COUNTY OF SAN MATEO, PLANNING AND BUILDING DEPARTMENT

NOTICE OF INTENT TO ADOPT MITIGATED NEGATIVE DECLARATION

A notice, pursuant to the California Environmental Quality Act of 1970, as amended (Public Resources Code 21,000, et seq.), that the following project: <u>Vida Verde Education Camp</u> <u>Facility</u>, when adopted and implemented, will not have a significant impact on the environment.

FILE NO.: PLN 2019-00429

OWNER: Vida Verde Nature Education, Inc.

APPLICANT: Vida Verde Nature Education, Inc.

ASSESSOR'S PARCEL NO.: 081-320-060

LOCATION: 3540 La Honda Road, San Gregorio

PROJECT DESCRIPTION

Coastal Development Permit, Planned Agricultural District Permit, and Farm Labor Housing Permit to establish a camp for low income, 4th-6th grade students through the Vida Verde Nature Education non-profit organization. The proposed overnight camping would accommodate up to 35 people, including 30 guests (students/chaperones) and 5 permanent staff housed in the existing residence. New proposed development includes a new 2,890 sq. ft. 2-story barn (for meeting, cooking and eating, plus restrooms on lower floor; restrooms and sleeping rooms upstairs for staff), outdoor camping for student and chaperones), three 400 sq. ft. and one 320 sq. ft. outdoor camping structures, a new 100 sq. ft. detached student restroom, a new 735 sq. ft. equipment storage building, minor remodel of the existing house to accommodate permanent operational/educational staff and provide an ADA-accessible unit, installation of a new septic system, improved water storage facilities, a 200-panel ground-mounted solar system, a fire hydrant, and new driveway turnouts to serve the development. The two-bedroom Farm Labor Housing unit is proposed to be located on the second floor of the proposed barn.

FINDINGS AND BASIS FOR A NEGATIVE DECLARATION

The Current Planning Section has reviewed the initial study for the project and, based upon substantial evidence in the record, finds that:

- 1. The project will not adversely affect water or air quality or increase noise levels substantially.
- 2. The project will not have adverse impacts on the flora or fauna of the area.
- 3. The project will not degrade the aesthetic quality of the area.
- 4. The project will not have adverse impacts on traffic or land use.

- 5. In addition, the project will not:
 - a. Create impacts which have the potential to degrade the quality of the environment.
 - b. Create impacts which achieve short-term to the disadvantage of long-term environmental goals.
 - c. Create impacts for a project which are individually limited, but cumulatively considerable.
 - d. Create environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

The County of San Mateo has, therefore, determined that the environmental impact of the project is insignificant.

MITIGATION MEASURES included in the project to avoid potentially significant effects:

<u>Mitigation Measure 1</u>: The applicant shall submit a plan to the Planning and Building Department prior to the issuance of any grading "hard card" that, at a minimum, includes the "Basic Construction Mitigations Measures" as listed in Table 8-2 of the BAAQMD CEQA Guidelines (May 2017). These measures shall be implemented prior to beginning any ground disturbance and shall be maintained for the duration of the project activities:

- a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access road) shall be watered two times per day.
- b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- c. All visible mud or dirt track-out onto adjacent paved roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- d. All vehicle speeds on unpaved roads shall be limited to 15 mph.
- e. Idling times shall be minimized either by shutting equipment or vehicles off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- f. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- g. Post a publicly visible sign with the telephone number and person to contact at the County regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Bay Area Air Quality Management District's phone number shall also be visible to ensure compliance with applicable regulations.

Mitigation Measure 2: San Francisco Dusky-Footed Woodrat- A survey for San Francisco dusky-footed wood rat lodges within the development areas shall be conducted prior to any construction activities. California Department of Fish and Wildlife requires disturbance-free buffers of 50 feet around each lodge. Wood rat lodges that cannot be avoided shall be dismantled by a qualified biologist during the time of year that would least impact breeding wood rats (November-January). Dismantling shall be conducted slowly to avoid impacting neonate wood rats. If neonates are detected in the lodge, dismantling shall cease, and the lodge will be checked every 48 hours to determine if the neonates are still present. Dismantling can continue once the neonates are no longer present and have either been weaned from their mothers, or the mothers have moved them from the nest.

<u>Mitigation Measure 3</u>: Day Roosting Bats- Day roosting bats may occur in crevices of the barn roof. The roof and trim should be carefully removed with hand tools. Removal should be conducted towards the end of the day, when bats naturally emerge from their day roosts.

Mitigation Measure 4: Non-Native Plant Species Avoidance- All construction vehicles that may have been exposed to non-native, invasive plant species and may carry seeds shall be washed (tires and undercarriage) before entering the property. In the event that imported fill is needed, native soil shall be used. All rock, aggregate, fiber rolls, or other construction materials, if needed, shall be certified weed-free.

<u>Mitigation Measure 5</u>: Exclusion fencing shall be installed at the perimeter of the riparian buffer to delineate the area of work and protect sensitive habitats.

<u>Mitigation Measure 6</u>: Watershed Protection and Maintenance- Best Management Practices according to San Mateo County's Watershed Protection and Maintenance Standards shall be incorporated into the project design to protect the water quality of nearby San Gregorio Creek (https://publicworks.smcgov.org/watershed-protection-and-maintenance-standards).

Mitigation Measure 7: If possible, barn demolition, vegetation trimming/removal, and initial earth work should be conducted outside the breeding season (September 1-January 31). If these activities occur during the breeding season, a qualified biologist will need to conduct a survey for nesting birds within five days prior to the proposed start of construction. If an active nest is detected in the construction area, work will be delayed until the young fledge, and/or a disturbance-free buffer will need to be established around the nest. California Department of Fish and Wildlife usually accepts a 50-foot buffer for passerine nests, and a 250-foot buffer for most raptor nests. A qualified biologist shall monitor the behavior of the birds at the nest site to ensure that they are not disturbed by project related activities. Nest avoidance and/or monitoring shall continue during project-related construction work until the young have fledged, are no longer being fed by the parents, and have left the nest site. At that time the nest buffer may be removed, and work may commence.

<u>Mitigation Measure 8</u>: In the event that prehistoric traces (human remains, artifacts, concentrations of shell/bone/rock/ash, etc.) are encountered, all construction activities within a fifty-meter radius of the find shall be stopped, the County Planning Department notified, and an archaeologist retained to examine the find and make appropriate recommendations. All

contractors and sub-contractors shall be made aware of these requirements and shall adhere to all applicable laws including State Cultural Preservation laws.

Mitigation Measure 9: In the event that human skeletal remains are encountered, all work at the immediate location of the find must temporarily stop. Public Resource Code 5097 and local Health and Safety codes establish a procedure for notifying the County Coroner's Office and possibly the State Native American Heritage Commission to seek recommendations from a Most Likely Descendant (Tribal Contact) before any further action at the location of the find can proceed. All contractors and sub-contractors shall be made aware of these requirements and shall adhere to all applicable laws including State Cultural Preservation laws.

Mitigation Measure 10: Prior to commencement of the project, the applicant shall submit to the Planning Department for review and approval an erosion and drainage control plan that shows how the transport and discharge of soil and pollutants from and within the project site shall be minimized. The plan shall be designed to minimize potential sources of sediment, control the amount of runoff and its ability to carry sediment by diverting incoming flows and impeding internally generated flows, and retain sediment that is picked up on the project site through the use of sediment-capturing devices. The plan shall also limit application, generation, and migration of toxic substances, ensure the proper storage and disposal of toxic materials, and apply nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters. Said plan shall adhere to the San Mateo County Wide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including:

- a. Sequence construction to install sediment-capturing devices first, followed by runoff control measures and runoff conveyances. No construction activities shall begin until after all proposed measures are in place.
- b. Minimize the area of bare soil exposed at one time (phased grading).
- c. Clear only areas essential for project activities.
- d. Within five days of clearing or inactivity, stabilize bare soils through either non-vegetative BMPs, such as mulching, or vegetative erosion control methods such as seeding. Vegetative erosion control shall be established within two weeks of seeding/planting.
- e. Project site entrances shall be stabilized immediately after grading and frequently maintained to prevent erosion and control dust.
- f. Control wind-born dust through the installation of wind barriers such as hay bales and/or sprinkling.
- g. Soil and/or other construction-related material stockpiled on-site shall be placed a minimum of 200 feet from all wetlands and drain courses. Stockpiled soils shall be covered with tarps at all times of the year.
- h. Intercept runoff above disturbed slopes and convey it to a permanent channel or storm drains by using earth dikes, perimeter dikes or swales, or diversions. Use check dams where appropriate.

- i. Provide protection for runoff conveyance outlets by reducing flow velocity and dissipating flow energy.
- j. Install storm drain inlet protection that traps sediment before it enters any adjacent storm sewer systems. This barrier shall consist of filter fabric, straw bales, gravel, or sand bags.
- k. Install sediment traps/basins at outlets of diversions, channels, slope drains, or other runoff conveyances that discharge sediment-laden water. Sediment traps/ basins shall be cleaned out when 50 percent full (by volume).
- I. Use silt fence and/or vegetated filter strips to trap sediment contained in sheet flow. The maximum drainage area to the fence should be 0.5-acre or less per 100 feet of fence. Silt fences shall be inspected regularly, and sediment removed when it reaches 1/3 the fence height. Vegetated filter strips should have relatively flat slopes and be vegetated with erosion-resistant species.
- m. Utilize coir fabric/netting on sloped graded areas to provide a reduction in water velocity, erosive areas, habitat protection, and topsoil stabilization.
- n. Throughout the construction period, the applicant shall conduct regular inspections of the condition and operational status of all structural BMPs required by the approved Erosion Control Plan.

<u>Mitigation Measure 11</u>: The applicant shall implement the following basic construction measures at all times:

- a. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxic Control Measure Title13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- b. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
- c. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person, or his/her designee, shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

RESPONSIBLE AGENCY CONSULTATION

State Water Resources Control Board Division of Drinking Water

INITIAL STUDY

The San Mateo County Current Planning Section has reviewed the Environmental Evaluation of this project and has found that the probable environmental impacts are insignificant. A copy of the initial study is attached.

REVIEW PERIOD: June 23, 2021-July 29, 2021

All comments regarding the correctness, completeness, or adequacy of this Negative Declaration must be received by the County Planning and Building Department, 455 County Center, Second Floor, Redwood City, no later than **5:00 p.m., July 29, 2021**.

CONTACT PERSON

Angela Chavez Project Planner, 650/599-7217 achavez@smcgov.org

Angela Chavez

Angela Chavez, Project Planner

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County of San Mateo Planning and Building Department

INITIAL STUDY ENVIRONMENTAL EVALUATION CHECKLIST (To Be Completed by Planning Department)

(TO be Completed by Planning Departme

- 1. **Project Title:** Vida Verde Education Camp
- 2. County File Number: PLN 2019-00429
- 3. Lead Agency Name and Address: County of San Mateo 455 County Center, 2nd Floor Redwood City, CA 94063
- 4. Contact Person and Phone Number: Angela Chavez, Project Planner 650/ 599-7217
- 5. **Project Location:** 3540 La Honda Road, San Gregorio
- 6. Assessor's Parcel Number and Size of Parcel: 081-320-060 and 23.08 acres
- 7. **Project Sponsor's Name and Address:** Vida Verde Nature Education Inc., 3540 La Honda Road, San Gregorio, CA 94074
- 8. Name of Person Undertaking the Project or Receiving the Project Approval (if different from Project Sponsor): Same as Project Sponsor
- 9. General Plan Designation: Agriculture
- 10. **Zoning:** PAD/CD (Planned Agricultural District/Coastal District)
- 11. Description of the Project: Coastal Development Permit, Planned Agricultural District Permit, and Farm Labor Housing Permit to establish a camp for low income, 4th-6th grade students through the Vida Verde Nature Education non-profit organization. The proposed overnight camping would accommodate up to 35 people, including 30 guests (students/chaperones) and 5 permanent staff housed in the existing residence. New proposed development includes a new 2,890 sq. ft. 2-story barn (for meeting, cooking and eating, plus restrooms on lower floor; restrooms and sleeping rooms upstairs for staff), outdoor camping for student and chaperones), three 400 sq. ft. and one 320 sq. ft. outdoor camping structures, a new 100 sq. ft. detached student restroom, a new 735 sq. ft. equipment storage building, minor remodel of the existing house to accommodate permanent operational/educational staff and provide an ADA-accessible unit, installation of a new septic system, improved water storage facilities, a 200-panel ground-mounted solar system, a fire hydrant, and new driveway turnouts to serve the development. The two-bedroom Farm Labor Housing unit is proposed to be located on the second floor of the proposed barn.
- 12. **Surrounding Land Uses and Setting:** The project parcel is accessed from La Honda Road via a private road easement shared by three other adjacent properties. The project parcel is developed with a single-family residence and several buildings that support the activities on the site. San Gregorio Creek runs through the parcel and around the developed areas in a U-shape. The subject 23-acre parcel is largely covered by native and non-native vegetation.

The surrounding parcels are made up of a mix of developed and undeveloped parcels. The developed parcels largely consist of low-density residential and/or agricultural development.

- 13. Other Public Agencies Whose Approval is Required:
- 14. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?: (NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process (see Public Resources Code Section 21080.3.2.). Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality).

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" or "Significant Unless Mitigated" as indicated by the checklist on the following pages.

	Aesthetics		Energy	Public Services
	Agricultural and Forest Resources		Hazards and Hazardous Materials	Recreation
Х	Air Quality	Х	Hydrology/Water Quality	Transportation
Х	Biological Resources		Land Use/Planning	Tribal Cultural Resources
Х	Climate Change		Mineral Resources	Utilities/Service Systems
Х	Cultural Resources		Noise	Wildfire
х	Geology/Soils		Population/Housing	Mandatory Findings of Significance

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. 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 will 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 onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3. Once the lead agency has determined that a particular physical impact may occur, then 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 substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (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 (mitigation measures from "Earlier Analyses," as described in 5. below, may be cross-referenced).
- 5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other California Environmental Quality Act (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 Measures 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. Sources used or individuals contacted should be cited in the discussion.

1. AESTHETICS . Except as provided in Public Resources Code Section 21099, would the project:						
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact	
1.a.	Have a substantial adverse effect on a scenic vista, views from existing residen- tial areas, public lands, water bodies, or roads?			х		
adjac propo public currei minim	ussion: The project site is located within the ent development is a mix of low-density resid used development will be visible from adjacer or viewpoints due to the topography and prese ntly developed, and the proposed developmentize visual impacts to neighboring properties. ce: Project Plans; Project Location.	dential and aging the developed p ence of existing ent is clustered	icultural deve arcels the pro g mature vege	lopment. Whi ject is not visi etation. The si	le the ble from ite is	
1.b.	Substantially damage or destroy scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				Х	
includ	ussion: The project site is not located in a st de the removal of significant trees, rock outcro ce: Project Location.				s not	
1.c.	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings, such as significant change in topography or ground surface relief features, and/or development on a ridgeline? (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?				X	
of the from t devel	ussion: The project site is located within a rule parcel is located down a steep driveway from the roadway to the developed area (approximopment will not be visible from public viewpoge in topography as only minor grading activitient.	m La Honda R nately 85 feet) ints. The proj	load. Due to t the existing a ect does not ir	he elevation of nd proposed nclude a propo	lifference osed	
Sour	ce: Project Location; Project Plans.					

				r					
	Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?			Х					
Discussion: The project proposes to construct a new two-story barn to replace the existing barn, a detached guest restroom, an agricultural storage shed, camping structures for overnight campers, and a ground-mounted solar system. As mentioned previously all the proposed development is clustered amongst existing development. The proposed development utilizes colors and materials to blend with the surrounding environment and does not incorporate materials that would result in daytime glare. The project does not include nighttime lighting that is inconsistent with the development pattern of the existing and surrounding development and is not expected to impact nighttime views in the area. Source: Project Plans; Project Location.									
Source		1	1	1					
	Be adjacent to a designated Scenic Highway or within a State or County Scenic Corridor?			х					
Discussion: See discussion under 1.a. and 1.c., above. Source: Project Location; Project Plans.									
	If within a Design Review District, conflict with applicable General Plan or Zoning Ordinance provisions?				Х				
Discussion: The project site is not located within a Design Review District.									
Source	: Project Location.								
	Visually intrude into an area having natural scenic qualities?			х					
	Discussion: See discussion under 1.a. and 1.c., above. Source: Project Location; Project Plans.								

2. AGRICULTURAL AND FOREST RESOURCES. 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 the 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 Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact	
2.a.	For lands outside the Coastal Zone, convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?				X	
	ssion: The project site is located within the e: Project Location.	Coastal Zone				
2.b.	Conflict with existing zoning for agricultural use, an existing Open Space Easement, or a Williamson Act contract?			Х		
Discussion: The project parcel is not part of an existing Open Space Easement or a Williamson Act Contract. The project parcel is zoned PAD/CD (Planned Agriculture District/Coastal District). The proposed project proposes the construction of structures which are consistent with an agricultural use. The project proposes to establish a permanent overnight outdoor recreational camp for public school elementary age school children. The camp would accommodate permanent staff members and up to 30 guests. Public Recreation is allowed in the PAD zoning regulations with the issuance of a Planned Agriculture Permit. Source: Project Location; San Mateo County Zoning Regulations.						
2.c.	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 forestland to non-forest use?			Х		
existin constr existin new w storag safety develo have p The exist that co flood z	ssion: The proposed project includes the ready barn); construction a detached guest restruction of four tent/yurt structures (four overrag agricultural storage yurt; installation of a rater distribution, treatment, and storage infrate tanks); installation of a ground mounted se; and creation of twelve delineated staff and opment is proposed for lands identified as propreviously been disturbed and/or are adjace existing agricultural activities are not impacted ontain prime soils, are largely undevelopable zone. The subject parcel does not contain for existing agricultural station; Project Plans; United Servation Service, Web Soil Survey.	room; construc- night campers/ new wastewate astructure (po- olar panel syst visitor parking ime soils there nt to areas that d. The portion e due to the pro- prestland.	ction of a deta chaperones); er treatment sy table water an tem; new drive g spaces. Whi e is minimal im t have been p is of the parce esence of sen	ched agricultu legalization o ystem; installa d fire suppres way turnouts le the majority npact as these reviously distu I outside of the sitive habitats	ral shed; f the tion of a sion for fire of the areas urbed. e areas and the	

2.d. For lands within the Coastal Zone, convert or divide lands identified as Class I or Class II Agriculture Soils and Class III Soils rated good or very good for artichokes or Brussels sprouts?		Х	
for artichokes or Brussels sprouts?			

Discussion: The subject parcel is largely made up of CsB (Corralitos Sandy Loam) and Ma (Mixed alluvial land) soils. CsB has a Class II classification when the soils are irrigated and Class III when non irrigated. Ma is not rated as suitable. The existing agricultural and non-agricultural development is largely located on the CsB soils. The developable portions of the parcel are heavily constrained due to the presence of sensitive habitats and a flood zone buffer zone. While the proposed project maintains the current agricultural development, the new structures are located on prime soils. Given the existing development pattern of the parcel and site development constraints the proposed project minimizes disturbances by clustering the proposed development and maintaining the existing agricultural areas/operations intact. The proposed development will not result in a subdivision.

Source: Project Location; Project Plans; United Sates Department of Agriculture-Natural Resources Conservation Service, Web Soil Survey.

2.e.	Result in damage to soil capability or loss of agricultural land?		Х	
	-			ł

Discussion: The development area on the subject parcel is highly constrained due to the presence of the sensitive habitats, flood zone, and prime soils. Given this the existing development area of the parcel is located on prime soils. Conversion of additional prime soils is limited as the proposed barn is to be located in the footprint of the existing barn and the new storage building is ancillary to the existing agricultural production. The proposed development avoids this area. The existing agricultural areas include the area enclosed within the deer fence and in the orchard area (as shown on plans). The site's improvements are limited to the project site and no impacts to the productivity of any adjacent agricultural lands is expected.

Source: Project Plans; Project Location.

2.f.	Conflict with existing zoning for, or cause rezoning of, forestland (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
	Note to reader: This question seeks to address the economic impact of converting forestland to a non- timber harvesting use.		

Discussion: The project site supports a significant amount of riparian vegetation but is not considered forestland or timberland. The project does not conflict with the existing zoning nor does it propose rezoning the parcel.

Source: Project Location; San Mateo County Zoning Regulations.

3. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
3.a.	Conflict with or obstruct implementation of the applicable air quality plan?		Х		

Discussion: The project will not conflict with or obstruct the implementation of the Bay Area Air Quality Management District's (BAAQMD) 2017 Clean Air Plan (CAP), which is the regulating air quality plan for San Mateo County. The project site currently supports a residence and agricultural activities. During project construction, air emissions would be generated from site grading, equipment, and work vehicles. However, any such grading related emissions would be temporary and localized.

The current agricultural activities will continue as will the number of staff members. The camp function will operate from 30-35 during the standard school year and for a maximum of three weeks in the summer. The maximum number of visitors would be 30 people to be on site for three days and two nights permit. Furthermore, the project would not generate any long-term operational air quality emissions as the project proposes no new development or change in land use.

The BAAQMD provides preliminary screening criteria in their 2017 BAAQMD CEQA Guidelines to indicate whether a project would result in the generation of construction-related criteria air-pollutants and/or precursors that exceed defined thresholds of significance. The proposed project, with the basic construction mitigation control measures below, meets the screening criteria indicating a less than significant impact for construction-related activities as the project does not propose any applicable land use or development exceed such criteria.

<u>Mitigation Measure 1</u>: The applicant shall submit a plan to the Planning and Building Department prior to the issuance of any grading "hard card" that, at a minimum, includes the "Basic Construction Mitigations Measures" as listed in Table 8-2 of the BAAQMD CEQA Guidelines (May 2017). These measures shall be implemented prior to beginning any ground disturbance and shall be maintained for the duration of the project activities:

- a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access road) shall be watered two times per day.
- b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- c. All visible mud or dirt track-out onto adjacent paved roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- d. All vehicle speeds on unpaved roads shall be limited to 15 mph.
- e. Idling times shall be minimized either by shutting equipment or vehicles off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne

Toxics Control Measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

- f. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- g. Post a publicly visible sign with the telephone number and person to contact at the County regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Bay Area Air Quality Management District's phone number shall also be visible to ensure compliance with applicable regulations.

Source: BAAQMD CEQA Guidelines, May 2017; BAAQMD 2017 Clean Air Plan; Project Plans.

or State ambient air quality standard?	3.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?			Х	
		3.b.	net increase of any criteria pollutant for which the project region is non- attainment under an applicable Federal	net increase of any criteria pollutant for which the project region is non- attainment under an applicable Federal	net increase of any criteria pollutant for which the project region is non- attainment under an applicable Federal	net increase of any criteria pollutant for which the project region is non- attainment under an applicable Federal

Discussion: The San Francisco Bay Area is in non-attainment for ozone and particulate matter (PM), including PM 10 (state status) and PM 2.5 (state status), including the 24-hour PM 2.5 national standard. Given the focused area of work, overall parcel size, and project scope the project would only generate minor temporary criteria pollutant emissions, which would be addressed with the implementation of Mitigation Measure 1. Therefore, construction related emissions would not result in a cumulatively considerable increase of any criteria pollutant for which the project region is in non-attainment under an applicable Federal or State ambient air quality standard.

Source: Project Plans; Project Location.

3.c. Expose sensitive receptors to substantial pollutant concentrations, as defined by the Bay Area Air Quality Management District?	X
---	---

Discussion: There are no sensitive receptors located in close proximity to the project site nor is the project expected to result in the release of substantial pollutants.

Source: BAAQMD CEQA Guidelines, May 2017; Project Plans; Project Location.

3.d.	Result in other emissions (such as		Х
• • • • •	l l		
	those leading to odors) adversely		
	3 , , 3		
	affecting a substantial number of		
	people?		
	heobies		

Discussion: The project would result in short-term grading related emissions, such as fugitive dust and exhaust from construction vehicles. However, the project site is located in a remote, rural area where the closest residence is located over 500 feet away. Given the distance, topography of the site, and mature vegetation occurring between the two sites any impacts would be less than significant. The project does not include elements that would result in other emissions that would adversely affect a substantial number of people.

Source: Project Plans.

4.	BIOLOGICAL RESOURCES. Would the project:					
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact	
4.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 Depart- ment of Fish and Wildlife or U.S. Fish and Wildlife Service or National Marine Fisheries Service?		Х			

Discussion: A biological assessment was completed for this project by Albion Environmental, Inc. dated June 2019. This assessment was an update for one which was completed by TRA Environmental Sciences in April 2014. Both assessments concluded that no rare or otherwise special-status plant species occur within the proposed development areas. The assessments acknowledge the presence of riparian and/or native grass lands on the property but conclude that no direct or indirect impacts are anticipated. However, the assessments identified five special status animal species that have the potential to occur within the project area: California red-legged frog (*Rana draytonii*), western pond turtle (*Actinemys marmorata*), San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), pallid bat (*Antrozous pallidus*), and San Francisco dusky-footed wood rat (*Neotoma fuscipes annectens*).

The California red-legged frog (CRLF) is a State of California Species of Special Concern (SSC) and a Threatened Species at the Federal level. The assessments note that California red-legged frogs are known to occur in San Gregorio Creek and may be found within the portions of the creek that transverse the property. While California red-legged frogs are also known to use upland habitat, the assessments note that the areas proposed for development provide limited suitable refugia (such as wet areas, logs, burrows, etc.). The assessments conclude that project activities are not expected to adversely impact the California red-legged frog.

The San Francisco garter snake (SFGS) is a both State of California and Federal endangered species. San Francisco garter snakes are known to occur along San Gregorio Creek and may occur near the creek within the property. However, the assessment notes that project activities are not expected to adversely impact the San Francisco garter snake because the areas proposed for development are already disturbed and that snakes avoid disturbed, open areas with human presence.

The Western pond turtle is a California SSC. The assessments note that the Western pond turtles are known to occur in San Gregorio Creek. However, the creek depth for the portion of San Gregorio creek that runs through the property is mostly shallow (2-12 inches) and does not provide preferred habitat for this species. The assessments conclude that project activities are not expected to adversely impact the western pond turtle.

The Pallid bat is a California SSC. The assessments note that Pallid bats are uncommon along the San Mateo coast and the species has a low likelihood to occur on the property. Given the amount of activity on the parcel it is unlikely that Pallid bats are roosting in the barn as they are sensitive to disturbance and unlikely to roost where human activity regularly occurs. The assessments note that project activities are not expected to adversely impact pallid bats.

The assessments do cite that other species of bats, protected by Fish and Game Code, may have day roosts in crevices under the roof of the barn. Demolition of the barn could impact day-roosting bats.

The San Francisco dusky-footed wood rat is a California Species of Special Concern and based on the assessments are known to occur on the project site. The assessments confirm that their lodges are well-established and occur near proposed development areas. Construction activities could adversely impact wood rats.

The assessments provided a number of avoidance and mitigation measures to ensure that in the event these resources are encountered that impacts would be less than significant.

Mitigation Measure 2: San Francisco Dusky-Footed Woodrat- A survey for San Francisco duskyfooted wood rat lodges within the development areas shall be conducted prior to any construction activities. California Department of Fish and Wildlife requires disturbance-free buffers of 50 feet around each lodge. Wood rat lodges that cannot be avoided shall be dismantled by a qualified biologist during the time of year that would least impact breeding wood rats (November-January). Dismantling shall be conducted slowly to avoid impacting neonate wood rats. If neonates are detected in the lodge, dismantling shall cease, and the lodge will be checked every 48 hours to determine if the neonates are still present. Dismantling can continue once the neonates are no longer present and have either been weaned from their mothers, or the mothers have moved them from the nest.

<u>Mitigation Measure 3</u>: Day Roosting Bats- Day roosting bats may occur in crevices of the barn roof. The roof and trim should be carefully removed with hand tools. Removal should be conducted towards the end of the day, when bats naturally emerge from their day roosts.

<u>Mitigation Measure 4</u>: Non-Native Plant Species Avoidance- All construction vehicles that may have been exposed to non-native, invasive plant species and may carry seeds shall be washed (tires and undercarriage) before entering the property. In the event that imported fill is needed, native soil shall be used. All rock, aggregate, fiber rolls, or other construction materials, if needed, shall be certified weed-free.

<u>Mitigation Measure 5</u>: Exclusion fencing shall be installed at the perimeter of the riparian buffer to delineate the area of work and protect sensitive habitats.

<u>Mitigation Measure 6</u>: Watershed Protection and Maintenance- Best Management Practices according to San Mateo County's Watershed Protection and Maintenance Standards shall be incorporated into the project design to protect the water quality of nearby San Gregorio Creek (https://publicworks.smcgov.org/watershed-protection-and-maintenance-standards).

Source: Biotic Assessment Report Update for Vida Verde ,3540 La Honda Road, San Gregorio, California (APN 081-320-060), Albion Environmental, Inc, June 2019 (Ablion 2019); Biotic Assessment for APN# 081-320-060 Vida Verde, San Gregorio, California, TRA Environmental Sciences, May 2014 (TRA 2014); Project Location; Project Plans.

4.b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service or National Marine Fisheries Service?			Х		
the ce and ri dense deline propo the pr with M Source	Ission: San Gregorio Creek, a perennial bluenter of the property. Most of the parcel is vere parian vegetation. The riparian corridor runs e cover of woody riparian species and herbace ated the edge of the riparian corridor and a sed development is located outside of the broject determined that no impacts are anticip ditigation Measures 4-6 address any unfores ce: Biotic Assessment Report Update for Viernia (APN 081-320-060), Albion Environmer	egetated with r s along each s ceous underst 50-ft buffer ha uffer zone. Th ated as part of seen impacts. da Verde ,354	native and nor ide of the cree ory. The biotic s been establi le biotic asses f the project. I 0 La Honda R	n-native trees, ek and support c assessments shed. All of th sments submi Further, compl oad, San Greg	grasses, ts a ne tted for liance	
Asses	ssment for APN# 081-320-060 Vida Verde, S ces, May 2014 (TRA 2014); Project Locatior	San Gregorio, 🤇	California, TR/		tal	
4.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	
	Ission: There are no wetlands present on thce: Project Location; Project Plans.	ne project site.				
4.d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?		х			
during	Ission: The biotic assessments note that th g project construction activities. The followin impacts to less than significant.					
work s activit nestin	<u>Mitigation Measure 7</u> : If possible, barn demolition, vegetation trimming/removal, and initial earth work should be conducted outside the breeding season (September 1-January 31). If these activities occur during the breeding season, a qualified biologist will need to conduct a survey for nesting birds within five days prior to the proposed start of construction. If an active nest is detected in the construction area, work will be delayed until the young fledge, and/or a disturbance-free buffer					

in the construction area, work will be delayed until the young fledge, and/or a disturbance-free buffer will need to be established around the nest. California Department of Fish and Wildlife usually accepts a 50-foot buffer for passerine nests, and a 250-foot buffer for most raptor nests. A qualified biologist shall monitor the behavior of the birds at the nest site to ensure that they are not disturbed by project related activities. Nest avoidance and/or monitoring shall continue during project-related construction work until the young have fledged, are no longer being fed by the parents, and have left the nest site. At that time the nest buffer may be removed, and work may commence.

Source: Biotic Assessment Report Update for Vida Verde ,3540 La Honda Road, San Gregorio, California (APN 081-320-060), Albion Environmental, Inc, June 2019 (Ablion 2019); Biotic Assessment for APN# 081-320-060 Vida Verde, San Gregorio, California, TRA Environmental Sciences, May 2014 (TRA 2014); Project Location; Project Plans.

4.e.	Conflict with any local policies or ordi-		Х
	nances protecting biological resources,		
	such as a tree preservation policy or		
	ordinance (including the County Heritage		
	and Significant Tree Ordinances)?		

Discussion: The proposed project does not conflict with any local policies or ordinances protecting biological resources. The proposed project does not include the removal of trees.

Source: Project Plans; San Mateo County Local Coastal Program; San Mateo County General Plan; San Mateo County Zoning Regulations.

4.f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural		Х
Conservation Community Plan, other		
approved local, regional, or state habitat conservation plan?		

Discussion: The project area is not subject to a Habitat Conservation Plan, Natural Conservation Community Plan, or other approved conservation plan.

Source: Project Location.

4	.g.	Be located inside or within 200 feet of a		Х
		marine or wildlife reserve?		

Discussion: The project site is not located within 200 feet of a marine or wildlife reserve.

Source: Project Location.

4.h.	Result in loss of oak woodlands or other		Х
	non-timber woodlands?		

Discussion: The proposed project site does not support oak woodlands or other non-timber woodland. The project site does support a riparian corridor which will not be impacted by the proposed project. The proposed project does not involve the removal of trees.

Source: Project Location; Project Plans.

5.	CULTURAL RESOURCES. Would the project:				
					No Impact
5.a.	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?		Х		

Discussion: A project referral was sent to California Historical Resources Information System (CHRIS), File No: NWIC 20-2034. The CHRIS responses noted that a previous cultural resources study had been conducted on the property. This report, completed by Stella D'Oro, MA, RPA, of Albion Environmental, INC., dated November 2017 was also submitted as part of the permit application. The report did not identify the presence of any cultural resources (archaeological sites or historic buildings and/or structures) on the project site and did not recommend that additional studies be conducted. However, it was recommended that the Native American Heritage Commission be contacted regarding traditional, cultural, and religious heritage values.

A Native American Heritage Commission Sacred Lands search was completed, and the results were negative. The Commission also provided the contact information for five Native American tribes to contact who could have knowledge of cultural resources in the project area. Staff has reached out to these tribes but to date has received no response.

In order to address the possibility of encountering resources during project construction the following mitigation measures have been added:

<u>Mitigation Measure 8</u>: In the event that prehistoric traces (human remains, artifacts, concentrations of shell/bone/rock/ash, etc.) are encountered, all construction activities within a fifty-meter radius of the find shall be stopped, the County Planning Department notified, and an archaeologist retained to examine the find and make appropriate recommendations. All contractors and sub-contractors shall be made aware of these requirements and shall adhere to all applicable laws including State Cultural Preservation laws.

Source: Project Location; California Historical Resource Information System (File No.: 20-2034); State of California Native American Heritage Commission; D'Oro.S (November 2017). Vida Verde Cultural Resources Assessment of Proposed Construction at 3540 State Highway 84, San Gregorio, California.

5.b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Section 15064 52			Х		
	15064.5?					

Discussion: See discussion of 5.a., above.

Source: Project Location; California Historical Resource Information System (File No.: 20-2034); State of California Native American Heritage Commission; D'Oro.S (November 2017). Vida Verde Cultural Resources Assessment of Proposed Construction at 3540 State Highway 84, San Gregorio, California.

5	.C.	Disturb any human remains, including those interred outside of formal	Х	
		cemeteries?		

Discussion: There are no known human remains located on the site. However, in the event human remains were encountered the following mitigation measure is included.

Mitigation Measure 9: In the event that human skeletal remains are encountered, all work at the immediate location of the find must temporarily stop. Public Resource Code 5097 and local Health and Safety codes establish a procedure for notifying the County Coroner's Office and possibly the State Native American Heritage Commission to seek recommendations from a Most Likely Descendant (Tribal Contact) before any further action at the location of the find can proceed. All contractors and sub-contractors shall be made aware of these requirements and shall adhere to all applicable laws including State Cultural Preservation laws.

Source: Project Location.

6.	6. ENERGY. Would the project:				
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?		vould consum	e or result in v	X vasteful,
	ient, or unnecessary consumption of energy	resources.			
Sourc	ce: Project Plans.				
6.b.	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.				х
	ssion: The project does not involve elemer or renewable energy or energy efficiency.	nts which woul	d conflict or ol	ostruct a state	or local
Sourc	ce: Project Plans.				

7.	7. GEOLOGY AND SOILS. Would the project:					
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact	
7.a.	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving the following, or create a situation that results in:					
	 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? Note: Refer to Division of Mines and Geology Special Publication 42 and the County Geotechnical Hazards Synthesis Map. 				x	
parce Sour	ussion: This parcel is not located in an area I is not located within a special study area fo ce: San Mateo County Geotechnical Hazaro nservation: EQ Zapp: California Earthquake	r earthquakes Is Synthesis M	lap; State of C	California, Dep		
	ii. Strong seismic ground shaking?			X		
struct incluc Sour	ussion: The subject parcel is located in an a sures proposed for construction will be require les construction methods that address seism ce: Project Location; Association of Bay Are ty Earthquake Hazard Map.	ed to meet the nic ground sha	e applicable Bu king.	uilding Code w	hich	
	iii. Seismic-related ground failure, including liquefaction and differential settling?				Х	
failure	ussion: This parcel has not been identified a e, including liquefaction and differential settlin e State of California Geological Survey.					
	ce: San Mateo County Geotechnical Hazard nservation: EQ Zapp: California Earthquake				artment	

iv. Landslides?			х
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Discussion: This parcel has not been identified as being susceptible to landslides. The parcel is located within a study area for the State of California Geological Survey.

Source: San Mateo County Geotechnical Hazards Synthesis Map; State of California, Department of Conservation: EQ Zapp: California Earthquake Hazards Zone Online Application.

v. Coastal cliff/bluff instability or erosion?		Х
Note to reader: This question is looking at instability under current conditions. Future, potential instability is looked at in Section 7 (Climate Change).		

Discussion: The subject parcel is located approximately 3 miles from the nearest coastal cliff/bluff and is not subject to cliff/bluff instability or erosion.

Source: Project Location.

7.b. Result in substantial soil erosion or the loss of topsoil?		Х			
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Discussion: The project involves approximately 180 cubic yards of earthwork. While the proposed grading is relatively minor given the presence of sensitive habitats on the parcel, the following mitigation measure has been included to ensure that there are no significant impacts:

Mitigation Measure 10: Prior to commencement of the project, the applicant shall submit to the Planning Department for review and approval an erosion and drainage control plan that shows how the transport and discharge of soil and pollutants from and within the project site shall be minimized. The plan shall be designed to minimize potential sources of sediment, control the amount of runoff and its ability to carry sediment by diverting incoming flows and impeding internally generated flows, and retain sediment that is picked up on the project site through the use of sediment-capturing devices. The plan shall also limit application, generation, and migration of toxic substances, ensure the proper storage and disposal of toxic materials, and apply nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters. Said plan shall adhere to the San Mateo County Wide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including:

- a. Sequence construction to install sediment-capturing devices first, followed by runoff control measures and runoff conveyances. No construction activities shall begin until after all proposed measures are in place.
- b. Minimize the area of bare soil exposed at one time (phased grading).
- c. Clear only areas essential for project activities.
- d. Within five days of clearing or inactivity, stabilize bare soils through either non-vegetative BMPs, such as mulching, or vegetative erosion control methods such as seeding. Vegetative erosion control shall be established within two weeks of seeding/planting.
- e. Project site entrances shall be stabilized immediately after grading and frequently maintained to prevent erosion and control dust.

- f. Control wind-born dust through the installation of wind barriers such as hay bales and/or sprinkling.
- g. Soil and/or other construction-related material stockpiled on-site shall be placed a minimum of 200 feet from all wetlands and drain courses. Stockpiled soils shall be covered with tarps at all times of the year.
- h. Intercept runoff above disturbed slopes and convey it to a permanent channel or storm drains by using earth dikes, perimeter dikes or swales, or diversions. Use check dams where appropriate.
- i. Provide protection for runoff conveyance outlets by reducing flow velocity and dissipating flow energy.
- j. Install storm drain inlet protection that traps sediment before it enters any adjacent storm sewer systems. This barrier shall consist of filter fabric, straw bales, gravel, or sand bags.
- k. Install sediment traps/basins at outlets of diversions, channels, slope drains, or other runoff conveyances that discharge sediment-laden water. Sediment traps/ basins shall be cleaned out when 50 percent full (by volume).
- Use silt fence and/or vegetated filter strips to trap sediment contained in sheet flow. The maximum drainage area to the fence should be 0.5-acre or less per 100 feet of fence. Silt fences shall be inspected regularly, and sediment removed when it reaches 1/3 the fence height. Vegetated filter strips should have relatively flat slopes and be vegetated with erosionresistant species.
- m. Utilize coir fabric/netting on sloped graded areas to provide a reduction in water velocity, erosive areas, habitat protection, and topsoil stabilization.
- n. Throughout the construction period, the applicant shall conduct regular inspections of the condition and operational status of all structural BMPs required by the approved Erosion Control Plan.

Source: Project Location; Project Plans.

7.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, sovere erosion liquefaction or collapse?		х	
	severe erosion, liquefaction or collapse?			

Discussion: The project site is not identified as having a geologic unit or soil that is unstable or would become unstable as a result of the project. The site is developed and has no evidence of a geologic unit or soils that are unstable.

Source: Project Location.

7.d			х
	in Table 18-1-B of Uniform Building Code, creating substantial direct or		
	indirect risks to life or property?		

Discussion: The subject parcel is largely made up of CsB (Corralitos Sandy Loam) and Ma (Mixed alluvial land) soils. Neither of these soils is identified as expansive.

Source: Project Location; Hydrology Report for Vida Verde, San Gregorio, CA, Questa Engineering Corporation (December 2018).

7.e.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems		Х
	where sewers are not available for the disposal of wastewater?		

Discussion: The subject parcel currently supports a septic system. The proposed project includes improvements to the septic system which have been reviewed and conditionally approved by the San Mateo County Division of Environmental Health Services, the agency responsible for review, approval, and monitoring of these systems for the County of San Mateo.

Source: Project Location.

7.f.	Directly or indirectly destroy a unique		Х
	paleontological resource or site or		
	unique geologic feature?		

Discussion: The subject property does not support a unique paleontological resource or site or unique geologic feature.

Source: Project Location; Project Plans.

8.	CLIMATE CHANGE. Would the project:				
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
8.a.	Generate greenhouse gas (GHG) emissions (including methane), either directly or indirectly, that may have a significant impact on the environment?		х		

Discussion: A minor temporary increase in greenhouse gasses may occur during the construction phase. Vehicles and equipment associated with the construction phase of the project are subject to California Air Resources Board emission standards. Although the project scope is not likely to significantly generate greenhouse gases, the following mitigation measure is recommended.

<u>Mitigation Measure 11</u>: The applicant shall implement the following basic construction measures at all times:

- a. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxic Control Measure Title13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- b. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
- c. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person, or his/her designee, shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Source: California Air Resources Board, San Mateo County Energy Efficiency Climate Action Plan.

8.b.	Conflict with an applicable plan (including a local climate action plan), policy or regulation adopted for the		х
	purpose of reducing the emissions of greenhouse gases?		

Discussion: The project does not conflict with the San Mateo County Energy Efficiency Climate Action Plan provided that the mitigation measure outlined in Section 8.a, above is implemented.

Source: San Mateo County Energy Efficiency Climate Action Plan.

8.c.	Result in the loss of forestland or conversion of forestland to non-forest use, such that it would release signifi- cant amounts of GHG emissions, or		Х
	significantly reduce GHG sequestering?		

Discussion: The subject parcel is not considered forestland. There are no trees proposed for removal as part of the project.

Source: Project Location; Project Plans.

8.d. Expose new or existing structures and/or infrastructure (e.g., leach fields) to accelerated coastal cliff/bluff erosion due to rising sea levels?		Х
6		1

Discussion: The project site is not located on a coastal cliff or bluff.

Source: Project Location.

8.e.	Expose people or structures to a		Х
	significant risk of loss, injury or death		
	involving sea level rise?		

Discussion: The project is located approximately 3 miles from the ocean. Given the topography and distance sea level rise is not expected to impact this parcel.

Source: Project Location.

		8.f. Place structures within an anticipate 100-year flood hazard area as mapp on a Federal Flood Hazard Boundar Flood Insurance Rate Map or other hazard delineation map?	ped ry or	Х
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Discussion: The project parcel contains both portions of Zone X (areas of minimal flood hazard) and Zone A (special flood hazard area without an established base flood elevation). The proposed development is all located outside of the flood plain.

Source: Project Location; Project Plans; Federal Emergency Management Agency, Panel No. 06081C-0380E, Effective Date: October 16, 2012.

8.g. Place within an anticipated 100-year flood hazard area structures that would impede or redirect flood flows?				Х
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Discussion: See discussion under 8.f., above.

Source: Project Location; Project Plans; Federal Emergency Management Agency, Panel No. 06081C-0380E, Effective Date: October 16, 2012.

9.	HAZARDS AND HAZARDOUS MATERIALS. Would the project:					
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact	
9.a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (e.g., pesticides, herbicides, other toxic substances, or radioactive material)?				Х	
Discussion: No transport of hazardous materials is associated with this project. Source: Project Plans.						
9.b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident condi- tions involving the release of hazardous materials into the environment?				Х	

Discussion: The project does not involve the use of hazardous materials which could create a significant hazard to the public or the environment. Source: Project Plans.					
9.c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				х
Discussion: The project site is not within one-quarter mile of an existing or proposed school. The project does not involve elements which would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste.					
Sourc	ce: Project Location.				
9.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
Discu	ssion: The project site is not located on a li	ist of hazardo	us materials s	ites.	
Sourc	e: Project Location; California Department	of Toxic Subs	tances Contro	I.	
9.e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?				Х
Discussion: The project site is not located within an airport land use plan area or within 2 miles of a public airport or public use airport.					
Sourc	e: Project Location.				

9.f.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
parce and w Given	ussion: The proposed project elements are and entirely within the parcel boundaries. The vater storage tanks for fire suppression in order this, there is no expected impact to any emotion	The project inc ler to improve ergency respo	emergency re onse or evacua	al driveway tu sponse to the	irnouts
Sour	ce: Project Location; San Mateo County Off	ice of Emerge	ncy Services.		
9.g.	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			Х	
for will with the p code.	ussion: The subject parcel is located in a St Idland fires. The proposed project includes i he addition of new turnouts. The project also parcel is currently developed, and all new stru A review of the project was completed by C conditionally approved.	mproved eme o includes wat uctures will be	rgency ingress er storage tan constructed to	s/egress to the ks for fire support the applicable	e site pression le fire
Sour	ce: Project Location; Cal-Fire, California Fire	e Hazard Seve	erity Zone Map).	
9.h.	Place housing within an existing 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				х
	ussion: The proposed project includes the c ed outside of the 100-year flood hazard boun		a farm labor h	iousing unit w	hich is
	ce: Project Plans; Federal Emergency Mana tive Date: October 16, 2012.	agement Agen	cy, Panel No.	06081C-0380	E,
9.i.	Place within an existing 100-year flood hazard area structures that would impede or redirect flood flows?				х
	ussion: See discussion under 8.f. and 9.h., a		I		I
	ce: Project Location; San Mateo County Offigency Management Agency, Panel No. 0608				
9.j.	Expose people or structures to a signifi- cant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				Х

Discussion: The project development is proposed to be located outside of the flood plain. The project site is not located in the vicinity of a levee or dam inundation area.

Source: Project Location; FEMA, Flood Map Service Center.

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Discussion: The project site is not located in an area that is susceptible to inundation by seiche, or tsunami. Though San Gregorio Creek could potentially serve as a transportation medium for a mudflow event, the creek has several bends and is bounded by riparian vegetation which together would reduce the velocity of a mudflow event.

Source: Project Location.

10.	HYDROLOGY AND WATER QUALITY. Would the project:				
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
10.a.	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality (consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical stormwater pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash))?		Х		

Discussion: The project has the potential to generate polluted stormwater runoff during site grading and construction-related activities. However, these impacts would be reduced to a less than significant level with the implementation of Mitigation Measure 10 (see above).

The project will be required to comply with the County's Drainage Policy requiring post-construction stormwater flows to be at, or below, pre-construction flow rates. Additionally, the project must include Low Impact Development (LID) site design measures in compliance with Provision C.3.i. of the County's Municipal Regional Stormwater Permit as the project will introduce 9,979 sq. ft. of new impervious surface. These standards will ensure that post-construction water runoff does not violate any water quality standard as the project proposes to direct roof, driveway, and patio runoff to vegetated areas. The proposed project was reviewed and conditionally approved by the Building Inspection Section's Civil Section for compliance with County drainage standards. Furthermore, the proposed septic system has been preliminarily reviewed and conditionally approved by the County Environmental Health Services. As such, the project is not expected to violate any water quality standards or waste discharge requirements.

Source: Project Plans, C.3/C.6 Development Review Checklist; County of San Mateo Drainage Policy, County of San Mateo Environmental Health Services.

10.b.	Substantially decrease groundwater supplies or interfere substantially with		Х
	groundwater recharge such that the		
	project may impede sustainable groundwater management of the basin?		

Discussion: A hydrology report was provided as part of the permit application. The report notes that the groundwater on the site occurs mainly within the areas of the parcel that support alluvial soils. The report notes that the alluvial groundwater is recharged by direct rainfall-recharge and lateral infiltration from San Gregorio Creek. An analysis of groundwater recharge was conducted utilizing an annual water balance analysis. The water balance analysis indicates the average annual replenishment of the onsite alluvial aquifer to be more than 10 times the estimated annual water demand for normal activities and operations. The analysis also determined that during extreme drought conditions, groundwater replenishment would drop considerably, but would still be 2 to 3 times the normal water demand. This analysis does not account for the contribution of groundwater recharge from the northern hillside portion of the site (approximately 2.5 acres) or lateral inflow from San Gregorio Creek alluvial aquifer. The report also clarified that these two sources would contribute an undetermined additional amount of annual recharge to the alluvial aquifer, further enhancing the water supply reliability.

Source: Project Location; Project Plans; Water Supply Plan for Vida Verde San Gregorio, California (Questa Engineering Corporation, October 2019); Preliminary Technical Report Public Water System for Vida Verde Nature Education San Gregorio, California (Questa Engineering Corporation, March 1, 2021).

10.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 that would:		
	i. Result in substantial erosion or siltation on- or off-site;		Х

Discussion: The project does not involve the alteration of a course of a stream or river. The project does not involve the construction of new structures and site improvements. The most significant of the new buildings that are proposed is the replacement barn which is to be located in the same location as the existing barn. Minor changes to on-site drainage patterns resulting from the structures and site improvements will be reviewed and addressed at the building permit stage per the County's Stormwater Permit. No other changes to the site's existing drainage patterns are proposed.

Source: Project Plans.

ii. Substantially increase the rate or		х
amount of surface runoff in a manner		
which would result in flooding on- or		
off-site;		

Discussion: The project proposes to introduce 6,970 sq. ft. of new impervious surface to the project site. Given the overall parcel size the proposed additional impervious surface is minor. The project is subject to compliance with the County's Drainage Policy and Provision C.3.i. of the San Francisco Bay Region Municipal Regional Permit which requires that the design of a project include measures to maintain the surface runoff at its current levels.

Source: Project Plans.

iii.	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of		Х
	polluted runoff; or		

Х

Discussion: See discussion under Question 10(c)(ii).

Source: Project Plans.

iv. Impede or redirect flood flows?	
-------------------------------------	--

Discussion: See discussion under Question 10(c)(ii).

Source: Project Plans.

10.d.	In flood hazard, tsunami, or seiche		Х	
	zones, risk release of pollutants due to			
	project inundation?			

Discussion: While the project parcel does have areas, which are located within the identified flood plain, the areas proposed for development are located outside of these areas.

Source: Project Plans.

10.e.	Conflict with or obstruct implementation		х
	of a water quality control plan or		
	sustainable groundwater management		
	plan?		

Discussion: The project site lies within the San Gregorio Valley groundwater basin. This basin has been designated by the State Department of Water Resources as a "very low" priority basin. As such, no groundwater management plan is required under the State's Sustainable Groundwater Management Act; nor has the County developed a groundwater management plan for this basin. With regard to water quality control plans, the project site lies within the San Mateo Coastal SubBasin as identified within the San Francisco Bay Basin Water Quality Control Plan (Basin Plan). As such, any potential discharge from a site must comply with the Basin Plan, as was discussed under Question 10(a). Compliance with the SWRCB waste discharge permit requirements will ensure that the project will not conflict with the adopted Basin Plan.

Source: San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan), California Regional Water Quality Control Board (San Francisco Bay Region); 2019 SGMA Basin Prioritization Map, California Department of Water Resources.

10.f.	Significantly degrade surface or ground- water water quality?		Х
	water water quality?		

Discussion: See discussion under 10.a. and 10.b., above.

Source: Project Plans, C.3/C.6 Development Review Checklist; County of San Mateo Drainage Policy, County of San Mateo Environmental Health Services; Project Location; Water Supply Plan for Vida Verde San Gregorio, California (Questa Engineering Corporation, October 2019); Preliminary Technical Report Public Water System for Vida Verde Nature Education San Gregorio, California (Questa Engineering Corporation, March 1, 2021).

10.g.	Result in increased impervious surfaces and associated increased runoff?		Х	

Discussion: See discussion under Question 10(c)(ii)

Source: Project Plans.

11. LAND USE AND PLANNING. Would the project:					
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
11.a.	Physically divide an established community?				Х
 Discussion: The project development is contained entirely on the project parcel. The not involve elements that would result in the physical division of an established commu Source: Project Location; Project Plans. 					ect does
11.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?				х
	ssion: The proposed project does not conf tion adopted for the purpose of avoiding or i				cy, or

Source: Project Plans; Project Location; San Mateo County Zoning Regulations; San Mateo County General Plan, San Mateo County Local Coastal Program.

increase development intensity of already developed areas (examples include the introduction of new or expanded public utilities, new industry, commercial facilities or recreation activities)?

Discussion: While the proposed project does include a recreation component, the program is for educational purposes and all visits are pre-arranged. The improvements associated with the project are limited to the project site and are limited to those necessary to serve the educational program and agricultural activities.

Source: Project Plans; Project Location.

12.	MINERAL RESOURCES. Would the project:				
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
12.a.	Result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State?				х
Discussion: There are no known mineral resources that would be of value to the region or the residents of the state on the subject parcel. Source: Project Location; San Mateo County General Plan, Mineral Resource Map.					
12.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?				X
	ssion: There are no locally important minerary's General Plan, any specific plan, or any o		• • • •		the

Source: Project Location; San Mateo County General Plan; San Mateo County Zoning Regulations; San Mateo County Local Coastal Program.

		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impaci
13.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?				х
Discussion: During project construction, excessive noise could be generated, particularly during grading and excavation activities. However, the project is subject to the County's Noise Ordinance which limits the days and hours of construction related activities. Once construction is complete, the project site is not expected to generate noise which would violate the San Mateo County Noise Ordinance.					
Sourc	e: Project Plans, San Mateo County Noise (Ordinance.			
	Generation of excessive ground-borne				V
13.b.	vibration or ground-borne noise levels?				Х
Discu		hat would incl	ude generatio	n of excessive	
Discu borne	vibration or ground-borne noise levels? ssion: There are no aspects of the project t	hat would incl	ude generatio	n of excessive	

14.	4. POPULATION AND HOUSING. Would the project:				
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
14.a.	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				Х
Discussion: The development proposed as part of this project is limited to the project pa order to serve the project. The project includes one farm labor housing unit. No additional businesses are proposed as part of the project.					
Sourc	e: Project Plans; Project Location.				
14.b.	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				Х
Discu	ssion: The proposed project does not inclu	de the displac	cement of any	people or hou	sing.
Sourc	e: Project Plans.				

15. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, the 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:

		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
15.a.	Fire protection?				Х
15.b.	Police protection?				Х
15.c.	Schools?				Х
15.d.	Parks?				Х
15.e.	Other public facilities or utilities (e.g., hospitals, or electrical/natural gas supply systems)?				Х

Discussion: There are no anticipated impacts to public services as the property is developed and proposed development is limited to the project site. The project scope includes modifications to the site but is not of significant scope to trigger increased fire protection, police protection, schools, parks, and/or other public facilities.

Source: Project Plans; Project Location.

16.	16. RECREATION . Would the project:					
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact	
16.a.	Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				Х	
ownec to scho use of physic	ssion: All of the proposed improvements and parcel. Given that the parcel is already devolved groups that have pre-arranged their visit existing neighborhood or regional parks or early deterioration of any such facility as a resurce: Project Plans, Project Location.	veloped and th s, there is no e other recreation	nat visitors to t expected sign onal facilities tl	the site will be ificant increase hat would resu	limited e in the	
16.b.	Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			Х		
Educa the pro facilitie	Discussion: The project includes the construction of camp facilities to serve the Vida Verde Educational Camp. The project site is currently developed, and the improvements associated with the project are limited to the site. The project does not result in the need to expand or construct any facilities off-site. As proposed and mitigated the project will result in adverse physical effect on the environment.					
Sourc	e: Project Plans; Project Location.					

		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
17.a.	Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, and parking?				Х
barcel. transit,	ssion: As mentioned previously, the proposition of	ogram plan, or			
Sourc	e: Project Plans; Project Location.				
17.b.	Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b) <i>Criteria</i> <i>for Analyzing Transportation Impacts</i> ?				Х
	Note to reader: Section 15064.3 refers to land use and transportation projects, qualitative analysis, and methodology.				
metho require and us be a si signific VMT th Plannii deadlir	asion: California Environmental Quality Ac d for analyzing certain transportation impact ements, circulation impacts must be analyze se project, if the estimated VMT exceeds an gnificant impact. Each Lead Agency is resp eance and has until July 1, 2020 to do so. A mesholds of significance, but the responsibling) are working on this threshold with the ai ne. Until such time as the required threshold is (Level of Service) is the applicable standa	ts created by a ed based on ve a established t consible for es at this time, Sa e County depa m of adopting d is establishe	a proposed pro ehicle miles tra hreshold of sig stablishing the in Mateo Cour artments (Pub a threshold b	oject. Under the aveled (VMT). gnificance, the ir own thresho nty has not add lic Works and y the required	ne new For a n it could lds of opted
	the small number of students that the site c Highway 84) the project is not expected to			Ŷ	a Honda
•	e: Staff Analysis.	icour in signin		uano.	
17.c.	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or				Х

17.d.	Result in inadequate emergency access?			Х
	ssion: The project including access to the sonal approval from Cal-Fire, the County's F	reviewed by a	nd received	
Sourc	e: Project Plans			

18.	TRIBAL CULTURAL RESOURCES. Would the project:				
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
18.a.	Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
	 Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k) 				Х
	ssion: See discussion under question 5.a., :e: Project Location.	above.			
	 ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Subdivision (c) of Public Resources Code Section 5024.1. (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.) 				X

Discussion: See discussion under question 5.a., above.

Source: Project Location.

19.	UTILITIES AND SERVICE SYSTEMS. Would the project:				
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
19.a.	Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the con- struction or relocation of which could cause significant environmental effects?			Х	

Discussion: The project includes repairs and modifications to the existing wastewater treatment system. The existing 2,000-gallon septic tank which serves the existing residence/office and will serve the proposed detached restroom will remain but will undergo testing and improvements (i.e., upgrading risers and adding an effluent filter. A second septic tank (2,500 gallon) will be added in order serve the barn. The effluent from the septic tanks serving the existing residence and the proposed barn will be gravity collected into a single 2,000-gallon flow equalization tank. Secondary treatment of the wastewater consists of an AdvanTex textile filter a recirculation/blend tank. After secondary treatment, the treated water will be processed through a UV disinfection unit, collected dosing tank, and finally directed to the dispersal system. This additional treatment is required due to the project/parcel's proximity to San Gregorio Creek. Given that San Gregorio Creek is listed as "impaired" due to pathogens this additional treatment will ensure that no additional pathogens from wastewater make their way into the creek.

The project also includes upgrades to the existing domestic water system. The well, which currently provides the domestic service will be abandoned and a second (previously approved) well will be energized. The new service will also include treatment and storage facilities. Given the proposed project scope the service is determined to be a "State Small Water System" and is regulated by the State of California Division of Drinking Water (DDW). Review and certification of the system will require final approval by DDW. The applicant has submitted their preliminary application to DDW which includes a technical report and water supply plan both of which have been completed by Questa Engineering Corporation dated March 1, 2021 and October 2019 (respectively) which is currently under review. Based on these assessments there is no expectation that the improved water system will result in significant environmental effects.

Source: Project Location; Project Plans; Water Supply Plan for Vida Verde San Gregorio, California (Questa Engineering Corporation, October 2019); Preliminary Technical Report Public Water System for Vida Verde Nature Education San Gregorio, California (Questa Engineering Corporation, March 1, 2021).

19.b.	Have sufficient water supplies available		Х	
	to serve the project and reasonably			
	foreseeable future development during normal, dry and multiple dry years?			

Discussion: The submitted preliminary technical report provides analysis for the availability of water in both standard and dry years. The report noted that the source of groundwater on the site is made up of primarily direct rainfall-recharge (percolation) along with the possibility of some lateral infiltration from San Gregorio Creek. The report included estimates of groundwater recharge from onsite rainfall percolation by utilizing an annual water balance analysis for an average year and for back-to-back drought year conditions. The report determined that the average annual replenishment of the onsite aquifer to be more than 10 times the estimated annual water demand for normal activities and operations. In the event of extreme drought conditions (back-to-back years) the report determined that while groundwater replenishment would drop considerably, there would still be 2 to 3 times the normal water demand available to serve the site.

Source: Project Location; Project Plans; Water Supply Plan for Vida Verde San Gregorio, California (Questa Engineering Corporation, October 2019); Preliminary Technical Report Public Water System for Vida Verde Nature Education San Gregorio, California (Questa Engineering Corporation, March 1, 2021).

19.c.	Result in a determination by the waste- water 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		х	
	projected demand in addition to the provider's existing commitments?			

Discussion: The project site is not served by a municipal wastewater treatment provider. The site is developed with on onsite wastewater treatment system. The project includes proposed improvements which have been reviewed by and granted conditional approval by the County of San Mateo's Environmental Health Services.

Source: Project Plans; Project Location.

19.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?		Х
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Discussion: The project as proposed does not include a use that would result in solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure.

Source: Project Plans.

19.e.	Comply with Federal, State, and local		х
	management and reduction statutes and		
	regulations related to solid waste?		

Discussion: See discussion under 19.a.-19.d., above.

Source: Project Location; Project Plans; Water Supply Plan for Vida Verde San Gregorio, California (Questa Engineering Corporation, October 2019); Preliminary Technical Report Public Water System for Vida Verde Nature Education San Gregorio, California (Questa Engineering Corporation, March 1, 2021).

20. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
20.a.	Substantially impair an adopted emergency response plan or emergency evacuation plan?				Х

Discussion: The project site is located in an area designated as a "Moderate Fire Hazard Risk" on the State's Fire Hazard Severity Zone Maps. The project site is accessed via existing roadways. The project includes improvements to the driveway, adding water storage for fire suppression, and a new hydrant. All new structures will utilize the appropriate fire rated materials and the replacement barn will be fire-sprinklered. The project scope is limited to the project parcel and does not require the closure of any public roads which could impact an emergency response or evacuation plan.

Source: Project Plans, Project Location.

20.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 uncentralied encoded of a wildfire?	X
the uncontrolled spread of a wildfire?	

Discussion: The project site is in an area defined as being at moderate risk for fire danger. As discussed, the project site was previously developed, and the proposed project includes elements to improve fire safety. In the event there was a wildfire in the area the occupants would likely be exposed to pollutant concentrations and/or uncontrolled spread.

Source: Project Location.

20.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				
	Discussion: See discussion under 20.a., above. Source: Project Plans, Project Location.						
20.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?		Х				

Discussion: While downslope or downstream flooding could be possible the proposed development is located outside of the delineated flood plain. The immediate area around the parcel is not mapped for landslides. The proposed on-site drainage facilities have been sized and located to retain stormwater on-site and allow for percolation into the ground. As the project would not increase the risk of or severity of wildfires the project would not expose these structures to significant risk from flooding, as a result of runoff, post-fire instability, or drainage changes.

Source: Project Location; San Mateo County General Plan-Hazards Mapping.

21.	MANDATORY FINDINGS OF SIGNIFICA	NCE.			
		Potentially Significant Impacts	Significant Unless Mitigated	Less Than Significant Impact	No Impact
21.a.	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
potent	ission: While the project could result in sign tially sensitive habitats, mitigation measures nan significant levels.				
Sourc	ce: Project Location; Project Plans.				
21.b.	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively consider- able" 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
parcel operat group	Ission: The proposed project results in improposed development avoids sensiti tion will result in minimal outward changes to a week for 30-35 weeks of the school year ang agricultural activities will continue.	ve habitats an the property.	d flood hazaro The camp w	l areas. The c ill host one ca	camp mp
Sourc	ce: Project Plans.				

21.c.	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				х
	Discussion: See discussion of 21.a. and 21.b. Source: Project Plans; Project Location.				

RESPONSIBLE AGENCIES. Check what agency has permit authority or other approval for the project.

AGENCY	YES	NO	TYPE OF APPROVAL
Bay Area Air Quality Management District		Х	
Caltrans		Х	
City		Х	
California Coastal Commission	х		Associated Coastal Development Permit is Appealable to them.
County Airport Land Use Commission (ALUC)		Х	
Other:		Х	
National Marine Fisheries Service		Х	
Regional Water Quality Control Board		Х	
San Francisco Bay Conservation and Development Commission (BCDC)		х	
Sewer/Water District:		Х	
State Department of Fish and Wildlife		Х	
State Department of Public Health		Х	
State Water Resources Control Board	Х		State Small Water System
U.S. Army Corps of Engineers (CE)		Х	
U.S. Environmental Protection Agency (EPA)		Х	
U.S. Fish and Wildlife Service		Х	

MITIGATION MEASURES Yes No Mitigation measures have been proposed in project application. X Other mitigation measures are needed. X

The following measures are included in the project plans or proposals pursuant to Section 15070(b)(1) of the State CEQA Guidelines:

<u>Mitigation Measure 1</u>: The applicant shall submit a plan to the Planning and Building Department prior to the issuance of any grading "hard card" that, at a minimum, includes the "Basic Construction Mitigations Measures" as listed in Table 8-2 of the BAAQMD CEQA Guidelines (May 2017). These measures shall be implemented prior to beginning any ground disturbance and shall be maintained for the duration of the project activities:

- a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access road) shall be watered two times per day.
- b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- c. All visible mud or dirt track-out onto adjacent paved roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- d. All vehicle speeds on unpaved roads shall be limited to 15 mph.
- e. Idling times shall be minimized either by shutting equipment or vehicles off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- f. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- g. Post a publicly visible sign with the telephone number and person to contact at the County regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Bay Area Air Quality Management District's phone number shall also be visible to ensure compliance with applicable regulations.

Mitigation Measure 2: San Francisco Dusky-Footed Woodrat- A survey for San Francisco duskyfooted wood rat lodges within the development areas shall be conducted prior to any construction activities. California Department of Fish and Wildlife requires disturbance-free buffers of 50 feet around each lodge. Wood rat lodges that cannot be avoided shall be dismantled by a qualified biologist during the time of year that would least impact breeding wood rats (November-January). Dismantling shall be conducted slowly to avoid impacting neonate wood rats. If neonates are detected in the lodge, dismantling shall cease, and the lodge will be checked every 48 hours to determine if the neonates are still present. Dismantling can continue once the neonates are no longer present and have either been weaned from their mothers, or the mothers have moved them from the nest.

<u>Mitigation Measure 3</u>: Day Roosting Bats- Day roosting bats may occur in crevices of the barn roof. The roof and trim should be carefully removed with hand tools. Removal should be conducted towards the end of the day, when bats naturally emerge from their day roosts.

Mitigation Measure 4: Non-Native Plant Species Avoidance- All construction vehicles that may have been exposed to non-native, invasive plant species and may carry seeds shall be washed (tires and undercarriage) before entering the property. In the event that imported fill is needed, native soil shall be used. All rock, aggregate, fiber rolls, or other construction materials, if needed, shall be certified weed-free.

<u>Mitigation Measure 5</u>: Exclusion fencing shall be installed at the perimeter of the riparian buffer to delineate the area of work and protect sensitive habitats.

<u>Mitigation Measure 6</u>: Watershed Protection and Maintenance- Best Management Practices according to San Mateo County's Watershed Protection and Maintenance Standards shall be incorporated into the project design to protect the water quality of nearby San Gregorio Creek (https://publicworks.smcgov.org/watershed-protection-and-maintenance-standards).

Mitigation Measure 7: If possible, barn demolition, vegetation trimming/removal, and initial earth work should be conducted outside the breeding season (September 1-January 31). If these activities occur during the breeding season, a qualified biologist will need to conduct a survey for nesting birds within five days prior to the proposed start of construction. If an active nest is detected in the construction area, work will be delayed until the young fledge, and/or a disturbance-free buffer will need to be established around the nest. California Department of Fish and Wildlife usually accepts a 50-foot buffer for passerine nests, and a 250-foot buffer for most raptor nests. A qualified biologist shall monitor the behavior of the birds at the nest site to ensure that they are not disturbed by project related activities. Nest avoidance and/or monitoring shall continue during project-related construction work until the young have fledged, are no longer being fed by the parents, and have left the nest site. At that time the nest buffer may be removed, and work may commence.

Mitigation Measure 8: In the event that prehistoric traces (human remains, artifacts, concentrations of shell/bone/rock/ash, etc.) are encountered, all construction activities within a fifty-meter radius of the find shall be stopped, the County Planning Department notified, and an archaeologist retained to examine the find and make appropriate recommendations. All contractors and sub-contractors shall be made aware of these requirements and shall adhere to all applicable laws including State Cultural Preservation laws.

<u>Mitigation Measure 9</u>: In the event that human skeletal remains are encountered, all work at the immediate location of the find must temporarily stop. Public Resource Code 5097 and local Health and Safety codes establish a procedure for notifying the County Coroner's Office and possibly the State Native American Heritage Commission to seek recommendations from a Most

Likely Descendant (Tribal Contact) before any further action at the location of the find can proceed. All contractors and sub-contractors shall be made aware of these requirements and shall adhere to all applicable laws including State Cultural Preservation laws.

Mitigation Measure 10: Prior to commencement of the project, the applicant shall submit to the Planning Department for review and approval an erosion and drainage control plan that shows how the transport and discharge of soil and pollutants from and within the project site shall be minimized. The plan shall be designed to minimize potential sources of sediment, control the amount of runoff and its ability to carry sediment by diverting incoming flows and impeding internally generated flows, and retain sediment that is picked up on the project site through the use of sediment-capturing devices. The plan shall also limit application, generation, and migration of toxic substances, ensure the proper storage and disposal of toxic materials, and apply nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters. Said plan shall adhere to the San Mateo County Wide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including:

- a. Sequence construction to install sediment-capturing devices first, followed by runoff control measures and runoff conveyances. No construction activities shall begin until after all proposed measures are in place.
- b. Minimize the area of bare soil exposed at one time (phased grading).
- c. Clear only areas essential for project activities.
- d. Within five days of clearing or inactivity, stabilize bare soils through either non-vegetative BMPs, such as mulching, or vegetative erosion control methods such as seeding. Vegetative erosion control shall be established within two weeks of seeding/planting.
- e. Project site entrances shall be stabilized immediately after grading and frequently maintained to prevent erosion and control dust.
- f. Control wind-born dust through the installation of wind barriers such as hay bales and/or sprinkling.
- g. Soil and/or other construction-related material stockpiled on-site shall be placed a minimum of 200 feet from all wetlands and drain courses. Stockpiled soils shall be covered with tarps at all times of the year.
- h. Intercept runoff above disturbed slopes and convey it to a permanent channel or storm drains by using earth dikes, perimeter dikes or swales, or diversions. Use check dams where appropriate.
- i. Provide protection for runoff conveyance outlets by reducing flow velocity and dissipating flow energy.
- j. Install storm drain inlet protection that traps sediment before it enters any adjacent storm sewer systems. This barrier shall consist of filter fabric, straw bales, gravel, or sand bags.
- k. Install sediment traps/basins at outlets of diversions, channels, slope drains, or other runoff conveyances that discharge sediment-laden water. Sediment traps/ basins shall be cleaned out when 50 percent full (by volume).

- I. Use silt fence and/or vegetated filter strips to trap sediment contained in sheet flow. The maximum drainage area to the fence should be 0.5-acre or less per 100 feet of fence. Silt fences shall be inspected regularly, and sediment removed when it reaches 1/3 the fence height. Vegetated filter strips should have relatively flat slopes and be vegetated with erosion-resistant species.
- m. Utilize coir fabric/netting on sloped graded areas to provide a reduction in water velocity, erosive areas, habitat protection, and topsoil stabilization.
- n. Throughout the construction period, the applicant shall conduct regular inspections of the condition and operational status of all structural BMPs required by the approved Erosion Control Plan.

<u>Mitigation Measure 11</u>: The applicant shall implement the following basic construction measures at all times:

- a. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxic Control Measure Title13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- b. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
- c. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person, or his/her designee, shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

DETERMINATION (to be completed by the Lead Agency).

On the basis of this initial evaluation:

I find the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared by the Planning Department.

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 of the mitigation measures in the discussion have been included as part of the proposed project. A MITIGATED NEGATIVE DECLARATION will be prepared.

Х

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

Angela Chavez

(Signature)

June 23, 2021

Planner III

Date

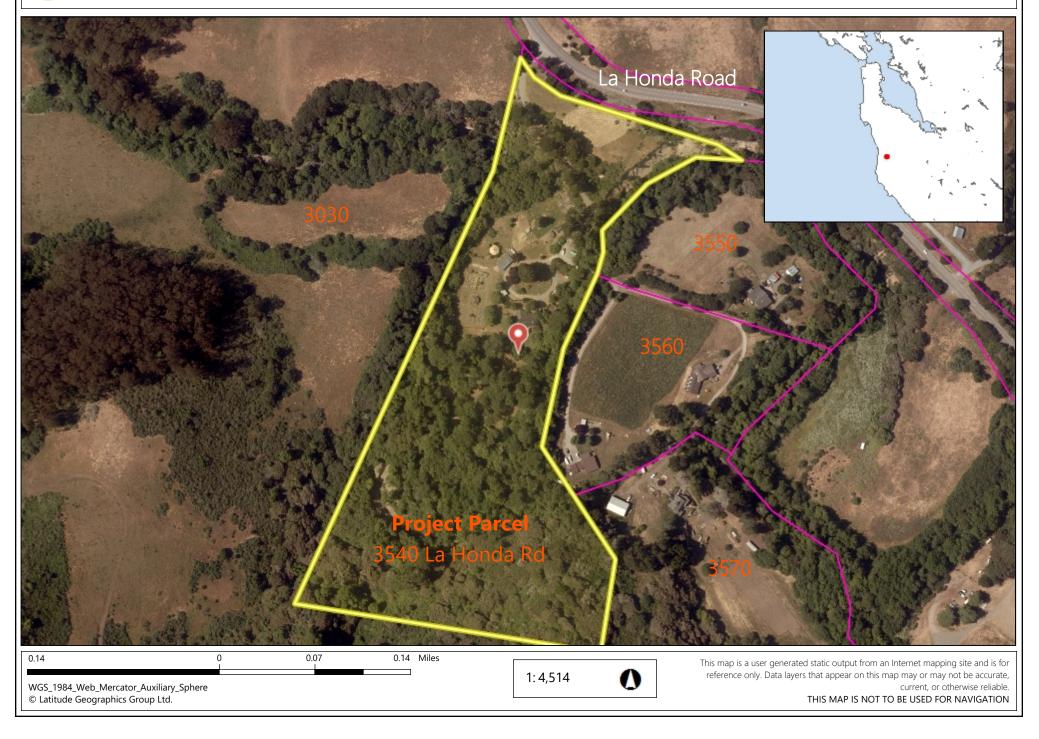
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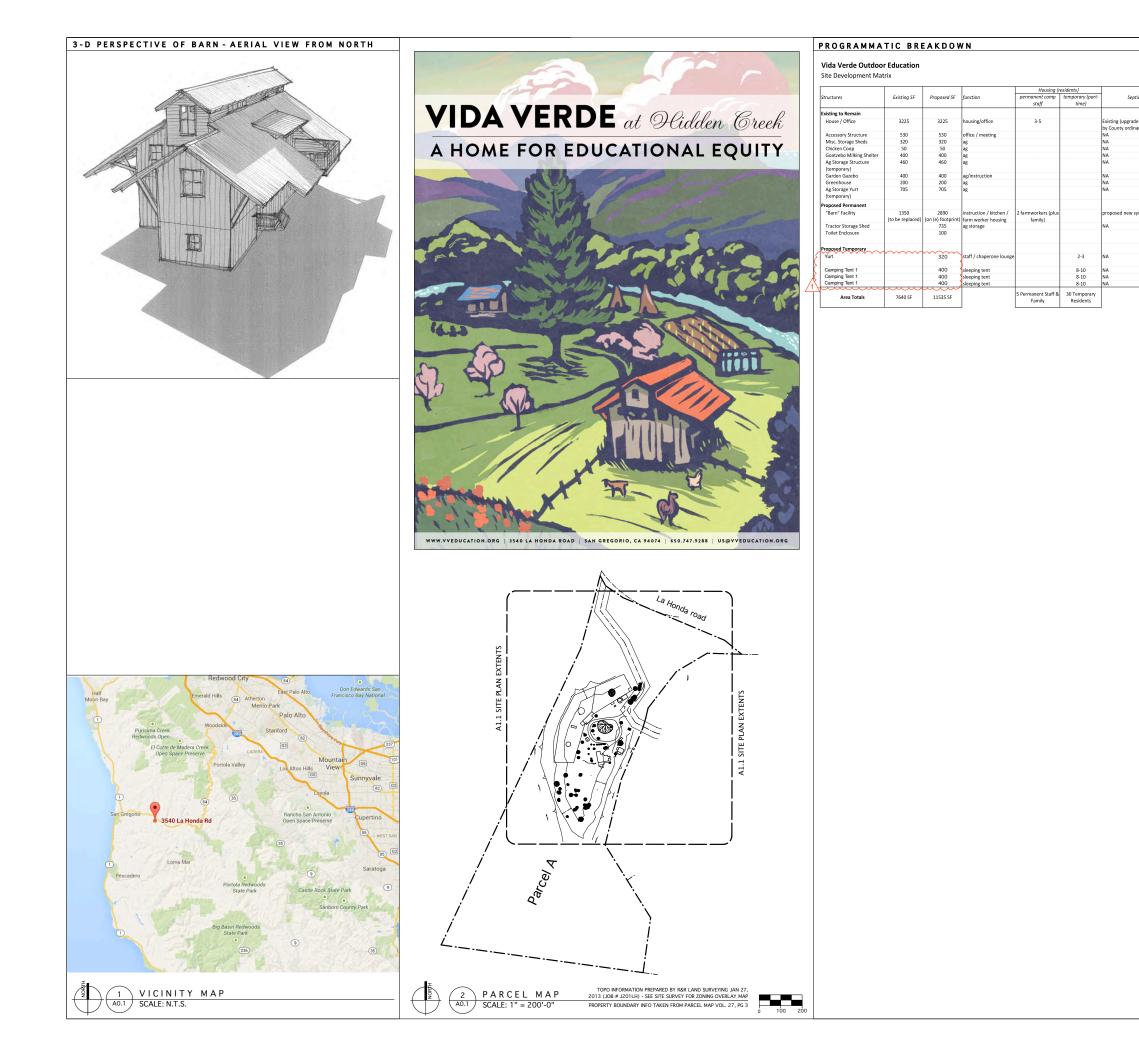
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San Mateo County

Location Map





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	Open-air roofed structure	OCCUPANCY:	R-3 / E (BARN) U (SHED / PUMP HOUSE)			
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		Shawn Sears, Executive Director 3540 La Honda Rd	<u>a</u>	9	NSED	ARC
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		Sandy Sommer, Capital Project M T: 510.541.8514 sandysommer@dslextreme.com	Manager		ATE OF C	ALTONIA C
		ACHTECT David Arkin & Anni Tilt 1101 Eighth Street, Suite 180 Berkeley, CA 94710 E: info@arkintilt.com T: 510.528.9830 F: 510.528.0206				
		HYDROLOGIST / CIVIL ENGINEER Norman Hantzsche Questa Engineering Corp. 1220 Brickyard Cove Road Point Richmond, CA 94807 T: 510.236.6114 nhantzsche@questace.com	/ WELL DESIGN	for:		
		BIOLOGIST Autumn Meisel Senior Biologist TRA Environmental Sciences T: 415.254.0805 E: meisel@traenviro.com		· ·	aura Sears	0 La Honda Rd (Hwy 84) in Gregorio, CA 94074 APN#: 081-320-060
		FLOOD FLEVATION SURVEY Cross Land Surveying 2210 Mt Pleasant Rd San Jose, CA 95148 T: 408.274.7994		Coastal Development Permit	Shawn & L	3540 La Honda Rd (Hwy 8- San Gregorio, CA 94074 APN#: 081-320-060
		BOLINDARY SURVEYOR Randy Yick. R&R Land Surveying 2007 Arbor Ave Belmont, CA 94002 T: 650.580.4050				
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		A5.1 BARN INTERIO			<u>۸</u>	\cap

A5.2 BARN INTERIOR ELEVATIONS

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(E) AG USES / BUILDINGS TO REMAIN



(E) GOAT MILKING PARLOR



(E) GARDEN & GAZEBO



(E) GREENHOUSE







(E) CHICKEN COOP & GOATS





(E) GARDEN SHED

(E) BUILDINGS TO REMAIN



(E) SHEDS & PARKING LOT



(E) BIKE STORAGE SHED



(E) HOUSE & OFFICE FRONT



(E) HOUSE & OFFICE BACK



(E) MEETING SPACE - TO BE MADE ACCESSIBLE







BARN BACK



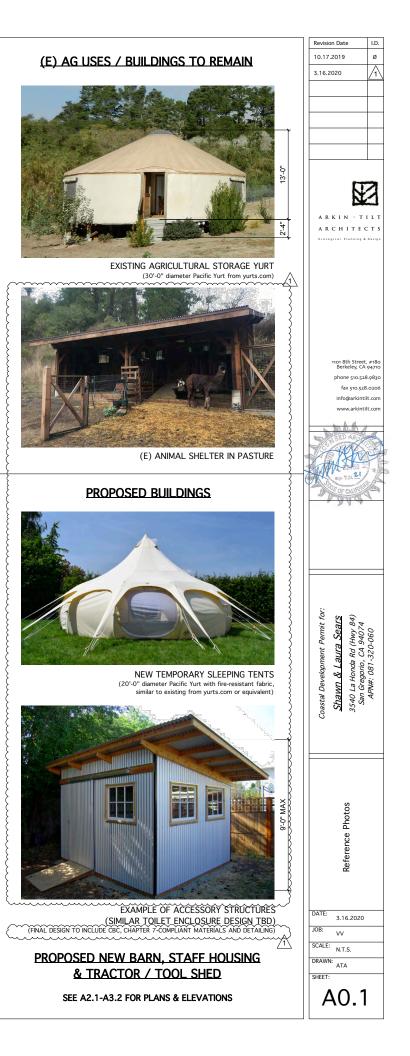
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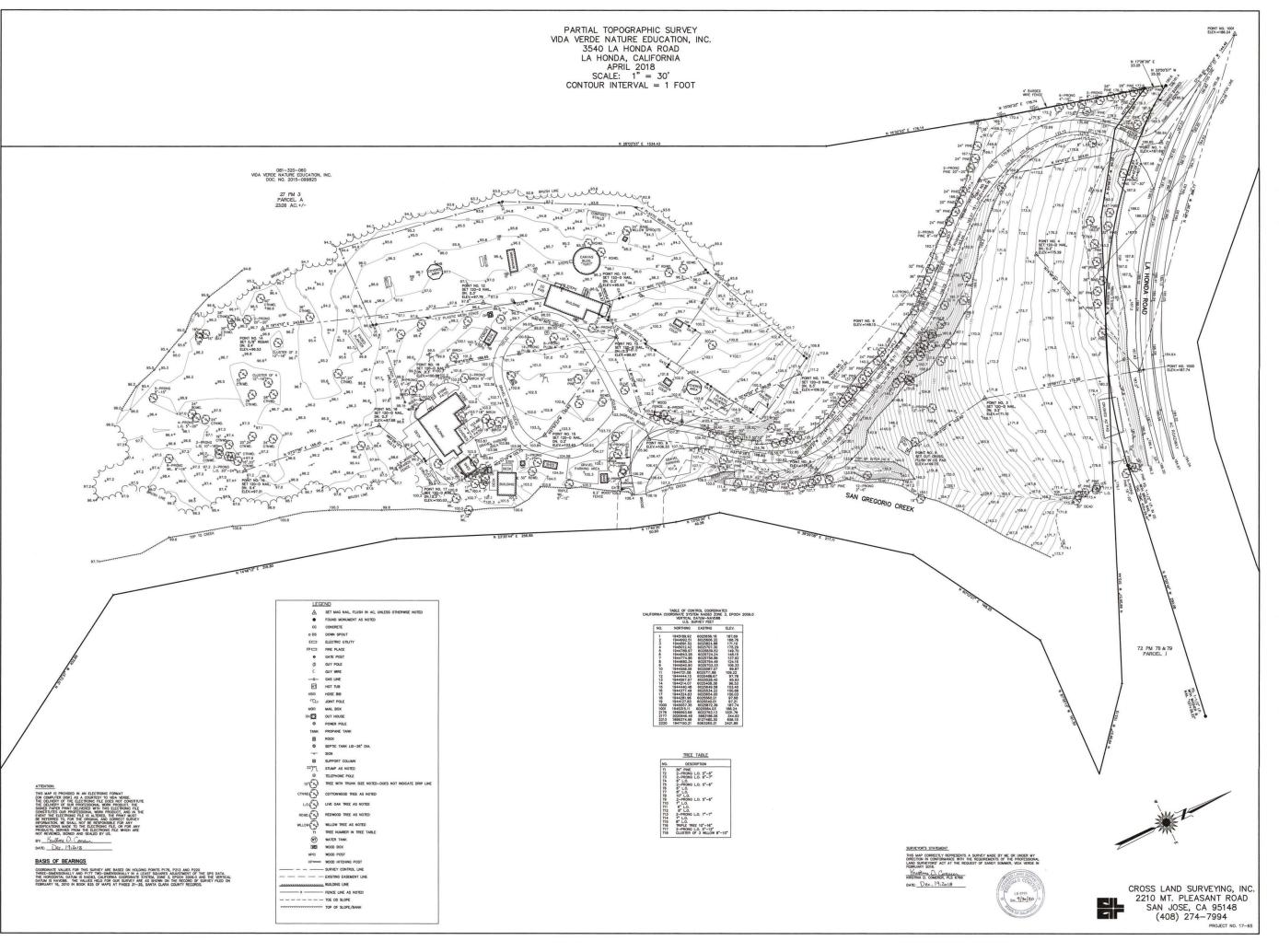
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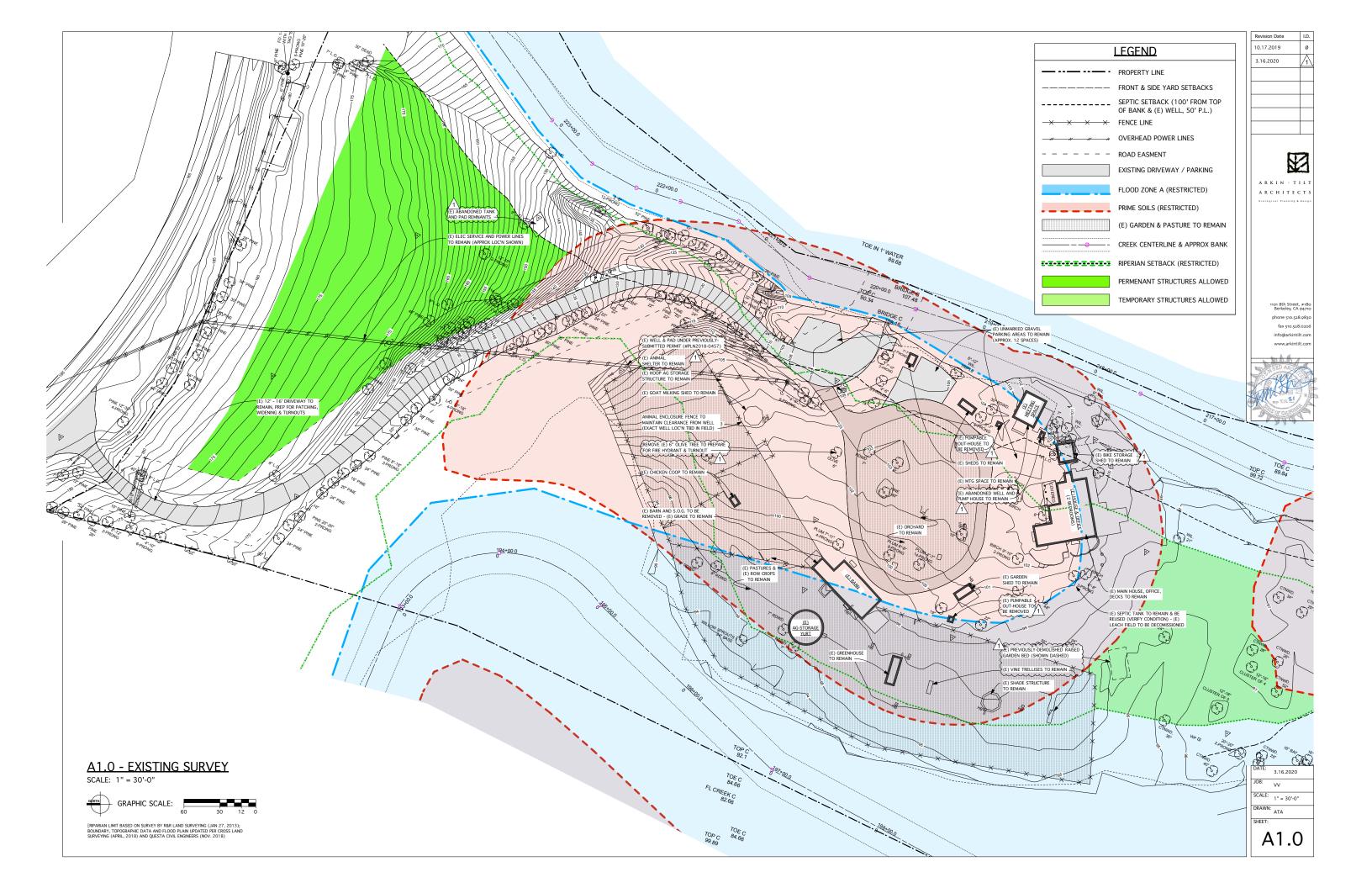


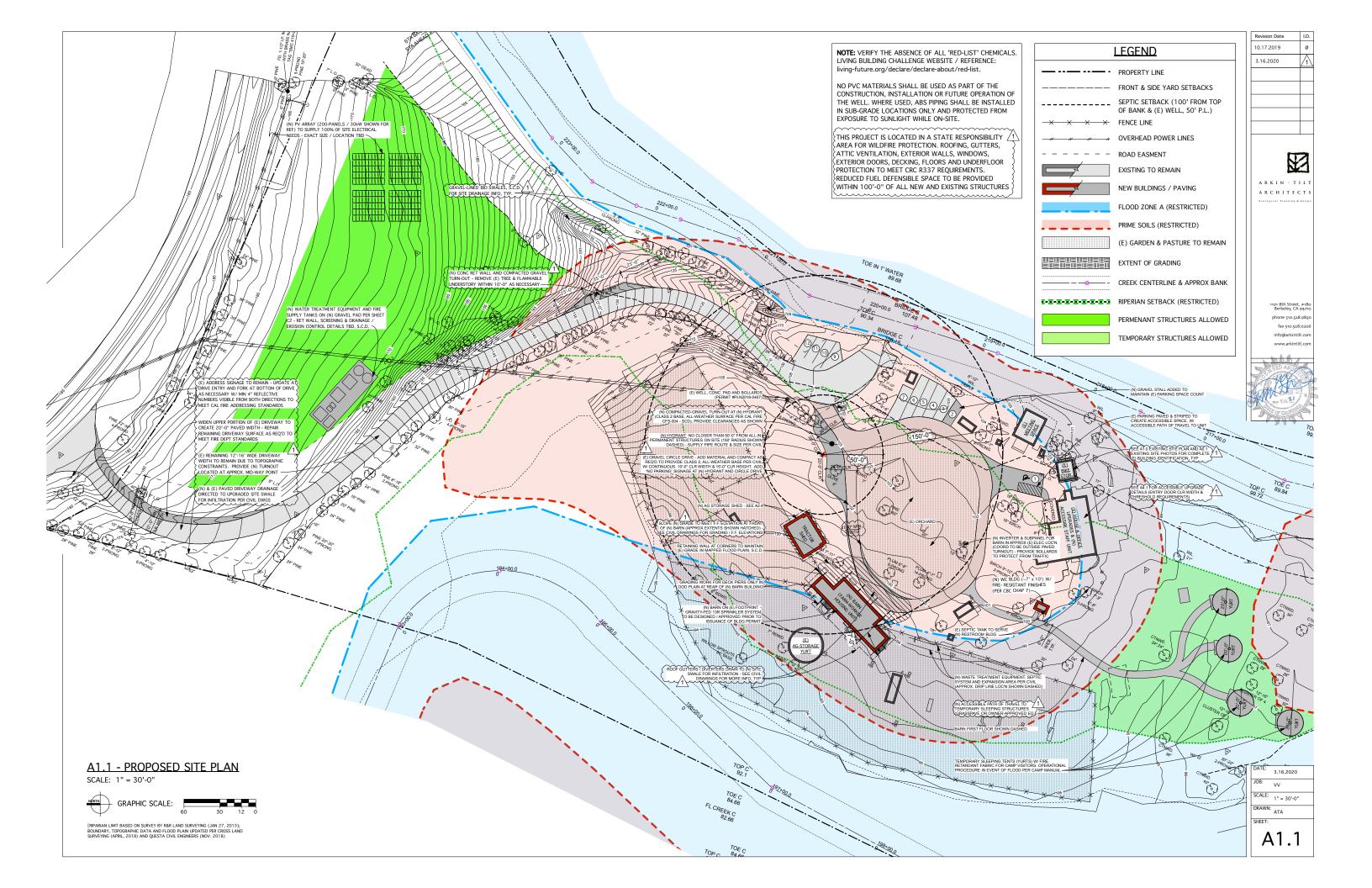
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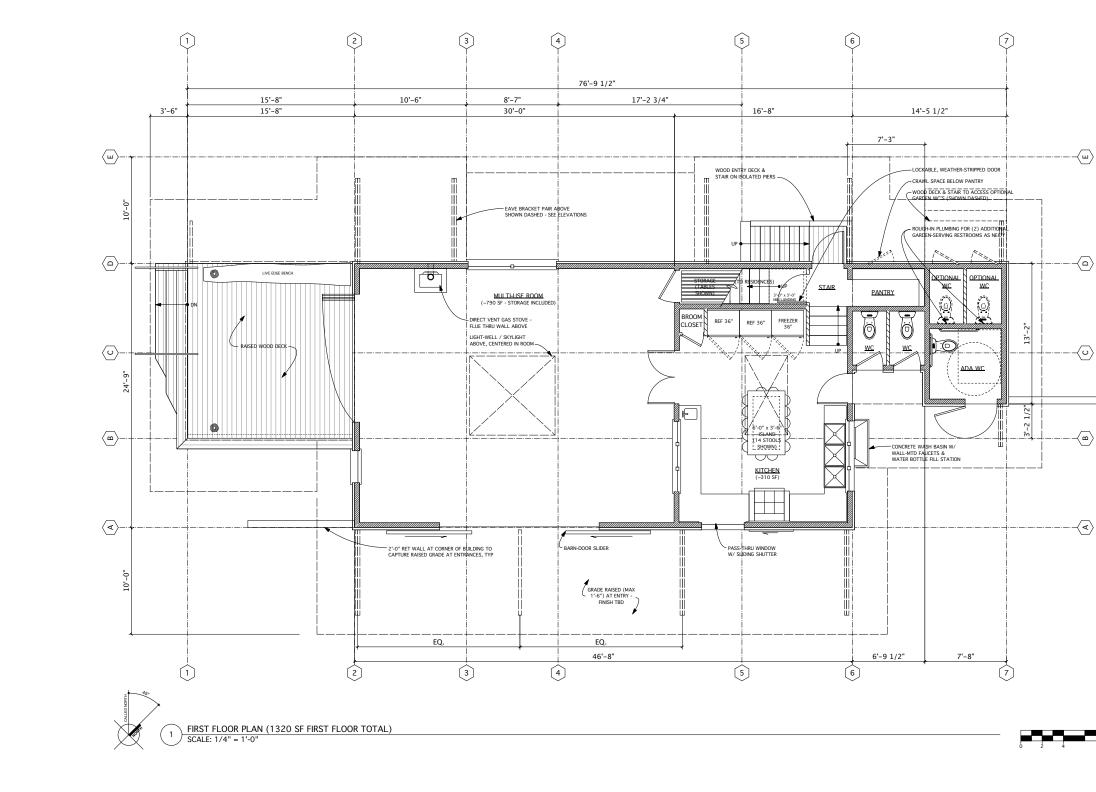


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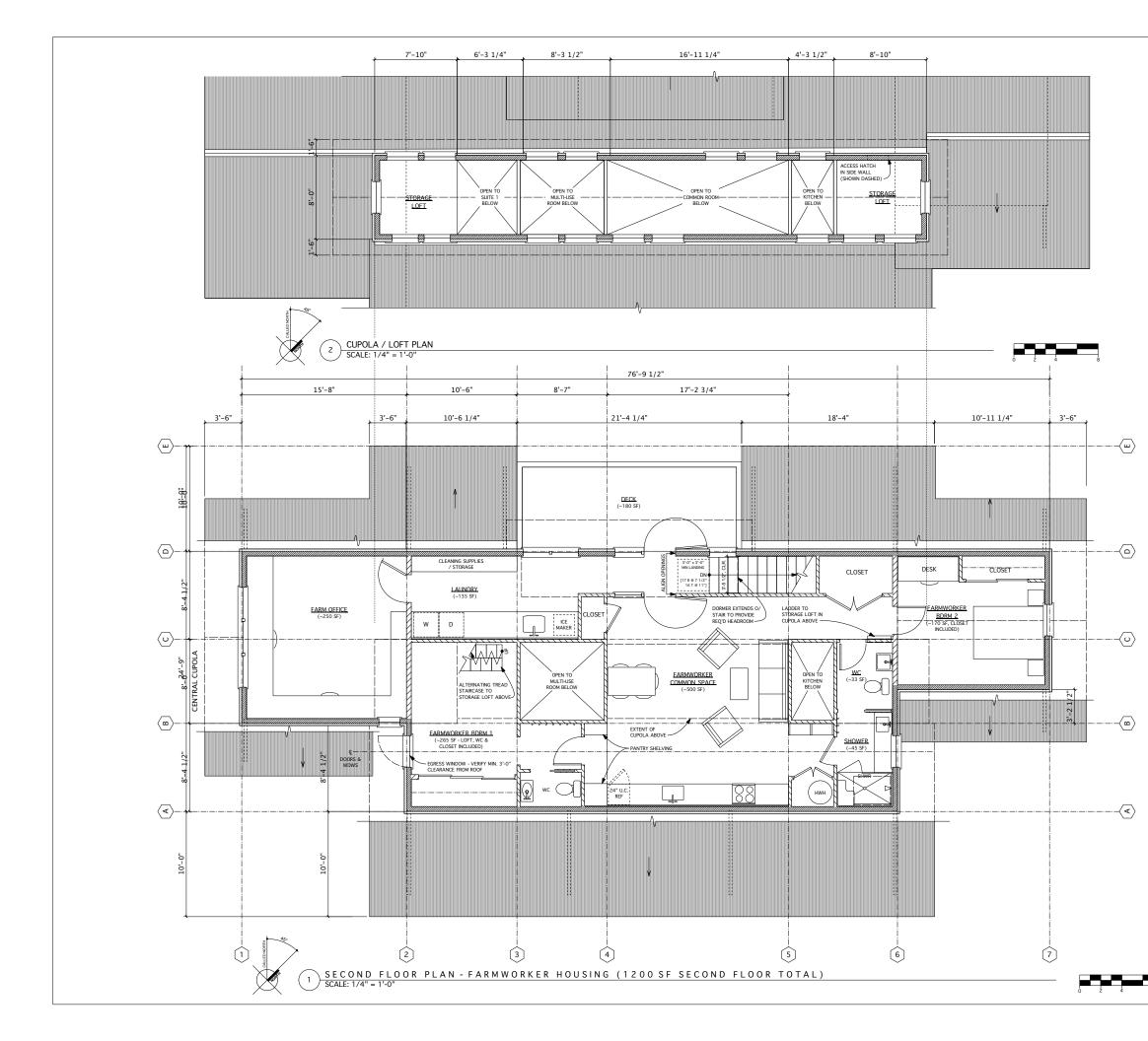
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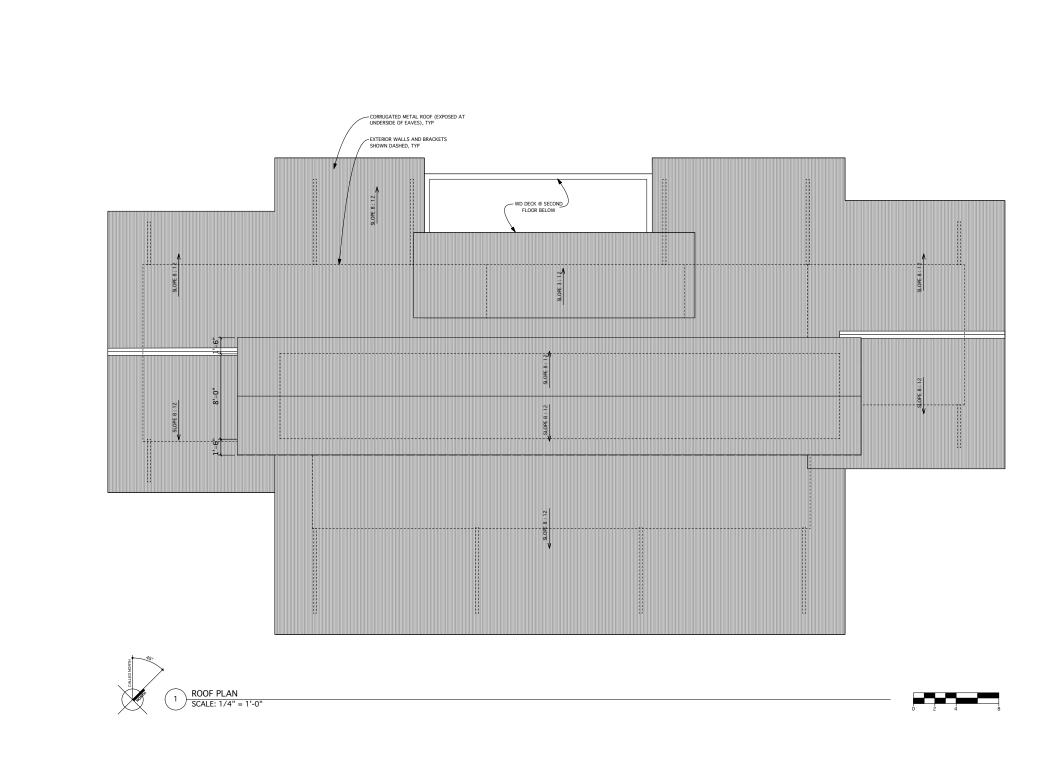


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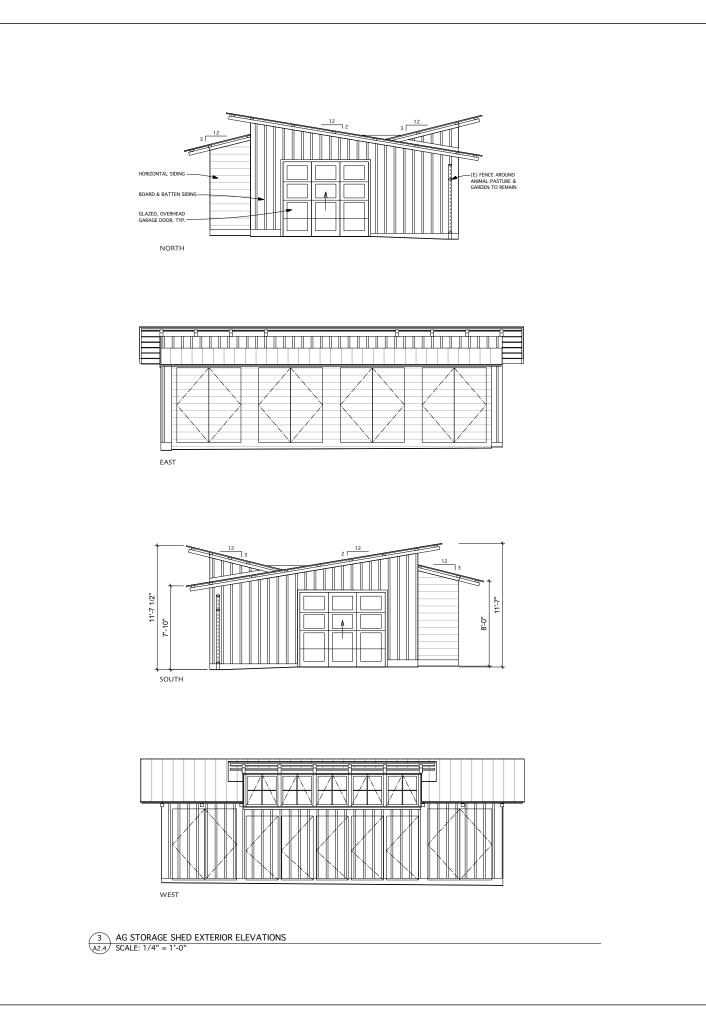
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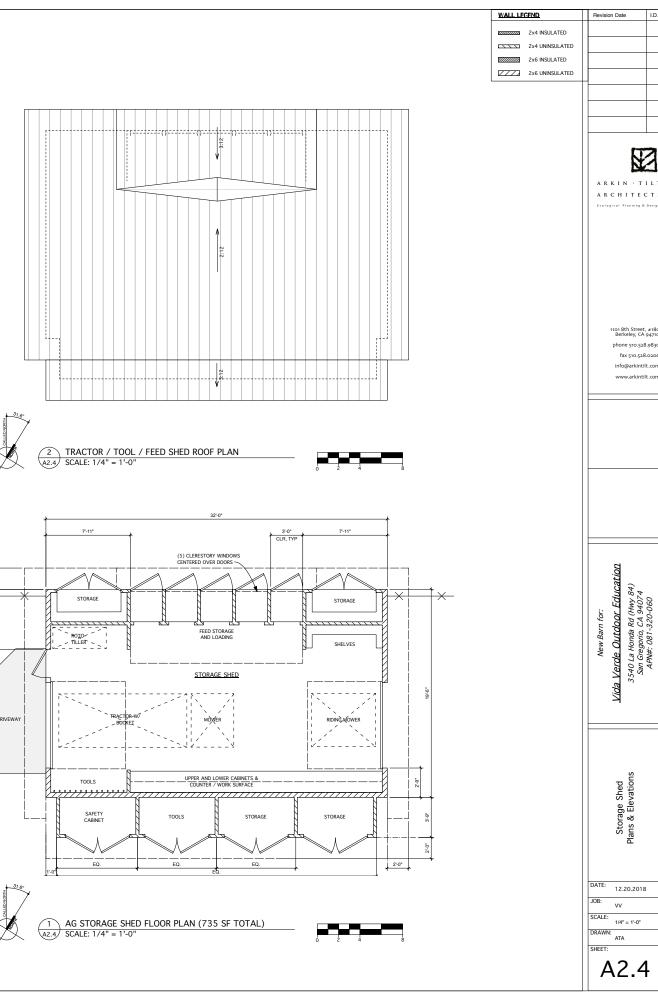
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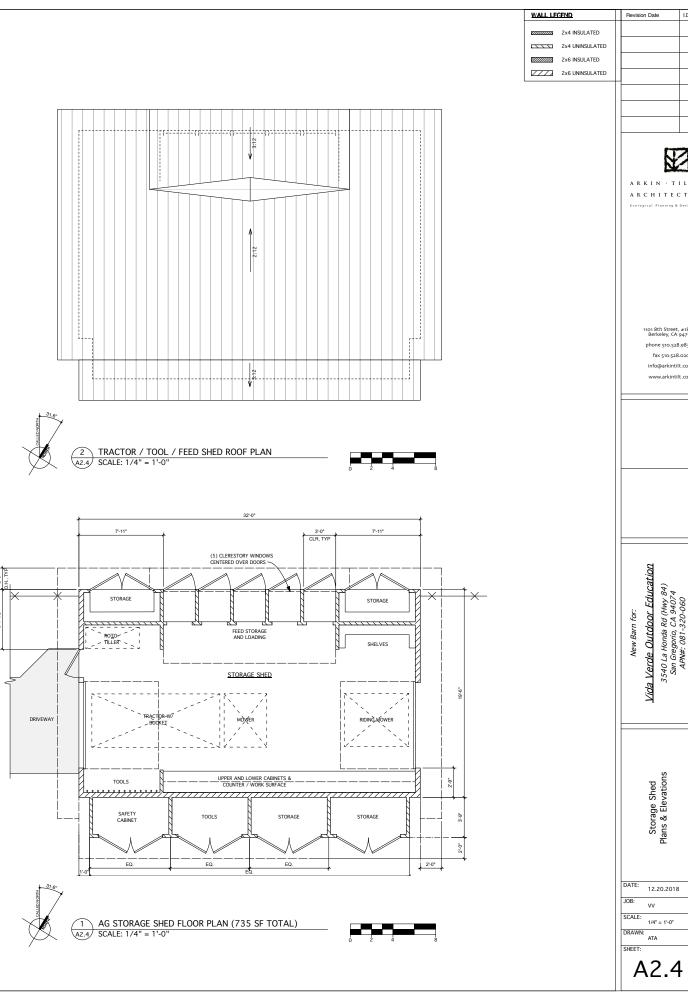
ARKIN · TIL ARCHITECT cological Planning & D 1101 8th Street, #18 Berkeley, CA 9471 phone 510.528.983 fax 510.528.0200 info@arkintilt.cor www.arkintilt.co ion Rd (Hwy 84) CA 94074 320-060 3540 La Hoi San Grego ^ ₽№#: C Vida Ve Second Floor & Loft Floor Plans DATE: 12.20.2018 JOB: vv SCALE: 1/4" = 1'-0" DRAWN: ATA SHEET: A2.2



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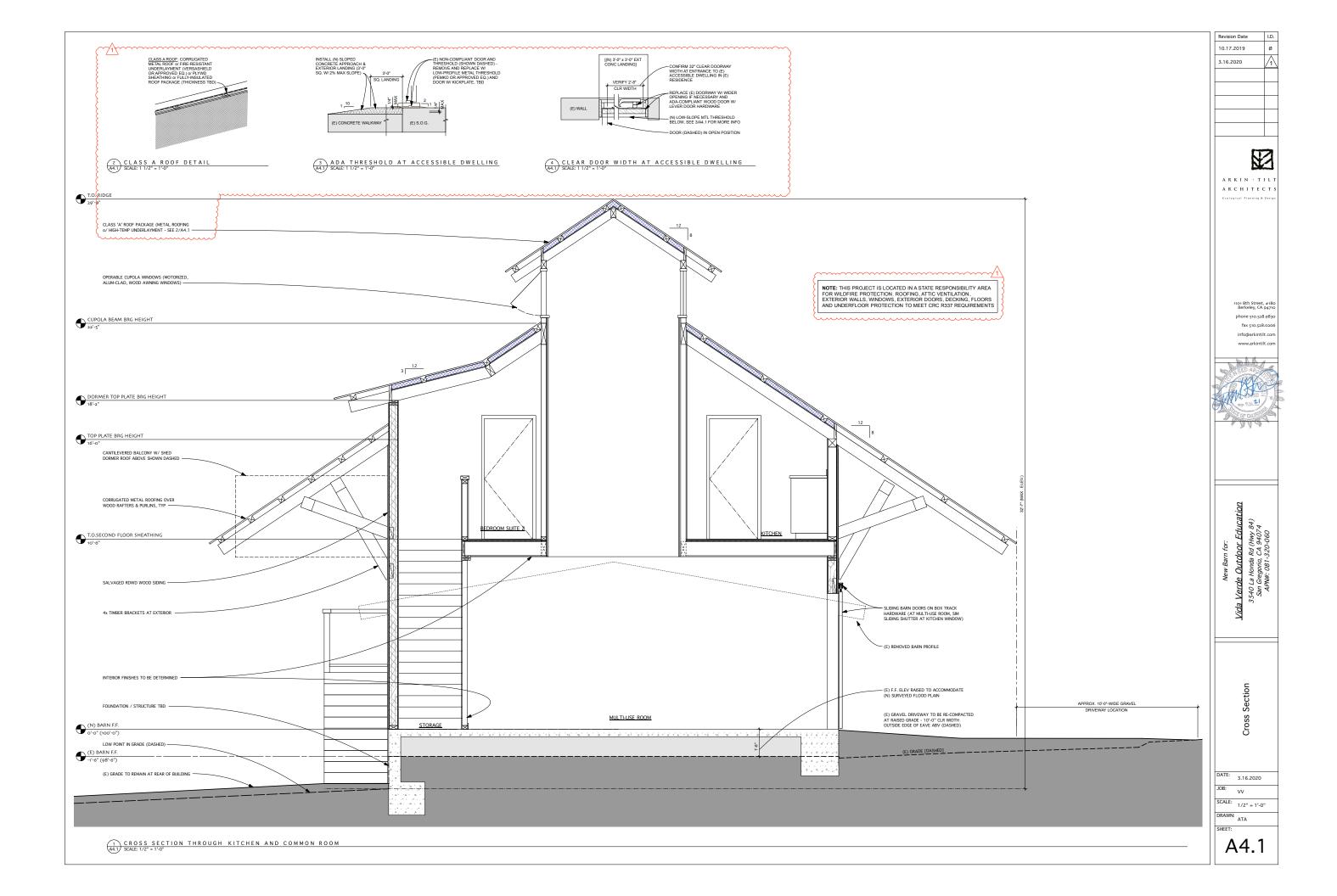


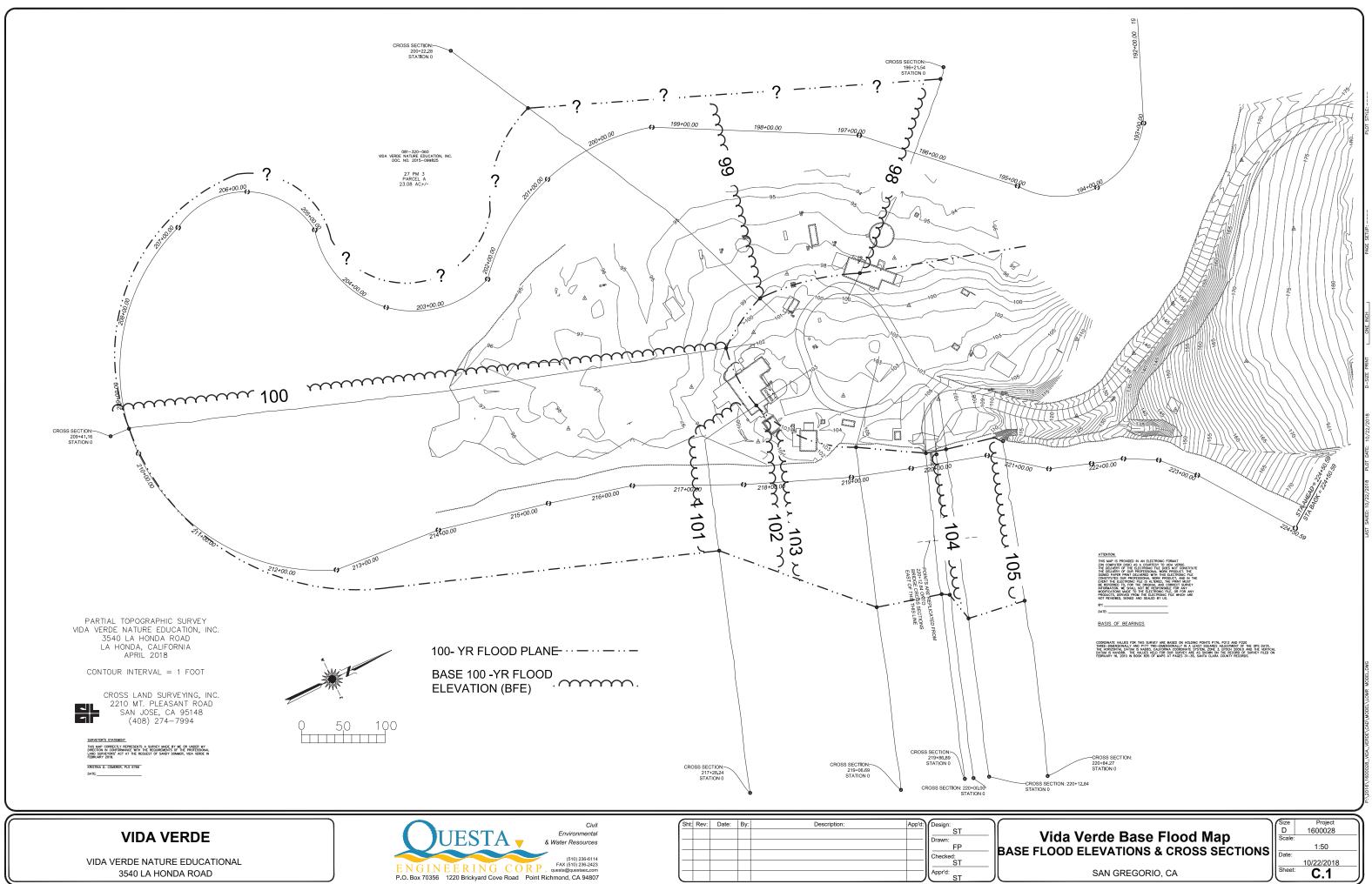
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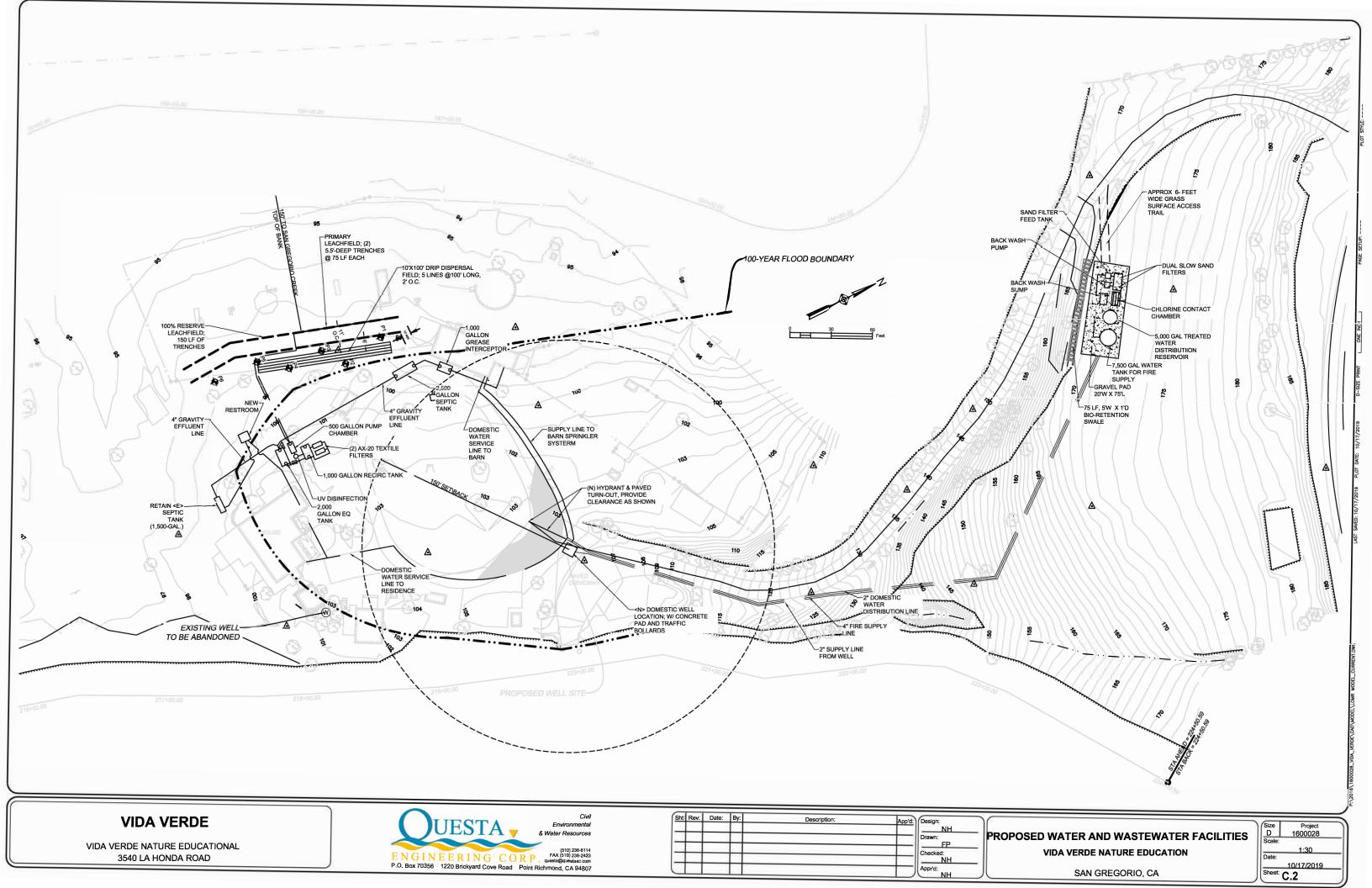
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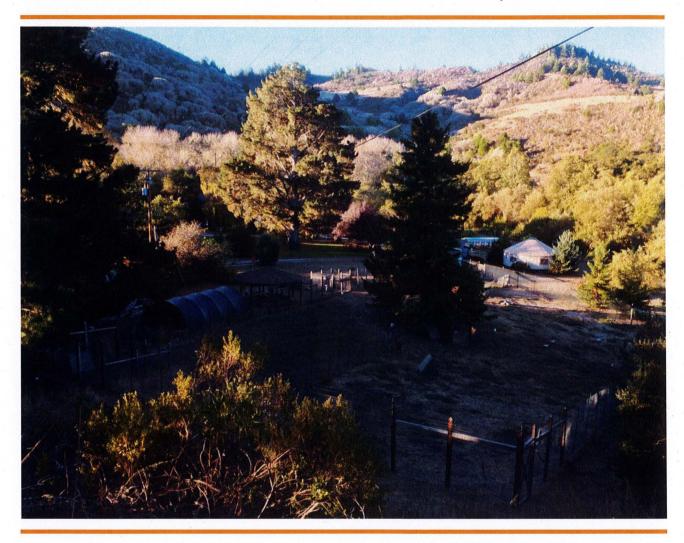
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Biotic Assessment Report Update

for Vida Verde, 3540 La Honda Road, San Gregorio, California (APN 081-320-060)

Prepared for Shawn Sears





Biotic Assessment Report Update for Vida Verde, 3540 La Honda Road, San Gregorio, California (APN 081-320-060)

June 2019 J2019-026.01 Photo Credit: Stella D'Oro

Prepared for

Shawn Sears Vida Verde 5360 La Honda Road San Gregorio, California 94074

Prepared by

Sandra Menzel, MS Albion Environmental, Inc. 1414 Soquel Avenue, Suite 205 Santa Cruz, California 95062

PLN2019-00429 RECEIVED OCT 18 2019 San Mateo County Planning Division

Executive Summary ()

In May 2019, Vida Verde contracted with Albion Environmental, Inc. (Albion) to conduct a Biotic Resources Assessment Update for APN 081-320-060, 3540 La Honda Road in San Gregorio, California for compliance with San Mateo County Local Coastal Program. This report is an update for the assessment conducted in April 2014 by TRA Environmental Sciences, 545 Middlefield Road, Suite 200 Menlo Park, California.

Vida Verde is proposing to modify and improve the property to better accommodate their overnight outdoor recreational camp for low-income, public elementary school students, and to provide improved housing for their staff. Improvements include replacing a single-story barn with a two-story barn within the existing footprint, installing a septic field, building staff housing, a solar array, and potentially placing one or two water storage tanks to meet fire suppression requirements.

This assessment confirms TRA Environmental Sciences (2014) findings that no rare or otherwise special-status plant species occur in the proposed development areas. Proposed new development will occur on mowed, non-native grassland within an already disturbed and developed area, and no direct or indirect impact to riparian or native grassland habitat is anticipated.

Five special-status animal species have potential to occur within the proposed development areas: California red-legged frog (*Rana draytonii*), western pond turtle (*Actinemys marmorata*), San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), pallid bat (*Antrozous pallidus*), and San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*). Of these five species, woodrats could potentially be adversely impacted by construction activities. Demolition of the barn could potentially impact bat species other than pallid bats, and demolition as well as any new construction could potentially impact nesting birds if work is conducted during the breeding season (February 1–August 31).

Implementation of the avoidance and minimization measures included in this assessment will protect biological resources during demolition and construction at this property.

Contents

1	Executive Summaryi
2	Introduction1
3	Proposed Action2
4	Habitat and Protected Species Considerations
5	Potential Effects on Biological Resources
	California red-legged frog
6	Avoidance and Minimization Measures
	Watershed protection and maintenance

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Introduction

On 3 June 2019, Albion Environmental, Inc.'s (Albion) senior biologist, Sandra Menzel, assessed biotic resources that could potentially be impacted during proposed construction activities at the Vida Verde property (APN 081-320-060), 3540 La Honda Road in San Gregorio, San Mateo County, California (Figure 1). This report is intended as an abbreviated update for the comprehensive assessment conducted in April 2014 by TRA Environmental Sciences, 545 Middlefield Road, Suite 200 Menlo Park, California.



Figure 1. Location of the Vida Verde property in San Gregorio, San Mateo County, California.

Proposed Action



Vida Verde's proposal, as detailed in their submittal from December 2018, includes the following uses/development components:

- 1. A new two-story barn to replace the existing barn/garage, with a kitchen, agricultural processing / student common area, five student restrooms, and farmworker housing on the second floor for Vida Verde's permanent farm manager (and family).
- 2. Repair or alteration to the existing single-family residence to accommodate permanent operational/educational staff, and provide an ADA-accessible unit.
- 3. A new standalone guest restroom near the camping area.
- 4. A new agricultural storage shed
- 5. Erection of primitive temporary camping teepees for overnight use by students and their adult chaperones.
- 6. Additional storage facilities to support the agricultural operation.
- 7. A new wastewater treatment system, including repair of the existing septic tank and abandonment of the existing leach field.
- 8. Abandonment of the old well (following completion of the new well under Permit PLN2018-00457 and the construction of the water system herein).
- 9. Water distribution, treatment, and storage infrastructure.
- 10. Ground-mounted solar panels.
- 11. Driveway turnouts for fire safety.
- 12. Staff parking, including a designated accessible paved parking space.
- 13. Visitor parking spaces.
- 14. Use of the existing yurt for agricultural storage.

Habitat and Protected Species Considerations



This report update summarizes considerations of potential impacts to biological resources within the proposed development areas at the Vida Verde property. Approximately six acres of the 23-acre property are currently used for Vida Verde's operations. The majority of the property is undeveloped. Existing structures include a single family home, a small cottage, a barn, and several outbuildings.

All proposed new development components will be sited outside of the creek floodplain, riparian setback, prime agricultural soils, and outside of the 50-foot setback from the edge of riparian vegetation. The new barn is proposed to be built within the existing 1,341 ft²-footprint of the current barn. Proposed new development will occur on mowed, non-native grassland within an already disturbed and developed area. No direct or indirect impact to riparian or native grassland habitat is anticipated. The septic field is proposed to be installed in a flat, grassy area between the house and the vegetable garden. The staff housing and solar array are proposed to be built in a grassy, flat area near the property entrance at La Honda Road. One or two water tanks are proposed to be placed alongside the asphalt driveway. Although a variety of ornamental trees and shrubs, fruit trees, as well as native tree species, such as coast live oak (*Quercus agrifolia*), occur within the development areas, limited tree or shrub removal and/or trimming is anticipated.

This assessment confirms TRA Environmental Sciences (2014) findings that no rare or otherwise special-status plant species occur in the proposed development areas. Five special-status animal species have potential to occur within the proposed development areas: California red-legged frog (*Rana draytonii*), western pond turtle (*Actinemys marmorata*), San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), pallid bat (*Antrozous pallidus*), and San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*). Demolition of the barn and any new construction could impact nesting birds if work is conducted during the breeding season (February 1–August 31). We discuss potential impacts for each of these five species and nesting birds in Section 4 below.

Potential Effects on Biological Resources



Proposed development will occur in already disturbed, mowed, non-native grassland which affords minimal suitability to four of the special-status wildlife species listed below. Also, Vida Verde staff and school groups constantly frequent these areas and likely deter presence of sensitive species. For more detailed species accounts please see the 2014 TRA Environmental Sciences report. Habitat conditions described in their report are still valid.

CALIFORNIA RED-LEGGED FROG

California red-legged frogs are known to occur in San Gregorio Creek and may be found within the creek at the property. California red-legged frogs also use upland habitat; however, the areas proposed for development provide limited suitable refugia (such as wet areas, logs, burrows, etc.). Project activities are not expected to adversely impact the California red-legged frog.

WESTERN POND TURTLE

Western pond turtles are known to occur in San Gregorio Creek; however the reach of creek within the property is mostly shallow (2-12 inches) and does not provide preferred habitat for this species. Project activities are not expected to adversely impact the western pond turtle.

SAN FRANCISCO GARTER SNAKE

San Francisco garter snakes are known to occur along San Gregorio Creek and may occur near the creek within the property. Project activities are not expected to adversely impact the San Francisco garter snake because these snakes avoid disturbed, open areas with human presence.

PALLID BAT

Pallid bats are uncommon along the San Mateo coast and the species has a low likelihood to occur on the property. Pallid bats are sensitive to disturbance and are therefore unlikely to roost in the barn where human activity regularly occurs. Project activities are not expected to adversely impact pallid bats.

Other species of bats, protected by Fish and Game Code, may have day roosts in crevices under the roof of the barn. Demolition of the barn could impact day-roosting bats.

SAN FRANCISCO DUSKY-FOOTED WOODRAT

San Francisco dusky-footed woodrats are a California Species of Special Concern (https://www.wildlife.ca.gov/Conservation/SSC/Mammals) and occur on site. Their well-established lodges occur near proposed development areas. Construction activities could adversely impact woodrats.

NESTING BIRDS

Nesting birds are protected by California Fish and Game Code and under the federal Migratory Bird Treaty Act. Suitable nesting habitat occurs throughout the proposed development areas. Nest substrates may include trees, shrubs, grasses, buildings, the creek bank, and bare ground. Construction activities could adversely impact nesting birds during the breeding season (February 1–August 31).

Avoidance and Minimization Measures

5

The following measures are recommended prior to and/or during construction to avoid or minimize potential effects to biological resources:

SAN FRANCISCO DUSKY-FOOTED WOODRAT

We recommend a survey for San Francisco dusky-footed woodrat lodges within the development areas prior to construction activities. California Department of Fish and Wildlife requires disturbance-free buffers of 50 feet around each lodge. Woodrat lodges that cannot be avoided shall be dismantled by a qualified biologist during the time of year that would least impact breeding woodrats (November–January). Dismantling shall be conducted slowly to avoid impacting neonate woodrats. If neonates are detected in the lodge, dismantling shall cease and the lodge will be checked every 48 hours to determine if the neonates are still present. Dismantling can continue once the neonates are no longer present and have either been weaned from their mothers, or the mothers have moved them from the nest.

NESTING BIRDS

If possible, barn demolition, vegetation trimming/removal, and initial earth work should be conducted outside the breeding season (September 1–January 31). If these activities occur during the breeding season, a qualified biologist will need to conduct a survey for nesting birds within five days prior to the proposed start of construction. If an active nest is detected in the construction area, work will be delayed until the young fledge, and/or a disturbance-free buffer will need to be established around the nest. California Department of Fish and Wildlife usually accepts a 50-foot buffer for passerine nests, and a 250-foot buffer for most raptor nests. A qualified biologist shall monitor the behavior of the birds at the nest site to ensure that they are not disturbed by project-related activities. Nest avoidance and/or monitoring shall continue during project-related construction work until the young have fledged, are no longer being fed by the parents, and have left the nest site. At that time the nest buffer may be removed and work may commence.

DAY-ROOSTING BATS

Day roosting bats may occur in crevices of the barn roof. The roof and trim should be carefully removed with hand tools. Removal should be conducted towards the end of the day, when bats naturally emerge from their day roosts.

NON-NATIVE PLANT SPECIES AVOIDANCE

All construction vehicles that may have been exposed to non-native, invasive plant species and may carry seeds shall be washed (tires and undercarriage) before entering the property. If fill is needed, native soil shall be used. All rock, aggregate, fiber rolls, or other construction materials, if needed, shall be certified weed-free.

WATERSHED PROTECTION AND MAINTENANCE

Best Management Practices according to San Mateo County's Watershed Protection and Maintenance Standards shall be incorporated into the project design to protect the water quality of nearby San Gregorio Creek (https://publicworks.smcgov.org/watershed-protection-andmaintenance-standards). Project activities are not expected to adversely impact the watershed. Biotic Assessment Report for APN # 081-320-060 Vida Verde, San Gregorio, California

> For compliance with San Mateo County Local Coastal Program

> > Prepared for:

Vida Verde Shawn Sears 3540 La Honda Road San Gregorio, CA 94074

Prepared by:

TRA Environmental Sciences 545 Middlefield Road, Suite 200 Menlo Park, CA 94025 (650) 327-0429

May 2014

Biotic Assessment Report for APN # 081-320-060 Vida Verde, San Gregorio, California

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4.	Principal Investigators	1
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6.	Project and Property Description	2
7.	Methodology	4
8.	Results	
9.	List all Direct and Indirect Impacts of the Proposed Project on the Habitat	5
10.	List and discuss all probable impacts to threatened, rare, endangered or unique species	
eith	er listed or proposed by the Local Coastal Program, a Federal or State agency, or the	
Cali	fornia Native Plant Society, both on-site and within an area of one-quarter mile radius from	
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11.	Tabulate by significant impact all feasible mitigation measures proposed to reduce the	
leve	I of impact and explain how such measures will be successful 1	2
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Appendix A. Principle Investigator QualificationsA-1
Appendix B. Representative Photos of the Site Taken April 14, 2014B-1

-

1. **Project location (include USGS Township, Range and Section)**

The project site is located at 3540 La Honda Road, San Gregorio, approximately 3 miles east of the Pacific Ocean. The project site is located in the San Gregorio USGS quad in Township 01N and Range 01E (Figures 1 and 2).

2. Assessor's Parcel Number and any applicable Planning Permit numbers

APN: 081-320-060

Owner/Applicant: Shawn Sears
 Address: 3540 La Honda Road, San Gregorio, CA 94074
 Phone: (650) 747-9288

4. Principal Investigators (attach a qualification summary to the report).

This report was prepared by Autumn Meisel, Senior Biologist, TRA Environmental Sciences, Inc. (TRA). Graphics were prepared by Sarah Daniels, Biologist III and GIS Analyst, TRA. See Appendix A for qualification summaries.

5. Report summary (briefly state the results of the report, habitat type, rare, endangered, or unique species present, anticipated impacts, and proposed mitigation measures.)

This report documents the existing biological resources at APN #081-320-060 in San Gregorio, unincorporated San Mateo County. The project site was surveyed for biological resources on April 14, 2014. San Gregorio Creek flows in an oxbow through the property. San Gregorio Creek is a perennial, blue line stream that flows from the Santa Cruz Mountains to its mouth at the Pacific Ocean at San Gregorio State Beach.

The project site is privately owned and is home to Vida Verde, a non-profit organization that provides environmental education to underserved grade school children. The majority of the project site is earthen, either undeveloped or farmed (vegetable garden and goat and chicken pasture). Structures that have been developed on site include a single family home, a small cottage, a barn, and several outbuildings. Approximately 6 acres of the 23-acre Vide Verde property are actively used for Vida Verde's operations.

Vida Verde has proposed a site plan that would expand the existing, single-level barn to a twolevel barn within the existing footprint and construct a septic field, ag storage building, solar array, and potentially one or two water storage tanks to meet fire suppression requirements. Other than the barn, which is existing, these features have yet to be fully designed and their precise location and size had not been finalized at the time this report was prepared. Development on the property is constrained by several factors, including the creek flood zone, riparian set back, and prime agricultural soil.

The majority of the property is well vegetated with native and non-native trees, grasses, and riparian vegetation. The riparian corridor is continuous on both sides of the creek and supports a

dense cover of woody riparian species with an herbaceous understory. All proposed development would be outside of the 50-foot setback from the edge of riparian vegetation.

Based on the habitat observed on the property and a careful study of rare plants with potential to occur in the region, it was determined that no rare or otherwise special-status plants have potential to occur on the property. Seven special-status animal species were found to have potential to occur in the project area, including steelhead (*Oncorhynchus mykiss irideus*), coho salmon (*Oncorhynchus kisutch*), California red-legged frog (*Rana draytonii*), western pond turtle (*Actinemys marmorata*), San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), pallid bat (*Antrozous pallidus*), and San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*).

No impacts to special-status species are anticipated to result from implementation of the proposed project because all of the proposed development is located in areas that do not contain suitable habitat for the species. Barn construction could impact nesting birds if work is conducted during the bird nesting season. Measures are proposed to avoid impact to nesting birds, including timing work outside of the nesting season, or if unavoidable, conducting a preconstruction survey for nesting birds. Construction of the barn could negatively impact day roosting bats that may be present in crevices under the roof. An avoidance measure is proposed to significantly reduce potential impact to roosting bats.

It is recommended that Best Management Practices from San Mateo County's Watershed Protection and Maintenance Standards be incorporated into the project design to protect the water quality of nearby San Gregorio Creek.

This project would not contribute to any negative cumulative impacts on environmental resources.

6. Project and property description (describe the proposed project and property, including the size, topographic characteristics, water resources, soil types, and land uses on the property and in the vicinity up to a radius of one-quarter mile. Include a map of the area from the USGS 7.5-minute quadrangle series.)

The property is approximately 23 acres in size and is home to Vida Verde, a non-profit organization that provides environmental education for underserved grade school children. The property is located in a rural setting just south of La Honda Road and within an oxbow of San Gregorio Creek, approximately 3.3 miles east of the Pacific Ocean (Figures 1 and 2). The project site is accessed via an asphalt driveway that drops down from La Honda Road. The elevation at La Honda Road is 186 feet, and the developed property sits at 98 feet. Thus the driveway drops down a slope approximately 88 feet to the flat, developed portion of the property. The bed of the creek sits at an average elevation of 90 feet along the oxbow.

San Gregorio is a small community in unincorporated San Mateo County that supports low population density and primarily agricultural and rural development. The area surrounding the property up to and beyond a one-quarter mile radius is a mix of rural-residential and undeveloped open space.

Approximately 6 acres of the 23-acre Vide Verde property are actively used for Vida Verde's operations. Structures on site include a single-family home, small cottage, single-story barn, yurt, and several outbuildings. An asphalt drive leads onto the property from La Honda Road, and parking areas on site are on permeable gravel. Agricultural development on site includes a vegetable garden, fruit trees, and a pasture for goats and chickens. The property is well vegetated with native and non-native trees, non-native grassland, and riparian vegetation along the creek. A portion of the property is located within the flood zone of the creek and some soils on site are mapped as prime agricultural soils, limiting development potential (Figure 3).

San Gregorio Creek is a perennial, blue-line creek that originates on the western ridges of the Santa Cruz Mountains where it courses southwest through steep forested canyons. The San Gregorio Creek main stem begins at the confluence of Alpine and La Honda Creeks, from where it flows 12 miles through rolling grasslands and pasturelands where it ends in a lagoon at San Gregorio State Beach. The lagoon at its seasonal largest, is about five acres and six feet deep, and serves as habitat for tidewater goby (*Eucyclogobius newberryi*) and rearing steelhead. Coho salmon do not rear in the lagoon but outgoing smolts use it to physiologically prepare for migration to saltwater.

With approximately 45 miles of blue line streams, San Gregorio is one of nine priority creeks slated by California Department of Fish and Wildlife (CDFW) for coho reintroduction (Natural Heritage Institute 2010). In addition, San Gregorio Creek is considered a Critical Coastal Area (CCA) by the California Coastal Commission. Of the 101 CCAs in California, San Gregorio Creek is one of the ten highest priority watersheds based on existing water quality conditions, value and sensitivity of coastal resources, new or expanding threats to beneficial uses, and degree of local support for watershed-based planning efforts (Natural Heritage Institute 2010).

Several soil types are present on site, with the majority of soil being *Corralitos sandy loam*, *gently sloping*, which is typically found in flood plains, *Gazos loam*, *very steep*, *eroded*, found where the creek bank is steep and eroded, and *Mixed alluvial land*, also typical of flood plains and classed as excessively drained (NRCS 2014).

The owners of Vida Verde propose to increase the value of the barn for environmental education and outreach by adding a second story, working within the barn's existing footprint (1,341 square feet in size). Other modifications proposed for the property include a septic field, a building for ag storage, a solar array, and potentially one or two water tanks to meet fire suppression requirements (Figure 3a). An alternative site plan has been developed (Figure 3b) that would relocate the barn. Both alternatives are discussed under impacts, below. All new features have been located in the few areas that meet all requirements of being outside of the creek floodplain, riparian setback, and prime agricultural soils. The septic field is proposed in a flat grassy area between the house and vegetable garden. The solar array is proposed in a grassy flat area near the property entrance at La Honda Road. Locations for the water tank(s) have not yet been determined, but are likely to be staged somewhere alongside the asphalt driveway. All proposed development would be outside of the 50-foot setback from the edge of riparian vegetation. No tree or shrub removal or trimming is anticipated at this time. A schedule for this project has not yet been determined.

7. Methodology (briefly describe the survey methods used in preparing the report and show on an appropriately scaled map the location of sample points, transects, and any additional areas surveyed in the vicinity of the project.)

The site was surveyed for biological resources by TRA Senior Biologist Autumn Meisel on April 14, 2014. Prior to the site visit, the California Natural Diversity Database (2014) was consulted for records of special-status species occurrences in the project area. The property and San Gregorio Creek were visually inspected, and areas where property modifications are proposed were evaluated and photographed. The edge of riparian vegetation and 50-foot setback had already been mapped over most of the property by another biologist prior to TRA's site visit. TRA completed the riparian mapping using an aerial image and ground truthing, and submitted these data to the applicant's architect for incorporation into the project plans.

8. Results (at length, describe the botanical and zoological resources of the project site. To the extent possible, describe the food chain of the habitat and how the proposed project will impact those resources. Use both common and scientific names and please indicate references used.)

The property outside of the riparian corridor is primarily non-native grassland. Dominant grass species include wild oat (*Avena fatua*), soft chess (*Bromus hordeaceus*), and rip-gut brome (*Bromus diandrus*). Grassland around the farm and residential facilities where project activities are kept mowed. Within the grassland is a variety of trees, both ornamental species that have been planted, such as fruit trees and Monterey pine (*Pinus radiata*), as well as native species such as coast live oak (*Quercus agrifolia*), red alder (*Alnus rubra*) and Fremont cottonwood (*Populus fremontii*). Photos of the property are provided in Appendix B.

The riparian corridor is continuous on both sides of the creek and supports a dense cover of woody riparian species with an herbaceous understory. Dominant woody species include willow (*Salix*) species, box elder (*Acer negundo*), red alder, and blue elderberry (*Sambucus cerulea*). Common riparian herbaceous species observed include stinging nettle (*Urtica dioica*), thimbleberry (*Rubus parviflorus*), and non-native poison hemlock (*Conium maculatum*).

Avian species observed during the site visit include house finch (*Carpodacus mexicanus*), lesser goldfinch (*Carduelis psaltria*), American robin (*Turdus migratorius*), yellow-rumped warbler (*Dendroica coronata*), and Anna's hummingbird (*Calypte anna*). A wide variety of passerine and birds of prey are expected to occur in the project region and may nest or forage on site. Nesting substrate varies among species of birds, but can include trees and shrubs, buildings, cliff faces, and on the ground.

Common reptile and amphibian species that are expected to be found in the project region include coast garter snake (*Thamnophis elegans terrestris*), Santa Cruz garter snake (*Thamnophis atratus atratus*), western fence lizard (*Sceloporus occidentalis*), arboreal salamander (*Aneides lugubris*), California slender salamander (*Batrachoseps attenuates*), and Pacific treefrog

(*Pseudacris regilla*). Mammals that may move through and forage on site include black-tailed (mule) deer (*Odocoileus hemionus*), gray fox (*Urocyon cinereoargenteus*), deer mouse (*Peromyscus maniculatus*), California vole (*Microtus californicus*), and raccoon (*Procyon lotor*), among others.

The scientific names used for plant species for this report are based on The Jepson Manual (Baldwin et al 2012). The scientific names used for animal species are based on Sibley (2003), Reid (2006), McGinnis (2006), and Stebbins (2003).

Food Chain Resources

With perennial San Gregorio Creek winding through the property, the site provides high quality foraging habitat for a variety of wildlife. The creek and adjacent riparian corridor provide a food chain resource for insects, fish, amphibians, birds, reptiles and mammals. Vegetation found around the developed farm and residential facilities of the property also offer foraging habitat for wildlife. The proposed project would not negatively impact food chain resources of the site because the project is restricted to the existing barn footprint and an area of non-native grassland that do not provide high quality foraging or nesting habitat for biological resources, and the project includes best management practices to protect the water quality in the creek. Neither the creek nor riparian habitat will be directly impacted because project activities are restricted to the existing barn footprint and adjacent to existing facilities.

9. List all direct and indirect impacts of the proposed project on the habitat. Include within the discussion an evaluation of the perceived cumulative biological impacts associated with the project.

All of the proposed project activities occur outside of the 50-foot riparian buffer and would be conducted within the existing footprint of the 1,341 square foot barn or within mowed, non-native grassland that occurs among the developed farm and facilities. There would be no direct or indirect impacts on riparian habitat. A loss of non-native grassland habitat would occur where the solar array, water tanks, and staff housing is built, and a temporary impact would occur where the septic field is installed. No indirect impacts to grassland habitat are anticipated.

An alternative site design had been proposed that would relocate the barn to a grassland area near the existing garden, rather than modify the barn on its existing footprint. From a biological perspective, the proposed design that would work within the barn's existing footprint is preferred. The existing barn is located directly adjacent to the animal pasture, gravel driveway, and in front of the yurt. This is an area already receiving higher human use and therefore provides less value for wildlife. The alternative location was set further away from existing facilities and is closer to the riparian corridor and the wildlife resources there.

Project activities are located away from San Gregorio Creek and are not expected to negatively impact creek water quality. However, it is still prudent to incorporate water quality protection measures into the project in order to reduce impacts to aquatic species habitat. It is recommended that Best Management Practices (BMPs) in San Mateo County's Watershed Maintenance and Protection Plan (2004) be incorporated into the project design.

This project would not contribute to any negative cumulative impacts on environmental resources. Only minor site modifications and development are proposed. There are several issues that may be impairing ecological conditions in the watershed, including water quantity, fine sediment sources and effects on the riparian ecosystem, stream temperature, turbidity, and bacteria levels, and non-native invasive species. Projects that contribute to these issues may have a negative cumulative impact on the environment. The proposed project at Vida Verde would not impact water quality or riparian vegetation, release sediment into the creek, nor change the stream temperature, turbidity or bacteria levels. A measure to minimize the potential that non-native plant species are introduced to the site during site construction is described under question 11, below.

10. List and discuss all probable impacts to threatened, rare, endangered or unique species either listed or proposed by the Local Coastal Program, a Federal or State agency, or the California Native Plant Society, both on-site and within an area of one-quarter mile radius from the project location.

Based on the habitat observed on the property and a careful study of rare plants with potential to occur in the region (CNDDB 2014 and CNPS 2010), it was determined that no rare or otherwise special-status plants have potential to occur within the project area because areas where ground disturbance will occur are already disturbed and mowed and support only non-native grassland. No rare plants were observed within the project area during the site survey.

From the CNDDB database (2014) and the preparer's knowledge of special-status wildlife species and their habitat requirements, a list was created of special-status species with potential to occur in the region. A total of 15 special-status animal species were considered for their potential to occur on site, and these species are listed in Table 1. The habitat requirements for most of these species are not met on site (Table 1). Seven species could occur in the habitats found on the site, including steelhead, coho salmon, California red-legged frog, western pond turtle, San Francisco garter snake, pallid bat, and San Francisco dusky-footed woodrat.

Species Name	Status	Habitat Present or Absent	Potential to Occur Onsite	Rationale
Myrtle's silverspot (Speyeria zerene myrtleae)	FE	A	No	No suitable habitat (sand dune and coastal prairie) present.
Tidewater goby (<i>Eucyclogobius newberryi</i>) and Critical Habitat	FE, SSC	A	No	No suitable habitat present in project area (restricted to San Gregorio estuary). San Gregorio Creek and estuary mapped as Critical Habitat.
Coho salmon (<i>Oncorhynchus kisutch</i>) and Critical Habitat	FE, SE	Р	Low	Known historically in San Gregorio Creek. The creek is mapped as Critical Habitat and National Marine Fisheries Service identifies the Watershed as one of

Table 1. Special status animal s	pecies that were considered for their	potential to occur onsite.

Species Name	Status	Habitat Present or Absent	Potential to Occur Onsite	Rationale
				the 28 focus watersheds for recovery of Coho (Natural Heritage Institute 2010).
Steelhead-Central California Coast ESU (Oncorhynchus mykiss irideus) and Critical Habitat	FT	Р	Yes	Species occurs in San Gregorio Creek.
Longfin smelt (Spirinchus thaleichthys)	FC, ST, SCC	A	No	No suitable habitat present (pelagic species).
Western snowy plover (Charadrius alexandrinus nivosus)	FT, SSC	A	No	No suitable habitat (beach or sand dune) present.
Saltmarsh common yellowthroat (Geothlypis trichas sinuosa)	SSC	А	No	No suitable habitat (saltmarsh) present.
Marbled murrelet (Brachyramphus marmoratus)	FT, SE	A	No	No old growth trees to provide nesting habitat present on site.
Bank swallow (<i>Riparia riparia</i>)	ST	Р	Low	Suitable habitat present along eroding creek bank, but no evidence of the species or nests observed.
California clapper rail (<i>Rallus</i> longirostris obsoletus)	FE, ST	А	No	No suitable habitat (tidal mudflat) present.
California red-legged frog (<i>Ranadraytonii</i>) and Critical Habitat.	FT, SSC	Р	Yes	Species may be present in San Gregorio Creek.
Western pond turtle (Actinemys marmorata)	SSC	Р	Moderate	Species may be present in San Gregorio Creek.
San Francisco garter snake (Thamnophis sirtalis tetrataenia)	FE, SE, SFP	Р	Low	Species may be present in San Gregorio Creek, although preferred marsh habitat not found on site.
Pallid bat (Antrozous pallidus)	SSC	Р	Moderate	Moderately suitable habitat present, although species uncommon in region.
San Francisco dusky-footed woodrat (<i>Neotoma fuscipes</i> <i>annectens</i>)	SSC	Р	Yes	Woodrats houses present on site.

Notes: FE – Federal endangered; FT – Federal threatened; FC- Federal Candidate; SE – State endangered; ST – State threatened; SSC – California species of special concern; SFP – State Fully Protected.

Steelhead

Steelhead is the anadromous form of *O. mykiss*, spending a portion of its life cycle in fresh water and a portion in salt water. The older juvenile and adult life stages occur in the ocean, until the adults ascend freshwater streams to spawn. Unlike Pacific salmon, steelhead are iteroparous, or capable of spawning more than once before death. Although one-time spawners are the great majority, repeat spawners are relatively numerous in California streams. Eggs (laid in gravel nests called redds), alevins (gravel dwelling hatchlings), fry (juveniles newly emerged from stream gravels) and young juveniles all rear in freshwater until they become large enough to migrate to the ocean to finish rearing and maturing to adults. Although variation occurs, coastal California steelhead usually live in freshwater for 2 years, then spend 1 or 2 years in the ocean before returning to their natal stream to spawn. Adult steelhead typically immigrate to tributaries of San Francisco Bay between November and April, peaking in January and February. Adult steelhead are generally not present in streams between May and October.

Steelhead are known to occur in San Gregorio Creek (Natural Heritage Institute 2010 and CNDDB 2014) and may spawn within the stretch of creek that winds around the property. Proposed project activities would not result in adverse impacts to steelhead because no project activities would occur within or cause impact to the creek bed, banks, or riparian corridor. Recommendations for protection of water quality are provided under question 11, below.

Coho Salmon

Like steelhead, coho salmon are anadromous and adults migrate from a marine environment into freshwater streams and rivers of their birth in order to mate. Coho spend approximately the first half of their life cycle rearing and feeding in streams and small freshwater tributaries. Spawning habitat is small streams with stable gravel substrates. As the time for migration to the sea approaches, juvenile coho salmon lose their parr marks, a pattern of vertical bars and spots useful for camouflage, and gain the dark back and light belly coloration used by fish living in open water. Their gills and kidneys also begin to change at this time so that they can process salt water. In their freshwater stages, coho feed on plankton and insects, and switch to a diet of small fishes as adults in the ocean. Adults return to their stream of origin to spawn usually at around three years old. Some precocious males known as "jacks" return as two-year-old spawners. Coho salmon spawn only once and then die (semelparity). Spawning males develop a strongly hooked snout and large teeth. Females prepare several redds where the eggs will remain for 6-7 weeks until they hatch.

Coho salmon are known to occur historically in San Gregorio Creek. According to the San Gregorio Creek Watershed Management Plan, small numbers of coho salmon are observed in San Gregorio Creek, although detailed information on their life history in the watershed is not available (Natural Heritage Institute 2010). The creek is mapped as Critical Habitat and the National Marine Fisheries Service identifies the Watershed as one of the 28 focus watersheds for recovery of Coho. It is unlikely that coho salmon are present in San Gregorio Creek within the project area given the rarity of this species in the watershed. Proposed project activities would not result in adverse impact to coho salmon because no project activities would occur within or

cause impact to the creek bed, banks, or riparian corridor. Recommendations for protection of water quality are provided under question 11, below.

Bank Swallow

The Bank Swallow is rarely found far from water. Social and always active, this small brown and white bird nests in colonies sometimes numbering in the thousands. Bank Swallows nest exclusively in the fresh banks or earthen walls cut by moving water, usually at lower elevations. They prefer meandering streams and rivers. Artificial banks created incidentally by mining are also used. Foraging and migrating occur over fields, streams, wetlands, farmlands, and still water. The bank swallow feeds and drinks almost exclusively on the wing. They consume bees, wasps, ants, beetles, and flies primarily from the air, but occasionally from the water surface. They eat no plant material. Arriving before the females, male bank swallows select a colony, then a nest site 3 to 12 feet above the base of a bank or cliff. With his beak, the male begins to dig a hole, which the pair will finish together. The swallows use their bills, wings, and feet to excavate. Breeding appears to be synchronized within the colony.

An eroded stream bank present at the north end of the property near La Honda Road provides suitable nesting habitat for bank swallow. However, no swallows or nests were observed during the site survey. No project activities would occur along the stream bank, and proposed project activities would not result in adverse impact to bank swallow.

California Red-legged Frog

The California red-legged frog uses a variety of habitat types, including various aquatic, riparian, and upland habitats. California red-legged frogs can use many aquatic systems, provided a permanent water source, ideally free of nonnative predators, is nearby. However, individual frogs may complete their entire life cycle in a pond or other aquatic site that is suitable for all life stages. California red-legged frogs breed in aquatic habitats such as marshes, ponds, deep pools and backwaters in streams and creeks, lagoons, and estuaries. Breeding adults are often associated with dense, shrubby riparian or emergent vegetation and areas with deep (greater than 27 inches) still or slow-moving water. However, the frog often successfully breeds in artificial ponds with little or no emergent vegetation and has been observed in stream reaches that are not covered in riparian vegetation. California red-legged frogs spend a substantial amount of time resting and feeding in riparian and emergent vegetation. The moisture and camouflage provided by the riparian plant community may provide good foraging habitat and may facilitate dispersal in addition to providing pools and backwater aquatic areas for breeding.

California red-legged frog is known from San Gregorio Creek (Natural Heritage Institute 2010 and CNDDB 2014) and may be found within the stretch of creek that winds around the property. Project activities are proposed on an existing structure (barn) and on non-native grassland that is mowed and within the developed portion of the site. California red-legged frogs use upland habitat, however the areas proposed for development do not provide refugia (such as wetted areas, logs, burrows, etc.) for the species. The species is unlikely to move through the developed portion of the property as San Gregorio Creek is wetted year round and thus provides a much more suitable movement corridor for the frog than the developed, upland habitat found within the creek's oxbow. In addition, the species is nocturnal and migration typically occurs at night. Project activities are not expected to adversely impact California red-legged frog.

Western Pond Turtle

The western pond turtle is a small to medium-sized turtle growing to approximately 8 inches in carapace length. It is limited to the west coast of the United States and Mexico. Western pond turtles occur in both permanent and intermittent waters, including marshes, streams, rivers, ponds, and lakes. They favor habitats with large numbers of emergent logs or boulders, where they aggregate to bask. They also bask on top of aquatic vegetation or position themselves just below the surface where water temperatures are elevated. Western pond turtles seek refuge in deep water, under submerged logs and rocks, in beaver burrows and lodges, and by "swimming" into deep silt. Western pond turtles are omnivorous and most of their animal diet includes insects, crayfish and other aquatic invertebrates. Females produce 5-13 eggs per clutch. They deposit eggs either once or twice a year. They may travel some distance from water for egg-laying, moving as much as 1/2 mile away from and up to 300 feet above the nearest source of water, but most nests are with 300 feet of water. The female usually leaves the water in the evening and may wander far before selecting a nest site, often in an open area of sand or hardpan that is facing southwards.

Western pond turtle has been recorded in San Gregorio Creek (Natural Heritage Institute 2010), although the reach of creek within the project area is typically too shallow (2-12 inches) to provide preferred habitat for this species. Project activities are proposed on an existing structure (barn) and on non-native grassland that is mowed and within the developed portion of the site. Project activities are not expected to adversely impact western pond turtle.

San Francisco Garter Snake

The preferred habitat for San Francisco garter snake (SFGS) is a densely vegetated pond near an open hillside where it can sun, feed, and find cover in rodent burrows; however, markedly less suitable habitat can be successfully used. Temporary ponds and other seasonal freshwater bodies are also appropriate. Emergent and bankside vegetation such as cattails, bulrushes, and spike rushes apparently are preferred and used for cover. The zone between stream and pond habitats and grasslands or bank sides is characteristically utilized for basking, while nearby dense vegetation or water often provide escape cover. San Francisco garter snakes forage extensively in aquatic habitats. Adult snakes feed primarily on California red-legged frogs. They may also feed on juvenile bullfrogs (*Rana catesbeiana*), but they are unable to consume adults; in fact, adult bullfrogs prey on juvenile garter snakes. Newborn and juvenile SFGS depend heavily upon Pacific treefrogs as prey. On the coast, SFGS hibernates in the winter. Although mating can occur in the fall, the first warm days of March encourage encounters as SFGS emerge from their hibernacula and concentrate in nearby aquatic habitat.

San Francisco garter snake is known from San Gregorio Creek (Natural Heritage Institute 2010 and CNDDB 2014) and may be found within the stretch of creek that winds around the property. Project activities are not expected to adversely impact San Francisco garter snake because ground-disturbing activities are confined to non-native grassland areas within the developed

portion of the property. There is regular human presence here, including school groups, and the grass is kept mowed. SFGS avoids disturbed, open areas with human presence. The solar array and staff housing will be built in grassland adjacent to La Honda Road.

Pallid Bat

The pallid bat can be found in arid regions with rocky outcroppings, to open, sparsely vegetated grasslands. Water must be available close by to all sites. They typically will use three different types of roosts. A day roost which can be a warm, horizontal opening such as in attics, shutters or crevices; the night roost is in the open, but with foliage nearby; and a hibernation roost, which is often in buildings, caves, or cracks in rocks. Pallid bats are susceptible to mild disturbance which cause them to abandon their roost. Pallid bats will eat a variety of prey items. These can include crickets, scorpions, centipedes, ground beetles, grasshoppers, cicadas, praying mantis and long-horned beetles. They have been known to eat lizards and rodents. What is unique to the pallid bat is that it catches its food almost exclusively on the ground as opposed to while in flight. Maternity colonies are rather small in size, ranging from 20-100 animals. Mating takes place in the fall resulting in usually two babies being born in the late spring.

Pallid bat has been recorded in the project area (CNDDB 2014), however the species is uncommon on the San Mateo coast and has only a low likelihood to occur on site. Pallid bats are sensitive to disturbance and are therefore unlikely to roost in a small barn where there is regular human activity, including school group activity. There is no suitable pallid bat roosting habitat that would be impacted by proposed construction activities.

San Francisco Dusky-footed Woodrat

The San Francisco dusky-footed woodrat occurs from the Golden Gate Bridge to just inside the Santa Cruz County line and also in the East Bay. It is associated with riparian, oak woodland and redwood forest. San Francisco dusky-footed woodrat is a medium-sized rodent with a body around 7 inches long, nose to rump, and a furred tail. Dusky-footed woodrats are relatively common and widespread in California, but their complex social structure makes them particularly vulnerable to disturbance. San Francisco dusky-footed woodrat build mounded stick houses that may range in size from 3 to 8 feet across at the base and as much as 6 feet tall, and they tend to live in colonies of 3 to 15 or more houses. The houses can be quite complex inside, with multiple chambers for general living, nesting, latrine use, food storage, and other activities. The availability of suitably-sized sticks may limit the number of woodrat houses. Each house is occupied by a single adult; adult females share the house with their litters for a few months until the young disperse to nearby nests. Adult females live in the same house until they die, when the house is taken over by one of the female offspring. In this manner houses may be occupied and maintained by the same family for decades. Individual houses may persist for 20 to 30 years.

San Francisco dusky-footed woodrats occur on site, with houses found only within the woody riparian corridor. No woodrat houses occur or would occur in the non-native grassland areas where construction activities are proposed and no adverse impact to San Francisco dusky-footed woodrat is anticipated.

Nesting Birds

Nesting birds, including raptors, are protected by State Fish and Game code Section 3503, which reads, "It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." Passerines and non-passerine land birds are further protected under the federal Migratory Bird Treaty Act (MBTA). The avian nesting season is from February 1 to August 15.

With the project site's close proximity to San Gregorio Creek, trees and shrubs found on the property offer attractive nesting habitat for a variety of birds. Some birds such as house finch may also nest on buildings found on site, including the barn. Some species of birds nest on the ground, however ground-nesting birds are unlikely to utilize the mowed, non-native grassland that surrounds the farm and residential facilities where the project is proposed. Construction of the barn could impact nesting birds if conducted during the nesting season. If vegetation is trimmed or removed as part of project activities, this could also impact nesting birds.

Roosting Bats

Although pallid bat is unlikely to roost in the barn, other species of bats that are not specialstatus but that are still protected by Fish and Game Code may roost in the barn. No evidence of roosting bats was observed during the site visit, but bats may escape detection and could be present. Bats may have day roosts in crevices under the roof. Construction of the second level of the barn could impact day roosting bats. Bats disturbed from their day roost get disoriented and may be unable to locate a new roost or suffer predation.

Impact	Mitigation Measure	Impact after Mitigation	Implementation
Earthwork could negatively impact creek water quality if dirt or contaminants are allowed to enter the stream.	Best Management Practices (BMPs) described in San Mateo County's Watershed Protection and Maintenance Standards will be incorporated into project design (San Mateo County 2004). These may include BMPs for containment, equipment fueling, and timing of work, among others. How construction will proceed will determine what BMPs are relevant to the project. BMPs can be found on the County's website at https://publicworks.smcgov.org/watershed- protection-and-maintenance-standards.	None. Water quality within San Gregorio Creek will not be negatively impacted by project activities.	Project construction contractor, with oversight from Vida Verde.
If conducted during the avian nesting season, barn modification and removal or	To avoid impacts to nesting birds, barn construction and vegetation trimming or removal shall be scheduled to take place outside of the breeding season (February 1 to August 15). However, if these activities will occur during the breeding season, a qualified biologist shall	None. Nesting birds protected by the Migratory Bird Treaty Act and Fish	Vida Verde, coordinating with the construction contractor and biological

11. Tabulate by significant impact all feasible mitigation measures proposed to reduce the level of impact and explain how such measures will be successful.

Impact	Mitigation Measure	Impact after Mitigation	Implementation
trimming of vegetation may negatively impact nesting birds.	conduct a survey for nesting birds within five days prior to the proposed start of construction. An active nest is defined as a nest having eggs or chicks present, or a nest that adult birds have staked a territory and are displaying, constructing a nest, or are repairing an old nest. If active nests are not present, construction can take place as scheduled. If more than 5 days elapses between the initial nest search and the start of vegetation removal or barn construction, it is possible for new birds to move onto the barn or into vegetation and begin building a nest. If there is such a delay, another nest survey shall be conducted. If an active nest(s) is detected on the barn, barn construction shall be delayed until the young have fully fledged, are no longer being fed by the parents, and have left the nest site, as determined by a qualified biologist. If an active nest(s) is detected, work will be delayed and a buffer will be established around the nest. California Department of Fish and Wildlife usually accepts a 250-foot radius buffer around passerine and small raptor nests, and up to a 1,000-foot radius for large raptors. A qualified	and Game Code will be protected from adverse impact.	monitor.
	biologist shall monitor the behavior of the birds (adults and young, when present) at the nest site to ensure that they are not disturbed by project- related activities. Nest monitoring shall continue during project-related construction work until the young have fully fledged, are no longer being fed by the parents and have left the nest site. The nest buffer may be removed and work may commence.		
Construction of the barn could negatively impact day roosting bats that may be present in crevices under the roof.	The roof and trim should be carefully removed with hand tools, with particular care taken around cracks and crevices. Removal should be conducted at dusk, which is close to the time bats naturally emerge from day roosts.	The potential of impact to day-roosting bats will be significantly reduced.	Project construction contractor, with oversight from Vida Verde.
Heavy equipment and other machinery and construction materials can be	All construction vehicles entering the site that may have entered weed-infested areas (such as at other construction sites) prior to arriving at Vida Verde shall first wash the tires and undercarriage of the vehicles before entering the project site. If fill is	The potential for non- native plant introduction will be	Project construction contractor, with oversight from Vida Verde.

Impact	Mitigation Measure	Impact after Mitigation	Implementation
a source of non- native plant introduction to the site.	needed, native soil will be used. All rock, aggregate, fiber rolls, or other construction material, if needed, will be certified weed-free.	significantly reduced.	

12. <u>Certification</u>. I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

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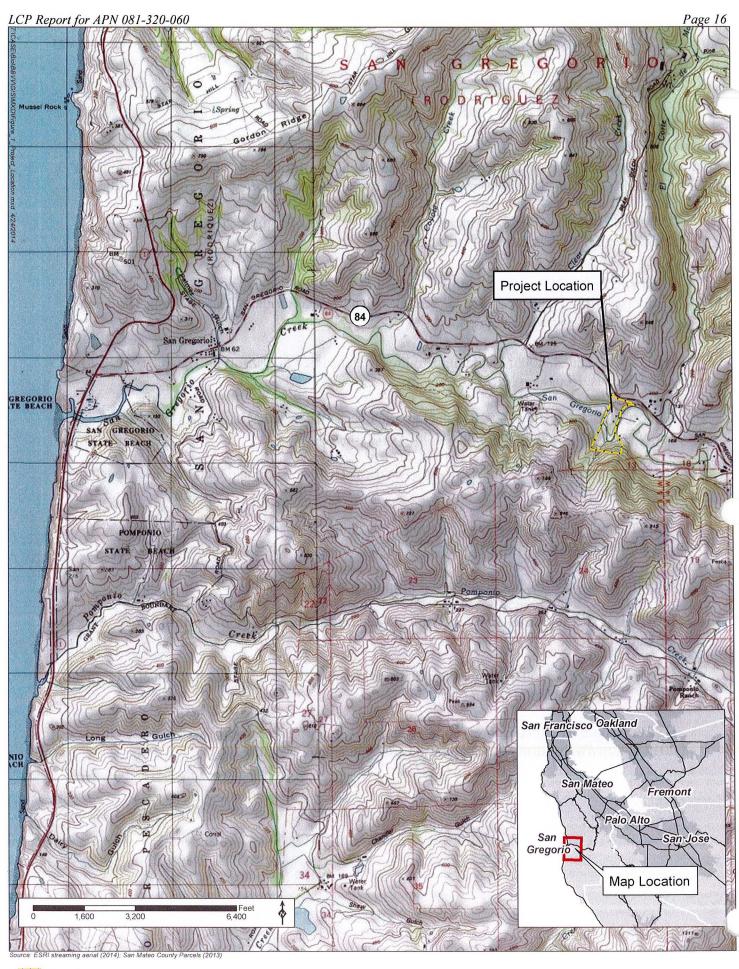
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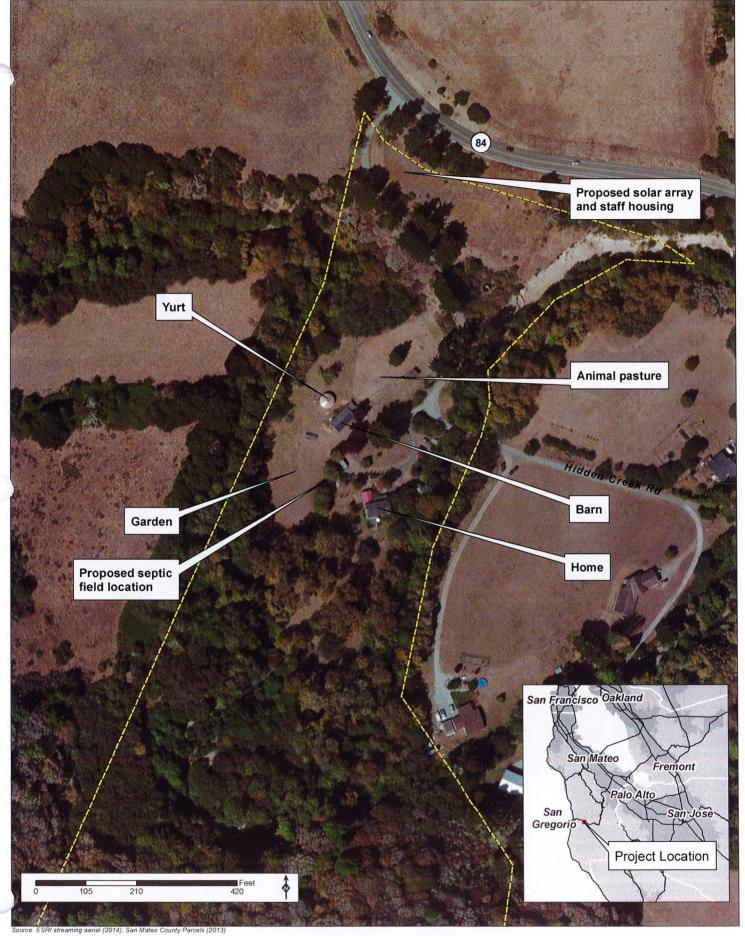
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Study Area

Figure 1 Project Location

3540 La Honda Rd, San Gregorio, CA



Study Area



Appendix A. Principle Investigator Qualifications

AUTUMN MEISEL, SENIOR BIOLOGIST

Autumn Meisel is an ecologist specialized in habitat assessment and management, with a focus on sensitive species conservation. She joined TRA as a staff biologist in 2005 and is competent in overall site and habitat assessment, biological monitoring, Endangered Species Act consultation, and landscape level planning and management. She has worked with numerous local, public municipalities, providing biological consultation services for improvement projects such as roads, pipelines, and bridges, park management plans, habitat restoration plans, and development projects.

Ms. Meisel has worked as project manager for a variety of clients on projects ranging from small, single-family home developments to capital improvement projects and the implementation of Habitat Conservation Plans. Ms. Meisel has a working relationship with the regulatory agencies and provides clients with guidance in regulatory compliance. She is skilled in her understanding of the regulations with respect to the Clean Water Act, Endangered Species Act, Migratory Bird Treaty Act, Fish and Game Code, Local Coastal Policy Programs, and CEQA significance. She excels in her ability to creatively find solutions to complex issues while ensuring that regulations are met and sensitive resources are protected.

In the field, Ms. Meisel has experience in plant and wildlife identification, reconnaissance-level site surveys, wetland delineations, construction monitoring, mitigation monitoring, and vegetation and wildlife monitoring. Ms. Meisel has experience surveying for and providing management recommendations for rare plants, nesting birds, bats, and a variety of special-status species including California red-legged frog, California tiger salamander, listed butterflies, burrowing owl, western pond turtle, and San Francisco dusky-footed wood rat, among others. Ms. Meisel has a background in fire ecology and has worked with CalFire on vegetation management planning.

Ms. Meisel also has expertise in habitat restoration at degraded sites and has overseen invasive weed control efforts, native out-planting, and plant establishment maintenance. She has lead volunteer groups in restoration work and provided education to others about ecology and resource management. Ms. Meisel has aided in prioritizing restoration needs when resources were limited and has designed experimental vegetation management methods to better understand how to best meet desired goals so that resources may be put to the greatest use.

Educational Background

San Francisco State University, San Francisco

Master of Conservation Ecology

U.C. San Diego, La Jolla

Bachelor of Science, Ecology, Behavior, and Evolution

SARAH DANIELS, BIOLOGIST III, GIS ANALYST

Sarah Daniels joined TRA as an environmental analyst and biologist, bringing her seven years of experience in NEPA analysis, biological assessments, and planning documentation. She has been the project manager for city-wide planning projects, reconnaissance biological evaluations, and environmental assessments. Ms. Daniels utilizes GIS analysis in environmental and resource management planning to find optimal solutions and to create exemplary graphics. She brings a diverse set of ecological and planning skills and natural resources knowledge to her work. She has participated in numerous public meetings and thoroughly encourages outreach in all of her projects.

At TRA, she has been contributing to the GIS analysis of biological resources, recreational resources, land use and zoning, as well as producing figures for CEQA documentation. Prior to joining TRA, Ms. Daniels participated in wetland delineations, rare plant surveys, recreation and visual resource planning, biological resources field work, and military planning working as an environmental planner.

Educational Background

Duke University, Nicholas School of the Environment, Durham, NC

Master of Environmental Management

Certificate in Geospatial Analysis

Duke University, Durham, NC

Bachelor of Science, Biology

Appendix B. Representative Photos of the Site Taken April 14, 2014



Photo 1. View of animal pasture and barn from the property's driveway. Dense and mature riparian corridor shown wrapping around the property.



Photo 2. Grey barn would gain a second level. Yurt located behind the barn and the animal pasture is adjacent to the barn.



Photo 3. Existing vegetable garden.

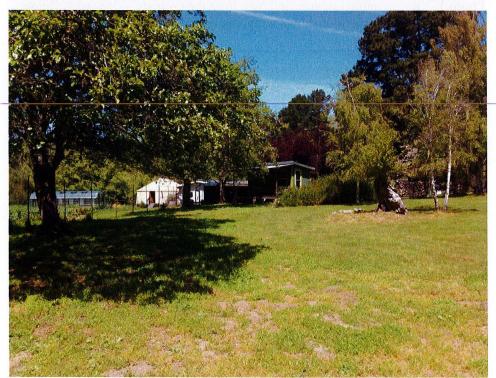


Photo 4. Location of proposed septic field

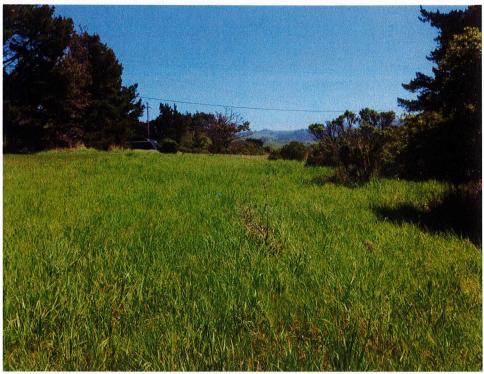


Photo 5. Flat and grassy opening at the top of the property near La Honda Road that is proposed for development of a solar array.



Photo 6. View of San Gregorio Creek

VIDA VERDE

CULTURAL RESOURCES ASSESSMENT of Proposed Construction at 3540 State Highway 84

RECEIVED

OCT 1 8 2019

San Mateo County Planning Division

SAN GREGORIO, CALIFORNIA

NOVEMBER 2017



ALBION ENVIRONMENTAL, INC.



VIDA VERDE

CULTURAL RESOURCES ASSESSMENT of PROPOSED CONSTRUCTION at 3540 STATE HIGHWAY 84

SAN GREGORIO, CALIFORNIA

NOVEMBER 2017

PREPARED FOR:

SANDY SOMMER VIDA VERDE 5360 LA HONDA ROAD SAN GREGORIO, CALIFORNIA 94074

PREPARED BY:

STELLA D'ORO, MA, RPA Albion Environmental, Inc. 1414 Soquel Avenue, Suite 205 Santa Cruz, California 95062

J2017-043.01

EXECUTIVE SUMMARY

In October 2017, Sandy Sommer contracted with Albion Environmental, Inc. (Albion), to conduct a cultural resources assessment of an approximately 7-acre area located at 3540 State Highway 84, San Gregorio, California. The property is owned by the Vida Verde Nature Education non-profit organization that provides free environmental learning experiences for low income, "in-need" 4th through 6th grade students. The organization plans to develop the camp, which includes a new 2-story barn, tepees and yurts, a new equipment tool shed, a new septic system for the existing house on the property, improved water storage facilities, ground-mounted solar panels, and driveway turnouts. The existing single-family structure is also proposed to be repaired. Albion's investigation included a background records search at the California Historical Resources Information System Northwest Information Center at Sonoma State University (NWIC), and a field investigation entailing pedestrian survey and limited shovel testing of the subject parcel. The evaluation was designed to adequately address treatment of cultural resources under guidelines outlined by the San Mateo County Planning and Building Division General Plan (5.20), and California Environmental Quality Act (CEQA) guidelines.

A search of records at the NWIC indicated that eleven archaeological studies have been conducted within a ¹/₄-mile radius of the Project Area. According to the NWIC, one archaeological resource has been identified within a ¹/₄-mile radius of the Project Area and no previously-recorded sites are recorded within the Project Area.

After reviewing the record search results, Albion conducted an intensive pedestrian survey and limited shovel testing of the project site. Our surface investigation of the subject parcel did not reveal any prehistoric or historic- age deposits and/or features. Moreover, three shovel tests were excavated to expose subsurface deposits and produced three shards of clear glass, four pieces of charcoal, and three pieces of unidentifiable shell. One of the shards of clear glass was found in the 40-60 cm level indicating disturbed soils in the area of Shovel Test #1. Soils within all of the shovel tests did not show any stratigraphy that would indicate an intact cultural resource (Appendix A: Photograph 5).

Given these findings, it is Albion's recommendation that no further action regarding cultural resources at this parcel is warranted. It is CEQA policy should prehistoric or historic-era deposits or features are discovered at any time during construction, activities in the area should cease and a qualified archaeologist should inspect and evaluate the discovery and prepare a recommendation for a further course of action.

Since many important cultural resources, such as Tribal Cultural Resources, do not necessarily leave an archaeological footprint or have physically identifiable manifestations, it is vital to seek out the possibility of these important resources and their locations through consultation with local tribal members. Under the authority of recently-passed Bill 52, the County of San Mateo may have received information from interested Native American tribes or representatives concerning Tribal Cultural Resources at the project site. The County is responsible for collecting and incorporating tribal information into the environmental review process. At this time, we do not know if the County has received any such information.

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INTRODUCTION

This report documents the results of a cultural resource assessment of an approximately 7-acre area located at 3540 State Highway 84, San Gregorio, California. The Project Area is on the south side of State Highway 84 approximately 0.4 miles (0.6 km) northwest of the intersection at Highway 84 and Madera Lane and approximately 0.7 miles (1.1 km) southwest of the intersection at Highway 84 and Bear Gulch Road, San Gregorio, San Mateo County (Figure 1). The property is owned by the Vida Verde Nature Education non-profit organization that provides free environmental learning experiences for low income, "in-need" 4th through 6th grade students. The organization plans to develop the camp, which includes a new 2-story barn, tepees and yurts, a new equipment tool shed, a new septic system for the existing house on the property, improved water storage facilities, ground-mounted solar panels, and driveway turnouts. The existing single-family structure is also proposed to be repaired.

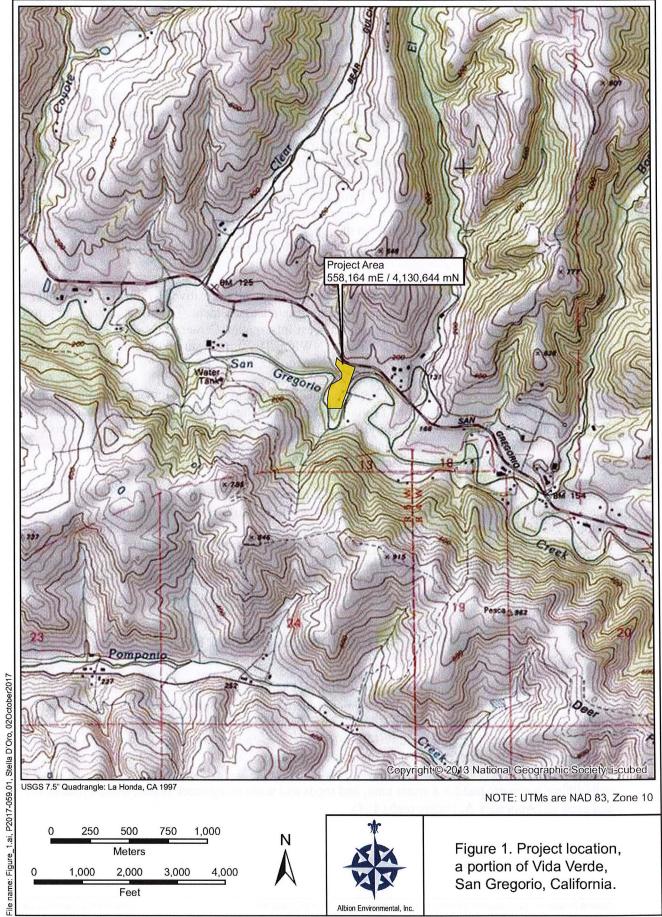
Because the property is in an area designated as "archaeologically sensitive" by the County of San Mateo, Albion was contracted to conduct a cultural resource assessment. The investigation comprised three tasks: 1) a review of records from the Northwest Information Center of the Historical Resources Information System at Sonoma State University (NWIC); 2) a surface survey of the parcel; and 3) limited subsurface excavation.

Albion designed the investigation to address treatment of cultural resources under guidelines outlined by the San Mateo County Planning and Building Division General Plan (5.20), and CEQA guidelines. This includes: (1) identification of significant resources; (2) determination of significant impacts to resources; and (3) development of any necessary mitigation measures. All work was conducted in accordance with guidelines and regulations set forth in the CEQA.

The records search was requested by Albion staff archaeologist Stella D'Oro in October 2017 (NWIC File No.: 17-1040). The subsequent pedestrian survey and subsurface testing was conducted on October 24, 2017 by a two-person crew; Josie Twigg who earned an MSc in Osteoarchaeology and has worked in California archaeology for ten years and Kolin Taylor who will earn his BA in Anthropology in the spring of 2018 and has worked in California archaeology for six years. The crew conducted the field work under the supervision of Stella D'Oro who holds an MA in Applied Anthropology and has been working in California archaeology for 13 years.

PROJECT LOCATION AND DESCRIPTION

The Project Area is on the south side of State Highway 84 approximately 0.4 miles (0.6 km) northwest of the intersection at Highway 84 and Madera Lane and approximately 0.7 miles (1.1 km) southwest of the intersection at Highway 84 and Bear Gulch Road, San Gregorio, San Mateo County (Figure 1). The parcel is approximately 140 to 180 ft above sea level and slopes from north to south. San Gregorio Creek borders the area on the west, south, and east sides. The area has previously been disturbed by construction of a residence with a deck, a barn, tool shed, structure for goats, an outbuilding, a cement pad for a water tank, and roads and trails along creek banks, animal paddocks, and gardens (Appendix A: Photographs 1–4).



SOURCES CONSULTED

In order to determine if cultural resources are recorded within or near the Project Area, Albion consulted the following sources as part of the NWIC records search:

- <u>California Inventory of Historic Resources for Santa Cruz County</u> managed by the State of California Department of Parks and Recreation lists no historic resources within a ¹/₄-mile of the Project Area.
- <u>Historic Property Data File for Santa Cruz County</u> managed by the State Office of Historic Preservation (including the California Register, California Historical Landmarks, and California Points of Historical Interest) reveals no historic properties are located within a ¹/₄-mile radius.

A search of records at the NWIC indicated eleven surveys have been conducted within a ¹/₄mile radius of the project area. One survey was conducted for a Caltrans inventory of rural highways and the other ten surveys were city, county, or statewide archaeological overviews.

There is one recorded cultural resource within a $^{1}/_{4}$ -mile radius of the Project Area. P-41-002165 is a chalcedony core isolate found approximately 0.2 miles (0.3 km) northwest of the Project Area (Nolte 2005). Record search results are located in Appendix B.

BACKGROUND

Natural Environment

The parcel is approximately 140 to 180 ft above sea level and slopes from north to south. San Gregorio Creek borders the area on the west, south, and east sides. There are two types of soils in the Project Area: Corralitos sandy loam and mixed alluvial (USDA 2017). The Corralitos Sandy loam series consists of somewhat excessively-drained soils sandy alluvium derived from acid sandstone and related rocks. The A Horizon (0–32 in. below the surface) is characterized as brown to pale brown loamy sand. The C Horizon (32–72 in. below the surface) is characterized by light gray to light yellowish brown loamy sand.

The mixed alluvial land series consists of excessively-drained soils in floodplains formed by alluvium. From 0–70 in. below the surface, soils are characterized as sand, fine sand, loamy fine sand, and gravelly sand (USDA 1978).

Cultural Environment

San Francisco Bay Area during Precolonial Times

Archaeological research in the San Francisco Bay area, including San Mateo County, began in the early twentieth century. Table 1 presents a chronological summary of the major investigators and their archaeological findings. It is not meant to be a comprehensive list of every research effort conducted in the area, but is intended to highlight some of the major developments in San Francisco

Bay area archaeology. Each of these investigations has also contributed to the refinement of research questions and themes that are currently being addressed in archaeology today.

Year	Description of Investigation	Related Excavation Finds/Conclusions
1907	Uhle investigates the Emeryville Shellmound	Uhle recognizes a number of different strata and, based on burial complexes, argues that a succession of "cultural stages" was represented in the mound. He proposes that the mound was occupied for "more than a thousand years into the past."
1910	Nelson investigates Ellis Landing Shellmound	Nelson's excavations at the Ellis Landing Shellmound result in a conclusion contrary to Uhle; he argues that the mound demonstrates little evidence of culture change. Nelson also makes an attempt to date the shellmound using a volumetric calculation based on shell constituents and estimates that the mound might be about 3,500 years old.
1912	Loud investigates the Presidio Mound	Loud records a shellmound within the San Francisco Presidio (CA-SFR-6) that was subsequently covered during a dredging project; it was later rediscovered.
1916	Gifford works at several San Francisco Bay area shellmounds and publishes a summary	Gifford analyzes midden samples from 15 sites.
1924	Loud investigates the Stege Mounds in Richmond	One of the Stege Mounds may have been a specialized fishing village. Loud records that 61% of all the artifacts found were stone net-sinkers.
1925	Kroeber publishes a summary of California ethnography	Based on the work of previous researchers, Kroeber concludes that there has been little significant cultural change in the state's precolonial past.
1926	Schenck revisits the Emeryville Shellmound	Schenck rescues valuable data from the Emeryville Shellmound before it was leveled to accommodate a paint factory. Schenck's conclusions regarding the site contrast with those of Uhle.
1939	Lillard et al. develops a cultural chronology for central California	They divide the precolonial period of central California into three periods: "Early," "Transitional," and "Late." It was originally formulated for the Sacramento-San Joaquin Delta region.
1939	Heizer and Fenenga argue that the Lillard et al. chronology is applicable to the San Francisco Bay area	They use Lillard et al.'s chronology for temporally ordering sites in the San Francisco Bay region.
1948	Beardsley develops a tripartite chronology for the San Francisco Bay region that will later be called the Central California Taxonomic System (CCTS)	Like Lillard et al.'s scheme, this chronology was divided into "Early," "Middle" and "Late" Horizons. This system proposed a uniform, linear sequence of cultural succession. Beardsley associated the Santa Clara Valley with patterns observed with other east bay shore sites of Alameda and Contra Costa counties.
1968	Gerow challenges a number of aspects of the CCTS	His work at CA-SMA-77, the University Village site, conflicts with the Early Period of the CCTS.

Table 1. Selected major precontact archaeological investigations in the San Francisco Bay area.

Year	Description of Investigation	Related Excavation Finds/Conclusions
1972	Ragir argues for an older antiquity for the Early Period of the CCTS	Ragir relies on radiocarbon dates to challenge aspects of the CCTS.
1973	King and Hickman conduct the first large-scale survey of the Santa Clara Valley	They identified three different site types and correlated these types with five broad classes of environmental areas.
1973	Anderson documents the existence of the Narvaez Site (CA-SCL-68)	This site, located along the Guadalupe River, contained a number of burials and features.
1974	Fredrickson proposes a new chronology for central California. He also proposes the concept of the "pattern" to define atemporal modes of adaptation	It is primarily applicable to the North Coast Ranges and is based on a five-part chronology. Despite this latter point, many subsequent researchers use Fredrickson's chronology for the San Francisco Bay area.
1978	Winter conducts a salvage excavation at the "Holiday Inn" site (CA-SCL-128/H)	He finds evidence of a large village site along the Guadalupe River, in downtown San Jose, which includes numerous artifacts, features, and human burials.
1982	Bergthold conducts a comprehensive test of the King and Hickman model using site data from the Santa Clara Valley	She found that the King and Hickman model does not adequately account for settlement patterns in the valley.
1983	Hildebrandt excavates CA-SCL-178 as well as four other sites in the Santa Clara Valley	The basal levels at site SCL-178 yields a radiocarbon date of approximately 8000 BP.
1986	Elsasser conducts an overview of Santa Clara Valley's precolonial past	He argues for the existence of deeply buried sites in the valley.
1987	Bennyhoff and Hughes detailed analyses on shell bead types lead to the construction of yet another central California chronology	The major periods of this scheme are further sub-divided by a number of different phases. This chronology is later refined by Milliken and Bennyhoff (1993).
1994 (2007 Report)	M. Hylkema excavates the Tamien Station Site (CA-SCL-690)	This large village site is located in downtown San Jose along the Guadalupe River. It contains numerous burials and features.
2001	Grady et al. conduct excavations at the Rubino Site (CA-SCL-674)	A total of 270 burials were uncovered during the course of excavations and analyses were conducted on the human remains.
2002	Wiberg investigates the Skyport Plaza Site (CA-SCL-478)	This site is located east of San Jose International Airport. Many of the burials demonstrate evidence of warfare.
2009	Bartelink investigates changes in diet in the Late Holocene San Francisco Bay Area using stable isotope analysis.	Data come from a number of archaeological sites located along the eastern margins of San Francisco Bay. Late Holocene diets are characterized as terrestrially focused, rather than marine-focused.
2013, 2014, 2016	Eerkens et al. conduct a series of isotopic studies on human remains at several Bay Area sites	Data for these studies was gleaned from a number of Bay Area sites, including CA-SCL-38 and CA-SCL-919. Topics such as paleodiet, population movement, past ecological relationships, settlement patterns.

Cultural Resources Assessment of Proposed Construction at 3540 State Highway 85 Vida Verde Much of the earliest archaeological research carried out in the San Francisco Bay area was concentrated along the shoreline of San Francisco Bay. This is hardly surprising given the high visibility of shoreline sites, many of which consist of large, heaping shellmounds. The first researcher to conduct formal excavations on these shellmounds was Max Uhle, a German-born archaeologist who had previously conducted excavations in Peru. During the first decade of the twentieth century, he investigated the famous Emeryville Shellmound (CA-ALA-309) on the east side of San Francisco Bay. From stratigraphically controlled excavations, Uhle (1907) identified the presence of two developmental stages at the site, which he argued demonstrated "the gradual elaboration and refinement of technical processes." The early assemblage was characterized by flexed burials, red ocher, knife-like bone implements, and a general lack of flaked stone. The later assemblage was characterized by cremation, flaked stone implements, and polished stones. Uhle concluded that the differences in these two stages represented significant cultural change that had unfolded over perhaps a thousand years.

Nels Nelson, a student of Alfred Kroeber at the University of California, was the next archaeologist to study the area's precolonial history. Like Uhle, Nelson focused his energies on San Francisco shellmounds, identifying over 400 mounds, including several sites along the west bank of the Guadalupe River in the Santa Clara Valley. In 1910, Nelson published the results of excavations carried out at the Ellis Landing Shellmound (CA-CCO-295) (Nelson 1910). His conclusions were much more cautious than Uhle's. He maintained that in general the site evinced little evidence of cultural change. Although Nelson noticed a change in the exploitation of shellfish, he attributed it to changes in the substrate of the bay rather than to cultural change. Nelson's view of California precolonial past, changing very little until the arrival of Europeans, was highly influential and became the generally accepted interpretation of California and San Francisco Bay area archaeology for the next several years.

A few additional shellmound excavations were conducted during the next 15 years (Gifford 1916; Loud 1912, 1924; Schenck 1926). Gifford (1916) worked at several locations whereas Loud (1924) published the results of excavations carried out at the Stege Mounds (CA-CCO-298, CA-CCO-300). Schenck (1926) revisited the Emeryville Shellmound and posited an interpretation of the site that was also at odds with Uhle. He suggested that the site might only be 500–1,000 years old and, building upon Nelson's ideas of relative stability in California's precolonial cultures, that it demonstrated an "extraordinary stability of culture" rather than any developmental change.

Based largely on the conclusions of researchers like Nelson and Schenck, Kroeber (1925) published a landmark summary of California during precolonial times championing the idea that there had been little significant cultural change in the state's past. He believed that material differences noticed by researchers like Uhle were of degree rather than kind and that the archaeological resources of precolonial Californians were "in essentials the same as that found in the same region by the more recent explorer and settler" (Kroeber 1908:3). According to Kroeber (1908:16), Native Californians observed ethnographically were so primitive as to rule out any possibility for advancements through precolonial times.

By the 1930s, the view that California's precolonial period was characterized by cultural stasis was beginning to undergo revision. Increasingly, researchers recognized that the archaeology of California and the San Francisco Bay area was demonstrating evidence of cultural evolutionary change. Researchers were beginning to realize that changes in artifact types suggested a change in cultural adaptation. Indeed, by the late 1930s, Kroeber himself was revising many of his earlier conclusions (Bickel 1981:7-8). As Bickel (1981) noted, much of this new thinking regarding California's precolonial period was stimulated by developments in the archaeology of the American southwest,

where archaeologists like A.V. Kidder and Emil Haury were demonstrating cultural change as evidenced by the gradual shift in artifact types.

One of the first efforts recognizing significant cultural changes in the precolonial archaeology of central California was put forward by Lillard et al. (1939). Based on their work at several sites in the Sacramento Valley and Delta region, including the Windmiller Site (CA-SAC-107), the authors developed a tripartite sequence composed of "Early," "Transitional," and "Late" periods. These periods were distinguished by marked changes in settlement, subsistence orientation, grave goods, and artifacts types. The authors were concerned with seeking to organize the variability within and between artifact assemblages into area-based patterns, which were then seen as denoting "cultures" or cultural variants. However, the sequence was descriptive more than explanatory; they were not concerned with illuminating the conditions under which cultural change occurred. This sequence was the most comprehensive, detailed, and best documented local sequence to be offered in California up to that time.

Although Lillard et al. (1939) derived their sequence from interior valley sites, other researchers (Heizer and Fenenga 1939) argued that this chronology was applicable to a much wider area in California, including the San Francisco Bay area. During the next decade, Beardsley (1948) made the argument that the chronological sequence for the Marin County coast and the San Francisco Bay were very similar to Lillard et al.'s (1939) three-part sequence. He conducted a reanalysis of published material from the San Francisco Bay area and concluded that archaeological materials from the Early Period were extremely rare but that the two latter periods (Transitional and Late) were well represented. In particular, the shellmounds at Ellis Landing and Emeryville were argued to represent examples of the Transitional (which Beardsley called "Middle") and Late periods, respectively. Eventually, Beardsley (1954) put forward his own chronological scheme for the area, which came to be known as the Central California Taxonomic System (CCTS) (Gerow 1968). It was very similar to the sequence of Lillard et al. (1939), consisting of an "Early-Middle-Late" nomenclature, but applicable to a wider area.

With the advent of radiocarbon dating in the 1950s, some archaeologists began to reexamine the CCTS with a critical eye. Many aspects of this chronology were found to be inaccurate when compared to newly obtained radiocarbon dates. For example, evidence began to accumulate suggesting that the antiquity of human occupation in central California and elsewhere was much older than anticipated by the CCTS (see, for example, Ragir 1972). Other problems with the CCTS surfaced, as well. Radiocarbon dates from several sites in California demonstrated that the Early and Middle Horizons, rather than indicative of sequential cultural change, were more accurately viewed as contemporaneous phenomena (Moratto 1984:199). In addition, many of the traits considered typical of particular horizons in the CCTS were absent in various parts of the Central Valley and the San Francisco Bay region. Based on evidence recovered from the University Village Site (CA-SMA-77), for example, Gerow (1968) maintained that Early Horizon sites in the San Francisco Bay area were much different from the supposed Early Horizon sites in the valley and delta.

As the shortcomings of the CCTS readily became apparent, several researchers began to propose new and different culture chronologies for central California. One of the most comprehensive for the time was Fredrickson's (1973, 1994) five-part chronology. Anticipating the possibility of an earlier than previously conceived antiquity, Fredrickson's earliest period begins around 10,000 B.C. This initial period, called the Paleoindian Period, persists until about 6000 B.C., when it is succeeded by the Lower Archaic Period (6000–3000 B.C.), the Middle Archaic Period (3000–1000 B.C.), the Upper Archaic Period (1000 B.C.–A.D. 500), and the Emergent Period (A.D. 500–1800). These different periods are distinguished from one another primarily on the basis of perceived adaptations. Fredrickson also made the point that the transition from one culture type to another did not occur

uniformly throughout the area, but took place at different times in different regions. Although Fredrickson's sequence was developed mainly for the North Coast Ranges, it has been used by a number of researchers working in the San Francisco Bay area (see Bennyhoff 1986, 1994b; Bennyhoff and Hughes 1987; Broughton 1999; Hildebrandt and Jones 1992; Simons 1992).

In recent years, however, most researchers working in the Bay Area have relied on a cultural chronology originally proposed by Bennyhoff and Hughes' (1987) but subsequently refined by Milliken and Bennyhoff (1993), Groza (2002), and Hughes and Milliken (2007). This sequence is based on a detailed metrical analysis of shell beads and ornaments types. It is divided into temporal periods and, like the CCTS, uses the general Early-Middle-Late nomenclature but divides these into further subdivisions. The earliest period in this sequence is the aptly termed Early Period (3500-600 B.C.), originating during Middle Holocene times and continuing to approximately 600 B.C. The material culture of this period is characterized by long-stemmed, contracting stemmed, and lanceolate form projectile points. Shell beads, found almost exclusively in burials, are primarily thick rectangular beads (Type L) and spire-lopped beads (Type A). Ground stone implements include handstones, bowl mortars, and milling slabs. Bipointed bone gorges have also been found in sites dating to this time. Taken together, the material culture of this period suggests hunting, fishing, and plant gathering constituted the major subsistence regimes. The gathering of shellfish (especially mussels) was also an important subsistence activity for coastal peoples. The bowl mortars suggest acorns were a staple, whereas the milling slabs point to the processing of hard seeds. Obsidian found at Early Period sites, especially obsidian from the Casa Diablo source, suggests an east-west trade pattern, with obsidian from sources in the eastern Sierras ending up in coastal and inland sites in central California. Some scholars have posited an Early/Middle Transition Period occurring at the end of the Early Period.

The Early Period is followed by the Middle Period (600 B.C.–A.D. 1000), a time when some combination of population growth and temperate climate may have led to territorial circumscription in some parts of central California (Sunseri 2009). The material culture from this period is very similar to the previous period with comparable profiles of flaked stone and ground stone implements. Contracting-stemmed projectile points, bone gorges, and grooved net weights for fishing are some of the artifacts recovered from Middle Period sites. Diagnostic beads include *Olivella* saucer bead types (Type G2), irregular saucer beads (Type G6), and square saddle beads (Type F3a). There seems to have been a greater diversification of subsistence than the previous period, with heavier reliance on small terrestrial animals (e.g., rabbits and sea otters). Vegetal foods like acorns and hard seeds persist in the diet, and fish (inshore species and small schooling varieties) were also exploited. Burials are typically in flexed position and funerary goods include bone tubes and saucer-type G2 beds. Scholars have argued for greater sedentism and increased storage, as well as increasingly gender-specific work.

A number of archaeologists working in the San Francisco Bay area have argued that during the Middle Period, a distinct cultural pattern emerged along the southern and eastern ends of San Francisco Bay. Called the Meganos Aspect (Bennyhoff 1994b; R. Milliken, et al. 2007; Moratto 1984), this cultural pattern may indicate an intrusion of peoples moving into the area from the south and east. Archaeologists have argued that this resulted in two different ethnic groups occupying the Bay Area, the forerunners of the Ohlone and the Meganos culture. This latter group has been linked to the so-called Windmiller Pattern of the San Joaquin Delta area. Cultural traits associated with the Meganos Aspect are exemplified by ventrally extended burials, no evidence of cremation, and a variable orientation (though Bennyhoff argues for a preference for northerly orientation). Associated grave goods are characteristically rare. Mortars and pestles suggest a reliance on vegetal resources, especially acorns. Flaked lithic technologies are considered rare at Meganos Aspect sites, though faunal assemblages indicate that the hunting of large mammals (e.g., deer, elk) was important. A

number of archaeologists have also argued that this intrusion may have led to violent conflict between Meganos peoples and the older inhabitants of the Bay Area.

A relatively brief period of approximately 250 years, called the Middle/Late Transition Period (A.D. 1,000–750), characterizes the transition from the Middle to the Late periods. Despite the brevity of this period, it contrasts sharply with the previous Middle Period in a number of ways. Chiefly, this period coincides with a geologic interval known as the Medieval Climatic Anomaly, which involved a period of severe drought and accelerated aridity (Stine 1994). Some scholars (e.g., Jones 1995) have argued that settlement patterns were disrupted during this time, and that populations were characterized by frequent movement, a pattern opposite from the previous period. This shift in settlement patterns may be linked to an economic reorganization of society which resulted from a less stable and reliable resource base. Material culture is characterized by the disappearance of stemmed points and the abrupt appearance of small, leaf-shaped and double side-notched projectile points. A number of scholars are argued that the changes in lithic technology reflects increased use of the bow and arrow. Milling slabs and handstones persist but new fishing technologies emerge, such as circular fishhooks and notched stone sinkers. Subsistence patterns are similar to the previous period but also evince differences in degree and kind: there is increased reliance on terrestrial ungulates; there is an intensification in fishing and other aquatic resources; and there is a shift toward lower-ranked resources.

By A.D. 750, during the beginning of the Late Period, many Middle Period and Middle/Late Transition Period traits gave way to social and economic characteristics consistent with the ethnographic record (Bennyhoff 1994a). The process toward the intensification of resources continues with acorns, seeds, and other lower-ranked vegetal foods exploited. Small terrestrial mammals (e.g., rabbits, rodents, etc.), birds, and aquatic resources (especially small, schooling fishes) are also exploited. The exploitation of sea otters become especially important during this time as well, and it is suggested that the trade in pelts becomes an important economic activity. Small projectile points (e.g., desert side-notched and cottonwood varieties) are common from sites during this time, and milling slabs are rarer than in previous periods. Beads common during the Late Period include *Olivella* lipped (Type E) and cupped forms (Type K). Obsidian densities are lower, suggesting a decrease in long distance trade for such commodities. Conversely, shell bead production increases as beads become a standardized form of exchange, a pattern observed in the ethnohistoric period.

Santa Mateo County during Precolonial Times

A number of important archaeological resources have been investigated in San Mateo County. One especially rich area in terms of archaeological sites and resources is along the San Francisquito Creek and watershed in the southwestern part of San Francisco Bay. Bocek (1987:280) has argued that approximately 90 sites, of which 50 were major villages, have been identified in this area. Recognition of the area's precolonial past dates to at least the 1920s. In 1922, for example, a Stanford University student discovered a human skull, subsequently dubbed "Stanford Man I," in alluvial deposits along the bank of the creek (Moratto 1984:267). It was estimated to be approximately between 3000 and 4000 years old based on the presumed age of the gravels in which it was discovered. The remains of a second individual, dubbed "Stanford Man II," was subsequently found in the same gravels. Unlike Stanford Man I, it was a complete burial in flexed position and contained three associated projectile points, which were large side-notched points made from Monterey chert. Bone collagen from Stanford Man II yielded radiocarbon dates of 2450+/-270 B.P. and 2400+/-125 B.P. (Moratto 1984:267).

Other important sites located along San Francisquito Creek include the University Village site (CA-SMA-77), the Hiller Mound site (CA-SMA-160), and the Jasper Ridge site (CA-SMA-204). In the 1950s, Gerow (1968) excavated CA-SMA-77, an early site located along the edge of San Francisco

Bay near Stanford University. Unearthed during a construction project, it was found under deep alluvium deposited from San Francisquito Creek. It contained a plethora of human burials as well as numerous artifacts and ecofacts. The former included shell beads, projectile points, notched stone net weights, mortars and pestles, charmstones, eccentric crescents, and an array of bone tools. Shell beads included *Olivella* spire-lopped and thick rectangular beads as well as *Haliotis* square beads. Ecofacts included shellfish debris (bay oyster [*Ostrea lurida*], bay mussel [*Mytilus trossulus*], and horn snail [*Cerithidia californica*], primarily) and mammal bones. The burials were in flexed position with no consistent orientation. A number of scattered lenses containing charcoal, ash, and burned shell were also uncovered. Radiocarbon dates associated with the burials established a very early date for the site, between 3000 and 3200 B.P. Gerow (1968) concluded that the site was occupied only a relatively short time before a change in the course of San Francisquito Creek likely caused the site to be abandoned.

The Hiller Mound site (CA-SMA-160) was also excavated during the 1950s, and is located very near the University Village site. Like CA-SMA-77, it was excavated by Gerow and contained a rich deposit of artifacts and ecofacts, especially shellfish. In fact, the site contained some of the highest density of shell per cubic meter for an archaeological site in the region located away from the coast. Artifacts include numerous flaked and ground stone tools and fire-cracked rocks. Cartier reinvestigated the site in 1970 and obtained a large sample for analysis. He established that the site contains cultural layers penetrating at least 2.1 meter deep and was a major habitation site. Radiocarbon assays demonstrated that the site was occupied from 660 to 1600 B.P. (Cartier 1978). A relatively large amount of bird bones, especially waterfowl, was identified as a result of this analysis. Many of these were taxa typically associated with the winter months, an observation that suggests that site was occupied during the winter.

The Jasper Ridge site (CA-SMA-204) is located along San Francisquito Creek. It is a village site that dates from the Late Period. Excavations conducted in 1981-1982 (Bocek 1987) obtained faunal and lithic sample for analysis. Like the other sites, the Jasper site contains high quantities of bay oyster, bay mussel, and horn snail, with oyster especially high. Small mammals, such as rodents and rabbits, are ubiquitous, constituting over 50% of the vertebrate faunal remains. Fish fauna are represented by flat-bellied, bottom-feeding estuary species. Lithic materials are overwhelmingly identified as Franciscan chert with small amounts of obsidian also present.

Another productive area in San Mateo County for archaeological materials is along the Pacific, or Penisular, coast of the County. Here, archaeological investigation began as early as 1915 with Loud's (1915) work at the Princeton Mound site (CA-SMA-22). Located on the edge of an old lagoon just north of Half Moon Bay, Loud uncovered burials and sampled a rich deposit of artifacts and ecofacts. Burials were mostly in flexed position and accompanied by grave goods, such as shell beads. Artifacts also included bone tools, notably a whalebone wedge, which had probably been used to pry shellfish off rocks. Additional burials were found at the site in 1962 (Moratto 1984:233).

State Parks archaeologist Mark Hylkema initiated the investigation of a number of sites at Año Nuevo State Park. One of these is CA-SMA-18, just down the coast from CA-SMA-22; it is an extensive, though partially eroded precolonial site situated on a low-lying dune at the tip of Año Nuevo Point. It was subject to a number of California State Parks-sponsored archaeological investigations beginning in 2004 (Hildebrandt, et al 2009). The deposit was relatively shallow and interpreted as a single component occupation. A number of radiocarbon dates were obtained from the site; these demonstrated that the most intense occupation occurred between 1300 and 1150 years B.P. Hildebrandt, et al (2009:60) suggest that site served as a "multi-activity residential base" rather than a permanent village. Artifacts from the deposits included shell beads (most belonging to the *Olivella* spire-lopped A series), flaked stone tools, such as projectile points, bifaces, drills, and cores, and

ground stone. This latter category included such items as handstones, pitted stones, grooved stones, and bowl mortars. Bone artifacts were found in abundance, including awls, fish gorges, pendants, spatulas, and numerous polished pieces.

Ecofactual remains from the site included large and small mammals, both terrestrial and marine taxa. The former included elk, mule deer, fox, coyote, bear, raccoon, and skunk, whereas the latter included northern fur seal, California sea lion, harbor seal, and a number of cetaceans. Also included in the faunal remains were abundant bones of sea otter, cottontail rabbit, and rodents. The high incidence of northern fur seal indicates that this species may have used the point, or a nearby area, as a rookery or haul-out during precolonial times. Moreover, the analysis of age-sex data corroborate this scenario. Bird taxa are diverse, with the bones of ducks, herons, geese, gulls, shearwaters, auks, murres, pelicans, grebes, cormorants, loons, albatrosses, and raptors all present in the deposit. The common murre (*Uria aalge*) is especially numerous. The fish assemblage is dominated by members of the surfperch family (Embiotocaidae), though rockfishes are numerous as well. Mussel and turban snail (*Tegula funebralis*) are the most ubiquitous taxa in the shellfish assemblage.

The Middle Holocene site of CA-SMA-218 is located just northwest of CA-SMA-18 (Hylkema 1991). It yielded a very narrow artifact assemblage dominated by bifaces, preforms, and projectile points, most of these fashioned from Monterey chert. Like CA-SMA-18, the faunal assemblage is dominated by northern fur seal; this species makes up 72.8% of the entire assemblage. Hildebrandt, et al (2009:4) have suggested that:

...the narrow focus on the production of hunting implements and the killing and butchering of northern fur seals is very unusual for central California, and clearly represents specialized, logistically organized group whose residential base was located elsewhere.

A number of sites have also been investigated along the San Mateo coast, including CA-SMA-115, at Montara State Beach, CA-SMA-97, inland from Point Año Nuevo, CA-SMA-238, also at Point Año Nuevo, and CA-SMA-118, north of Point Año Nuevo. Of particular importance is CA-SMA-113, the Quiroste Valley site. This site is located just inland from Point Año Nuevo and represents a large ethnohistoric village site mentioned in Spanish diaries. It is situated in a secluded, steeply-sided valley with access to numerous biotic resources, including coastal resources less than 4 km away. Spanish accounts from 1769, during the Portola expedition, estimate village size at approximately 200 individuals. Importantly, Fray Juan Crespi, who accompanied the expedition, wrote that the village contained "a very large round house like a half orange, grass-roofed, which, by what we saw inside it, would hold the entire village" (Brown 2001:577). Radiocarbon dates from excavations in 2003 indicate that the site was occupied from A.D. 1010 to 1680 (though the Spanish accounts indicate the site was occupied in 1769). Later dates obtained from the site suggest it was occupied up to 1770. Artifacts assemblages are dominated by Monterey chert, with smaller quantities of Franciscan chert and obsidian also present. Pitted and grooved stones are common, suggesting fishing was an important subsistence activity. Abundant ground stone tools suggest plant processing was also important. A diverse array of terrestrial and marine taxa are present in the faunal assemblage, including mule deer, lagomorphs, and rodents. Shellfish and intertidal and small schooling fishes are, not surprisingly, also abundant. Rocky intertidal shellfish is dominated by California mussel, leaf barnacle, turban snail, and limpet.

Historic Context

Juan Rodriguez Cabrillo is thought to be the first European explorer to encounter the Ohlone people in the vicinity of the Monterey Bay in 1542. An early account of the Ohlone is provided by Sebastian Vizcaíno from a voyage between 1602 and 1603 (Broadbent 1972). However, this portion of California did not experience regular or continued presence by the Spanish until after 1769 when the expedition led by Gaspar de Portolá founded the city of Monterey (Levy 1978). In the following decades, several missions were established by the Spanish along El Camino Real. These include Mission San Francisco (Dolores) (1776), Mission Santa Clara (1777), Mission Santa Cruz (1791), and Mission San Jose (1797), accompanied by pueblos and presidios. The Missions affected native lifeways as many joined, or were forced into service by, the Franciscan missionaries (Milliken 1995). California came under Mexican rule in 1821, and the missions were secularized in 1833 and lands transferred to private owners through a series of government issued land grants, including a series of ranches. The Treaty of Guadalupe Hidalgo (1848) transferred governance of California to the United States. The California Gold Rush also began at that time, bringing a rapid influx of Euroamericans to the area. In the 1850s, much of the region was developed for large wheat and cattle ranches to meet subsistence demands of the numerous prospectors. By the 1900s the Santa Clara Valley began a slow transition to urbanization that is evident today.

San Mateo County is located in the San Francisco Bay Area, incorporating most of the San Francisco Peninsula, much of it mountainous except for a portion of the Santa Clara Valley to the east (Alley 1883; Alexander and Hamm 1916). The county was established in 1856, when the State decided to split San Francisco County in two with the southern portion becoming San Mateo. The county was officially organized the following year, with Redwood City as county seat, and in 1868 it annexed a portion of Santa Cruz County that includes Pescadero. Some of the earliest American Period settlers in the county were involved in the lumber industry, especially in the vicinity of Redwood City, with included the construction of mills that provided construction material to San Francisco. Other early settlers included merchants, ranchers, and shipbuilders, among others, including individuals and families from other parts of the United States, Europe, and Asia. In communities like Redwood City and San Mateo early buildings included churches, schools, stores, hotels, and government offices. Early transportation routes included a series of stage lines across the county, followed in the mid- to late-19th century by railroads.

San Gregorio is located at the western end of a fertile valley near the coast, south of Half Moon Bay and north of Pescadero, named after Pope St. Gregory the Great (Gudde 1998:336). The Spanish Portola Expedition of 1769 camped near San Gregorio on its northward journey and Franciscan missionary Juan Crespi noted that it was then occupied by a Native American village, had fertile land and abundant water (San Gregorio Creek), and would be a good place for a mission, though none was ever constructed here (Bolton 1927:221). During the Mexican Period the land was part of Rancho San Gregorio granted by Governor Alvarado to San Jose soldier Antonio Buelna in 1839 for use as pasturage (Cloud 1928; Kyle et al. 2002:396). Shortly thereafter Buelna transferred the property to Salvador Castro. The town itself was established in the 1850s in support of local agriculture (Cerny 2007:123). Over time, the community has been home to a Catholic church, the San Gregorio House hotel established in the 1860s, a post office in the 1870s, and general store built in 1889, a small Chinatown, and several cheese factories (California Legislature 1915:30; Cloud 1928; Cerny 2007:123). An inland stagecoach route, Stage Road, ran between San Gregorio and Pescadero from 1865 to 1905 and the town was popular as a resort for fishing and other recreation around the turn of the 20th century (Caughman and Ginsberg 1987:179).

FIELD METHODS

On October 24, 2017, Albion Archaeologists Josie Twigg and Kolin Taylor conducted surface and subsurface archaeological investigations at 3540 State Highway 84. They first conducted a pedestrian survey over the entire area, which consisted of a residence with a deck, a barn, tool shed, structure for goats, an outbuilding, a cement pad for a water tank, and roads and trails along creek banks, animal paddocks, and gardens (Appendix A: Photographs 1–4).

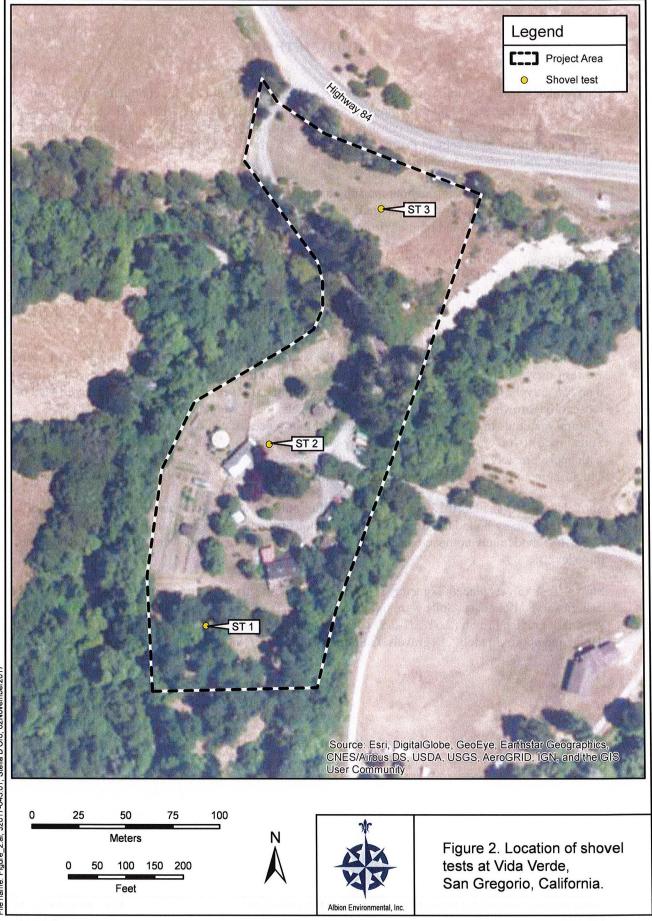
Visibility of soil surfaces throughout the subject property was poor to good due to thick duff in areas beneath trees. Soils in the pasture and garden areas were visible, but much of the other areas were covered with vegetation and built environment. No cultural materials were observed on the surface.

Following surface inspection, three shovel tests were excavated to check for subsurface cultural deposits. The shovel tests measured approximately 50 cm in diameter, and were excavated to a depth of 60 cm (24 in.) below current grade. Soils were removed in three 20 cm increments. Excavated soils were screened through 1/4-in. mesh. The shovel tests were located in areas to be impacted by proposed construction (Figure 2).

Shovel Test #1 was placed 34 meters north of the southern survey boundary and 30 meters east of the western survey boundary. Soils from 0–20 cm consisted of loose, olive brown (2.5Y 4/3) silt with less than 5% gravels. One shard of clear glass was noted in the 0-20 cm level. The 20–40 cm consisted of loose, olive brown (2.5Y 4/3) silt with 50–75% gravels; the gravel content increased at 21 cm. Cultural materials in the 20–40 cm level included four pieces of charcoal and a shard of clear glass. Soils in the 40–60 cm level were moderately-compacted dark olive brown (2.5Y 3/3) silty clay loam with approximately 75% gravels. Three small pieces of unidentifiable shell, four pieces of charcoal, and a fragment of clear glass were observed in the 40–60 cm level (Appendix: Photographs 5 and 6).

Shovel Test #2 was placed 129 meters north of the southern survey boundary and 51 meters east of the western survey boundary. Soils were homogenous from 0-60 cm and consisted of olive brown (2.5Y 4/4) moderately compacted, silty clay loam. No cultural materials were observed in any of the three levels.

Shovel Test #3 was placed 27 meters south of the northern survey boundary and 49 meters west of the eastern survey boundary. Soils were homogenous from 0-60 cm and consisted of very dark gay to very dark grayish brown (2.5Y 3/1-3/2) compact, clay loam with the clay content increasing with depth, and approximately 2% gravels. Cultural materials were not observed in any of the three levels.



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STUDY FINDINGS AND CONCLUSIONS

Visual inspection of the Project Area surface and small-scale subsurface excavations revealed no evidence of intact prehistoric or historic-era archaeological deposits. Moreover, the entire Project Area has been disturbed by past construction activities associated with a residence outbuildings, trails, and livestock husbandry (Appendix A: Photographs 1–4).

Soils encountered were silt, silty loam, and silty clay with no evidence of culturally-produced stratigraphy. The surface investigation of the subject parcel did not reveal any prehistoric or historic-age deposits and/or features. Three shovel tests were excavated to expose subsurface deposits and produced three shards of clear glass, four pieces of charcoal, and three pieces of shell. One of the shards of clear glass was found in the 40–60 cm level indicating disturbed soils in the area of Shovel Test #1. Soils within all of the shovel tests did not show any stratigraphy that would indicate an intact cultural resource (Appendix A: Photograph 5).

Since many important cultural resources, such as Tribal Cultural Resources, do not necessarily leave an archaeological footprint or have physically identifiable manifestations, it is vital to seek out the possibility of these important resources and their locations through consultation with local tribal members. Under the authority of recently-passed Bill 52, the County of San Mateo may have received information from interested Native American tribes or representatives concerning Tribal Cultural Resources at the project site. The County is responsible for collecting and incorporating tribal information into the environmental review process. At this time, we do not know if the County has received any such information.

Albion's investigation at 3540 State Highway 84 in San Gregorio indicates that potentially significant cultural materials are NOT located in the Project Area, and it is Albion's judgment that no further archaeological investigation is warranted to assess California Register of Historical Resources eligibility.

It is CEQA policy should prehistoric or historic-era deposits or features are discovered at any time during construction, activities in the area should cease and a qualified archaeologist should inspect and evaluate the discovery and prepare a recommendation for a further course of action.

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APPENDIX A PROJECT PHOTOGRAPHS



Photograph 1. View of the paddock area from Highway 84 (facing southeast).



Photograph 2. View of the upper meadow area (facing east).



Photograph 3. View from Highway 84 towards the house and barn (facing south).



Photograph 4. View of lower meadow flood plain (facing southwest).



Photograph 5. View of storage area (facing east).



Photograph 6. Material found in the 40–60cm level of ST #1: glass, charcoal and three pieces of shell (plan view).

APPENDIX B RECORDS SEARCH RESULTS



Northwest Information Center Sonoma State University 150 Professional Center Drive, Suite E Rohnert Park, California 94928-3609 Tel: 707.588.8455 nwic@sonoma.edu http://www.sonoma.edu/nwic

NWIC File No.: 17-1040

10/20/2017

Stella D'Oro Albion Environmental, Inc. 1414 Soquel Avenue, Suite 205 Santa Cruz, CA 95062

Re: Vida Verde

The Northwest Information Center received your record search request for the project area referenced above, located on the La Honda USGS 7.5' quad(s). The following reflects the results of the records search for the project area and a ¼ mi. radius:

Resources within project area:	None listed			
Resources within ¹ / ₄ mi. radius:	P-41-002165			
Reports within project area:	None listed			
Reports within ¹ / ₄ mi. radius:	S-33511			
Other Reports within records search radius:	Included is a list of the 10 "Other Reports" within or encompassing your project area. These reports are classified as Other Reports; reports with little or no field work or missing maps. The electronic maps do not depict study areas for these reports, however a list of these reports has been provided. In addition, you have not been charged any fees associated with these studies.			

Resource Database Printout (list):	\Box enclosed	\boxtimes not requested	\Box nothing listed
Resource Database Printout (details):	\boxtimes enclosed	\Box not requested	□ nothing listed
Resource Digital Database Records:	□ enclosed	\boxtimes not requested	□ nothing listed
Report Database Printout (list):	\Box enclosed	I not requested	□ nothing listed
<u>Report Database Printout (details):</u>	🛛 enclosed	\Box not requested	□ nothing listed
Report Digital Database Records:	\Box enclosed	\boxtimes not requested	□ nothing listed
Resource Record Copies:	\boxtimes enclosed	\Box not requested	\Box nothing listed
<u>Report Copies:</u>	\Box enclosed	I not requested	□ nothing listed
OHP Historic Properties Directory:	\boxtimes enclosed	□ not requested	□ nothing listed
Archaeological Determinations of Eligibility:	\Box enclosed	\Box not requested	⊠ nothing listed

CA Inventory of Historic Resources (1976):	\boxtimes enclosed	\Box not requested	\Box nothing listed
Caltrans Bridge Survey: **	\Box enclosed	⊠ not requested	□ nothing listed
Ethnographic Information:	\Box enclosed	⊠ not requested	□ nothing listed
Historical Literature:	\Box enclosed	⊠ not requested	□ nothing listed
Historical Maps:	\Box enclosed	\Box not requested	⊠ nothing listed
Local Inventories:	\Box enclosed	\Box not requested	⊠ nothing listed
GLO and/or Rancho Plat Maps:	\boxtimes enclosed	\Box not requested	\Box nothing listed
Shipwreck Inventory: **	\Box enclosed	🛛 not requested	\Box nothing listed

*Notes:

** Current versions of these resources are available on-line:

Caltrans Bridge Survey: <u>http://www.dot.ca.gov/hq/structur/strmaint/historic.htm</u> Soil Survey: <u>http://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/?stateld=CA</u> Shipwreck Inventory: <u>http://www.slc.ca.gov/Info/Shipwrecks.html</u>

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely, Annette Neal

Researcher