP that can be used for emergency evacuation efforts when deemed appropriate by public safety officials.

### **16.0 Temporary Safe Refuge Area**

*Temporary Safe Refuge Areas* are areas initially designated by public safety officials as locations for evacuated individuals to gather for a period of 12 hours or less, or as a measure of last resort should evacuation routes be obstructed or unsafe, as a result of a wildfire. It is anticipated that one or more temporary safe refuge areas may be established in the BRSP area for potential use by the public when Bickford Ranch Road and the three EVA's are unavailable. Temporary safe refuge areas may be established at the following public locations in the future in the BRSP area:

- Bickford Ranch Community Park located at Bickford Ranch Road and Sierra College Boulevard; and
- Bickford Ranch Recreation Center East located at Bickford Ranch Road and 19A Lane.

Additional temporary refuge areas may also be established at local public schools in the BRSP area as the need arises.

### **17.0 Evacuation Shelters**

The wildfire risk in the Ridge Subdivision area is moderate. A wildfire in this area will likely result in the temporary (<12 hour) evacuation of 88 or fewer persons. A local dedicated evacuation center within the Project area is not warranted for this type of hazard.

The decision to open an evacuation center rests with Placer County OES. This agency has previously designated the Gold Country Fairgrounds in Auburn for use as an evacuation center

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<sup>1</sup> Clark Tunnel Road to CA Highway 193, Clark Tunnel Road to Penryn and Woodsdale Court.

for long duration emergency events. This facility is properly designed to handle the evacuation of general population, special need population and domestic animal groups.

The Gold County Fairground site is located within 30 minutes' drive time from the Project based on routine traffic conditions in the area. Emergency transportation of persons without vehicles to this location can be addressed through coordinated planning efforts between County OES, Regional Transit officials, private ambulance operators and property/business owners who need to complete this evacuation planning effort.

## **18.0 Wildfire Community Education Measures**

CAL FIRE has an effective community education program to assist residents and visitors prepare for a wildfire<sup>2</sup>. The program is titled *Ready-Set-Go* and is designed to assist persons in preparing for and leaving a residence threatened by a local wildfire. This information should be made available to new and existing residents and homeowners through information packets and HOA websites whenever practical.

## **19.0 Emergency Notification**

Community notification is an important aspect of evacuation planning. In Placer County all public safety agencies have partnered to implement the *Placer Alert* notification system.<sup>3</sup> This multi-county (Placer, Sacramento and Yolo Counties) telecommunication system allows public safety agencies to provide critical alert information to residents during an emergency such as a wildfire. It can alert residents to community evacuations, safe refuge areas and wildfire related road closures.

END

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<sup>2</sup> CAL FIRE, *Ready Set Go*; <http://www.readyforwildfire.org/>

<sup>3</sup> Placer Alert, Citizen Notification System; <https://www.placer.ca.gov/departments/sheriff/citizenalert>

## TECHNICAL MEMORANDUM

DATE: October 6, 2019  
TO: Adrienne L. Graham, A.I.C.P.  
FROM: Ronald A. Phillips  
RE: **Ridge Subdivision Fire Safe Plan / TM4: Fire Safety Plan Recommendations**

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### 20.0 Introduction

The purpose of this memo is to summarize the Fire Safety Plan recommendations at one central location for documentation and review purposes.

### 21.0 Key Findings

- 21.1 Fire and rescue services for the Project site are the responsibility of the **Penryn Fire Protection District (PFPD)**. Wildfire protection for the adjacent undeveloped areas near the Project are the responsibility of CAL FIRE.
- 21.2 The Ridge Subdivision (Project) is located within a CAL FIRE designated *Moderate* Fire Hazard Severity Zone. The Project is therefore subject to the regulations found in California Public Resource Code Section 4291.
- 21.3 The Project is located within a PFPD designated *Wildland Urban-Interface (WUI) Zone*. The Project is therefore subject to the regulations found in both the California Building Code and California Fire Code for WUI areas.
- 21.4 The Project has an overall Fire Risk Rating of *Moderate* based upon the ten fire rating criteria outlined in TM-1.
- 21.5 The Project has no proposed uses that are identified as *Critical Assets* that could be at risk during a wildfire.

### 22.0 Fire Safe Recommendations

- 22.1 All private roads and lanes within the Project, including the gated entrance into the subdivision, shall be constructed and maintained in accordance with PFPD and CAL FIRE requirements.

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- 22.2 The Project will meet the minimum fire-flow requirements of 1,000 GPM @ 20 PSIG for 2 hours duration as identified in the California Fire Code (CFC). The water supply system will meet PCWA design standards. Fire hydrants serving the site shall be provided at the following locations in the Project, or equivalent locations subject to approval of PCWA and County Public Works:
- a. Along the private road near Lots 14/15
  - b. Along the private road near Lots 18/19
  - c. Along the private road near Lots 21/22
  - d. Along the private road near Lots 24/25
  - e. In the turnaround along the private lane at Lot 30
  - f. In the turnaround along the private lane at Lot 33
  - g. In the turnout along the private lane at Lots 33/34
  - h. In the turnaround along the private lane at Lot 34
- 22.3 All dwellings in the Project will be provided with an approved residential fire sprinkler system. Upon occupancy these systems shall be operable and maintained by the individual homeowners at all times.
- 22.4 All structures constructed on lots facing the WUI Zone (Lots 15-25 and 29-34) shall have a minimum 30-foot setback from the rear property line to reduce the threat of a wildfire impinging directly on the primary building. Setback areas may contain driveways, parking areas and/or other non-combustible surfaces.
- 22.5 Fencing materials located along the side and rear yard property lines facing the WUI on Ridge Subdivision Lots 15-25 and 29-34 shall be constructed of non-combustible materials.
- 22.6 Dwellings located on Project Lots 15-25 and 29-34 shall be constructed and maintained in accordance with the current design standards found in *California Building Code (CBC) Chapter 7A (Materials and Construction Methods for Exterior Wildfire Exposure)*.
- 22.7 A coordinated pre-planning effort should be developed between PFPD, CAL FIRE and the landowners to create emergency response maps that identify fire access points, water supply locations, community evacuation routes and safe refuge areas.
- 22.8 A *Ridge Fuel Management* program shall be established to ensure that all hazardous fuel reduction efforts, including creating and maintaining defensible space near each developed parcel in the Project, and the construction and maintenance of a shaded fuel break adjacent to the Project on LaFaille Ranch, is completed annually or more frequently as determined by PFPD and CAL FIRE. The program shall be managed by the *Ridge Homeowners Association* or their designee. It shall be adequately funded to ensure that

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all hazardous fuel reduction work is completed per the prescription requirements identified in TM-2.

- 22.9 A 300-foot wide shaded fuel break that reduces hazardous live and dead vegetation near the project shall be constructed and maintained in accordance with PFPD and CAL FIRE standards in the canyon below Project Lots 15-25 and 29-34. The shaded fuel break shall meet the following criteria:
- a. The construction of the shaded fuel break will commence at the property line between the lot(s) and adjoining LaFaille Ranch property.
  - b. It will extend nominally 300-feet except when variances are allowed due to topographical issues, sensitive cultural resources present, or environmental concerns.
  - c. The shaded fuel break will be constructed and accepted by PFPD and CAL FIRE prior to the issuance of the first building permit within the Project. See TM-2 for shaded fuel break prescriptive requirements.
  - d. Maintenance of the shaded fuel break will require the recordation of an “Fuel Management Zone” easement along with a right of entry approval from the adjoining LaFaille Ranch property owner(s).
- 22.10 Undeveloped lots within the Project shall have all hazardous fuels, including annual grasses and dead vegetation, reduced to 4-inches or less during the CAL FIRE declared fire season period.
- 22.11 *A Ridge Neighborhood Wildfire Evacuation Plan* should be created. It should include the following information:
- a. Identify Highway 193, Sierra College Boulevard, Bickford Ranch Road and School Ranch Road as the primary community evacuation routes for the Project.
  - b. Identify the Placer County Evacuation Center located at the Gold Country Fairgrounds facility in Auburn as the nearest location to the Ridge Subdivision project area for long-term care and shelter during an emergency. A dedicated evacuation center within the Ridge Subdivision area is not currently warranted due to the moderate wildfire risk.
  - c. It is anticipated that one or more Temporary Safe Refuge areas may be established in the area for potential use by the public when Bickford Ranch Road and the three BRSP area EVA’s are unavailable.
  - d. The evacuation plan should be made available as part of the new homeowner information packet and through the Project HOA newsletter or website.
  - e. CAL FIRE *Ready-Set-Go* education materials should be made available to all new residents of the Project for their use in preparing for an evacuation. PFPD and CAL FIRE should be encouraged to visit the neighborhood annually to discuss this material and answer questions by the homeowners.

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- f. Placer County OES education materials on the *Placer Alert* program should be made available to all new residents of the Project for use in receiving timely notification information regarding the need to evacuate.

END



## **APPENDIX B**

### **Applicable Fire Codes and Ordinances and Programs**

## APPENDIX B

### Applicable Fire Codes and Ordinances and Programs

#### California Public Resources Code Section 4291

4291. (a) A person who owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material, shall at all times do all of the following:

(1) Maintain defensible space of 100 feet from each side and from the front and rear of the structure, but not beyond the property line except as provided in paragraph (2). The amount of fuel modification necessary shall take into account the flammability of the structure as affected by building material, building standards, location, and type of vegetation. Fuels shall be maintained in a condition so that a wildfire burning under average weather conditions would be unlikely to ignite the structure. This paragraph does not apply to single specimens of trees or other vegetation that are well-pruned and maintained so as to effectively manage fuels and not form a means of rapidly transmitting fire from other nearby vegetation to a structure or from a structure to other nearby vegetation. The intensity of fuels management may vary within the 100-foot perimeter of the structure, the most intense being within the first 30 feet around the structure. Consistent with fuels management objectives, steps should be taken to minimize erosion. For the purposes of this paragraph, "fuel" means any combustible material, including petroleum-based products and wildland fuels.

(2) A greater distance than that required under paragraph (1) may be required by state law, local ordinance, rule, or regulation. Clearance beyond the property line may only be required if the state law, local ordinance, rule, or regulation includes findings that the clearing is necessary to significantly reduce the risk of transmission of flame or heat sufficient to ignite the structure, and there is no other feasible mitigation measure possible to reduce the risk of ignition or spread of wildfire to the structure. Clearance on adjacent property shall only be conducted following written consent by the adjacent landowner.

(3) An insurance company that insures an occupied dwelling or occupied structure may require a greater distance than that required under paragraph (1) if a fire expert, designated by the director, provides findings that the clearing is necessary to significantly reduce the risk of transmission of flame or heat sufficient to ignite the structure, and there is no other feasible mitigation measure possible to reduce the risk of ignition or spread of wildfire to the structure. The greater distance may not be beyond the property line unless allowed by state law, local ordinance, rule, or regulation.

(4) Remove that portion of a tree that extends within 10 feet of the outlet of a chimney or stovepipe.

(5) Maintain a tree, shrub, or other plant adjacent to or overhanging a building free of dead or dying wood.

(6) Maintain the roof of a structure free of leaves, needles, or other vegetative materials.

(7) Prior to constructing a new building or structure or rebuilding a building or structure damaged by a fire in an area subject to this section, the construction or rebuilding of which requires a building permit, the owner shall obtain a certification

from the local building official that the dwelling or structure, as proposed to be built, complies with all applicable state and local building standards, including those described in subdivision (b) of Section 51189 of the Government Code, and shall provide a copy of the certification, upon request, to the insurer providing course of construction insurance coverage for the building or structure. Upon completion of the construction or rebuilding, the owner shall obtain from the local building official, a copy of the final inspection report that demonstrates that the dwelling or structure was constructed in compliance with all applicable state and local building standards, including those described in subdivision (b) of Section 51189 of the Government Code, and shall provide a copy of the report, upon request, to the property insurance carrier that insures the dwelling or structure.

(b) A person is not required under this section to manage fuels on land if that person does not have the legal right to manage fuels, nor is a person required to enter upon or to alter property that is owned by any other person without the consent of the owner of the property.

(c) (1) Except as provided in Section 18930 of the Health and Safety Code, the director may adopt regulations exempting a structure with an exterior constructed entirely of nonflammable materials, or, conditioned upon the contents and composition of the structure, the director may vary the requirements respecting the removing or clearing away of flammable vegetation or other combustible growth with respect to the area surrounding those structures.

(2) An exemption or variance under paragraph (1) shall not apply unless and until the occupant of the structure, or if there is not an occupant, the owner of the structure, files with the department, in a form as the director shall prescribe, a written consent to the inspection of the interior and contents of the structure to ascertain whether this section and the regulations adopted under this section are complied with at all times.

(d) The director may authorize the removal of vegetation that is not consistent with the standards of this section. The director may prescribe a procedure for the removal of that vegetation and make the expense a lien upon the building, structure, or grounds, in the same manner that is applicable to a legislative body under Section 51186 of the Government Code.

(e) The Department of Forestry and Fire Protection shall develop, periodically update, and post on its Internet Web site a guidance document on fuels management pursuant to this chapter. Guidance shall include, but not be limited to, regionally appropriate vegetation management suggestions that preserve and restore native species, minimize erosion, minimize water consumption, and permit trees near homes for shade, aesthetics, and habitat; and suggestions to minimize or eliminate the risk of flammability of nonvegetative sources of combustion such as woodpiles, propane tanks, decks, and outdoor lawn furniture.

(f) As used in this section, "person" means a private individual, organization, partnership, limited liability company, or corporation.

4291.1. (a) Notwithstanding Section 4021, a violation of Section 4291 is an infraction punishable by a fine of not less than one hundred dollars (\$100), nor more than five hundred dollars (\$500). If a person is convicted of a second violation of Section 4291 within five years, that person shall be punished by a fine of not less than two hundred fifty dollars (\$250), nor more than five hundred dollars (\$500). If a person is convicted of a third violation of Section 4291 within five years, that person is guilty of a misdemeanor and shall be punished by a fine of not less than five hundred dollars (\$500).

If a person is convicted of a third violation of Section 4291 within five years, the department may perform or contract for the performance of work necessary to comply with Section 4291 and may bill the person convicted for the costs incurred, in which case the person convicted, upon payment of those costs, shall not be required to pay the fine. If a person convicted of a violation of Section 4291 is granted probation, the court shall impose as a term or condition of probation, in addition to any other term or condition of probation, that the person pay at least the minimum fine prescribed in this section.

(b) If a person convicted of a violation of Section 4291 produces in court verification prior to imposition of a fine by the court, that the condition resulting in the citation no longer exists, the court may reduce the fine imposed for the violation of Section 4291 to fifty dollars (\$50).

4291.3. Subject to any other applicable provision of law, a state or local fire official, at his or her discretion, may authorize an owner of property, or his or her agent, to construct a firebreak, or implement appropriate vegetation management techniques, to ensure that defensible space is adequate for the protection of a hospital, adult residential care facility, school, aboveground storage tank, hazardous materials facility, or similar facility on the property. The firebreak may be for a radius of up to 300 feet from the facility, or to the property line, whichever distance is shorter.

# Chapter 7A [SFM] Materials and Construction Methods for Exterior Wildfire Exposure

## Section 701A Scope, Purpose and Application

### 701A.1 Scope

*This chapter applies to building materials, systems and/or assemblies used in the exterior design and construction of new buildings located within a Wildland-Urban Interface Fire Area as defined in Section 702A.*

### 701A.2 Purpose

*The purpose of this chapter is to establish minimum standards for the protection of life and property by increasing the ability of a building located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area to resist the intrusion of flames or burning embers projected by a vegetation fire and contributes to a systematic reduction in conflagration losses.*

### 701A.3 Application

*New buildings located in any Fire Hazard Severity Zone or any Wildland-Urban Interface Fire Area designated by the enforcing agency constructed after the application date shall comply with the provisions of this chapter.*

#### **Exceptions:**

- 1. Buildings of an accessory character classified as a Group U occupancy and not exceeding 120 square feet in floor area, when located at least 30 feet from an applicable building.*
- 2. Buildings of an accessory character classified as Group U occupancy of any size located least 50 feet from an applicable building.*
- 3. Buildings classified as a Group U Agricultural Building, as defined in Section 202 of this code (see also Appendix C – Group U Agricultural Buildings), when located at least 50 feet from an applicable building.*
- 4. Additions to and remodels of buildings originally constructed prior to the applicable application date.*

*For the purposes of this section and Section 710A, applicable building includes all buildings that have residential, commercial, educational, institutional, or similar occupancy type use.*

#### **701A.3.1 Application date and where required**

*New buildings for which an application for a building permit is submitted on or after July 1, 2008 located in any Fire Hazard Severity Zone or Wildland Interface Fire Area shall comply with all sections of this chapter, including all of the following areas:*

- 1. All unincorporated lands designated by the State Board of Forestry and Fire Protection as State Responsibility Area (SRA) including:*
  - 1.1. Moderate Fire Hazard Severity Zones*
  - 1.2. High Fire Hazard Severity Zones*
  - 1.3. Very-High Fire Hazard Severity Zones*
- 2. Land designated as Very-High Fire Hazard Severity Zone by cities and other local agencies.*
- 3. Land designated as Wildland Interface Fire Area by cities and other local agencies.*

#### **Exceptions:**

- 1. New buildings located in any Fire Hazard Severity Zone within State Responsibility Areas, for which an application for a building permit is submitted on or after January 1, 2008, shall comply with all sections of this chapter.*
- 2. New buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland Interface Fire Area designated by cities and other local agencies for which an application for a building permit is submitted on or after December 1, 2005 but prior to July 1, 2008, shall only comply with the following sections of this chapter:*
  - 2.1. Section 705A – Roofing*
  - 2.2. Section 706A – Attic Ventilation*

### 701A.3.2 Application to accessory buildings and miscellaneous structures

New accessory buildings and miscellaneous structures specified in Section 710A shall comply only with the requirements of that section.

### 701A.4 Inspection and certification

Building permit applications and final completion approvals for buildings within the scope and application of this chapter shall comply with the following:

1. *Building permit issuance.* The local building official shall, prior to construction, provide the owner or applicant a certification that the building as proposed to be built complies with all applicable state and local building standards, including those for materials and construction methods for wildfire exposure as described in this chapter. Issuance of a building permit by the local building official for the proposed building shall be considered as complying with this section.
2. *Building permit final.* The local building official shall, upon completion of construction, provide the owner or applicant with a copy of the final inspection report that demonstrates the building was constructed in compliance with all applicable state and local building standards, including those for materials and construction methods for wildfire exposure as described in this chapter. Issuance of a certificate of occupancy by the local building official for the proposed building shall be considered as complying with this section.

### 701A.5 Vegetation management compliance

Prior to building permit approval, the property shall be in compliance with the vegetation management requirements prescribed in California Fire Code Section 4906, including California Public Resources Code 4291 or California Government Code Section 51182. Acceptable methods of compliance inspection and documentation shall be determined by the enforcing agency and shall be permitted to include any of the following:

1. Local, state or federal fire authority or designee authorized to enforce vegetation management requirements
2. Enforcing agency
3. Third party inspection and certification authorized to enforce vegetation management requirements
4. Property owner certification authorized by the enforcing agency

## Section 702A Definitions

For the purposes of this chapter, certain terms are defined below:

**CDF DIRECTOR** means the Director of the California Department of Forestry and Fire Protection.

**EXTERIOR COVERING.** The exposed siding or cladding material applied to the exterior side of an exterior wall, roof eave soffit, floor projection or exposed underfloor framing.

**FIRE PROTECTION PLAN** is a document prepared for a specific project or development proposed for a Wildland Urban Interface Fire Area. It describes ways to minimize and mitigate potential for loss from wildfire exposure.

The Fire Protection Plan shall be in accordance with this chapter and the California Fire Code, Chapter 49. When required by the enforcing agency for the purposes of granting modifications, a fire protection plan shall be submitted. Only locally adopted ordinances that have been filed with the California Building Standards Commission or the Department of Housing and Community Development in accordance with Section 1.1.8 shall apply.

**FIRE HAZARD SEVERITY ZONES** are geographical areas designated pursuant to California Public Resources Codes Sections 4201 through 4204 and classified as Very High, High, or Moderate in State Responsibility Areas or as Local Agency Very High Fire Hazard Severity Zones designated pursuant to California Government Code, Sections 51175 through 51189. See California Fire Code Chapter 49.

The California Code of Regulations, Title 14, Section 1280, entitles the maps of these geographical areas as "Maps of the Fire Hazard Severity Zones in the State Responsibility Area of California."

**HEAVY TIMBER.** A type of construction classification specified in Section 602. For use in this chapter, heavy timber shall be sawn lumber or glue laminated wood with the smallest minimum nominal dimension of 4 inches (102 mm). Heavy timber walls or floors shall be sawn or glue-laminated planks splined, tongue-and-groove, or set close together and well spiked.

**IGNITION-RESISTANT MATERIAL.** A type of building material that resists ignition or sustained flaming combustion sufficiently so as to reduce losses from wildland-urban interface conflagrations under worst-case weather and fuel conditions with wildfire exposure of burning embers and small flames, as prescribed in Section 703A and SFM Standard 12-7A-5, Ignition-Resistant Material.

**LOCAL AGENCY VERY HIGH FIRE HAZARD SEVERITY ZONE** means an area designated by a local agency upon the recommendation of the CDF Director pursuant to Government Code Sections 51177(c), 51178 and 5118 that is not a state responsibility area and where a local agency, city, county, city and county, or district is responsible for fire protection.

**LOG WALL CONSTRUCTION.** A type of construction in which exterior walls are constructed of solid wood members and where the smallest horizontal

dimension of each solid wood member is at least 6 inches (152 mm).

**RAFTER TAIL.** The portion of roof rafter framing in a sloping roof assembly that projects beyond and overhangs an exterior wall.

**ROOF EAVE.** The lower portion of a sloping roof assembly that projects beyond and overhangs an exterior wall at the lower end of the rafter tails. Roof eaves may be either "open" or "enclosed." Open roof eaves have exposed rafter tails and an unenclosed space on the underside of the roof deck. Enclosed roof eaves have a boxed-in roof eave soffit with a horizontal underside or sloping rafter tails with an exterior covering applied to the underside of the rafter tails.

**ROOF EAVE SOFFIT.** An enclosed boxed-in soffit under a roof eave with exterior covering material applied to the soffit framing creating a horizontal surface on the exposed under-side.

**STATE RESPONSIBILITY AREA** means lands that are classified by the Board of Forestry pursuant to Public Resources Code Section 4125 where the financial responsibility of preventing and suppressing forest fires is primarily the responsibility of the state.

**WILDFIRE** is any uncontrolled fire spreading through vegetative fuels that threatens to destroy life, property, or resources as defined in Public Resources Code Sections 4103 and 4104.

**WILDFIRE EXPOSURE** is one or a combination of radiant heat, convective heat, direct flame contact and burning embers being projected by vegetation fire to a structure and its immediate environment.

**WILDLAND-URBAN INTERFACE FIRE AREA** is a geographical area identified by the state as a "Fire Hazard Severity Zone" in accordance with the Public Resources Code Sections 4201 through 4204 and Government Code Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires.

## Section 703A Standards of Quality

### 703A.1 General

Building material, systems, assemblies and methods of construction used in this chapter shall be in accordance with Section 703A.

### 703A.2 Qualification by

#### testing

Material and material assemblies tested in accordance with the requirements of Section 703A shall be accepted for use when the results and conditions of those tests are met. Product evaluation testing of material and material assemblies shall be approved or listed by the State Fire Marshal, or identified in a current report issued by an approved agency.

### 703A.3 Approved agency

Product evaluation testing shall be performed by an approved agency as defined in Section 1702. The scope of accreditation for the approved agency shall include building product compliance with this code.

### 703A.4 Labeling

Material and material assemblies tested in accordance with the requirements of Section 703A shall bear an identification label showing the fire test results. That identification label shall be issued by a testing and/or inspecting agency approved by the State Fire Marshal.

1. Identification mark of the approved testing and/or inspecting agency
2. Contact and identification information of the manufacturer
3. Model number or identification of the product or material
4. Pre-test weathering specified in this chapter
5. Compliance standard as described under Section 703A.7

### 703A.5 Weathering and surface treatment protection

#### 703A.5.1 General

Material and material assemblies tested in accordance with the requirements of Section 703A shall maintain their fire test performance under conditions of use, when installed in accordance with the manufacturer's instructions.

#### 703A.5.2 Weathering

Fire-retardant-treated wood and fire-retardant-treated wood shingles and shakes shall meet the fire test performance requirements of this

chapter after being subjected to the weathering conditions contained in the following standards, as applicable to the materials and the conditions of use.

#### **703A.5.2.1 Fire-retardant-treated wood**

*Fire-retardant-treated wood shall be tested in accordance with ASTM D2898 (Method A) and the requirements of Section 2303.2.*

#### **703A.5.2.2 Fire-retardant-treated wood shingles and shakes**

*Fire-retardant-treated wood shingles and shakes shall be approved and listed by the State Fire Marshal in accordance with Section 208(c), Title 19 California Code of Regulations.*

#### **703A.5.3 Surface treatment protection**

*The use of paints, coatings, stains or other surface treatments are not an approved method of protection as required in this chapter.*

#### **703A.6 Alternates for materials, design, tests and methods of construction**

*The enforcing agency is permitted to modify the provisions of this chapter for site-specific conditions in accordance with Section 1.11.2.4. When required by the enforcing agency for the purposes of granting modifications, a fire protection plan shall be submitted in accordance with the California Fire Code, Chapter 49.*

#### **703A.7 Standards of quality**

*The State Fire Marshal standards for exterior wildfire exposure protection listed below and as referenced in this chapter are located in the California Referenced Standards Code, Part 12 and Chapter 35 of this code.*

##### **SFM Standard 12-7A-1**

*Exterior Wall Siding and Sheathing. A fire resistance test standard consisting of a 150 kW intensity direct flame exposure for a 10-minute duration.*

##### **SFM Standard 12-7A-2**

*Exterior Windows. A fire resistance test standard consisting of a 150 kW intensity direct flame exposure for an 8-minute duration.*

##### **SFM Standard 12-7A-3**

*Horizontal Projection Underside A fire resistance test standard consisting of a 300 kW intensity direct flame exposure for a 10-minute duration.*

##### **SFM Standard 12-7A-4**

*Decking. A two-part test consisting of a heat release rate (Part A) deck assembly combustion test with an under deck exposure of 80 kW intensity direct flame for a 3-minute duration, and a (Part B) sustained deck assembly combustion test consisting of a deck upper surface burning ember exposure with a 12 mph wind for 40 minutes using a 2.2lb (1kg) burning "Class A" size 12" x 12" x 2.25" (300 mm x 300 mm x 57 mm) roof test brand.*

##### **SFM Standard 12-7A-4A**

*Decking Alternate Method A. A heat release rate deck assembly combustion test with an under deck exposure of 80 kW intensity direct flame for a 3-minute duration,*

##### **SFM Standard 12-7A-5**

*Ignition-resistant Material. A generic building material surface burning flame spread test standard consisting of an extended 30 minute ASTM E84 or UL 723 test method as is used for fire-retardant-treated wood.*

*ASTM D2898 Standard Practice for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing*

*ASTM D3909/D3909M Standard Specification for Asphalt Roll Roofing (Glass Felt) Surfaced with Mineral Granules*

*ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials*

*ASTM E2632/E2632M Standard Test Method for Evaluating the Under-Deck Fire Test Response of Deck Materials*

*ASTM E2707 Standard Test Method for Determining Fire Penetration of Exterior Wall Assemblies Using a Direct Flame Impingement Exposure*

*ASTM E2726/E2726M Standard Test Method for Evaluating the Fire Test Response of Deck Structures to Burning Brands*

*ASTM E2886/E2886M Standard Test Method for Evaluating the Ability of Exterior Vents to Resist the Entry of Embers and Direct Flame Impingement*

*ASTM E2957 Standard Test Method for Resistance to Wildfire Penetration of Eaves, Soffits and Other Projections*



## Section 704A Ignition-Resistant Construction

### 704A.1 General

The materials prescribed herein for ignition resistance shall conform to the requirements of this chapter.

### 704A.2 Ignition-resistant material

Ignition-resistant materials shall comply with one of the following:

1. The requirements in Section 704A.3 when tested in accordance with the test procedures set forth in ASTM E84 or UL 723,
2. The test procedures and requirements set forth in SFM Standard 12-7A-5 "Ignition-Resistant Material", or
3. One of the alternative methods in Section 704A.4.

### 704A.3 Conditions of acceptance for ignition-resistant material tested in accordance with ASTM E84 or UL

#### 723

A material shall comply with the conditions of acceptance in Items 1 and 2 below when the test is continued for an additional 20-minute period, meaning for a total test period of an "extended" 30-minute test period.

1. The material shall exhibit a flame spread index not exceeding 25 and shall show no evidence of progressive combustion following the extended 30-minute test period.
2. The material shall exhibit a flame front that does not progress more than  $10^1 /_2$  feet (3200 mm) beyond the centerline of the burner at any time during the extended 30-minute test period.

### 704A.4 Alternative methods for determining ignition-resistant material

Any one of the following shall be accepted as meeting the definition of ignition-resistant material:

1. Noncombustible material. Material that complies with the definition for noncombustible materials in Section 202.
2. Fire-retardant-treated wood. Fire-retardant-treated wood identified for exterior use that complies with the requirements of Section 2303.2.
3. Fire-retardant-treated wood shingles and shakes. Fire-retardant-treated wood shingles and shakes, as defined in Section 1505.6 and listed by State Fire Marshal for use as "Class B" roof covering, shall be accepted as an ignition-resistant wall covering material when installed over solid sheathing.

## Section 705A Roofing

### 705A.1 General

Roofs shall comply with the requirements of Chapter 7A and Chapter 15. Roofs shall have a roofing assembly installed in accordance with its listing and the manufacturer's installation instructions.

### 705A.2 Roof

#### coverings

Where the roof profile allows a space between the roof covering and roof decking, the spaces shall be constructed to resist the intrusion of flames and embers, be firestopped with approved materials or have one layer of minimum 72 pound (32.4 kg) mineral-surfaced nonperforated cap sheet complying with ASTM D3909 installed over the combustible decking.

### 705A.3 Roof

#### valleys

Where valley flashing is installed, the flashing shall be not less than 0.019-inch (0.48 mm) No. 26 gage galvanized sheet corrosion-resistant metal installed over not less than one layer of minimum 72 pound (32.4 kg) mineral-surfaced nonperforated cap sheet complying with ASTM D3909, at least 36-inch-wide (914 mm) running the full length of the valley.

#### 705A.4 Roof

##### gutters

Roof gutters shall be provided with the means to prevent the accumulation of leaves and debris in the gutter.

#### Section 706A Vents

##### 706A.1 General

Where provided, ventilation openings for enclosed attics, enclosed eave soffit spaces, enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters, and underfloor ventilation shall be in accordance with Section 1203 and Sections 706A.1 through 706A.3 to resist building ignition from the intrusion of burning embers and flame through the ventilation openings.

##### 706A.2 Requirements

Ventilation openings for enclosed attics, enclosed eave soffit spaces, enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters, and underfloor ventilation openings shall be fully covered with metal wire mesh, vents, other materials or other devices that meet one of the following requirements:

1. Vents shall be listed to ASTM E2886 and comply with all of the following:

- 1.1. There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
- 1.2. There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.
- 1.3. The maximum temperature of the unexposed side of the vent shall not exceed 662°F (350°C).

2. Vents shall comply with all of the following:

- 2.1. The dimensions of the openings therein shall be a minimum of  $1/16$ -inch (1.6 mm) and shall not exceed  $1/8$ -inch (3.2 mm).
- 2.2. The materials used shall be noncombustible.  
**Exception:** Vents located under the roof covering, along the ridge of roofs, with the exposed surface of the vent covered by noncombustible wire mesh, may be of combustible materials.
- 2.3. The materials used shall be corrosion resistant.

##### 706A.3 Ventilation openings on the underside of eaves and cornices

Vents shall not be installed on the underside of eaves and cornices.

##### Exceptions:

1. Vents listed to ASTM E2886 and complying with all of the following:

- 1.1. There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
- 1.2. There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.
- 1.3. The maximum temperature of the unexposed side of the vent shall not exceed 662°F (350°C).

2. The enforcing agency shall be permitted to accept or approve special eave and cornice vents that resist the intrusion of flame and burning embers.

3. Vents complying with the requirements of Section 706A.2 shall be permitted to be installed on the underside of eaves and cornices in accordance with either one of the following conditions:

- 3.1. The attic space being ventilated is fully protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or,
- 3.2. The exterior wall covering and exposed underside of the eave are of noncombustible materials, or ignition-resistant materials, as determined in accordance with SFM Standard 12-7A-5 Ignition-Resistant Material and the

requirements of Section 704A.3, and the vent is located more than 12 feet (3.66 m) from the ground or walking surface of a deck, porch, patio or similar surface.

## Section 707A Exterior Covering

### 707A.1 Scope

The provisions of this section shall govern the materials and construction methods used to resist building ignition and/or safeguard against the intrusion of flames resulting from small ember and short-term direct flame contact exposure.

### 707A.2 General

The following exterior covering materials and/or assemblies shall comply with this section:

1. Exterior wall covering material
2. Exterior wall assembly
3. Exterior exposed underside of roof eave overhangs
4. Exterior exposed underside of roof eave soffits
5. Exposed underside of exterior porch ceilings
6. Exterior exposed underside of floor projections
7. Exterior underfloor areas

#### Exceptions:

1. Exterior wall architectural trim, embellishments, fascias, and gutters
2. Roof or wall top cornice projections and similar assemblies
3. Roof assembly projections over gable end walls
4. Solid wood rafter tails and solid wood blocking installed between rafters having minimum dimension 2 inch (50.8 mm) nominal
5. Deck walking surfaces shall comply with Section 709A.4 only

### 707A.3 Exterior walls

The exterior wall covering or wall assembly shall comply with one of the following requirements:

1. Noncombustible material
2. Ignition-resistant material
3. Heavy timber exterior wall assembly
4. Log wall construction assembly
5. Wall assemblies that have been tested in accordance with the test procedures for a 10-minute direct flame contact exposure test set forth in ASTM E2707 with the conditions of acceptance shown in Section 707A.3.1
6. Wall assemblies that meet the performance criteria in accordance with the test procedures for a 10-minute direct flame contact exposure test set forth in SFM Standard 12-7A-1.

**Exception:** Any of the following shall be deemed to meet the assembly performance criteria and intent of this section:

1. One layer of  $5/8$ -inch Type X gypsum sheathing applied behind the exterior covering or cladding on the exterior side of the framing
2. The exterior portion of a 1-hour fire resistive exterior wall assembly designed for exterior fire exposure including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual

### 707A.3.1 Conditions of acceptance when tested in accordance with ASTM E2707

The ASTM E2707 test shall be conducted on a minimum of three test specimens and the conditions of acceptance in Items 1 and 2 below shall be met. If any one of the three tests does not meet the conditions of acceptance, three additional tests shall be run. All of the additional tests shall meet the conditions of acceptance.

1. Absence of flame penetration through the wall assembly at any time.
2. Absence of evidence of glowing combustion on the interior surface of the assembly at the end of the 70- min test.

### 707A.3.2 Extent of exterior wall covering

Exterior wall coverings shall extend from the top of the foundation to the roof, and terminate at 2 inch (50.8 mm) nominal solid wood blocking between rafters at all roof overhangs, or in the case of enclosed eaves, terminate at the enclosure.

### 707A.4 Open roof eaves

The exposed roof deck on the underside of unenclosed roof eaves shall consist of one of the following:

1. Noncombustible material
2. Ignition-resistant material
3. One layer of  $5/8$ -inch Type X gypsum sheathing applied behind an exterior covering on the underside exterior of the roof deck
4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the roof deck designed for exterior fire exposure including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual

**Exceptions:** The following materials do not require protection:

1. Solid wood rafter tails on the exposed underside of open roof eaves having a minimum nominal dimension of 2 inch (50.8 mm)
2. Solid wood blocking installed between rafter tails on the exposed underside of open roof eaves having a minimum nominal dimension of 2 inch (50.8 mm)
3. Gable end overhangs and roof assembly projections beyond an exterior wall other than at the lower end of the rafter tails
4. Fascia and other architectural trim boards

### 707A.5 Enclosed roof eaves and roof eave

#### soffits

The exposed underside of enclosed roof eaves having either a boxed-in roof eave soffit with a horizontal underside, or sloping rafter tails with an exterior covering applied to the under-side of the rafter tails, shall be protected by one of the following:

1. Noncombustible material
2. Ignition-resistant material
3. One layer of  $5/8$ -inch Type X gypsum sheathing applied behind an exterior covering on the underside of the rafter tails or soffit
4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the rafter tails or soffit including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual
5. Boxed-in roof eave soffit assemblies with a horizontal underside that meet the performance criteria in Section 707A.10 when tested in accordance with the test procedures set forth in ASTM E2957.
6. Boxed-in roof eave soffit assemblies with a horizontal underside that meet the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3.

**Exceptions:** The following materials do not require protection:

1. Gable end overhangs and roof assembly projections beyond an exterior wall other than at the lower end of the rafter tails

## 2. Fascia and other architectural trim boards

### 707A.6 Exterior porch

#### ceilings

The exposed underside of exterior porch ceilings shall be protected by one of the following:

1. Noncombustible material
2. Ignition-resistant material
3. One layer of  $5/8$ -inch Type X gypsum sheathing applied behind the exterior covering on the underside of the ceiling
4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the ceiling assembly including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual
5. Porch ceiling assemblies with a horizontal underside that meet the performance criteria in Section 707A.10 when tested in accordance with the test procedures set forth in ASTM E2957.
6. Porch ceiling assemblies with a horizontal underside that meet the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3.

**Exception:** Architectural trim boards.

### 707A.7 Floor

#### projections

The exposed underside of a cantilevered floor projection where a floor assembly extends over an exterior wall shall be protected by one of the following:

1. Noncombustible material
2. Ignition-resistant material
3. One layer of  $5/8$ -inch Type X gypsum sheathing applied behind an exterior covering on the underside of the floor projection
4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the floor projection including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual
5. The underside of a floor projection assembly that meets the performance criteria in Section 707A.10 when tested in accordance with the test procedures set forth in ASTM E2957.
6. The underside of a floor projection assembly that meets the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3.

**Exception:** Architectural trim boards.

### 707A.8 Underfloor protection

The underfloor area of elevated or overhanging buildings shall be enclosed to grade in accordance with the requirements of this chapter or the underside of the exposed underfloor shall consist of one of the following:

1. Noncombustible material
2. Ignition-resistant material
3. One layer of  $5/8$ -inch Type X gypsum sheathing applied behind an exterior covering on the underside of the floor projection
4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the floor including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual
5. The underside of a floor assembly that meets the performance criteria in Section 707A.10 when tested in accordance with the test procedures set forth in ASTM E2957.
6. The underside of a floor assembly that meets the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3.

**Exception:** Heavy timber structural columns and beams do not require protection.

#### **707A.9 Underside of appendages**

When required by the enforcing agency the underside of overhanging appendages shall be enclosed to grade in accordance with the requirements of this chapter or the underside of the exposed under-floor shall consist of one of the following:

1. Noncombustible material
2. Ignition-resistant material
3. One layer of  $5/8$ -inch Type X gypsum sheathing applied behind an exterior covering on the underside of the floor projection
4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the floor including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual
5. The underside of a floor assembly that meets the performance criteria in accordance with the test procedures set forth in either of the following:
  - 5.1. SFM Standard 12-7A-3; or
  - 5.2. ASTM E2957

**Exception:** Heavy timber structural columns and beams do not require protection.

#### **707A.10 Conditions of acceptance when tested in accordance with ASTM E2957**

The test shall be conducted on a minimum of three test specimens and the conditions of acceptance in Items 1 through 3 below shall be met. If any one of the three tests does not meet the conditions of acceptance, three additional tests shall be run. All of the additional tests shall meet the conditions of acceptance.

1. Absence of flame penetration of the eaves or horizontal projection assembly at any time.
2. Absence of structural failure of the eaves or horizontal projection subassembly at any time.
3. Absence of sustained combustion of any kind at the conclusion of the 40-minute test.

### **Section 708A EXTERIOR WINDOWS, SKYLIGHTS AND**

#### **DOORS**

##### **708A.1 General**

##### **708A.2 Exterior glazing**

The following exterior glazing materials and/or assemblies shall comply with this section:

1. Exterior windows
2. Exterior glazed doors
3. Glazed openings within exterior doors
4. Glazed openings within exterior garage doors
5. Exterior structural glass veneer
6. Skylights
7. Vents

##### **708A.2.1 Exterior windows, skylights and exterior glazed door assembly requirements**

Exterior windows, skylights and exterior glazed door assemblies shall comply with one of the following requirements:

1. Be constructed of multipane glazing with a minimum of one tempered pane meeting the requirements of Section 2406 Safety Glazing, or
2. Be constructed of glass block units, or
3. Have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 257, or
4. Be tested to meet the performance requirements of SFM Standard 12-7A-2

#### **708A.2.2 Structural glass veneer**

The wall assembly behind structural glass veneer shall comply with Section 707A.3.

#### **708A.3 Exterior doors**

Exterior doors shall comply with one of the following:

1. The exterior surface or cladding shall be of noncombustible material.
2. The exterior surface or cladding shall be of ignitionresistant material.
3. The exterior door shall be constructed of solid core wood that complies with the following requirements:
  - 3.1. Stiles and rails shall not be less than  $1\frac{3}{8}$  inches thick.
  - 3.2. Panels shall not be less than  $1\frac{1}{4}$  inches thick, except for the exterior perimeter of the panel that shall be permitted to taper to a tongue not less than  $\frac{3}{8}$  inch thick.
4. The exterior door assembly shall have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 252.
5. The exterior surface or cladding shall be tested to meet the performance requirements of Section 707A.3.1 when tested in accordance with ASTM E2707.
6. The exterior surface or cladding shall be tested to meet the performance requirements of SFM Standard 12-7A1.

#### **708A.3.1 Exterior door glazing**

Glazing in exterior doors shall comply with Section 708A.2.1.

#### **708A.4 Weather stripping**

Exterior garage doors shall be provided with weather stripping to resist the intrusion of embers from entering through gaps between doors and door openings when visible gaps exceed  $\frac{1}{8}$  inch (3.2 mm). Weather stripping or seals shall be installed on the bottom, sides, and tops of doors to reduce gaps between doors and door openings to  $\frac{1}{8}$  inch (3.2 mm) or less.

### **Section 709A Decking**

#### **709A.1 General**

The walking surface material of decks, porches, balconies and stairs shall comply with the requirements of this section.

#### **709A.2 Where required**

The walking surface material of decks, porches, balconies and stairs shall comply with the requirements of this section when any portion of such surface is within 10 feet (3048 mm) of the building.

#### **709A.3 Decking Surfaces**

The walking surface material of decks, porches, balconies and stairs shall be constructed with one of the following materials:

1. Material that complies with the performance requirements of Section 709A.4 when tested in accordance with both ASTM E2632 and ASTM E2726.
2. Ignition-resistant material that complies with the performance requirements of 704A.3 when tested in accordance with ASTM E84 or UL 723.
3. Material that complies with the performance requirements of both SFM Standard 12-7A-4 and SFM Standard 12-7A-5.

4. Exterior fire retardant treated wood

5. Noncombustible material

6. Any material that complies with the performance requirements of SFM Standard 12-7A-4A when attached exterior wall covering is also composed of noncombustible or ignition-resistant material.

**Exception:** Wall material may be of any material that otherwise complies with this chapter when the decking surface material complies with the performance requirements ASTM E84 with a Class B flame spread rating.

7. Any material that complies with the performance requirements of Section 709A.5 when tested in accordance with ASTM E2632 and when attached exterior wall covering is also composed of only noncombustible or ignition-resistant materials.

**Exception:** Wall material shall be permitted to be of any material that otherwise complies with this chapter when the decking surface material complies with the performance requirements ASTM E84 with a Class B flame spread rating.

#### **709A.4 Requirements for type of ignition-resistant material in Section 709A.3, Item 1**

The material shall be tested in accordance with both ASTM E2632 and ASTM E2726 and shall comply with the conditions of acceptance in Sections 709A.4.1 and 709A.4.2. The material shall also be tested in accordance with ASTM E84 or UL 723 and comply with the performance requirements of Section 704A.3.

##### **709A.4.1 Conditions of acceptance for ASTM E2632**

The ASTM E2632 test shall be conducted on a minimum of three test specimens and the conditions of acceptance in Items 1 through 3 below shall be met. If any one of the three tests does not meet the conditions of acceptance, three additional tests shall be run. All of the additional tests shall meet the conditions of acceptance.

1. Peak heat release rate of less than or equal to 25 kW/ft<sup>2</sup> (269 kW/m<sup>2</sup>).
2. Absence of sustained flaming or glowing combustion of any kind at the conclusion of the 40-min observation period.
3. Absence of falling particles that are still burning when reaching the burner or floor.

##### **709A.4.2 Conditions of acceptance for ASTM E2726**

The ASTM E2726 test shall be conducted on a minimum of three test specimens and the conditions of acceptance in Items 1 and 2 below shall be met. If any one of the three tests does not meet the conditions of acceptance, three additional tests shall be run. All of the additional tests shall meet the conditions of acceptance.

1. Absence of sustained flaming or glowing combustion of any kind at the conclusion of the 40-min observation period.
2. Absence of falling particles that are still burning when reaching the burner or floor.

#### **709A.5 Requirements for type of ignition-resistant material in Section 709A.3, Item 6**

The material shall be tested in accordance with ASTM E2632 and shall comply with the following condition of acceptance. The ASTM E2632 test shall be conducted on a minimum of three test specimens and the peak heat release rate shall be less than or equal to 25 kW/ft<sup>2</sup> (269 kW/m<sup>2</sup>). If any one of the three tests does not meet the conditions of acceptance, three additional tests shall be run. All of the additional tests shall meet the condition of acceptance.

### **Section 710A Accessory Structures**

#### **710A.1 General**

Accessory buildings and miscellaneous structures defined in this section that have the potential to pose a significant exterior fire exposure hazard to applicable buildings during wildfires shall be constructed to conform to the requirements of this section.

#### **710A.2 Applicability**

The provisions of this section shall apply to the buildings covered by Section 701A.3, Exception 1. This section shall also apply to specified attached and detached miscellaneous structures that require a building permit, including but not limited to trellises, arbors, patio covers, carports, gazebos, and similar structures.

##### **Exceptions:**

1. Decks shall comply with the requirements of Section 709A.



2. *Awnings and canopies shall comply with the requirements of Section 3105.*
3. *Exterior wall architectural trim, embellishments, and fascias.*
4. *Roof or wall top cornice projections and similar assemblies.*

### **710A.3 Where required**

*No requirements shall apply to accessory buildings or miscellaneous structures when located at least 50 feet from an applicable building. Applicable accessory buildings and attached miscellaneous structures, or detached miscellaneous structures that are installed at a distance of less than 3 feet from an applicable building, shall comply with this section. When required by the enforcing agency, detached miscellaneous structures that are installed at a distance of more than 3 feet but less than 50 feet from an applicable building shall comply with the requirements of this section.*

#### **710A.3.1 Accessory building requirements**

*Applicable accessory buildings that are less than 120 square feet in floor area and are located more than 30 feet but less than 50 feet from an applicable building shall be constructed of noncombustible materials or of ignition-resistant materials as described in Section 704A.2.*

#### **710A.3.2 Attached miscellaneous structure requirements**

*Applicable miscellaneous structures that are attached to, or installed at a distance of less than 3 feet from, an applicable building shall be constructed of noncombustible materials or of ignition-resistant materials as described in Section 704A.2.*

#### **710A.3.3 Detached miscellaneous structure requirements**

When required by the enforcing agency, applicable detached miscellaneous structures that are installed at a distance of more than 3 feet but less than 50 feet from an applicable building shall be constructed of noncombustible materials or of ignition-resistant materials as described in Section 704A.2.

## **Placer County Chapter 9 (Fire Code)**

### **9.32.070 Fire breaks required—Roofs to be kept clean.**

Every person owning, controlling, renting or operating any cabin, tent, residence, store, hotel, motel, house trailer, apiary or other building, structure or improvement in any unincorporated territory in the county shall, during the period from April 15th, but, in any event, not later than June 1st to December 1st of each year, the date to be at the discretion of the state or United States Forest Rangers or duly appointed agents thereof or the chief of a legally constituted fire protection district:

A. Maintain a fire break or clearing around such cabin, tent, residence, store, hotel, motel, house trailer, apiary or other building, structure or improvement, free from all flammable material, for a distance of thirty (30) feet from any portion of such building, structure or improvement; provided, that the state or United States Forest Ranger or chief of a legally constituted fire protection district may, by ten (10) days' written notice plainly posted on the property to be cleared or delivered to the occupant thereof, require a distance greater than thirty (30) feet but not to exceed one hundred (100) feet to be cleared where the state or United States Forest Ranger or chief of a legally constituted fire protection district determines that the greater distance is necessary to protect such improvements. Where the distance from the building, structure or improvement to the property line of the parcel upon which the building, structure or improvement is located is less than the distance required to be cleared, the adjacent owner or lessee shall clear an area on his or her own property, sufficient to provide the required fire break. This subsection shall not apply to trees, except where dead or where the foliage of such trees shall be within ten (10) feet of the chimney of any building or structure, nor shall it apply to ornamental or cultivated shrubs or ground coverings preserved for decorative effect, provided they do not form a means of readily transmitting fire from the native growth to any building, structure or improvement.

B. Keep the roofs of all cabins, tents, residences, stores, hotels, motels, house trailers or other like structures or improvements free from leaves, needles or other flammable debris. (Prior code § 7.21)

### **9.32. Part 4: Hazardous Vegetation Abatement on Unimproved Parcels**

#### **Part 4. Hazardous Vegetation Abatement on Unimproved Parcels**

##### **9.32.120 Title.**

This part shall be known as, and may be cited or referred to as "The Hazardous Vegetation Abatement on Unimproved Parcels Ordinance." (Ord. 5603-B § 1, 2010)

##### **9.32.130 Finding.**

A. The Placer County board of supervisors (BOS) supports the improved parcel defensible space obligations found in Public Resources Code Section (PRC) 4291. PRC 4291 does not address hazardous vegetation abatement on unimproved parcels and the potential impact that hazardous vegetation on an unimproved parcel could have on an adjacent improved parcel. This part extends and supplements state law to ensure defensible space activities are accomplished on unimproved parcels adjacent to

improved parcels and along roadways and fire access easements so that land owners benefit from the application of PRC 4291 on unimproved parcels.

B. This part shall apply to:

1. Unimproved parcels adjacent to improved parcels where the owner/occupant of the improved parcel is unable to obtain the required defensible space clearances, as delineated in adopted county codes and/or PRC 4291 and the current condition of fuels on the unimproved parcel is assessed by the fire warden (or designee) as an extra hazardous fire condition. The owner of the unimproved parcel shall provide the fuel modifications to meet the defensible space requirements of the improved parcel. Fuel modifications shall meet the standards identified in Appendix A, available from the county fire warden and incorporated by reference.

2. Unimproved parcels adjacent to roadways and determined by the county fire warden (or designee) to be necessary for the safe ingress and egress to the area served by the roadway or fire access easement and the current condition of fuels on the unimproved parcel is assessed by the county fire warden as an extra hazardous fire condition. Fuel modifications shall meet the standards identified in Appendix A.

3. In the instances where the structures on the improved parcel are built after the effective date of the ordinance codified in this part, the owner/occupant of the improved parcel shall be responsible for fifty (50) percent of the abatement cost on the unimproved parcel.

C. Placer County is located east of Sacramento and has forested landscape that stretches from the oak woodlands of the Sacramento Valley to the conifer forests surrounding Lake Tahoe. In all, there are five hundred forty-nine thousand (549,000) acres of forested land which includes two National Forests, several California State parks and numerous county and local parks.

D. The removal of hazardous vegetation in the area subject to this part is recognized as an essential action a homeowner or property owner can take to increase the chances that homes, structures and other property will survive a wildfire. Regular property clearing is necessary to ensure adequate defensible space is achieved.

E. Placer County's defensible space inspection program is based on state law, PRC 4291. PRC 4291 provides required treatments for improved parcels upon, or adjoining any mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or any land that is covered with flammable material.

F. It is the purpose of this part to establish a hazardous vegetation abatement program that provides a process to identify and abate hazardous vegetation on unimproved parcels. This part will also help protect the lives and property of the citizens of Placer County while at the same time protecting rare and sensitive plants, animal species and the environment.

G. There is a need to broaden the scope of the current Placer County Fire Break Ordinance (Section 9.32.070) to include requirements for abatement of hazardous vegetation on undeveloped property. This part also defines abatement guidelines on improved parcels in Appendix A.

H. There is a need to provide public education and alternative processes for vegetation management. This is to include the use of the county chipper, shaded fuel break development and maintenance and biomass utilization programs. (Ord. 5705-B § 1, 2013; Ord. 5634-B §§ 1, 2, 2011; Ord. 5603-B § 1, 2010)

**9.32.140 Definitions.**

A. Hazardous Vegetation. Vegetation that is flammable and endangers the public safety by creating a fire hazard including, but not limited to, seasonal and recurrent weeds, stubble, brush, downed limbs, low hanging branches, dry leaves and tumbleweeds. For the purpose of enforcement, hazardous vegetation within one hundred (100) feet of a structure, as defined below, (or greater as determined by the Placer County fire warden or his or her designated representative) and along roadways that serve as primary ingress and egress routes, is a public nuisance.

B. County Fire Warden. An officer of the county of Placer whose duties are described in Chapter 2.26 of the Placer County Code.

C. Improved Parcel. A portion of land of any size, the area of which is determined by the assessor's maps and records and may be identified by an assessor's parcel number upon which a structure is located.

D. Unimproved Parcel. A portion of land of any size, the area of which is determined by the assessor's maps and records and may be identified by an assessor's parcel number upon which no structure is located.

E. Structure. Any dwelling, house, building or other type of flammable construction subject to PRC 4291.

F. PRC-4291. A California Public Resources Code that defines the defensible space requirements on improved parcels.

G. LE-38. The standard "Notice of Fire Hazard Inspection" (Form LE-38A) form used by local fire agencies to document PRC 4291 findings.

H. Biomass. For the purposes of this part, biomass is defined as the "green waste" material generated during the defensible space clearing project. This includes, grass, weeds, vegetation and tree trimmings.

I. Agency Director. The head of the community development/resource agency of Placer County, or designee. (Ord. 5705-B § 2, 2013; Ord. 5603-B § 1, 2010)

**9.32.150 Duty to abate hazardous vegetation.**

It shall be the duty of every owner, occupant, and person in control of any unimproved parcel of land or having an interest therein, which is located in the unincorporated territory of the county of Placer as that territory is determined and classified by the board of supervisors to abate therefrom, and from all sidewalks and roadways, except for those roads accepted into the county maintained system, all combustible material and hazardous vegetation, that constitutes a fire hazard and public nuisance which may endanger or damage neighboring property or forestland.

A. The requirements of this section shall be satisfied if there is cleared property pursuant to a notice to abate by cutting brush, trimming trees, thinning trees, disking, mowing, plowing or any other method described in the notice:

1. An area that extends to a minimum of ten (10) feet beyond the shoulder of the roadway, to a height of fifteen (15) feet along the boundary of an unimproved parcel; and/or

2. A one hundred (100) foot wide strip of land\* around flammable structure(s) located on an adjacent improved parcel (some or all of this clearance may be required on the unimproved parcel depending upon the location of the structure on the improved parcel).

\*Note: The county fire warden, local fire protection district fire chief, or designee may require more than a one hundred (100) foot width (subject to CEQA guidelines) or less than a one hundred (100) foot width for the protection of public health, safety or welfare or the environment. The county fire warden, local fire protection district fire chief, or designee will determine appropriate clearance distances based upon a visual inspection of the parcel and shall consider all factors that place the property or adjoining structure(s) at risk from an approaching fire. These factors shall include local weather conditions, fuel type(s), topography, and the environment where the property or adjoining structure(s) is located. Examples of the clearance requirements above are set forth in Appendix A for informational purposes only.

B. Where the parcel's terrain is such that it cannot be disked or mowed, the county fire warden, local fire protection district fire chief, or designee may require, or authorize, other means of hazardous vegetation removal. (Ord. 5603-B § 1, 2010)

### **9.32.160 Enforcement.**

The county fire warden and the agency director shall be the primary enforcement authorities for the requirements of this part and shall work jointly and cooperatively to administer and enforce the requirements as provided in this part. The county fire warden shall, as more broadly defined below, exhaust all informal steps to resolve the abatement of hazardous vegetation on unimproved parcels in advance of using the enforcement process below. The county fire warden may delegate authority to subordinate chief officers and trained, professional prevention staff as his or her deputy in the performance of the duties enjoined upon him or her by this part. In addition, each of the following officers within the county of Placer is designated to perform the same duties within the territory of the political subdivision which he or she serves (and whenever the term "county fire warden" is used hereinafter, the following officers are included in the meaning of such word, except that the county fire warden, him or herself, shall coordinate all such officers in the performance of these duties): chiefs or chief engineers of all fire protection districts/fire departments within the unincorporated areas of the county, and their deputies; and such other officers as are designated by the board of supervisors or the county fire warden.

The county fire warden shall have the following responsibilities and authorities in the enforcement and administration of the provisions of this chapter:

- A. Plan and conduct PRC 4291 inspections within the limits of available resources;
- B. Review with property owners found to be out of compliance with PRC 4291 the provisions of this code to support voluntary compliance with its provisions;
- C. Provide notice in accordance with Section 9.32.170;
- D. Conduct post-notice/pre-abatement inspections and documentation, and conduct post-abatement inspections and documentation;
- E. The county fire warden, or designee, may at his or her discretion issue a notice of violation for a violation of this part, in lieu of abating the unimproved parcel.

The agency director shall have the following responsibilities and authorities in the enforcement and administration of the provisions of this chapter:

- A. Initiate administrative hearings in accordance with Section 9.32.180;
- B. Enforce the required fuel modifications by completing the required work and attaching the actual costs and administrative fee to the property tax of the unimproved parcel as a tax lien in accordance with Section 9.32.210;
- C. Carry out any other special enforcement programs initiated by part, order or resolution of the board of supervisors, and any other responsibilities and authorities specified by this part or this code;
- D. Recover enforcement investigation and processing costs. (Ord. 5603-B § 1, 2010)

**9.32.170 Enforcement process.**

The county fire warden may identify by planned PRC 4291 inspection those parcels requiring abatement. The county fire warden shall send the owner of record for the unimproved parcel a “notice to abate” by certified mail, return receipt requested. The “notice to abate” shall outline the required fuel modifications and allow thirty (30) days for the work to be completed. The “notice to abate” shall also outline the appeals process.

After the thirty (30) day time period, the county fire warden shall conduct a post-notice/pre-abatement inspection and, if the required fuel modification has not been performed, may recommend to the agency director that the required fuel modifications be completed by the county, and the cost of enforcement and the abatement with administrative fee be attached to the property tax as a lien in accordance with Section 9.32.210 below.

Should the property owner appeal the “notice to abate” no action will be initiated until after the hearing body has made a determination of the appeal.

For parcels owned or controlled by public agencies, the local fire chief or designee may provide a “notice of nuisance” and include the project area in the local community wildfire protection plan and request the hazardous vegetation be abated in accordance with the Healthy Forest Restoration Act of 2003 (H.R. 1904) or the State Public Resources Code. (Ord. 5705-B § 3, 2013; Ord. 5603-B § 1, 2010)

**9.32.180 Appeals process.**

Property owners wishing to appeal a “notice to abate” shall do so in writing by delivering a request for hearing to agency director within thirty (30) days of the date of the notice to abate from the county fire warden. (Ord. 5603-B § 1, 2010)

**9.32.190 Hazardous vegetation abatement hearing body.**

The hazardous vegetation abatement hearing body is established. The hazardous vegetation hearing body will be convened by the agency director and will consist of a representative seated by the participating Placer County fire chiefs, two “citizens at large,” and two alternates at large appointed by the Placer County board of supervisors.

The hazardous vegetation abatement hearing body shall have the authority to amend, dismiss, or uphold the “notice to abate” with a majority vote. (Ord. 5642-B § 1, 2011; Ord. 5634-B § 3, 2011; Ord. 5603-B § 1, 2010)

**9.32.200 Removal of hazardous vegetation by private contractor and establishment of costs and administrative fee.**

If, at the end of the time allowed for compliance in the original “notice to abate,” or as extended in cases of appeal, or as specified by the hearing body, compliance has not been accomplished, the officer issuing the notice or the agency of which he or she is an officer, may recommend to the agency director that he or she proceed with the abatement of the hazardous vegetation or other combustible material and it be removed by public officers or by employees of the agency or by a private contractor selected by the county purchasing agent in accordance with applicable statutes and in the manner and under the terms specified by the board of supervisors. The cost of such removal and enforcement accompanied by a reasonable administrative charge may be imposed as an assessment in the county tax roll (Section 9.32.210).

The costs so assessed shall be limited to the actual costs incurred by the county of Placer and the county fire warden in enforcing abatement upon the parcel. Such costs may include, but are not limited to, the costs of payments to the contractor, costs of site inspection, costs of notice, boundary determination, measurement, clerical, personnel, consultant, and other administrative costs. (Ord. 5705-B § 4, 2013; Ord. 5603-B § 1, 2010)

**9.32.210 Abatement penalties and costs.**

Upon expiration of the time limits established by Section 9.32.170 of this part, the agency director shall acquire jurisdiction to abate the nuisance, and may carry out the following as appropriate:

A. Disposal of Materials. Any materials abated may be disposed of as a part of the removal process to include, as appropriate, recycling or as a part of the county’s biomass utilization program.

B. Cost Accounting, Receipts and Notice of Assessment. The fire warden and the agency director will keep an itemized account of the costs of enforcing the provisions of this part, and of the proceeds of the sale of any materials connected therewith. Upon

completion of abatement, the agency director shall prepare a notice to be served as provided in Section 17.62.090(A) and (B), specifying:

1. The work done (supported by before and after pictures);
2. An itemized account of the costs and receipts of performing the work;
3. An address, legal description, or other description sufficient to identify the premises;
4. The amount of the assessment proposed to be levied against the premises, or the amount to be refunded, if any, due to excess proceeds over the expenses;
5. The time and place where the agency director will submit the account to the board of supervisors for confirmation. The time and place specified shall be no less than fifteen (15) days after service of the notice;
6. A statement that the board of supervisors will hear and consider objections and protests to the account and proposed assessment or refund.

C. Hearing on Account and Proposed Assessment. At the time and place fixed in the notice, the BOS will hear and consider the account and proposed assessment, together with objections and protests thereto. At the conclusion of the hearing, the BOS may make such modifications and revisions of the proposed account and assessment as deemed just and may order the account and proposed assessment confirmed or denied, in whole or in part, or as modified and revised. The determination of the BOS as to all matters contained therein is final and conclusive.

D. Notice of Lien. Upon confirmation of an assessment by the BOS, the agency director shall notify the owners by certified mail, return receipt requested, of the amount of the pending lien confirmed by the BOS, and advise them that they may pay the account in full within thirty (30) days in order to avoid the lien being recorded against the property. If the lien amount is not paid by the date stated in the letter, the agency director shall prepare and have recorded in the office of the recorder of Placer County a notice of lien. The notice shall contain:

1. A legal description, address and/or other description sufficient to identify the premises;
2. A description of the proceeding under which the special assessment was made, including the order of the BOS under this code confirming the assessment;
3. The amount of the assessment;
4. A claim of lien upon the described premises.

E. Lien. Upon the recordation of a notice of lien, the amount claimed shall constitute a lien upon the described premises, pursuant to Section 25845 of the California Government Code. Such lien shall be at parity with the liens of state and county taxes.

F. Collection with Ordinary Taxes. After recordation, the notice of lien shall be delivered to the County auditor, who will enter the amount of the lien on the assessment roll as a special assessment. Thereafter the amount set forth shall be collected at the same time and in the same manner as ordinary county taxes, and is subject to the same penalties and interest, and to the same procedures for foreclosure and sale in case of



delinquency, as are provided for ordinary county taxes; all laws applicable to the levy, collection and enforcement of county taxes are hereby made applicable to such assessment. (Ord. 5603-B § 1, 2010)

**9.32.220 Violations.**

Pursuant to Placer County Code Section 9.32.230, it shall be an infraction or misdemeanor for any person, natural or corporate, owning, possessing, occupying, or controlling any lands or premises to fail to perform the duty set forth in Section 9.32.150 of this part, or to fail to comply with the requirements in the “notice to abate” as specified in Section 9.32.170 of this part, or to interfere with the performance of the duties herein specified for any of the officers named in this part or their deputies, or to refuse to allow any such officer or their deputies or employees, or approved private contractors, to enter upon any premises for the purpose of lawfully inspecting and/or as ordered, removing any hazardous vegetation and/or combustible material hereinbefore described as a public nuisance, or to interfere in any manner whatever with the officers or contractors in the work of a lawful inspection and ordered removal herein provided. (Ord. 5603-B § 1, 2010)

**9.32.230 Penalties for violation.**

Upon conviction, punishment shall be by a fine of not less than one hundred dollars (\$100.00) or more than one thousand dollars (\$1,000.00) and by imprisonment of not more than six months, or both. (Ord. 5603-B § 1, 2010)

**9.32.240 Authority to promulgate reasonable rules and regulations.**

The board of supervisors reserves its right to adopt reasonable rules, regulations, and resolutions consistent with this part to enforce, interpret, and carry out the provisions of this part. Such rules may vary among different areas within the county. (Ord. 5603-B § 1, 2010)

## **APPENDIX C**

### **CalFire Ready Set Go Pamphlet**

# Your Personal **Wildland Fire ACTION GUIDE**



*Ready*



*Set*



*Go!*



8th Edition

# Ready, Set, Go!



## Saving Lives and Property through Advance Planning

This publication was prepared by the International Association of Fire Chiefs' RSG! Program and the USDA Forest Service, U.S. Department of the Interior, and the U.S. Fire Administration.

To learn more about the Ready, Set, Go! Program and its partners, visit [www.wildlandfireRSG.org](http://www.wildlandfireRSG.org).

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The fire season is a year-round reality, requiring firefighters and residents to be prepared for the threat of wildland fire.

Each year, wildland fires consume hundreds of homes in the Wildland-Urban Interface (WUI) – a high-risk wildfire area containing natural fuels where houses are built. Studies show as many as 80 percent of the homes lost to wildland fires could have been saved if their owners had followed simple fire-safe practices. In addition, wildland fire related deaths occur because people wait too long to leave their homes.

Your fire department takes every precaution to help protect you and your property from wildland fire. However, in a major wildland fire event, there simply may not be enough fire resources or firefighters to defend every home.

Successfully preparing for a wildland fire enables you to take personal responsibility to protect yourself, your family, and your property. In this Action Guide, we provide tips and tools you need to prepare for a wildland fire threat; to have situational awareness when a fire starts; and to act early as directed by local officials.

The Ready, Set, Go (RSG)! Program works in collaboration with existing wildland fire public education efforts. RSG is brought to you in partnership with the fire service, and amplifies the common goal we all share for wildland fire preparedness. Visit us at [www.wildlandfireRSG.org](http://www.wildlandfireRSG.org) to learn more about becoming prepared.

The IAFC's Wildland Fire Programs offer guidance, insight, and resources that support your local fire department in their outreach, mitigation, and response efforts. Visit [www.iafc.org/wildland](http://www.iafc.org/wildland) to learn more about wildland fire risk reduction and to access our resources.

You are a key leader to creating change. You and the members of your community can take simple steps to increase your wildland fire preparedness. Your knowledge and actions may empower others to follow your lead, increasing their safety and potentially decreasing property loss and damage. Being prepared for a wildland fire is vital, as responder resources can be spread thin. Taking advanced personal action can result in improved safety for all involved.

Fire is, and always has been, a natural occurrence. Hills, canyons, and forests burned periodically long before homes were built. Wildland fires are fueled by a build-up of dry vegetation and driven by seasonal hot and dry winds, which are extremely dangerous and difficult to control. Many people have built homes in the WUI without fully understanding the impact a fire may have on their lives. Few have adequately prepared their families and homes for a timely evacuation in the event of a wildland fire.

**It is not a question of if, but when, the next major wildland fire will occur.** Through advanced planning, understanding, and preparation we can all be partners in the wildland fire solution. The tips on the following pages are designed to help create awareness and a safer environment for you, your family, and fire personnel.



# Living in the Wildland-Urban Interface and Ember Zone

*Ready, Set, Go!*

begins with a house that firefighters can defend.

### Defensible Space Works

If you live next to a dense vegetation area, the Wildland-Urban Interface (WUI), you should provide firefighters with the defensible space they need to protect your home. Create a buffer zone by removing weeds, brush, and other vegetation. This helps keep the fire away from your home and reduces the risk from flying embers. Fire preparedness education programs provide valuable guidance on property enhancements.

### Homes on the Wildland Boundary are at Risk too

A home within one mile of a natural area is considered a part of an ember zone, where wind-driven embers can be a risk to your property. You and your home must be prepared well before a fire occurs. Ember fires can destroy homes or neighborhoods far from the actual front of the fire. Prepare your home with the tips from the following pages.

### Consider This

Unmanaged vegetation between and around homes increases the risk of wildland fire spreading throughout the community, and endangering lives and property. Pre-fire planning, fuels management, and sufficient fuel breaks allow firefighters the space they need to keep fire from entering the community.

“Fire preparedness education programs provide valuable guidance on property enhancements.”

—Nick Harrison, Texas A&M Forest Service

# Create Defensible Space

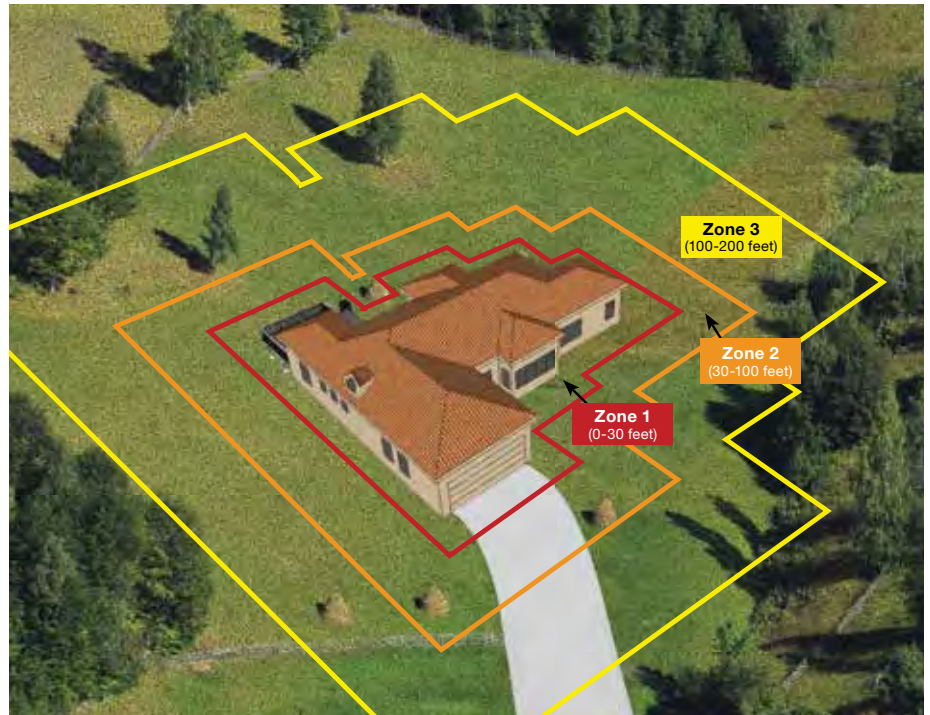
**D**efensible space is the space between a structure and the wildland area that creates a sufficient buffer to slow or halt the spread of fire to a structure.

It protects the home from igniting due to direct flame or radiant heat. Defensible space is essential to help protect a structure during a wildland fire.

You can create defensible space by removing weeds, brush, and other vegetation from around your property.

Defensible space is made up of three zones around your home; Zone 1: 0-30ft, Zone 2: 30-100ft, and Zone 3: 100-200ft.

Follow the advice under each zone to help protect your home.



## ZONE 1

### 0-30 feet around your home or to property line

- Use hard surfaces such as concrete or noncombustible rock mulch 0-5 feet around home.
- Use non-wood, low-growing herbaceous vegetation. Succulent plants and ground covers are good choices.
- Store firewood and other combustible materials at least 30 feet away from your home, garage, or attached deck.
- Trim back touching or overhanging branches from the roof to a distance of at least 10 feet.

## ZONE 2

### 30-100 feet around your home or to property line

- Create vegetation groups, "islands," to break up continuous fuels around your home.
- Remove ladder fuels to create a separation between low-level vegetation and tree branches to keep fire from climbing trees.
- Remove leaf and needle debris from the yard.
- Keep grass and wildflowers under 8 inches in height.

## ZONE 3

### 100-200 feet around your home or to property line

- Create and maintain a minimum of 10 feet between the tops of trees.
- Remove ladder fuels, creating a separation between low-level vegetation and tree branches to keep fire from climbing up trees.
- Remove dead trees and shrubs.

## Ladder Fuels

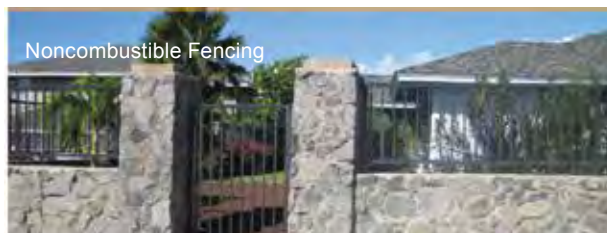
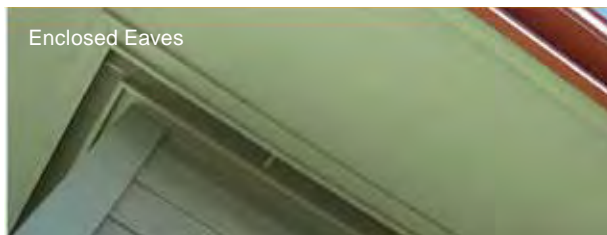
Ladder fuels allow the fire to climb from the surface fuels into the upper portion of the tree. They can be eliminated by increasing horizontal and vertical separation between vegetation.



# Making Your Home Fire Resistant – Harden Your Home

Construction materials and the quality of the defensible space surrounding the structure are what increases the chance of survival in a wildland fire. Embers from a wildland fire will find the weak spot in your home's fire protection scheme and can easily catch because of small, overlooked, or seemingly inconsequential factors. Below are some measures you can take to safeguard your home.

## Home Improvements



### BALCONIES and DECKS

**Construct your balconies or decks with noncombustible materials, and do not store combustible items underneath them. If there is a fire threat, bring any furniture into your home.** Embers can collect in or on combustible surfaces, or beneath decks and balconies, igniting the material and entering the home through walls or windows.

**To harden your home even further, consider protecting your home with a residential fire sprinkler system.** In addition to extinguishing a fire started by an ember that enters your home, a sprinkler system can help protect you and your family year-round from any home fire.

### ROOFS

Roofs are the most vulnerable surface where embers land because they become lodged and can start a fire. Roof valleys, open ends of barrel tiles, and rain gutters are all points of entry. **Block off all open spaces, and regularly inspect these areas.**

### EAVES

Embers can gather under open eaves and ignite combustible material. **Enclose your eaves to prevent ember intrusion, and regularly clear away debris that collects here.**

### VENTS

Embers can enter the attic or other concealed spaces and ignite combustible materials. Vents in eaves and cornices are particularly vulnerable, as are any unscreened vents. **Use corrosion resistant metal mesh to screen all vents, and check them regularly to remove any debris that collects in front of the screen.**

### WALLS and FENCING

Combustible siding or other combustible/overlapping materials provide surfaces and crevices for embers to nestle and ignite. **Build or remodel with noncombustible or ignition-resistant materials wherever possible, regularly clear away debris from any crevices, and perform annual upkeep.**

### WINDOWS and DOORS

Embers can enter gaps in doors, including garage doors. **Install weather proofing around your garage door, and if your garage is attached to your home make sure the interior door is solid and on self-closing hinges.**

Plants or combustible storage near windows can be ignited from embers and generate heat that can break windows and/or melt combustible frames. **Wherever possible, use dual-paned windows with tempered glass, as they are less likely to shatter from radiant heat.**

# Tour a Wildland Fire Prepared Home

**Home Site and Yard:** Ensure all vegetation within 100 feet around your home or to your property line is well-managed. This area may need to be enlarged in severe fire hazard areas. This may mean considering the impact a common slope or neighbor's yard may have on your property during a wildland fire. Remember the importance of routine maintenance. Keep woodpiles, propane tanks, and combustible materials away from your home and other structures such as detached garages, barns, and sheds. Ensure trees are away from power lines.

**Inside:** Keep working fire extinguishers on hand. Install smoke alarms on each level of your home and near bedrooms. Test them monthly and change the batteries twice a year.

**Address:** Make sure your address is clearly visible from the road and constructed of noncombustible materials. Reflective numbering is recommended.

**Roof:** Use a Class A fire-rated roof covering, such as composition shingles, metal, or tile, when roofing or re-roofing. Block any spaces between roof decking and covering to minimize ember intrusion. Clear pine needles, leaves, and other debris from your roof and gutters. Prune tree branches within 10 feet of your roof.

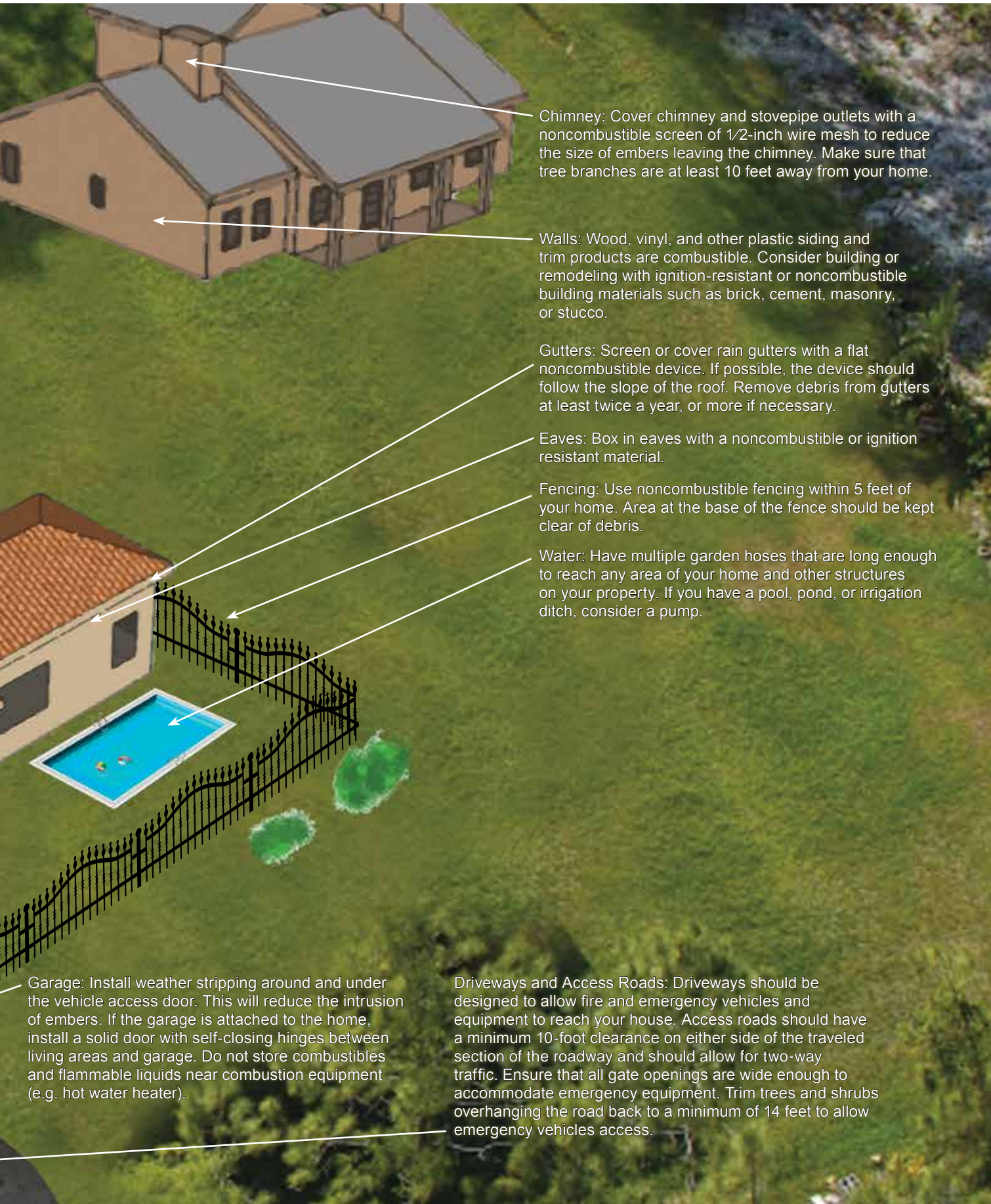
**Deck/Patio Cover:** Use heavy timber or noncombustible construction material for decks. Enclose the underside of balconies and decks with fire-resistant materials to prevent embers from blowing underneath. Keep your deck clear of combustible items, such as baskets, flower arrangements, and other material. Combustible materials should not be stored under your deck.

**Vents:** At a minimum, all vent openings should be covered with 1/8-inch corrosion resistant metal mesh.

**Windows:** Radiant heat from burning vegetation or a nearby structure can cause the glass in windows to break. This will allow embers to enter and start internal fires. Single-pane and large picture windows are particularly vulnerable to glass breakage. Install dual-paned windows with a minimum of one pane being tempered glass to reduce the chance of breakage during a fire. Limit the size and number of windows in your home that face large areas of vegetation.







**Chimney:** Cover chimney and stovepipe outlets with a noncombustible screen of 1/2-inch wire mesh to reduce the size of embers leaving the chimney. Make sure that tree branches are at least 10 feet away from your home.

**Walls:** Wood, vinyl, and other plastic siding and trim products are combustible. Consider building or remodeling with ignition-resistant or noncombustible building materials such as brick, cement, masonry, or stucco.

**Gutters:** Screen or cover rain gutters with a flat noncombustible device. If possible, the device should follow the slope of the roof. Remove debris from gutters at least twice a year, or more if necessary.

**Eaves:** Box in eaves with a noncombustible or ignition resistant material.

**Fencing:** Use noncombustible fencing within 5 feet of your home. Area at the base of the fence should be kept clear of debris.

**Water:** Have multiple garden hoses that are long enough to reach any area of your home and other structures on your property. If you have a pool, pond, or irrigation ditch, consider a pump.

**Garage:** Install weather stripping around and under the vehicle access door. This will reduce the intrusion of embers. If the garage is attached to the home, install a solid door with self-closing hinges between living areas and garage. Do not store combustibles and flammable liquids near combustion equipment (e.g. hot water heater).

**Driveways and Access Roads:** Driveways should be designed to allow fire and emergency vehicles and equipment to reach your house. Access roads should have a minimum 10-foot clearance on either side of the traveled section of the roadway and should allow for two-way traffic. Ensure that all gate openings are wide enough to accommodate emergency equipment. Trim trees and shrubs overhanging the road back to a minimum of 14 feet to allow emergency vehicles access.

# Ready, Set, Go!

## Create Your Own Action Guide

Now that you have done everything you can to prepare your home, it is time to prepare your family. Your Wildland Fire Action Guide must be prepared with all members of your household well in advance of a fire. Use these checklists to help you prepare and gain situational awareness in the threat of wildland fire.

### Ready – Get Ready

- Create a Family Disaster Plan that includes meeting locations and communication plans and rehearse it regularly. Include the evacuation of large animals such as horses in your plan.
- Have fire extinguishers on hand and teach your family how to use them.
- Ensure that your family knows where your gas, electric, and water main shut-off controls are and how to use them.
- Plan and practice several different evacuation routes.
- Designate an emergency meeting location outside the fire hazard area.
- Assemble an emergency supply kit as recommended by the American Red Cross. Keep an extra kit in your vehicle.
- Appoint an out-of-area friend or relative as a point of contact so you can communicate with family members.
- Maintain a list of emergency contact numbers in your emergency supply kit.
- Have a portable radio or scanner so you can stay updated on the fire and weather emergency announcements.



## Set – Be Prepared

- Monitor fire weather conditions and fire status. See [www.inciweb.nwcg.gov](http://www.inciweb.nwcg.gov). Stay tuned to your TV or local radio stations for updates.
- Evacuate as soon as you are 'set!'
- Alert family and neighbors.
- Dress in appropriate clothing (i.e., clothing made from natural fibers, such as cotton, and work boots). Have goggles and a dry bandana or particle mask handy.
- Ensure that you have your emergency supply kit on hand that includes all necessary items, such as a battery powered radio, spare batteries, emergency contact numbers, and a lot of drinking water.
- Remain close to your house, drink plenty of water, and ensure your family and pets are accounted for until you are ready to leave.

### INSIDE CHECKLIST, IF TIME ALLOWS

- Close all windows and doors, leaving them unlocked.
- Remove all shades and curtains from windows.
- Move furniture to the center of the room, away from windows and doors.
- Turn off pilot lights and air conditioning.
- Leave your lights on so firefighters can see your house under smoky conditions.

### OUTSIDE CHECKLIST, IF TIME ALLOWS

- Bring combustible items from the exterior of the house inside (e.g., patio furniture, children's toys, door mats, etc.) If you have a pool, place combustible items in the water.
- Turn off propane tanks and other gas at the meter.
- Don't leave sprinklers on or water running. They can effect critical water pressure.
- Leave exterior lights on.

- Back your car into the driveway to facilitate a quick departure. Shut doors and roll up windows.
- Have a ladder available.
- Patrol your property and extinguish all small fires until you leave.
- Cover attic and ground vents with pre-cut plywood or commercial seals if time permits.

### IF YOU ARE TRAPPED: SURVIVAL TIPS

- Stay in your home until the fire passes. Shelter away from outside walls.
- Bring garden hoses inside house so embers and flames do not destroy them.
- Look for spot fires and extinguish if found inside house.
- Wear long sleeves and long pants made of natural fibers such as cotton.
- Stay hydrated.
- Ensure you can exit the home if it catches fire (remember if it's hot inside the house, it is four to five times hotter outside).
- Fill sinks and tubs for an emergency water supply.
- Place wet towels under doors to keep smoke and embers out.
- After the fire has passed, check your roof and extinguish any fires, sparks or embers. Check the attic as well.
- If there are fires that you cannot extinguish, call 9-1-1.

## Go! – Act Early

By leaving early, you give your family the best chance of surviving a wildland fire. You also help firefighters by keeping roads clear of congestion, enabling them to move more freely and do their job in a safer environment.

### WHEN TO LEAVE

Do not wait to be advised to leave if there is a possible threat to your home or evacuation route. Leave early enough to avoid being caught in fire, smoke, or road congestion. If you are advised to leave by local authorities, do not hesitate!

### WHERE TO GO

Leave to a predetermined location (it should be a low-risk area, such as a well-prepared neighbor or relative's house, a Red Cross shelter or evacuation center, motel, etc.)

### HOW TO GET THERE

Have several travel routes in case one route is blocked by the fire or by emergency vehicles. Choose the safest route away from the fire.

### WHAT TO TAKE

Take your emergency supply kit containing your family and pet's necessary items.

### EMERGENCY SUPPLIES LIST

The American Red Cross recommends every family have an emergency supply kit assembled long before a wildland fire or other emergency occurs. Use the checklist below to help assemble yours. For more information on emergency supplies visit [www.redcross.org/get-help](http://www.redcross.org/get-help).

- Three-day supply of water (one gallon per person, per day) and non-perishable food for family (3 day supply).
- First aid kit and sanitation supplies.
- Flashlight, battery-powered radio, and extra batteries.
- An extra set of car keys, credit cards, cash, or traveler's checks.
- Extra eyeglasses, contact lenses, prescriptions, and medications.
- Important family documents and contact numbers, including insurance documents.
- Map marked with evacuation routes.
- Easily carried valuables and irreplaceable items.
- Personal electronic devices and chargers.
- Note: Keep a pair of old shoes and a flashlight handy in case of a sudden evacuation at night.



IAFC's Wildland Fire Programs are funded in cooperation with the USDA Forest Service. ***In accordance with Federal law and U.S. Department of Agriculture policy, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age, or disability. (Not all prohibited bases apply to all programs).*** To file a complaint alleging discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington DC 20250-9410 or call toll free voice (866) 632-9992, TDD (800) 877-8339, or voice relay (866) 377-8642. USDA is an equal opportunity provider and employer.

# My Personal Wildland Fire ACTION PLAN

Write up your Wildland Fire Action Plan and post it in a location where every member of your family can see it. Rehearse it with your family.

During high-fire-danger days in your area, monitor your local media for information and be ready to implement your plan. Hot, dry, and windy conditions create the perfect environment for a wildland fire.

## IMPORTANT PHONE NUMBERS

Out-of-Area Contact \_\_\_\_\_ Phone: \_\_\_\_\_

Work \_\_\_\_\_

School \_\_\_\_\_

Other \_\_\_\_\_

## EVACUATION ROUTES

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

## WHERE TO GO

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## LOCATION OF EMERGENCY SUPPLY KIT(S)

\_\_\_\_\_

## NOTES

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Contact your local fire department for more tips to prepare before a wildland fire.



# My Personal Wildland Fire ACTION PLAN

## Residential Safety Checklist

Tips To Improve Family and Property Survival During A Wildland Fire

### Ready

#### Get ready

- Dispose of or relocate combustible material from around your home.
- Trim trees & bushes allowing ample space between your home & landscape vegetation.

### Set

#### Be prepared

- Arrange your 'Go-Kit' with prescription medication, emergency supplies, important documents, and other essential items.
- Create your own action plan; involve your family & practice exit plans from the home & neighborhood frequently.
- Be sure you're familiar with local emergency notification systems & evacuation systems.

### Go!

#### Act early

- Get your 'Go-Kit' and leave well before the threat approaches following a planned accessible route.
- Stay aware of the situation and follow your plan.
- Cooperate with local authorities during evacuation & re-entry processes.

*Ready, Set, Go!*

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**APPENDIX D**

**Biological Resource Measures**

**The Ridge Fire Safe Plan  
Appendix D  
Biological Resource Measures**

Action 10 of Chapter 5 of the Ridge Fire Safe Plan requires a generally 300-foot wide modified shaded fuel break (MSFB) in the canyon below Lots 15 through 25 and 29 through 34 (see Figure 1-2 in the MSFB). Technical Memorandum #2 identifies the activities that would occur within the MSFB, including, but not limited to:

- Reducing annual grasses to a height of 4 inches or less through grazing, mowing or similar means;
- Removal of dead and diseased trees;
- Removal of tree limbs on live trees 10-feet above the ground;
- Removal of understory fuels over 1 foot in height (individual plants or pairs of plants may be retained provided there is a horizontal separation of 3 to 5 times the height of residual plants, and the residual plants are not within the drip lines of an overstory tree); and
- Removal of dead vegetation of 4 inches or less in diameter.

Fuel management activities are to take place on an annual basis.

The removal of vegetation in the MSFB could affect biological resources, including sensitive species, if any are present. The Biological Resource Assessment prepared for the Ridge Project identifies two biological communities within the MSFB—mixed-oak woodland and annual grassland that would be affected by fuel management activities. There are also non-vernal pool seasonal wetlands in the MSFB, but fill of these wetlands is not anticipated to occur during fuel maintenance.<sup>1</sup>

There are a two special-status plant species that have a high potential to occur within the MSFB--big-scale balsamroot (blooms March through June) and Brandegee's clarkia (blooms May through July)<sup>2</sup>. A number of other special-status plant species have a low potential of occurring within the MSFB, including Ahart's dwarf rush (blooms March through May), Butte County fritillary, (blooms March through June), dubious pea (blooms April through May), dwarf downingia (blooms March through May), Humboldt lily (blooms May through August), oval-leaved viburnum (blooms May through June), Red Hills soaproot (blooms May through June), and streambank spring beauty blooms (February through May). As indicated above, work within the MFSB would focus on removal of dead and dying vegetation and trees, removal of understory fuels taller than 1 foot and reducing the height of annual grasslands through grazing, mowing or similar measures. These activities would not result in the loss of plant habitat, because the soil would not be disturbed, and most vegetation would not be entirely removed.<sup>3</sup>

The only wildlife species with a high potential for occurring within the MFSB are certain nesting birds, which are protected under the Migratory Bird Treaty Act, as well as other laws and regulations. Birds that have a high potential to occur within the MFSB include grasshopper sparrow, northern harrier, purple martin, and white-tailed kite.<sup>4</sup> There is also a low potential for Swainson's hawk, a California threatened species and Placer County Conservation Program (PCCP) species, to nest within the project site.<sup>5</sup> Removal of trees and/or tree limbs during the breeding season could disturb these birds and cause them to abandon their nests and offspring. One way to avoid disturbing

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<sup>1</sup> HELIX Environmental Planning, Inc., *The Ridge Biological Resources Assessment*, March 2021, page 21.

<sup>2</sup> HELIX Environmental Planning, Inc., *The Ridge Biological Resources Assessment*, March 2021, page 15.

<sup>3</sup> HELIX Environmental Planning, Inc., *The Ridge Biological Resources Assessment*, March 2021, page 27.

<sup>4</sup> HELIX Environmental Planning, Inc., *The Ridge Biological Resources Assessment*, March 2021, page 18.

<sup>5</sup> HELIX Environmental Planning, Inc., *The Ridge Biological Resources Assessment*, March 2021, page 18.



nesting birds is to remove trees in the non-breeding season, typically between September 16 and January 31. However, this may not be feasible with an annual fuel reduction program, which typically occurs prior to the fire season, in the spring/early summer, when grasses have reached mature growth.

There is a low potential for one amphibian California species of special concern to occur within the MSFB—western spadefoot. The seasonal wetlands could provide marginal breeding habitat, and individuals could use the small burrows located throughout the annual grasslands and oak woodlands during their dormant periods.<sup>6</sup> If present during fuel management activities, individuals could be injured or killed.

Three insect species have low potential to occur within the MSFB—the andrenid bee, the Morrison bumble bee and the Western bumble bee.<sup>7</sup> These bees are on the California Special Animals List kept by the California Department of Fish and Wildlife (CDFW). This list includes species that are tracked in the California Natural Diversity Database, but that warrant no legal protection, although their numbers, reproductive success and/or habitat may be in decline.<sup>8</sup> Vegetation clearing could temporarily affect potential nesting and foraging habitat for these species, if present in the MSFB. However, similar habitats and vegetation species are located in areas near the MSFB, so the potential temporary loss of some of their habitat would not be significant.<sup>9</sup>

In summary, fuel maintenance activities within the MSFB could result in disturbances to nesting birds and/or injury or harm to western spadefoot if any of these species are present when fuel maintenance is performed. The FSP is not expected to result in the permanent loss of special-status plant habitat or fill of wetlands within the MSFB.

In order to address the potential disturbance/harm to nesting birds and western spadefoot, the following measures will be implemented.

#### 1. Western Spadefoot

- a. A qualified biologist will conduct a survey for western spadefoot between February 1 and March 31<sup>st</sup> of each year in portions of the MSFB where fuel maintenance activities will take place that year.
- b. If western spadefoots are found during the survey, an environmental training program will be conducted by a qualified biologist for all personnel who will be engaged in fuel maintenance that year. The program will cover identification of the western spadefoot, steps to take prior to and during construction, areas to be avoided (if any) and penalties for non-compliance.
- c. If any western spadefoot are discovered during fuel maintenance, a qualified biologist will obtain permission from CDFW to relocate the individuals, and shall document the relocation in a letter report provided to the County.

#### 2. Nesting Birds

- a. A qualified biologist will conduct a nesting survey within 3 days of the commencement of fuel management activities. A brief letter report will be provided to the County within 14 days of completing the survey documenting the findings of the survey and, if any nests were found, the steps taken to protect the nests from disturbance during fuel maintenance (see 2c, below).
- b. If no nests are found, fuel management activities may commence as soon as the surveys are complete.

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<sup>6</sup> HELIX Environmental Planning, Inc., *The Ridge Biological Resources Assessment*, March 2021, page 19.

<sup>7</sup> HELIX Environmental Planning, Inc., *The Ridge Biological Resources Assessment*, March 2021, page 21.

<sup>8</sup> HELIX Environmental Planning, Inc., *The Ridge Biological Resources Assessment*, March 2021, page 8.

<sup>9</sup> HELIX Environmental Planning, Inc., *The Ridge Biological Resources Assessment*, March 2021, page 27.

- c. If an active nest is found during the surveys, the biologist will establish a species-appropriate buffer zone around the nest. No fuel management activities will occur within the buffer zone until after the young have successfully fledged or the biologist determines the nest is no longer active. Fuel management activities may be done outside of the established buffer zone.
- d. An environmental awareness program will be conducted by a qualified biologist for personnel engaged in fuel maintenance activities. The program will provide information on the presence of and protection for the active nests.
- e. No surveys or environmental awareness program are necessary for fuel maintenance activities that begin during the non-breeding season (September 1 through January 31).