

**DRAFT MITIGATED NEGATIVE DECLARATION**

**FILE:** TM21-0002

**PROJECT NAME** Sierra View Estates Tentative Subdivision Map

**NAME OF APPLICANT:** Harry and Carrie Boyajian

**ASSESSOR'S PARCEL NO.:** 109-340-069      **SECTION:** 02 **T:** 09N **R:** 08E, MDM

**LOCATION:** The project is located on the west side of South Shingle Road, approximately 300 feet north of the intersection with Big Branch Road, in the Shingle Springs area.

**GENERAL PLAN AMENDMENT:**      **FROM:**      **TO:**

**REZONING:**      **FROM:**      **TO:**

**TENTATIVE PARCEL MAP** To subdivide a 30.84-acre undeveloped parcel into six (6) parcels ranging in size from 5.0 to 5.8 acres: Lot 1 (5.00 acres), Lot 2 (5.00 acres), Lot 3 (5.00 acres), Lot 4 (5.00 acres), Lot 5 (5.83 acres), and Lot 6 (5.00 acres). Access to the parcels would be from a new private road from South Shingle Road, approximately 300 feet north of Big Branch Road. Each parcel would have its own septic system and private well. Electric service would be provided by connecting to PG&E.

**SUBDIVISION:**

**SUBDIVISION (NAME):** Sierra View Estates

**SPECIAL USE PERMIT TO ALLOW:**

**OTHER:**

**REASONS THE PROJECT WILL NOT HAVE A SIGNIFICANT ENVIRONMENTAL IMPACT:**

**NO SIGNIFICANT ENVIRONMENTAL CONCERNS WERE IDENTIFIED DURING THE INITIAL STUDY.**

**MITIGATION HAS BEEN IDENTIFIED WHICH WOULD REDUCE POTENTIALLY SIGNIFICANT IMPACTS.**

**OTHER:**

In accordance with the authority and criteria contained in the California Environmental Quality Act (CEQA), State Guidelines, and El Dorado County Guidelines for the Implementation of CEQA, the County Environmental Agent analyzed the project and determined that the project will not have a significant impact on the environment. Based on this finding, the Planning Department hereby prepares this MITIGATED NEGATIVE DECLARATION. A period of thirty (30) days from the date of filing this mitigated negative declaration will be provided to enable public review of the project specifications and this document prior to action on the project by COUNTY OF EL DORADO. A copy of the project specifications is on file at the County of El Dorado Planning Services, 2850 Fairlane Court, Placerville, CA 95667.

This Mitigated Negative Declaration was adopted by \_\_\_\_\_ on \_\_\_\_\_.

\_\_\_\_\_  
Executive Secretary



**COUNTY OF EL DORADO  
PLANNING AND BUILDING DEPARTMENT  
INITIAL STUDY  
ENVIRONMENTAL CHECKLIST**

**Project Title:** TM21-0002/Sierra View Estates

**Lead Agency Name and Address:** El Dorado County, 2850 Fairlane Court, Placerville, CA 95667

**Contact Person:** Bianca Dinkler, Associate Planner

**Phone Number:** (530) 621-5875

**Owner's Name and Address:** Harry and Carrie Boyajian, 4348 Swift Circle, Shingle Springs, CA 95682

**Applicant's Name and Address:** Harry and Carrie Boyajian, 4348 Swift Circle, Shingle Springs, CA 95682

**Project Engineer's Name and Address:** Lebeck Engineering, Inc., 3430 Robin Lane #2, Cameron Park, CA 95682

**Project Location:** The project is located on the west side of South Shingle Road, approximately 300 feet north of the intersection with Big Branch Road in the Shingle Springs area.

**Assessor's Parcel Number:** 109-340-069 **Acres:** 30.84 acres

**Sections:** S: 02 T: 09N R: 08E

**General Plan Designation:** Low Density Residential (LDR)

**Zoning:** Residential Estate, Five-acre (RE-5)

**Description of Project:** A Tentative Subdivision Map to subdivide a 30.84-acre undeveloped parcel into six (6) parcels ranging in size from 5.0 to 5.8 acres: Lot 1 (5.00 acres), Lot 2 (5.00 acres), Lot 3 (5.00 acres), Lot 4 (5.00 acres), Lot 5 (5.83 acres), and Lot 6 (5.00 acres). Access to the parcels would be from a new private road from South Shingle Road, approximately 300 feet north of Big Branch Road. Each parcel would have its own septic system and private well. Electric service would be provided by connecting to PG&E. (Attachment 7).

**Environmental Setting:** The project site is an undeveloped 30.84-acre parcel. The land is gently sloped with slopes less than fifteen percent (15%) and located at an elevation of 1,320 feet above mean sea level. The four soil types on-site include AwD (Auburn silt loam, 2 to 30 percent slopes), AxD (Auburn very rocky silt loam, 2 to 30 percent slopes), ReB (Rescue sandy loam, 2 to 9 percent slopes), and RfC (Rescue very stony sandy loam, 3 to 15 percent slopes). The project site occurs in the Big Canyon Creek watershed, part of the Upper Cosumnes River watershed. Water onsite trends southeast towards South Shingle Road. Vegetation is blue oak/foothill pine woodland (6.4 acres) and annual grasslands (23.3%). The study area contains a pond and associated riparian habitat, a wetland swale, and an intermittent stream. A Biological Resource Assessment and Rare Plant Survey was prepared by Salix Consulting, Inc. with field reviews prepared on May 4, 2021, May 31, 2021, and final report dated September 2021. (Attachment 18). Further discussion and analysis of these topics are contained within this Initial Study.

**Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):**

1. El Dorado County Stormwater, West Slope
2. El Dorado County Surveyor's Office
3. El Dorado County Building Services
4. El Dorado County Air Quality Management District
5. El Dorado County Department of Transportation
6. El Dorado County Environmental Management Department
7. El Dorado County Fire Protection District
8. PG&E

**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, has consultation begun?** At the time of the application, seven Tribes have requested to be notified of proposed projects in El Dorado County: Colfax-Todds Valley Consolidated Tribe, Ione Band of Miwok Indians, Nashville-El Dorado Miwok, Shingle Springs Band of Miwok Indians, Tsi Akim Maidu, United Auburn Indian Community (UAIC), and Washoe Tribe of California and Nevada. These Tribes were notified of the proposed project by certified mail on January 10, 2022. Further discussion is included in the Tribal Cultural Resources section of this Initial Study.

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

	Aesthetics		Agriculture and Forestry Resources		Air Quality
X	Biological Resources		Cultural Resources		Energy
	Geology and Soils		Greenhouse Gas Emissions		Hazards and Hazardous Materials
	Hydrology and Water Quality		Land Use and Planning		Mineral Resources
	Noise		Population and Housing		Public Services
	Recreation		Transportation		Tribal Cultural Resources
	Utilities and Service Systems		Wildfire		Mandatory Findings of Significance

**DETERMINATION**

**On the basis of this initial evaluation:**

- I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards; and 2) has been addressed by Mitigation Measures based on the earlier analysis as described in attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects: a) have been analyzed adequately in an earlier EIR or **NEGATIVE DECLARATION**, pursuant to applicable standards; and b) have been avoided or mitigated pursuant to that earlier EIR or **NEGATIVE DECLARATION**, including revisions or Mitigation Measures that are imposed upon the proposed project, nothing further is required.

Signature:  Date: 11/30/22

Printed Name: Bianca Dinkler, Associate Planner For: El Dorado County

Signature:  Date: 11/30/22

Printed Name: Gina Hamilton, Current Planning Manager For: El Dorado County

## **PROJECT DESCRIPTION**

### **Introduction**

This Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts resulting from the proposed project.

Throughout this Initial Study, please reference the following Attachments:

- Attachment 1: Location Map
- Attachment 2: Aerial Map
- Attachment 3: Vicinity Map
- Attachment 4: General Plan Land Use Map
- Attachment 5: Zoning Map
- Attachment 6: Assessors Parcel Map
- Attachment 7: Tentative Subdivision Map
- Attachment 8: Tentative Subdivision Map with Aerial Photo
- Attachment 9: Slope Analysis Map
- Attachment 10: Preliminary Grading & Drainage Plan
- Attachment 11: Original Parcel Map PM 41-65-3
- Attachment 12: Site Map of Percolation Test and Soil Test Trench Locations
- Attachment 13: List of Existing Wells
- Attachment 14: Transportation Impact Study (TIS) Initial Determination Form
- Attachment 15: On-Site Transportation Review (OSTR) Report, March 17, 2022
- Attachment 16: Wildland Fire Safe Plan
- Attachment 17: Design Waiver Request
- Attachment 18: Biological Resources Assessment and Rare Plant Survey

**Project Description:** A Tentative Subdivision Map to subdivide a 30.84-acre undeveloped parcel into six (6) parcels ranging in size from 5.0 to 5.8 acres: Lot 1 (5.00 acres), Lot 2 (5.00 acres), Lot 3 (5.00 acres), Lot 4 (5.00 acres), Lot 5 (5.83 acres), and Lot 6 (5.00 acres). Access to the parcels would be from a new private road from South Shingle Road, approximately 300 feet north of Big Branch Road. Each parcel would have its own septic system and private well. Electric service would be provided by connecting to PG&E.

The project includes a request for a Design Waiver to modify County Standard Plan 101C which requires paving or chip seal to be provided where roadway slope exceeds 12 percent. Approximately 170 linear feet of the proposed new private road would have a slope of 13.9 percent. The Design Waiver, if approved, would allow that section of the roadway exceeding 12 percent slope to be constructed with aggregate base instead of the required paving or chip seal. The proposed road would be 20 feet wide with six (6) inches of aggregate base and 1-foot unpaved shoulders on each side. Attachment 7 details the Design Waiver request.

**Site Description:** The project site is an undeveloped 30.84-acre parcel. The land is gently sloped with slopes less than fifteen percent (15%) and located at an elevation of 1,320 feet above mean sea level. The four soil types on-site include AwD (Auburn silt loam, 2 to 30 percent slopes), AxD (Auburn very rocky silt loam, 2 to 30 percent slopes), ReB (Rescue sandy loam, 2 to 9 percent slopes), and RfC (Rescue very stony sandy loam, 3 to 15 percent slopes). The project site occurs in the Big Canyon Creek watershed, part of the Upper Cosumnes River watershed. Water on-site trends southeast towards South Shingle Road. Vegetation is blue oak/foothill pine woodland (6.4 acres) and annual grasslands (23.3 acres). The project site contains a pond and associated riparian habitat, a wetland swale, and an intermittent stream. A Biological Resource Assessment and Rare Plant Survey was prepared by Salix Consulting, Inc. with field reviews prepared on May 4, 2021, May 31, 2021, and final report dated September 2021. (Attachment 18).

Project Location and Surrounding Uses:

The project site is 30.84 acres and located in the Shingle Springs Community Region. The adjacent parcels are similarly zoned Residential Estate, Five-acre (RE-5) with a General Plan land use designation of Low Density Residential (LDR) and developed with residential uses.

Project Characteristics:

1. Transportation/Circulation/Parking/Fire Protection

The project was reviewed by the County Department of Transportation (DOT) who provided project-specific and standard conditions of approval. An On-Site Transportation Review (OSTR) report was prepared by KD Anderson and Associates dated March 17, 2022 (Attachment 15). The eight tasks that are part of the OSTR although not necessarily required depending on-site usage, include analyzing the current traffic problems in the local area, proximity of proposed site driveways to other driveways or intersections, adequacy of vehicle parking, adequacy of the project site design to fully satisfy truck loading demand on-site, 25-foot minimum required throat depth (MRTD) at project driveways, adequacy of the project site design to convey all vehicle types, adequacy of sight distance on-site, and queuing analysis of “drive-through” facilities. The report concluded that no issues were found with the proposed project design. Sight lines at the project driveway should be confirmed to meet the required sight distance standards.

Access is proposed from South Shingle Road approximately 300 feet north of Big Branch Road. A County Standard Encroachment per Standard Plan 103D is proposed. Grading will be necessary for the access road only. Pad grading for the subdivision is not proposed, and the created parcels would be subject to a grading permit at the time of building permit issued for each parcel. Natural drainage is proposed, as modified by the construction of any culverts necessary for access road construction.

A Design Waiver is requested to modify County Standard Plan 101C which requires paving or chip seal to be provided where roadway slope exceeds 12 percent. Approximately 170 linear feet of the proposed new private road would have a slope of 13.9 percent. The Design Waiver, if approved, would allow that section of the roadway exceeding 12 percent slope to be constructed with aggregate base instead of the required paving or chip seal. The proposed road would be 20 feet wide with six (6) inches of aggregate base and 1-foot unpaved shoulders on each side.

In addition, the El Dorado County Fire Protection District reviewed the project and provided conditions of approval which would be incorporated into the project, specifically pertaining to fire flow, sprinklers, hydrants, fire department access, roadway surface, roadway grade, traffic calming measures, turning radius, gates, funding mechanism for emergency fire access components, wildland fire safe plan, fencing, parking and fire lanes, vegetative fire clearance, trail systems and land-locked access, addressing, landscaping, improvement plans, and building and fire plans.

2. Utilities and Infrastructure

Each parcel would be served by its own private septic system and well for water. The County Environmental Management Department reviewed the project and provided comments outlining the requirements for septic systems and wells. Wells on each parcel produced between 8 and 68 gallons per minute with a median well production of 50 gallons per minute and an average well production of 43.6 gallons per minute between 5 separate wells. Soil depth was 11 feet for each of the proposed parcels, meeting the El Dorado County Environmental Management’s “Local Agency Management Plan” (LAMP) requirement for adequate soil depth. Soil percolation rates for Parcel 1,2,3,5, and 6 meet the LAMP requirement for new parcels utilizing a septic system to have an average soil percolation rate of 120 minutes per inch or less. Parcel 4 has a soil depth of 11 feet and a soil percolation rate of 128 minutes per inch, which does not meet LAMP requirements for land divisions. The El Dorado County LAMP defines usable dispersal material as soil with a percolation rate between 1 and 120 minutes per inch. Options to meet this LAMP requirement include merging Parcel 4 with an adjacent parcel that has a lower percolation rate or identifying an alternative sewage dispersal area on the parcel with a soil percolation rate between 1 and 120 minutes per inch.

Electric service would be provided by connecting to Pacific Gas & Electric (PG&E) infrastructure in the project area.

### 3. Construction Considerations

The proposed parcels would maintain the current zoning designation of Residential Estate, Five-acre (RE-5), which allows for single-unit residential development with a minimum parcel size of five acres. Any future construction activities, such as new/additional residential units and/or accessory structures, would be completed in conformance with applicable agency requirements, and subject to grading and building permits from the El Dorado County Building Services.

### Project Schedule and Approvals

This Initial Study is being circulated for public and agency review for a 30-day period. Written comments on the Initial Study should be submitted to the project planner indicated in the Summary section, above. Following the close of the written comment period, the Initial Study will be considered by the Lead Agency in a public meeting and the Mitigated Negative Declaration (MND) will be adopted if it is determined to be in compliance with California Environmental Quality Act (CEQA). The Lead Agency will also determine whether to approve the project.

## **EVALUATION OF ENVIRONMENTAL IMPACTS**

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole 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.
3. If the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is a fair argument 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.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of Mitigation Measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the Mitigation Measures, and briefly explain how they reduce the effect to a less than significant level.
5. 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 (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:
  - a. Earlier Analysis Used. Identify and state where they are available for review.
  - b. 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, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c. Mitigation Measures. For effects that are "Less Than Significant With Mitigation Incorporated," 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.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
  - a. the significance criteria or threshold, if any, used to evaluate each question; and

- b. the mitigation measure identified, if any, to reduce the impact to less than significant.

**ENVIRONMENTAL IMPACTS**

<b>I. AESTHETICS. <i>Would the project:</i></b>				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?				<b>X</b>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				<b>X</b>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			<b>X</b>	
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			<b>X</b>	

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

No federal regulations are applicable to aesthetics in relation to the proposed project.

***State Laws, Regulations, and Policies***

In 1963, the California State Legislature established the California Scenic Highway Program, a provision of the Streets and Highways Code, to preserve and enhance the natural beauty of California (Caltrans, 2022). The state highway system includes designated scenic highways and those that are eligible for designation as scenic highways.

***Local Laws, Regulations, and Policies***

The County has several standards and ordinances that address issues relating to visual resources. Many of these can be found in the County Zoning Ordinance (Title 130 of the County Code). The Zoning Ordinance consists of descriptions of the zoning districts, including identification of uses allowed by right or requiring a special-use permit and specific development standards that apply in particular districts based on parcel size and land use density. These development standards often involve limits on the allowable size of structures, required setbacks, and design guidelines. Included are requirements for setbacks and allowable exceptions, the location of public utility distribution and transmission lines, architectural supervision of structures facing a state highway, height limitations on structures and fences, outdoor lighting, and wireless communication facilities.

**Environmental Setting:**

Visual resources are classified as 1) scenic resources or 2) scenic views. Scenic resources include specific features of a viewing area (or viewshed) such as trees, rock outcroppings, and historic buildings. They are specific features that act as the focal point of a viewshed and are usually foreground elements. Scenic views are elements of the

broader viewshed such as mountain ranges, valleys, and ridgelines. They are usually middle ground or background elements of a viewshed that can be seen from a range of viewpoints, often along a roadway or other corridor.

A list of the county's scenic views and resources is presented in Table 5.3-1 of the *El Dorado County General Plan Draft EIR* (El Dorado County 2003:5.3-3). This list includes areas along highways where viewers can see large water bodies (e.g., Lake Tahoe and Folsom Reservoir), river canyons, rolling hills, forests, or historic structures or districts that are reminiscent of El Dorado County's heritage.

Several highways in El Dorado County have been designated by the California Department of Transportation (Caltrans) as scenic highways or are eligible for such designation. These include U.S. 50 from the eastern limits of the Government Center interchange (Placerville Drive/Forni Road) in Placerville to South Lake Tahoe, all of SR 89 within the county, and those portions of SR 88 along the southern border of the county. There are no officially designated state scenic corridors in the vicinity of the project site (Caltrans 2018).

Rivers in El Dorado County include the American, Cosumnes, Rubicon, and Upper Truckee rivers. A large portion of El Dorado County is under the jurisdiction of the United States Forest Service (USFS), which oversees rivers or river sections identified as Wild and Scenic under the Wild and Scenic Rivers Act. To date, no river sections in El Dorado County have been nominated for or granted Wild and Scenic River status.

**Discussion:** A substantial adverse effect to visual resources would result in the introduction of physical features that are not characteristic of the surrounding development, substantially change the natural landscape, or obstruct an identified public scenic vista.

- a. **Scenic Vista or Resource:** No scenic vistas, as designated by the County General Plan, are located in the vicinity of the site (El Dorado County 2003, 5.3-3 through 5.3-5). The project site is not adjacent to or visible from the portion of U.S. 50 that is designated a State Scenic Highway. Any new structures would require permits for construction and would be required to comply with the General Plan and the Zoning Ordinance. There would be no impact.
- b. **Scenic Resources:** The project site is not visible from an officially designated State Scenic Highway or county-designated scenic highway, or any roadway that is part of a corridor protection program (Caltrans, 2018). There are no views of the site from public parks or scenic vistas. Though there are trees in the project vicinity, there are no trees or historic buildings that have been identified by the County as contributing to exceptional aesthetic value at the project site. There would be no impact.
- c. **Visual Character:** Each resulting parcel would have the capability for single-family residential development. The property is currently undeveloped. Each new parcel would be allowed to develop residential structures, including a primary residence and accessory dwelling unit (ADU), and accessory structures. The project site is adjacent to other residences. The proposed project would not affect the visual character of the surrounding area. Impacts would be less than significant.
- d. **Light and Glare:** The proposed project does not include any substantial new light sources; however, the project would allow for residential development on each of the new parcels in the future which could produce minimal new light and glare. Future development would be required to comply with the County lighting ordinance requirements, including the shielding of lights to avoid potential glare, during the building permit process. Impacts would be less than significant.

**FINDING:** With adherence to El Dorado County Code of Ordinances (County Code), for this Aesthetics category, impacts would be anticipated to be less than significant.

<b>II. AGRICULTURE AND FOREST RESOURCES.</b> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by California Department of forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Locally Important Farmland (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b. Conflict with existing zoning for agricultural use, or a Williamson Act Contract?				X
c. 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))?				X
d. Result in the loss of forest land or conversion of forest land to non-forest use?				X
e. 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?				X

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

No federal regulations are applicable to agricultural and forestry resources in relation to the proposed project.

***State Laws, Regulations, and Policies***

**Farmland Mapping and Monitoring Program**

The Farmland Mapping and Monitoring Program (FMMP), administered by the California Department of Conservation (CDC), produces maps and statistical data for use in analyzing impacts on California’s agricultural resources (CDC 2008). FMMP rates and classifies agricultural land according to soil quality, irrigation status, and other criteria. Important Farmland categories are as follows (CDC 2013a):

***Prime Farmland:*** Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. These lands have the soil quality, growing season, and moisture supply needed to produce sustained high yields. Prime Farmland must have been used for irrigated agricultural production at some time during the 4 years before the FMMP’s mapping date.

***Farmland of Statewide Importance:*** Farmland similar to Prime Farmland, but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Farmland of Statewide Importance must have been used for irrigated agricultural production at some time during the 4 years before the FMMP's mapping date.

***Unique Farmland:*** Farmland of lesser quality soils used for the production of the state's leading agricultural crops. These lands are usually irrigated but might include non-irrigated orchards or vineyards, as found in some climatic zones. Unique Farmland must have been cropped at some time during the 4 years before the FMMP's mapping date.

***Farmland of Local Importance:*** Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

#### California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965 (commonly referred to as the Williamson Act) allows local governments to enter into contracts with private landowners for the purpose of preventing conversion of agricultural land to non-agricultural uses (CDC 2013b). In exchange for restricting their property to agricultural or related open space use, landowners who enroll in Williamson Act contracts receive property tax assessments that are substantially lower than the market rate.

#### Z'berg-Nejedly Forest Practice Act

Logging on private and corporate land in California is regulated by the 1973 Z'berg-Nejedly Forest Practice Act. This Act established the Forest Practice Rules (FPRs) and a politically-appointed Board of Forestry to oversee their implementation. The California Department of Forestry (CALFIRE) works under the direction of the Board of Forestry and is the lead government agency responsible for approving logging plans and for enforcing the FPRs.

**Discussion:** A substantial adverse effect to Agricultural Resources would occur if:

- There is a conversion of choice agricultural land to nonagricultural use, or impairment of the agricultural productivity of agricultural land;
  - The amount of agricultural land in the County is substantially reduced; or
  - Agricultural uses are subjected to impacts from adjacent incompatible land uses.
- a. **Farmland Mapping and Monitoring Program:** The property is zoned Residential Estate, Five-acre (RE-5). The project site is not designated as Farmland of Local Importance that would require a monitoring program. The proposed Tentative Subdivision Map to create six residential parcels would not negatively impact farmland. There would be no impact.
  - b. **Agricultural Uses:** The property is not located within a Williamson Act Contract, nor adjacent to land under a Williamson Act Contract. There would be no impact to agricultural uses.
  - c.-d. **Loss of Forest Land or Conversion of Forest Land:** The site is not designated as Timberland Preserve Zone (TPZ) or other forest land according to the General Plan and Zoning Ordinance. There would be no impact to forest lands.
  - e. **Conversion of Prime Farmland or Forest Land:** The project would not convert prime farmland or forest land to non-agriculture use. There would be no impact.

**FINDING:** For this Agriculture category, there would be no impacts.

<b>III. AIR QUALITY. <i>Would the project:</i></b>				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?			X	
b. 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
c. Expose sensitive receptors to substantial pollutant concentrations?			X	
d. Create objectionable odors affecting a substantial number of people?			X	

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

The Clean Air Act is implemented by the U.S. Environmental Protection Agency (USEPA) and sets ambient air limits, the National Ambient Air Quality Standards (NAAQS), for six criteria pollutants: particulate matter of aerodynamic radius of 10 micrometers or less (PM10), particulate matter of aerodynamic radius of 2.5 micrometers or less (PM2.5), carbon monoxide (CO), nitrogen dioxide (NO2), ground-level ozone, and lead. Of these criteria pollutants, particulate matter and ground-level ozone pose the greatest threats to human health.

***State Laws, Regulations, and Policies***

The California Air Resources Board (CARB) sets standards for criteria pollutants in California that are more stringent than the U.S. National Ambient Air Quality Standards (NAAQS) and include the following additional contaminants: visibility-reducing particles, hydrogen sulfide, sulfates, and vinyl chloride. The proposed project is located within the Mountain Counties Air Basin, which is comprised of seven air districts: the Northern Sierra Air Quality Management District (AQMD), Placer County Air Pollution Control District (APCD), Amador County APCD, Calaveras County APCD, the Tuolumne County APCD, the Mariposa County APCD, and a portion of the El Dorado County AQMD, which consists of the western portion of El Dorado County. The El Dorado County Air Quality Management District (AQMD) manages air quality for attainment and permitting purposes within the west slope portion of El Dorado County.

USEPA and CARB regulate various stationary sources, area sources, and mobile sources. USEPA has regulations involving performance standards for specific sources that may release toxic air contaminants (TACs), known as hazardous air pollutants (HAPs) at the federal level. In addition, USEPA has regulations involving emission criteria for off-road sources such as emergency generators, construction equipment, and vehicles. CARB is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB also establishes passenger vehicle fuel specifications.

Air quality in the project area is regulated by the El Dorado County Air Quality Management District. California Air Resources Board and local air districts are responsible for overseeing stationary source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required to comply with CEQA. The AQMD regulates air quality through the federal and state Clean Air Acts, district rules, and its permit authority. National and

state ambient air quality standards (AAQS) have been adopted by the Environmental Protection Agency and State of California, respectively, for each criteria pollutant: ozone, particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide.

The Environmental Protection Agency and State also designate regions as “attainment” (within standards) or “nonattainment” (exceeds standards) based on the ambient air quality. The County is in nonattainment status for both federal and state ozone standards and for the state PM10 standard, and is in attainment or unclassified status for other pollutants (California Air Resources Board 2013). County thresholds are included in the chart below.

Criteria Pollutant	El Dorado County Threshold	
Reactive Organic Gasses (ROG)	82 lbs/day	
Nitrogen Oxides (NOx)	82 lbs/day	
Carbon Monoxide (CO)	8-hour average: 6 parts per million (ppm)	1-hour average: 20 ppm
Particulate Matter (PM10):	Annual geometric mean: 30 µg/m3	24-hour average: 50 µg/m3
Particulate Matter (PM2.5):	Annual arithmetic mean: 15 µg/m3	24-hour average: 65 µg/m3
Ozone	8-hour average: 0.12 ppm	1-hour average: .09

The guide includes a Table (Table 5.2) listing project types with potentially significant emissions. ROG and NOx Emissions may be assumed to not be significant if:

- The project encompasses 12 acres or less of ground that is being worked at one time during construction;
- At least one of the recommended mitigation measures related to such pollutants is incorporated into the construction of the project;
- The project proponent commits to pay mitigation fees in accordance with the provisions of an established mitigation fee program in the district (or such program in another air pollution control district that is acceptable to District); or
- Daily average fuel use is less than 337 gallons per day for equipment from 1995 or earlier, or 402 gallons per day for equipment from 1996 or later.

If the project meets one of the conditions above, AQMD assumed that exhaust emissions of other air pollutants from the operation of equipment and vehicles are also not significant.

For Fugitive dust (PM10), if dust suppression measures will prevent visible emissions beyond the boundaries of the project, further calculations to determine PM emissions are not necessary. For the other criteria pollutants, including CO, PM10, SO2, NO2, sulfates, lead, and H2S, a project is considered to have a significant impact on air quality if it will cause or contribute significantly to a violation of the applicable national or state ambient air quality standard(s).

Naturally occurring asbestos (NOA) is also a concern in El Dorado County because it is known to be present in certain soils and can pose a health risk if released into the air. The AQMD has adopted an El Dorado County Naturally Occurring Asbestos Review Area Map that identifies those areas more likely to contain NOA (El Dorado County 2005).

**Discussion:** The El Dorado County Air Quality Management District (AQMD) has developed a Guide to Air Quality Assessment (2002) to evaluate project specific impacts and help determine if air quality mitigation measures are needed, or if potentially significant impacts could result. A substantial adverse effect on air quality would occur if:

- Emissions of ROG and No<sub>x</sub> will result in construction or operation emissions greater than 82lbs/day (Table 3.2);

- Emissions of PM<sub>10</sub>, CO, SO<sub>2</sub> and NO<sub>x</sub>, as a result of construction or operation emissions, will result in ambient pollutant concentrations in excess of the applicable National or State Ambient Air Quality Standard (AAQS). Special standards for ozone, CO, and visibility apply in the Lake Tahoe Air Basin portion of the County; or
  - Emissions of toxic air contaminants cause cancer risk greater than 1 in 1 million (10 in 1 million if best available control technology for toxics is used) or a non-cancer Hazard Index greater than 1. In addition, the project must demonstrate compliance with all applicable District, State and U.S. EPA regulations governing toxic and hazardous emissions.
- a. **Air Quality Plan:** The El Dorado County Air Quality Management District (EDCAQMD) has adopted Rules and Regulations establishing rules and standards for the reduction of stationary source air pollutants (ROG/VOC, NO<sub>x</sub>, and O<sub>3</sub>). The EDC/State Clean Air Act Plan has set a schedule for implementing and funding transportation contract measures to limit mobile source emissions. The project would not conflict with or obstruct implementation of either plan. Any activities associated with grading and construction would require a Fugitive Dust Mitigation Plan (FDMP). The FDMP would address grading measures and operation of equipment to minimize and reduce the level of defined particulate matter exposure and/or emissions to a less than significant level. The impact would be less than significant.
- b. **Air Quality Standards and Cumulative Impacts:** No construction is proposed as part of the project. There is the potential for future development on the parcels for construction of residential structures as well as accessory structures. Although this would contribute air pollutants due to construction and possible additional vehicle trips to and from the site, these contributions would not result in exceedance of any air quality standards or a cumulatively considerable net increase of any criteria pollutant. Existing regulations implemented at issuance of building and grading permits would ensure that any construction related PM<sub>10</sub> dust emissions would be reduced to acceptable levels. The El Dorado County Air Quality Management District (EDCAQMD) reviewed the project and provided standard conditions of approval that will be incorporated into the project. The impact would be less than significant.
- c. **Sensitive Receptors:** The CEQA Guidelines (14 CCR 15000) identify sensitive receptors as facilities that house or attract children, the elderly, people with illnesses, or others that are especially sensitive to the effects of air pollutants. Hospitals, schools, and convalescent hospitals are examples of sensitive receptors. The project site is not located adjacent to sensitive receptors and no sources of substantial pollutant concentrations would be emitted by any future residences, during construction, or following construction. The impact would be less than significant.
- d. **Objectionable Odors:** Table 3-1 of the Guide to Air Quality Assessment (AQMD, 2002) does not list the proposed use of the parcels for residential uses as a use known to create objectionable odors. The request for a Tentative Subdivision Map would not be a source of objectionable odors. The impact would be less than significant.

**FINDING:** The proposed project would not affect the implementation of regional air quality regulations or management plans. With conditions of approval, the proposed project would not be anticipated to cause substantial adverse effects to air quality, nor exceed established significance thresholds for air quality impacts.

<b>IV. BIOLOGICAL RESOURCES.</b> <i>Would the project:</i>				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
b. 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 California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			X	

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

Endangered Species Act

The Endangered Species Act (ESA) (16 U.S. Code [USC] Section 1531 *et seq.*; 50 Code of Federal Regulations [CFR] Parts 17 and 222) provides for conservation of species that are endangered or threatened throughout all or a substantial portion of their range, as well as protection of the habitats on which they depend. The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) share responsibility for implementing the ESA. In general, USFWS manages terrestrial and freshwater species, whereas NMFS manages marine and anadromous species.

Section 9 of the ESA and its implementing regulations prohibit the “take” of any fish or wildlife species listed under the ESA as endangered or threatened, unless otherwise authorized by federal regulations. The ESA defines the term “take” to mean “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” (16 USC Section 1532). Section 7 of the ESA (16 USC Section 1531 *et seq.*) outlines the procedures for federal interagency cooperation to conserve federally listed species and designated critical habitats. Section 10(a)(1)(B) of the ESA provides a process by which nonfederal entities may obtain an incidental take permit from USFWS or NMFS for otherwise lawful activities that incidentally may result in “take” of endangered or

threatened species, subject to specific conditions. A habitat conservation plan (HCP) must accompany an application for an incidental take permit.

#### Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC, Chapter 7, Subchapter II) protects migratory birds. Most actions that result in take, or the permanent or temporary possession of, a migratory bird constitute violations of the MBTA. The MBTA also prohibits destruction of occupied nests. USFWS is responsible for overseeing compliance with the MBTA.

#### Bald and Golden Eagle Protection Act

The federal Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), first enacted in 1940, prohibits "taking" bald eagles, including their parts, nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." The definition for "Disturb" includes injury to an eagle, a decrease in its productivity, or nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior. In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present.

#### Clean Water Act

Clean Water Act (CWA) section 404 regulates the discharge of dredged and fill materials into waters of the U.S., which include all navigable waters, their tributaries, and some isolated waters, as well as some wetlands adjacent to the aforementioned waters (33 CFR Section 328.3). Areas typically not considered to be jurisdictional waters include non-tidal drainage and irrigation ditches excavated on dry land, artificially irrigated areas, artificial lakes or ponds used for irrigation or stock watering, small artificial waterbodies such as swimming pools, vernal pools, and water-filled depressions (33 CFR Part 328). Areas meeting the regulatory definition of waters of the U.S. are subject to the jurisdiction of U.S. Army Corps of Engineers (USACE) under the provisions of CWA Section 404. Construction activities involving placement of fill into jurisdictional waters of the U.S. are regulated by USACE through permit requirements. No USACE permit is effective in the absence of state water quality certification pursuant to Section 401 of CWA.

Section 401 of the CWA requires an evaluation of water quality when a proposed activity requiring a federal license or permit could result in a discharge to waters of the U.S. In California, the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs) issue water quality certifications. Each RWQCB is responsible for implementing Section 401 in compliance with the CWA and its water quality control plan (also known as a Basin Plan). Applicants for a federal license or permit to conduct activities that may result in the discharge to waters of the U.S. (including wetlands or vernal pools) must also obtain a Section 401 water quality certification to ensure that any such discharge will comply with the applicable provisions of the CWA.

#### ***State Laws, Regulations, and Policies***

##### California Fish and Game Code

The California Fish and Game Code includes various statutes that protect biological resources, including the Native Plant Protection Act of 1977 (NPPA) and the California Endangered Species Act (CESA). The NPPA (California Fish and Game Code Section 1900-1913) authorizes the Fish and Game Commission to designate plants as endangered or rare and prohibits take of any such plants, except as authorized in limited circumstances.

CESA (California Fish and Game Code Section 2050–2098) prohibits state agencies from approving a project that would jeopardize the continued existence of a species listed under CESA as endangered or threatened. Section 2080 of the California Fish and Game Code prohibits the take of any species that is state listed as endangered or

threatened, or designated as a candidate for such listing. California Department of Fish and Wildlife (CDFW) may issue an incidental take permit authorizing the take of listed and candidate species if that take is incidental to an otherwise lawful activity, subject to specified conditions.

California Fish and Game Code Section 3503, 3513, and 3800 protect native and migratory birds, including their active or inactive nests and eggs, from all forms of take. In addition, Section 3511, 4700, 5050, and 5515 identify species that are fully protected from all forms of take. Section 3511 lists fully protected birds, Section 5515 lists fully protected fish, Section 4700 lists fully protected mammals, and Section 5050 lists fully protected amphibians.

#### Streambed Alteration Agreement

Sections 1601 to 1606 of the California Fish and Game Code require that a Streambed Alteration Application be submitted to CDFW for any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake. As a general rule, this requirement applies to any work undertaken within the 100-year floodplain of a stream or river containing fish or wildlife resources.

#### California Native Plant Protection Act

The California Native Plant Protection Act (California Fish and Game Code Section 1900–1913) prohibits the taking, possessing, or sale of any plants with a state designation of rare, threatened, or endangered (as defined by CDFW). The California Native Plant Society (CNPS) maintains a list of plant species native to California that has low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Plants of California (CNPS 2001). Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review.

#### Forest Practice Act

Logging on private and corporate land in California is regulated by the Z'berg-Nejedly Forest Practices Act (FPA), which took effect January 1, 1974. The act established the Forest Practice Rules (FPRs) and a politically-appointed Board of Forestry to oversee their implementation. CALFIRE works under the direction of the Board of Forestry and is the lead government agency responsible for approving logging plans and for enforcing the FPRs. A Timber Harvest Plan (THP) must be prepared by a Registered Professional Forester (RPF) for timber harvest on virtually all non-federal land. The FPA also established the requirement that all non-federal forests cut in the State be regenerated with at least three hundred stems per acre on high site lands, and one hundred fifty trees per acre on low site lands.

#### ***Local Laws, Regulations, and Policies***

The County General Plan also include policies that contain specific, enforceable requirements and/or restrictions and corresponding performance standards that address potential impacts on special status plant species or create opportunities for habitat improvement. The El Dorado County General Plan designates the Important Biological Corridor (IBC) (Exhibits 5.12-14, 5.12-5 and 5.12-7, El Dorado County, 2003). Lands located within the overlay district are subject to the following provisions, given that they do not interfere with agricultural practices:

- Increased minimum parcel size;
- Higher canopy-retention standards and/or different mitigation standards/thresholds for oak woodlands;
- Lower thresholds for grading permits;
- Higher wetlands/riparian retention standards and/or more stringent mitigation requirements for wetland/riparian habitat loss;
- Increased riparian corridor and wetland setbacks;
- Greater protection for rare plants (e.g., no disturbance at all or disturbance only as recommended by U.S. Fish and Wildlife Service/California Department of Fish and Wildlife);
- Standards for retention of contiguous areas/large expanses of other (non-oak or non-sensitive) plant communities;

- Building permits discretionary or some other type of “site review” to ensure that canopy is retained;
- More stringent standards for lot coverage, floor area ratio (FAR), and building height; and
- No hindrances to wildlife movement (e.g., no fences that would restrict wildlife movement).

**Discussion:** A substantial adverse effect on Biological Resources would occur if the implementation of the project would:

- Substantially reduce or diminish habitat for native fish, wildlife or plants;
- Cause a fish or wildlife population to drop below self-sustaining levels;
- Threaten to eliminate a native plant or animal community;
- Reduce the number or restrict the range of a rare or endangered plant or animal;
- Substantially affect a rare or endangered species of animal or plant or the habitat of the species; or
- Interfere substantially with the movement of any resident or migratory fish or wildlife species.

- a. **Special Status Species:** The project site is located within a sensitive natural community of the county, state, or federal agency, including but not limited to an Ecological Preserve, or U.S. Fish and Wildlife Service (USFWS) Recovery Plan boundaries. The study area occurs within a County-recognized Important Biological Corridor (IBC) and includes lands with high wildlife habitat value, function, and connectivity. Locally, quality foraging habitat occurs around the pond, and wetland swale to a lesser extent, among the annual grassland and oak woodland areas. The area is not necessarily a quality corridor for large animal movement as the surrounding area is a patchwork of fences and roads. A Biological Resource Assessment and Rare Plant Survey was prepared by Salix Consulting, Inc. with field reviews prepared on May 4, 2021, May 31, 2021, and final report dated September 2021. The study area contains a pond and associated riparian habitat, a wetland swale, and an intermittent stream. If these areas are avoided, a permit from the California Department of Fish and Wildlife (CDFW) would not be necessary. No special status wildlife or plants species were identified on-site during the field review. **Special status wildlife species** that have the potential to occur within a five-mile radius of the project area include bald eagle, coast horned lizard, foothill yellow-legged frog, tricolored blackbird, and western pond turtle. **Special status plants species** that have the potential to occur within a five-mile radius of the project area include Red Hills soaproot, Layne’s ragwort, El Dorado County mules’ ears, Bisbee Peak rush-rose, Stebbins’ morning-glory, chaparral sedge, Pine Hill ceanothus, and El Dorado bedstraw. Future development of each of the proposed residential parcels would require review at the time of grading and building permit submittal. Further, implementing the following mitigation strategy would reduce impacts to a level of less than significant:

**MM BIO-1      Special Status Wildlife - Nesting raptors and Migratory Birds, Western Pond Turtle Preconstruction Survey**

When future residential development is proposed, the following mitigation measures shall be implemented to avoid impacts to special status species:

- a) If oak tree removal occurs at any time during the typical nesting season (February 15-September 15) a pre-construction survey shall be prepared by a qualified biologist no more than 15 days prior to initiation of proposed development activities. If active nests are found on or immediately adjacent to the site, the biologist shall contact the California Department Fish & Wildlife as appropriate to determine appropriate avoidance measures. If no nesting is found to occur, necessary oak tree removal could then proceed for review and compliance with the standard requirements for oak tree removal, which would be reviewed at time of future building permit submittal; and

- b) If construction activities encroach upon the pond, a pre-construction survey (standard visual survey) should be prepared for the presence/absence of western pond turtle in the pond during the time when water is present. If the pond is dry, there is no need for the survey. Should a wetland pond turtle be located during construction, it should be captured and moved to another pond. It is recommended that if impacts are proposed for the pond, it should take place in the fall when there is no water and therefore, no turtles or other aquatic species are present.

Monitoring Requirement: Planning Services shall verify completion of the requirement prior to issuance of grading and building permits in coordination with the applicant.

Monitoring Responsibility: El Dorado County Planning and Building Department, Planning Services.

- b. **Riparian Habitat and Wetlands:** Based on the Biological Resource Assessment and Rare Plant Survey prepared by Salix Consulting, Inc. with field reviews prepared on May 4, 2021, May 31, 2021, and final report dated September 2021, the study area contains a pond and associated riparian habitat, a wetland swale, and an intermittent stream. Any activity causing direct adverse impacts could require resource permits from the U.S. Army Corps of Engineers, the Regional Water Quality Control Board (401;WDR), and/or the California Department of Fish & Wildlife (1602). However, the proposed Tentative Subdivision Map does not propose any development at this time. Further, Zoning Ordinance Section 130.30.050 - Setback Requirements and Exceptions would require a minimum setback distance of 25 feet from any intermittent stream, wetland, or sensitive riparian habitat, which would apply to any future residential development permits. These setbacks shall be required as a condition of approval, as well and recorded on the final map. Therefore, the impacts would be less than significant.
- c. **Federally Protected Wetlands:** The project site is not located in federally protected wetlands and would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Any activity causing direct adverse impacts to any existing water on-site could require resource permits from the Army Corps of Engineers, the Regional Water Quality Control Board (401;WDR), and/or the California Department of Fish & Wildlife (1602). Further, Zoning Ordinance Section 130.30.050 - Setback Requirements and Exceptions would require a minimum setback distance of 25 feet from any intermittent stream, wetland, or sensitive riparian habitat, which would apply to any future residential development. These setbacks shall be required as a condition of approval and recorded on the final parcel map. The impacts would be less than significant.
- d. **Migration Corridors:** Review of the California Department of Fish and Wildlife Migratory Deer Herd Maps and General Plan DEIR Exhibit 5.12-7 indicate that the deer herd migration corridor does not extend over the project site. The El Dorado County General Plan does identify the project site within an Important Biological Corridor (IBC); however, the proposed project to develop six large lot residential parcels ranging in size from 5.0 to 5.83 acres would not substantially interfere with the movement of any native resident or migratory fish or wildlife species, or with any established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites. The impacts would be less than significant.
- e. **Local Policies:** Local protection of biological resources includes the Important Biological Corridor (IBC) overlay, oak woodland preservation, rare plants and special status species, and wetland preservation with the goal to preserve and protect sensitive natural resources within the County. Any future tree removal of oak woodlands, individual native oak trees, or heritage trees, as defined in Section 130.39.030, would be required to comply with Oak Resources Conservation Ordinance of Section 130.39.070.C (Oak Tree and Oak Woodland Removal Permits), which would be reviewed at time of future building permit submittal.

Based on the results of the Biological Resources Assessment, which included Oak Conservation analysis, recommendations would be incorporated as conditions of approval. These conditions of approval include protecting oak trees in proximity of construction which are not to be disturbed and shall be protected by a minimum four (4-foot) tall fence along canopy dripline; oak trees not identified for removal but having a canopy that overhangs the proposed construction shall be fenced at a minimum distance from the trunk that is equal to one foot (1-foot) for each inch of tree diameter; fenced area to be kept free of building materials, waste, and excess oil; and any soil disturbing activities within the fenced area should be monitored.

The property is located in an Important Biological Corridor (IBC) overlay, but not located in an Ecological Preserve (EP) overlay area. Future development would be required to comply with all applicable County ordinances and policies regarding oak woodland conservation, payment of rare plant mitigation fee as applicable, and mitigated to require a pre-construction survey (Mitigation Measure BIO-1) to detect and protect if any special status species exist at the building sites. Any future development would also need to adhere to the County's setbacks from any intermittent stream or wetlands. With implementation of the mitigation measures and development standards described above, the impacts from the proposed project would be a less than significant level.

- f. **Adopted Plans:** The project site may support habitat for special status species plant and wildlife; however, no species were identified during the site survey. With the incorporation of the recommended mitigation measure to require a pre-construction survey (Mitigation Measure BIO-1), and the standard requirement for review and payment of in-lieu fees for oak tree removal at future residential development, would reduce potential impacts from future development. Further, the proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, or other approved local, regional, or state habitat conservation plan. The impacts would be less than significant.

**Finding:** With the implementation of Mitigation Measure BIO-1, potential impacts to biological resources from future residential development would be mitigated. Future residential development is required to comply with applicable County codes and policies which would be reviewed at time of submittal of the grading and building permits. Therefore, potential impacts to Biological Resources as mitigated would be less than significant.

<b>V. CULTURAL RESOURCES.</b> <i>Would the project:</i>				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?			X	
b. Cause a substantial adverse change in the significance of archaeological resource pursuant to Section 15064.5?			X	
c. Disturb any human remains, including those interred outside of formal cemeteries?			X	

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

The National Register of Historic Places

The National Register of Historic Places (NRHP) is the nation's master inventory of known historic resources. The NRHP is administered by the National Park Service and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level. The criteria for listing in the NRHP include resources that:

- A. Are associated with events that have made a significant contribution to the broad patterns of history (events);
- B. Are associated with the lives of persons significant in our past (persons);
- C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (architecture); or
- D. Have yielded or may likely yield information important in prehistory or history (information potential).

### ***State Laws, Regulations, and Policies***

#### California Register of Historical Resources

Public Resources Code Section 5024.1 establishes the CRHR. The register lists all California properties considered to be significant historical resources. The CRHR includes all properties listed as or determined to be eligible for listing in the National Register of Historic Places (NRHP), including properties evaluated under Section 106 of the National Historic Preservation Act. The criteria for listing are similar to those of the NRHP. Criteria for listing in the CRHR include resources that:

- A. Are associated with the events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- B. Are associated with the lives of persons important in our past;
- C. Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or
- D. Have yielded, or may be likely to yield, information important in prehistory or history.

The regulations set forth the criteria for eligibility as well as guidelines for assessing historical integrity and resources that have special considerations.

#### The California Register of Historic Places

The California Register of Historic Places (CRHP) program encourages public recognition and protection of resources of architectural, historical, archeological and cultural significance, identifies historical resources for state and local planning purposes, determines eligibility for state historic preservation grant funding and affords certain protections under the California Environmental Quality Act. The criteria for listing in the CRHP include resources that:

- A. Are 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.
- B. Are associated with the lives of persons important to local, California or national history.
- C. Embody the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.
- D. Have yielded, or have the potential to yield, information important to the prehistory or history of the local area, California or the nation.

The State Office of Historic Preservation sponsors the California Historical Resources Information System (CHRIS), a statewide system for managing information on the full range of historical resources identified in California. CHRIS provides an integrated database of site-specific archaeological and historical resources information. The State Office of Historic Preservation also maintains the California Register of Historical Resources (CRHR), which identifies the State's architectural, historical, archeological and cultural resources. The CRHR includes properties listed in or formally determined eligible for the National Register and lists selected California Registered Historical Landmarks.

Public Resources Code (Section 5024.1[B]) states that any agency proposing a project that could potentially impact a resource listed on the CRHR must first notify the State Historic Preservation Officer, and must work with the officer to ensure that the project incorporates “prudent and feasible measures that will eliminate or mitigate the adverse effects.”

California Health and Safety Code Section 7050.5 requires that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Section 5097.98 of the California Public Resources Code stipulates that whenever the commission receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The decedents may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The descendants shall complete their inspection and make their recommendation within 24 hours of their notification by the Native American Heritage Commission. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

#### CEQA and CEQA Guidelines

Section 21083.2 of CEQA requires that the lead agency determine whether a project may have a significant effect on unique archaeological resources. A unique archaeological resource is defined in CEQA as an archaeological artifact, object, or site about which it can be clearly demonstrated that there is a high probability that it:

- Contains information needed to answer important scientific research questions, and there is demonstrable public interest in that information;
- Has a special or particular quality, such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.
- Although not specifically inclusive of paleontological resources, these criteria may also help to define “a unique paleontological resource or site.”

Measures to avoid, conserve, preserve, or mitigate significant effects on these resources are also provided under CEQA Section 21083.2.

Section 15064.5 of the CEQA Guidelines notes that “a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” Substantial adverse changes include physical changes to the historic resource or to its immediate surroundings, such that the significance of the historic resource would be materially impaired. Lead agencies are expected to identify potentially feasible measures to mitigate significant adverse changes in the significance of a historic resource before they approve such projects. Historic resources are those that are:

- Listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR) (Public Resources Code Section 5024.1[k]);
- Included in a local register of historic resources (Public Resources Code Section 5020.1) or identified as significant in an historic resource survey meeting the requirements of Public Resources Code Section 5024.1(g); or

- Determined by a lead agency to be historically significant.

CEQA Guidelines Section 15064.5 also prescribes the processes and procedures found under Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.95 for addressing the existence of, or probable likelihood of, Native American human remains, as well as the unexpected discovery of any human remains within the project site. This includes consultation with the appropriate Native American tribes.

CEQA Guidelines Section 15126.4 provides further guidance about minimizing effects to historical resources through the application of mitigation measures. Mitigation measures must be legally binding and fully enforceable.

The lead agency having jurisdiction over a project is also responsible to ensure that paleontological resources are protected in compliance with CEQA and other applicable statutes. Paleontological and historical resource management is also addressed in Public Resources Code Section 5097.5, "Archaeological, Paleontological, and Historical Sites." This statute defines as a misdemeanor any unauthorized disturbance or removal of a fossil site or remains on public land and specifies that state agencies may undertake surveys, excavations, or other operations as necessary on state lands to preserve or record paleontological resources. This statute would apply to any construction or other related project impacts that would occur on state-owned or state-managed lands. The County General Plan contains policies describing specific, enforceable measures to protect cultural resources and the treatment of resources when found.

**Discussion:** In general, significant impacts are those that diminish the integrity, research potential, or other characteristics that make a historical or cultural resource significant or important. A substantial adverse effect on Cultural Resources would occur if the implementation of the project would:

- Disrupt, alter, or adversely affect a prehistoric or historic archaeological site or property that is historically or culturally significant to a community or ethnic or social group; or a paleontological site except as a part of a scientific study;
- Affect a landmark of cultural/historical importance;
- Conflict with established recreational, educational, religious or scientific uses of the area; or
- Conflict with adopted environmental plans and goals of the community where it is located.

a.-c. **Historic, Archeological Resources, Human Remains.** A Cultural Resource record search was prepared by the California Historical Resources Information System, North Central Information Center with a results summary dated September 10, 2021. The review indicated that the project area contained zero recorded indigenous-period/ethnographic-period resources and zero recorded historic-period cultural resources. Further, given the extent of known cultural resources and patterns of local history, there is low potential for locating historic-period cultural resources in the immediate vicinity of the proposed project area. No significant cultural resources were identified within the proposed project, and no further archaeological work is recommended. In the event of human remains discovery during any future construction if additional structures are built, standard conditions of approval to address accidental discovery of human remains would apply during any grading activities. The project is subject to the cultural resources provisions of CEQA Assembly Bill 52 (AB52), which requires Native American outreach. Pursuant to AB52, the County solicited input from Native American organizations and representatives listed with the Native American Heritage Commission to identify cultural resources and properties of concern to the Native American Community. At the time of the initial review consultation, seven tribes were notified of the proposed project: Colfax-Todds Valley Consolidated Tribe, Ione Band of Miwok Indians, Nashville-El Dorado Miwok, Shingle Springs Band of Miwok Indians, Tsi Akim Maidu, United Auburn Indian Community (UAIC), and Washoe Tribe of California and Nevada. The Shingle Springs Band of Miwok Indians responded within 30 days to initiate consultation. Staff provided the tribe with the cultural resources record search results for their review. No comments were received from the tribe. Staff confirmed conclusion of consultation via email on August 9, 2022. Standard protective conditions of approval will be incorporated with the project. The impacts would be less than significant.

**FINDING:** Standard conditions of approval would apply in the event of discovery of any Tribal Cultural Resources (TCRs) during any future construction, that construction would stop immediately, and the Tribes would be notified. Therefore, the proposed project as conditioned would have a less than significant impact on Cultural Resources.

<b>VI. ENERGY.</b> <i>Would the project:</i>				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Result in potential significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

**Regulatory Setting**

***Federal Energy Policy Act of 2005***

The Federal Energy Policy Act of 2005 (EP Act) was intended to establish a comprehensive, long-term energy policy and is implemented by the U.S. Department of Energy (U.S. DOE). The EP Act addresses energy production in the U.S., including oil, gas, coal, and alternative forms of energy and energy efficiency and tax incentives. Energy efficiency and tax incentive programs include credits for the construction of new energy efficient homes, production or purchase of energy efficient appliances, and loan guarantees for entities that develop or use innovative technologies that avoid the production of greenhouse gases (GHG).

***State Laws, Regulations, and Policies***

California Building Standards Code (Title 24, California Code of Regulations), including Energy Code (Title 24, Part 6) and Green Building Standards Code (Title 24, Part 11)

California first adopted the California Buildings Standards Code in 1979, which constituted the nation’s first comprehensive energy conservation requirements for construction. Since this time, the standards have been continually revised and strengthened. In particular, the California Building Standards Commission adopted the mandatory Green Building Standards Code (CALGreen [California Code of Regulations, Title 24, Part 11]) in January 2010. CALGreen applies to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure. The California Code of Regulations, Title 24, Part 6 (also known as the California Energy Code), and associated regulations in CALGreen were revised again in 2013 by the California Energy Commission (CEC). The 2013 Building Energy Efficiency Standards are 25% more efficient than previous standards for residential construction. Part 11 also establishes voluntary standards that became mandatory in the 2010 edition of the code, including planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The standards offer builders better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses. The next update to the Title 24 energy efficiency standards will occur in 2016 and take effect in 2017. The California Building Code applies to all new development, and there are no substantive waivers available that would exempt development from its energy efficiency requirements. The California Building Code is revised on a regular basis, with each revision increasing the required level of energy efficiency.

Senate Bills 1078/107 and Senate Bill 2—Renewables Portfolio Standard

Senate Bill (SB) 1078 and SB 107, California's Renewables Portfolio Standard (RPS), obligates investor-owned utilities (IOUs), energy service providers (ESPs), and Community Choice Aggregations (CCAs) to procure an additional 1% of retail sales per year from eligible renewable sources until 20% is reached, no later than 2010. The California Public Utilities Commission (CPUC) and CEC are jointly responsible for implementing the program. SB 2 (2011) set forth a longer range target of procuring 33% of retail sales by 2020. Implementation of the RPS will conserve nonrenewable fossil fuel resources by generated a greater percentages of statewide electricity from renewable resources, such as wind, solar, and hydropower.

Assembly Bill (AB) 1881 (Chapter 559, Statutes of 2006)

Water conservation reduces energy use by reducing the energy cost of moving water from its source to its user. Assembly Bill (AB) 1881 (Chapter 559, Statutes of 2006) requires the Department of Water Resources (DWR) to adopt an Updated Model Water Efficient Landscape Ordinance (MWELo) and local agencies to adopt DWR's MWELo or a local water efficient landscape ordinance by January 1, 2010 and notify DWR of their adoption (Government Code Section 65595). The water efficient landscape ordinance would apply to sites that are supplied by public water as well as those supplied by private well. Local adoption and implementation of a water efficient landscape ordinance would reduce per capita water use from new development.

Senate Bill X7-7 (Chapter 4, Statutes of 2009)

SB X7-7 (Chapter 4, Statutes of 2009), the Water Conservation Act of 2009, establishes an overall goal of reducing statewide per capita urban water use by 20% by December 31, 2020 (with an interim goal of at least 10% by December 31, 2015). This statute applies to both El Dorado Irrigation District (EID) and the Georgetown Divide Public Utilities District (GDPUD). EID has incorporated this mandate into its water supply planning, as represented in its Urban Water Management Plan 2010 Update (El Dorado Irrigation District 2011) and all subsequent water supply plans. Reducing water use results in a reduction in energy demand that would otherwise be used to transport and treat water before delivery to the consumer.

Assembly Bill 2076, Reducing Dependence on Petroleum

The CEC and Air Resources Board (ARB) are directed by AB 2076 (passed in 2000) to develop and adopt recommendations for reducing dependence on petroleum. A performance-based goal is to reduce petroleum demand to 15% less than 2003 demand by 2020.

Senate Bill 375—Sustainable Communities Strategy

SB 375 was adopted with a goal of reducing fuel consumption and GHG emissions from cars and light trucks. Each metropolitan planning organization (MPO) across California is required to develop a sustainable communities strategy (SCS) as part of their regional transportation plan (RTP) to meet the region's GHG emissions reduction target, as set by the California Air Resources Board. The Sacramento Area Council of Governments (SACOG) is the MPO for the Sacramento region, including the western slope of El Dorado County. SACOG adopted its SB 375-compliant Metropolitan Transportation Plan/Sustainable Communities Strategy 2035 in April 2012.

Assembly Bill 1493—Pavley Rules (2002, Amendments 2009, 2012 rule-making)

AB 1493 required the ARB to adopt vehicle standards that will improve the efficiency of light duty autos and lower GHG emissions to the maximum extent feasible beginning in 2009. Additional strengthening of the Pavley standards (referred to previously as "Pavley II," now referred to as the "Advanced Clean Cars" measure) has been proposed for vehicle model years 2017–2025. Together, the two standards are expected to increase average fuel economy to roughly 54.5 miles per gallon by 2025. The improved energy efficiency of light duty autos will reduce statewide fuel consumption in the transportation sector.

CEQA and CEQA Guidelines

Section 15126.2(b) of the CEQA Guidelines requires detailed analysis of a project's energy impacts. If analysis of the project's energy use reveals that the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources, the environmental document shall prescribe mitigation for those impacts. This analysis should include the project's energy use for all project phases and components, including transportation-related energy, during construction and operation. In addition to building code compliance, other relevant considerations may include, among others, the project's size, location, orientation, equipment use and any renewable energy features that could be incorporated into the project.

CEQA Guidelines, Appendix F: Energy Conservation

CEQA requires EIRs to include a discussion of potential energy impacts and energy conservation measures. Appendix F, Energy Conservation, of the State CEQA Guidelines outlines energy impact possibilities and potential conservation measures designed to assist in the evaluation of potential energy impacts of proposed projects. Appendix F places “particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy,” and further indicates this may result in an unavoidable adverse effect on energy conservation. Moreover, the State CEQA Guidelines state that significant energy impacts should be “considered in an EIR to the extent relevant and applicable to the project.” Mitigation for potential significant energy impacts (if required) could include implementing a variety of strategies, including measures to reduce wasteful energy consumption and altering project siting to reduce energy consumption.

**Local Laws, Regulations, and Policies**

The County General Plan Public Services and Utilities Element includes goals, objectives, and policies related to energy conservation associated with the County’s future growth and development. Among these are is Objective 5.6.2

(Encourage Energy-Efficient Development) which applies to energy-efficient buildings, subdivisions, development and landscape designs. Associated with Objective 5.6.2 are two policies specifically addressing energy conservation:

Policy 5.6.2.1: Requires energy conserving landscaping plans for all projects requiring design review or other discretionary approval.

Policy 5.6.2.2: All new subdivisions should include design components that take advantage of passive or natural summer cooling and/or winter solar access, or both, when possible.

Further, the County has other goals and policies that would conserve energy even though not being specifically drafted for energy conservation purposes (e.g., Objective 6.7.2, Policy 6.7.2.3).

**Discussion:**

- a. **Unnecessary Consumption:** Project-related construction and operation would be consistent with applicable energy legislation, policies, and standards for the purpose of reducing energy consumption and improving efficiency (i.e., reducing wasteful and inefficient use of energy) as described in the Regulatory Setting. The proposed project would conform to building codes and other state and local energy conservation measures described in the Regulatory Setting. With adherence to the above-mentioned codes and regulations, any potential impacts would be less than significant.
- b. **Conflict with Energy Plans:** Development of the project will be consistent with all applicable state and local plans for renewable energy or energy efficiency and will not obstruct implementation of applicable energy plans. Any potential impacts would be less than significant.

**FINDING:** The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. The project would be consistent with all applicable state and local plans for renewable energy or energy efficiency. For this Energy category, any potential impacts would be anticipated to be less than significant.

<b>VII.GEOLOGY AND SOILS. <i>Would the project:</i></b>				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact

<b>VII.GEOLOGY AND SOILS. <i>Would the project:</i></b>				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b. Result in substantial soil erosion or the loss of topsoil?			X	
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial risks to life or property?			X	
e. 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?			X	
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

**Regulatory Setting:**

**Federal Laws, Regulations, and Policies**

**National Earthquake Hazards Reduction Act**

The National Earthquake Hazards Reduction Act of 1977 (Public Law 95-124) and creation of the National Earthquake Hazards Reduction Program (NEHRP) established a long-term earthquake risk-reduction program to better understand, predict, and mitigate risks associated with seismic events. The following four federal agencies are responsible for coordinating activities under NEHRP: USGS, National Science Foundation (NSF), Federal Emergency Management Agency (FEMA), and National Institute of Standards and Technology (NIST). Since its inception, NEHRP has shifted its focus from earthquake prediction to hazard reduction. The current program objectives (NEHRP 2009) are to:

1. Develop effective measures to reduce earthquake hazards;
2. Promote the adoption of earthquake hazard reduction activities by federal, state, and local governments; national building standards and model building code organizations; engineers; architects; building owners;

and others who play a role in planning and constructing buildings, bridges, structures, and critical infrastructure or “lifelines”;

3. Improve the basic understanding of earthquakes and their effects on people and infrastructure through interdisciplinary research involving engineering; natural sciences; and social, economic, and decision sciences; and
4. Develop and maintain the USGS seismic monitoring system (Advanced National Seismic System); the NSF-funded project aimed at improving materials, designs, and construction techniques (George E. Brown Jr. Network for Earthquake Engineering Simulation); and the global earthquake monitoring network (Global Seismic Network).

Implementation of NEHRP objectives is accomplished primarily through original research, publications, and recommendations and guidelines for state, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

### **State Laws, Regulations, and Policies**

#### **Alquist–Priolo Earthquake Fault Zoning Act**

The Alquist–Priolo Earthquake Fault Zoning Act (Public Resources Code Section 2621 *et seq.*) was passed to reduce the risk to life and property from surface faulting in California. The Alquist–Priolo Act prohibits construction of most types of structures intended for human occupancy on the surface traces of active faults and strictly regulates construction in the corridors along active faults (earthquake fault zones). It also defines criteria for identifying active faults, giving legal weight to terms such as “active,” and establishes a process for reviewing building proposals in and adjacent to earthquake fault zones. Under the Alquist-Priolo Act, faults are zoned and construction along or across them is strictly regulated if they are “sufficiently active” and “well defined.” Before a project can be permitted, cities and counties are required to have a geologic investigation prepared to demonstrate that the proposed buildings would not be constructed across active faults.

Historical seismic activity and fault and seismic hazards mapping in the project vicinity indicate that the area has relatively low potential for seismic activity (El Dorado County 2003). No active faults have been mapped in the project area, and none of the known faults have been designated as an Alquist-Priolo Earthquake Fault Zone.

#### **Seismic Hazards Mapping Act**

The Seismic Hazards Mapping Act of 1990 (Public Resources Code Sections 2690–2699.6) establishes statewide minimum public safety standards for mitigation of earthquake hazards. While the Alquist–Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. Its provisions are similar in concept to those of the Alquist–Priolo Act. The state is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other seismic hazards, and cities and counties are required to regulate development within mapped seismic hazard zones. In addition, the act addresses not only seismically induced hazards but also expansive soils, settlement, and slope stability.

Mapping and other information generated pursuant to the SHMA is to be made available to local governments for planning and development purposes. The State requires: (1) local governments to incorporate site-specific geotechnical hazard investigations and associated hazard mitigation, as part of the local construction permit approval process; and (2) the agent for a property seller or the seller if acting without an agent, must disclose to any prospective buyer if the property is located within a Seismic Hazard Zone. Under the Seismic Hazards Mapping Act, cities and counties may withhold the development permits for a site within seismic hazard zones until appropriate site-specific geologic and/or geotechnical investigations have been carried out and measures to reduce potential damage have been incorporated into the development plans.

#### **California Building Standards Code**

Title 24 CCR, also known as the California Building Standards Code (CBC), specifies standards for geologic and seismic hazards other than surface faulting. These codes are administered and updated by the California Building Standards Commission. CBC specifies criteria for open excavation, seismic design, and load-bearing capacity directly related to construction in California.

**Discussion:** A substantial adverse effect on Geologic Resources would occur if the implementation of the project would:

- Allow substantial development of structures or features in areas susceptible to seismically induced hazards such as groundshaking, liquefaction, seiche, and/or slope failure where the risk to people and property resulting from earthquakes could not be reduced through engineering and construction measures in accordance with regulations, codes, and professional standards;
- Allow substantial development in areas subject to landslides, slope failure, erosion, subsidence, settlement, and/or expansive soils where the risk to people and property resulting from such geologic hazards could not be reduced through engineering and construction measures in accordance with regulations, codes, and professional standards; or
- Allow substantial grading and construction activities in areas of known soil instability, steep slopes, or shallow depth to bedrock where such activities could result in accelerated erosion and sedimentation or exposure of people, property, and/or wildlife to hazardous conditions (e.g., blasting) that could not be mitigated through engineering and construction measures in accordance with regulations, codes, and professional standards.

a. **Seismic Hazards:**

i) According to the California Department of Conservation Division of Mines and Geology, there are no Alquist-Priolo fault zones within the west slope of El Dorado County. However, a fault zone has been located in the Tahoe Basin and Echo Lakes area. The West Tahoe Fault runs along the base of the range front at the west side of the Tahoe Basin. The West Tahoe Fault has a mapped length of 45 km. South of Emerald Bay the West Tahoe Fault extends onshore as two parallel strands. In the lake, the fault has clearly defined scarps that offset submarine fans, lake-bottom sediments, and the McKinney Bay slide deposits (DOC, 2016). There is clear evidence that the discussed onshore portion of the West Tahoe Fault is active with multiple events in the Holocene and poses a surface rupture hazard. However, because of the distance between the project site and these faults, the impacts would be less than significant.

ii) The potential for seismic ground shaking in the project area would be considered remote for the reason stated in Section i) above. Any potential impacts due to seismic impacts would be addressed through compliance with the Uniform Building Code (UBC). All structures would be built to meet the construction standards of the UBC for the appropriate seismic zone. The impacts would be less than significant.

iii) El Dorado County is considered an area with low potential for seismic activity. There are no landslide, liquefaction, or fault zones (DOC, 2007). The impacts would be less than significant.

iv) All grading activities onsite would be required to comply with the El Dorado County Grading, Erosion Control and Sediment Ordinance. The impacts would be less than significant.

- b. **Soil Erosion:** A Preliminary Grading and Drainage Plan was included with the application (Attachment 10). There could be the potential for erosion, or changes in topography during future construction however concerns would be addressed during the grading permit process. Development activities would need to comply with the El Dorado County Grading, Erosion and Sediment Control Ordinance, including the implementation of pre- and post-construction Best Management Practices (BMPs). Implemented BMPs are required to be consistent with the County's California Stormwater Pollution Prevention Plan (SWPPP) issued by the State Water Resources Control Board to eliminate run-off and erosion and sediment controls. Any grading activities exceeding 250 cubic yards of graded material or grading completed for the purpose of supporting a structure must meet the provisions contained in the County of El Dorado Grading, Erosion, and Sediment Control Ordinance. Any future construction would require similar review for compliance with the County SWPPP. If construction would disturb 1 acre or more of soil, the project proponent must

obtain a General Permit for discharges of storm water associated with activity from SWRCB. As part of this permit, a SWPPP must be prepared and implemented. The SWPPP must include erosion control measures and construction waste containment measures to ensure that waters of the State are protected during and after project construction. Future residential development on the new parcels would need to be located at sufficient distances away from any natural water features. Future development would need to adhere to the County's setback distance of 25 feet from any intermittent stream or wetland, including single-family dwellings, accessory dwelling units (ADU), and/or accessory structures. Therefore, the potential impacts related to soil erosion from future development would be considered less than significant.

- c. **Geologic Hazards:** Based on the Seismic Hazards Mapping Program administered by the California Geological Survey, no portion of El Dorado County is located in a Seismic Hazard Zone or those areas prone to liquefaction and earthquake-induced landslides (DOC, 2013). Therefore, El Dorado County is not considered to be at risk from liquefaction hazards. Lateral spreading is typically associated with areas experiencing liquefaction. Because liquefaction hazards are not present in El Dorado County, the county is not at risk for lateral spreading. All grading activities would comply with the El Dorado County Grading, Erosion Control and Sediment Ordinance. The impacts would be less than significant.
- d. **Expansive Soils:** Expansive soils are those that greatly increase in volume when they absorb water and shrink when they dry out. When buildings are placed on expansive soils, foundations may rise each wet season and fall each dry season. This movement may result in cracking foundations, distortion of structures, and warping of doors and windows. The western portions of the county, including the Auburn soil types, have a low expansiveness rating. Any development of the site would be required to comply with the El Dorado County Grading, Erosion and Sediment Control Ordinance and the development plans for any homes or other structures would be required to implement the Seismic construction standards. The impacts would be less than significant.
- e. **Septic Capability:** Each parcel would be served by its own private septic system and well for water. The El Dorado County Environmental Management Department (EMD) reviewed the project and provided comments outlining the requirements for septic systems and wells, which will be incorporated as conditions of approval. Wells on each parcel produced between 8 and 68 gallons per minute with a median well production of 50 gallons per minute and an average well production of 43.6 gallons per minute between 5 separate wells. These well production figures meet the requirement to demonstrate an adequate water supply for the project. Soil depth was 11 feet for each of the proposed parcels, meeting the El Dorado County Environmental Management's "Local Agency Management Plan" (LAMP) requirement for adequate soil depth. Soil percolation rates for Parcel 1,2,3,5, and 6 meet the LAMP requirement for new parcels utilizing a septic system to have an average soil percolation rate of 120 minutes per inch or less. Parcel 4 has a soil depth of 11 feet and a soil percolation rate of 128 minutes per inch, which does not meet LAMP requirements for land divisions. The El Dorado County LAMP defines usable dispersal material as soil with a percolation rate between 1 and 120 minutes per inch. Options to meet this LAMP requirement include merging Parcel 4 with an adjacent parcel that has a lower percolation rate or identifying an alternative sewage dispersal area on the parcel with a soil percolation rate between 1 and 120 minutes per inch. With the incorporation of conditions of approval, the impacts would be less than significant.
- f. **Paleontological Resources:** The proposed project area is not located in an area that is considered likely to have paleontological resources present. Fossils of plants, animals, or other organisms of paleontological significance have not been discovered within the project area. In this context, the project would not result in impacts to paleontological resources or unique geologic features. In the event subsurface paleontological sites are disturbed during grading activities in the site, standard conditions of approval requiring that all work activities shall be stopped in the event of an unanticipated discovery would ensure that impacts are less than significant.

**FINDING:** All grading activities would be required to comply with the El Dorado County Grading, Erosion Control and Sediment Ordinance which would address potential impacts related to soil erosion, landslides and other geologic impacts. Future development would be required to comply with the Uniform Building Code (UBC), which would

address any potential seismic related impacts, and with LAMP requirements from EMD. For the Geology and Soils category, impacts would be less than significant.

<b>VIII. GREENHOUSE GAS EMISSIONS. <i>Would the project:</i></b>				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

**Background/Science:**

Cumulative greenhouse gases (GHG) emissions are believed to contribute to an increased greenhouse effect and global climate change, which may result in sea level rise, changes in precipitation, habitat, temperature, wildfires, air pollution levels, and changes in the frequency and intensity of weather-related events. While criteria pollutants and toxic air contaminants are pollutants of regional and local concern (see Section III. Air Quality above); GHG are global pollutants. The primary land-use related GHG are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxides (N<sub>2</sub>O). The individual pollutant’s ability to retain infrared radiation represents its “global warming potential” and is expressed in terms of CO<sub>2</sub> equivalents; therefore CO<sub>2</sub> is the benchmark having a global warming potential of 1. Methane has a global warming potential of 21 and thus has a 21 times greater global warming effect per metric ton of CH<sub>4</sub> than CO<sub>2</sub>. Nitrous Oxide has a global warming potential of 310. Emissions are expressed in annual metric tons of CO<sub>2</sub> equivalent units of measure (i.e., MTCO<sub>2</sub>e/yr). The three other main GHG are Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride. While these compounds have significantly higher global warming potentials (ranging in the thousands), all three typically are not a concern in land-use development projects and are usually only used in specific industrial processes.

***GHG Sources***

The primary man-made source of CO<sub>2</sub> is the burning of fossil fuels; the two largest sources being coal burning to produce electricity and petroleum burning in combustion engines. The primary sources of man-made CH<sub>4</sub> are natural gas systems losses (during production, processing, storage, transmission and distribution), enteric fermentation (digestion from livestock) and landfill off-gassing. The primary source of man-made N<sub>2</sub>O is agricultural soil management (fertilizers), with fossil fuel combustion a very distant second. In El Dorado County, the primary source of GHG is fossil fuel combustion mainly in the transportation sector (estimated at 70% of countywide GHG emissions). A distant second are residential sources (approximately 20%), and commercial/industrial sources are third (approximately 7%). The remaining sources are waste/landfill (approximately 3%) and agricultural (<1%).

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

At the federal level, USEPA has developed regulations to reduce GHG emissions from motor vehicles and has developed permitting requirements for large stationary emitters of GHGs. On April 1, 2010, USEPA and the National Highway Traffic Safety Administration (NHTSA) established a program to reduce GHG emissions and improve fuel economy standards for new model year 2012-2016 cars and light trucks. On August 9, 2011, USEPA

and the NHTSA announced standards to reduce GHG emissions and improve fuel efficiency for heavy-duty trucks and buses.

***Federal Laws, Regulations, and Policies***

In September 2006, Governor Arnold Schwarzenegger signed Assembly Bill (AB) 32, the *California Climate Solutions Act of 2006* (Stats. 2006, ch. 488) (Health & Safety Code, Section 38500 et seq.). AB 32 requires a statewide GHG emissions reduction to 1990 levels by the year 2020. AB 32 requires the California Air Resources Board (CARB) to implement and enforce the statewide cap. When AB 32 was signed, California’s annual GHG emissions were estimated at 600 million metric tons of CO<sub>2</sub> equivalent (MMTCO<sub>2e</sub>) while 1990 levels were estimated at 427 MMTCO<sub>2e</sub>. Setting 427 MMTCO<sub>2e</sub> as the emissions target for 2020, current (2006) GHG emissions levels must be reduced by 29%. CARB adopted the AB 32 Scoping Plan in December 2008 establishing various actions the state would implement to achieve this reduction (CARB, 2008). The Scoping Plan recommends a community-wide GHG reduction goal for local governments of 15%.

In June 2008, the California Governor’s Office of Planning and Research’s (OPR) issued a Technical Advisory (OPR, 2008) providing interim guidance regarding a proposed project’s GHG emissions and contribution to global climate change. In the absence of adopted local or statewide thresholds, OPR recommends the following approach for analyzing GHG emissions: Identify and quantify the project’s GHG emissions, assess the significance of the impact on climate change; and if the impact is found to be significant, identify alternatives and/or Mitigation Measures that would reduce the impact to less than significant levels (CEC, 2006).

**Discussion:**

CEQA does not provide clear direction on addressing climate change. It requires lead agencies identify project GHG emissions impacts and their “significance,” but is not clear what constitutes a “significant” impact. As stated above, GHG impacts are inherently cumulative, and since no single project could cause global climate change, the CEQA test is if impacts are “cumulatively considerable.” Not all projects emitting GHG contribute significantly to climate change. CEQA authorizes reliance on previously approved plans (i.e., a Climate Action Plan (CAP), etc.) and mitigation programs adequately analyzing and mitigating GHG emissions to a less than significant level. “Tiering” from such a programmatic-level document is the preferred method to address GHG emissions. El Dorado County does not have an adopted CAP or similar program-level document; therefore, the project’s GHG emissions must be addressed at the project-level.

Unlike thresholds of significance established for criteria air pollutants in EDCAQMD’s *Guide to Air Quality Assessment* (February 2002) (“CEQA Guide”), the District has not adopted GHG emissions thresholds for land use development projects. In the absence of County adopted thresholds, EDCAQMD recommends using the adopted thresholds of other lead agencies which are based on consistency with the goals of AB 32. Since climate change is a global problem and the location of the individual source of GHG emissions is somewhat irrelevant, it’s appropriate to use thresholds established by other jurisdictions as a basis for impact significance determinations. Projects exceeding these thresholds would have a potentially significant impact and be required to mitigate those impacts to a less than significant level. Until the County adopts a CAP consistent with CEQA Guidelines Section 15183.5, and/or establishes GHG thresholds, the County will follow an interim approach to evaluating GHG emissions utilizing significance criteria adopted by the San Luis Obispo Air Pollution Control District (SLOAPCD) to determine the significance of GHG emissions.

SLOAPCD developed a screening table using CalEEMod which allows quick assessment of projects to “screen out” those below the thresholds as their impacts would be less than significant.

These thresholds are summarized below:

<b>Significance Determination Thresholds</b>	
<b>GHG Emission Source Category</b>	<b>Operational Emissions</b>
Non-stationary Sources	1,150 MT <sub>CO2e</sub> /yr OR

	4.9 MT CO <sub>2</sub> e/SP/yr
Stationary Sources	10,000 MTCO <sub>2</sub> e/yr

SP = service population, which is resident population plus employee population of the project

Projects below screening levels identified in Table 1-1 of SLOAPCD's CEQA Air Quality Handbook (pp. 1-3, SLOAPCD, 2012) are estimated to emit less than the applicable threshold. For projects below the threshold, no further GHG analysis is required.

- a. The proposed project would create six parcels from a 30.84-acre undeveloped parcel. The resultant parcels would range in size from 5.0 to 5.8 acres: Lot 1 (5.00 acres), Lot 2 (5.00 acres), Lot 3 (5.00 acres), Lot 4 (5.00 acres), Lot 5 (5.83 acres), and Lot 6 (5.00 acres). Each parcel would be allowed to have a primary residence and an accessory dwelling unit (ADU) by right, for a total of twelve residences possible. Future construction may involve a small increase in household GHG production. However, any future construction would be required to incorporate modern construction and design features that reduce energy consumption to the extent feasible. Implementation of these features would help reduce potential GHG emissions resulting from the development. The proposed project would have a negligible contribution towards statewide GHG inventories and would have a less than significant impact.
- b. Because any future construction-related emissions would be temporary and below the minimum standard for reporting requirements under AB 32, and because any ongoing GHG emissions would be a result of a maximum potential of eight households (four primary residences/four accessory dwelling units possible), the proposed project's GHG emissions would have a negligible cumulative contribution towards statewide and global GHG emissions. The proposed project would not conflict with the objectives of AB 32 or any other applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. According to the SLOAPCD Screening Table, the GHG emissions from this project are estimated at less than 1,150 metric tons/year. Cumulative GHG emissions impacts are considered to be less than significant. Therefore, the proposed project would have a less than significant impact.

**FINDING:** For the Greenhouse Gas Emissions category, there would be no significant adverse environmental effect as a result of the project. Impacts would be less than significant.

<b>IX. HAZARDS AND HAZARDOUS MATERIALS. <i>Would the project:</i></b>				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X

<b>IX. HAZARDS AND HAZARDOUS MATERIALS. <i>Would the project:</i></b>				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	

**Regulatory Setting:**

Hazardous materials and hazardous wastes are subject to extensive federal, state, and local regulations to protect public health and the environment. These regulations provide definitions of hazardous materials; establish reporting requirements; set guidelines for handling, storage, transport, and disposal of hazardous wastes; and require health and safety provisions for workers and the public. The major federal, state, and regional agencies enforcing these regulations are USEPA and the Occupational Safety and Health Administration (OSHA); California Department of Toxic Substances Control (DTSC); California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA); California Governor’s Office of Emergency Services (Cal OES); and EDCAPCD.

***Federal Laws, Regulations, and Policies***

**Comprehensive Environmental Response, Compensation, and Liability Act**

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also called the Superfund Act; 42 USC Section 9601 *et seq.*) is intended to protect the public and the environment from the effects of past hazardous waste disposal activities and new hazardous material spills. Under CERCLA, USEPA has the authority to seek the parties responsible for hazardous materials releases and to ensure their cooperation in site remediation. CERCLA also provides federal funding (through the “Superfund”) for the remediation of hazardous materials contamination. The Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499) amends some provisions of CERCLA and provides for a Community Right-to-Know program.

**Resource Conservation and Recovery Act**

The Resource Conservation and Recovery Act of 1976 (RCRA; 42 USC Section 6901 *et seq.*), as amended by the Hazardous and Solid Waste Amendments of 1984, is the primary federal law for the regulation of solid waste and hazardous waste in the United States. These laws provide for the “cradle-to-grave” regulation of hazardous wastes, including generation, transportation, treatment, storage, and disposal. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed of.

USEPA has primary responsibility for implementing RCRA, but individual states are encouraged to seek authorization to implement some or all RCRA provisions. California received authority to implement the RCRA program in August 1992. DTSC is responsible for implementing the RCRA program in addition to California’s own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law.

### Energy Policy Act of 2005

Title XV, Subtitle B of the Energy Policy Act of 2005 (the Underground Storage Tank Compliance Act of 2005) contains amendments to Subtitle I of the Solid Waste Disposal Act, the original legislation that created the Underground Storage Tank (UST) Program. As defined by law, a UST is "any one or combination of tanks, including pipes connected thereto, that is used for the storage of hazardous substances and that is substantially or totally beneath the surface of the ground." In cooperation with USEPA, SWRCB oversees the UST Program. The intent is to protect public health and safety and the environment from releases of petroleum and other hazardous substances from tanks. The four primary program elements include leak prevention (implemented by Certified Unified Program Agencies [CUPAs], described in more detail below), cleanup of leaking tanks, enforcement of UST requirements, and tank integrity testing.

### Spill Prevention, Control, and Countermeasure Rule

USEPA's Spill Prevention, Control, and Countermeasure (SPCC) Rule (40 CFR, Part 112) apply to facilities with a single above-ground storage tank (AST) with a storage capacity greater than 660 gallons, or multiple tanks with a combined capacity greater than 1,320 gallons. The rule includes requirements for oil spill prevention, preparedness, and response to prevent oil discharges to navigable waters and adjoining shorelines. The rule requires specific facilities to prepare, amend, and implement SPCC Plans.

### Occupational Safety and Health Administration

OSHA is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for the handling of hazardous substances (as well as other hazards). OSHA also establishes criteria by which each state can implement its own health and safety program.

### Federal Communications Commission Requirements

There is no federally mandated radio frequency (RF) exposure standard; however, pursuant to the Telecommunications Act of 1996 (47 USC Section 224), the Federal Communications Commission (FCC) established guidelines for dealing with RF exposure, as presented below. The exposure limits are specified in 47 CFR Section 1.1310 in terms of frequency, field strength, power density, and averaging time. Facilities and transmitters licensed and authorized by FCC must either comply with these limits or an applicant must file an environmental assessment (EA) with FCC to evaluate whether the proposed facilities could result in a significant environmental effect.

FCC has established two sets of RF radiation exposure limits—Occupational/Controlled and General Population/Uncontrolled. The less-restrictive Occupational/Controlled limit applies only when a person (worker) is exposed as a consequence of his or her employment and is "fully aware of the potential exposure and can exercise control over his or her exposure," otherwise the General Population limit applies (47 CFR Section 1.1310).

The FCC exposure limits generally apply to all FCC-licensed facilities (47 CFR Section 1.1307[b][1]). Unless exemptions apply, as a condition of obtaining a license to transmit, applicants must certify that they comply with FCC environmental rules, including those that are designed to prevent exposing persons to radiation above FCC RF limits (47 CFR Section 1.1307[b]). Licensees at co-located sites (e.g., towers supporting multiple antennas, including antennas under separate ownerships) must take the necessary actions to bring the accessible areas that exceed the FCC exposure limits into compliance. This is a shared responsibility of all licensees whose transmission power density levels account for 5.0 or more percent of the applicable FCC exposure limits (47 CFR 1.1307[b][3]).

### Code of Federal Regulations (14 CFR) Part 77

14 CFR Part 77.9 is designed to promote air safety and the efficient use of navigable airspace. Implementation of the code is administered by the Federal Aviation Administration (FAA). If an organization plans to sponsor any construction or alterations that might affect navigable airspace, a Notice of Proposed Construction or Alteration (FAA Form 7460-1) must be filed. The code provides specific guidance regarding FAA notification requirements.

### ***State Laws, Regulations, and Policies***

#### Safe Drinking Water and Toxic Enforcement Act of 1986 – Proposition 65

The Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65, protects the state's drinking water sources from contamination with chemicals known to cause cancer, birth defects, or other reproductive harm. Proposition 65 also requires businesses to inform the public of exposure to such chemicals in the products they purchase, in their homes or workplaces, or that are released into the environment. In accordance with Proposition 65, the California Governor's Office publishes, at least annually, a list of such chemicals. OEHHA, an agency under the California Environmental Protection Agency (CalEPA), is the lead agency for implementation of the Proposition 65 program. Proposition 65 is enforced through the California Attorney General's Office; however, district and city attorneys and any individual acting in the public interest may also file a lawsuit against a business alleged to be in violation of Proposition 65 regulations.

#### The Unified Program

The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. CalEPA and other state agencies set the standards for their programs, while local governments (CUPAs) implement the standards. For each county, the CUPA regulates/oversees the following:

- Hazardous materials business plans;
- California accidental release prevention plans or federal risk management plans;
- The operation of USTs and ASTs;
- Universal waste and hazardous waste generators and handlers;
- On-site hazardous waste treatment;
- Inspections, permitting, and enforcement;
- Proposition 65 reporting; and
- Emergency response.

#### Hazardous Materials Business Plans

Hazardous materials business plans are required for businesses that handle hazardous materials in quantities greater than or equal to 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet (cf) of compressed gas, or extremely hazardous substances above the threshold planning quantity (40 CFR, Part 355, Appendix A) (Cal OES, 2015). Business plans are required to include an inventory of the hazardous materials used/stored by the business, a site map, an emergency plan, and a training program for employees (Cal OES, 2015). In addition, business plan information is provided electronically to a statewide information management system, verified by the applicable CUPA, and transmitted to agencies responsible for the protection of public health and safety (i.e., local fire department, hazardous material response team, and local environmental regulatory groups) (Cal OES, 2015).

#### California Occupational Safety and Health Administration

Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations in California. Cal/OSHA regulations pertaining to the use of hazardous materials in the workplace (CCR Title 8) include requirements for safety training, availability of safety equipment, accident and illness prevention programs, warnings about exposure to hazardous substances, and preparation of emergency action and fire prevention plans.

Hazard communication program regulations that are enforced by Cal/OSHA require workplaces to maintain procedures for identifying and labeling hazardous substances, inform workers about the hazards associated with hazardous substances and their handling, and prepare health and safety plans to protect workers at hazardous waste sites. Employers must also make material safety data sheets available to employees and document employee information and training programs. In addition, Cal/OSHA has established maximum permissible RF radiation exposure limits for workers (Title 8 CCR Section 5085[b]), and requires warning signs where RF radiation might exceed the specified limits (Title 8 CCR Section 5085 [c]).

### California Accidental Release Prevention

The purpose of the California Accidental Release Prevention (CalARP) program is to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. In accordance with this program, businesses that handle more than a threshold quantity of regulated substance are required to develop a risk management plan (RMP). This RMP must provide a detailed analysis of potential risk factors and associated mitigation measures that can be implemented to reduce accident potential. CUPAs implement the CalARP program through review of RMPs, facility inspections, and public access to information that is not confidential or a trade secret.

### California Department of Forestry and Fire Protection Wildland Fire Management

The Office of the State Fire Marshal and the CALFIRE administer state policies regarding wildland fire safety. Construction contractors must comply with the following requirements in the Public Resources Code during construction activities at any sites with forest-, brush-, or grass-covered land:

- Earthmoving and portable equipment with internal combustion engines must be equipped with a spark arrester to reduce the potential for igniting a wildland fire (Public Resources Code Section 4442).
- Appropriate fire-suppression equipment must be maintained from April 1 to December 1, the highest-danger period for fires (Public Resources Code Section 4428).
- On days when a burning permit is required, flammable materials must be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor must maintain the appropriate fire suppression equipment (Public Resources Code Section 4427).
- On days when a burning permit is required, portable tools powered by gasoline fueled internal combustion engines must not be used within 25 feet of any flammable materials (Public Resources Code Section 4431).

### California Highway Patrol

CHP, along with Caltrans, enforce and monitor hazardous materials and waste transportation laws and regulations in California. These agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roads. All motor carriers and drivers involved in transportation of hazardous materials must apply for and obtain a hazardous materials transportation license from CHP.

### ***Local Laws, Regulations, and Policies***

A map of the fuel loading in the County (General Plan Figure HS-1) shows the fire hazard severity classifications of the SRAs in El Dorado County, as established by CDF. The classification system provides three classes of fire hazards: Moderate, High, and Very High. Fire Hazard Ordinance (Chapter 8.08) requires defensible space as described by the State Public Resources Code, including the incorporation and maintenance of a 30-foot fire break or vegetation fuel clearance around structures in fire hazard zones. The County's requirements on emergency access, signing and numbering, and emergency water are more stringent than those required by state law (Patton 2002). The Fire Hazard Ordinance also establishes limits on campfires, fireworks, smoking, and incinerators for all discretionary and ministerial developments.

**Discussion:** A substantial adverse effect due to Hazards or Hazardous Materials would occur if implementation of the project would:

- Expose people and property to hazards associated with the use, storage, transport, and disposal of hazardous materials where the risk of such exposure could not be reduced through implementation of Federal, State, and local laws and regulations;
- Expose people and property to risks associated with wildland fires where such risks could not be reduced through implementation of proper fuel management techniques, buffers and landscape setbacks, structural design features, and emergency access; or
- Expose people to safety hazards as a result of former on-site mining operations.

- a.-c. **Hazardous Materials:** The proposed Tentative Subdivision Map would not involve the routine transportation, use, or disposal of hazardous materials such as construction materials, paints, fuels, landscaping materials, and household cleaning supplies. Any future construction may involve some hazardous materials temporarily but this is considered to be small in scale. Impacts would be less than significant.
- d. **Hazardous Sites:** The project site is not included on a list of or near any hazardous materials sites pursuant to Government Code section 65962.5 (DTSC, 2015). There would be no impact.
- e. **Aircraft Hazards, Private Airstrips:** As shown on the El Dorado County Zoning Map, the project is not located within an Airport Safety District combining zone or near a public airport or private airstrip. There would be no impact.
- f. **Emergency Plan:** Access to the project site is from South Shingle Road approximately 300 feet north of Big Branch Road. A County Standard Encroachment per Standard Plan 103D is proposed. The El Dorado County Fire Protection District reviewed the project and provided comments which will be incorporated as conditions of approval. Additionally, the County Department of Transportation reviewed the project and provided comments which will be incorporated as conditions of approval. An On-Site Transportation Review (OSTR) was prepared by KD Anderson and Associates dated March 17, 2022 (Attachment 15). The eight tasks that are part of the OSTR, although not necessarily required depending on-site usage, included analyzing the current traffic problems in the local area, proximity of proposed site driveways to other driveways or intersections, adequacy of vehicle parking, adequacy of the project site design to fully satisfy truck loading demand on-site, 25 foot minimum required throat depth (MRTD) at project driveways, adequacy of the project site design to convey all vehicle types, adequacy of sight distance on-site, and queuing analysis of “drive-through” facilities. No issues were found with the proposed project design. Sight lines at the project driveway should be confirmed to meet the required sight distance standards. With the incorporation of the conditions of approval, the proposed project would not impair implementation of any emergency response plan or emergency evacuation plan. The impacts would be less than significant.
- g. **Wildfire Hazards:** The project site is in an area of high fire hazard for wildland pursuant to Figure HS-1 of the Fire Hazard rating in the El Dorado County General Plan (2015). The El Dorado County General Plan Safety Element precludes development in areas of high wildland fire hazard unless such development can be adequately protected from wildland fire hazards as demonstrated in a Fire Safe Plan prepared by a Registered Professional Forester (RPF) and approved by the local fire Protection District and/or California Department of Forestry and Fire Protection. A Wildland Fire Safe Plan was prepared for the project by Registered Professional Forester William F. Draper with report dated October 5, 2021. (Attachment 16). Further, the El Dorado County Fire Protection District reviewed the project and provided comments which would be incorporated into the project as conditions of approval. The conditions of approval would ensure compliance with applicable Fire Safe Regulations. The impacts would be less than significant.

**FINDING:** For the Hazards and Hazardous Materials category, with compliance with the Fire Safe Regulations contained in the Wildland Fire Safe Plan prepared for the project, and with the incorporation of the conditions of approval from the El Dorado County Fire Protection District, the impacts would be less than significant.

<b>X. HYDROLOGY AND WATER QUALITY.</b> Would the project:				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact

<b>X. HYDROLOGY AND WATER QUALITY.</b> Would the project:				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:				
i. result in substantial erosion or siltation on- or off-site;			X	
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;			X	
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			X	
iv. impede or redirect flood flows?			X	
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

**Regulatory Setting:**

**Federal Laws, Regulations, and Policies**

Clean Water Act

The Clean Water Act (CWA) is the primary federal law that protects the quality of the nation’s surface waters, including lakes, rivers, and coastal wetlands. The key sections pertaining to water quality regulation for the Proposed Project are CWA Section 303 and Section 402.

*Section 303(d) — Listing of Impaired Water Bodies*

Under CWA Section 303(d), states are required to identify “impaired water bodies” (those not meeting established water quality standards), identify the pollutants causing the impairment, establish priority rankings for waters on the list, and develop a schedule for the development of control plans to improve water quality. USEPA then approves the State’s recommended list of impaired waters or adds and/or removes waterbodies.

### *Section 402—NPDES Permits for Stormwater Discharge*

CWA Section 402 regulates construction-related stormwater discharges to surface waters through the NPDES, which is officially administered by USEPA. In California, USEPA has delegated its authority to the State Water Resources Control Board (SWRCB), which, in turn, delegates implementation responsibility to the nine RWQCBs, as discussed below in reference to the Porter-Cologne Water Quality Control Act.

The NPDES program provides for both general (those that cover a number of similar or related activities) and individual (activity- or project-specific) permits. General Permit for Construction Activities: Most construction projects that disturb 1.0 or more acre of land are required to obtain coverage under SWRCB's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). The general permit requires that the applicant file a public notice of intent to discharge stormwater and prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). SWPPP must include a site map and a description of the proposed construction activities, demonstrate compliance with relevant local ordinances and regulations, and present a list of Best Management Practices (BMPs) that will be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters. Permittees are further required to monitor construction activities and report compliance to ensure that BMPs are correctly implemented and are effective in controlling the discharge of construction-related pollutants.

#### Municipal Stormwater Permitting Program

SWRCB regulates stormwater discharges from municipal separate storm sewer systems (MS4s) through its Municipal Storm Water Permitting Program (SWRCB, 2013). Permits are issued under two phases depending on the size of the urbanized area/municipality. Phase I MS4 permits are issued for medium (population between 100,000 and 250,000 people) and large (population of 250,000 or more people) municipalities, and are often issued to a group of co-permittees within a metropolitan area. Phase I permits have been issued since 1990. Beginning in 2003, SWRCB began issuing Phase II MS4 permits for smaller municipalities (population less than 100,000).

El Dorado County is covered under two SWRCB Regional Boards. The West Slope Phase II Municipal Separate Storm Sewer Systems (MS4) NPDES Permit is administered by the Central Valley Regional Water Quality Control Board (RWQCB) (Region Five). The Lake Tahoe Phase I MS4 NPDES Permit is administered by the Lahontan RWQCB (Region Six). The current West Slope MS4 NPDES Permit was adopted by the SWRCB on February 5, 2013. The Permit became effective on July 1, 2013 for a term of five years and focuses on the enhancement of surface water quality within high priority urbanized areas. The current Lake Tahoe MS4 NPDES Permit was adopted and took effect on December 6, 2011 for a term of five years. The Permit incorporated the Lake Tahoe Total Maximum Daily Load (TMDL) and the Lake Clarity Crediting Program (LCCP) to account for the reduction of fine sediment particles and nutrients discharged to Lake Tahoe.

On May 19, 2015 the El Dorado County Board of Supervisors formally adopted revisions to the Storm Water Quality Ordinance (Ordinance 4992). Previously applicable only to the Lake Tahoe Basin, the ordinance establishes legal authority for the entire unincorporated portion of the County. The purpose of the ordinance is to 1) protect health, safety, and general welfare, 2) enhance and protect the quality of Waters of the State by reducing pollutants in storm water discharges to the maximum extent practicable and controlling non-storm water discharges to the storm drain system, and 3) cause the use of Best Management Practices to reduce the adverse effects of polluted runoff discharges on Waters of the State.

#### National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities complying with FEMA regulations that limit development in floodplains. The NFIP regulations permit development within special flood hazard zones provided that residential structures are raised above the base flood elevation of a 100-year flood event. Non-residential structures are required either to provide flood proofing construction techniques for that portion of structures below the 100-year flood

elevation or to elevate above the 100-year flood elevation. The regulations also apply to substantial improvements of existing structures.

### ***State Laws, Regulations, and Policies***

#### **Porter–Cologne Water Quality Control Act**

The Porter–Cologne Water Quality Control Act (known as the Porter–Cologne Act), passed in 1969, dovetails with the CWA (see discussion of the CWA above). It established the SWRCB and divided the state into nine regions, each overseen by an RWQCB. SWRCB is the primary State agency responsible for protecting the quality of the state’s surface water and groundwater supplies; however, much of the SWRCB’s daily implementation authority is delegated to the nine RWQCBs, which are responsible for implementing CWA Sections 401, 402, and 303[d]. In general, SWRCB manages water rights and regulates statewide water quality, whereas RWQCBs focus on water quality within their respective regions.

The Porter–Cologne Act requires RWQCBs to develop water quality control plans (also known as basin plans) that designate beneficial uses of California’s major surface-water bodies and groundwater basins and establish specific narrative and numerical water quality objectives for those waters. Beneficial uses represent the services and qualities of a waterbody (i.e., the reasons that the waterbody is considered valuable). Water quality objectives reflect the standards necessary to protect and support those beneficial uses. Basin plan standards are primarily implemented by regulating waste discharges so that water quality objectives are met. Under the Porter–Cologne Act, basin plans must be updated every 3 years.

**Discussion:** A substantial adverse effect on Hydrology and Water Quality would occur if the implementation of the project would:

- Expose residents to flood hazards by being located within the 100-year floodplain as defined by the Federal Emergency Management Agency;
  - Cause substantial change in the rate and amount of surface runoff leaving the project site ultimately causing a substantial change in the amount of water in a stream, river or other waterway;
  - Substantially interfere with groundwater recharge;
  - Cause degradation of water quality (temperature, dissolved oxygen, turbidity and/or other typical stormwater pollutants) in the project area; or
  - Cause degradation of groundwater quality in the vicinity of the project site.
- a. **Water Quality Standards:** Some waste discharge may occur as part of the project. Erosion control would be required as part of any future building or grading permit. Stormwater runoff from potential development would contain water quality protection features in accordance with a potential National Pollutant Discharge Elimination System (NPDES) stormwater permit, as deemed applicable. The project would comply with County Ordinances and standards regarding waste discharge therefore the project would not be expected to violate water quality standards. Impacts would be less than significant.
- b. **Groundwater Supplies:** The geology of the Western Slope portion of El Dorado County is principally hard, crystalline, igneous, or metamorphic rock overlain with a thin mantle of sediment or soil. Groundwater in this region is found in fractures, joints, cracks, and fault zones within the bedrock mass. These discrete fracture areas are typically vertical in orientation rather than horizontal as in sedimentary or alluvial aquifers. Recharge is predominantly through rainfall infiltrating into the fractures. Movement of this groundwater is very limited due to the lack of porosity in the bedrock. Wells are typically drilled to depths ranging from 80 to 300 feet in depth. There is no evidence that the project will substantially reduce or alter the quantity of groundwater in the vicinity, or materially interfere with groundwater recharge in the area of the proposed project. The project is not anticipated to affect potential groundwater supplies above pre-project levels. Impacts to groundwater supplies would be less than significant.
- c. **Drainage Patterns:** A grading permit would be required to address grading, erosion and sediment control for any future construction. Construction activities would be required to adhere to the El Dorado County

Grading, Erosion Control and Sediment Ordinance. This includes the use of Best Management Practices (BMPs) to minimize degradation of water quality during construction. Preliminary Grading and Drainage Plans are included with the project. With the implementation of standard requirements, impacts on drainage patterns would be less than significant.

- d.-e. **Flood-related Hazards:** The project site is not located within any mapped 100-year flood areas and would not result in the construction of any structures that would impede or redirect flood flows (FEMA, 2008). No dams which would result in potential hazards related to dam failures are located in the project area. The risk of exposure to seiche, tsunami, or mudflows would be remote. The impact would be less than significant.

**FINDING:** The project would be required to address any potential changes to the drainage pattern on-site during the grading and building permit review process for future construction of single-unit residences, accessory dwelling units (ADU), and/or accessory structures. No significant hydrological impacts are expected. The impacts would be less than significant.

<b>XI. LAND USE PLANNING. <i>Would the project:</i></b>				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Physically divide an established community?			X	
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X	

**Regulatory Setting:**

California State law requires that each City and County adopt a general plan "for the physical development of the City and any land outside its boundaries which bears relation to its planning." Typically, a general plan is designed to address the issues facing the City or County for the next 15-20 years. The general plan expresses the community's development goals and incorporates public policies relative to the distribution of future public and private land uses. The El Dorado County General Plan was adopted in 2004. The 2013-2021 Housing Element was adopted in 2013.

**Discussion:** A substantial adverse effect on Land Use would occur if the implementation of the project would:

- Result in the conversion of Prime Farmland as defined by the State Department of Conservation;
  - Result in conversion of land that either contains choice soils or which the County Agricultural Commission has identified as suitable for sustained grazing, provided that such lands were not assigned urban or other nonagricultural use in the Land Use Map;
  - Result in conversion of undeveloped open space to more intensive land uses;
  - Result in a use substantially incompatible with the existing surrounding land uses; or
  - Conflict with adopted environmental plans, policies, and goals of the community.
- a. **Established Community:** The project site is located within the Shingle Springs Community Region. The project site is surrounded by similar large lot parcels with residential development. The proposed Tentative Subdivision Map would not conflict with the existing land use pattern in the area or physically divide an established community. The impact would be less than significant.

- b. **Land Use Consistency:** The subject parcel has a General Plan land use designation of Low Density Residential (LDR) within an Important Biological Corridor (IBC) overlay; and located in the Residential Estate, Five-acre (RE-5) Zone District. The purpose of the LDR designation is to establish areas for single-family residential development in a rural setting. In Rural Regions, this designation shall provide a transition from Community Regions and Rural Centers into the agricultural, timber, and more rural areas of the County and shall be applied to those areas where infrastructure such as arterial roadways, public water, and public sewer are generally not available. This land use designation is also appropriate within Community Regions and Rural Centers where higher density serving infrastructure is not yet available. The maximum allowable density shall be one dwelling unit per 5.0 acres. Parcel size shall range from 5.0 to 10.0 acres. Within Community Regions and Rural Centers, the LDR designation shall remain in effect until a specific project is proposed that applies the appropriate level of analysis and planning and yields the necessary expansion of infrastructure. The RE-5 Zone District has a minimum parcel size of five acres. Parcel sizes for the proposed Tentative Subdivision Map lots would range from 5.0 to 5.83 acres. The proposed project is consistent with the General Plan land use designation and with the Zone District. The impact would be less than significant.

**FINDING:** The proposed use of the land to develop six new residential parcels would be consistent with the uses allowed in the Shingle Springs Community Region, with the County General Plan, and with the Zoning Ordinance. The impacts would be less than significant.

<b>XII.MINERAL RESOURCES. <i>Would the project:</i></b>				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. 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?				<b>X</b>
b. 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?				<b>X</b>

**Regulatory Setting:**

**Federal Laws, Regulations, and Policies**

No federal laws, regulations, or policies apply to mineral resources and the Proposed Project.

**State Laws, Regulations, and Policies**

**Surface Mining and Reclamation Act**

The Surface Mining and Reclamation Act of 1975 (SMARA) requires that the State Mining and Geology Board identify, map, and classify aggregate resources throughout California that contain regionally significant mineral resources. Designations of land areas are assigned by CDC and California Geological Survey following analysis of geologic reports and maps, field investigations, and using information about the locations of active sand and gravel mining operations. Local jurisdictions are required to enact planning procedures to guide mineral conservation and extraction at particular sites and to incorporate mineral resource management policies into their general plans.

The California Mineral Land Classification System represents the relationship between knowledge of mineral deposits and their economic characteristics (grade and size). The nomenclature used with the California Mineral Land Classification System is important in communicating mineral potential information in activities such as mineral land classification, and usage of these terms are incorporated into the criteria developed for assigning mineral resource zones. Lands classified MRZ-2 are areas that contain identified mineral resources. Areas classified as MRZ-2a or MRZ-2b (referred to hereafter as MRZ-2) are considered important mineral resource areas.

**Local Laws, Regulations, and Policies**

El Dorado County in general is considered a mining region capable of producing a wide variety of mineral resources. Metallic mineral deposits, including gold, are considered the most significant extractive mineral resources. Exhibit 5.9-6 shows the MRZ-2 areas within the county based on designated Mineral Resource (-MR) overlay areas. The -MR overlay areas are based on mineral resource mapping published in the mineral land classification reports referenced above. The majority of the county’s important mineral resource deposits are concentrated in the western third of the county.

According to General Plan Policy 2.2.2.7, before authorizing any land uses within the -MR overlay zone that will threaten the potential to extract minerals in the affected area, the County shall prepare a statement specifying its reasons for considering approval of the proposed land use and shall provide for public and agency notice of such a statement consistent with the requirements of Public Resources Code section 2762. Furthermore, before finally approving any such proposed land use, the County shall balance the mineral values of the threatened mineral resource area against the economic, social, or other values associated with the proposed alternative land uses. Where the affected minerals are of regional significance, the County shall consider the importance of these minerals to their market region as a whole and not just their importance to the County.

Where the affected minerals are of statewide significance, the County shall consider the importance of these minerals to the State and Nation as a whole. The County may approve the alternative land use if it determines that the benefits of such uses outweigh the potential or certain loss of the affected mineral resources in the affected regional, Statewide, or national market.

**Discussion:** A substantial adverse effect on Mineral Resources would occur if the implementation of the project would:

- Result in obstruction of access to, and extraction of mineral resources classified MRZ-2x, or result in land use compatibility conflicts with mineral extraction operations.

a.-b. **Mineral Resources.** The project site has not been delineated in the El Dorado County General Plan as a locally important mineral resource recovery site (2003, Exhibits 5.9-6 and 5.9-7). Review of the California Department of Conservation Geologic Map data showed that the project site is not within a mineral resource zone district. There would be no impact.

**FINDING:** For this Mineral Resources category, no impacts to mineral resources are expected, either directly or indirectly. There would be no impacts.

<b>XIII. NOISE.</b> <i>Would the project result in:</i>				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact

<b>XIII. NOISE.</b> <i>Would the project result in:</i>					
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact	
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X		
b. Generation of excessive groundborne vibration or groundborne noise levels?			X		
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise level?			X		

**Regulatory Setting:**

No federal or state laws, regulations, or policies for construction-related noise and vibration that apply to the Proposed Project. However, the Federal Transit Administration (FTA) Guidelines for Construction Vibration in Transit Noise and Vibration Impact Assessment state that for evaluating daytime construction noise impacts in outdoor areas, a noise threshold of 90 dBA Leq and 100 dBA Leq should be used for residential and commercial/industrial areas, respectively (FTA 2006).

For construction vibration impacts, the FTA guidelines use an annoyance threshold of 80 VdB for infrequent events (fewer than 30 vibration events per day) and a damage threshold of 0.12 inches per second (in/sec) PPV for buildings susceptible to vibration damage (FTA 2006).

**Discussion:** A substantial adverse effect due to Noise would occur if the implementation of the project would:

- Result in short-term construction noise that creates noise exposures to surrounding noise sensitive land uses in excess of 60dBA CNEL;
- Result in long-term operational noise that creates noise exposures in excess of 60 dBA CNEL at the adjoining property line of a noise sensitive land use and the background noise level is increased by 3dBA, or more; or
- Results in noise levels inconsistent with the performance standards contained in Table 130.37.060.1 and Table 130.37.060.2 of the El Dorado County Zoning Ordinance.

<b>TABLE 6-2 NOISE LEVEL PERFORMANCE PROTECTION STANDARDS FOR NOISE SENSITIVE LAND USES AFFECTED BY NON-TRANSPORTATION* SOURCES</b>						
Noise Level Descriptor	Daytime 7 a.m. - 7 p.m.		Evening 7 p.m. - 10 p.m.		Night 10 p.m. - 7 a.m.	
	Community/ Rural Centers	Rural Regions	Community/ Rural Centers	Rural Regions	Community/ Rural Centers	Rural Regions
Hourly Leq, dB	55	50	50	45	45	40
Maximum level, dB	70	60	60	55	55	50

- a. **Noise Exposures:** The proposed Tentative Subdivision Map project would not expose people to noise levels in excess of standards established in the General Plan or Zoning Ordinance. Future construction may require the use of trucks and other equipment, which may result in short-term noise impacts to surrounding neighbors. These activities would require grading and building permits and would be restricted to construction hours pursuant to the General Plan. There could be additional noise associated with potential future residential development. However, the project is not expected to generate noise levels exceeding the performance standards contained within the Zoning Ordinance. The impact would be less than significant.
- b. **Groundborne Vibration:** The project site is currently undeveloped. Future residential development is anticipated. Future construction may generate short-term ground borne vibration or shaking events during project construction; however, this would be temporary. The impact would be less than significant.
- c. **Aircraft Noise:** The project site is not located within the vicinity of a private airstrip or an airport land use plan or within two miles of a public airport or public use airport. There would be no impact.

**FINDING:** As conditioned and with adherence to County Code, no significant direct or indirect impacts to noise levels are expected. The impacts would be less than significant.

<b>XIV. POPULATION AND HOUSING. <i>Would the project:</i></b>				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?			X	

**Regulatory Setting:**

No federal or state laws, regulations, or policies apply to population and housing and the proposed project.

**Discussion:** A substantial adverse effect on Population and Housing would occur if the implementation of the project would:

- Create substantial growth or concentration in population;
- Create a more substantial imbalance in the County’s current jobs to housing ratio; or
- Conflict with adopted goals and policies set forth in applicable planning documents.

- a. **Population Growth:** The project site is currently undeveloped. Future residential development is anticipated. Each parcel would be allowed a primary residence and accessory dwelling unit by right, for a total of twelve (12) residences (six primary dwellings/six accessory dwelling units). This potential additional housing and population would not be considered a significant population growth. The impact would be less than significant.
- b. **Housing Displacement:** The proposed Tentative Subdivision Map project would result in the creation of six (6) parcels, each new of which would be allowed a primary residence and an accessory dwelling unit by right. No existing housing would be displaced resulting from the project. The impact would be less than significant.

**FINDING:** The project would not displace housing and there would be no potential for a significant impact due to substantial growth, either directly or indirectly. The impacts would be less than significant.

<b>XV. PUBLIC SERVICES. <i>Would the project:</i></b>				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. 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:			X	
Fire protection?			X	
Police protection?			X	
Schools?			X	
Parks?			X	
Other?			X	

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

California Fire Code

The California Fire Code (Title 24 CCR, Part 9) establishes minimum requirements to safeguard public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings. Chapter 33 of CCR contains requirements for fire safety during construction and demolition.

**Discussion:** A substantial adverse effect on Public Services would occur if the implementation of the project would:

- Substantially increase or expand the demand for fire protection and emergency medical services without increasing staffing and equipment to meet the Department's/District's goal of 1.5 firefighters per 1,000 residents and 2 firefighters per 1,000 residents, respectively;
- Substantially increase or expand the demand for public law enforcement protection without increasing staffing and equipment to maintain the Sheriff's Department goal of one sworn officer per 1,000 residents;
- Substantially increase the public school student population exceeding current school capacity without also including provisions to adequately accommodate the increased demand in services;
- Place a demand for library services in excess of available resources;
- Substantially increase the local population without dedicating a minimum of 5 acres of developed parklands for every 1,000 residents; or
- Be inconsistent with County adopted goals, objectives or policies.

a. **Fire Protection:** The El Dorado County Fire Protection District reviewed the project and provided comments which are incorporated as conditions of approval. The project must adhere to these applicable requirements for emergency vehicle access including roadway widths and turning radii, fire flow and sprinkler requirements, and vehicle ingress/egress. Compliance with these requirements will assure

adequate emergency access and evacuation routes. The Fire District would review future grading and/or building permit applications and could include fire protection measures at that time. The impact would be less than significant.

**Police Protection:** Police services would be provided by the El Dorado County Sheriff’s Department (EDSO). Any future residential construction would not significantly increase demand for law enforcement protection. Impacts would be less than significant.

**Schools:** As a result of project approval, new residential dwelling units could be constructed in the future which could add a small number of additional students; however, payment of school impact fees would be required at time of future grading and building permits issuance. The impact would be less than significant.

**Parks.** Any additional units from future construction would not increase the local population substantially, and therefore would not substantially increase the use of parks and recreational facilities. The dedication of land, the payment of fees in lieu thereof, or a combination of both for park and recreational purposes would be required, pursuant to the provisions of Sections 120.12.090 through 120.12.110. The impact would be less than significant.

**Government Services.** There are no government services that would be significantly impacted as a result of the proposed project. The impact would be less than significant.

**FINDING:** The project would not result in a significant increase of public services to the project. Increased demand to services would be addressed through the payment of established impact fees, if applicable. The impacts would be less than significant.

<b>XVI. RECREATION. <i>Would the project:</i></b>				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. 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?			X	
b. 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?			X	

**Regulatory Setting:**

National Trails System

The National Trails System Act of 1968 authorized The National Trails System (NTS) in order to provide additional outdoor recreation opportunities and to promote the preservation of access to the outdoor areas and historic resources of the nation. The Appalachian and Pacific Crest National Scenic Trails were the first two components, and the System has grown to include 20 national trails.

The National Trails System includes four classes of trails:

1. National Scenic Trails (NST) provide outdoor recreation and the conservation and enjoyment of significant scenic, historic, natural, or cultural qualities. The Pacific Coast Trail falls under this category. The PCT passes through the Desolation Wilderness area along the western plan area boundary.
2. National Historic Trails (NHT) follow travel routes of national historic significance. The National Park Service has designated two National Historic Trail (NHT) alignments that pass through El Dorado County, the California National Historic Trail and the Pony Express National Historic Trail. The California Historic Trail is a route of approximately 5,700 miles including multiple routes and cutoffs, extending from Independence and Saint Joseph, Missouri, and Council Bluffs, Iowa, to various points in California and Oregon. The Pony Express NHT commemorates the route used to relay mail via horseback from Missouri to California before the advent of the telegraph.
3. National Recreation Trails (NRT) are in, or reasonably accessible to, urban areas on federal, state, or private lands. In El Dorado County there are 5 NRTs.

### ***State Laws, Regulations, and Policies***

#### **The California Parklands Act**

The California Parklands Act of 1980 (Public Resources Code Section 5096.141-5096.143) recognizes the public interest for the state to acquire, develop, and restore areas for recreation and to aid local governments to do the same. The California Parklands Act also identifies the necessity of local agencies to exercise vigilance to see that the parks, recreation areas, and recreational facilities they now have are not lost to other uses.

The California state legislature approved the California Recreational Trail Act of 1974 (Public Resources Code Section 2070-5077.8) requiring that the Department of Parks and Recreation prepare a comprehensive plan for California trails. The California Recreational Trails Plan is produced for all California agencies and recreation providers that manage trails. The Plan includes information on the benefits of trails, how to acquire funding, effective stewardship, and how to encourage cooperation among different trail users.

The 1975 Quimby Act (California Government Code Section 66477) requires residential subdivision developers to help mitigate the impacts of property improvements by requiring them to set aside land, donate conservation easements, or pay fees for park improvements. The Quimby Act gave authority for passage of land dedication ordinances to cities and counties for parkland dedication or in-lieu fees paid to the local jurisdiction. Quimby exactions must be roughly proportional and closely tied (nexus) to a project's impacts as identified through traffic studies required by CEQA. The exactions only apply to the acquisition of new parkland; they do not apply to the physical development of new park facilities or associated operations and maintenance costs.

The County implements the Quimby Act through §16.12.090 of the County Code. The County Code sets standards for the acquisition of land for parks and recreational purposes, or payments of fees in lieu thereof, on any land subdivision. Other projects, such as ministerial residential or commercial development, could contribute to the demand for park and recreation facilities without providing land or funding for such facilities.

### ***Local Laws, Regulations, and Policies***

The 2004 El Dorado County General Plan Parks and Recreation Element establishes goals and policies that address needs for the provision and maintenance of parks and recreation facilities in the county, with a focus on providing recreational opportunities and facilities on a regional scale, securing adequate funding sources, and increasing tourism and recreation-based businesses. The Recreation Element describes the need for 1.5 acres of regional parkland, 1.5 acres of community parkland, and 2 acres of neighborhood parkland per 1,000 residents. Another 95 acres of park land are needed to meet the General Plan guidelines.

**Discussion:** A substantial adverse effect on Recreational Resources would occur if the implementation of the project would:

- Substantially increase the local population without dedicating a minimum of 5 acres of developed parklands for every 1,000 residents; or
  - Substantially increase the use of neighborhood or regional parks in the area such that substantial physical deterioration of the facility would occur.
- a. **Parks.** Any additional units from future construction would not increase the local population substantially, and therefore would not substantially increase the use of parks and recreational facilities. The dedication of land, the payment of fees in lieu thereof or a combination of both for park and recreational purposes may be required pursuant to the provisions of Sections 120.12.090 through 120.12.110 as a condition of approval. The impact would be less than significant.
- b. **Recreational Services.** The project would not include additional recreation services or sites as part of the project. The impact would be less than significant.

**FINDING:** No significant impacts to parks or recreation facilities would result from the proposed project. The proposed project would not result in the need for the construction or expansion of new recreation facilities. The impacts would be less than significant.

<b>XVII. TRANSPORTATION.</b> <i>Would the project:</i>				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Conflict with an applicable program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) (Vehicle Miles Traveled)?			X	
c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d. Result in inadequate emergency access?			X	

**Regulatory Setting:**

**Federal Laws, Regulations, and Policies**

No federal laws, regulations, or policies apply to transportation/traffic and the Proposed Project.

**State Laws, Regulations, and Policies**

Caltrans manages the state highway system and ramp interchange intersections. This state agency is also responsible for highway, bridge, and rail transportation planning, construction, and maintenance.

**Local Laws, Regulations, and Policies**

The Transportation and Circulation Element of the County General Plan relies on automobile delay and Level of Service (LOS) as performance measures to determine impacts on County-maintained roads and state highways within the unincorporated areas of the county.

County General Plan Policy TC-Xd states that Level of Service (LOS) for County-maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions. Level of Service is calculated using the methodologies in the latest edition of the Highway Capacity Manual (Transportation Research Board, National Research Council). There are some roadway segments that are except from these standards and are allowed to operate at LOS F and are listed in Table TC-2. According to Policy TC-Xe, “worsen” is defined as any of the following number of project trips using a road facility at the time of issuance of a use and occupancy permit for the development project:

- A. A two percent increase in traffic during a.m., p.m. peak hour, or daily
- B. The addition of 100 or more daily trips, or
- C. The addition of 10 or more trips during the a.m. or p.m. peak hour.

Starting on July 1, 2020, automobile delay and level of service (LOS) may no longer be used as the performance measure to determine the transportation impacts of land development under CEQA. Instead, an alternative metric that supports the goals of SB 743 legislation will be required. The use of vehicle miles traveled (VMT) has been recommended by the Governor’s Office of Planning and Research (OPR) and is cited in the CEQA Guidelines as the most appropriate measure of transportation impacts (Section 15064.3(a)).

The intent of SB743 is to bring CEQA transportation analysis into closer alignment with other statewide policies regarding greenhouse gases, complete streets, and smart growth. Using VMT as a performance measure, instead of LOS, is intended to discourage suburban sprawl, reduce greenhouse gas emissions, and encourage the development of smart growth, complete streets, and multimodal transportation networks.

Current direction regarding methods to identify VMT and comply with state requirements is provided by the California Governor’s Office of Planning and Research (OPR) December 2018 publication, Technical Advisory on Evaluating Transportation Impacts in CEQA. This advisory contains technical recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. OPR provides this Technical Advisory as a resource for the public to use at their discretion. OPR is not enforcing or attempting to enforce any part of the recommendations contained herein. (Government Code Section 65035 [“It is not the intent of the Legislature to vest in the Office of Planning and Research any direct operating or regulatory powers over land use, public works, or other state, regional, or local projects or programs.”].)

OPR’s Technical Advisory provides this direction for small projects:

Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact.

Per OPR’s Technical Advisory, this determination is based on the following:

CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area. (CEQA Guidelines, § 15301, subd. (e)(2)). Typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract an additional 110-124 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact.

On October 6, 2020 El Dorado County Board of Supervisors adopted Resolution 141-2020 setting thresholds of significance for VMT resulting from proposed development projects. The VMT threshold for a residential Tentative Subdivision Map is [%] below the baseline County-wide VMT.

**Discussion:** A substantial adverse effect on Transportation would occur if the implementation of the project would:

- Conflict with an applicable program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) (Vehicle Miles Traveled); or
- Substantially increase hazards 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.

- a. **Conflicts with a Transportation Plan, Policy or Ordinance:** The project would not worsen traffic as defined in General Plan Policy TC-Xe as the total potential new development would be limited to a maximum of twelve (12) residences possible (six primary dwellings/six accessory dwelling units). Trip generation for the project using the 10<sup>th</sup> Edition of the ITE Trip Generation Manual resulted in 57 trips daily, 4 trips during the AM peak hour, and 6 trips during the PM peak hour. Access would be from South Shingle Road, a County-maintained roadway. Construction of the proposed project would not necessitate construction of road improvements to meet or maintain General Plan policy level of service standards. The impact would be less than significant.
- b. **Vehicle Miles Travelled (VMT):** Per Resolution 141-2020, there is a presumption of less than significant impacts for projects that generate or attract less than 100 trips per day. The proposed project would create six (6) parcels. Construction activities associated with the project would temporarily generate additional vehicle traffic in the project area but would not be expected to exceed 100 trips per day during the construction period. Once construction has been completed, long-term traffic is anticipated to increase by 57 trips daily. Therefore, in accordance with Resolution 141-2020 and OPR's direction regarding determining transportation impacts for land use projects, this impact is presumed to be less than significant.
- c. **Design Hazards:** The project site is undeveloped. Access is from South Shingle Road approximately 300 feet north of Big Branch Road. A County Standard Encroachment per Standard Plan 103D is proposed. Grading will be necessary for the access road only. Pad grading for the subdivision is not proposed, and the created parcels would be subject to a grading permit at the time of building permit issued for each parcel. Natural drainage is proposed, as modified by the construction of any culverts necessary for access road construction. The proposed project was reviewed by the County Department of Transportation who provided project-specific and standard conditions of approval. An On-Site Transportation Review (OSTR) was prepared by KD Anderson and Associates dated March 17, 2022 (Attachment 15). The eight tasks that are part of the OSTR, although not necessarily required depending on site usage, included analyzing the current traffic problems in the local area, proximity of proposed site driveways to other driveways or intersections, adequacy of vehicle parking, adequacy of the project site design to fully satisfy truck loading demand on-site, 25 foot minimum required throat depth (MRTD) at project driveways, adequacy of the project site design to convey all vehicle types, adequacy of sight distance on-site, and queuing analysis of "drive-through" facilities. No issues were found with the proposed project design. Sight lines at the project driveway should be confirmed to meet the required sight distance standards. A Design Waiver is requested to modify County Standard Plan 101C which requires paving or chip seal to be provided where roadway slope exceeds 12 percent. Approximately 170 linear feet of the proposed new private road would have a slope of 13.9 percent. The Design Waiver, if approved, would allow that section of the roadway exceeding 12 percent slope to be constructed with aggregate base instead of the required paving or chip seal. The proposed road would be 20 feet wide with six (6) inches of aggregate base and 1-foot unpaved shoulders on each side. With the incorporation of conditions of approval, the impacts would be less than significant.
- d. **Emergency Access:** The project site is currently undeveloped. Access is from South Shingle Road, which is a County-maintained roadway. Driveway improvements for access to the newly proposed parcels would

be required as shown on the proposed Tentative Subdivision Map (Attachment 7). Future development would require a grading permit and would be required to be compliant with fire and building code emergency access requirements. Further, the El Dorado County Fire Protection District reviewed the project and provided comments which have been incorporated as conditions of approval. The Fire District would also review the improvement plans at time of grading and/or building permit submittal to ensure compliance with all safety protocols. The impact would be less than significant.

**FINDING:** The project would not conflict with applicable General Plan policies regarding effective operation of the County circulation system and the project would not exceed the level of service thresholds for traffic identified within the General Plan. Further, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b) (Vehicle Miles Traveled). The project would not create any road hazards or affect road safety and would not result in inadequate emergency access. For this Transportation category, the threshold of significance would not be exceeded and impacts would be less than significant.

<b>XVIII. TRIBAL CULTURAL RESOURCES.</b> <i>Would the project: Cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</i>	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. 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			<b>X</b>	
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of 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.			<b>X</b>	

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

No federal laws, regulations, or policies apply to Tribal Cultural Resources (TCRs) and the Proposed Project.

***State Laws, Regulations, and Policies***

**Assembly Bill (AB) 52**

AB 52, which was approved in September 2014 and effective on July 1, 2015, requires that CEQA lead agencies consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if so requested by the tribe. The bill, chaptered in CEQA Section 21084.2, also specifies that a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment.

Defined in Section 21074(a) of the Public Resources Code, TCRs are:

1. Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe that are either of the following:
  - a. Included or determined to be eligible for inclusion in the California Register of Historical Resources; or

- b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

TCRs are further defined under Section 21074 as follows:

- b. A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and
- c. A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “nonunique archaeological resource” as defined in subdivision (h) of Section 21083.2 may also be a TCR if it conforms with the criteria of subdivision (a).

Mitigation measures for TCRs must be developed in consultation with the affected California Native American tribe pursuant to newly chaptered Section 21080.3.2, or according to Section 21084.3. Section 21084.3 identifies mitigation measures that include avoidance and preservation of TCRs and treating TRCs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource.

#### **Discussion:**

In general, significant impacts are those that diminish the integrity, research potential, or other characteristics that make a TCR significant or important. To be considered a TCR, a resource must be either: (1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or: (2) a resource that the lead agency chooses, in its discretion, to treat as a TCR and meets the criteria for listing in the state register of historic resources pursuant to the criteria set forth in Public Resources Code Section 5024.1(c). A substantial adverse change to a TCR would occur if the implementation of the project would:

- Disrupt, alter, or adversely affect a TCR such that the significance of the resource would be materially impaired

a.-b. **Tribal Cultural Resources:** A Cultural Resource record search was prepared by the California Historical Resources Information System, North Central Information Center with a results summary dated September 10, 2021. The review indicated that the project area contained zero recorded indigenous-period/ethnographic-period resources and zero recorded historic-period cultural resources. Further, given the extent of known cultural resources and patterns of local history, there is low potential for locating historic-period cultural resources in the immediate vicinity of the proposed project area. No significant cultural resources were identified within the proposed project, and no further archaeological work is recommended. In the event of human remains discovery during any future construction if additional structures are built, standard conditions of approval to address accidental discovery of human remains would apply during any grading activities. Further, the project is subject to the cultural resources provisions of CEQA Assembly Bill 52 (AB52), which requires Native American outreach. Pursuant to AB52, the County solicited input from Native American organizations and representatives listed with the Native American Heritage Commission to identify cultural resources and properties of concern to the Native American Community. At the time of the initial review consultation, seven tribes were notified of the proposed project: Colfax-Todds Valley Consolidated Tribe, Ione Band of Miwok Indians, Nashville-El Dorado Miwok, Shingle Springs Band of Miwok Indians, Tsi Akim Maidu, United Auburn Indian Community (UAIC), and Washoe Tribe of California and Nevada. The Shingle Springs Band of Miwok Indians responded within 30 days to initiate consultation. Staff provided the tribe with the record search results for their review. No comments were received from the tribe. Staff confirmed conclusion of consultation via email on August 9, 2022. Standard protective conditions of approval will be incorporated with the project. The impacts would be less than significant.

**FINDING:** Standard conditions of approval would apply in the event of discovery of any Tribal Cultural Resources (TCRs) during any future construction, that construction would stop immediately, and the Tribes would be notified. Therefore, the proposed project as conditioned would have a less than significant impact on Tribal Cultural Resources.

<b>XIX. UTILITIES AND SERVICE SYSTEMS. <i>Would the project:</i></b>				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?			X	
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?			X	
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e. Comply with federal, state, and local statutes and regulations related to solid waste?			X	

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

Energy Policy Act of 2005

The Energy Policy Act of 2005, intended to reduce reliance on fossil fuels, provides loan guarantees or tax credits for entities that develop or use fuel-efficient and/or energy efficient technologies (USEPA, 2014). The act also increases the amount of biofuel that must be mixed with gasoline sold in the United States (USEPA, 2014).

***State Laws, Regulations, and Policies***

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (Public Resources Code, Division 30) requires all California cities and counties to implement programs to reduce, recycle, and compost wastes by at least 50 percent by 2000 (Public Resources Code Section 41780). The state, acting through the California Integrated Waste Management Board (CIWMB), determines compliance with this mandate. Per-capita disposal rates are used to determine whether a jurisdiction's efforts are meeting the intent of the act.

California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act of 1991 (Public Resources Code Sections 42900-42911) requires that all development projects applying for building permits include adequate, accessible areas for collecting and loading recyclable materials.

California Integrated Energy Policy

Senate Bill 1389, passed in 2002, requires the California Energy Commission (CEC) to prepare an Integrated Energy Policy Report for the governor and legislature every 2 years (CEC 2015a). The report analyzes data and provides policy recommendations on trends and issues concerning electricity and natural gas, transportation, energy efficiency, renewable energy, and public interest energy research (CEC 2015a). The 2014 Draft Integrated Energy Policy Report Update includes policy recommendations, such as increasing investments in electric vehicle charging infrastructure at workplaces, multi-unit dwellings, and public sites (CEC 2015b).

#### Title 24 Building Energy Efficiency Standards

Title 24 Building Energy Efficiency Standards of the California Building Code are intended to ensure that building construction, system design, and installation achieve energy efficiency and preserve outdoor and indoor environmental quality (CEC 2012). The standards are updated on an approximately 3-year cycle. The 2013 standards went into effect on July 1, 2014.

#### Urban Water Management Planning Act

California Water Code Sections 10610 *et seq.* requires that all public water systems providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 acre-feet per year (AFY), prepare an urban water management plan (UWMP).

#### *Other Standards and Guidelines*

#### Leadership in Energy & Environmental Design

Leadership in Energy & Environmental Design (LEED) is a green building certification program, operated by the U.S. Green Building Council (USGBC) that recognizes energy efficient and/or environmentally friendly (green) components of building design (USGBC, 2015). To receive LEED certification, a building project must satisfy prerequisites and earn points related to different aspects of green building and environmental design (USGBC, 2015). The four levels of LEED certification are related to the number of points a project earns: (1) certified (40–49 points), (2) silver (50–59 points), (3) gold (60–79 points), and (4) platinum (80+ points) (USGBC, 2015). Points or credits may be obtained for various criteria, such as indoor and outdoor water use reduction, and construction and demolition (C&D) waste management planning. Indoor water use reduction entails reducing consumption of building fixtures and fittings by at least 20% from the calculated baseline and requires all newly installed toilets, urinals, private lavatory faucets, and showerheads that are eligible for labeling to be WaterSense labeled (USGBC, 2014). Outdoor water use reduction may be achieved by showing that the landscape does not require a permanent irrigation system beyond a maximum 2.0-year establishment period, or by reducing the project's landscape water requirement by at least 30% from the calculated baseline for the site's peak watering month (USGBC, 2014). C&D waste management points may be obtained by diverting at least 50% of C&D material and three material streams, or generating less than 2.5 pounds of construction waste per square foot of the building's floor area (USGBC, 2014).

**Discussion:** A substantial adverse effect on Utilities and Service Systems would occur if the implementation of the project would:

- Breach published national, state, or local standards relating to solid waste or litter control;
  - Substantially increase the demand for potable water in excess of available supplies or distribution capacity without also including provisions to adequately accommodate the increased demand, or is unable to provide an adequate on-site water supply, including treatment, storage and distribution;
  - Substantially increase the demand for the public collection, treatment, and disposal of wastewater without also including provisions to adequately accommodate the increased demand, or is unable to provide for adequate on-site wastewater system; or
  - Result in demand for expansion of power or telecommunications service facilities without also including provisions to adequately accommodate the increased or expanded demand.
- a. **New Stormwater Facilities or Construction of New Facilities:** Any stormwater drainage facilities needed for any future construction would be built in conformance with the County of El Dorado Drainage

Manual and would be reviewed during the grading and building permit processes. No development is proposed as a part of the Tentative Subdivision Map and no construction of new facilities is required. Electric service for each parcel would be provided by connecting to Pacific Gas & Electric (PG&E). The impact would be less than significant.

- b. **Sufficient Water Supply:** Each parcel would be served by its own private well for water. The County Environmental Management Department reviewed the project and provided comments outlining the requirements for wells. Wells on each parcel produced between 8 and 68 gallons per minute with a median well production of 50 gallons per minute and an average well production of 43.6 gallons per minute between 5 separate wells. These well production figures meet the requirement to demonstrate an adequate water supply for the project. The impact would be less than significant.
- c. **Wastewater Requirements:** Each parcel would be served by its own private septic system. The County Environmental Management Department reviewed the project and provided comments outlining the requirements for septic systems. Soil depth was 11 feet for each of the proposed parcels, meeting the El Dorado County Environmental Management’s “Local Agency Management Plan” (LAMP) requirement for adequate soil depth. Soil percolation rates for Parcel 1,2,3,5, and 6 meet the LAMP requirement for new parcels utilizing a septic system to have an average soil percolation rate of 120 minutes per inch or less. Parcel 4 has a soil depth of 11 feet and a soil percolation rate of 128 minutes per inch, which does not meet LAMP requirements for land divisions. The El Dorado County LAMP defines usable dispersal material as soil with a percolation rate between 1 and 120 minutes per inch. Options to meet this LAMP requirement include merging Parcel 4 with an adjacent parcel that has a lower percolation rate or identifying an alternative sewage dispersal area on the parcel with a soil percolation rate between 1 and 120 minutes per inch. With the incorporation of conditions of approval, the impact would be less than significant.
- d. **Solid Waste Disposal and Requirements:** El Dorado Disposal distributes municipal solid waste to Forward Landfill in Stockton and Kiefer Landfill in Sacramento. Pursuant to El Dorado County Environmental Management Solid Waste Division staff, both facilities have sufficient capacity to serve the County. Recyclable materials are distributed to a facility in Benicia and green wastes are sent to a processing facility in Sacramento. County Ordinance No. 4319 requires that new development provide areas for adequate, accessible, and convenient storing, collecting and loading of solid waste and recyclables. This project does not propose to add any activities that would generate substantial additional solid waste, as future additional housing units would generate minimal amounts of solid waste for disposal. The impact would be less than significant.
- e. **Adequate Wastewater Capacity:** Each parcel would be served by its own private septic system. The County Environmental Management Department reviewed the project and provided comments outlining the requirements for septic systems. With the incorporation of conditions of approval, the project would comply with local statutes and regulations. The impact would be less than significant.

**FINDING:** For the Utilities and Service Systems category, no significant utility and service system impacts would be expected from the project, either directly or indirectly. The impacts would be less than significant.

<b>XX. WILDFIRE.</b> <i>If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:</i>				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact

<b>XX. WILDFIRE.</b> <i>If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:</i>				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
b. 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?			X	
c. 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?			X	
d. 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?			X	

**Discussion:**

- a. The project is surrounded by rural residential parcels with existing residential uses. Implementation of the proposed project would not alter any roadways, access points, or otherwise degrade traffic operations and access to the area in such a way as to interfere with an emergency response or evacuation plan. There are no proposed residences associated with the project, and project operations would not notably increase the risk of wildfire on the project site. Any potential impacts would be less than significant.
- b. Implementation of the proposed project would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. The project is required to adhere to all fire prevention and protection requirements and regulations of El Dorado County including the El Dorado County Fire Hazard Ordinance and the Uniform Fire Code, as applicable. Pertinent measures include, but are not limited to, the use of equipment with spark arrestors and non-sparking tools during project activities. The project applicant would also be required to develop the project structures to meet ‘defensible space’ requirements as specified under Objective 6.2.1 of the Safety Element of the El Dorado County General Plan. Any potential impacts would be less than significant.
- c. Future residential development of each parcel would include installation of a private well and on-site septic system, as well as new connections to PG&E for electric service. The project site is surrounded by similar rural residential development and any new connections would not require major infrastructure development that would exacerbate fire risk or result in temporary or ongoing impacts to the environment. Any potential impacts would be less than significant.
- d. The proposed project has been reviewed by the El Dorado County Fire Protection District in cooperation with CALFIRE and is not anticipated to exacerbate wildfire risks. The project area does not have steep or sloping terrain that would expose people or structures to significant risk from downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes. Any potential impacts would be less than significant.

**FINDING:** As conditioned and with adherence to El Dorado County Code of Ordinances, for this Wildfire category, any potential impacts would be less than significant.

<b>XXI. MANDATORY FINDINGS OF SIGNIFICANCE. Does the project:</b>				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. 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?		X		
b. 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)?			X	
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

**Discussion**

- a. No substantial evidence contained in the project record has been found that would indicate that this project would have the potential to significantly degrade the quality of the environment. As conditioned or mitigated, and with adherence to County permit requirements, this project would not have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of California history or pre-history. Any impacts from the project would be less than significant due to the design of the project and required standards that would be implemented prior to recording the final subdivision map or with the building permit processes and/or any required project specific improvements on the property.
- b. Cumulative impacts are defined in Section 15355 of the California Environmental Quality Act (CEQA) Guidelines as *two or more individual effects, which when considered together, would be considerable or which would compound or increase other environmental impacts.*

The proposed project and site-specific environmental conditions of approval, which have been disclosed in the Project Description and analyzed in Items I through XXI, show there would be no significant impacts anticipated related to aesthetics, agriculture/forest resources, air quality, biological resources, cultural resources, geology/soils, greenhouse gas emissions, hazards/hazardous materials, hydrology/water quality, land use planning, mineral resources, noise, population/housing, public services, recreation, traffic/transportation, tribal cultural resources, or utilities/service systems that would combine with similar effects such that the project's contribution would be cumulatively considerable. For all categories (except biological resources, which have incorporated a mitigation measure MM BIO-1), a determination of either less than significant impacts or no impacts would be anticipated.

As outlined and discussed in this document, as conditioned and with compliance with County Codes, this project would be anticipated to have a less than significant project-related environmental effect which would cause substantial adverse effects on human beings, either directly or indirectly. Based on the analysis in this study, it has been determined that the project would have less than significant cumulative impacts.

- c. Based on the discussion contained in this document, no potentially significant impacts to human beings are anticipated to occur with respect to potential project impacts. The project would not include any physical changes to the site, and any future development or physical changes would require review and permitting through the County. Adherence to these standard conditions of approval would be expected to reduce potential impacts to a less than significant level.

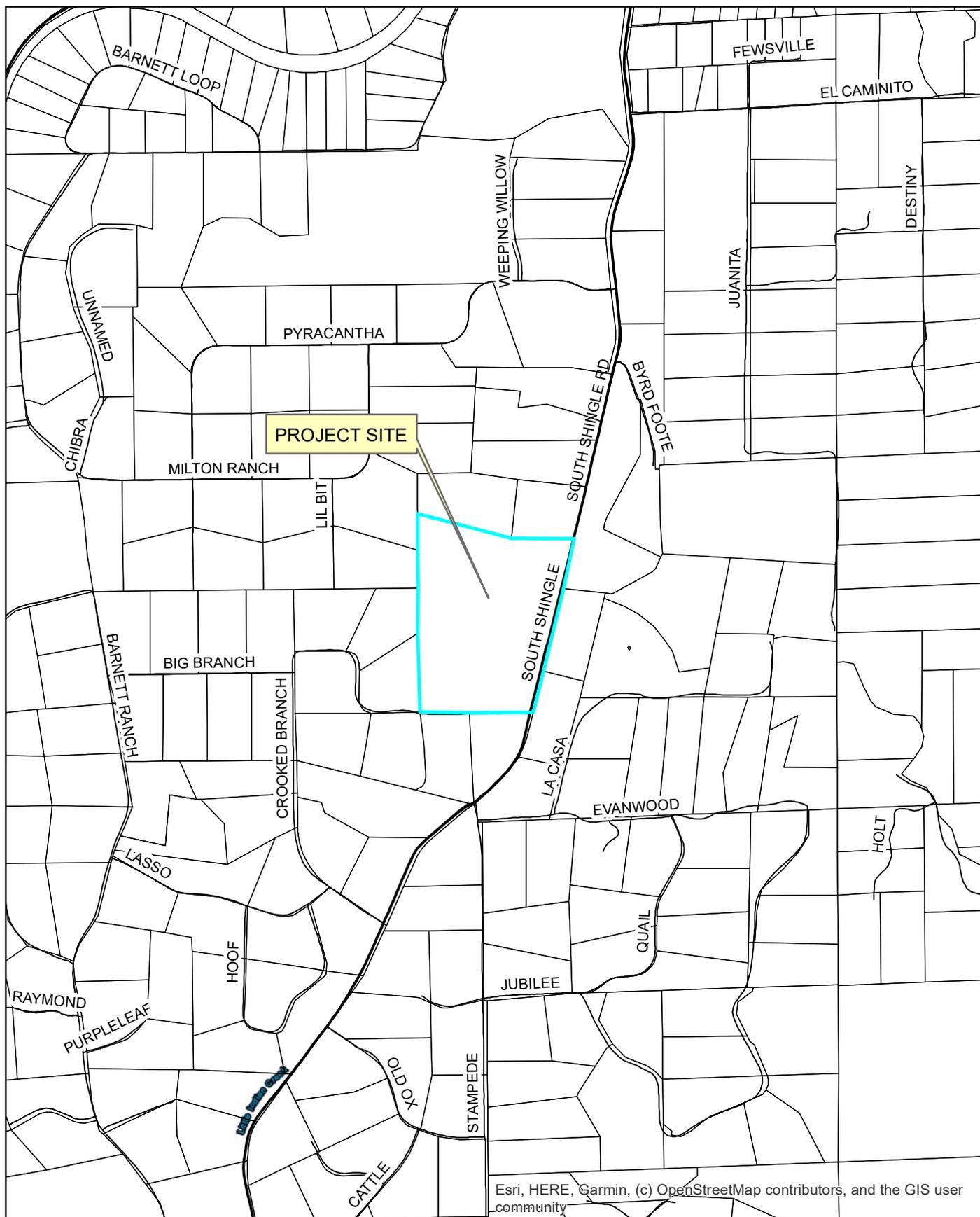
**FINDINGS:** It has been determined that the proposed project would not result in significant environmental impacts. The project would not exceed applicable environmental standards, nor significantly contribute to cumulative environmental impacts.

### **SUPPORTING INFORMATION SOURCE LIST**

- CAPCOA Guide (August 2010): <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-QuantificationReport-9-14-Final.pdf>
- California Air Resources Board (CARB). (2008). *Climate Change Scoping Plan*. Available at: [http://www.arb.ca.gov/cc/scopingplan/document/adopted\\_scoping\\_plan.pdf](http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf)
- California Attorney General's Office. (2010). Addressing Climate Change at the Project Level. Available at: [http://ag.ca.gov/globalwarming/pdf/GW\\_mitigation\\_measures.pdf](http://ag.ca.gov/globalwarming/pdf/GW_mitigation_measures.pdf)
- California Department of Conservation (CDC). (2008). *Farmland Mapping and Monitoring Program: El Dorado County Important Farmland 2008*. Available at: <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2008/eld08.pdf>.
- California Department of Conservation (CDC). (2013a). Important Farmland Categories webpage. Available online at: [www.conservation.ca.gov/dlrp/fmmp/mccu/Pages/map\\_categories.aspx](http://www.conservation.ca.gov/dlrp/fmmp/mccu/Pages/map_categories.aspx).
- California Department of Conservation (CDC). (2013b). The Land Conservation Act. Available online at: [www.conservation.ca.gov/dlrp/lca/Pages/Index.aspx](http://www.conservation.ca.gov/dlrp/lca/Pages/Index.aspx).
- California Department of Toxic Substances Control (DTSC). (2015). *DTSC's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List)*. Retrieved April 15, 2015 from [http://www.dtsc.ca.gov/SiteCleanup/Cortese\\_List.cfm](http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm).
- California Energy Commission. (2006). *Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004, Staff Final Report*. Publication CEC-600-2006-013-SF.
- California Department of Transportation (Caltrans). (2015). Scenic Highway Program FAQs: Caltrans Landscape Architecture Program. Retrieved February 27, 2015 from [www.dot.ca.gov/hq/LandArch/scenic/faq.htm](http://www.dot.ca.gov/hq/LandArch/scenic/faq.htm).
- California Department of Transportation (Caltrans). (2013). *California Scenic Highway Program, Officially Designated State Scenic Highways*. Retrieved April 8, 2015 from <http://www.dot.ca.gov/hq/LandArch/scenic/schwy.htm>.
- California Geological Survey. (2016). Alquist-Priolo Earthquake Fault Zone Maps. Retrieved October 4, 2016 from <http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm>.
- California Geological Survey. (2013). Seismic Hazards Zonation Program. Retrieved April 15, 2015 from <http://www.conservation.ca.gov/cgs/shzp/Pages/affected.aspx>.
- California Code of Regulations. *Guidelines for Implementation of the California Environmental Quality Act*. Title 14, Section 15000, et seq. 14 CCR 15000
- California Office of Emergency Services. 2015. Business Plan/EPCRA 312. Available online at: [www.caloes.ca.gov/for-businesses-organizations/plan-prepare/hazardousmaterials/hazmat-business-plan](http://www.caloes.ca.gov/for-businesses-organizations/plan-prepare/hazardousmaterials/hazmat-business-plan).
- El Dorado County. (2003). *El Dorado County General Plan Draft Environmental Impact Report*. State Clearinghouse No. 2001082030. Placerville, CA: El Dorado County Planning Services.
- El Dorado County. (2015). *El Dorado County General Plan: A Plan for Managed Growth and Open Roads; A Plan for Quality Neighborhoods and Traffic Relief*. Placerville, CA: El Dorado County Planning Services.
- El Dorado County. (2005, July 21). Asbestos Review Areas, Western Slope, El Dorado County, California. Available at: < <http://www.edcgov.us/Government/AirQualityManagement/Asbestos.aspx>>.

- El Dorado County Air Quality Management District (AQMD). (2000). *Rules and Regulations of the El Dorado County Air Quality Management District*. Retrieved April 15, 2015 from <http://www.arb.ca.gov/DRDB/ED/CURHTML/R101.HTM>.
- El Dorado County Air Quality Management District (AQMD). (2002). *Guide to Air Quality Assessment: Determining the Significance of Air Quality Impacts Under the California Environmental Quality Act*. Retrieved from [http://www.edcgov.us/Government/AirQualityManagement/Guide\\_to\\_Air\\_Quality\\_Assessment.aspx](http://www.edcgov.us/Government/AirQualityManagement/Guide_to_Air_Quality_Assessment.aspx).
- El Dorado County Geographic Information System (GIS) Data. Placerville, CA: Esri ArcGIS. Available: El Dorado County controlled access data GISDATA\LIBRARIES.
- El Dorado County Transportation Commission. (2012). *El Dorado County Airport Land Use Compatibility Plan*. Retrieved from <http://www.edctc.org/2/Airports.html>.
- Federal Emergency Management Agency (FEMA). (2008). FEMA Map Service Center, Current FEMA Issued Flood Maps: El Dorado County, California, unincorporated area, no. 06017C1025E. Available at: <http://map1.msc.fema.gov/idms/IntraView.cgi?KEY=94926033&IFIT=1>.
- Governor's Office of Planning and Research (OPR). (2008, June 19). *Technical advisory: CEQA and climate change: Addressing climate change through California Environmental Quality Act Review*. Available at: Sacramento, CA. <http://www.opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf>.
- Sacramento Metropolitan Air Quality Management District (SMAQMD). (2010). Construction GHG Emissions Reductions. Available at: <http://airquality.org/ceqa/cequguideupdate/Ch6FinalConstructionGHGReductions.pdf>
- State Water Resources Control Board (SWRCB). (2013). Storm Water Program, Municipal Program. Available online at: [www.waterboards.ca.gov/water\\_issues/programs/stormwater/municipal.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/municipal.shtml).
- National Earthquake Hazards Reduction Program (NEHRP). (2009). Background and History. Available online at: [www.nehrp.gov/about/history.htm](http://www.nehrp.gov/about/history.htm).
- San Luis Obispo County Air Pollution Control District (SLOAPCD). (2012, April). A Guide for Assessing The Air Quality Impacts For Projects Subject To CEQA Review. Available at [http://www.slocleanair.org/images/cms/upload/files/CEQA\\_Handbook\\_2012\\_v1.pdf](http://www.slocleanair.org/images/cms/upload/files/CEQA_Handbook_2012_v1.pdf).
- United States Department of Agriculture (USDA) Soil Conservation Service and Soil Service. (1974). *Soil Survey of El Dorado Area, California*. Retrieved April 10, 2015 from [http://www.nrcs.usda.gov/Internet/FSE\\_MANUSCRIPTS/california/el\\_doradoCA1974/EDA.pdf](http://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/el_doradoCA1974/EDA.pdf)
- U.S. Environmental Protection Agency. (2014). Summary of the Energy Policy Act. Available online at: [www2.epa.gov/laws-regulations/summary-energy-policy-act](http://www2.epa.gov/laws-regulations/summary-energy-policy-act).
- U.S. Environmental Protection Agency. (2015). The Green Book Nonattainment Areas for Criteria Pollutants. Available online at: [www.epa.gov/airquality/greenbook](http://www.epa.gov/airquality/greenbook).
- U.S. Green Building Council (USGBC). (2014). LEED v4 for Building Design and Construction Addenda. Updated October 1, 2014. Available online at: [www.usgbc.org/resources/leed-v4-building-design-and-construction-redline-current-version](http://www.usgbc.org/resources/leed-v4-building-design-and-construction-redline-current-version).
- U.S. Green Building Council (USGBC). (2015). LEED Overview. Available online at: [www.usgbc.org/leed](http://www.usgbc.org/leed).

TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 1 - LOCATION MAP



Scale

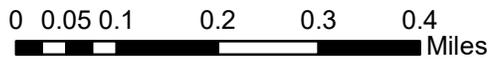
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community



TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 2 - AERIAL MAP



Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source; Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Scale

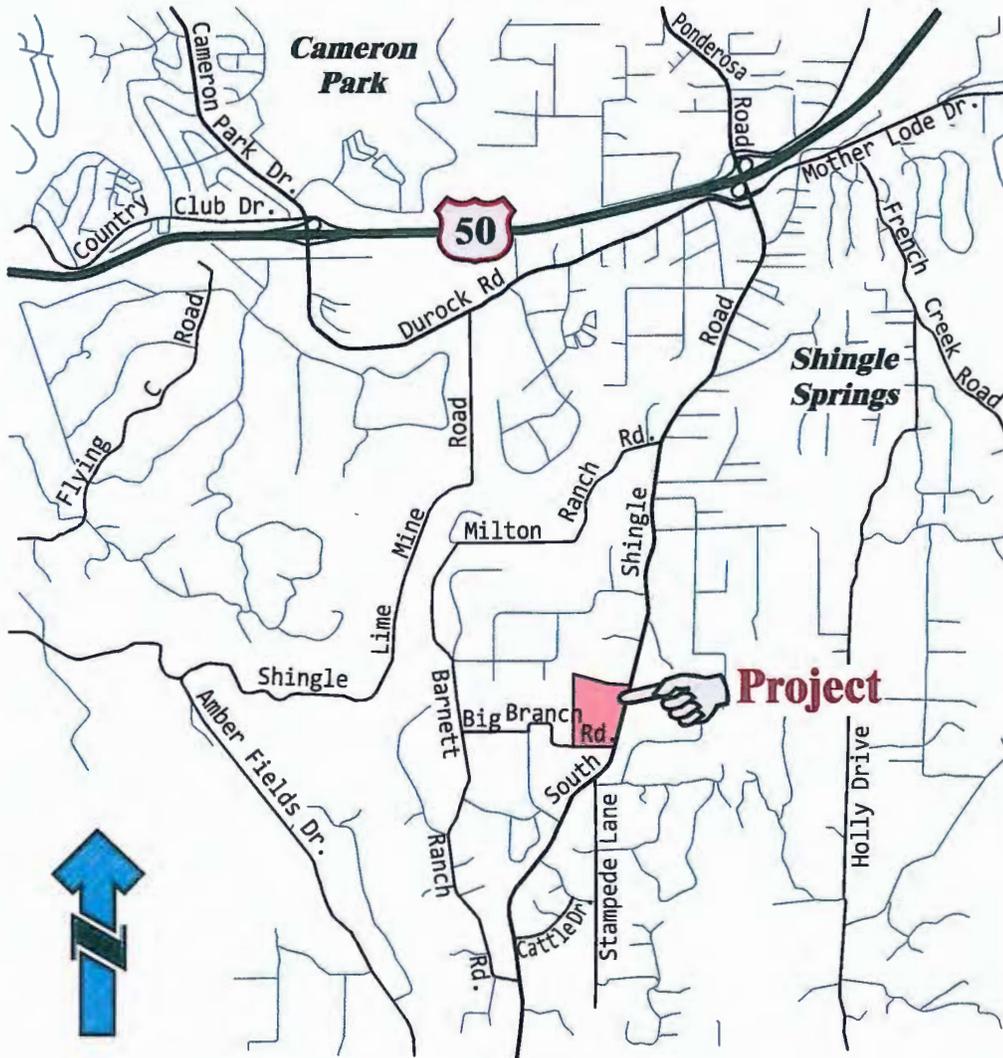


TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 3 - VICINITY MAP

# Vicinity Map

South Shingle Road - Parcel 3, 41/PM/65  
APN: 109-340-069 - El Dorado County, CA  
November 2021

RECEIVED  
PLANNING DEPARTMENT



NOT TO SCALE

**NAME OF APPLICANT:**  
Harry Jr. & Carrie Lyn Boyajian  
4348 Swift Circle  
Shingle Springs, CA 95682  
Phone: 916-502-1798  
Email: hb1182@yahoo.com

**OWNER OF RECORD:**  
Harry Jr. & Carrie Lyn Boyajian  
4348 Swift Circle  
Shingle Springs, CA 95682  
Phone: 916-502-1798  
Email: hb1182@yahoo.com

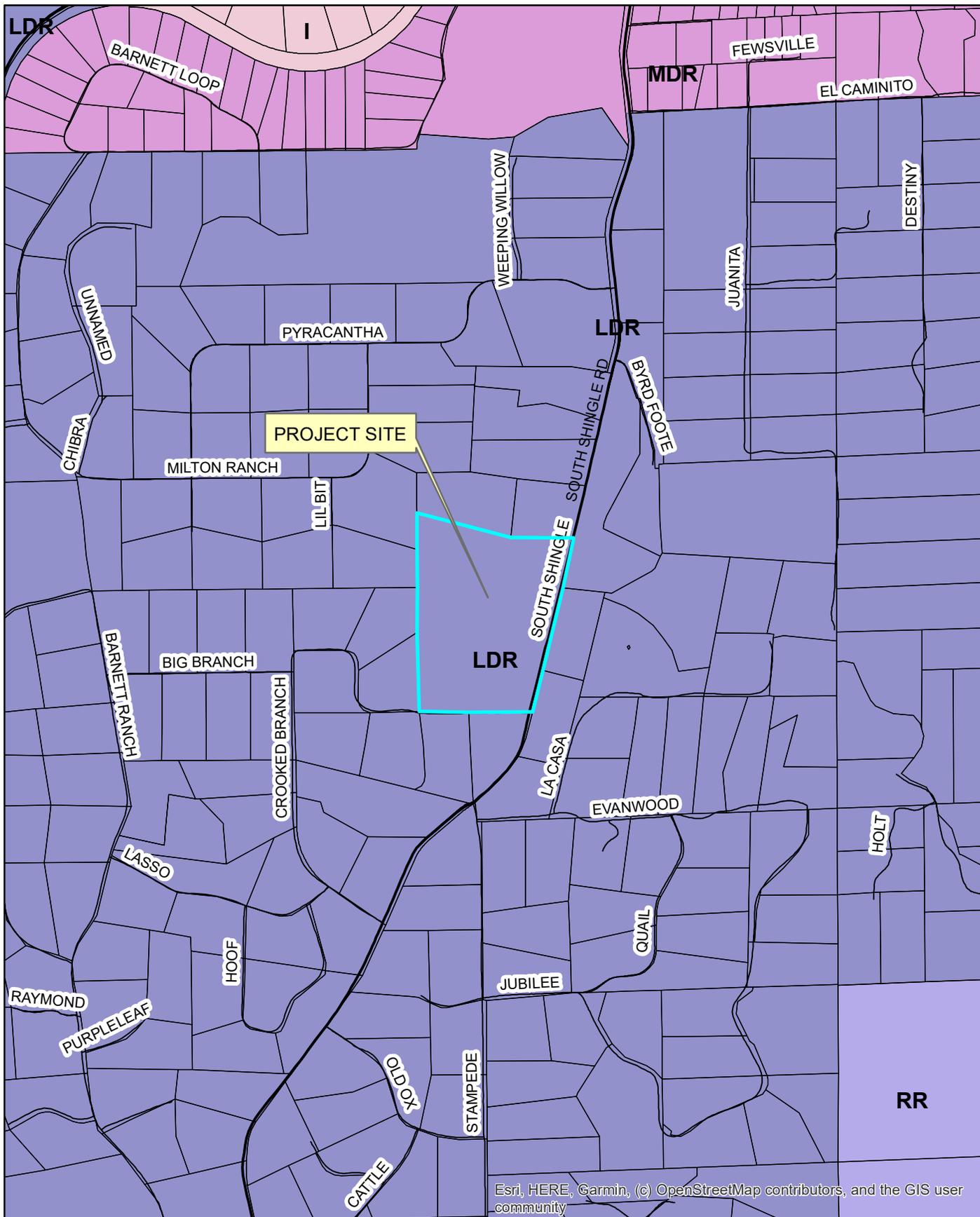


**LEBECK  
ENGINEERING, INC.**

3430 ROBIN LANE, BLDG. #2  
CAMERON PARK, CA 95682  
Ph. (530) 677-4080

# TM21-0002

TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 4 - GENERAL PLAN LAND USE MAP



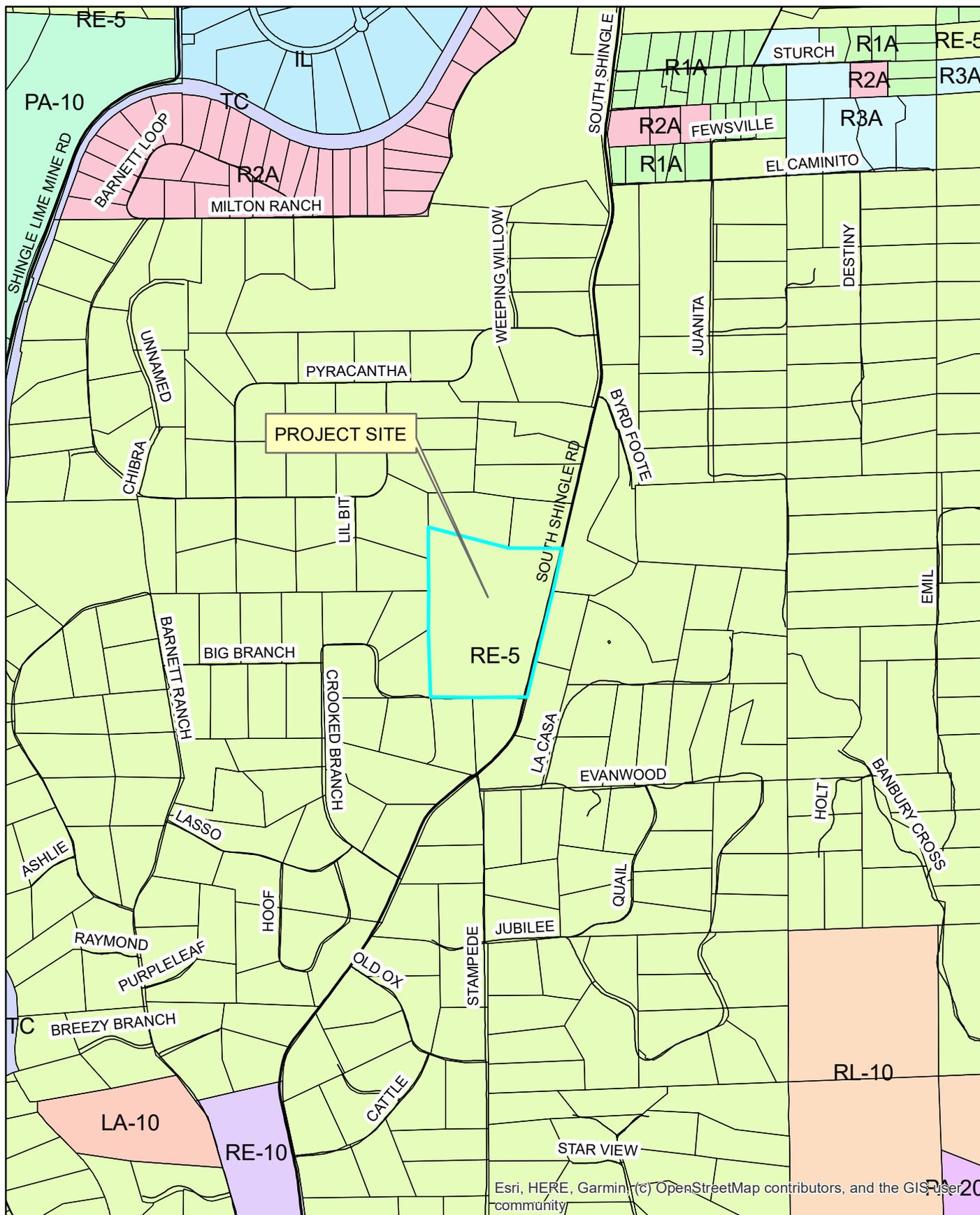
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

0 0.05 0.1 0.2 0.3 0.4  
Miles

Scale



TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 5 - ZONING MAP



Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

0 0.050.1 0.2 0.3 0.4  
Miles

Scale

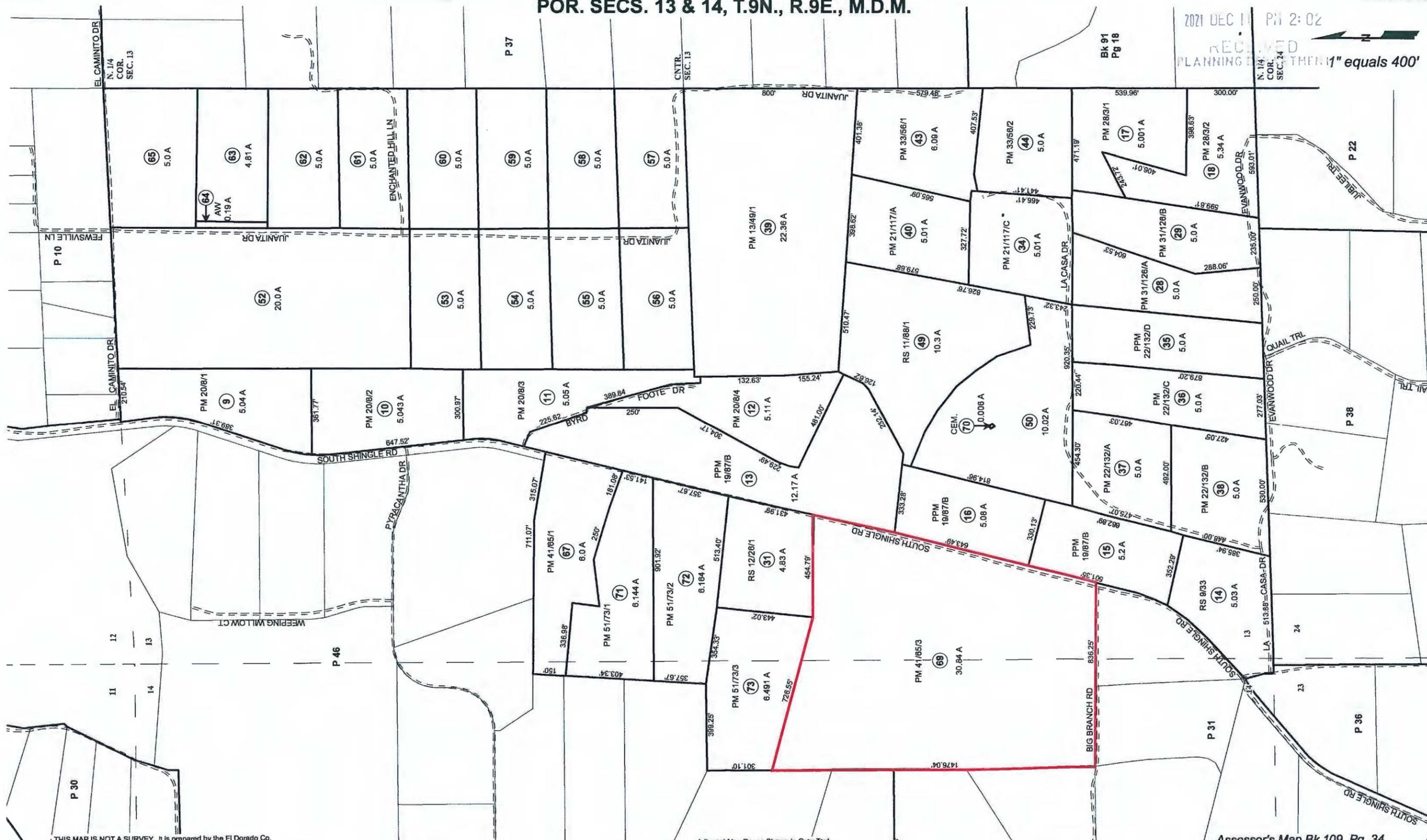
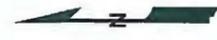


TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 6 - ASSESSORS PARCEL MAP

109:34

POR. SECS. 13 & 14, T.9N., R.9E., M.D.M.

2021 DEC 1 PM 2:02  
RECORDED  
PLANNING  
N. 1/4 COR. SEC. 14  
"equals 400'



THIS MAP IS NOT A SURVEY. It is prepared by the El Dorado Co. Assessor's office for assessment purposes only. Area calculations and characteristics are not guaranteed. Users should verify items such as dimensions and acreage.

**Acreages Are Estimates**

Adjacent Map Pages Shown in Grey Text  
Assessor's Block Numbers Shown in Ellipses  
Assessor's Parcel Numbers Shown in Circles

Rev. MAR 26, 2015

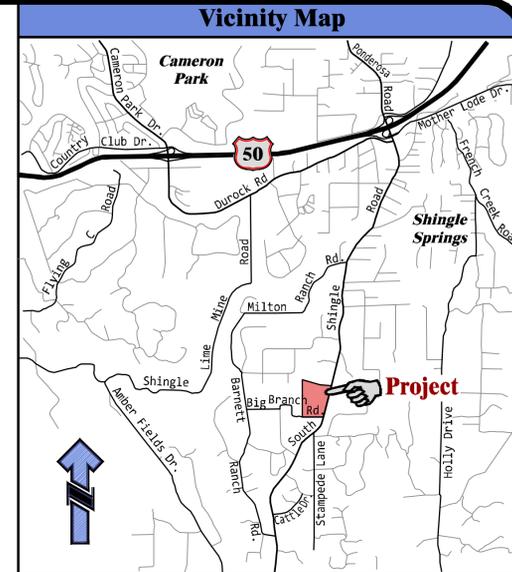
Assessor's Map Bk. 109, Pg. 34  
County of El Dorado, CA

**TM21-0002**

# Tentative Subdivision Map

## Sierra View Estates a Rural Subdivision

South Shingle Road - Parcel 3, 41/PM/65  
 APN: 109-340-069 - El Dorado County, CA  
 November 2021



### Abbreviations

AB	AGGREGATE BASE	L	LENGTH
AC	ACRES/ASPHALTIC CONCRETE	OHW	OVERHEAD WIRES
APN	ASSESSOR'S PARCEL NUMBER	(P)	PROPOSED
BC	BEGIN CURVE	PCC	POINT OF CONCENTRIC CURVE
CMP	CORRUGATED METAL PIPE	P/L	PROPERTY LINE
DWY	DRIVEWAY	PM	PARCEL MAP
(E)	EXISTING	PRC	POINT OF REVERSE CURVE
EC	END CURVE	PUE	PUBLIC UTILITY EASEMENT
EDC	EL DORADO COUNTY	R	RADIUS
EL	ELEVATION	RS	RECORD OF SURVEY
EP	EDGE OF PAVEMENT	R/W	RIGHT OF WAY
FG	FINISH GRADE	TP	TEST PIT
FL	FLOWLINE	UP	UTILITY POLE
GB	GRADE BREAK	W	WELL

### Lot Data

Parcel	Gross Area	Net Area
(E) APN: 109-340-069	30.837 Acres	29.95 Acres
(P) Lot 1	5.00 Acres	4.93 Acres
(P) Lot 2	5.00 Acres	4.69 Acres
(P) Lot 3	5.00 Acres	4.91 Acres
(P) Lot 4	5.00 Acres	4.78 Acres
(P) Lot 5	5.83 Acres	4.78 Acres
(P) Lot 6	5.00 Acres	4.57 Acres

### Project Data

OWNER / APPLICANT:	HARRY JR. & CARRIE LYN BOYAJIAN 4348 SWIFT CIRCLE SHINGLE SPRINGS, CA 95682 PHONE: 916-502-1798 EMAIL: HB1182@yahoo.com
PREPARED BY:	LEBECK ENGINEERING, INC. 1500 RIVER LANE, SUITE 2 CAMERON PARK, CA 95682 TEL: 916-877-4000
SCALE:	1" = 100'
CONTOUR INTERVAL:	5 FEET
SOURCE OF TOPOGRAPHY:	AERIAL SURVEY BY VERTICAL MAPPING RESOURCES
SECTION, TOWNSHIP & RANGE:	POR. OF SEC'S 13 & 14, T.9N., R.9E., M.D.M.
ASSESSOR'S PARCEL NUMBER:	109-340-069
PRESENT LAND USE DESIGNATION:	LDR
PRESENT ZONING:	RE-5
TOTAL AREA:	30.837 ACRES
TOTAL NUMBER OF PARCELS:	SIX (6)
MINIMUM PARCEL AREA:	5.00 ACRES
WATER SUPPLY:	EXISTING PRIVATE WELLS (6)
SEWAGE DISPOSAL:	PROPOSED ON-SITE SEPTIC
FIRE PROTECTION:	EL DORADO COUNTY FIRE PROTECTION DIST.
DATE OF PREPARATION:	NOVEMBER 2021
PROJECT #:	20-173

### Approvals

ZONING ADMINISTRATOR: \_\_\_\_\_

APPROVAL/DENIAL DATE: \_\_\_\_\_

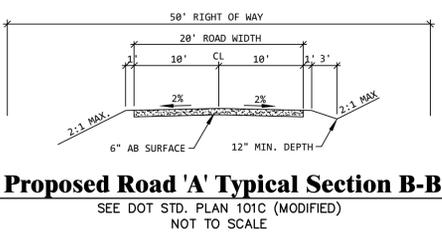
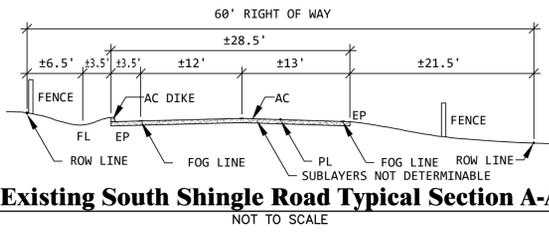
BOARD OF SUPERVISORS: \_\_\_\_\_

APPROVAL/DENIAL DATE: \_\_\_\_\_

**Sierra View Estates**  
**Tentative Subdivision**  
**Map**

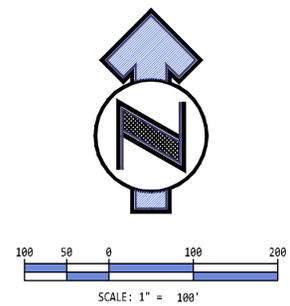
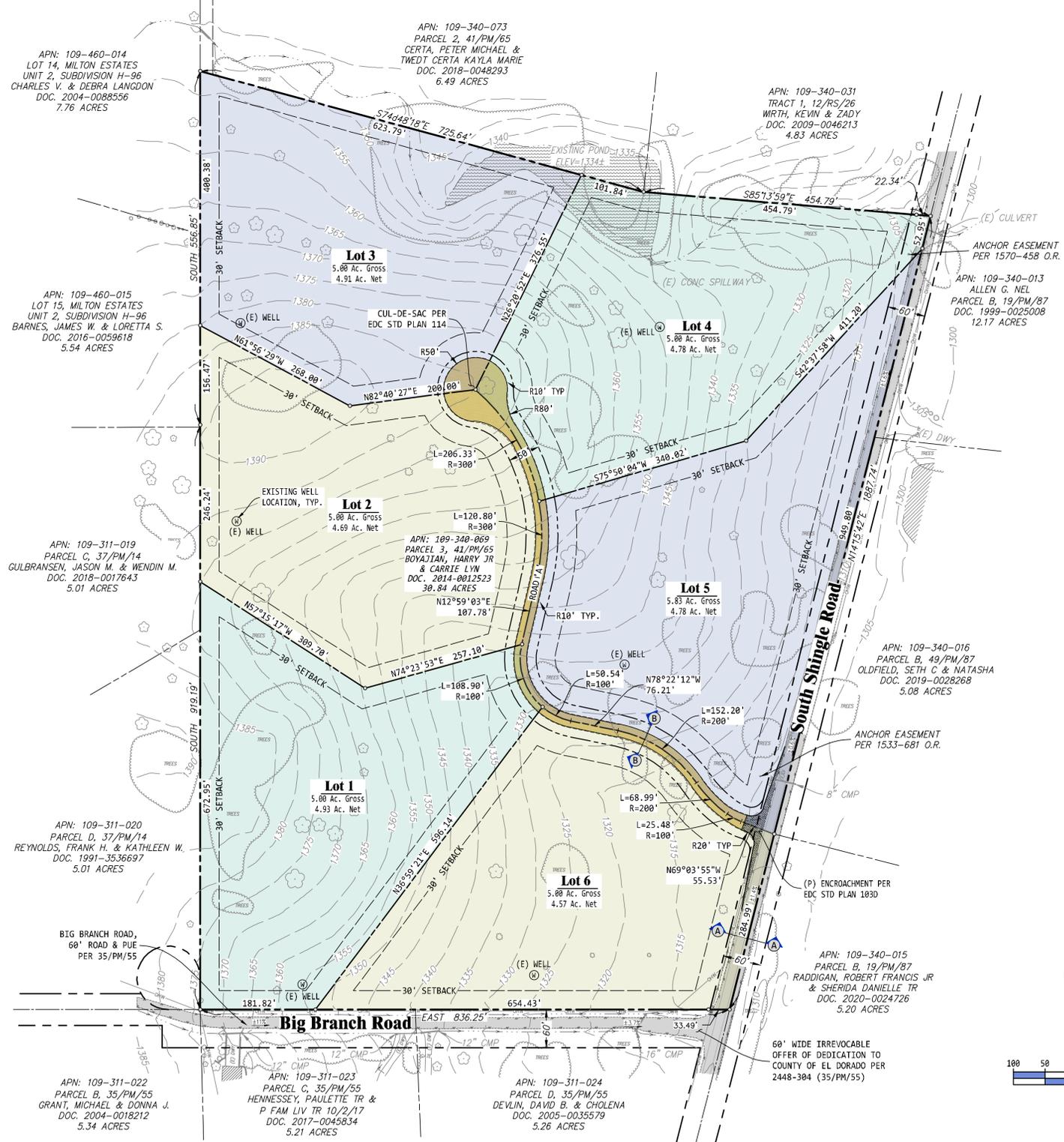
**TM**

Plot Date: Nov 22, 2021



### Project Notes

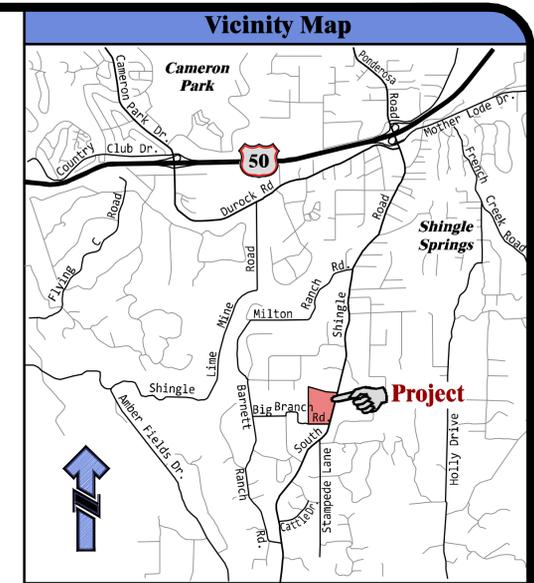
- ACCESS**
- 1) SOUTH SHINGLE ROAD IS AN EXISTING 60 FT. WIDE ROAD AND P.U.E.
- DATA SOURCES**
- 2) THE FIELD SURVEY PERFORMED TO PREPARE THIS TENTATIVE PARCEL MAP AND RELATED EXHIBITS WAS FOR ESTABLISHING AERIAL CONTROL ONLY. ON-SITE AND OFF-SITE IMPROVEMENTS ARE LOCATED AND DESCRIBED BASED ON A VARIETY OF SOURCES INCLUDING AERIAL PHOTOGRAPHS, SITE INSPECTIONS, AND PUBLIC RECORDS.
- EASEMENTS**
- 3) LOCATION OF EXISTING WATER PIPELINE EASEMENT PER 1431-512 O.R. CANNOT BE ASCERTAINED FROM RECORD.



# Tentative Subdivision Map with Aerial Photo

## Sierra View Estates a Rural Subdivision

South Shingle Road - Parcel 3, 41/PM/65  
 APN: 109-340-069 - El Dorado County, CA  
 November 2021



### Abbreviations

AB	AGGREGATE BASE	L	LENGTH
AC	ACRES/ASPHALTIC CONCRETE	OHW	OVERHEAD WIRES
APN	ASSESSOR'S PARCEL NUMBER	(P)	PROPOSED
BC	BEGIN CURVE	PCC	POINT OF CONCENTRIC CURVE
CMP	CORRUGATED METAL PIPE	P/L	PROPERTY LINE
DWY	DRIVEWAY	PM	PARCEL MAP
(E)	EXISTING	PRC	POINT OF REVERSE CURVE
EC	END CURVE	PUE	PUBLIC UTILITY EASEMENT
EDC	EL DORADO COUNTY	R	RADIUS
EL	ELEVATION	RS	RECORD OF SURVEY
EP	EDGE OF PAVEMENT	R/W	RIGHT OF WAY
FG	FINISH GRADE	TP	TEST PIT
FL	FLOWLINE	UP	UTILITY POLE
GB	GRADE BREAK	W	WELL

### Lot Data

Parcel	Gross Area	Net Area
(E) APN: 109-340-069	30.837 Acres	29.95 Acres
(P) Lot 1	5.00 Acres	4.93 Acres
(P) Lot 2	5.00 Acres	4.69 Acres
(P) Lot 3	5.00 Acres	4.91 Acres
(P) Lot 4	5.00 Acres	4.78 Acres
(P) Lot 5	5.83 Acres	4.78 Acres
(P) Lot 6	5.00 Acres	4.57 Acres

### Project Data

OWNER / APPLICANT:	HARRY JR. & CARRIE LYN BOYAJIAN 4348 SWIFT CIRCLE SHINGLE SPRINGS, CA 95682 PHONE: 916-502-1798 EMAIL: HB1182@yahoo.com
PREPARED BY:	LEBECK ENGINEERING, INC. 1500 RIVER LANE, SUITE 2 CAMERON PARK, CA 95682 PH: 530-877-4000
SCALE:	1" = 100'
CONTOUR INTERVAL:	5 FEET
SOURCE OF TOPOGRAPHY:	AERIAL SURVEY BY VERTICAL MAPPING RESOURCES
SECTION, TOWNSHIP & RANGE:	POR. OF SEC'S 13 & 14, T.9N., R.9E., M.D.M.
ASSESSOR'S PARCEL NUMBER:	109-340-069
PRESENT LAND USE DESIGNATION:	LDR
PRESENT ZONING:	RE-5
TOTAL AREA:	30.837 ACRES
TOTAL NUMBER OF PARCELS:	SIX (6)
MINIMUM PARCEL AREA:	5.00 ACRES
WATER SUPPLY:	EXISTING PRIVATE WELLS (6)
SEWAGE DISPOSAL:	PROPOSED ON-SITE SEPTIC
FIRE PROTECTION:	EL DORADO COUNTY FIRE PROTECTION DIST.
DATE OF PREPARATION:	NOVEMBER 2021
PROJECT #:	20-173

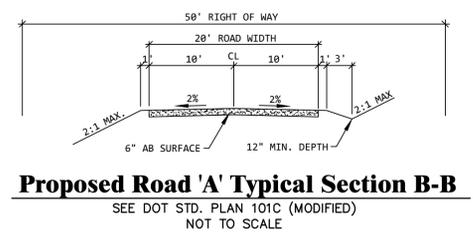
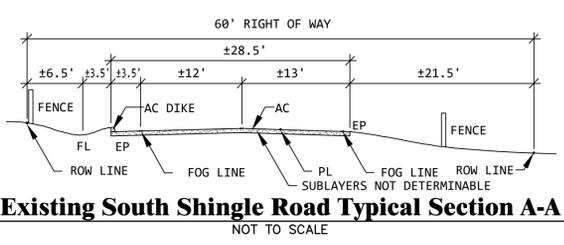
### Approvals

ZONING ADMINISTRATOR: \_\_\_\_\_

APPROVAL/DENIAL DATE: \_\_\_\_\_

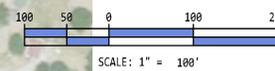
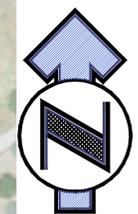
BOARD OF SUPERVISORS: \_\_\_\_\_

APPROVAL/DENIAL DATE: \_\_\_\_\_



### Project Notes

- ACCESS**
- 1) SOUTH SHINGLE ROAD IS AN EXISTING 60 FT. WIDE ROAD AND P.U.E.
- DATA SOURCES**
- 2) THE FIELD SURVEY PERFORMED TO PREPARE THIS TENTATIVE PARCEL MAP AND RELATED EXHIBITS WAS FOR ESTABLISHING AERIAL CONTROL ONLY. ON-SITE AND OFF-SITE IMPROVEMENTS ARE LOCATED AND DESCRIBED BASED ON A VARIETY OF SOURCES INCLUDING AERIAL PHOTOGRAPHS, SITE INSPECTIONS, AND PUBLIC RECORDS.
- EASEMENTS**
- 3) LOCATION OF EXISTING WATER PIPELINE EASEMENT PER 1431-512 O.R. CANNOT BE ASCERTAINED FROM RECORD.



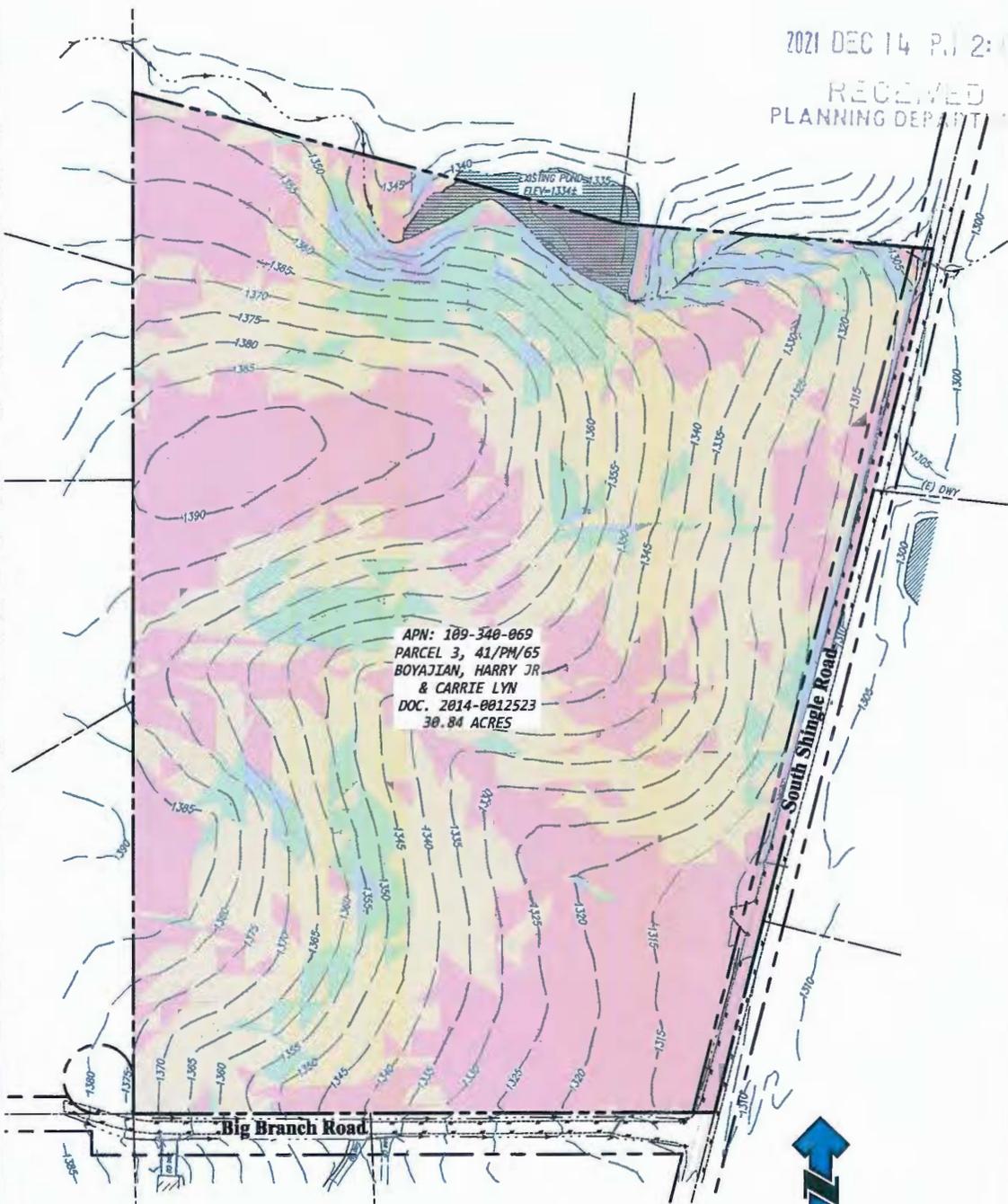
**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 9 - SLOPE ANALYSIS MAP**

**Slope Analysis  
Sierra View Estates**

South Shingle Road - Parcel 3, 41/PM/65  
APN: 109-340-069 - El Dorado County, CA

2021 DEC 14 P. 2

RECEIVED  
PLANNING DEPARTMENT



APN: 109-340-069  
PARCEL 3, 41/PM/65  
BOYAJIAN, HARRY JR  
& CARRIE LYN  
DOC. 2014-0012523  
30.84 ACRES



SCALE: 1" = 150'

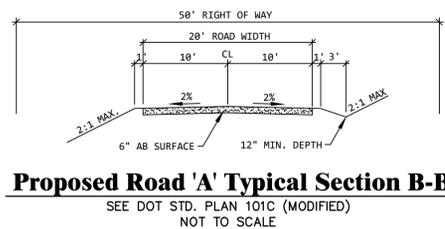
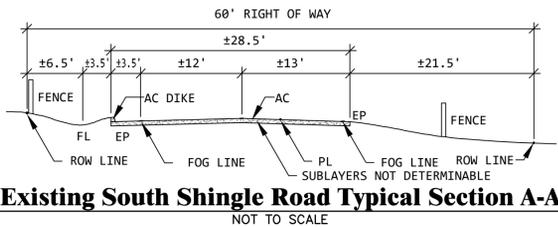
Slope Analysis		
Slope Range	Map Color	% of Site
0-10%		40.13%
>10-15%		44.92%
>15-20%		10.71%
>20-30%		2.42%
>30%		2.02%

**Sierra View Estates  
Slope Analysis**

**TM21-0002**

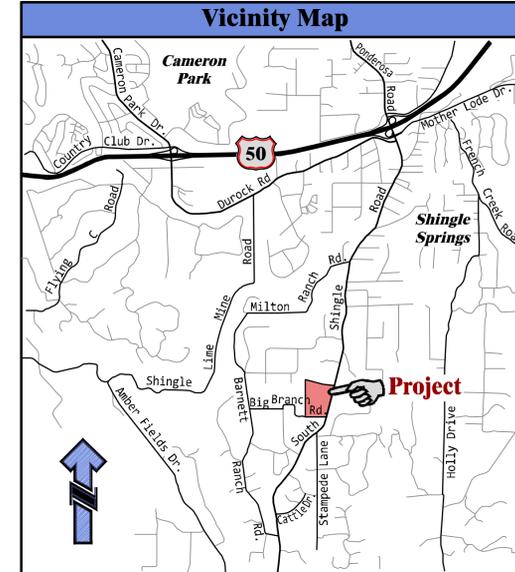
# Preliminary Grading & Drainage Plan Sierra View Estates

South Shingle Road - Parcel 3, 41/PM/65  
APN: 109-340-069 - El Dorado County, CA  
November 2021



### Project Notes

- ACCESS**  
1) SOUTH SHINGLE ROAD IS AN EXISTING 60 FT. WIDE ROAD AND P.U.E.
- DATA SOURCES**  
2) THE FIELD SURVEY PERFORMED TO PREPARE THIS TENTATIVE PARCEL MAP AND RELATED EXHIBITS WAS FOR ESTABLISHING AERIAL CONTROL ONLY. ON-SITE AND OFF-SITE IMPROVEMENTS ARE LOCATED AND DESCRIBED BASED ON A VARIETY OF SOURCES INCLUDING AERIAL PHOTOGRAPHS, SITE INSPECTIONS, AND PUBLIC RECORDS.
- EASEMENTS**  
3) LOCATION OF EXISTING WATER PIPELINE EASEMENT PER 1431-512 O.R. CANNOT BE ASCERTAINED FROM RECORD.



**Abbreviations**

AB	AGGREGATE BASE	L	LENGTH
AC	ACRES/ASPHALTIC CONCRETE	OHW	OVERHEAD WIRES
APN	ASSESSOR'S PARCEL NUMBER	(P)	PROPOSED
BC	BEGIN CURVE	PCC	POINT OF CONCENTRIC CURVE
CMP	CORRUGATED METAL PIPE	P/L	PROPERTY LINE
DHW	DRIVEWAY	PM	PARCEL MAP
(E)	EXISTING	PRC	POINT OF REVERSE CURVE
EC	END CURVE	PUE	PUBLIC UTILITY EASEMENT
EDC	EL DORADO COUNTY	R	RADIUS
EL	ELEVATION	RS	RECORD OF SURVEY
EP	EDGE OF PAVEMENT	R/W	RIGHT OF WAY
FG	FINISH GRADE	TP	SOIL TEST PIT
FL	FLOWLINE	UP	UTILITY POLE
GB	GRADE BREAK	W	WATER WELL

**Project Data**

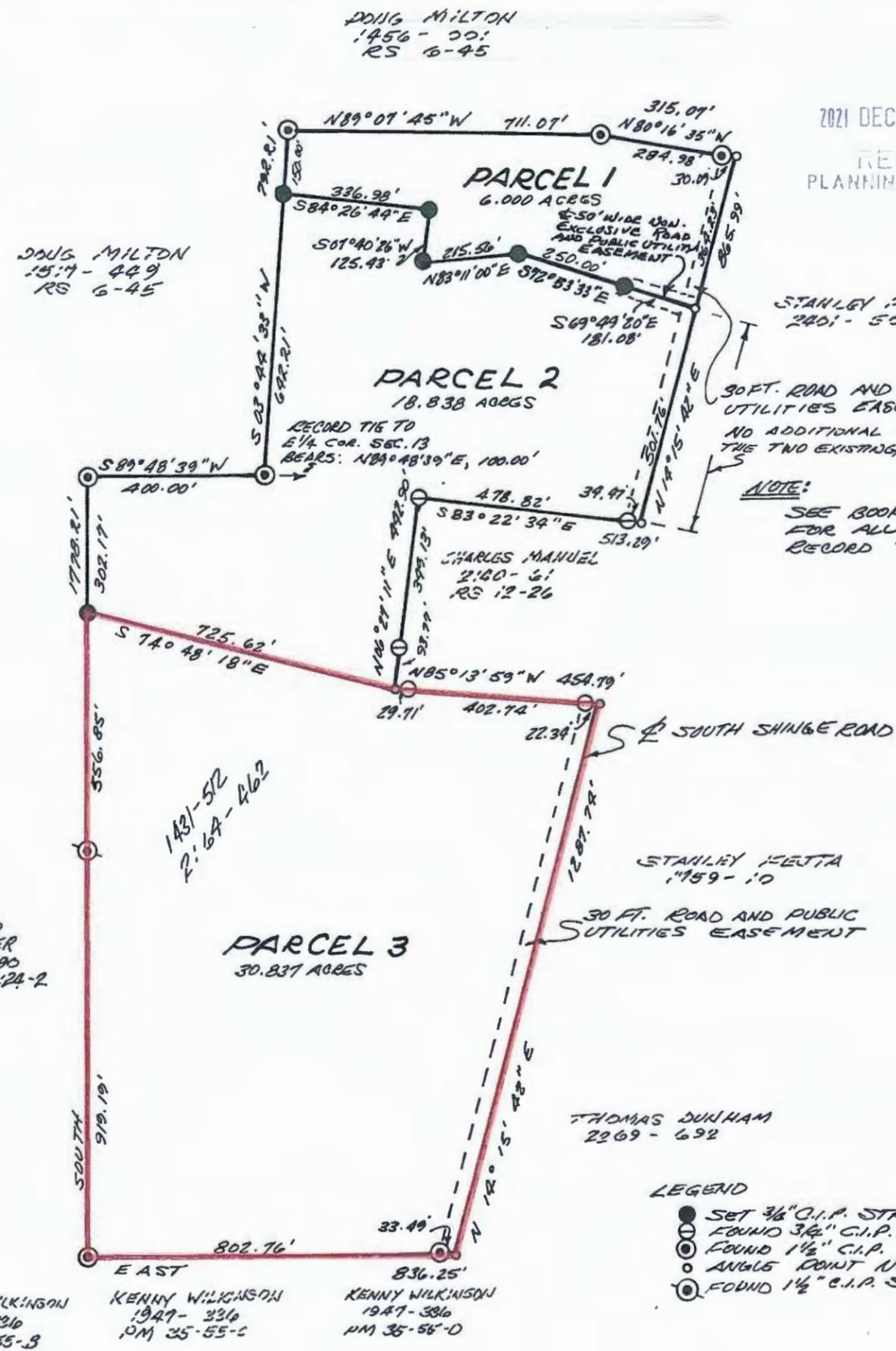
OWNER / APPLICANT:	HARRY JR. & CARRIE LYN BOYAJIAN 4348 SWEET CIRCLE SHINGLE SPRINGS, CA 95682 PHONE: 916-502-1798 EMAIL: HB1182@yahoo.com
PREPARED BY:	LEBECK ENGINEERING, INC. 3400 HORN LANE, SUITE #2 DANFORTH, CA 95608 PH: 530-877-4000
SCALE:	1" = 100'
CONTOUR INTERVAL:	5 FEET
SOURCE OF TOPOGRAPHY:	AERIAL SURVEY BY VERTICAL MAPPING RESOURCES
SECTION, TOWNSHIP & RANGE:	POR. OF SEC'S 13 & 14, T.9N., R.9E., M.D.M.
ASSESSOR'S PARCEL NUMBER:	109-340-069
PRESENT LAND USE DESIGNATION:	LDR
PRESENT ZONING:	RE-5
TOTAL AREA:	30.837 ACRES
TOTAL NUMBER OF PARCELS:	SIX (6)
MINIMUM PARCEL AREA:	5.0 ACRES
WATER SUPPLY:	EXISTING PRIVATE WELLS
SEWAGE DISPOSAL:	PROPOSED ON-SITE SEPTIC
FIRE PROTECTION:	EL DORADO COUNTY FIRE PROTECTION DISTRICT
DATE OF PREPARATION:	NOVEMBER 2021
PROJECT #:	20-173

**Sierra View Estates**  
**Preliminary Grading & Drainage Plan**

**G&D**  
Plot Date: Nov 22, 2021

41-65

59-17



2021 DEC 14 PM 2:00  
RECEIVED  
PLANNING DEPARTMENT



# PARCEL MAP

A PORTION OF WEST 1/2 OF SECTION 13 AND  
EAST 1/2 OF SECTION 14, T. 9N., R. 9E. M.D.M.  
COUNTY OF EL DORADO  
STATE OF CALIFORNIA  
SEPTEMBER 1989

REFERENCES:  
RS 6-45  
PM 20-24  
PM 35-55  
RS 12-26

## SURVEYOR'S STATEMENT

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF LANA STONE ON SEPT. 1, 1989. I HEREBY STATE THAT THIS PARCEL MAP SUBSTANTIALLY CONFORMS TO THE APPROVED OR CONDITIONALLY APPROVED TENTATIVE MAP IF ANY, WITHIN THE MEANING OF EL DORADO COUNTY ORDINANCE CODE SECTION 16:52.080 (B). ALL MONUMENTS ARE OF THE CHARACTER AND OCCUPY THE POSITIONS INDICATED AND ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED.

*James W. Gutierrez*  
JAMES W. GUTIERREZ RCE 18401  
LICENSE EXPIRES 6-30-93

## COUNTY SURVEYOR'S STATEMENT

THIS MAP CONFORMS WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE. ROAD AND PUBLIC UTILITY EASEMENTS ARE HEREBY ACCEPTED IRREVOCABLE OFFERS OF DEDICATION (I.O.D.S) FOR SUCH ROADS WILL NOT BE COUNTY MAINTAINED UNLESS AND UNTIL IT HAS BEEN ACCEPTED INTO THE COUNTY MAINTAINED ROAD SYSTEM BY RESOLUTION OF THE BOARD OF SUPERVISORS. FURTHER THE COUNTY SURVEYOR HEREBY OBJECTS THE OFFERS OF DEDICATION TO THE COUNTY OF EL DORADO FOR OTHER EASEMENTS AS SHOWN ON THE MAP.

*John P. Sanders*  
JOHN P. SANDERS L.S. 3012  
COUNTY SURVEYOR  
COUNTY OF EL DORADO  
LICENSE EXPIRES 6-30-92

## COUNTY RECORDER'S CERTIFICATE

I DOROTHY CARE, HEREBY CERTIFY THAT First American Title Co SUBDIVISION MAP GUARANTEE NUMBER 92143 WAS FILED WITH THIS OFFICE AND THAT THIS PARCEL MAP WAS ACCEPTED FOR RECORD AND FILED THIS 5th DAY OF Dec 1989, AT 10:38 AM, IN BOOK 41 OF PARCEL MAPS AT PAGE 65 AT THE REQUEST OF LANA STONE

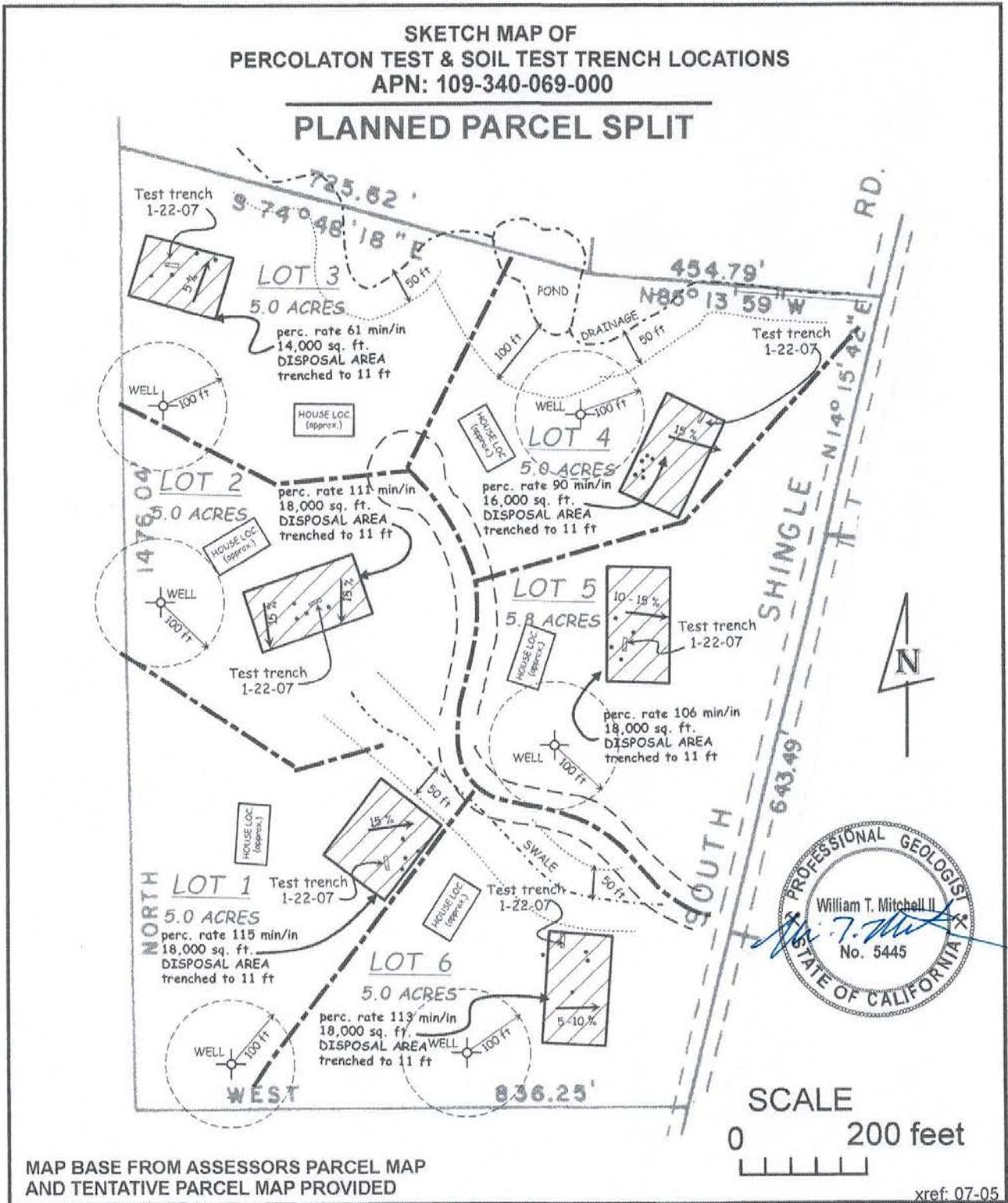
DOCUMENT NO. 74025

*Dorothy Care*  
DOROTHY CARE  
COUNTY RECORDER  
COUNTY OF EL DORADO

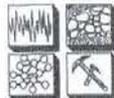
*Mary L. Poole*  
MARY L. POOLE  
DEPUTY

# TM21-0002

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 12 - SITE OF PERCOLATION TEST AND SOIL TEST TRENCH LOCATIONS**



**WHEELDON  
GEOLOGY**  
Consulting Geologists  
7700 BAYNE ROAD • PLACERVILLE • CALIFORNIA • 95667  
530-821-4482 • WHEELDONGEOLOGY.COM



**SITE MAP**  
HARRY BOYAJIAN  
SOUTH SHINGLE ROAD

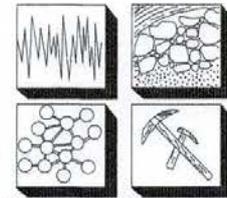
APN 109-340-069-000  
SCALE 1"=200' JOB NO. 22-09  
DRAWN BY WTM II DATE 2-3-07  
REVISED BY WTM II DATE 2-24-22

TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 12 - SITE OF PERCOLATION TEST AND SOIL TEST TRENCH LOCATIONS

**WHEELDON  
GEOLOGY**

Consulting Geologists

420 PLACERVILLE DRIVE • PLACERVILLE • CALIFORNIA • 95667  
530-621-4482 • wheeldongeology@gmail.com



William T. Mitchell II  
Professional Geologist #5445

**REPORT OF PERCOLATION TEST**  
for

HARRY BOYAJIAN

APN: 109-340-069-000

**PARCEL 1 of 6**

DIRECTIONS TO PROPERTY

HWY 50 WEST, SOUTH SHINGLE RD TO SITE  
ON RIGHT JUST BEFORE BIG BRANCH RD

**TEST DATE** 1/23/2007 **WEATHER** CLEAR  
COOL

**NUMBER OF HOLES TESTED** 4

Test Holes shown on Location Map

<u>Test Hole</u>	<u>Depth (ft.)</u>	<u>Stabilized Percolation Rate</u>
1	6.0	52
2	3.5	216
3	1.5	120
4	2.0	70

**Soil Profile from Backhoe Trench: 01/22/07**

0 - 2.0 FT RED BROWN SILTY SANDY LOAM  
2.0 - 3.5 FT BROWN - YELLOW BROWN SANDY CLAY SOIL  
3.5 - 11.0 FT LT BROWN - LT YELLOW BROWN ROCKY CLAYEY SILTY SOIL  
ON STR WEATHERED METASEDIMENTARY ROCK  
ROOTS OBSERVED TO 6.5 FT

REQUIRED BACKHOE TEST TRENCH ALSO INSPECTED BY COUNTY - NO

**Average Percolation Rate** 115 **Minutes per Inch**

TEST MADE BY WHEELDON GEOLOGY

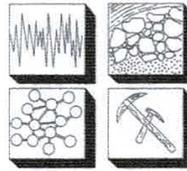
JOB NUMBER - 07-05-1  
Revised - 2/24/2022

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 12 - SITE OF PERCOLATION TEST AND SOIL TEST TRENCH LOCATIONS**

**WHEELDON  
GEOLOGY**

Consulting Geologists

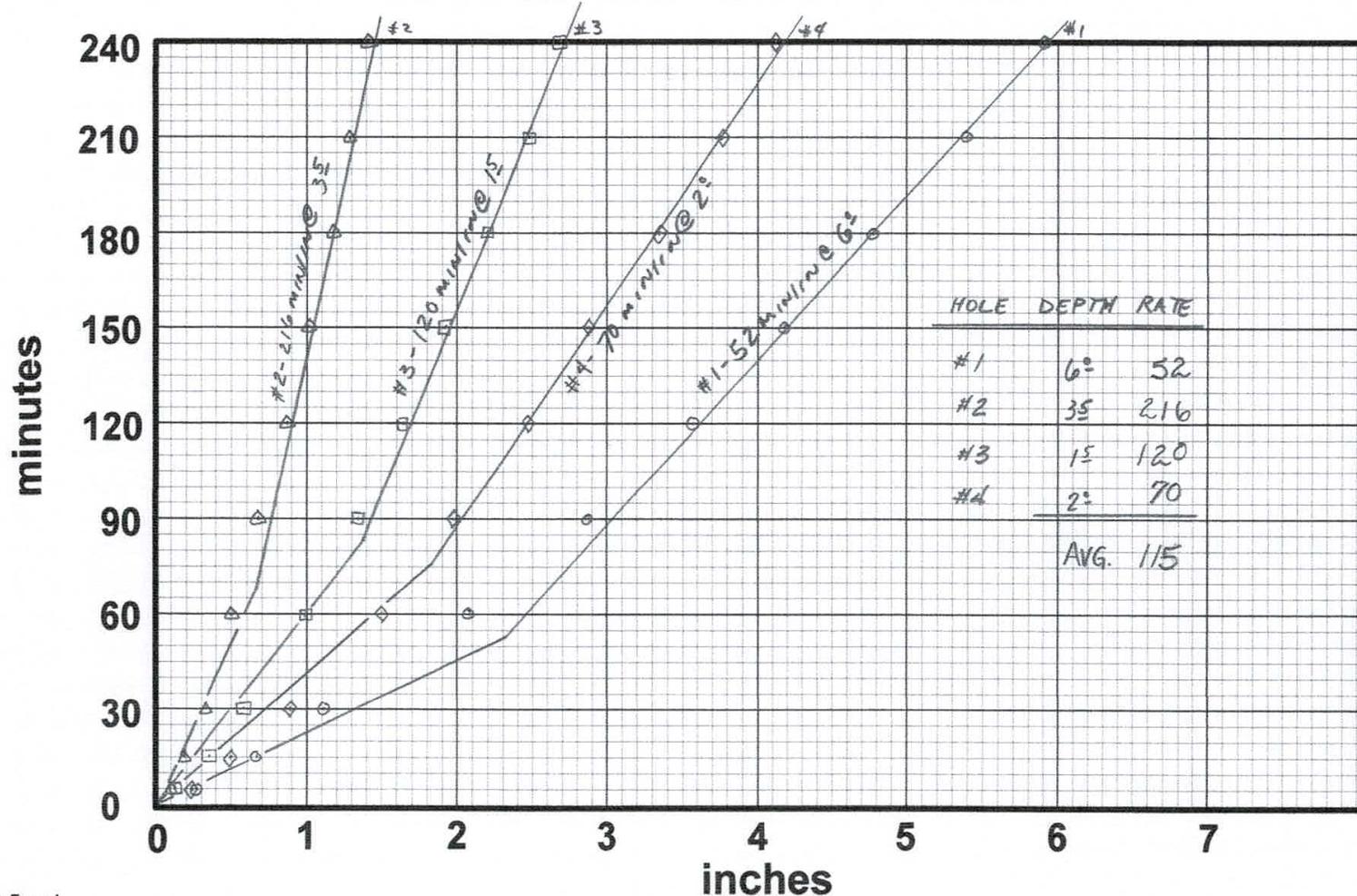
420 PLACERVILLE DRIVE • PLACERVILLE • CALIFORNIA • 95667  
530-621-4482 • FAX 530-621-4481



JOB HARRY BOYAJIAN JOB NO 07-05-1  
 APN 109-340-069-000 Xref 22-09  
 CALCULATED BY REVUEED WTM DATE 2-24-22  
 CHECKED BY WTM DATE 1-26-07

AVERAGE PERCOLATION RATE 115 minutes / inch

**PERCOLATION TEST DATA PLOT**

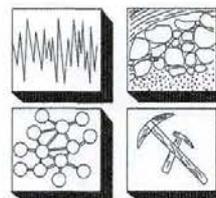


**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 12 - SITE OF PERCOLATION TEST AND SOIL TEST TRENCH LOCATIONS**

**WHEELDON  
GEOLOGY**

Consulting Geologists

420 PLACERVILLE DRIVE • PLACERVILLE • CALIFORNIA • 95667  
530-621-4482 • wheeldongeology@gmail.com



William T. Mitchell II  
Professional Geologist #5445

**REPORT OF PERCOLATION TEST**

for

HARRY BOYAJIAN

APN: 109-340-069-000

**PARCEL 2 of 6**

DIRECTIONS TO PROPERTY

HWY 50 WEST, SOUTH SHINGLE RD TO SITE  
ON RIGHT JUST BEFORE BIG BRANCH RD

<b>TEST DATE</b>	1/23/2007	<b>WEATHER</b>	CLEAR COOL
	<b>NUMBER OF HOLES TESTED</b>	4	

Test Holes shown on Location Map

<u>Test Hole</u>	<u>Depth (ft.)</u>	<u>Stabilized Percolation Rate</u>
1	2.5	132
2	2.0	86
3	1.5	94
4	2.0	131

**Soil Profile from Backhoe Trench: 01/22/07**

0 - 2.5 FT RED BROWN SILTY CLAYEY SANDY LOAM  
2.5 - 4.0 FT RED YELLOW CLAYEY SANDY SOIL  
4.0 - 7.0 FT RED YELLOW SILTY SANDY SOIL  
7.0 - 11.0 FT LIGHT BROWN SILTY SANDY SOIL  
ON STR WEATHERED DECOMPOSED GABBRO  
ROOTS OBSERVED TO 3 FT

REQUIRED BACKHOE TEST TRENCH ALSO INSPECTED BY COUNTY - NO

**Average Percolation Rate      111      Minutes per Inch**

TEST MADE BY WHEELDON GEOLOGY

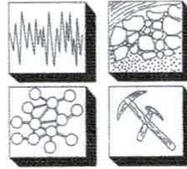
JOB NUMBER - 07-05-2  
Revised - 2-24-2022

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 12 - SITE OF PERCOLATION TEST AND SOIL TEST TRENCH LOCATIONS**

**WHEELDON  
GEOLOGY**

Consulting Geologists

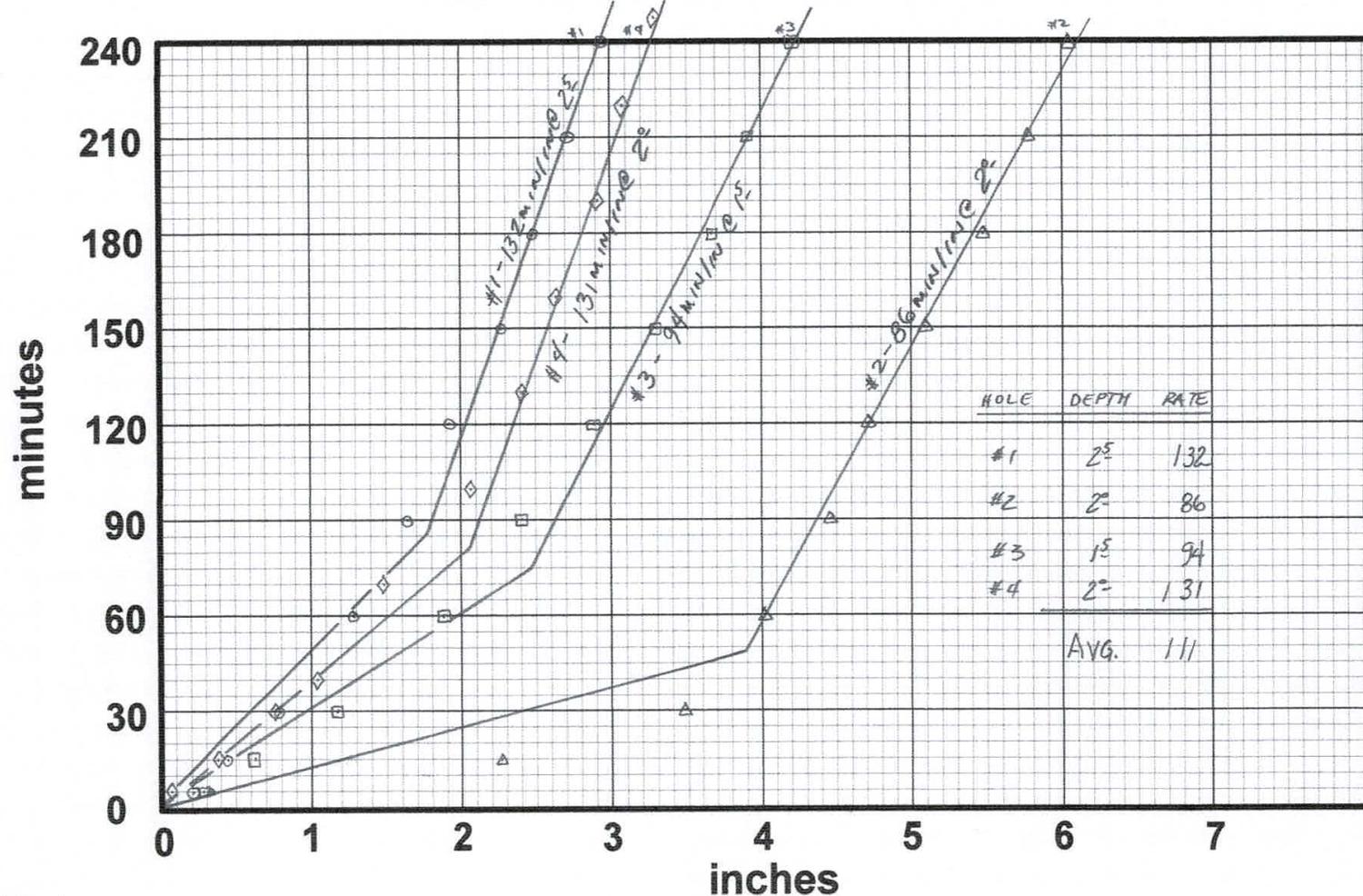
420 PLACERVILLE DRIVE • PLACERVILLE • CALIFORNIA • 95667  
530-621-4482 • FAX 530-621-4481



JOB HARRY BOYAJIAN JOB NO 07-05-2  
 APN 109-340-069-000 xref 22-09  
 CALCULATED BY Revised WTM DATE 2-24-22  
 CHECKED BY WTM DATE 1-26-07

AVERAGE PERCOLATION RATE 111 minutes / inch

**PERCOLATION TEST DATA PLOT**



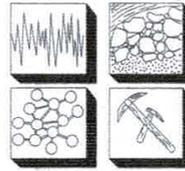


**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 12 - SITE OF PERCOLATION TEST AND SOIL TEST TRENCH LOCATIONS**

**WHEELDON  
GEOLOGY**

Consulting Geologists

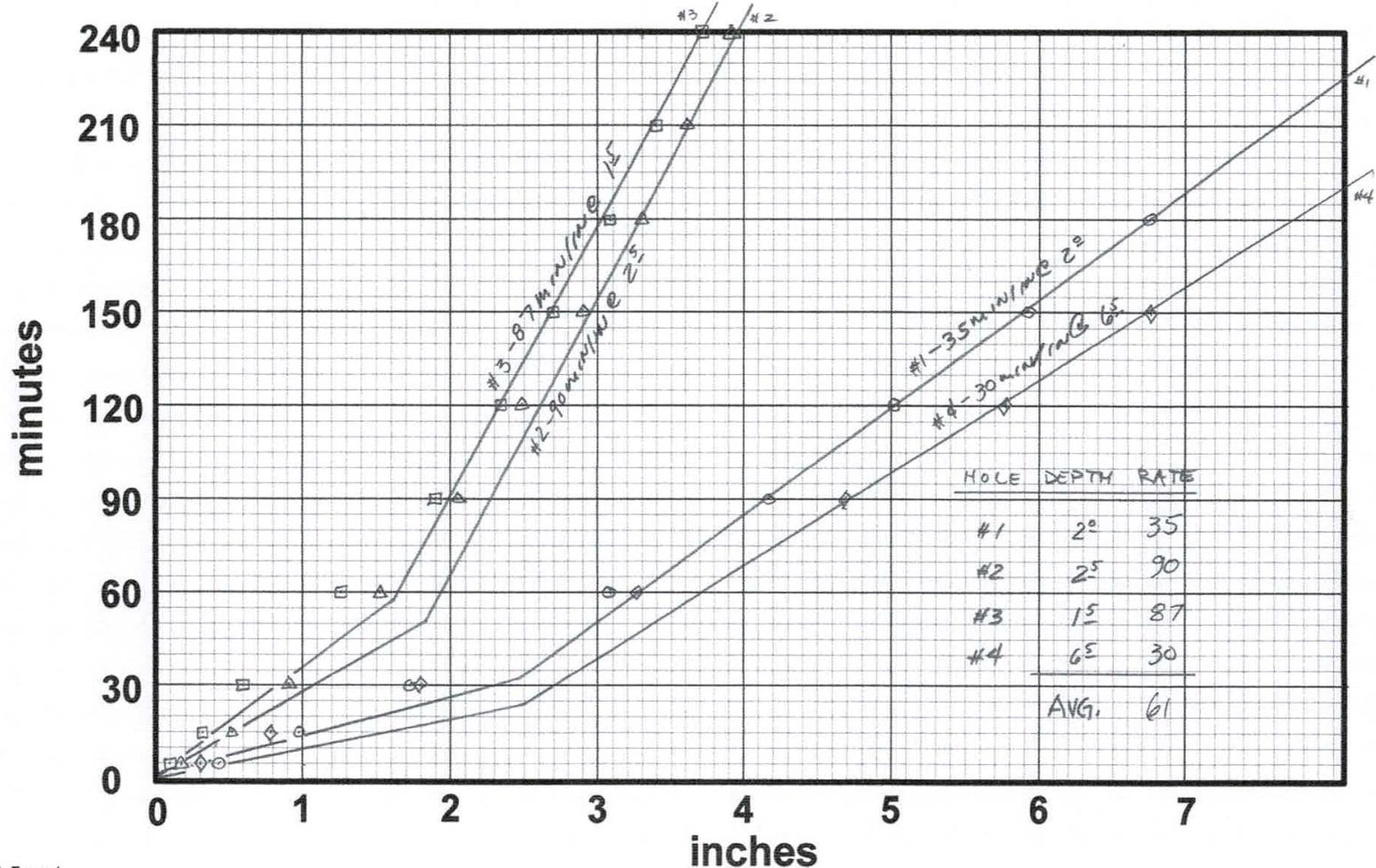
420 PLACERVILLE DRIVE • PLACERVILLE • CALIFORNIA • 95667  
530-621-4482 • FAX 530-621-4481



JOB HARRY BOYAJIAN JOB NO 07-05-3  
 APN 109-340-069-000 xref 22-09  
 CALCULATED BY Revised WTM DATE 2-24-22  
 CHECKED BY WTM DATE 1-26-07

AVERAGE PERCOLATION RATE 61 minutes / inch

**PERCOLATION TEST DATA PLOT**

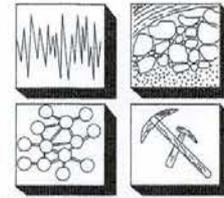


**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 12 - SITE OF PERCOLATION TEST AND SOIL TEST TRENCH LOCATIONS**

**WHEELDON  
GEOLOGY**

Consulting Geologists

420 PLACERVILLE DRIVE • PLACERVILLE • CALIFORNIA • 95667  
530-621-4482 • wheeldongeology@gmail.com



William T. Mitchell II  
Professional Geologist #5445

**REPORT OF PERCOLATION TEST**  
for

HARRY BOYAJIAN

APN: 109-340-069-000

**PARCEL 4 of 6**

DIRECTIONS TO PROPERTY

HWY 50 WEST, SOUTH SHINGLE RD TO SITE  
ON RIGHT JUST BEFORE BIG BRANCH RD

<b>TEST DATE</b>	2/23/2022	<b>WEATHER</b>	CLEAR COLD
	<b>NUMBER OF HOLES TESTED</b>	6	

Test Holes shown on Location Map

<u>Test Hole</u>	<u>Depth (ft.)</u>	<u>Stabilized Percolation Rate</u>
1	1.5	47
2	2.0	110
3	2.5	95
4	2.0	82
5	1.5	93
6	1.5	110

**Soil Profile from Backhoe Trench: 01/22/07**

0 - 2.0 FT RED SANDY SILTY LOAM  
2.0 - 6.0 FT YELLOW CLAYEY SILTY SANDY SOIL  
6.0 - 11.0 FT LIGHT BROWN SANDY D.G. SOIL  
ON STR WEATHERED DECOMPOSED GABBRO  
ROOTS OBSERVED TO 8 FT

REQUIRED BACKHOE TEST TRENCH ALSO INSPECTED BY COUNTY - NO

<b>Average Percolation Rate</b>	90	<b>Minutes per Inch</b>
---------------------------------	----	-------------------------

TEST MADE BY WHEELDON GEOLOGY

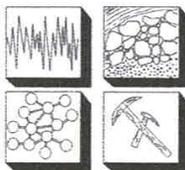
JOB NUMBER - 22-09-4  
Xref - 07-05-4

**TM21-0002 SIERRA VIEW ESTATES**  
**ATTACHMENT 12 - SITE OF PERCOLATION TEST AND SOIL TEST TRENCH LOCATIONS**

**WHEELDON  
GEOLOGY**

Consulting Geologists

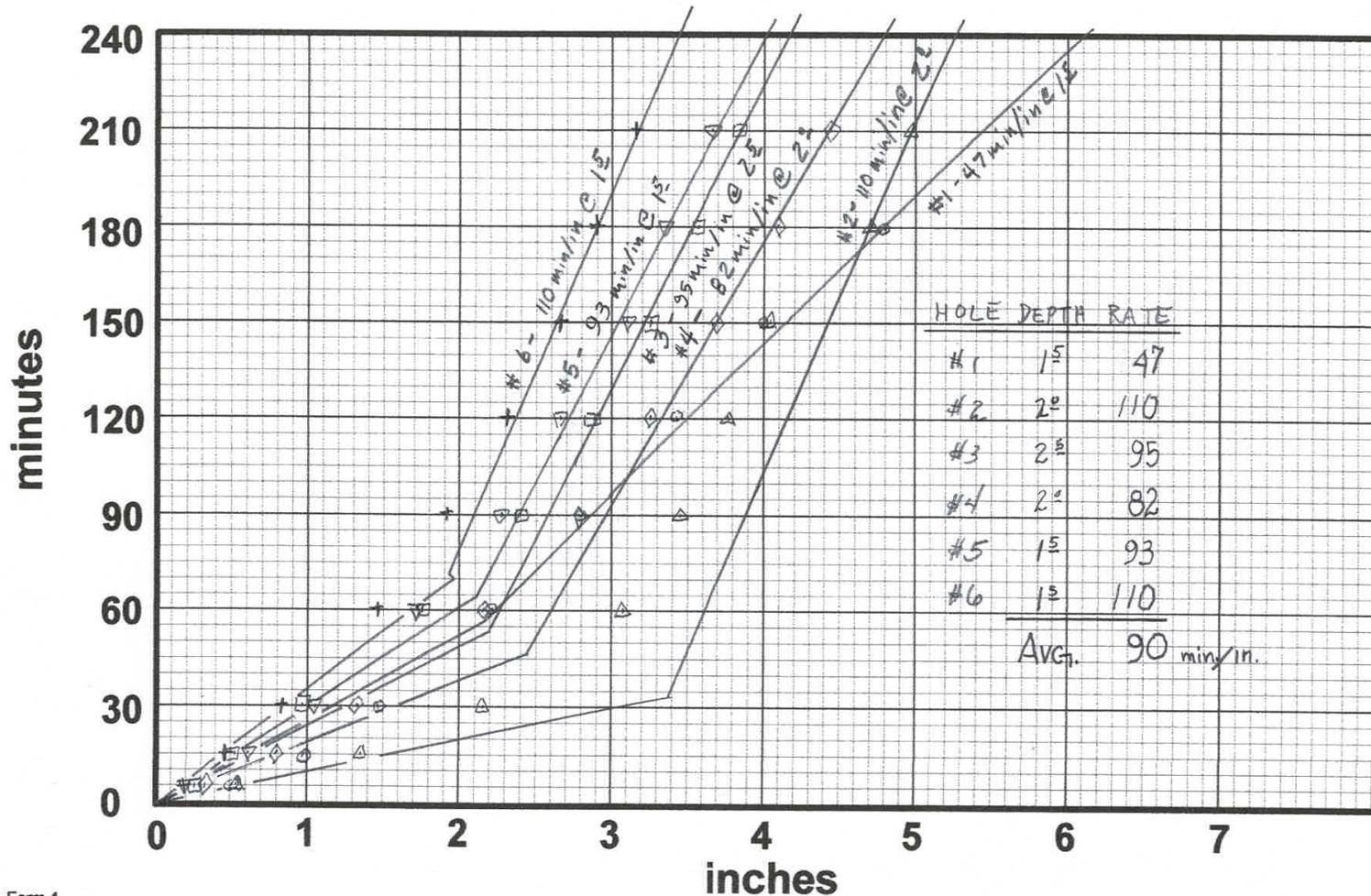
7700 BAYNE ROAD • PLACERVILLE • CALIFORNIA • 95667  
 530-621-4482 • FAX 530-621-4481



JOB HARRY BOYAJIAN JOB NO 22-09  
 APN 109-340-069-000 XREF 07-05-4  
 CALCULATED BY WTM DATE 2-24-22  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_

AVERAGE PERCOLATION RATE 90 minutes / inch

**PERCOLATION TEST DATA PLOT**

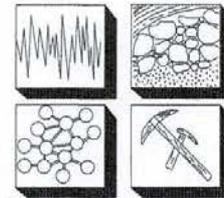


TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 12 - SITE OF PERCOLATION TEST AND SOIL TEST TRENCH LOCATIONS

**WHEELDON  
GEOLOGY**

Consulting Geologists

420 PLACERVILLE DRIVE • PLACERVILLE • CALIFORNIA • 95667  
530-621-4482 • wheeldongeology@gmail.com



William T. Mitchell II  
Professional Geologist #5445

**REPORT OF PERCOLATION TEST**

for

HARRY BOYAJIAN

APN: 109-340-069-000

**PARCEL 5 of 6**

DIRECTIONS TO PROPERTY

HWY 50 WEST, SOUTH SHINGLE RD TO SITE  
ON RIGHT JUST BEFORE BIG BRANCH RD

**TEST DATE** 1/25/2007 **WEATHER** CLEAR  
COOL

**NUMBER OF HOLES TESTED** 4

Test Holes shown on Location Map

<u>Test Hole</u>	<u>Depth (ft.)</u>	<u>Stabilized Percolation Rate</u>
1	1.5	74
2	4.0	210
3	2.0	105
4	6.0	34

**Soil Profile from Backhoe Trench: 01/22/07**

0 - 1.5 FT RED SILTY SANDY LOAM  
1.5 - 4.5 FT BROWN CLAYEY SILTY SANDY SOIL  
4.5 - 11.0 FT LIGHT BROWN SILTY SANDY D.G. SOIL  
ON STR WEATHERED DECOMPOSED GABBRO  
ROOTS OBSERVED TO 5 FT

REQUIRED BACKHOE TEST TRENCH ALSO INSPECTED BY COUNTY - NO

**Average Percolation Rate** 106 **Minutes per Inch**

TEST MADE BY WHEELDON GEOLOGY

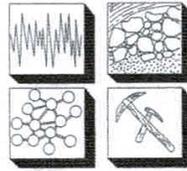
JOB NUMBER - 07-05-5  
Revised - 2-24-2022

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 12 - SITE OF PERCOLATION TEST AND SOIL TEST TRENCH LOCATIONS**

**WHEELDON  
GEOLOGY**

Consulting Geologists

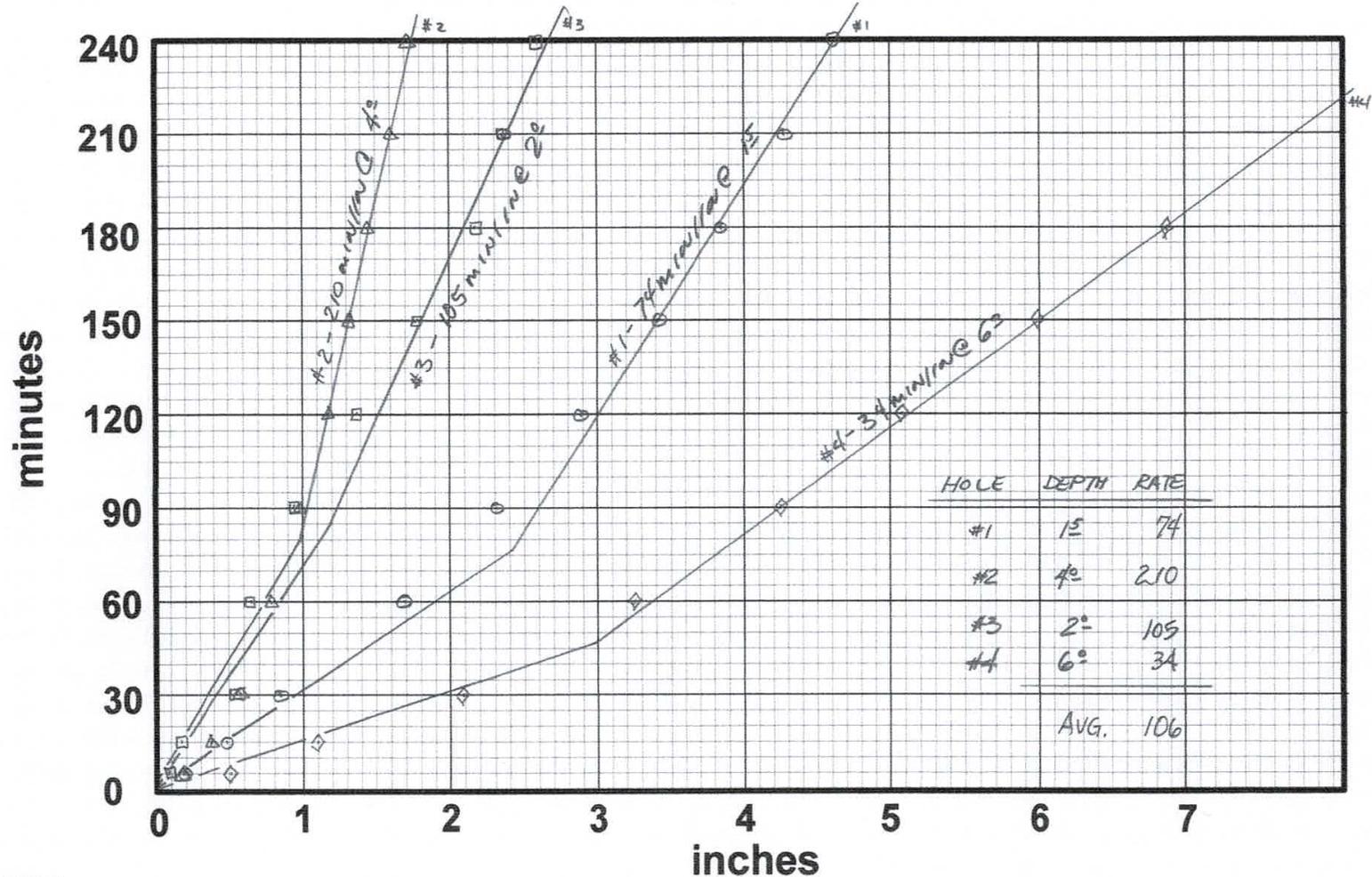
420 PLACERVILLE DRIVE • PLACERVILLE • CALIFORNIA • 95667  
530-621-4482 • FAX 530-621-4481



JOB HARRY BOYAJIAN JOB NO 07-05-5  
 APN 109-340-069-000 xref 22-09  
 CALCULATED BY Revised WTM DATE 2-24-22  
 CHECKED BY WTM DATE 1-26-07

AVERAGE PERCOLATION RATE 106 minutes / inch

**PERCOLATION TEST DATA PLOT**



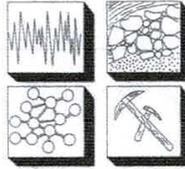


**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 12 - SITE OF PERCOLATION TEST AND SOIL TEST TRENCH LOCATIONS**

**WHEELDON  
GEOLOGY**

Consulting Geologists

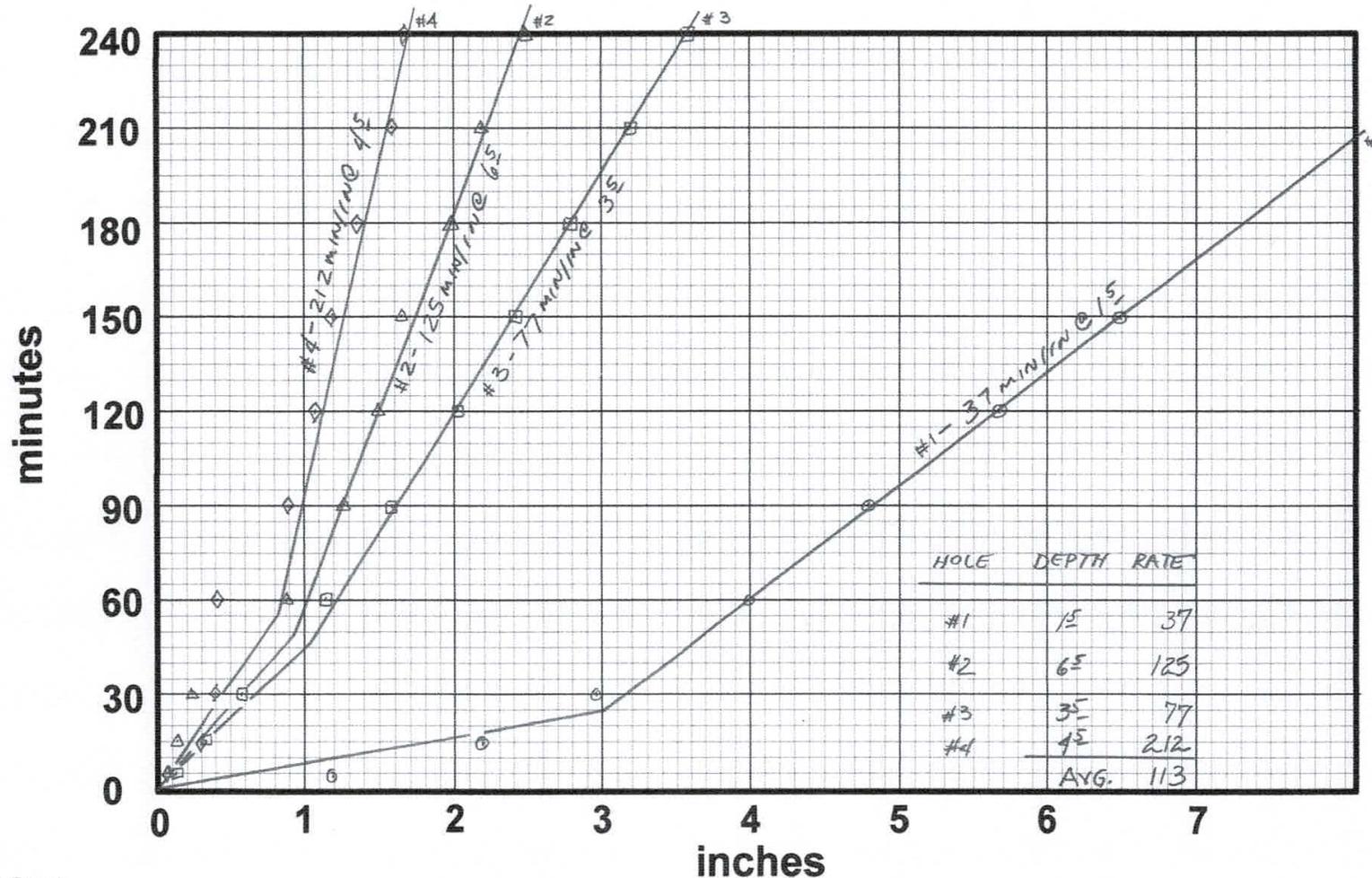
420 PLACERVILLE DRIVE • PLACERVILLE • CALIFORNIA • 95667  
530-621-4482 • FAX 530-621-4481



JOB HARRY BOYAJIAN JOB NO 07-05-6  
 APN 109-340-069-000 xref 22-09  
 CALCULATED BY Revised WTM DATE 2-24-22  
 CHECKED BY WTM DATE 1-26-07

AVERAGE PERCOLATION RATE 113 minutes / inch

**PERCOLATION TEST DATA PLOT**



**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 13 - LIST OF EXISTING WELLS**

**Sierra View Estates Subdivision – Existing wells**

**EXISTING WELLS LOCATED ON APN: 109-340-069**

The data below was obtained from El Dorado County's Environmental Health Department records through the County's Gotnet web application.

*RECORD ID: WP0001501  
DEPTH: 320  
PUMP RATE: 28  
SITE LOCATION: SITE #1*

*RECORD ID: WP0001504  
DEPTH: 420  
PUMP RATE: 8  
SITE LOCATION: SITE #4*

*RECORD ID: WP0001502  
DEPTH: 260  
PUMP RATE: 68  
SITE LOCATION: SITE #2*

*RECORD ID: WP0001505  
DEPTH: 780  
PUMP RATE: 50  
SITE LOCATION: SITE #5*

*RECORD ID: WP0001503  
DEPTH: 300  
PUMP RATE: 42  
SITE LOCATION: SITE #3*

*RECORD ID: WP0001506  
DEPTH: 300  
PUMP RATE: 50  
SITE LOCATION: SITE #6*

TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 14 - TIS INITIAL DETERMINATION FORM



COMMUNITY DEVELOPMENT SERVICES  
LONG RANGE PLANNING

2850 Fairlane Court, Placerville, CA 95667  
Phone (530) 621-4650, Fax (530) 642-0508

Transportation Impact Study (TIS) – Initial Determination

The information provided with this form will be used by County staff to determine if the proposed project will be required to complete a Transportation Impact Study (TIS) or an On-Site Transportation Review (OSTR). If one or both are required, County staff will contact the applicant with more information about the required studies. Both studies are described in the TIS Guidelines, which can be found on the County's website. **An OSTR is typically required for all projects.**

Complete and submit this form along with a detailed project description and a site plan by mail, fax or email.

Mail: CDS, Long Range Planning  
Attn: Natalie Porter  
2850 Fairlane Court  
Placerville, CA 95667

Fax: (530) 642-0508  
Phone: (530) 621-5442  
Email: [natalie.porter@edcgov.us](mailto:natalie.porter@edcgov.us)

Applicant Information:

Name: Harry Jr. & Carrie Lyn Boyajian  
Address: 4348 Swift Circle, Shingle Springs, CA

Phone #: 916-502-1798  
Email: HB1182@yahoo.com

Project Information:

Name of Project: Sierra View Estates  
Project Location: South Shingle Rd. at Big Branch Rd.  
APN(s): 109-340-069

Planning Number: \_\_\_\_\_  
Bldg Size: \_\_\_\_\_  
Project Planner: \_\_\_\_\_  
Number of units: \_\_\_\_\_

Description of Project: (Use, Number of Units, Building Size, etc.)

The Project, a six (6) lot Rural Subdivision, proposes the subdivision of an existing 30.84 acre parcel into 6 lots ranging in size from 5.0 acres to 5.8 acres. Access to the lots will be from South Shingle Rd. via a proposed private road terminating in a cul-de-sac. Water & sewer service shall be provided by individual private wells and septic systems. Current/proposed zoning is RE-5. No building construction is currently proposed.

Please attach a project site plan

If an OSTR is required, the following information shall be evaluated and the findings signed and stamped by a registered Traffic Engineer or Civil Engineer, and shall be included with the project submittal:

1. Existence of any current traffic problems in the local area such as a high-accident location, non-standard intersection or roadway, or an intersection in need of a traffic signal
2. Proximity of proposed site driveway(s) to other driveways or intersections
3. Adequacy of vehicle parking relative to both the anticipated demand and zoning code requirements
4. Adequacy of the project site design to fully satisfy truck circulation and loading demand on-site, when the anticipated number of deliveries and service calls may exceed 10 per day
5. Adequacy of the project site design to provide at least a 25 foot minimum required throat depth (MRTD) at project driveways, include calculation of the MRTD
6. Adequacy of the project site design to convey all vehicle types
7. Adequacy of sight distance on-site
8. Queuing analysis of "drive-through" facilities

TM21-0002

Rev 8/20/18

RECEIVED  
PLANNING DEPARTMENT  
DEC 14 11 21 AM '18

TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 14 - TIS INITIAL DETERMINATION FORM



COMMUNITY DEVELOPMENT SERVICES  
LONG RANGE PLANNING

2850 Fairlane Court, Placerville, CA 95667  
Phone (530) 621-4650, Fax (530) 642-0508

Transportation Impact Study (TIS) – Initial Determination (Page 2)

TO BE COMPLETED BY COUNTY STAFF:

The following project uses are typically exempt from the preparation of a TIS:

- |  |  |
|--|--|
| <input type="checkbox"/> 4 or less single family homes                 | <input type="checkbox"/> 28,000 square feet or less for warehouse    |
| <input type="checkbox"/> 4 or less multi-family units                  | <input type="checkbox"/> 38,000 square feet or less for mini-storage |
| <input type="checkbox"/> 2,300 square feet or less for shopping center | <input type="checkbox"/> 20,000 square feet or less for churches     |
| <input type="checkbox"/> 8,600 square feet or less for general office  | <input type="checkbox"/> 20 or less sites for campgrounds            |
| <input type="checkbox"/> 10,000 square feet or less for industrial     | <input type="checkbox"/> 20 or less rooms for hotel/motel/B&B        |

None apply – a TIS is required with applicable fee.

**County Staff Determination:**

The TIS or OSTR may be waived if no additional vehicle trips will be generated by the proposed change, no up-zoning is requested, or no intensification of use is requested. Long Range Planning staff may waive the TIS requirement. The Transportation Director or his/her designee may waive the OSTR requirement.

- TIS and OSTR are both waived. No further transportation studies are required.
- On-Site Transportation Review is required. A TIS is not required. The OSTR shall address all items listed, unless otherwise noted.
- The TIS and OSTR are required. An initial deposit for TIS scoping and review is required by CDS Long Range Planning staff. See Attached TIS Initial Fund Request letter.

TIS waiver approved by:

  
CDS Long Range Planning Signature

9-27-21  
Date

ADH TS

OSTR waiver approved by:

Department of Transportation Director or Designee

Date

PRINT

Rev 8/20/18

Transportation Engineers

March 17, 2022

Mr. Harry Boyajian  
4348 Swift Circle  
Shingle Springs, CA 95681

**RE: ON-SITE TRANSPORTATION REVIEW FOR SIERRA ESTATES SUBDIVISION,  
SHINGLE SPRINGS, EL DORADO COUNTY**

Dear Mr. Boyajian:

KD Anderson & Associates, Inc. has prepared this analysis for your proposed subdivision project in Shingle Springs, El Dorado County. The site is located along S. Shingle Road north of Big Branch Road (Figure 1). Access to the site is proposed via an existing driveway about 330 feet north of Big Branch Road; this driveway will be formalized as a private road.

**Project Description**

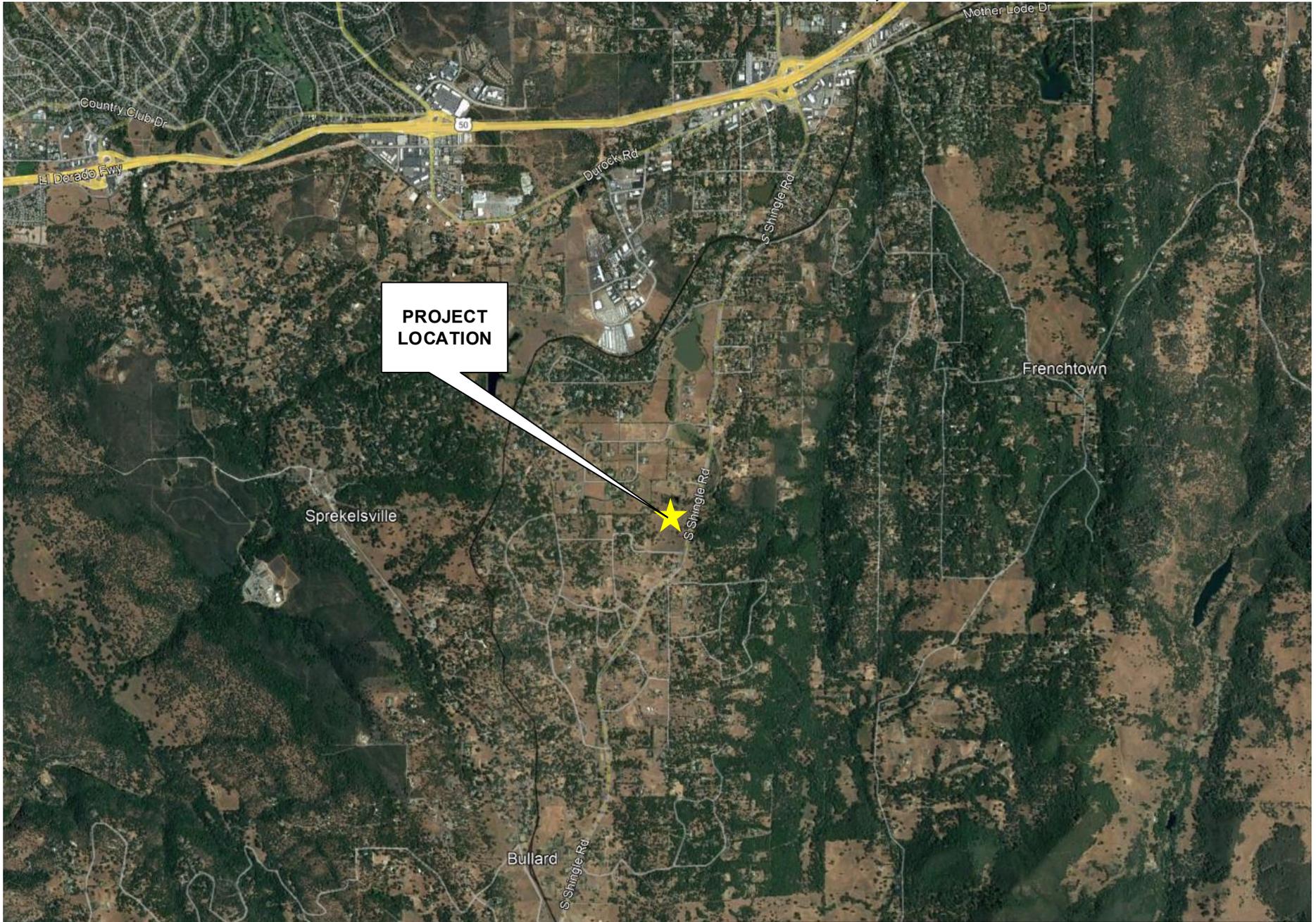
The site is a 30.84-acre parcel that is proposed to be split into six (6) lots ranging in size from 5.0 acres to 5.8 acres. Access to all lots will be via the proposed private road off S. Shingle Road in the southeast side of the site and terminating in a cul-de-sac towards the northwest corner of the site. No additional access locations are proposed. Figure 2 illustrates the site plan.

**Technical Approach**

El Dorado County requires an On-Site Transportation Review (OSTR) on all projects. The eight tasks that are part of the OSTR are identified and listed below; however, not all tasks are required depending on the site usage.

1. Existence of any current traffic problems in the local area such as a high-accident location, non-standard intersection or roadway, or an intersection in need of a traffic signal.
2. Proximity of proposed site driveway(s) to other driveways or intersections.
3. Adequacy of vehicle parking relative to both the anticipated demand and zoning code requirements.
4. Adequacy of the project site design to fully satisfy truck loading demand on-site, when the anticipated number of deliveries and service calls may exceed 10 per day.
5. Adequacy of the project site design to provide at least a 25' minimum required throat depth (MRTD) at project driveways. Include calculation of the MRTD.
6. Adequacy of the project site design to convey all vehicle types.
7. Adequacy of sight distance on-site.
8. Queuing analysis of "drive-through" facilities.

TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 15 - OSTR REPORT, MARCH 17, 2022

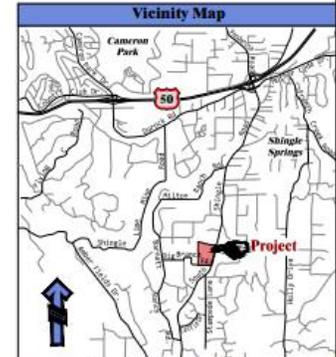


VICINITY MAP

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 15 - OSTR REPORT, MARCH 17, 2022**

**Tentative Subdivision Map  
Sierra View Estates**

South Shingle Road - Parcel 3, 41/PM/65  
APN: 109-340-069 - El Dorado County, CA  
November 2021



**Abbreviations**

CONC	CONCRETE	OW	OVERHEAD WIRES
(E)	EXISTING	(P)	PROPOSED
EL	EL DORADO COUNTY	PTL	PROPERTY LINE
EL	ELEVATION	PM	PARCEL MAP
EP	EDGE OF PAVEMENT	PU	PUBLIC UTILITY EASEMENT
FD	FLOOD	R/W	RIGHT OF WAY
FF	FINISHED FLOOR	S	SEWER
PH	PIPE HYDRANT	TP	TEST PIT
PL	PLUMBING	UP	UTILITY POLE
PO	POUND	W	WATER
		WV	WATER VALVE

**Lot Data**

Parcel	Gross Area	Net Area
(E) APN 109-340-069	39.837 Acres	19.58 Acres
(P) Lot 1	5.88 Acres	3.59 Acres
(P) Lot 2	5.88 Acres	3.52 Acres
(P) Lot 3	5.88 Acres	3.85 Acres
(P) Lot 4	5.88 Acres	2.59 Acres
(P) Lot 5	5.83 Acres	3.37 Acres
(P) Lot 6	5.88 Acres	3.38 Acres

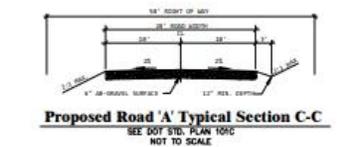
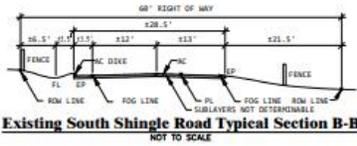
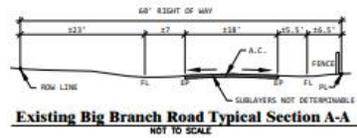
**Project Data**

OWNER / APPLICANT	HARRY JR. & CAROL LYNN BOVILZAM 4548 SWIFT CIRCLE SHINGLE SPRINGS, CA 95962 PHONE: 916-562-1708 EMAIL: hbovlz@pacnet.com
PREPARED BY	LEBECK ENGINEERING, INC. 10000 SHINGLE SPRING ROAD SHINGLE SPRINGS, CA 95962
SCALE	1" = 100'
CONTOUR INTERVAL	5 FEET
SOURCE OF TOPOGRAPHY	AERIAL SURVEY BY VERTICAL MAPPING RESOURCE
SECTION, TOWNSHIP & RANGE	PER. OF SEC. 13 & 34, T.9N., R.9E., W.D.M.
ASSESSOR'S PARCEL NUMBER	189-340-069
PRESENT LAND USE DESIGNATION	LRP
PRESENT ZONING	RS-1
TOTAL AREA	39.837 ACRES
TOTAL NUMBER OF PARCELS	124 LOTS
MINIMUM PARCEL AREA	5.8 ACRES
WATER SUPPLY	EXISTING PRIVATE WELLS
WASTE DISPOSAL	PROPOSED ON-SITE SEPTIC
FIRE PROTECTION	EL DORADO COUNTY FPD
DATE OF PREPARATION	NOVEMBER 2021
PROJECT #	21-173

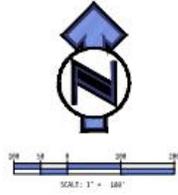
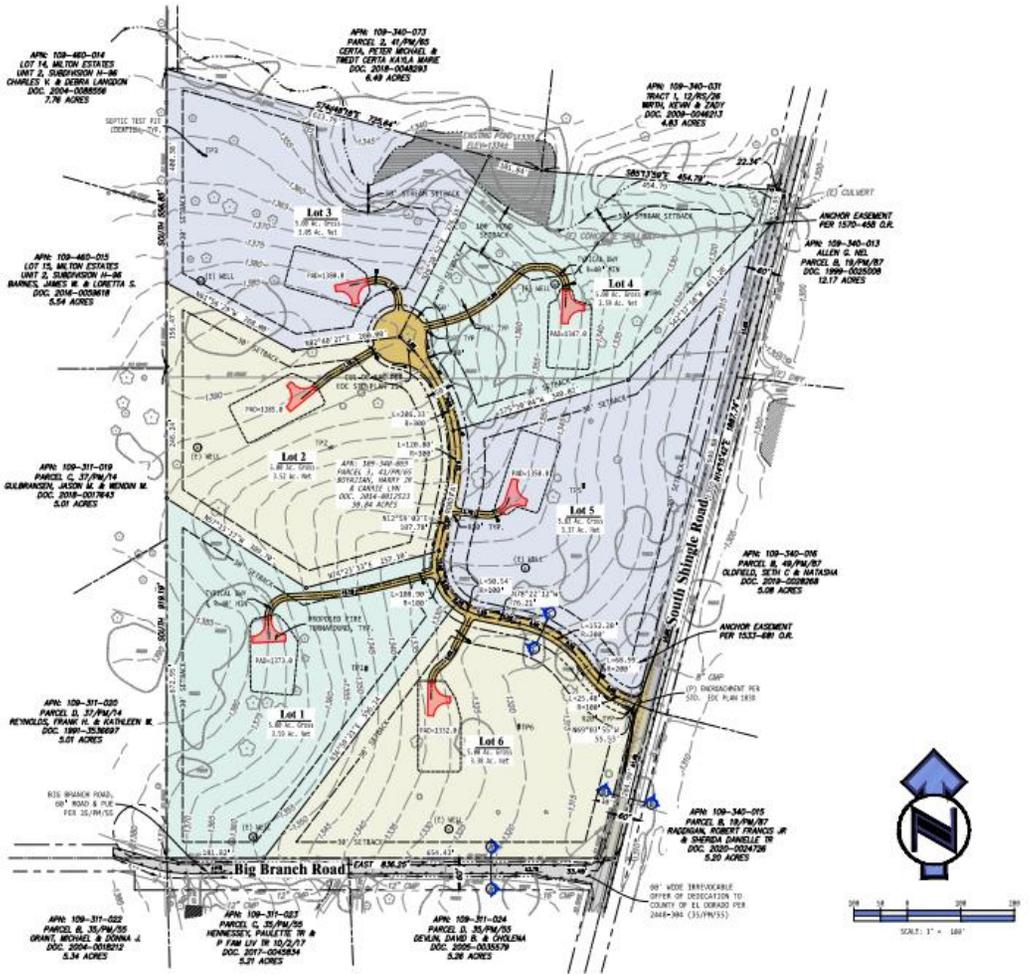
**Approvals**

ZONING ADMINISTRATOR:	_____
APPROVAL/DENIAL DATE:	_____
BOARD OF SUPERVISORS:	_____
APPROVAL/DENIAL DATE:	_____

**Sierra View Estates  
Tentative Subdivision  
Map**



- Project Notes**
- ACCESS:**
- SOUTH SHINGLE ROAD IS AN EXISTING 66 FT. WIDE ROAD AND P.U.C.
  - BIG BRANCH ROAD IS AN EXISTING 66 FT. WIDE ROAD AND P.U.C. FOR PARCEL MAP 25-15.
- DATA SOURCES:**
- THE FIELD SURVEY PERFORMED TO PREPARE THIS TENTATIVE PARCEL MAP AND RELATED EXHIBITS WAS FOR ESTABLISHING AREAL CONTROL ONLY. ON-SITE AND OFF-SITE IMPROVEMENTS ARE LOCATED AND ORDERED BASED ON A VARIETY OF SOURCES INCLUDING AERIAL PHOTOGRAPHY, SITE INSPECTIONS, AND PUBLIC RECORDS.
- EASEMENTS:**
- LOCATION OF EXISTING WATER PEDIERLE easement FOR 1431-152 O.R. CANNOT BE ASCERTAINED FROM RECORDS.



**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 15 - OSTR REPORT, MARCH 17, 2022**

Mr. Harry Boyajian  
March 17, 2022  
Page 4

## **EXISTING ROADWAYS**

One roadway provides access to the project site, S. Shingle Road. The County General Plan identifies S. Shingle Road as a Major 2-Lane Road. The roadway extends from Green Valley Road to about two miles west of Latrobe Road where the pavement ends. The road is identified as Ponderosa Road from Green Valley Road to the US 50 interchange, and S. Shingle Road from the interchange south to its terminus. In the project vicinity the roadway generally consists of two 12-foot wide lanes with a minimal paved shoulder. Where the topography permits there is additional unpaved shoulder. The roadway is generally a variable downhill grade from north to south. Throughout the area, access to properties is provided by periodic roadways and driveways off S. Shingle Road. At these locations the unpaved shoulders are generally widened and may consist of either paved driveways, packed gravel driveways or remain unimproved.

### **On-Site Transportation Review.**

1. Existence of any current traffic problems in the local area such as a high-accident location, non-standard intersection or roadway, or an intersection in need of a traffic signal.

SWITRS crash data through the California Highway Patrol (CHP) database was reviewed for the previous five-year period, 2016 – 2020 to determine whether there is any history of crashes in the driveway vicinity. A five-year period was used due to a reduction in travel in 2019 and 2020 due to the Covid-19 pandemic. During this period there were three reported crashes within 500 feet of the proposed roadway. All the crashes occurred just north or south of the Big Branch Road intersection. One was related to speed; one was an improper turn and one involved hitting a stationary object. The number of crashes and types of crashes over this period indicate the area is not a high accident location.

2. Proximity of proposed site driveway(s) to other driveways or intersections.

The closest intersection to the project site is at Big Branch Road, about 320 feet south of the proposed new intersection. The closest driveway is about 675' north of the project intersection.

3. Adequacy of vehicle parking relative to both the anticipated demand and zoning code requirements.

Chapter 130.35 of the County's zoning code identifies parking requirements for single family dwelling units with two per unit. While a site plan detailing garages and/or parking is unavailable, there is adequate space on the 5+ acre sites to each accommodate two vehicles.

4. Adequacy of the project site design to fully satisfy truck loading demand on-site, when the anticipated number of deliveries and service calls may exceed 10 per day.

There are no daily truck deliveries anticipated for the site; therefore, review of truck access is not required.

5. Adequacy of the project site design to provide at least a 25' minimum required throat depth (MRTD) at project driveways.

The project is a residential subdivision and does not have a driveway access onto S. Shingle Road. Instead, a private roadway leading to a cul-de-sac at its end, providing adequate storage to allow vehicles to queue while waiting to enter S. Shingle Road.

*KDA*

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 15 - OSTR REPORT, MARCH 17, 2022**

*Mr. Harry Boyajian  
March 17, 2022  
Page 5*

6. Adequacy of the project site design to convey all vehicle types.

The proposed project is a residential subdivision. The largest design vehicle includes a fire truck and / or garbage truck that would need access on a regular basis. Considering the location in a rural area of the County it would not be unexpected to also see 5<sup>th</sup> wheel trailers and motorhomes on the roads. *AutoTURN* software by Transoft was used to determine whether the design vehicles can complete turns while staying within the paved areas of the roadways. The spatial database used in the analysis includes aerial photography acquired from Google Earth. Right turning vehicle movements were completed with vehicles not crossing the centerline along S. Shingle Road. The new roadway is proposed as a 20-foot fire lane; therefore, it is expected that all vehicles may use the entire roadway width when completing turns.

Figures 3a and 3b illustrate the turning movements for a pumper style fire truck while Figures 3c and 3d represent the turning movements for a wildlands tanker truck. Figures 4a and 4b show the turning movements for garbage trucks. Figure 5 presents the right turning movements for a 5<sup>th</sup> wheel trailer while Figure 6 presents the same movements for 40-foot motorhome. All of these vehicles could be expected to access the rural location. In all instances, turning movements can be completed as described above.

7. Adequacy of sight distance on-site.

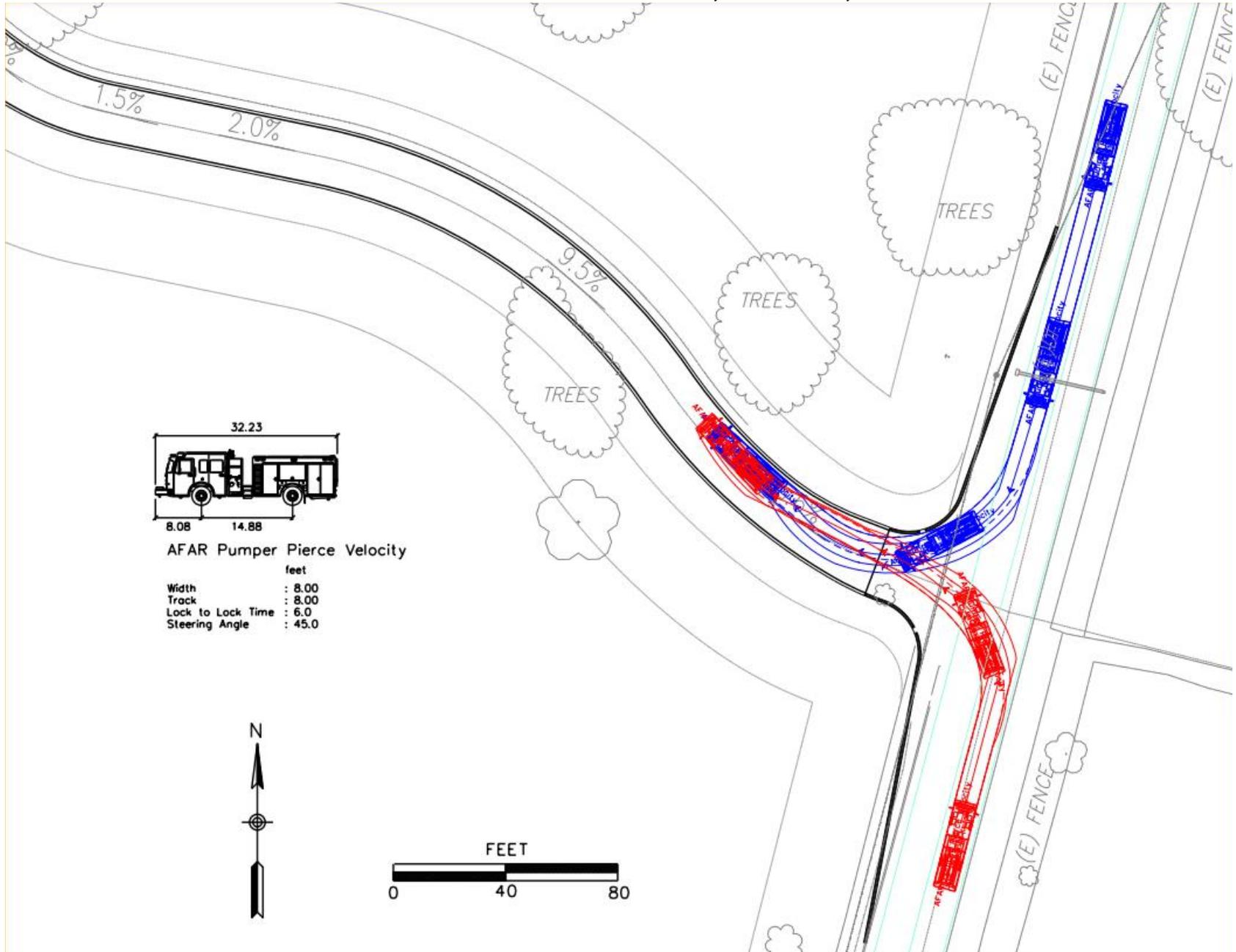
Corner sight distance at the proposed intersection was compared to the requirements of the Caltrans Highway Design Manual (HDM), Chapters 2 and 4. At the project intersection, S. Shingle Road has a downgrade to the south and is generally straight. The speed limit on S. Shingle Road is 55 mph. The intersection is considered rural as defined in the HDM. Based on a 55 mph speed the Corner Sight Distance (CSD) for a passenger car should be 606 feet. Sight distance for motorists is measured from the driver's eyes, which are assumed to be 3 ½ feet above the pavement surface, to an object ½-foot high on the road. As noted in the HDM, for sustained downgrades of 3% or greater and longer than one mile, the sight distance should be increased by 20%. S. Shingle Road is generally a downhill grade from north to south in the project vicinity; however, there is a short upgrade within one mile of the project intersection. To provide a conservative assessment for sight distance, the sight distance was increased by 20% for southbound traffic. Figure 7 illustrates the sight lines from the approximate location of an outbound vehicle. The sight distance, with clear lines of sight, appears to meet the required CSD. It is recommended that the grading plan confirm that the line of sight provide clear sight lines in both directions, considering the grades within the property and adjacent to the roadway.

8. Queuing analysis of “drive-through” facilities.

This project does not include drive-through facilities; therefore, a queuing analysis was not completed.

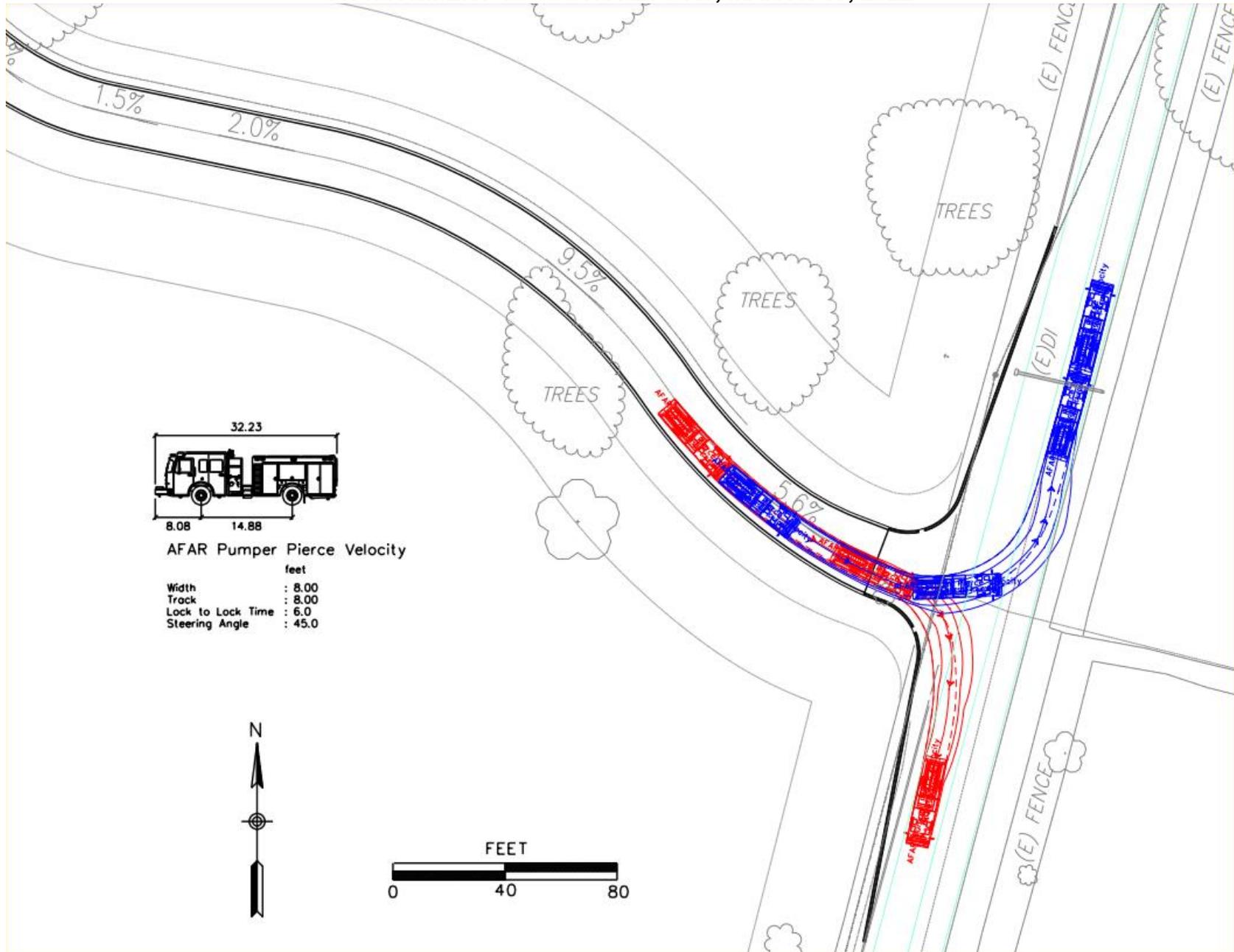
*KDA*

TM21-0002 SIERRA VIEW ESTATES  
 ATTACHMENT 15 - OSTR REPORT, MARCH 17, 2022



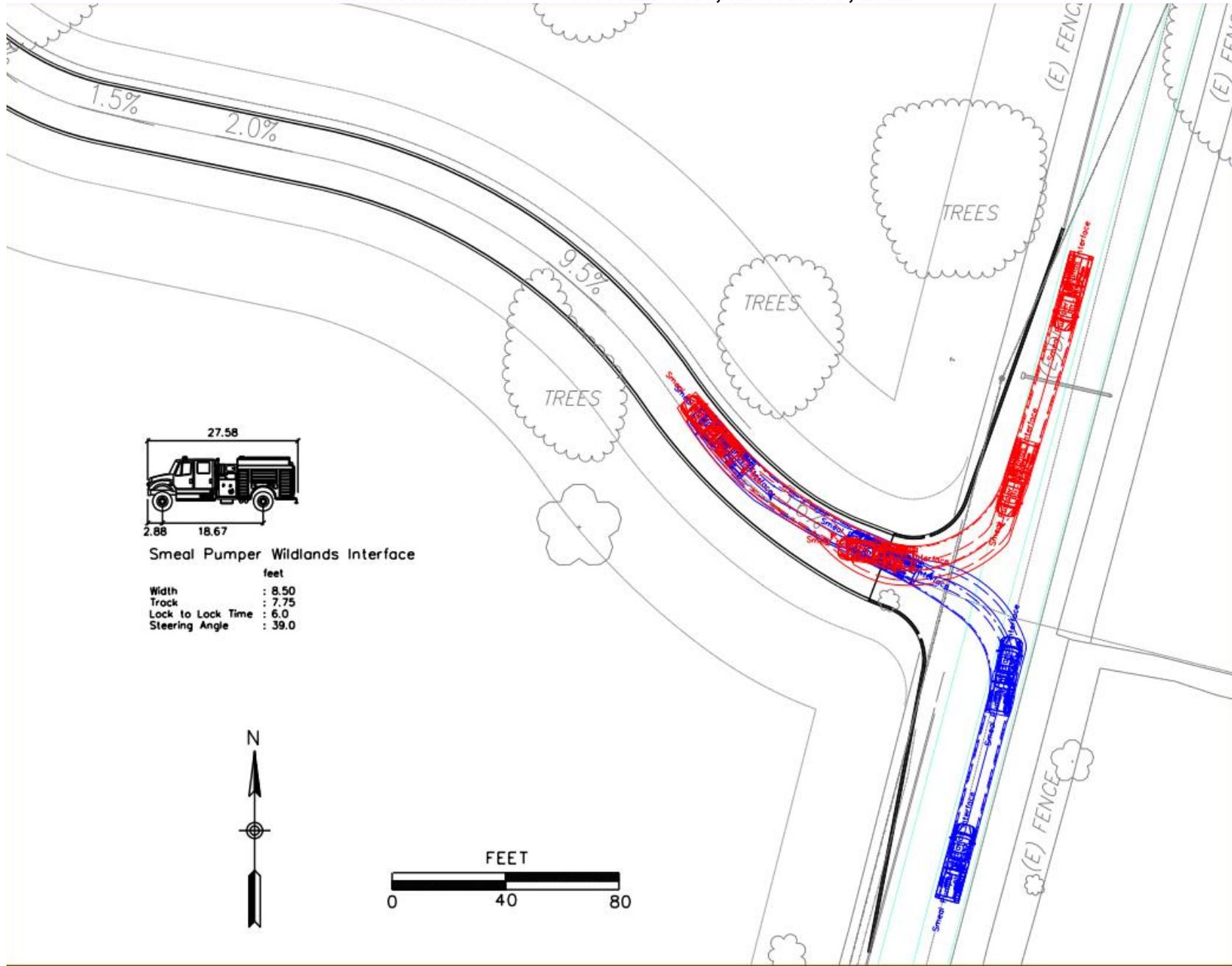
FIRE TRUCK INBOUND

TM21-0002 SIERRA VIEW ESTATES  
 ATTACHMENT 15 - OSTR REPORT, MARCH 17, 2022



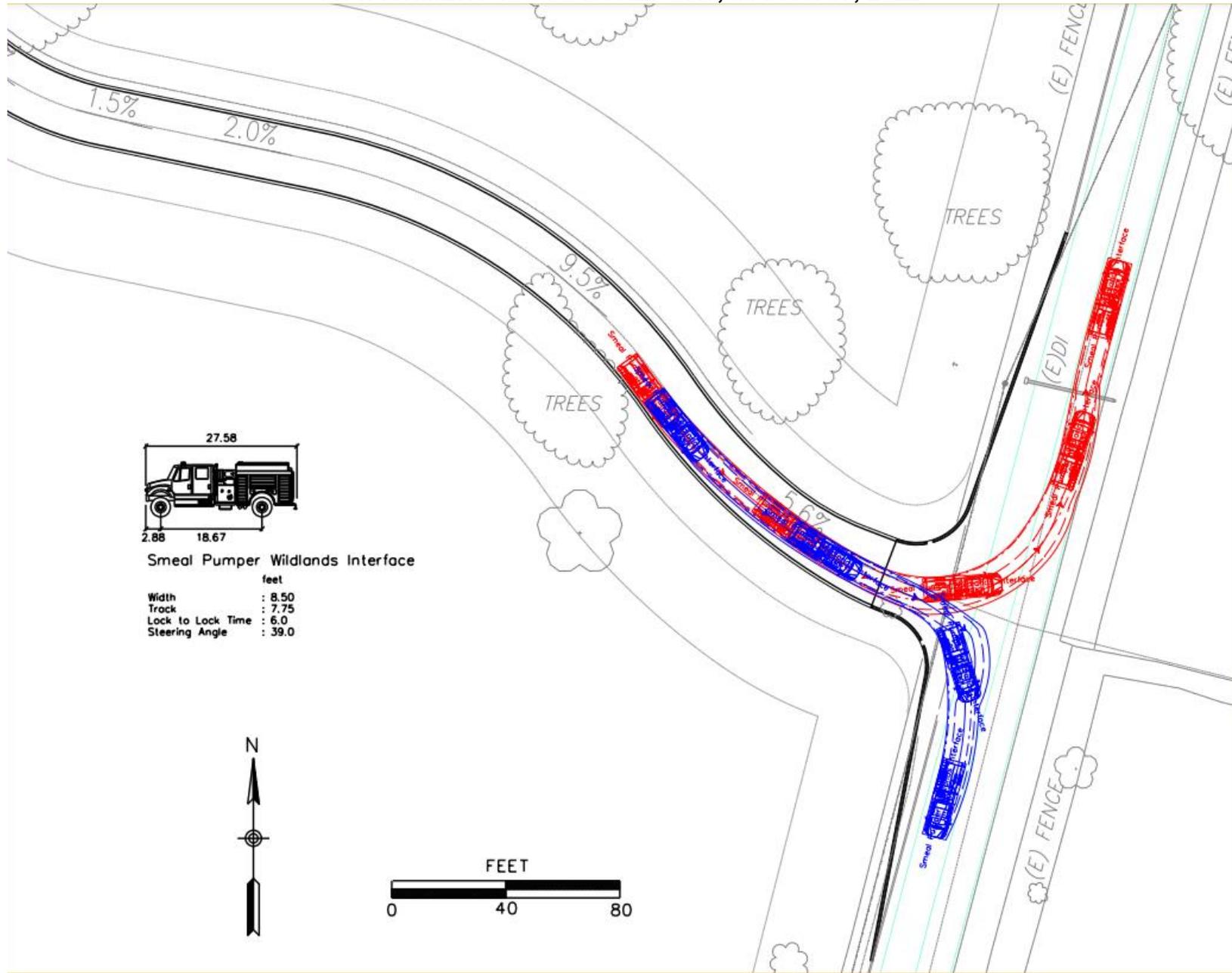
FIRE TRUCK OUTBOUND

TM21-0002 SIERRA VIEW ESTATES  
 ATTACHMENT 15 - OSTR REPORT, MARCH 17, 2022



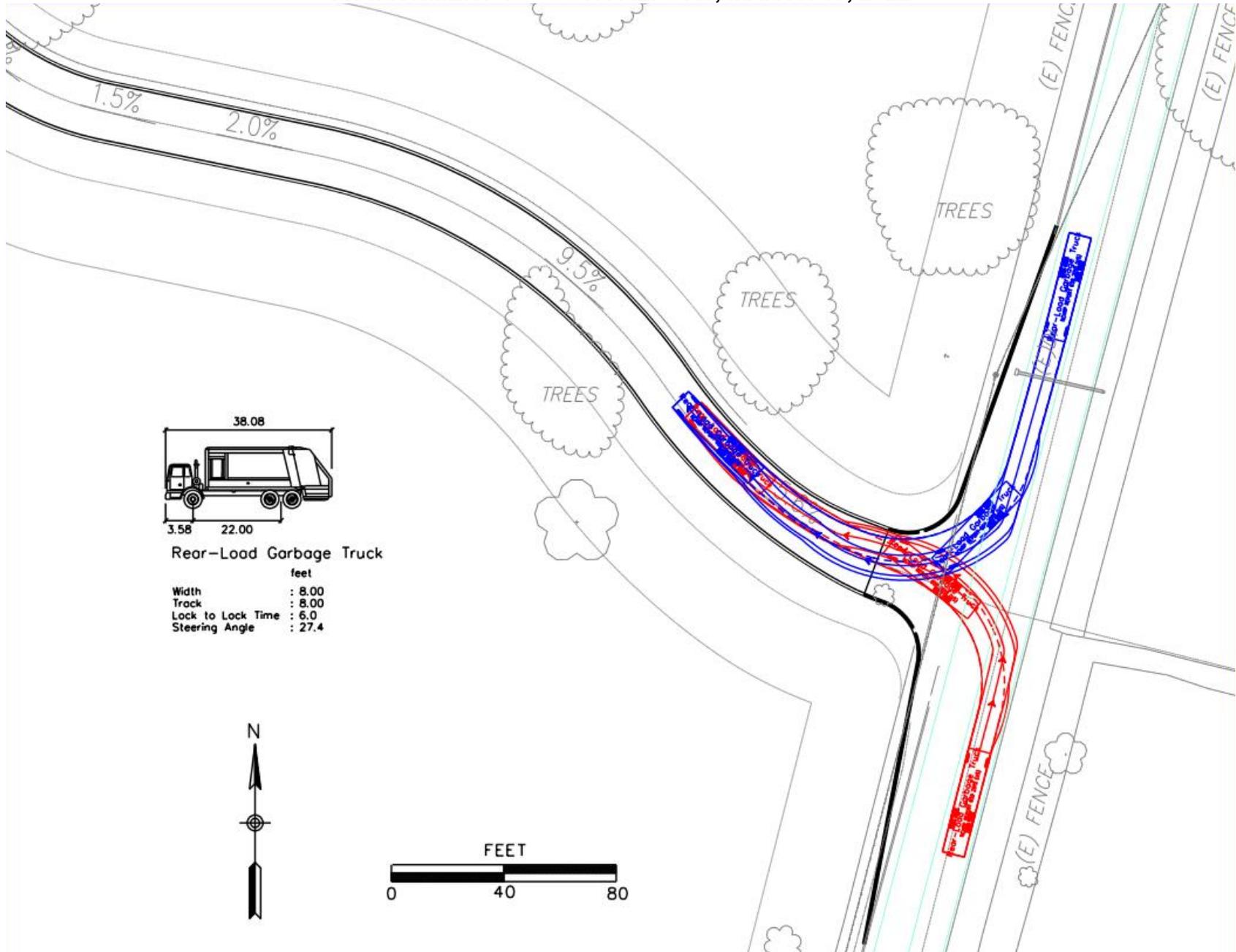
FIRE TANKER INBOUND

TM21-0002 SIERRA VIEW ESTATES  
 ATTACHMENT 15 - OSTR REPORT, MARCH 17, 2022



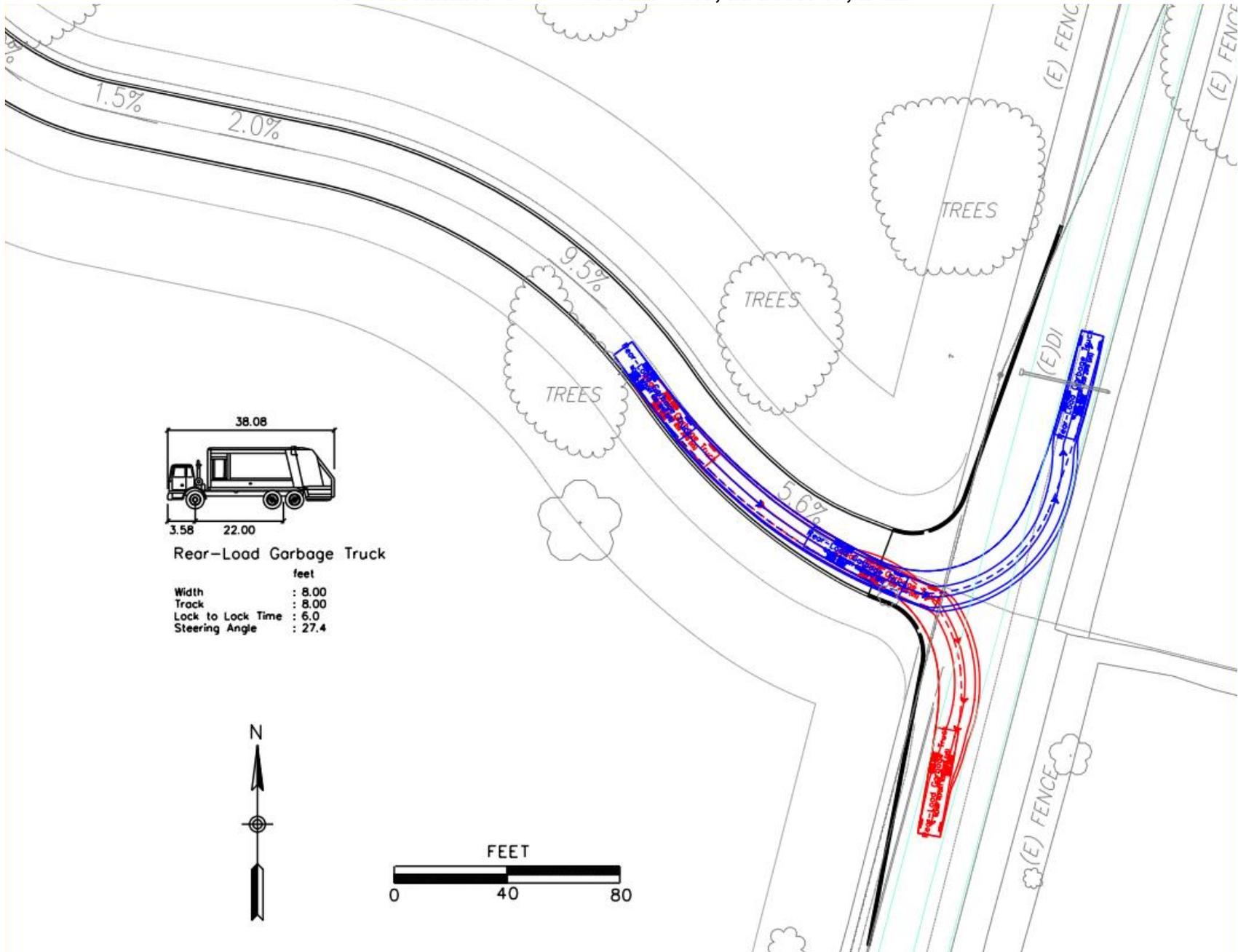
FIRE TANKER OUTBOUND

TM21-0002 SIERRA VIEW ESTATES  
 ATTACHMENT 15 - OSTR REPORT, MARCH 17, 2022



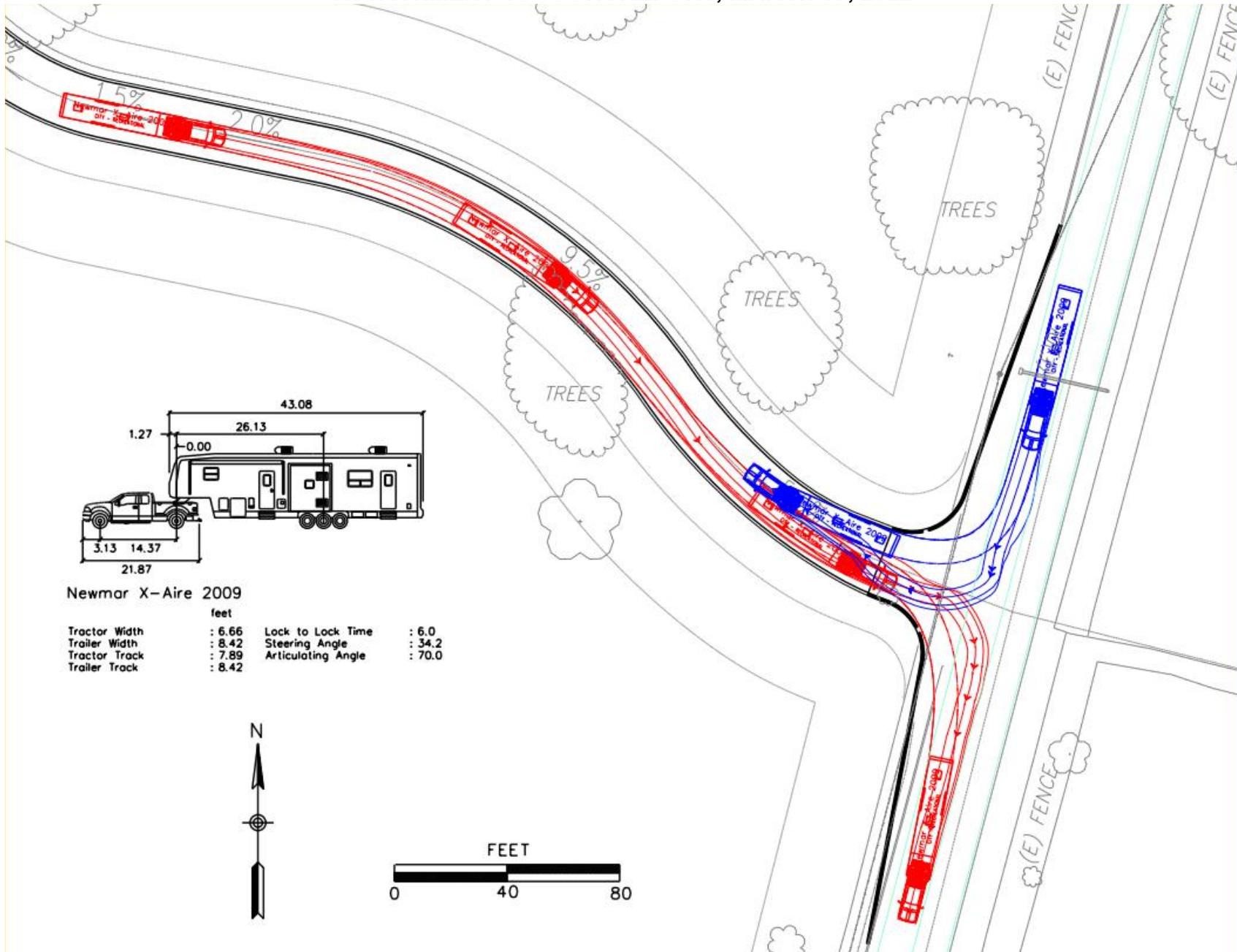
GARBAGE INBOUND

TM21-0002 SIERRA VIEW ESTATES  
 ATTACHMENT 15 - OSTR REPORT, MARCH 17, 2022



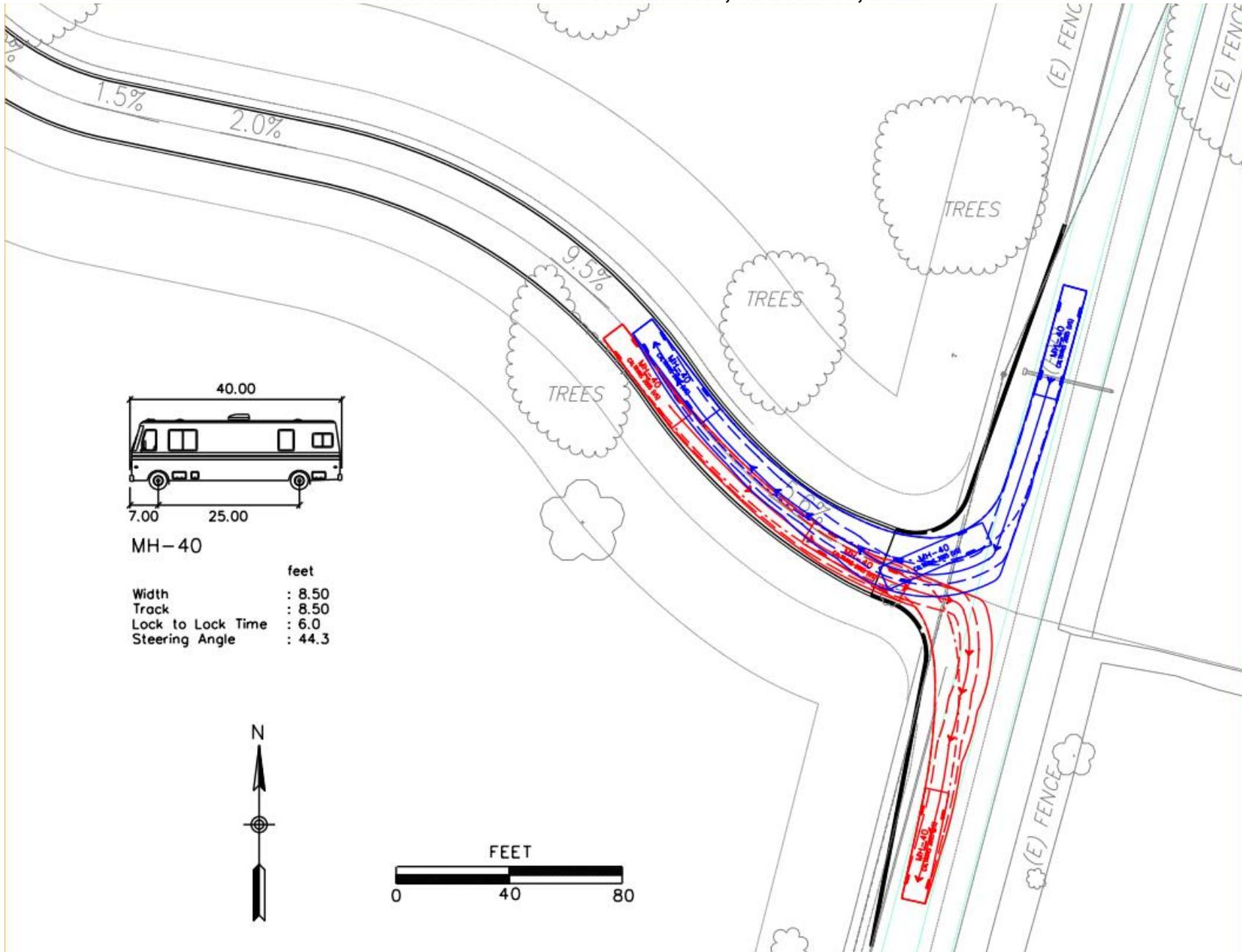
GARBAGE OUTBOUND

TM21-0002 SIERRA VIEW ESTATES  
 ATTACHMENT 15 - OSTR REPORT, MARCH 17, 2022



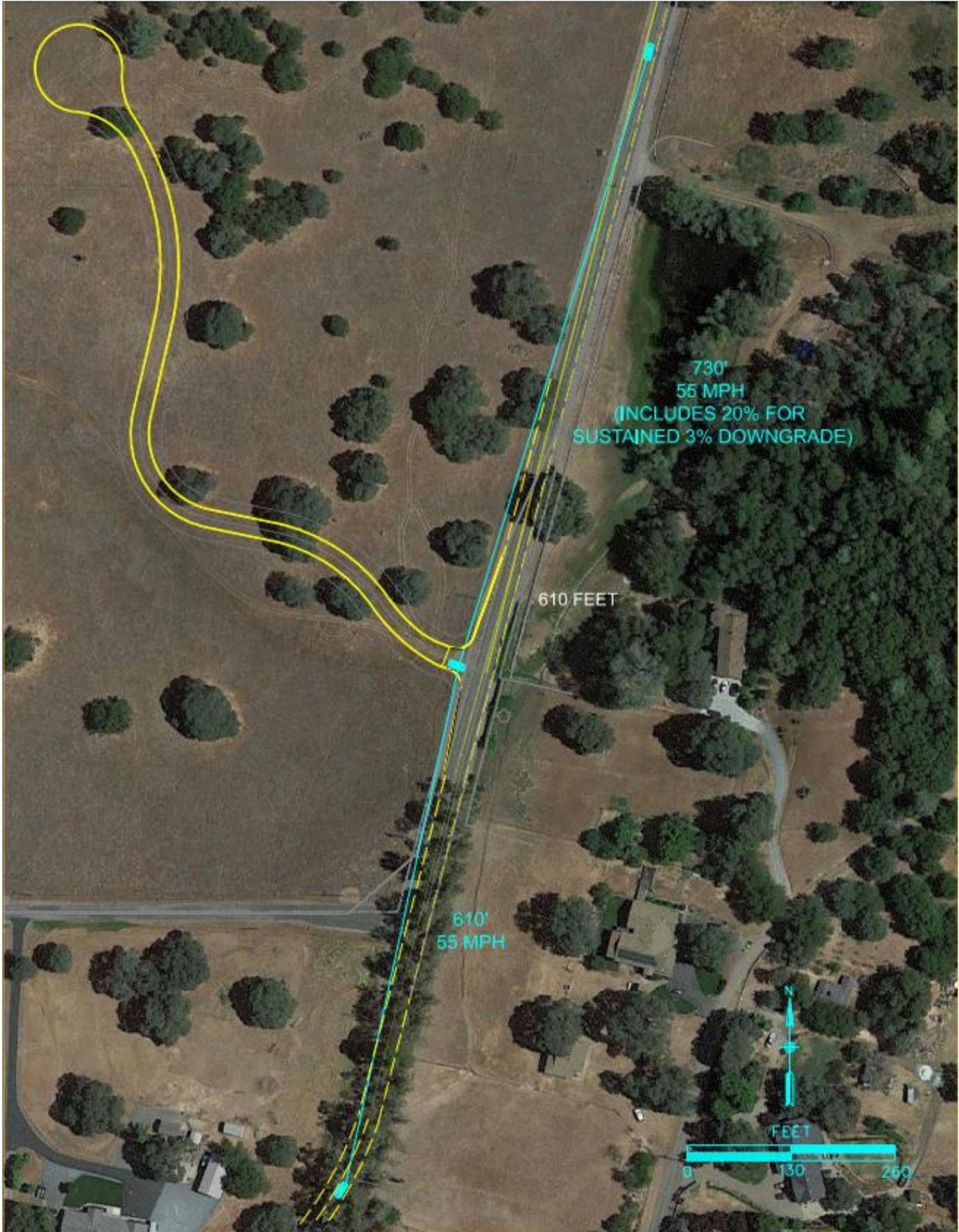
FIFTH WHEEL

TM21-0002 SIERRA VIEW ESTATES  
 ATTACHMENT 15 - OSTR REPORT, MARCH 17, 2022



40 MOTOR HOME

TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 15 - OSTR REPORT, MARCH 17, 2022



SIGHT DISTANCE

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 15 - OSTR REPORT, MARCH 17, 2022**

Mr. Harry Boyajian  
March 17, 2022  
Page 15

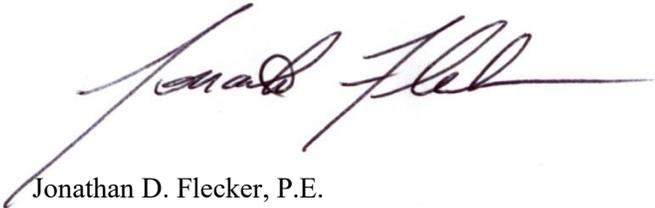
**CONCLUSIONS**

The proposed project will develop a six-unit subdivision along S. Shingle Road in Shingle Springs with access from a new intersection. No on-site traffic issues are noted with completion of the project; however, the sight lines at the project driveway should be confirmed to meet the required sight distance standards.

Should you have any questions, please free to contact me directly at (916) 660-1555. You may also reach me via e-mail at [jflecker@kdanderson.com](mailto:jflecker@kdanderson.com).

Sincerely,

**KD Anderson & Associates, Inc.**



Jonathan D. Flecker, P.E.  
Transportation Engineer



**KDA**

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 16 - WILDLAND FIRE SAFE PLAN**

**Sierra View Estates**

**APN: 109-340-69**

**Subdivision**

2021-10-05 10:11:11 AM  
PLANNING DEPARTMENT

**Wildland Fire Safe Plan  
Amendment A**

**Prepared for:**

**Harry Boyajian**

**Prepared by:**

**CDS Fire Prevention Planning  
William F. Draper  
Registered Professional Forester  
#898  
4645 Meadowlark Way  
Placerville, CA 95667**

**October 5, 2021**

TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 16 - WILDLAND FIRE SAFE PLAN

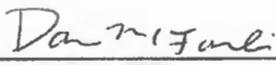
Sierra View Estates

The Amendment to the Wildland Fire Safe Plan for the Sierra View Estates subdivision does not guarantee that wildfire will not threaten, damage or destroy natural resources, homes or endanger residents. However, the full implementation of the mitigation measures will greatly reduce the exposure of structures to potential loss from wildfire and provide defensible space for firefighters and residents as well as protect the native vegetation. Specific items are listed for homeowner's attention to aid in wildfire safety. The plan and this amendment recommend and acknowledges best management practices. It is of great importance to recognize that no plan can completely protect property from wildland fire with multiple variables inherent in the wildland-urban interface.

Approved by:

  
\_\_\_\_\_  
Braden Stirling  
Fire Marshal  
El Dorado County Fire Protection District

10/20/2021  
Date

  
\_\_\_\_\_  
Darin McFarlin, FCS  
Fire Prevention  
California Department of Forestry and Fire Protection

10/20/2021  
Date

Prepared by:

  
\_\_\_\_\_  
William F. Draper  
RPF #898

10/20/21  
Date



**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 16 - WILDLAND FIRE SAFE PLAN**

**Sierra View Estates  
Amendment A**

**PURPOSE**

Amendment A to the Sierra View Estates Wildland Fire Safe Plan is to update the original plan that was completed September 15, 2010. Changes in State and local regulations need to be incorporated into the original plan to meet the current standards for Fire Safe. The conditions elaborated below are the changes necessary to bring the Plan and project into conformance. The project design and description shall remain the same as set forth in the original Wildland Fire Safe Plan.

**Fire Safe Update**

- Each new building must comply with current fire safe standards in the El Dorado County Fire District Fire Code, El Dorado County Code of Ordinances Chapter 8.09 (Vegetation Management and Defensible Space), California Code of Regulations Title 14 (SRA Fire Safe Regulations), California Code of Regulations Title 24, Parts 1-12 (California Buildings Standards Code), and Public Resources Code 4291 (PRC 4291) the state defensible space requirement for maintaining 100' clearances around all structures.
- The El Dorado County Fire District (EDCFD) provides all fire and emergency medical services to this project. The California Department of Forestry and Fire Protection (CALFIRE) has wildland fire responsibility in this state responsibility area (SRA). The project is located in a wildland fire threat map "High" Fire Hazard Severity Zone as prepared by CAL FIRE as part of its Fire Resource and Assessment Program (FRAP) in 2007.
- All dwellings shall be required to install and maintain an approved automatic fire sprinkler system that complies with the standards of California Code of Regulations Title 24, Part 2.5 and EDHFD standards. All fire sprinkler plans shall be reviewed and approved by EDCFD prior to construction.
- Implementation of Wildland-Urban Interface Fire Areas Building Standards (7A) will be required for the construction of all new residences. These standards address roofing, venting, eave enclosure, windows, exterior doors, siding, and decking.
- All parcels shall provide a minimum thirty (30) foot setback for all buildings from all property lines and/or the center of the road. When a thirty (30) foot setback is not possible for practical reasons, which may include but are not limited to parcel dimensions or size, topographic limitations, or other easement, the local jurisdiction shall provide for same practical effects.

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 16 - WILDLAND FIRE SAFE PLAN**

- Same practical effect requirements shall reduce the likelihood of home-to-home ignition. Same practical effect options may include, but are not limited to noncombustible block walls or fences; five (5) feet of noncombustible material horizontally around the structure; installing hardscape landscaping or reducing exposed windows on the side of the structure with less than thirty (30) foot setback.
- A five (5) foot ember resistant zone is required immediately adjacent and around all habitable structures built after July 1, 2021.
- The water supply for each property is to be wells. Each residence is required to provide water storage in a location and of sufficient quantity as described in El Dorado County Regional Fire Protection Standard Water Supplies for Suburban and Rural Fire Fighting, Standard #D-003 effective March 24, 2021. A temporary water source may be required prior to the start of construction.
- If gates are used on the roadways and/or driveways, the gated entries serving fire apparatus roadway/driveways shall meet the fire protection standards established by El Dorado County Fire District at the time of their construction and use.
- Electronic and manual gates obstructing fire apparatus access shall meet the minimum standards of El Dorado County Fire District as identified in Standard B-002 at the time of installation.
- All fencing adjacent to undeveloped property/open space shall be non-combustible.
- The State of California required Fire Safe clearances (PRC 4291) shall be implemented around all structures. The County of El Dorado Code Chapter 8.09 also applies. Clearances will be required at the time of construction by the County.
- El Dorado County Oak Tree Ordinance applies to the removal of any oak tree on any of the lots. The ordinance does not prevent the pruning of any oak tree that interferes with fire safe maintenance.
- Only California Fire Marshal approved fire resistive composite deck material, wood or non-combustibles shall be allowed for decks.
- A Homeowners Association (HOA) or other entity acceptable to the EDCFD shall be created for the purpose of funding the maintenance of the FHRZ's and other fire safe requirements on an on-going basis. The source of funding shall also be established.
- A Notice of Restriction (NOR) shall be filed with the final parcel map which stipulates that a Wildland Fire Safe Plan has been prepared and wildfire mitigation measures must be implemented. EDCFD shall review and approve this NOR prior to the recordation of the final map with the County of El Dorado.
- The El Dorado County Fire District and the Homeowners Association shall review and update the Wildland Fire Safe Plan no less than every 5 years as necessary to determine if additional Fire Safe measures shall be implemented to comply with current state and local regulations.
- All other provisions in the original Wildland Fire Safe Plan dated August 18,2010 remain in effect.

TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 16 - WILDLAND FIRE SAFE PLAN

APN 10934069



Disclaimer: This depiction was compiled from unverified public and private sources and is illustrative only. No representation is made as to accuracy of this information. Parcel boundaries are particularly unreliable. Users make use of this depiction at their own risk.

Printed on 11/15/2007 from El Dorado County Surveyor's Office



Aerials Copyright 2003,2004,2007 AirPhotoUSA, LLC. All Rights Reserved



Map displayed in State Plane Coordinate System  
(NAD 1983 California Zone 2, feet)



**EL DORADO COUNTY REGIONAL  
FIRE PROTECTION STANDARD**



**Water Supplies for Suburban and Rural Fire Fighting**  
STANDARD #D-003 EFFECTIVE – 3/24/2021

**I. PURPOSE:**

The purpose of this standard is to communicate the minimum level of water storage and delivery system requirements for one- and two-family dwellings as approved under the reduced fire flow allowance within the fire jurisdictions that adopt this standard.

**II. BACKGROUND:**

The California Fire Code (CFC) Section 507.1 requires an approved water supply capable of providing the required fire flow for fire protection to premises upon which facilities, buildings, or portions of buildings which are hereinafter constructed or moved into or within the jurisdiction. The CFC Section 507.2 further explains that the water supply shall consist of reservoirs, pressure tanks, elevated tanks, water mains or other fixed systems capable of providing the required fire flow. The CFC, as amended locally, requires the minimum fire flow for residential one- and two-family dwellings to be 1,000 gallons per minute for a 1-hour duration for dwellings 3,600 square feet or smaller. For dwellings 3,601 square feet or greater, the minimum fire flow is 1,000 gallons per minute for a 2-hour duration. The CFC grants the fire code official the authority to reduce the fire flow requirements for buildings in rural areas where the development of full fire flow requirements is impractical.

**III. SCOPE:**

This standard identifies a method of determining the minimum requirements for alternative water supplies for structural firefighting purposes in areas where the Authority Having Jurisdiction (AHJ) determines that adequate and reliable water supply systems for firefighting purposes do not otherwise exist. The CFC Section B103.3 allows the AHJ to use NFPA 1142.

**IV. WHERE REQUIRED:**

An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises on which facilities, buildings, or portions of buildings are hereafter constructed or moved into or within the jurisdiction. *(Structural additions may require existing water supply systems to upgrade from 2.5" to 4" systems on a case-by-case basis as determined by the AHJ).*

TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 16 - WILDLAND FIRE SAFE PLAN



**EL DORADO COUNTY REGIONAL  
FIRE PROTECTION STANDARD**

**AUTOMATIC & MANUAL GATES ON FIRE ACCESS ROADWAYS &  
DRIVEWAYS**

STANDARD #B-002

EFFECTIVE 03-30-2009

REVISION 02-21-2019

**PURPOSE**

It is the intent of this standard to provide for quick, reliable and easy access of emergency response fire apparatus into gated communities.

**SCOPE**

This standard shall apply to all automatic gates in El Dorado County installing access control devices or systems.

**AUTHORITY**

Chapter 5, Section 503 of the California Fire Code, 2016 Edition, requires that the installation of security gates across a fire apparatus access road shall be approved by the Fire Chief. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. Electric gate operators, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200.

The Fire Chief is authorized to modify any of the provisions of this standard upon application in writing by the owner, a lessee, or a duly authorized representative where there are practical difficulties in the way of carrying out the provisions of this standard, provided that the spirit of the standard shall be complied with and public safety is secured. The particulars of such modification and the decision of the Fire Chief shall be entered upon the records of the Department and a signed copy shall be furnished to the applicant.

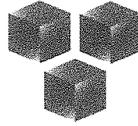
**DEFINITIONS**

**Roadway** - any surface designed, improved, or ordinarily used for vehicle travel

**Driveway** - a vehicular access that serves no more than two buildings, with no more than three dwelling units on a single parcel, and any number of accessory

**AHJ** - agency having jurisdiction

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 17 - DESIGN WAIVER REQUEST**



**LEBECK**  
ENGINEERING, INC.

2021 DEC 16 PM 1:56  
RECEIVED  
PLANNING DEPARTMENT

October 26, 2021

**Design Waiver Request  
Sierra View Estates, a Rural Subdivision**

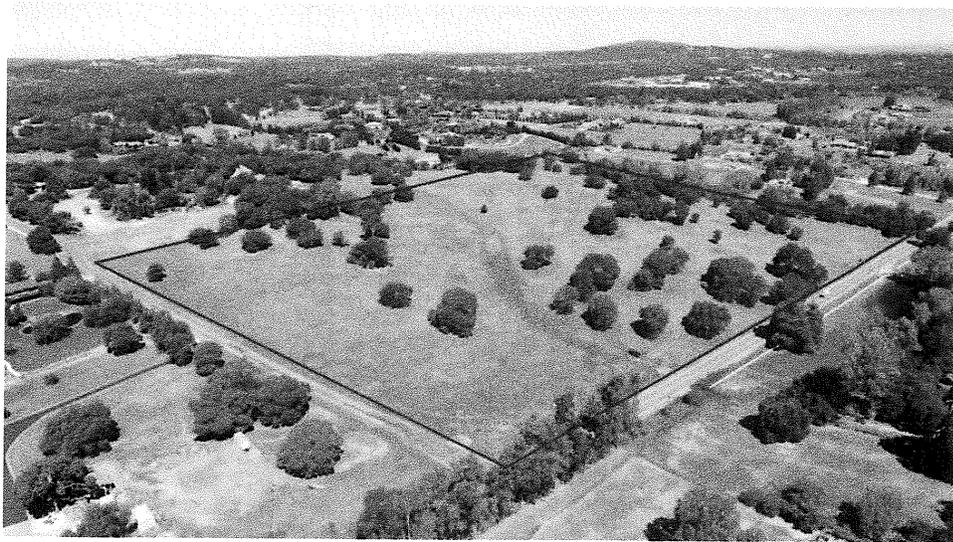
The proposed **Sierra View Estates** project site is located on South Shingle Road at Big Branch Road in the Shingle Springs, CA area, APN: 109-340-069, Parcel 3, 41/PM/65.

We respectfully request a waiver of the requirements of EDC Std. Plan 101C to:

- 1.) Modify 101C in order to comply with current EDC Fire Protection District standards. The proposed A.B. paved roadway width will be increased from 18' to 20' width, with 1-ft unpaved shoulders on each side. (Note: a short section (approximately 170 lf) has a 13.9% slope).

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**BIOLOGICAL RESOURCES ASSESSMENT AND RARE PLANT SURVEY  
FOR THE  
±32-ACRE SIERRA VIEW ESTATES STUDY AREA  
SHINGLE SPRINGS, EL DORADO COUNTY, CALIFORNIA**



*Prepared for:*

Harry Boyajian, Jr.  
4348 Swift Circle  
Shingle Springs, CA 95682

*Prepared by:*



11601 Blocker Drive, Suite 100  
Auburn, California 95603  
(530) 888-0130

2021 DEC 14 PM 2:16  
RECEIVED  
PLANNING DEPARTMENT

**FILE COPY**

**SEPTEMBER 2021**

**TM21-0002**

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**TABLE OF CONTENTS**

<b>Introduction.....</b>	<b>1</b>
Project Location.....	1
Project Setting.....	1
Objectives of Biological Resources Assessment and Rare Plant Survey.....	1
<b>Methods.....</b>	<b>4</b>
Background Material Review .....	4
Special-Status Species Reports.....	4
Field Assessments.....	4
<b>Survey and Literature Search Results.....</b>	<b>5</b>
Soils.....	5
Auburn silt loam, 2 to 30 percent slopes.....	5
Auburn very rocky silt loam, 2 to 30 percent slopes.....	5
Rescue sandy loam, 2 to 9 percent slopes.....	7
Rescue very stony sandy loam, 3 to 15 percent slopes .....	7
Hydrology .....	8
Biological Communities.....	8
Blue Oak – Foothill Pine Woodland .....	10
Annual Grassland .....	10
Riparian .....	10
Road .....	15
Aquatic Resources .....	15
Pond .....	15
Intermittent Stream.....	15
Wetland Swale.....	15
Wildlife Occurrence and Use.....	15
Special-Status Species .....	15
Plants .....	16
Animals .....	21
<b>Potential Impacts, Mitigation and Recommendations.....</b>	<b>25</b>
Potential Impacts .....	25
Aquatic Resources .....	25
Streams, Pond, and Riparian Habitat .....	25
Oak Conservation.....	25
Important Biological Corridor (IBC) .....	27
Special-Status Plants .....	27
Special-Status Wildlife .....	27
Nesting Raptors and Migratory Birds.....	27
<b>References and Other Resources.....</b>	<b>28</b>

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**FIGURES**

Figure 1. Site & Vicinity.....	2
Figure 2. Aerial Photograph .....	3
Figure 3. Soils Map.....	6
Figure 4. Habitat Map.....	9
Figure 5a-5d. Aerial and Site Photos.....	11-14
Figure 6a. CNDDDB Speical-status Plant Species Occurrence Locations.....	17
Figure 6b. CNDDDB Speical-statusAnimal Species Occurrence Locations .....	23
Figure 7. Potential Impacts .....	26

**TABLES**

Table 1. Habitat Components Present Within the Sierra View Estates Study Area .....	10
Table 2. Special-Status Plants Determined to Have Some Potential to Occur within the Sierra View Estates Study Area .....	18

**APPENDICES**

- Appendix A. Plant Species Observed Within the Study Area
- Appendix B. Potentially-Occurring Special-Status Plants
- Appendix C. Potentially-Occurring Special-Status Animals

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**Biological Resources Assessment and Rare Plant Survey  
for the  
±32-ACRE SIERRA VIEW ESTATES STUDY AREA**

**INTRODUCTION**

---

**Project Location**

Salix Consulting, Inc. (Salix) has prepared a Biological Resources Assessment and Rare Plant Survey for a ±32-acre parcel located at Big Branch Road and South Shingle Road, approximately 2.5 miles southwest of the unincorporated community of Shingle Springs, El Dorado County, California. It is situated in Section 14, Township 9 North and Range 9 East on the Shingle Springs, California 7.5-minute USGS topographic quadrangle (Figure 1). The approximate coordinates for the center of the property are 38°37'57.04"N and 120°56'52.89W.

**Project Setting**

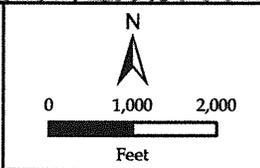
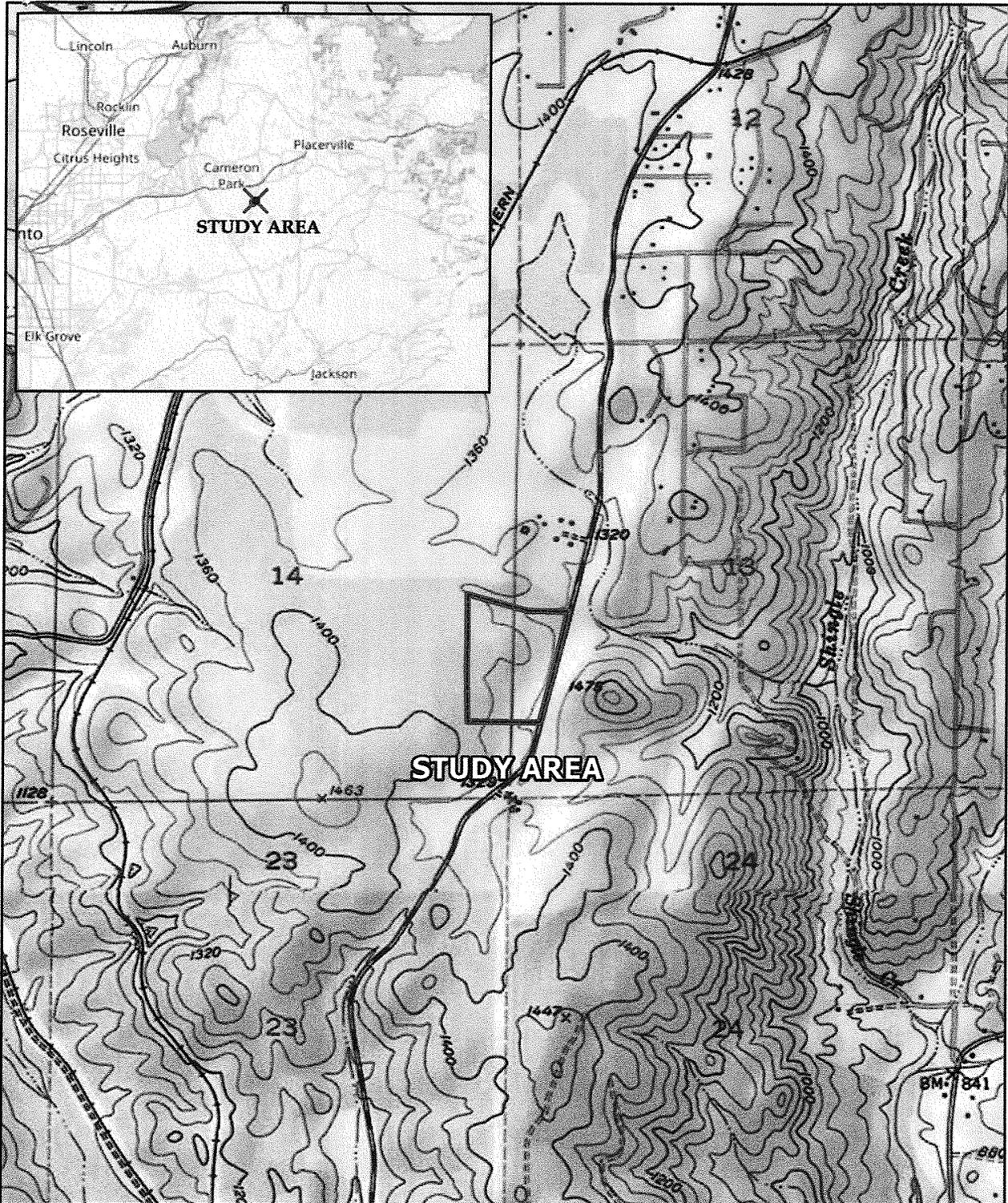
The study area is situated in the lower Sierra Nevada foothills southwest of Shingle Springs at elevations between 1315 and 1394 feet. The property is bordered on the south by Big Branch Road and large-lot development and on the east by South Shingle Road and similar development. Large-lot parcels are also located on the northern and eastern boundaries. The study area is undeveloped; a portion of a pond is located on the central northern boundary (Figure 2).

The County parcel data website indicates that the study area is in County rare plant mitigation zone 1, which is defined as lands in the "rare soils study area" but outside the ecological preserve overlay (El Dorado County Code Chapter 17.71).

**Objectives of Biological Resources Assessment and Rare Plant Survey**

- Identify and describe the biological communities present in the study area;
- Record plant and animal species observed in the study area;
- Determine if any sensitive habitats (including important biological corridors and/or oak woodlands) or special-status plant and animal species occur or could occur on the site;
- Conduct a survey to determine if special-status plants are present, especially those found in the Rescue soils;
- Assess potential impacts to natural resources; and
- Provide conclusions and recommendations

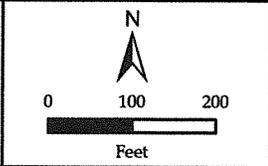
**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**



Source Maps: USGS Topographic Map  
Shingle Springs Quad 1:24,000  
S13+14 T9N R9E

**Figure 1**  
**SITE AND VICINITY MAP**  
*Sierra View Estates*  
Shingle Springs, El Dorado County, CA

TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY



 Study Area  
(±31.85 acres)

Imagery: 5-4-21 Salix Consulting, Inc.

**Figure 2**  
**AERIAL MAP**  
*Sierra View Estates*  
Shingle Springs, El Dorado County, CA

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

## **METHODS**

---

### **Background Material Review**

Salix biologists reviewed the proposed tentative subdivision map for this site, aerial photographs (Google and similar), the Latrobe and Shingle Springs USGS topographical maps, the *El Dorado County General Plan (Conservation and Open Space Element, October 2017)*, and the *El Dorado County Oak Resources Management Plan (September 2017)* for this analysis. This Biological Resources Assessment is prepared in conformance with General Plan Policy 7.4.2.8.C, which identifies requirements for report content.

### **Special-Status Species Reports**

To determine which special-status species could occur within or near the study area Salix biologists queried the California Natural Diversity Data Base (CDFW 2021), the California Native Plant Society Inventory (CNPS 2021), and the US Fish and Wildlife Service Information for Planning and Consultation (USFWS IPaC 2021) database for reported occurrences of special-status fish, wildlife, and plant species in the region surrounding the study area. The six-quadrangle search area included the Shingle Springs, Latrobe, Placerville, Clarksville, Folsom SE, and Coloma USGS quadrangles. Salix biologists also reviewed the California Department of Fish and Wildlife list of Species of Special Concern lists for the project vicinity.

For the purposes of this report, special-status species are those that fall into one or more of the following categories:

- Listed as endangered or threatened under the federal Endangered Species Act (or candidate species, or formally proposed for listing),
- Listed as endangered or threatened under the California Endangered Species Act (or proposed for listing),
- Designated as rare, protected, or fully protected pursuant to California Fish and Game Code,
- Designated a Species of Special Concern by the California Department of Fish and Wildlife, or
- Designated as Ranks 1, 2, or 3 on lists maintained by the California Native Plant Society.

### **Field Assessments**

Field assessments of the study area were conducted by Jeff Glazner and Hunter Gallant on May 4, and by Jeff Glazner on May 31, 2021, to characterize existing conditions, to assess the potential for sensitive plant and wildlife resources to occur, and to determine if aquatic resources are present. The botanical survey was conducted in accordance with the CDFW (2018) *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities*. These guidelines require that rare plant surveys be conducted at the proper time of year when rare or endangered species are both evident and identifiable. The rare plant survey was floristic in nature, focusing on searching for each of the target species noted in the *Special Status Species/Plants* section below. Each survey was conducted on foot in a

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

measured and meandering fashion. Plants and animals observed were documented, and habitat types were determined.

Biological communities of the study area were mapped, representative ground photographs were taken, and an Unmanned Aerial Vehicle (UAV) was utilized to obtain representative aerial photos and to generate an aerial basemap, which is used in this document.

Plants observed are listed in Appendix A; animals observed within the study area are included in the *Wildlife Occurrence and Use* section below. Plant names are according to the Jepson Herbarium, Jepson Flora Project (Jepson eFlora) and updated literature that appears in the eflora. Standard manuals were used as needed to identify wildlife species observed.

## **SURVEY AND LITERATURE SEARCH RESULTS**

---

### **Soils**

As illustrated in Figure 3, four soil units have been identified on the site. Most of the site is Auburn very rocky silt loam, 2 to 30 percent slopes, and a small portion of the site in the southeast corner is Auburn silt loam, 2 to 30 percent slopes. Very small areas of Rescue sandy loam, 2 to 9 percent slopes are found along the northern boundary, and a tiny sliver of Rescue very stony sandy loam, 3 to 15 percent slopes is located along the southeastern boundary.

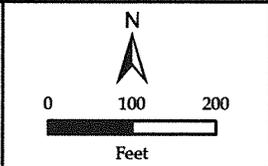
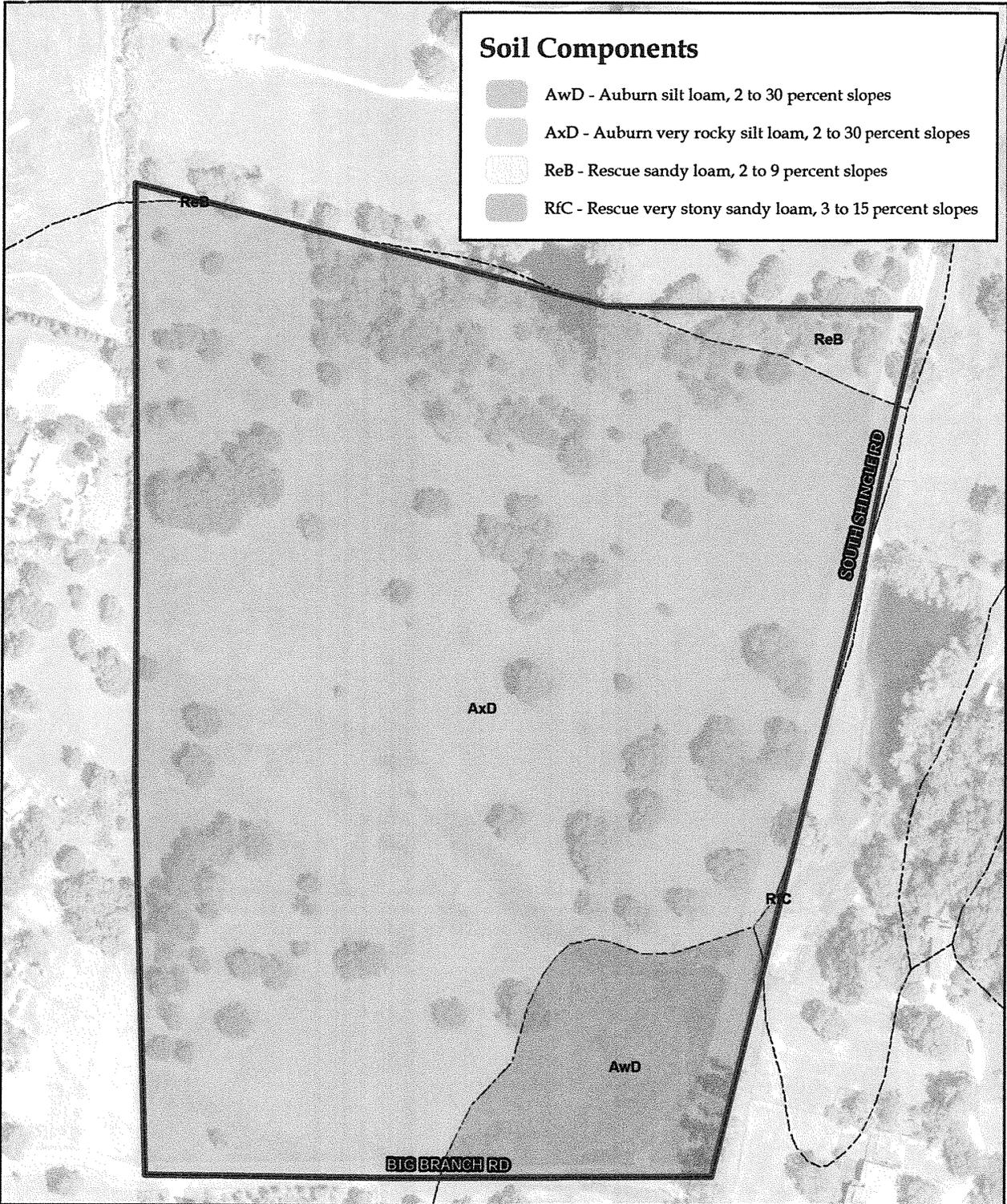
#### ***Auburn silt loam, 2 to 30 percent slopes***

The Auburn component makes up 85 percent of the map unit. Slopes are 2 to 30 percent. This component is on foothills, hills. The parent material consists of residuum weathered from basic igneous rock and/or basic residuum weathered from metamorphic rock. Depth to a root restrictive layer, bedrock, lithic, is 14 to 18 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R018XD076CA Shallow Loamy ecological site. Nonirrigated land capability classification is 6e. Irrigated land capability classification is 6e. This soil does not meet hydric criteria.

#### ***Auburn very rocky silt loam, 2 to 30 percent slopes***

The Auburn component makes up 75 percent of the map unit. Slopes are 2 to 30 percent. This component is on hills, foothills. The parent material consists of residuum weathered from basic igneous rock and/or basic residuum weathered from metamorphic rock. Depth to a root restrictive layer, bedrock, lithic, is 14 to 18 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**



Study Area  
(±31.85 acres)

Imagery: 5-4-21 Salix Consulting, Inc.

**Figure 3**  
**SOILS MAP**  
*Sierra View Estates*  
Shingle Springs, El Dorado County, CA

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

about 2 percent. This component is in the R018XD076CA Shallow Loamy ecological site. Nonirrigated land capability classification is 6e. Irrigated land capability classification is 6e. This soil does not meet hydric criteria.

The Rescue series consists of well-drained soils that are underlain by gabbrodiorite rocks at a depth of more than <10 inches. These soils are undulating to steep in the foothills. Slopes are 2 to 50 percent. Elevations range from 1,000 feet to 2,500 feet. Rescue soils are associated principally with Auburn, Argonaut, and Sobrante soils. The Argonaut series consists of well-drained soils underlain by metabasic or basic rocks at a depth of 20 to 40 inches (fig. 2). These soils are undulating to moderately steep on broad ridges. Slopes are 2 to 30 percent. Elevations generally range from 560 feet to 1,600 feet, but occasional areas are as high as 2,500 feet. Rescue soils are known to support special status plants and surveys in those areas receive more attention. Rescue soils are mapped in two small areas of the property, the northwest and northeast corners (Figure 3).

*Rescue sandy loam, 2 to 9 percent slopes*

The Rescue component makes up 85 percent of the map unit. Slopes are 2 to 9 percent. This component is on ridges, foothills. The parent material consists of residuum weathered from granodiorite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R018XD075CA Loamy ecological site. Nonirrigated land capability classification is 3e. Irrigated land capability classification is 3e. This soil does not meet hydric criteria.

*Rescue very stony sandy loam, 3 to 15 percent slopes*

The Rescue component makes up 85 percent of the map unit. Slopes are 3 to 15 percent. This component is on ridges, foothills. The parent material consists of residuum weathered from granodiorite. Depth to a root restrictive layer, bedrock, paralithic, is 55 to 59 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R018XD075CA Loamy ecological site. Nonirrigated land capability classification is 6e. Irrigated land capability classification is 6e. This soil does not meet hydric criteria.

The Argonaut component makes up 15 percent of the map unit. Slopes are 3 to 15 percent. This component is on ridges, foothills. The parent material consists of residuum weathered from andesite and/or residuum weathered from metasedimentary rock. Depth to a root restrictive layer, bedrock, paralithic, is 30 to 34 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is high. This soil is not flooded. It is not ponded. There is no zone of water

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 4e. This soil does not meet hydric criteria.

### **Hydrology**

The site occurs in the Big Canyon Creek HUC12 (180400130602) watershed part of the greater Upper Cosumnes HUC8 (18040013) watershed. Water onsite trends southeast towards South Shingle Road. The pond onsite in the northern edge of the site drains easterly through an outfall to an intermittent stream that flows easterly to the northeast corner of the site and into Shingle Creek for a short distance, before flowing into French Creek  $\frac{3}{4}$  mile away. Water near the middle of the site and towards the southern edge drain towards an upland swale that exits the site near South Shingle Road and may eventually enter Little Indian Creek  $\frac{3}{4}$  mile to the south along South Shingle Road. Both French Creek and Little Indian Creek eventually flow into Big Canyon Creek over 5 miles to the south. Big Canyon Creek flows 2.5 miles south before entering the Cosumnes River at the El Dorado and Amador County line.

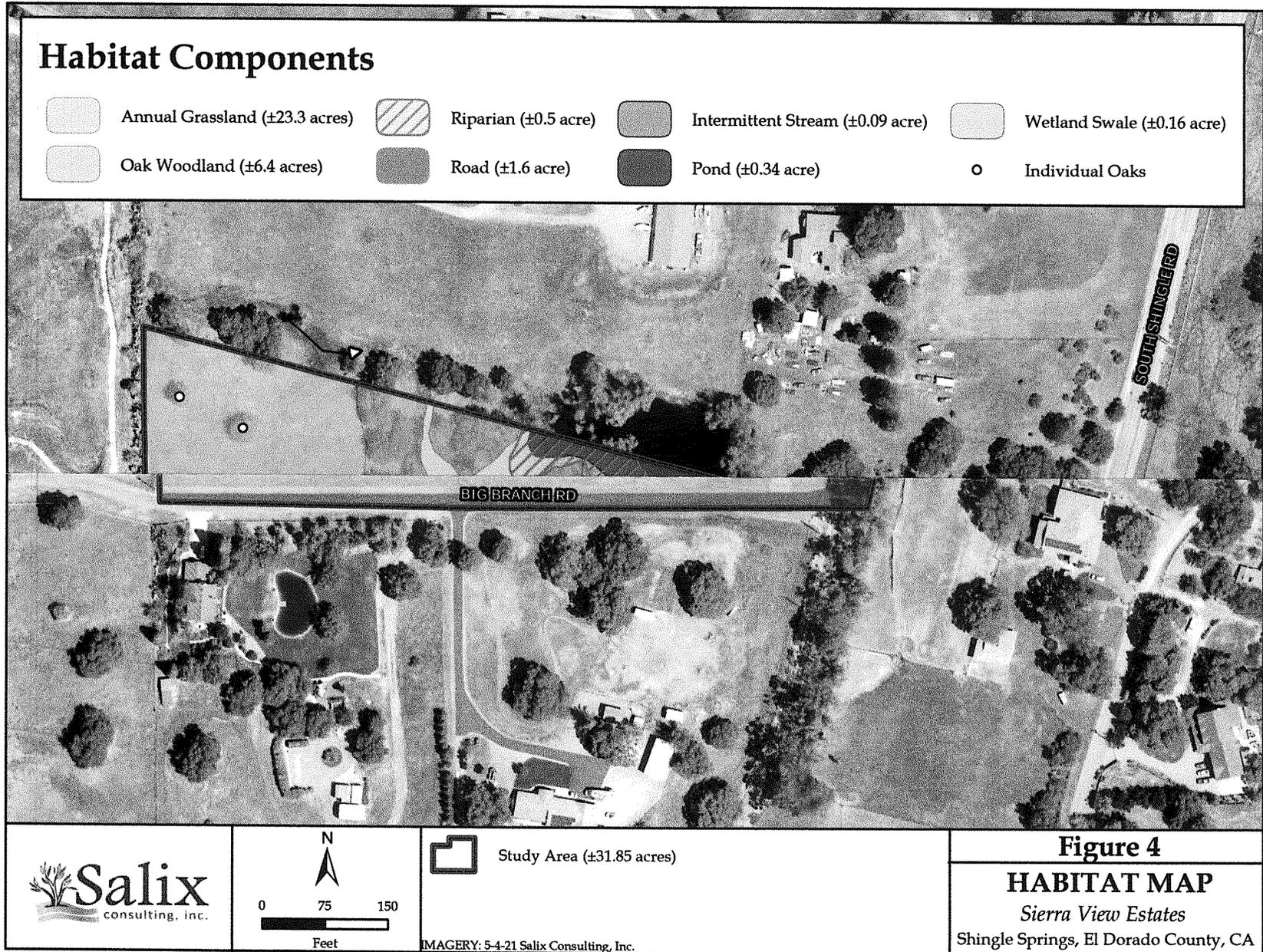
### **Biological Communities**

Prior to the field assessment and mapping of the habitats within the Sierra View Estates study area, Salix biologists reviewed the El Dorado County General Plan policies 7.4.2.8 and 7.4.2.9, pertaining to “contiguous blocks of important habitat” and the “Important Biological Corridor Overlay” (IBCO) to gain insight into County policies regarding wildlife movement and habitat protection and the policies’ application to this parcel. The study area appears to occur within an IBCO area.

The primary habitat type is annual grassland. Oak trees are scattered throughout the site, either as individual trees or small groves. Oak woodland habitat is mapped where the aggregation of oaks is sufficient to form a woodland. A pond straddles the northern boundary and is surrounded by riparian habitat. This pond is dammed along its eastern boundary and spills from the southeast corner of the pond into an intermittent stream along the northern property line.

Habitat types are summarized in Table 1 and illustrated in Figure 4. Representative site photographs are presented in Figures 5a – 5d. Descriptions of habitat types follow the table, and descriptions of the aquatic resources listed on the table follow that.

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**



**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

<b>Habitat Component</b>	<b>Approximate Acreage</b>
Blue oak/Foothill Pine Woodland	6.4
Annual Grassland	23.3
Riparian	0.5
Pond	0.3
Wetland Swale	0.2
Intermittent Stream	0.1
Road (So. Shingle Rd.)	1.6
<b>Total</b>	<b>32.4</b>

***Blue Oak - Foothill Pine Woodland***

The blue oak - foothill pine woodland habitat primarily supports three species of oaks and one species of pine. Interior live oak (*Quercus wislizeni*) and blue oak (*Q. douglasii*) are the most abundant oaks. Valley oak (*Quercus lobata*) is less common, and foothill pine (*Pinus sabiniana*) is scattered throughout the site. The shrub layer is quite sparse and contains poison oak (*Toxicodendron diversilobum*), hoary coffeeberry (*Frangula californica*), and coyote brush (*Baccharis pilularis*). The herbaceous layer is mostly grasses including hedgehog dogtail (*Cynosurus echinatus*), and forbs including miner's lettuce (*Claytonia perfoliata*), chickweed (*Stellaria media*), field hedgeparsley (*Torilis arvensis*), klamathweed (*Hypericum perforatum*), and vetch (*Vicia* spp.).

***Annual Grassland***

Annual grassland occupies almost three-fourths of the property. Common species include wild oat (*Avena fatua*), medusahead (*Elymus caput-medusae*), soft chess (*Bromus hordeaceus*), yellow starthistle (*Centaurea solstitialis*), broad leaf fillaree (*Erodium botrys*), long-beaked hawkbit (*Leontodon saxatalis*), q-tips (*Micropus californicus*), and prickly lettuce (*Lactuca serriola*).

***Riparian***

The area around the pond is lined with riparian habitat, primarily Gooding's black willow (*Salix goodingii*). Also common are red willow (*Salix laevigata*) and cottonwood (*Populus fremontii*). The wetland pond edge supports aquatic species including creeping spikerush (*Eleocharis machrostachya*), black sand spikerush (*Eleocharis pachycarpa*), northern water plantain (*Alisma triviale*), clustered field-sedge (*Carex praegracilis*), common velvet grass (*Holcus lanatus*), aquatic buttercup (*Ranunculus aquatilis*), and Baltic rush (*Juncus blaticus*).

TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY



Looking northwest over property.  
*Photo date 5-4-21*



Looking northwest over pond along northern property line.  
*Photo date 5-4-21*



**Figure 5a**

**SITE PHOTOS**  
*Sierra View Estates*

Shingle Springs, El Dorado County, CA

TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY



Looking south over southeast corner of site. Road intersection is South Shingle Road and Big Branch Road.

*Photo date 5-4-21*



Looking southwest over southern area of property.

*Photo date 5-4-21*



**Figure 5b**

**SITE PHOTOS**  
*Sierra View Estates*

Shingle Springs, El Dorado County, CA

TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY



Looking west along Big Branch Road and southern property line.  
*Photo date 5-4-21*



Looking southeast across property from western area.  
*Photo date 5-4-21*



**Figure 5c**

**SITE PHOTOS**

*Sierra View Estates*

Shingle Springs, El Dorado County, CA

TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY



Pond along northern property line.  
*Photo date 5-31-21*



Rock outcrop in open area in southwestern area of site.  
*Photo date 5-31-21*



**Figure 5d**

**SITE PHOTOS**  
*Sierra View Estates*

Shingle Springs, El Dorado County, CA

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

***Road***

South Shingle Road is on the eastern study area boundary, and Big Ranch Road is on the southern boundary. The landcover for each is asphalt with a ruderal edge.

**Aquatic Resources**

Three aquatic resource features are present in the northernmost portion of the study area: pond (0.3 acre), wetland swale (0.2 acre), and intermittent stream (0.1 acre), as described below.

***Pond***

The pond is an instream excavated feature that dries up during summer or fall. There does not appear to be any additional input to keep it wet during the summer and fall. It is fed by a wetland swale that flows in from the west. The riparian edge around the pond supports tall willow and cottonwood that overhang the open water. There is an abundant aquatic plant fringe that extends into the shallow waters.

***Intermittent Stream***

The intermittent stream flows out of the pond and along the northern property line. The stream appears to only have short duration flows and does not have a well-developed aquatic edge component. It flows through a relatively small culvert under South Shingle Road. The primary species along the stream is Italian ryegrass (*Festuca perennis*).

***Wetland Swale***

This drainage is considered a wetland swale because it is vegetated and lacks sufficient flows to regularly scour a channel. The primary species along the swale include English ryegrass, pennyroyal (*Mentha pulgium*), and curly dock (*Rumex crispus*).

**Wildlife Occurrence and Use**

The site contains suitable habitat for many resident and migratory animals. Western grey squirrel and Western mule deer were the only mammals observed, but evidence of coyote, raccoon, and striped skunk were evident. Many bird species were present during our site evaluation. The majority of bird activity and observations were from around the oak trees and riparian area. Species observed include western scrub jay, great horned owl, turkey vulture, red-tailed hawk, wild turkey, California quail, mourning dove, Brewer's blackbird, Western bluebird, Anna's hummingbird, white-breasted nuthatch, black phoebe, belted kingfisher, acorn woodpecker, northern flicker, bushtit, oak titmouse, and spotted towhee.

**Special-Status Species**

To determine potentially-occurring special-status species, the standard databases from CDFW (CNDDDB 2021), CNPS (2021), and USFWS (IPaC 2021), were queried as described above and reviewed. These searches provided a list of regionally-occurring special-status species and were used to determine which species had at least some potential to occur within or near the study area. Figures 6a and 6b show the approximate locations

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

of reported occurrences of special-status plants and animals (respectively) within a five-mile radius of the study area (CNDDDB 2021).

Appendix B lists potentially-occurring special-status plants, and Appendix C lists potentially-occurring special-status animals compiled from our queries. The field survey and the best professional judgment of Salix biologists were used to further refine the tables in Appendices B and C. Plant species ranked 4 by CNPS are not considered further in the document.

***Plants***

Of the 16 potentially-occurring plant species in Appendix B, eight (8) species were identified as occurring within the surrounding region (generally within or just beyond a 5-mile radius of the study area) (Figure 6a). Seven (7) of these are "Pine Hills plants," which occur in the serpentine/gabbro soils of the study area.

Two (2) plants listed in Appendix B were determined to have no likelihood to occur within the study area due to the absence of suitable habitat. These include

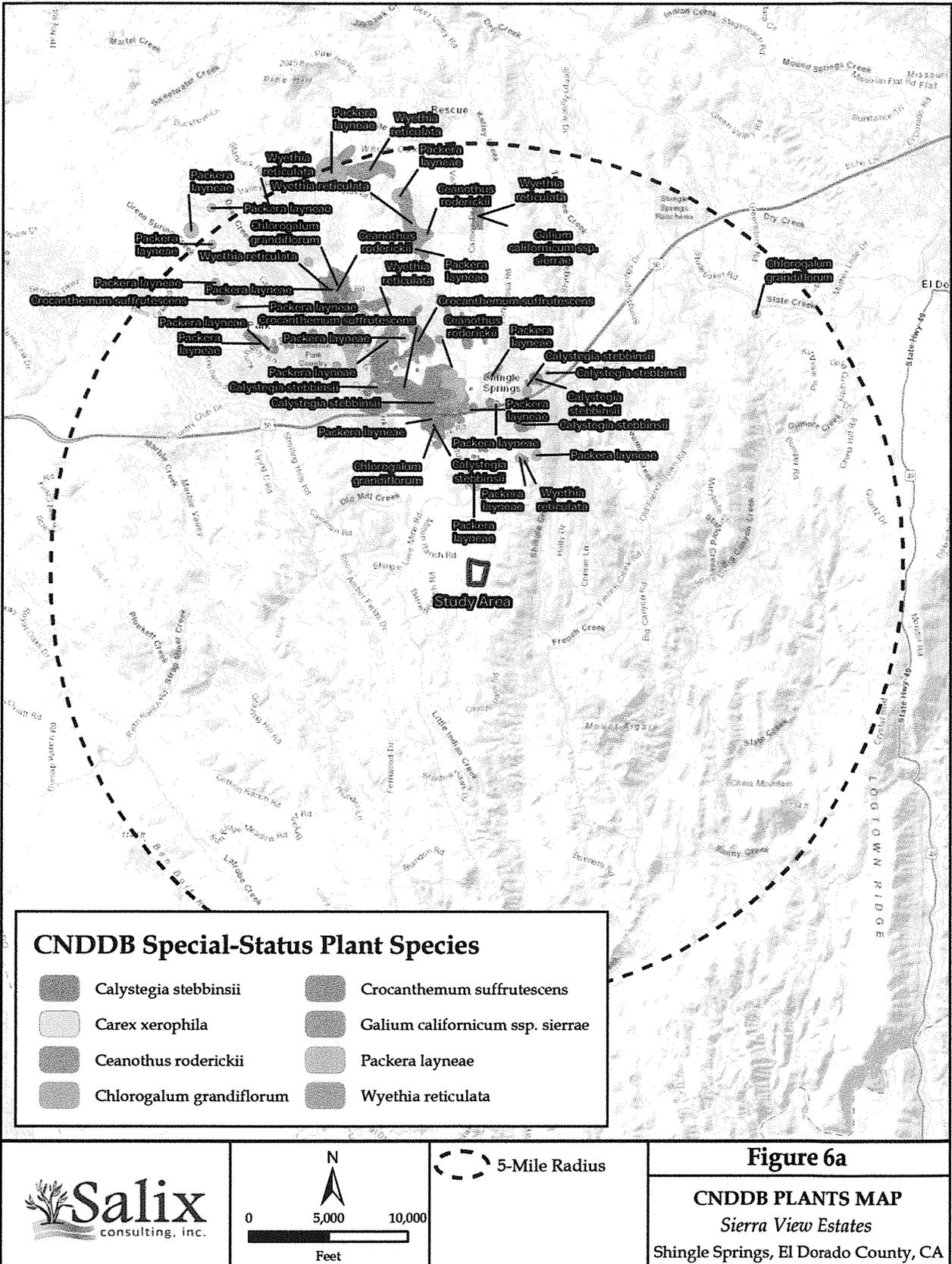
- Western viburnum (*Viburnum ellipticum*)
- Nissenan manzanita (*Arctostaphylos nissenana*)

The site occurs above the elevational range of Sanford's arrowhead (*Sagittaria sanfordii*) (Jepson 2021), and the species has been dismissed from further consideration. Additionally, the study area is located well below the range of one species, starved daisy (*Erigeron miser*), thus this species has also been dismissed from further consideration.

As noted in the Soils section above, most of the study area is mapped as Auburn very rocky silt loam, 2 to 30 percent slopes, which is not a serpentinite/gabbroic soil (Figure 3). However, due to the presence of small areas of the Rescue series soils that occur within the site, the study area is included in the County's rare plant Mitigation Zone 1, which is defined as lands in the "rare soils study area" but outside ecological preserves. Therefore, some small areas of the site provide substrates that would support the special-status plant species dependent on these soils. These areas were carefully examined during the floristic survey that was conducted as part of this assessment. These plants are listed in Table 2, along with several other special-status plants with any potential to occur. The eight species that are reported to occur within a 5-mile radius of the study area (Figure 6a) are marked with an asterisk (\*) in the table and are briefly discussed following the table.

In summary, 12 of the potentially-occurring special-status plant species identified in the queries have some potential to occur within the Sierra View Estates study area. However, none were observed during the floristic survey conducted as part of this assessment.

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**



**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

<b>Table 2. Special-Status Plants Determined to Have Some Potential to Occur within the Sierra View Estates Study Area</b>					
<b>Species</b>	<b>Status*</b>			<b>Habitat</b>	<b>Potential for Occurrence Within Study Area**</b>
	<b>Federal</b>	<b>State</b>	<b>CNPS</b>		
<b>Red Hills soaproot *</b> <i>Chlorogalum grandiflorum</i>			1B.2	Chaparral; cismontane woodland; [serpentinite or gabbroic].	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.
<b>Jepson's onion</b> <i>Allium jepsonii</i>	-	-	1B.2	Cismontane woodland; lower montane coniferous forest [serpentinite or volcanic]	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.
<b>Layne's ragwort *</b> <i>Packera layneae</i>	-FT	CR	1B.2	Chaparral; cismontane woodland; [serpentinite or gabbroic].	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.
<b>El Dorado County mules' ears *</b> <i>Wyethia reticulata</i>			1B.2	Chaparral; cismontane woodland; lower montane coniferous forest;	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.
<b>Bisbee Peak rush-rose*</b> <i>Crocانthemum suffrutescens</i>			3.2	Chaparral (often serpentinite, gabbroic, or lone soil).	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.
<b>Stebbins' morning-glory*</b> <i>Calystegia stebbinsii</i>	FE	CE	1B.1	Chaparral (openings); cismontane woodland; [serpentinite or gabbroic].	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.
<b>chaparral sedge *</b> <i>Carex xerophila</i>			1B.2	Serpentinite, gabbroic. Chaparral. Cismontane woodland. Lower montane coniferous forest.	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

<b>Table 2. Special-Status Plants Determined to Have Some Potential to Occur within the Sierra View Estates Study Area</b>					
<b>Species</b>	<b>Status*</b>			<b>Habitat</b>	<b>Potential for Occurrence Within Study Area**</b>
	<b>Federal</b>	<b>State</b>	<b>CNPS</b>		
<b>Pine Hill flannelbush</b> <i>Fremontodendron decumbens</i>	FE	CR	1B.2	Chaparral; cismontane woodland; [gabbroic or serpentinite].	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.
<b>Pine Hill ceanothus *</b> <i>Ceanothus roderickii</i>	FE	CR	1B.1	Chaparral; cismontane woodland; [serpentinite or gabbroic].	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.
<b>Eldorado bedstraw *</b> <i>Galium californicum</i> ssp. <i>sierrae</i>	FE	CR	1B.2	Chaparral; cismontane woodland; lower montane coniferous forest; [gabbroic].	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.
<b>Parry's horkelia</b> <i>Horkelia parryi</i>			1B.2	Chaparral; cismontane woodland; [especially Ione formation].	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.
<b>Tuolumne button-celery</b> <i>Eryngium pinnatisectum</i>			1B.2	Cismontane woodland; lower montane coniferous forest; vernal pools; [mesic]	Unlikely. Marginal habitat in study area. Not found during floristic surveys.

**\*Status Codes:**

**Federal**

FE Federal Endangered  
FT Federal Threatened

**State**

CE California Endangered  
CR California Rare

**CNPS**

Rank 1B Rare, Threatened, or Endangered in California  
Rank 2 R, T, or E in California, more common elsewhere  
Rank 3- More information is needed.

**\*\*Definitions for the Potential to Occur:**

None. No suitable habitat (or nesting habitat) present within the study area.

Unlikely: Minimal or marginal quality habitat in the study area. Disturbance or other activities may restrict or eliminate possibility of species occurring.

Possible. Suitable habitat occurs within the study area. Study area within range of species.

Likely. Study area provides desirable habitat for species and there is a very high probability for its occurrence. Species documented to occur nearby in similar habitat.

Observed: Species was observed within the study area.

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**Stebbins' morning glory** (*Calystegia stebbinsii*) is State listed as endangered and federally listed as endangered. It is ranked 1B.1 by CNPS. The plant is a leafy perennial herb of the morning glory family (Convolvulaceae) and looks similar to the common morning glory, the difference is the leaf shape. Flowers are white and bloom in spring. The nearest reported occurrence of the species is 1.25 miles north of the study area, in chaparral on Rescue Series soils on the west side of Lakeview Drive, about 0.5 mile south of Highway 50, Shingle Springs (1993, 1994, 2006). Stebbins' morning glory was not found in the study area during the floristic survey.

**Pine Hill ceanothus** (*Ceanothus roderickii*) is State listed as rare, federally listed as endangered, and ranked 1B.1 by CNPS. It is a low-growing shrub of the buckthorn family (Rhamnaceae) that is endemic to the Pine Hill area. Flowers are small, white clusters with a faint blue or pink tint, blooming period is April to June. Fruit is a small capsule that is globe-shaped and horned. The nearest reported occurrence of the species is 1.5 miles north of the study area, in openings in the chaparral on gabbroic soils (Rescue Series), along both sides of Highway 50 between Shingle Springs and Cameron Park (most recently in 2018). Pine Hill ceanothus was not found in the study area during the floristic survey.

**Layne's ragwort** (butterweed) (*Packera layneae*) is State listed as rare, federally listed as threatened, and ranked 1B.2 by CNPS. A perennial herb of the aster family (Asteraceae), it has yellow flowers and blooms from April to August. Besides El Dorado County, it can also be found in Yuba, Tuolumne, and Butte counties. It is found in all the units of the Pine Hill Ecological Preserve in rocky, open interior chaparral and woodland areas. The nearest reported occurrence of the species is 1.1 miles north of the study area, on chaparral on Rescue Series soils, on the west side of Lakeview Drive, south of Durock Road and north of the railroad tracks, Shingle Springs (most recently reported in 2009). Layne's ragwort was not found in the study area during the floristic survey.

**El Dorado bedstraw** (*Galium californicum* ssp. *sierrae*) is State listed as rare, federally listed as endangered, and ranked 1B.2 by CNPS. It is endemic to El Dorado County. It is low-growing perennial herb of the Rubiaceae family with pale-yellow flowers blooming in May and June. It is distinguished from other *Galium* subspecies by the very narrow leaf shape. The nearest reported occurrence of the species is 2.25 north of the study area on soil derived from gabbro parent material, between Calderwood Road and Many Oaks Lane, north of Highway 50, west of Shingle Springs (2017). El Dorado bedstraw was not found in the study area during the floristic survey.

**El Dorado mule ears** (*Wyethia reticulata*) is native to the Pine Hill area and is a member of the Asteraceae family. It has no state or federal status but is ranked 1B.2 by CNPS. It is a perennial herb that spreads by underground root sprouts (clonal). Some parent plants may be several hundred years old. The nearest reported occurrence of the species is 1.25 miles north of the study area, in chaparral recovering from grading several years prior, northeast of the intersection of Dividend Drive and Business Drive, Shingle Springs (most recently 2006). El Dorado mule ears was not found in the study area during the floristic survey.

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**Red Hills soaproot** (*Chlorogalum grandiflorum*). A perennial bulbiferous herb, it is also found in the Red Hills area of Tuolumne County. It is a native of California and a member of the Agavaceae family. It has no state or federal status but is ranked 1B.2 by CNPS. It is a perennial herb and blooms in June with flowers opening at dusk and closing at morning. It grows in chaparral on serpentine and gabbro soils, and also in ponderosa pine woodland. The nearest reported occurrence of the species is 1.25 miles north of the study area, in chaparral on Rescue Series soils, between Product Drive and Lakeview Drive, about ½ air mile south of Highway 50, Shingle Springs (most recently 2006). Red Hills soaproot was not found in the study area during the floristic survey.

**Bisbee Peak rush-rose** (*Crocانthemum suffrutescens*) is a perennial evergreen shrub, native to California and a member of the Cistaceae family. It has no state or federal status but is ranked 3.2 by CNPS. It is a low-growing shrub with yellow flowers and flat leaves covered with soft, very dense white hairs. Besides El Dorado County, it is found in Amador, Calaveras, Tuolumne, Mariposa, and Sacramento. It is a species of concern because more information is needed about this plant. The nearest reported occurrence of the species is 1.5 miles north of the study area, in chaparral on Rescue Series soils, on the east side of Cameron Park, mostly north of Highway 50 (most recently 2005). Bisbee Peak rush-rose was not found in the study area during the floristic survey.

**Chaparral sedge** (*Carex xerophila*) has no state or federal status but is ranked 1B.2 by CNPS. It is perennial herb of the Cyperaceae family that is native to California. The nearest reported occurrence of the species is 1.75 miles north of the study area, along a road and in cleared areas, within ridgetop chaparral on rocky gabbro soils, north of Highway 50, about 1 mile west of its junction with Mother Lode Drive in the Cameron Park Unit of Pine Hill Preserve (most recently in 2015). Chaparral sedge was not found in the study area during the floristic survey.

#### *Animals*

Of the 21 animal species in Appendix C, five (5) species were identified as occurring within the surrounding region (within or just beyond a 5-mile radius of the study area, Figure 6b).

The site does not contain vernal pools, streams, or other aquatic habitats that support special-status animals unique to these habitats or requiring these habitats for support, thus the following species have been dismissed from further consideration.

- Vernal pool fairy shrimp (*Branchinecta lynchi*)
- Steelhead, Central Valley ESU *Oncorhynchus mykiss irideus*
- Delta smelt (*Hypomesus transpacificus*) (Site also outside the range of the species.)
- Western spadefoot (*Spea hammondi*)
- California red-legged frog (*Rana draytonii*)
- Foothill yellow-legged frog (*Rana boylei*)
- Giant garter snake (*Thamnophis gigas*)
- Bald eagle (*Haliaeetus leucocephalus*)
- California black rail (*Laterallus jamaicensis coturniculus*)

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

- Bank swallow (*Riparia riparia*)
- Tricolored blackbird (*Agelaius tricolor*)

The site supports elderberry shrubs (*Sambucus nigra*) but the elevation of the site is above the range for the Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), thus, the species has been dismissed from further consideration.

The site does not contain loose, friable, open substrates necessary to support the Coast horned lizard (*Phrynosoma blainvillii*), and the species has been dismissed from further consideration.

The site also lacks dense coniferous and/or riparian woodlands to support the fisher (*Martes pennanti pacifica*), which has been dismissed from further consideration. No roosting habitat is present to support the pallid bat (*Antrozous pallidus*), and it has been dismissed from further consideration.

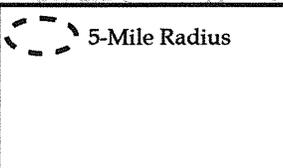
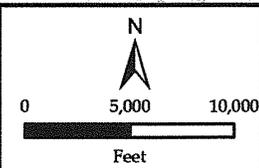
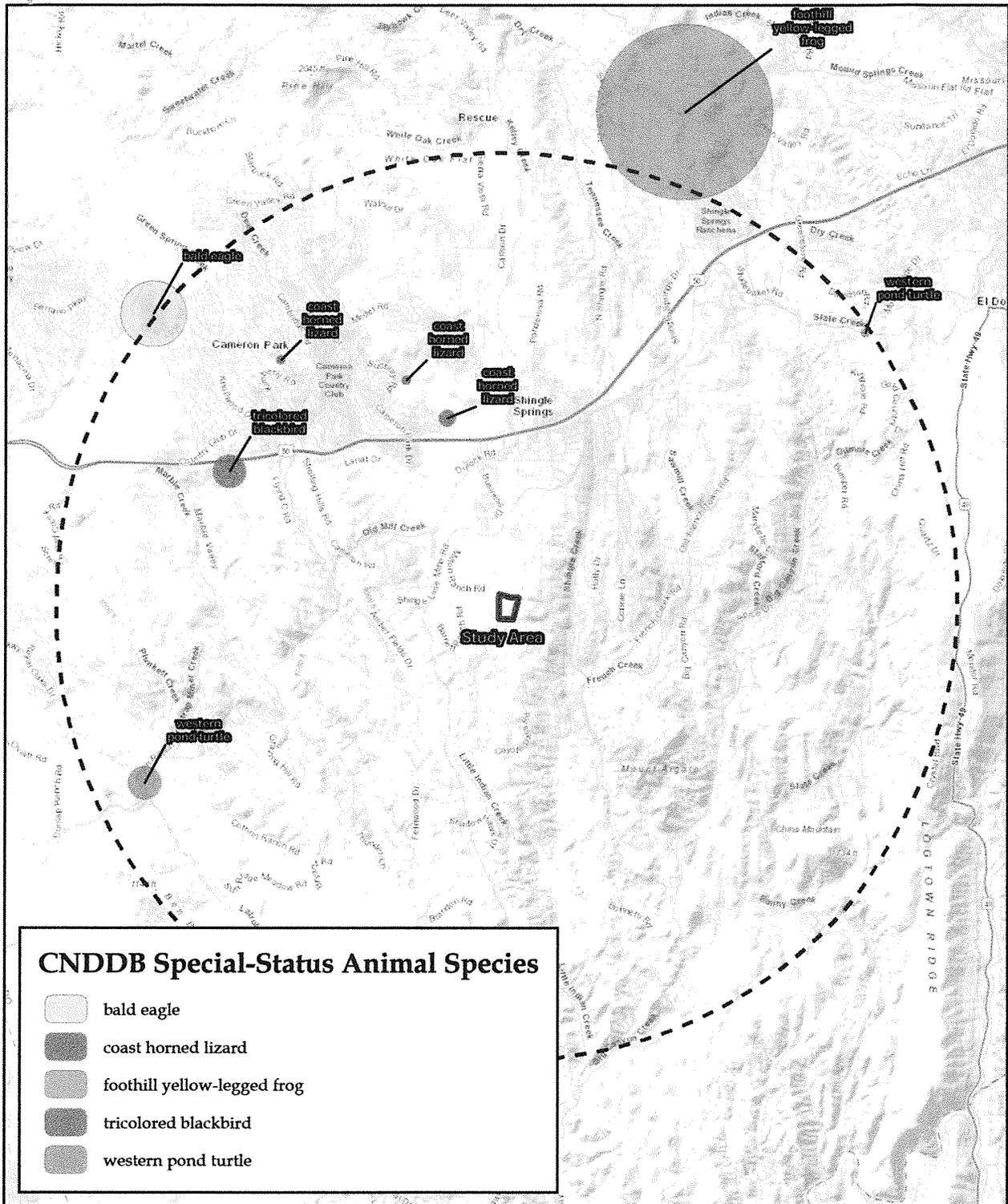
In addition to the four birds listed above that require aquatic habitats, (bald eagle, California black rail, bank swallow, and tricolored blackbird), the following additional birds have been dismissed from further consideration due to the lack of suitable nesting habitat within the study area:

- Swainson's hawk (*Buteo swainsoni*)
- Golden eagle (*Aquila chrysaetos*)
- Burrowing owl (*Athene cunicularia*)

Suitable nesting habitat is present in the trees on site for white-tailed kite (*Elanus leucurus*) and grasshopper sparrow (*Ammodramus savannarum*), which are discussed in further detail below. In addition, western pond turtle (*Actinemys marmorata*) may intermittently inhabit the pond in the northern portion of the site, but it would need to move on as the pond dries up in the summer months.

In summary, of the 21 potentially-occurring special-status animal species identified in the queries only three species have any potential to occur within the Sierra View Estates study area.

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**



**Figure 6b**  
**CNDDDB ANIMALS MAP**  
*Sierra View Estates*  
Shingle Springs, El Dorado County, CA

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**White-tailed kite (*Elanus leucurus*)** is a common to uncommon, yearlong resident in coastal and valley lowlands; rarely found away from agricultural areas. It preys mostly on voles and other small, diurnal mammals, occasionally on birds, insects, reptiles, and amphibians and forages in undisturbed, open grasslands, meadows, farmlands and emergent wetlands. White-tailed kite uses trees with dense canopies for cover. Makes a nest of loosely piled sticks and twigs and lined with grass, straw, or rootlets. Nest placed near top of dense oak, willow, or other tree stand; usually 20-100 feet above ground, near foraging area. While it is possible for white-tailed kite to occur on the site, the nearest occurrence of the species is 8.5 miles to the north, 1.6 miles north-northeast of the intersection of Placerville Road (East Bidwell) and Highway 50 in 1990. White-tailed kite was not observed during spring surveys of this site.

**Grasshopper sparrow (*Ammodramus savannarum*)** is an uncommon and local, summer resident and breeder in foothills and lowlands west of the Cascade-Sierra Nevada crest from Mendocino and Trinity counties south to San Diego County. It occurs in dry, dense grasslands, especially those with a variety of grasses and tall forbs and scattered shrubs for singing perches. It feeds primarily on insects, especially Orthoptera; it also eats other invertebrates and grass and forb seeds. Searches for food on the ground and builds a nest of grasses and forbs in a slight depression in ground, hidden at base of an overhanging clump of grasses or forbs (CDFW 2008). While it is possible for grasshopper sparrow to occur on the site, the nearest occurrence of the species is 10.5 miles southwest of the study area. It was not observed during spring surveys of this site.

**Western pond turtle (*Actinemys marmorata*)** is uncommon to common in suitable aquatic habitat throughout California, west of the Sierra-Cascade crest. It is associated with permanent or nearly permanent water in a wide variety of habitat types. Pond turtles require basking sites such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks. Turtles slip from basking sites to underwater retreats at the approach of humans or potential predators. Individuals normally associate with permanent ponds, lakes, streams, irrigation ditches or permanent pools along intermittent streams. During the spring or early summer, females move overland for up to 325 feet to find suitable sites for egg-laying. Other long-distance movements may be in response to drying of local bodies of water or other factors (CDFW 2000). The pond in the northern portion of the site may provide intermittent habitat for pond turtle, but it dries up, and any turtles would have to leave while the pond is dry. Pond turtles were not observed during the spring surveys while water was in the pond.

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**POTENTIAL IMPACTS, MITIGATION AND RECOMMENDATIONS**

---

**Potential Impacts**

The current proposed project subdivides the existing parcel into 6 lots that may have impacts beyond the conversion of annual grassland. Impacts to oaks will depend on the building envelopes proposed on each lot (Figure 7). No oak trees are currently proposed for removal, although that has not been definitively determined. It is anticipated that no aquatic resources would be impacted, as the footprint appears substantially setback from the pond and associated drainages. If the proposed project footprint changes, Salix recommends the following.

**Aquatic Resources**

The study area contains a pond, a wetland swale, and an intermittent stream that may fall under the jurisdiction of the Clean Water Act (CWA). Any fill placed in these features may require permits from federal (Corps of Engineers) and state (Regional Water Quality Control Board) regulatory agencies. If impacts are anticipated, a wetland delineation should be conducted and submitted to the U.S. Army Corps of Engineers with a request for a Jurisdictional Determination. If any aquatic resources are impacted by the proposed project, a Section 404 Clean Water Act permit will be required from the Corps of Engineers and a Section 401 Water Quality Certification will be required from the Regional Water Quality Control Board.

**Streams, Pond, and Riparian Habitat**

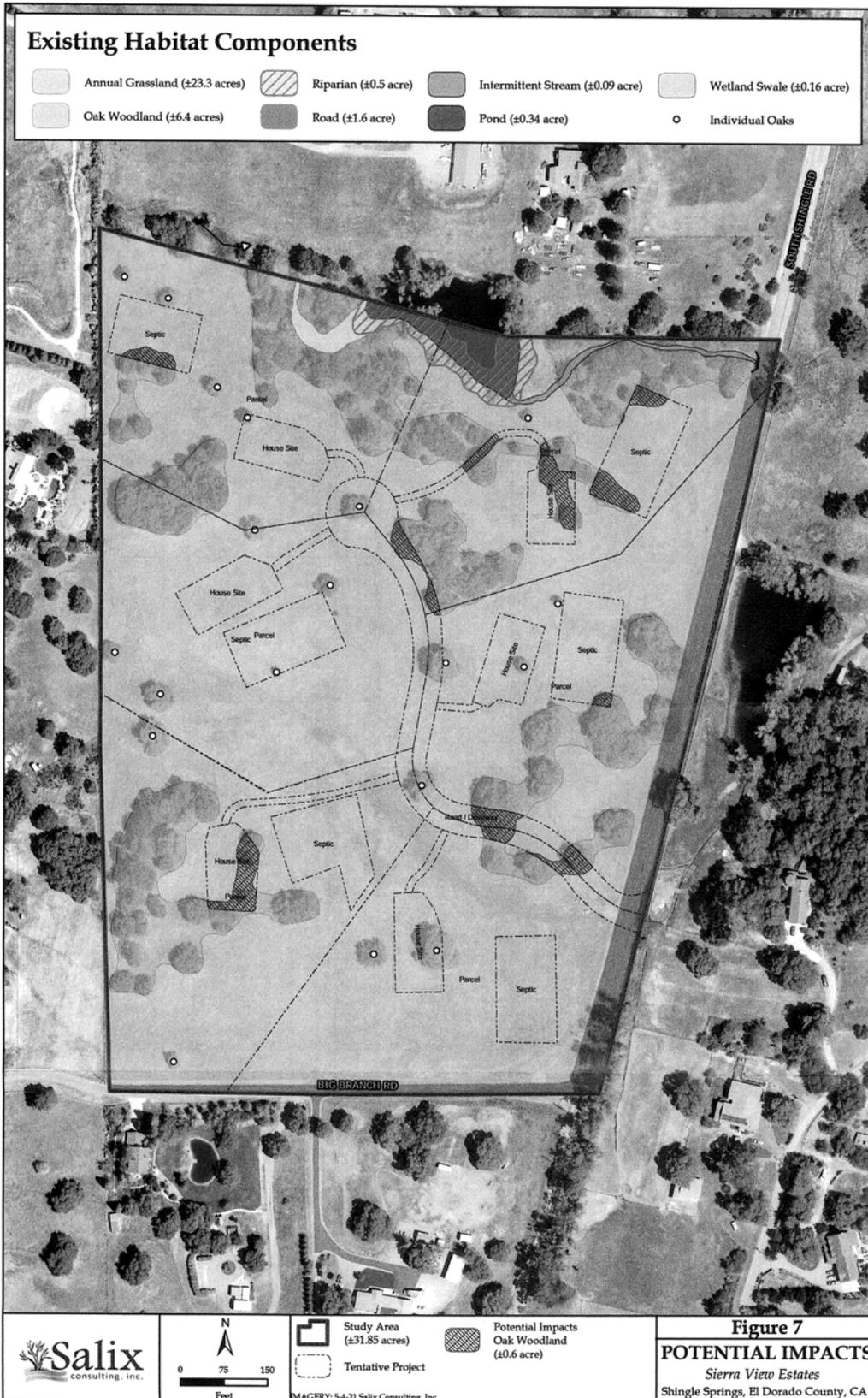
The study area contains a pond and associated riparian habitat. If the pond and associated riparian habitat are avoided, a permit from the California Department of Fish and Wildlife (CDFW) would not be necessary. If any of these habitats are affected by the proposed project, a 1602 would be required. Impacts to the wetland swale and intermittent stream would not likely require a 1602.

**Oak Conservation**

El Dorado County has adopted Oak Resources Conservation Ordinance 5061 and the Oak Resources Management Plan (ORMP) in an effort to protect oak woodlands and resources throughout the County. If the current proposed project changes and may affect oak woodlands or individual oak trees, Salix recommends:

1. Oak trees in the proximity of construction that are not to be disturbed are to be protected by a minimum four foot (4') tall fence along the canopy dripline;
2. Oak trees not identified for removal, but having a canopy that overhangs the proposed construction, shall be fenced at a minimum distance from the trunk that is equal to one foot (1') for each inch of tree diameter;
3. The fenced area is to be kept free of building materials, waste, and excess soil; and
4. Any soil disturbing activities within the fenced area should be monitored.

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**



**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**Important Biological Corridor (IBC)**

The study area appears to occur within an El Dorado County-recognized Important Biological Corridor (IBC) overlay that includes lands with high wildlife habitat value, function, and connectivity. Locally, quality foraging habitat occurs around the pond and wetland swale and to a lesser extent among the annual grassland and oak woodland areas. The area is not necessarily a quality corridor for large animal movement as the surrounding area is broken up by a patchwork of fences and roads in all directions.

**Special-Status Plants**

A review of the local soils, query of the CNDDDB and IPaC databases, and site evaluation indicate there is potential for special status plant species to occur on the site. A rare plant survey was conducted according to accepted protocols, and no special-status plants were found. No further studies are recommended.

**Special-Status Wildlife**

*Nesting Raptors and Migratory Birds*

If tree removal must occur at any time during the typical nesting season (Feb 15-Aug 31), a pre-construction survey should be conducted by a qualified biologist no more than 15 days prior to initiation of proposed development activities. If active nests are found on or immediately adjacent to the site, CDFW should be contacted to determine appropriate avoidance measures. If no nesting is found to occur, necessary tree removal could then proceed.

*Western Pond Turtle*

If construction activities encroach on the pond, a preconstruction survey (standard visual survey) should be conducted for the presence/absence of western pond turtle in the pond during the time when water is present. If the pond is dry, there is no need for a survey. Should a wetland pond turtle be located during construction, it should be captured and moved to another pond. It is recommended that if impacts are proposed for the pond, it should take place in the fall when there is no water and therefore, no turtles or other aquatic species are present.

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**REFERENCES AND OTHER RESOURCES**

---

- California Department of Fish and Wildlife. 2000. Interagency Wildlife Task Group. Western Pond Turtle species account.
- \_\_\_\_\_. California Wildlife Habitat Relationships Program. 2008a. List of Amphibians, Reptiles, Birds, and Mammals in California. Sacramento, California.
- \_\_\_\_\_. 2008b. Interagency Wildlife Task Group. Grasshopper Sparrow Species Account.
- \_\_\_\_\_. 2021. Wildlife and Habitat Data Analysis Branch. Natural Diversity Data Base Report (CNDDDB). Sacramento, California.
- California Herpes. 2020. Northwestern Pond Turtle. <http://www.californiaherps.com/turtles/pages/a.marmorata.html>. Accessed April 2021.
- California Native Plant Society. 2021. Inventory of Rare and Endangered Plants. An online database maintained by the Native Plant Society.
- El Dorado County. 2017a. El Dorado County General Plan Conservation and Open Space Element, 2004, Amended October 2017.
- El Dorado County. 2017b. Oak Resources Conservation Ordinance NO. 5061.
- El Dorado County. 2017c. Oak Resources Management Plan. September 2017.
- Jepson Flora Project (eds.) 2021. Jepson eFlora, <http://ucjeps.berkeley.edu/eflora/> [Accessed January 2021].
- Pine Hill Preserve. 2020. Rare Plants of PHP. [http://www.pinehillpreserve.org/rare\\_plants/index.htm](http://www.pinehillpreserve.org/rare_plants/index.htm). Accessed April 2021.
- Sibley, D.A. 2003. The Sibley Field Guide to Birds of Western North America. Alfred A. Knopf. New York.
- U.S. Department of Agriculture/NRCS.2021. Web Soil Survey, El Dorado County, California, <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Accessed: 2021.
- U.S. Department of the Interior. Bureau of Land Management. 2021. Pine Hill Preserve Area of Critical Environmental Concern. <https://www.blm.gov/visit/pine-hill-preserve>. Accessed April 2021.

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

U.S. Fish and Wildlife Service. 2021. IPaC Trust Resources Report generated for the Vandegrift Parcel study area, El Dorado County.

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White. 1988. California's Wildlife, Volume I. Amphibians and Reptiles. State of California, the Resources Agency, Department of Fish and Game, Sacramento, California.

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White. 1990a. California's Wildlife, Volume II: Birds. State of California, the Resources Agency, Department of Fish and Game, Sacramento, California.

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White. 1990b. California's Wildlife, Volume III: Mammals. State of California, the Resources Agency, Department of Fish and Game, Sacramento, California.

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**Appendix A.  
Plant Species Observed Within the Sierra View Estates Study Area**

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

---

**Appendix A**

**Sierra View Estates - Plants Observed May 2021**

---

**Gymnosperms**

**Pinaceae - Pine Family**

*Pinus sabiniana* Gray pine

**Angiosperms - Dicots**

**Adoxaceae - Muskroot Family**

*Sambucus nigra* Black elderberry

**Anacardiaceae - Cashew or Sumac Family**

*Toxicodendron diversilobum* Western poison-oak

**Apiaceae (Umbelliferae) - Carrot Family**

*Sanicula crassicaulis* Gamble weed

\**Torilis arvensis* Field hedgeparsley

**Apocynaceae - Dogbane/Milkweed Family**

*Asclepias cordifolia* Purple milkweed

*Asclepias fascicularis* Narrow-leaf milkweed

**Asteraceae (Compositae) - Sunflower Family**

*Achillea millefolium* Common yarrow

*Achyrochaena mollis* Blow-wives

*Baccharis pilularis* Coyote brush

\**Carduus pycnocephalus* Italian thistle

\**Centaurea solstitialis* Yellow starthistle

\**Chondrilla juncea* Skeleton weed

*Eriophyllum lanatum* Woolly sunflower

*Euthamia occidentalis* Western goldenrod

*Holocarpha virgata* subsp. *virgata* Virgate tarweed

\**Lactuca serriola* Prickly lettuce

\**Leontodon saxatilis* Long-beaked hawkbit

\**Logfia gallica* Narrowleaf cottonrose

*Micropus californicus* Q tips

\**Sonchus oleraceus* Common sow-thistle

**Boraginaceae - Borage Family**

*Amsinckia menziesii* Rancher's fireweed

*Plagiobothrys nothofulvus* Rusty popcornflower

**Brassicaceae (Cruciferae) - Mustard Family**

\**Raphanus sativus* Wild radish

**Caryophyllaceae - Pink Family**

\**Petrorhagia dubia* Grass-pink

\**Silene gallica* Windmill-pink

**Fabaceae (Leguminosae) - Legume Family**

*Lupinus bicolor* Miniature lupine

*Lupinus nanus* Sky lupine

\* Indicates a non-native species

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

<i>*Medicago polymorpha</i>	California burclover
<i>*Trifolium hirtum</i>	Rose clover
<b>Fagaceae - Oak Family</b>	
<i>Quercus douglasii</i>	Blue oak
<i>Quercus lobata</i>	Valley oak
<i>Quercus wislizeni</i>	Interior live oak
<b>Geraniaceae - Geranium Family</b>	
<i>*Erodium botrys</i>	Broad-leaf filaree
<i>*Erodium cicutarium</i>	Red-stem filaree
<i>*Geranium dissectum</i>	Cut-leaf geranium
<i>*Geranium molle</i>	Dove's-foot geranium
<b>Hypericaceae - St. John's Wort Family</b>	
<i>*Hypericum perforatum subsp. perforatum</i>	Klamathweed
<b>Juglandaceae - Walnut Family</b>	
<i>Juglans hindsii</i>	Northern California black walnut
<b>Lythraceae - Loosestrife Family</b>	
<i>*Lythrum hyssopifolia</i>	Hyssop loosestrife
<b>Montiaceae - Miner's Lettuce Family</b>	
<i>Claytonia perfoliata</i>	Common miner's lettuce
<b>Myrsinaceae - Myrsine Family</b>	
<i>*Lysimachia arvensis</i>	Scarlet pimpernel
<b>Onagraceae - Evening Primrose Family</b>	
<i>Clarkia purpurea subsp. quadrivulnera</i>	Four spot
<i>Epilobium brachycarpum</i>	Summer cottonweed
<b>Phrymaceae - Lopseed Family</b>	
<i>Erythranthe guttata</i>	Common monkeyflower
<b>Plantaginaceae - Plantain Family</b>	
<i>Callitriche heterophylla var. heterophylla</i>	Larger water-starwort
<i>*Plantago lanceolata</i>	English plantain
<b>Polemoniaceae - Phlox Family</b>	
<i>Leptosiphon bicolor</i>	Bicolored linanthus
<b>Polygonaceae - Buckwheat Family</b>	
<i>*Rumex crispus</i>	Curly dock
<b>Ranunculaceae - Buttercup Family</b>	
<i>Ranunculus aquatilis</i>	Aquatic buttercup
<i>*Ranunculus muricatus</i>	Spiny-fruit buttercup
<b>Rhamnaceae - Buckthorn Family</b>	
<i>Ceanothus cuneatus var. cuneatus</i>	Buck brush
<i>Frangula californica subsp. tomentella</i>	Hoary coffeeberry
<b>Rosaceae - Rose Family</b>	
<i>*Pyracantha angustifolia</i>	Firethorn
<b>Rubiaceae - Madder Family</b>	
<i>Galium aparine</i>	Goose grass
<i>*Galium parisiense</i>	Wall bedstraw
<i>Galium porrigens</i>	Climbing bedstraw

\* Indicates a non-native species

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**Salicaceae - Willow Family**

<i>Populus fremontii</i>	Fremont cottonwood
<i>Salix gooddingii</i>	Goodding's black willow
<i>Salix laevigata</i>	Red willow

**Solanaceae - Nightshade Family**

<i>Solanum xanti</i>	Purple nightshade
----------------------	-------------------

**Verbenaceae - Vervain Family**

<i>Verbena lasiostachys</i> var. <i>lasiostachys</i>	Western verbena
--	-----------------

**Angiosperms -Monocots**

---

**Agavaceae - Agave Family**

<i>Chlorogalum pomeridianum</i>	Soaproot
---------------------------------	----------

**Alismataceae - Water-Plantain Family**

<i>Alisma triviale</i>	California water plantain
------------------------	---------------------------

**Cyperaceae - Sedge Family**

<i>Carex praegracilis</i>	Clustered field-sedge
<i>Cyperus eragrostis</i>	Tall flatsedge
<i>Eleocharis macrostachya</i>	Creeping spikerush
* <i>Eleocharis pachycarpa</i>	Black sand spikerush

**Iridaceae - Iris Family**

<i>Sisyrinchium bellum</i>	Western blue-eyed grass
----------------------------	-------------------------

**Juncaceae - Rush Family**

<i>Juncus balticus</i>	Baltic rush
* <i>Juncus capitatus</i>	Dwarf rush
<i>Juncus occidentalis</i>	Slender rush
<i>Juncus tenuis</i>	Slender rush
<i>Juncus xiphioides</i>	Iris-leaved rush

**Liliaceae - Lily Family**

<i>Calochortus luteus</i>	Yellow mariposa-lily
---------------------------	----------------------

**Poaceae (Gramineae) - Grass Family**

* <i>Aegilops triuncialis</i>	Barbed goatgrass
* <i>Aira caryophyllea</i>	Silver European hairgrass
* <i>Avena fatua</i>	Wild oat
* <i>Briza minor</i>	Small quaking grass
* <i>Bromus diandrus</i>	Ripgut grass
* <i>Bromus hordeaceus</i>	Soft chess
* <i>Cynodon dactylon</i>	Bermudagrass
* <i>Cynosurus echinatus</i>	Hedgehog dogtail
* <i>Dactylis glomerata</i>	Orchard grass
* <i>Elymus caput-medusae</i>	Medusahead
<i>Elymus glaucus</i>	Blue wildrye
* <i>Festuca myuros</i>	Rattail sixweeks grass
* <i>Festuca perennis</i>	Italian ryegrass
* <i>Holcus lanatus</i>	Common velvet grass
<i>Melica torreyana</i>	Torrey melic
* <i>Poa annua</i>	Annual bluegrass
* <i>Poa bulbosa</i> subsp. <i>vivipara</i>	Bulbous bluegrass

\* Indicates a non-native species

TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY

*Stipa pulchra*

**Themidaceae - Brodiaea Family**

*Dichelostemma capitatum*

*Dichelostemma volubile*

*Triteleia hyacinthina*

*Triteleia laxa*

Purple needlegrass

Blue dicks

Twining brodiaea

White triteleia

Ithuriel's spear

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**Appendix B.  
Potentially-Occurring Special-Status Plants in the Region of the Sierra View Estates  
Study Area**

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**Appendix B**

**Sierra View Estates -Potentially-occurring Special-status Plants**

Family Taxon Common Name	Status*	Flowering Period	Habitat	Probability on Project Site
<b>Adoxaceae</b>				
<i>Viburnum ellipticum</i> Western viburnum	Fed: - State: - CNPS: Rank 2B.3	May-July	Chaparral; cismontane woodland; lower montane coniferous forest.	None. No suitable habitat. Site lacks shaded north slopes.
<b>Agavaceae</b>				
<i>Chlorogalum grandiflorum</i> Red Hills soaproot	Fed: FSW State: - CNPS: Rank 1B.2	May-June	Chaparral; cismontane woodland; [serpentine or gabbroic].	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.
<b>Alismataceae</b>				
<i>Sagittaria sanfordii</i> Sanford's arrowhead	Fed: - State: - CNPS: Rank 1B.2	May-October	Marshes, shallow freshwater.	None. Site below elevational range of species (Jepson).
<b>Alliaceae</b>				
<i>Allium jepsonii</i> Jepson's onion	Fed: FSW State: - CNPS: Rank 1B.2	May-August	Cismontane woodland; lower montane coniferous forest [serpentine or volcanic]. 300 to 1160 meters.	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.
<b>Apiaceae (Umbelliferae)</b>				
<i>Eryngium pinnatisectum</i> Tuolumne button-celery	Fed: - State: - CNPS: Rank 1B.2	June-August	Cismontane woodland; lower montane coniferous forest; vernal pools; [mesic].	Unlikely. Marginal habitat in study area. Not found during floristic surveys.
<b>Asteraceae (Compositae)</b>				
<i>Erigeron miser</i> Starved daisy	Fed: FSS State: - CNPS: Rank 1B.3	June-October	Upper montane coniferous forest (rocky, usually granite). 1840- 2620 m.	None. Site located below the range of the species.

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**Appendix B**

**Sierra View Estates -Potentially-occurring Special-status Plants**

Family Taxon Common Name	Status*	Flowering Period	Habitat	Probability on Project Site
<i>Packera layneae</i> Layne's ragwort	Fed: FT State: CR CNPS: Rank 1B.2	April-July	Chaparral; cismontane woodland; [serpentinite or gabbroic].	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.
<i>Wyethia reticulata</i> El Dorado County mules ears	Fed: - State: - CNPS: Rank 1B.2	May-July	Chaparral; cismontane woodland; lower montane coniferous forest; [clay or gabbroic].	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.
<b>Cistaceae</b>				
<i>Crocانthemum suffrutescens</i> Bisbee Peak rush-rose	Fed: - State: - CNPS: Rank 3.2	April-June	Chaparral (often serpentinite, gabbroic, or Ione soil).	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.
<b>Convolvulaceae</b>				
<i>Calystegia stebbinsii</i> Stebbins' morning-glory	Fed: FE State: CE CNPS: Rank 1B.1	May-June	Chaparral (openings); cismontane woodland; [serpentinite or gabbroic].	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.
<b>Cyperaceae</b>				
<i>Carex xerophila</i> chaparral sedge	Fed: - State: - CNPS: Rank 1B.2	March-June	Serpentinite, gabbroic. Chaparral. Cismontane woodland. Lower montane coniferous forest.	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.
<b>Ericaceae</b>				
<i>Arctostaphylos nissenana</i> Nissenan manzanita	Fed: FSW State: - CNPS: Rank 1B.2	February-March	Closed-cone coniferous forest; chaparral.	None. No suitable chaparral habitat. Generally occurs at higher elevations. Not found during floristic surveys.

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**Appendix B**

**Sierra View Estates -Potentially-occurring Special-status Plants**

Family Taxon Common Name	Status*	Flowering Period	Habitat	Probability on Project Site
<b>Malvaceae</b>				
<i>Fremontodendron decumbens</i> Pine Hill flannelbush	Fed: FE State: CR CNPS: Rank 1B.2	April-June	Chaparral; cismontane woodland; [gabbroic or serpentinite].	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.
<b>Rhamnaceae</b>				
<i>Ceanothus roderickii</i> Pine Hill ceanothus	Fed: FE State: CR CNPS: Rank 1B.1	May-June	Chaparral; cismontane woodland; [serpentinite or gabbroic].	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.
<b>Rosaceae</b>				
<i>Horkelia parryi</i> Parry's horkelia	Fed: FSW State: - CNPS: Rank 1B.2	April-June	Chaparral; cismontane woodland; [especially lone formation].	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.
<b>Rubiaceae</b>				
<i>Galium californicum sierrae</i> Eldorado bedstraw	Fed: FE State: CR CNPS: Rank 1B.2	May-June	Chaparral; cismontane woodland; lower montane coniferous forest; [gabbroic].	Possible. May occur in small areas of Rescue soils in study area. Not found during floristic surveys.

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**Appendix B**

**Sierra View Estates -Potentially-occurring Special-status Plants**

Family				
Taxon				
Common Name	Status*	Flowering Period	Habitat	Probability on Project Site

**\*Status**

Federal:  
 FE - Federal Endangered  
 FT - Federal Threatened  
 FPE - Federal Proposed Endangered  
 FPT - Federal Proposed Threatened  
 FC - Federal Candidate  
 FSS - Forest Service Sensitive  
 FSW - Forest Service Watchlist

State:  
 CE - California Endangered  
 CT - California Threatened  
 CR - California Rare  
 CSC - California Species of  
 Special Concern

CNPS (California Native Plant Society - List.RED Code):  
 Rank 1A - Extinct  
 Rank 1B - Plants rare, threatened, or endangered in California and elsewhere  
 Rank 2A- Plants extinct in California, but more common elsewhere  
 Rank 2B - Plants rare, threatened, or endangered in California, more common elsewhere  
 Rank 3 - Plants about which more information is needed, a review list  
 Rank 4 - Plants of limited distribution, a watch list  
 RED Code  
 1 - Seriously endangered (>80% of occurrences threatened)  
 2 - Fairly endangered (20 to 80% of occurrences threatened)  
 3 - Not very endangered (<20% of occurrences threatened)

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**Appendix C.  
Potentially-Occurring Special-Status Animals in the Region of the Sierra View Estates  
Study Area**

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**Appendix C**

**Sierra View Estates- Potentially-occurring Special-status Animals**

	Status*	Habitat	Probability on Project Site
<b>Invertebrates</b>			
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	Fed: FT State: - Other: -	Vernal pools and other temporary bodies of water in southern and Central Valley of California. Most common in smaller grass or mud bottomed swales or basalt flow depression pools in unplowed grasslands.	None. No suitable habitat. No vernal pools present.
<b>Insects</b>			
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	Fed: FT State: - Other: *	Requires host plant, elderberry ( <i>Sambucus nigra</i> ) for its life cycle. Shrubs must have live stem diameters at ground level of 1.0 inch or greater. Occurs in Great Valley and lower foothills.	None. No suitable habitat (host plant). Site located above range of species.
<b>Fish</b>			
Steelhead, Central Valley ESU <i>Oncorhynchus mykiss irideus</i>	Fed: FT State: - Other: -	Occurs below man-made impassable barriers in the Sacramento and San Joaquin rivers and tributaries. Adults migrate from ocean to natal freshwater streams to spawn. Yuba River has essentially the only remaining wild steelhead fishery in Central Valley.	None. No suitable habitat (no stream) present.
Delta smelt <i>Hypomesus transpacificus</i>	Fed: FT State: CT Other: -	Endemic to the Sacramento-San Joaquin Delta in coastal and brackish waters. Occurs seasonally in Suisun and San Pablo bays. Spawning usually occurs in dead-end sloughs and shallow channels.	None. No suitable habitat (no stream) present. Site locate outside range of species.
<b>Amphibians</b>			
Western spadefoot <i>Spea hammondi</i>	Fed: - State: CSC Other: -	Found primarily in grassland habitats, but may occur in valley and foothill woodlands. Requires vernal pools, seasonal wetlands, or stock ponds for breeding and egg laying. Prefers more turbid pools for predator avoidance.	None. No suitable habitat present.
California red-legged frog <i>Rana draytonii</i>	Fed: FT State: CSC Other: -	Occurs in lowlands and foothills in deeper pools and slow-moving streams, usually with emergent wetland vegetation. Requires 11-20 weeks of permanent water for larval development.	None. No suitable aquatic habitat present. Seasonal pond onsite does not provide habitat for sufficient amount of time to support species.

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**Appendix C**

**Sierra View Estates- Potentially-occurring Special-status Animals**

	Status*	Habitat	Probability on Project Site
Foothill yellow-legged frog <i>Rana boylei</i>	Fed: - State: CE Other: SSC	Found in partially shaded, shallow streams with rocky substrates. Needs some cobble-sized rocks as a substrate for egg laying. Requires water for 15 weeks for larval transformation.	None. No suitable habitat (no stream) present. Minor drainages lack rocky substrate.
<b>Reptiles</b>			
Western pond turtle <i>Actinemys marmorata</i>	Fed: - State: CSC Other: -	Inhabits ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Needs suitable basking sites and upland habitat for egg laying.	Possible. May inhabit pond temporarily, but would need to move on during the dry season
Coast horned lizard <i>Phrynosoma blainvillii</i>	Fed: - State: SSC Other: -	Open lowlands, washes, and sandy areas with an exposed gravelly-sandy substrate containing scattered shrubs. Edge of Sacramento Valley and in the Sierra Nevada foothills. Also observed in riparian woodland clearings and dry uniform chamise chaparral.	None. No sandy substrate present to support species.
Giant garter snake <i>Thamnophis gigas</i>	Fed: FT State: CT Other: -	Primarily associated with marshes and sloughs, less with slow-moving creeks, and absent from larger rivers. Nocturnal retreats include mammal burrows and crevices. During the day, basks on emergent vegetation such as cattails and tules.	None. No suitable habitat (no marshes, sloughs) present. Site located above the range of the species.
<b>Birds</b>			
White-tailed kite <i>Elanus leucurus</i>	Fed: - State: CFP Other: -	Found in lower foothills and valley margins with scattered oaks and along river bottomlands or marshes adjacent to oak woodlands. Nests in trees with dense tops.	Possible. Suitable nesting habitat present in trees onsite.
Bald eagle <i>Haliaeetus leucocephalus</i>	Fed: - State: CE Other: CFP	Occurs along shorelines, lake margins, and rivers. Nests in large, old-growth or dominant trees with open branches.	None. No suitable nesting or aquatic habitat present.
Swainson's hawk <i>Buteo swainsoni</i>	Fed: - State: CT Other: *	Breeds in open areas with scattered trees; prefers riparian and sparse oak woodland habitats. Requires nearby grasslands, grain fields, or alfalfa for foraging. Rare breeding species in Central Valley.	None. Site located outside range of species (valley)>

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**Appendix C**

**Sierra View Estates- Potentially-occurring Special-status Animals**

	Status*	Habitat	Probability on Project Site
Golden eagle <i>Aquila chrysaetos</i>	Fed: - State: CFP Other: -	Found in rolling foothill grassland with scattered trees. Nests on cliffs and in large trees in open areas.	None. No suitable nesting habitat present. No cliffs.
California black rail <i>Laterallus jamaicensis coturniculus</i>	Fed: - State: CT Other: CFP	Inhabits salt, fresh, and brackish water marshes with little daily and/or annual water fluctuations. In freshwater habitats, preference is for dense bulrush and cattails. Several scattered populations documented from Butte Co. to southern Nevada Co.	None. No suitable wet habitat present.
Burrowing owl <i>Athene cunicularia</i>	Fed: - State: CSC Other: *	Found in annual grasslands. Nests in burrows dug by small mammals, primarily ground squirrels.	None. No suitable burrows observe. Commonly found at lower elevation.
Bank swallow <i>Riparia riparia</i>	Fed: - State: CT Other: *	Colonial nester near riparian and other lowland habitats. Requires vertical banks or cliffs with fine-textured, sandy soils near streams, rivers, and lakes.	None. No suitable nesting habitat (steep banks, cliffs) or aquatic habitat present.
Grasshopper sparrow <i>Ammodramus savannarum</i>	Fed: - State: CSC Other: -	Occurs in dry, dense grasslands, especially those with a variety of grasses and tall forbs and scattered shrubs for singing perches. Has bred up to 5000 ft in San Jacinto mountains.. Secretive in winter. Nests in ground.	Possible. Suitable nesting habitat present.
Tricolored blackbird <i>Agelaius tricolor</i>	Fed: - State: CT Other: SSC	Colonial nester in dense cattails, tules, brambles or other dense vegetation. Requires open water, dense vegetation, and open grassy areas for foraging.	None. No suitable nesting or wetland habitat present.

**Mammals**

Pallid bat <i>Antrozous pallidus</i>	Fed: - State: SSC Other: *	Occurs in grasslands, woodlands, deserts & urban habitats; open habitat required for foraging. Common in dry habitats with rocky outcrops, cliffs, and crevices for roosting. Roosts include caves, mines, bridges & occasionally hollow trees, buildings.	None. No suitable roosting habitat present.
Fisher <i>Martes pennanti pacifica</i>	Fed: FC State: CSC Other: *	Occurs in intermediate to large-tree stage coniferous forests and riparian woodlands with a high percent level of canopy closure.	None. No suitable forest habitat present.

**TM21-0002 SIERRA VIEW ESTATES  
ATTACHMENT 18 - BIOLOGICAL RESOURCES ASSESSMENT  
AND RARE PLANT SURVEY**

**Appendix C**

**Sierra View Estates- Potentially-occurring Special-status Animals**

Status*	Habitat	Probability on Project Site
<p><b>*Status</b></p> <p><b>Federal:</b>            FE - Federal Endangered            FT - Federal Threatened            FPE - Federal Proposed Endangered            FPT - Federal Proposed Threatened            FC - Federal Candidate            FPD - Federal Proposed for Delisting</p>	<p><b>State:</b>            CE - California Endangered            CT - California Threatened            CR - California Rare            CC - California Candidate            CFP - California Fully Protected            CSC - California Species of Special Concern</p>	<p><b>Other:</b>            Some species have protection under the other designations, such as the California Department of Forestry Sensitive Species, Bureau of Land Management Sensitive Species, U.S.D.A. Forest Service Sensitive Species, and the Migratory Bird Treaty Act. Raptors and their nests are protected by provisions of the California Fish and Game Code. Certain areas, such as wintering areas of the monarch butterfly, may be protected by policies of the California Department of Fish and Game.            WL - CDFG Watch List</p>