ALAMEDA COUNTY, CALIFORNIA

George Ranch Land Improvements Project

INITIAL STUDY &
MITIGATED NEGATIVE DECLARATION

JANUARY 2025

Douglas Herring & Associates
Environmental, Policy, and Planning Services

George Ranch Land Improvements Project

Initial Study/Mitigated Negative Declaration

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California Environmental Quality Act (CEQA)
Environmental Checklist Form

1. Project Title: George Ranch Improvements Project (County file no. PLN2023-00174 CEQA Review for Grading Violation under J#67473), Grading Permit No. G07-211025, and Site Development Review, PLN 2024-00146

2. Lead Agency Name and Address:

Alameda County Planning Department
224 West Winton Ave., Rm. 111
Hayward, CA 94544

3. Contact Person and Phone Number:

Michael Flemming, Planner III
(510) 670-6102
MichaelFlemming@acgov.org

4. Project Location:

Assessor's Parcel Numbers (APNs): 096-0056-004-03, 096-0056-003, and 096-0056-002-01

The project site is located at 2239/3163/3505 Morrison Canyon Road, Fremont, CA 94539. The 633.97-acre site is situated approximately immediately east of the City of Fremont, in the unincorporated community of Sunol. Access to the site is provided via Morrison Canyon Road and Vargas Road. Regional access is provided by Interstate 680, located approximately 1.6 miles to the south.

5. Project Sponsor's Name and Address:

CMG Financial
Chris George
3163 Morrison Canyon Road
Fremont, CA 94539
(925) 983-3003

6. General Plan Designation:

ECAP-RM (Resource Management) under the *East County Area Plan*

7. Zoning:

A (Agriculture) District

8. Description of Project:

The project proposal includes correcting grading violations, removing two existing dwelling units and to allow the construction of a single-family dwelling and agricultural caretaker unit (ACU). The first component of the project would correct earlier violations necessitating enforcement action from the San Francisco Bay Regional Water Quality Control Board (RWQCB) and the U.S. Fish and Wildlife Service (USFWS) as a result of grading without a valid grading permit issued through the Alameda County Public Works Agency, Grading Division. The second portion of the project, is to remove two existing dwelling units located to the north west of where the new home will go. The first dwelling unit is a 1,140-square-foot double-wide manufactured home outfitted for residential occupancy and the second is a 1,200-square-foot two-bedroom, one-bathroom cottage. The project also plans to remove 21 trees around the area where the new home is going to accommodate the new home and new landscaping. The last portion of the project is to construct a new 11,255-square-foot single-family home and an agricultural caretaker unit measuring 1,155 square feet in area.

The land improvements are intended to reduce or eliminate soil erosion impacts from discharge of stormwater from a pond and ephemeral drainage located on the site. The location of the project site is shown on Figure 1 and an aerial overview of the site and its surroundings is shown on Figure 2 (all figures referenced in this section are at the end of the project description). The locations of the land improvements are shown on Figure 3 and the proposed site plan for the single-family home is shown on Figure 4. Although the ranch property encompasses 783.87 acres of rolling hills and oak woodlands, the proposed improvements would be limited to an area of approximately 2 acres, and no activity would occur on the remainder of the property. The residential development will be within the 2-acre building envelope located on APN: 96-56-3, while the grading violation corrections will be away from the development area and located on three parcels including, APNs 96-56-3, 96-56-4-3 and 96-56-2-1. No project activity would occur on a fourth parcel that is part of the ranch property, APN 507-076-100-300, which consists of rolling grazing land and oak woodland similar to the rest of the ranch property.

The project would take place on three adjacent parcels under single ownership, which are associated with three different addresses. The parcel at 3505 Morrison Canyon Road is currently occupied by a single-family home and an agricultural building, both of which would remain unchanged. The parcel at 3163 Morrison Canyon Road is currently occupied by four agricultural buildings as well as the two residential units proposed for demolition, referenced above. Some of the land improvements would encroach slightly into the third parcel, APN 96-56-2-1. (APN 507-076-100-300, not part of the project, has an address of 3166 Morrison Canyon Road.) The three parcels where some work would occur encompass a total area of 633.97 acres; the addition of APN 96-56-2-1 results in the total ranch property of 783.87 acres.

Land Improvements

The completed and proposed improvements consist of construction or replacement of outfalls, spillways, check dams, rock aprons, a storm drain inlet, stormwater pipe, and stormwater basin, all intended to improve stormwater management on the site and reduce erosion and associated water quality impacts on- and off-site. Potential environmental impacts from both the completed and the planned improvements are addressed in this Initial Study. The specific activities are described below; they affect the following parcels; all of the activities were the subject of the grading violations notice except Activity 8:

- Activity 1 affects APN 96-56-3 and 96-56-4-3
- Activity 2 affects APN 96-56-3
- Activity 3 affects APN 96-56-3
- Activity 4 affects APN 96-56-3
- Activity 5 affects APN 96-56-3
- Activity 6 affects 96-56-2-1
- Activity 7 affects APN 96-56-3
- Activity 8 affects APN 96-56-4-3

The completed and proposed land improvements include the following (keyed to the activity areas depicted on Figure 3):

- **Activity 1**: A concrete and rock stepped spillway has been constructed that connects Outfall 3 directly to the pond to protect the integrity of the surrounding landscape and maintain water quality within the pond. The construction of the spillway has resulted in a permanent impact to 0.03 acres of bioswale habitat. Figure 5 shows the location of the spillway and the affected habitat.
- **Activity 2**: Addition of a rock apron in association with the replacement of an outfall within the riparian zone on the southwestern edge of the pond. The stormwater outfalls currently discharge water from a drainage system into the riparian habitat bordering the pond. The force of the discharged water can cause erosion beyond the outfall. The addition of rock aprons to the existing outfall locations will assist with dissipating the energy of the flowing water, reducing erosion and preventing the destabilization of the surrounding soil. The addition of the rock apron will result in a permanent impact to 62 square feet and temporary impact to 0.01 acres of Oak-Bay Riparian Woodland. Figure 6 depicts the proposed rock apron and the affected habitat.
- **Activity 3**: Replacement of an outfall and placement of a rock apron within the riparian zone on the southeastern edge of the pond, approximately 20 feet east of the Activity 2 rock apron. The undersized and damaged outfall structures pose a threat to the stability and water quality of the riparian area bordering the pond. The installation of properly sized outfall structures and the strategic placement of rock aprons are crucial in preventing erosion and maintaining the health of the riparian and pond habitat. The replacement of the outfall and associated rock apron will result in a permanent impact to 53 square feet and 0.01 acres of Oak-Bay Riparian Woodland. Activity 3 is also shown on Figure 5.
- **Activity 4**: A storm drain inlet has been constructed on the graded slope draining through a culvert passing under the driveway leading to the existing home on the property where the driveway branches off from Morrison Canyon Road. The culvert leads to an outfall that will discharge to the rock apron described under Activity 2. The culvert connects upstream to an existing culvert under the paved road to the west, which in turn connects to an open channel that then passes through another culvert under Morrison Canyon Road. The addition of the

storm drain inlet has resulted in permanent impacts to 45 square feet (13 linear feet) and temporary impacts to 27 square feet (10 linear feet) to an ephemeral drainage. Figure 7 shows the location of Activity 4 and the affected habitat.

- **Activity 5**: A rock and cement spillway has been constructed adjacent to an earthen embankment at the northern end of the pond. This activity served as a cobble and mortar repair to reduce erosion. The construction of the rock and cement spillway has resulted in a temporary impact to 0.03 acres of Oak-Bay Riparian Woodland and permanent impacts to 19 square feet of emergent wetland. Figure 8 shows the location of Activity 5 and the affected habitat.
- **Activity 6**: A series of three rock check dams were installed beyond the barn on the southern edge of the property. The rock check dams, each consisting of 7 cubic yards of riprap with a thickness of 3 feet, provide soil erosion control on the property above and south of the barn. When heavy rainfall or runoff occurs, these dams slow down the flow of water, reducing its erosive force and preventing soil from being washed away. Due to the feature existing off the property, the delineation submitted to the Corps does not include a formal analysis of the feature. Olberding Environmental, the biological consultant for the project, delineated the feature from visual observation from the property as well as aerial imagery for the purpose of determining impacts. The construction of the rock check dams has resulted in a permanent impact to approximately 38 square feet (5 linear feet) and a temporary impact to approximately 0.01 acres (60 linear feet) of ephemeral drainage. Figure 9 shows the location of Activity 6 and the affected habitat. Takes place outside the property boundary.
- **Activity 7**: A stormwater pipe was placed in an ephemeral drainage for the purpose of managing and directing rainwater runoff. The placement of the stormwater pipe was placed to prevent runoff from causing soil erosion. The placement of the stormwater pipe has resulted in a permanent impact to approximately 0.02 acres (93 linear feet) of ephemeral drainage. The locations of the stormwater pipe are shown on Figure 6.
- **Activity 8**: A stormwater basin is proposed to be constructed above the southern boundary of the pond. The basin's location is outside the State and Corps jurisdiction for the pond, as well as outside the State jurisdiction over riparian habitat. This activity consists of the creation of a small stormwater detention basin. Figure 5 shows the location of the proposed stormwater basin.

Single-Family Residence

The project would include construction of a new single-family home approximately 300 feet west of the existing pond; the location is shown on Figure 4. The 11,255-square-foot, five-bedroom home would be a single-story structure with a subterranean three-car garage and additional living space nestled into the hillside. In addition to the bedrooms, the home would include six full bathrooms and three half-baths, kitchen with walk-in pantry, family room, dining room, sitting room, office, and den. The central living area would feature vaulted ceilings. The basement level would include a home theater, gym, billiards room, game room, and storage room.

The home would wrap around a motor court on the north side of the house that would provide parking capacity for about a dozen guest vehicles. This parking would be for any guests invited to the property

and could also be utilized by service and repair technicians, cattle veterinarians, agricultural consultants, etc. On the south side, the home would wrap around a patio featuring a fire pit, lounging areas, and a lawn. The entry hall to the home and the adjoining master bedroom would look out on an undulating reflecting pool that would be located adjacent to the patio. This pool would have a depth of 18 inches or less, and therefore is not included in the FAR density calculations for the project.

A detached two-story agricultural caretaker unit (ACU) would be located near the northeast corner of the house and east of the motor court. This 1,155-square-foot ACU would include one bedroom, one full bathroom and one half-bath, and combined kitchen and living room. The first story would include an attached one-car garage and an adjacent parking apron would accommodate two cars, or more with tandem parking.

The home and ACU would be extremely fire-resistant, featuring steel siding mixed with stone veneer, a standing-seam metal roof, and steel-framed windows and doors. The ACU would include the same architectural finishes as on the main home, with the addition of charred vertical Shou Sugi Ban[1] wood siding, which is also fire-resistant. Elevations of the home and ACU are shown on Figures 11 through 14.

The main home would have a building height of 25 feet 7 inches at the top of the roof ridge on the west elevation. Stone parapets bookending the central living area would rise above the roofline to a height of 29 feet 1 inch. Because of the lower ground elevation, the wing of the home housing the master bedroom and office would have a height of 32 feet 3 inches. However, as shown on the east and west elevations, both wings of the house would have lower absolute heights than the central living area.

The elevations of the ACU are presented on Figure 13. The height of this two-story building would be 26.0 feet.

As discussed in more detail in Section X-a, the project would be subject to stormwater control requirements of the San Francisco Bay Regional Water Quality Control Board. In compliance with these requirements, all of the stormwater from the impervious surfaces created by the home and paved surfaces would be captured and treated onsite in three bioretention planters that would provide natural onsite treatment of the stormwater runoff from the home and surrounding impervious surfaces. The locations of the bioretention planters are shown on Figure 14. The downhill side of each planter basin would be flanked by an energy dissipater constructed of cobblestones underlain by a perforated PVC pipe that would control erosion due to runoff to the adjacent hillside. More details on the stormwater controls are described in Section X-a.

As illustrated on the landscape plan shown on Figure 15, the proposed home would be generously landscaped with ornamental trees and other plants surrounding the house. Only trees and plants with low water demand have been selected. In addition, the project would be required to comply with Alameda County's Water-Efficient Landscape Ordinance (WELO), subject to verification during the permitting process. The trees would include red Japanese maple (*Acer Palmatum 'emperor'*), golden full moon maple (*Acer shirsawanum 'Aureum'*), Swan Hill fruitless olive (*Olea europaea 'Swan Hill'*), Cherokee Daybreak flowering dogwood (*Cornus florida 'Cherokke Daybrea'*), coast live oak (*Quercus agrifolia*), saucer

[1] Shou Sugi Ban, also known as Yakisugi, is a Japanese wood preservation method.

magnolia (*Magnolia x soulangeana*), and Natchez crape myrtle (*Lagerstroemia 'Natchez'*). Other plantings would include a large variety of shrubs, groundcovers, and native grasses. The plants would be grouped in different zones around the house, with a separate palette for each of the following areas:

- Driveway
- Slope
- Front garden
- Side garden
- Screening earthen berm
- Backyard slope
- Back patio

A variety of pavement treatments would be employed around the property. The long driveway leading to the house from the gate at the property entrance is currently paved with asphalt. The section in front of the new house would be repaved with large 6-inch x 12-inch cobblestones, while a side driveway leading to the garage would be paved with smaller cobble paving. The motor court providing guest parking in front of the main entrance would have a packed gravel surface with decorative cobble bands. Walkways around the house and surrounding a reflection pool would have flagstone paving. Stone veneer would be employed on steps and on the 3-foot-tall decorative walls flanking the court. Storm drainage from all of these surfaces would be collected and treated in the stormwater control system referenced above. Retaining walls of reinforced concrete in the rear of the site would range in height from 1 feet to 7 feet tall and would also be clad in stone veneer.

Project construction, including both the home and the remaining land improvements, is tentatively planned to commence in June 2025, and is expected to take 12 to 16 months to complete. An estimated 10 to 15 construction workers are expected to be working at the site on a typical work day. No import or export of soil would be required. All staging would occur within the work area.

An existing manufactured home and a 1,200-square-foot cottage would both be demolished to accommodate the proposed home. Although, as discussed in more detail in Section V, Cultural Resources, a Cultural Resources Assessment of these structures concluded that they did not constitute historical structures, they will also be subject to an historical evaluation by the Alameda County Planning Department prior to issuance of a demolition permit. Twenty-one existing trees located around these structures would be removed to accommodate the new home and surrounding landscape. They include almond, lemon, orange, fig, olive, plum, dogwood, birch, and willow trees. In addition, three oak trees (species not identified) ranging in size from 6 inches to 20 inches in diameter, would be removed.

Planning and Other Approvals

Site Development Review: The project will require Site Development Review by the Alameda County Planning Department to ensure that new buildings and land uses are compatible with the site and with the surrounding environment, other development, and traffic circulation.

Grading Permit: The proposed ground disturbance will require a Grading Permit issued by the Alameda County Public Works Agency.

Building Permit: The proposed structures will require a Building Permit issued by the Alameda County Public Works Agency.

Onsite Wastewater Treatment System (OWTS) Permit: The proposed replacement septic system will require a permit from the Alameda County Environmental Health Department.

As discussed in Section IV, Biological Resources, it is possible that additional regulatory permits could be required from the U.S. Army Corps of Engineers (ACOE), San Francisco Regional Water Quality Control Board (RWQCB), and/or California Department of Fish and Wildlife (CDFW).

9. Project Setting

The approximately 783-acre ranch property is situated in rolling grassland hillsides incised by deep canyons densely vegetated by oak woodlands and riparian habitat. Similar open space surrounds the property in all directions, though the lands to the north are dominated by dense forest. Vargas Plateau Regional Park is located just to the west of George Ranch and Stevens Creek Quarry is located about 3,000 feet to the south. Niles Canyon Road (State Highway 84) runs in an east-west direction about one-half mile to the north. The unincorporated community of Sunol is located about 1 mile to the east and the City of Fremont immediately adjacent to the site on the west. Interstate 680 (I-680) is located about 1 mile to the south.

Intermittent drainages that are tributaries of Alameda Creek are present throughout the property. An intermittent drainage bisects the central portion of the property and flows onto the property at the eastern boundary while another intermittent drainage flows along the southern boundary. Both intermittent drainages flow through woodland habitat. Another intermittent drainage is present in the western portion of the property, which supports willow riparian habitat. Ephemeral drainages are also present throughout the property; with the majority of these features originating on the fairly steep hillslopes, and conveying runoff into the various intermittent drainages, which all contribute to the greater Alameda Creek watershed.

The topography of the property consists of undulating hillsides that range between approximately 1,240 feet above sea level along the highest hilltop along the north-central boundary to 640 feet above sea level along the intermittent drainage located along the southeastern boundary. The ranch property is used for grazing cattle and buffalo, hay production, and grape wine production from a 5-acre vineyard located to the east of the pond, flanking the private roadway that heads toward the east.

The roughly 2-acre area where the proposed land improvements and single-family home would occur is currently developed with two single-family homes, several barn structures, miscellaneous outbuildings, at 3163 Morrison: (BLD2018-03851, Ag exemption Green House, 2880 sq. ft., 11/6/2018), (BLD2018-03850, Ag exemption Shed, 6,000 sq. ft., 11/6/2018), (BLD2019-04384, legalize gazebo, 335 sq. ft., 12/10/2019), (BLD2021-04621, Ag Exemption Shed, 6,000 sq. ft., 11/11/2021), (BLD2023-00144, New Pre-engineered metal building, 6,000 sq. ft., 1/13/2023), 3505 Morrison Canyon: BLD2014-01654 New Ag building 12,000 sq. ft., 11/5/2015), and an existing single-family residence. There is a corral area with a wood plank fence and a cattle-loading chute near the large hay barn. Vineyards flank the private road extending toward the east and also flank the west side of the perennial pond within this developed portion of the property. Photos illustrating existing conditions on the site are shown on Figures 17 through 19.

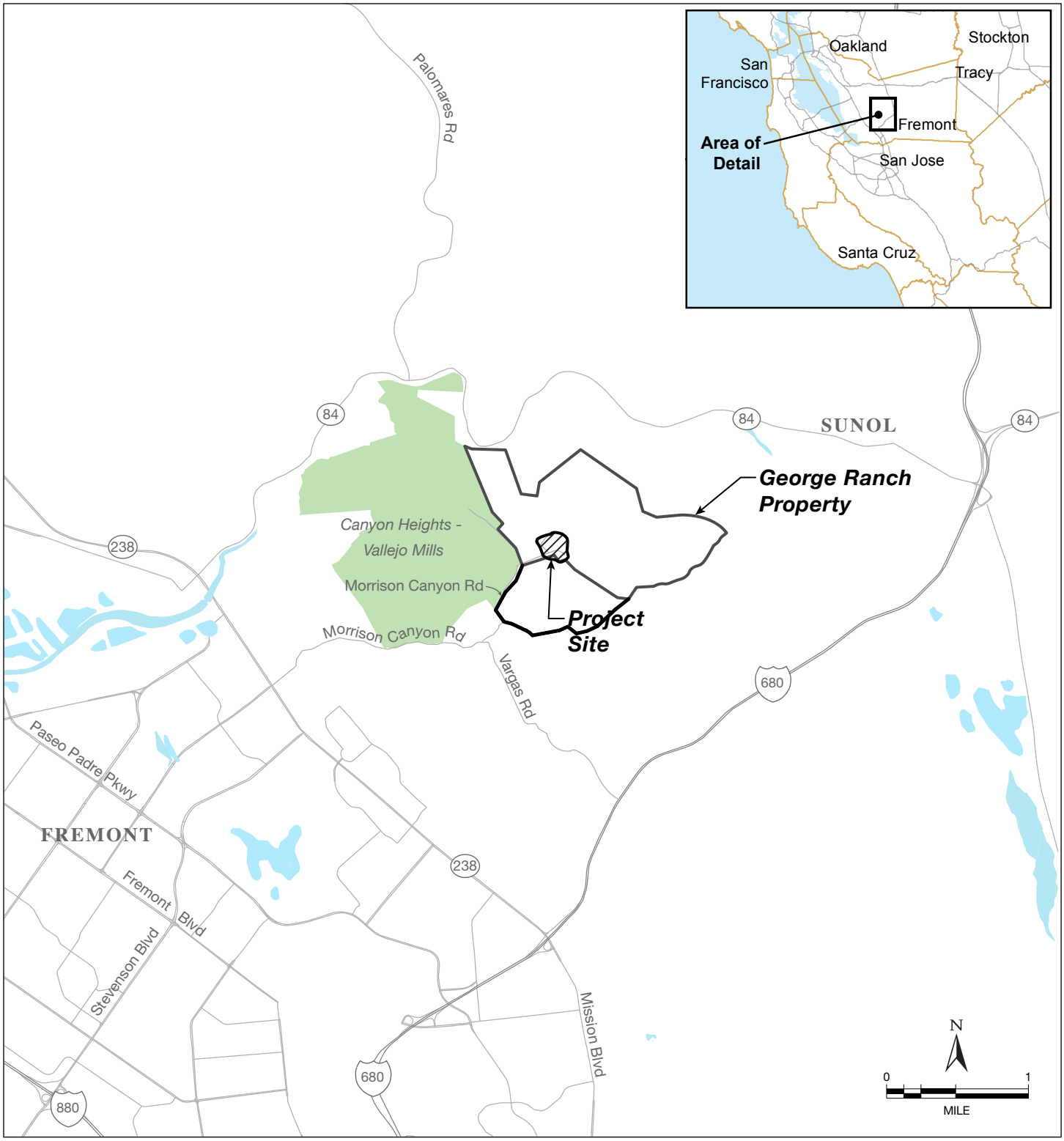


Figure 1

Project Site Location

Source: Douglas Herring & Associates

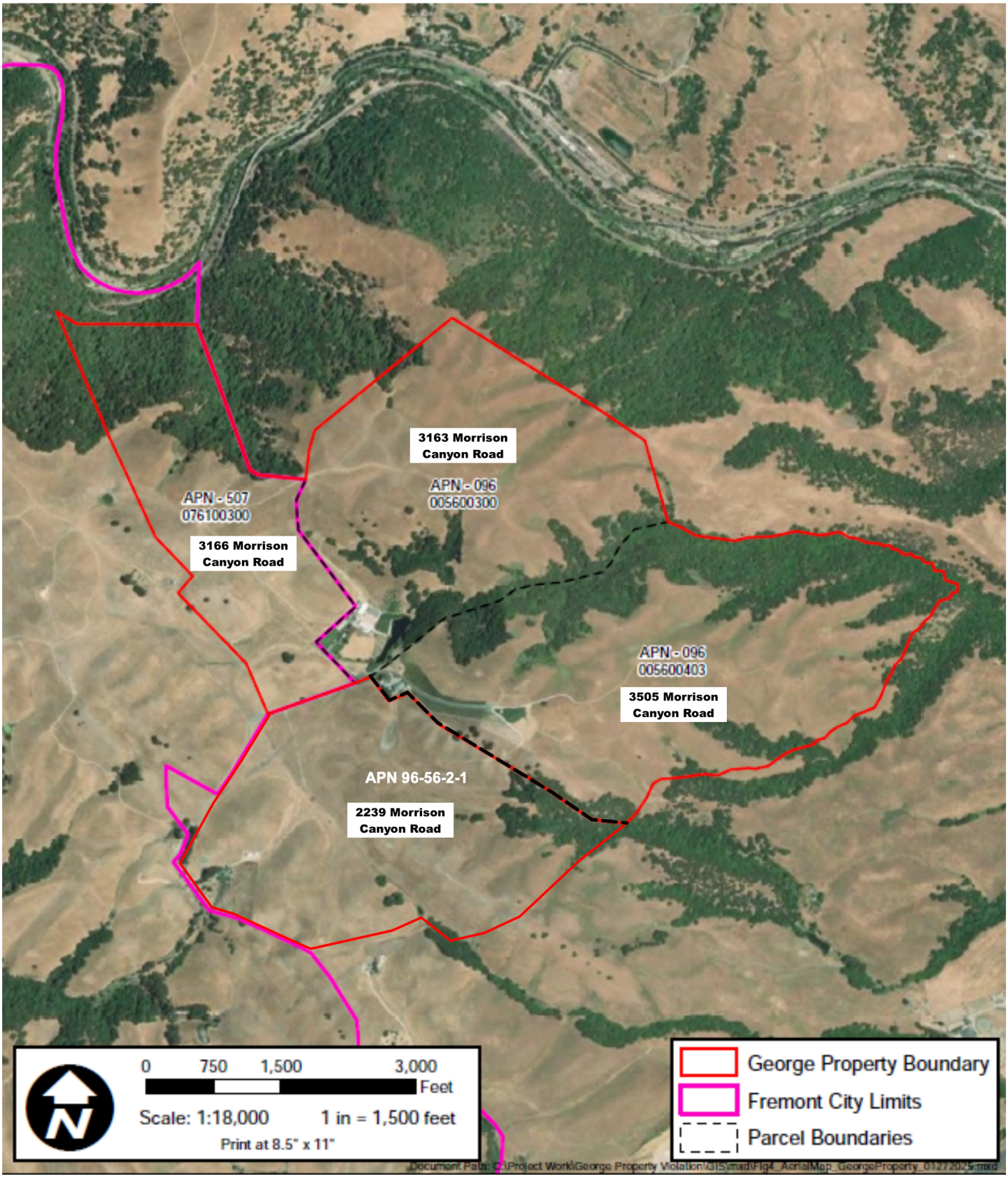


Figure 2

Aerial Overview of Site and Surroundings

Source: Olberding Environmental

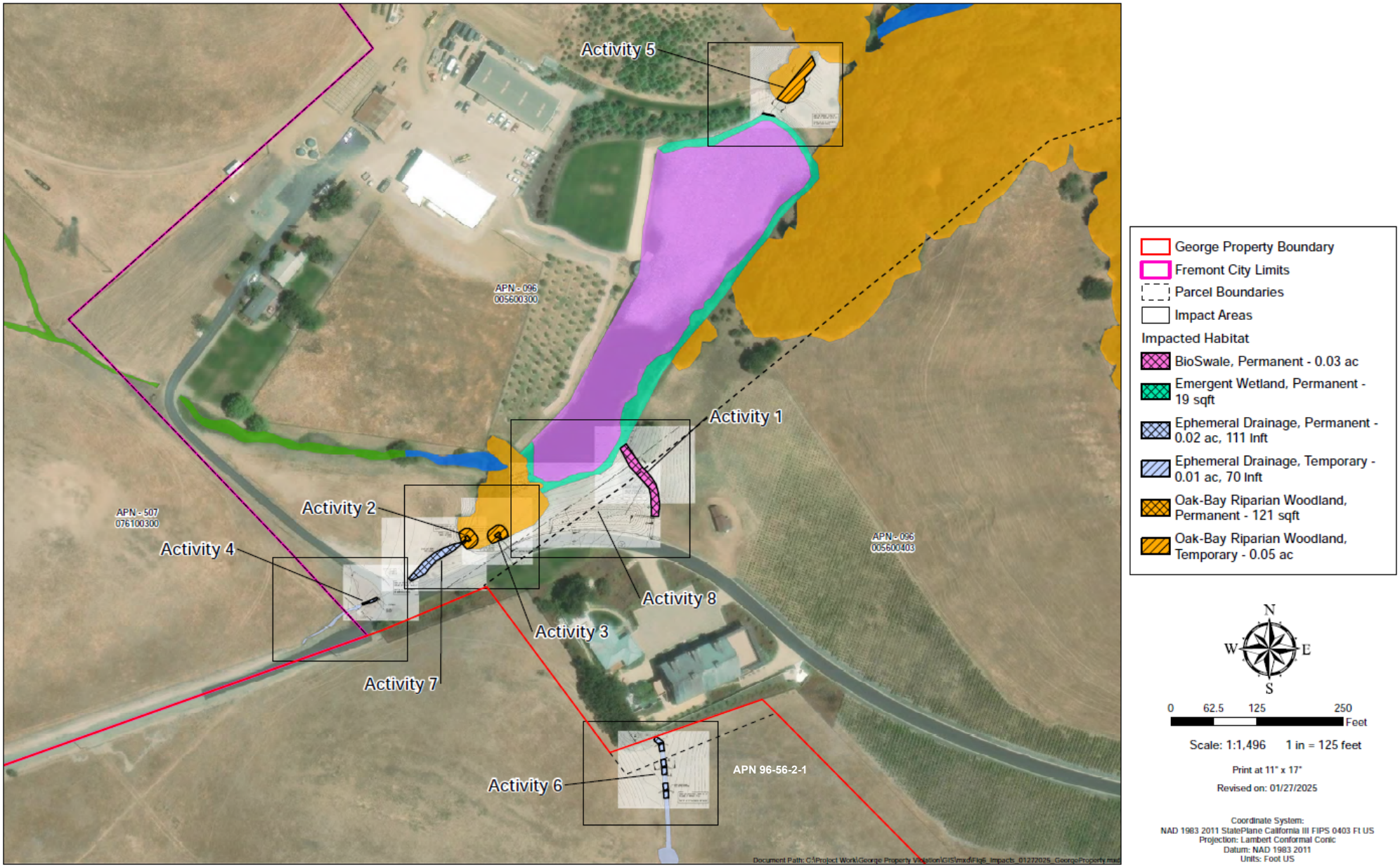


Figure 3

Overview of Existing and Proposed Land Improvements

Source: Olberding Environmental

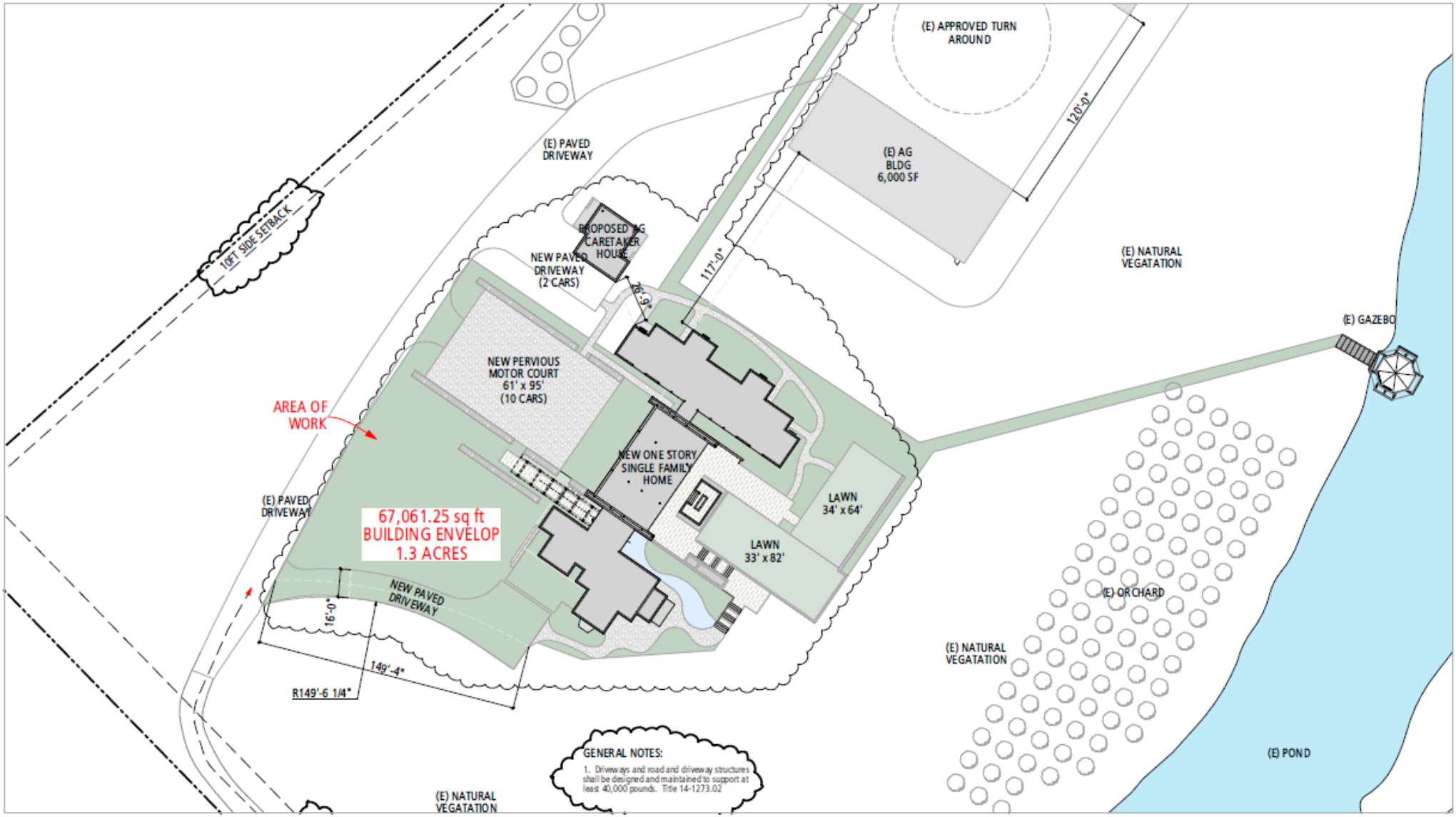


Figure 4

Proposed Site Plan for Single-Family Home

Source: Mark Davis Design

Figure 5

Overview of Activity 1 and Activity 8 Improvements

Source: Olberding Environmental

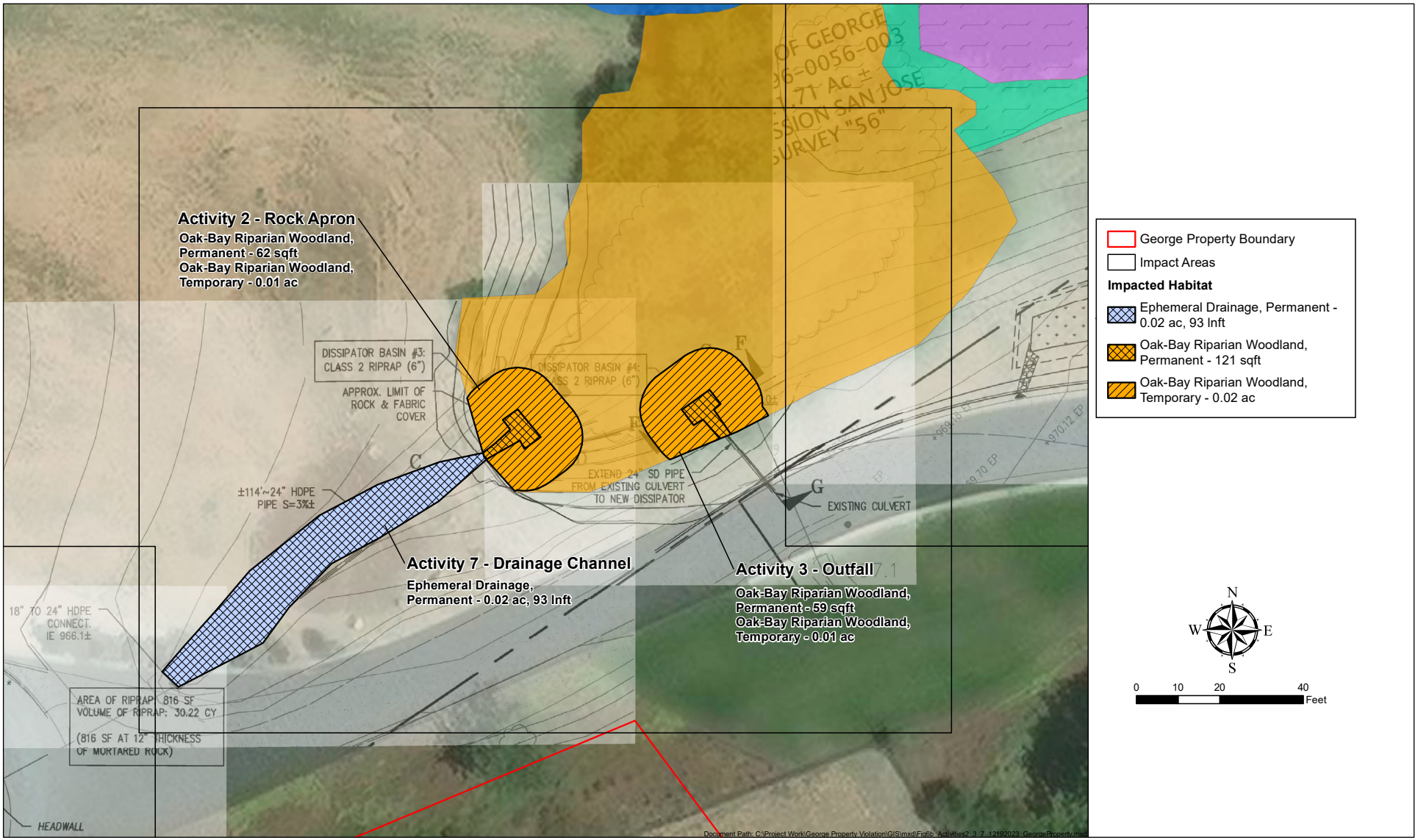


Figure 6

Overview of Activities 2, 3, and 7 Improvements

Source: Olberding Environmental

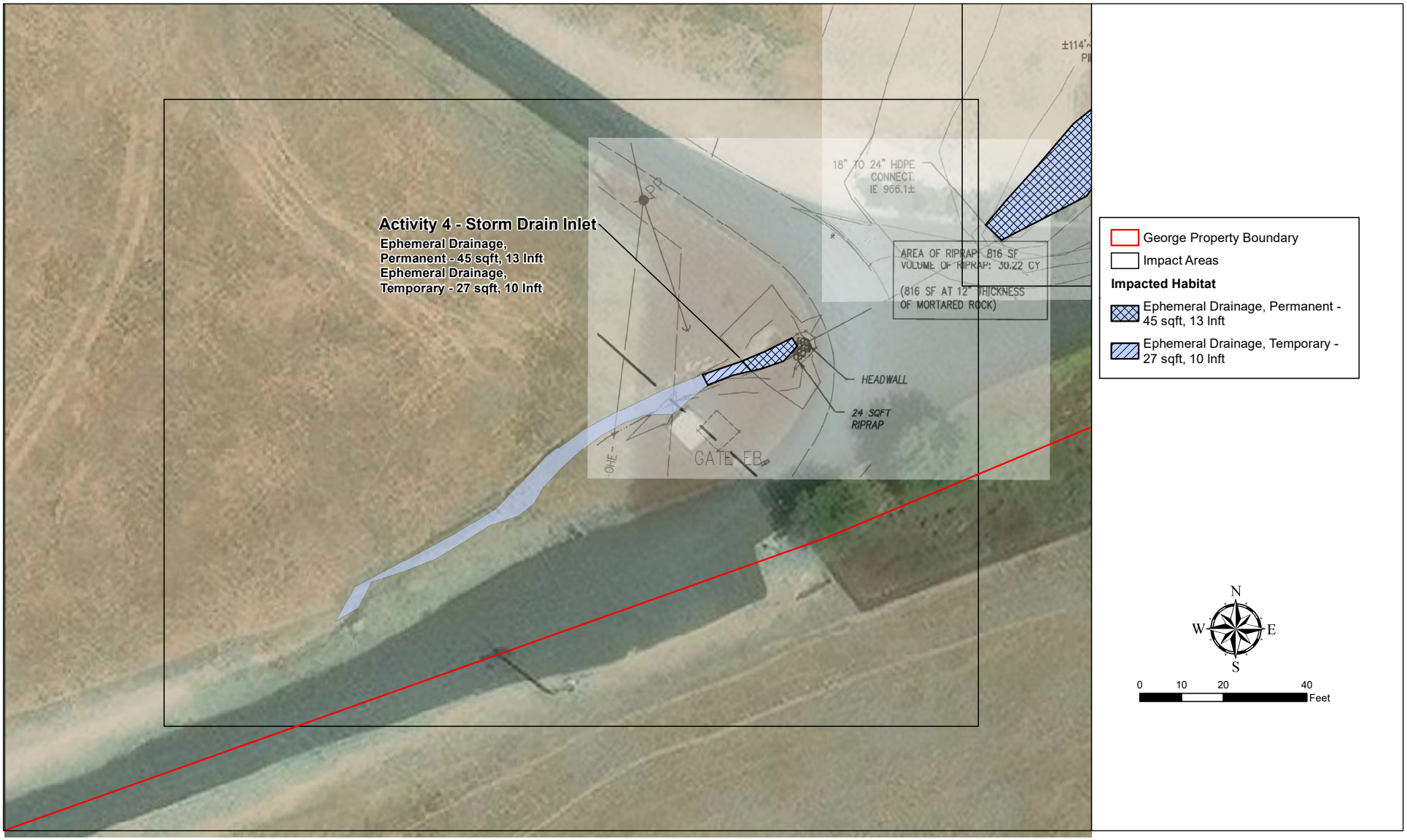


Figure 7

Overview of Activity 4 Improvements

Source: Olberding Environmental

Figure 8

Overview of Activity 5 Improvements

Source: Olberding Environmental

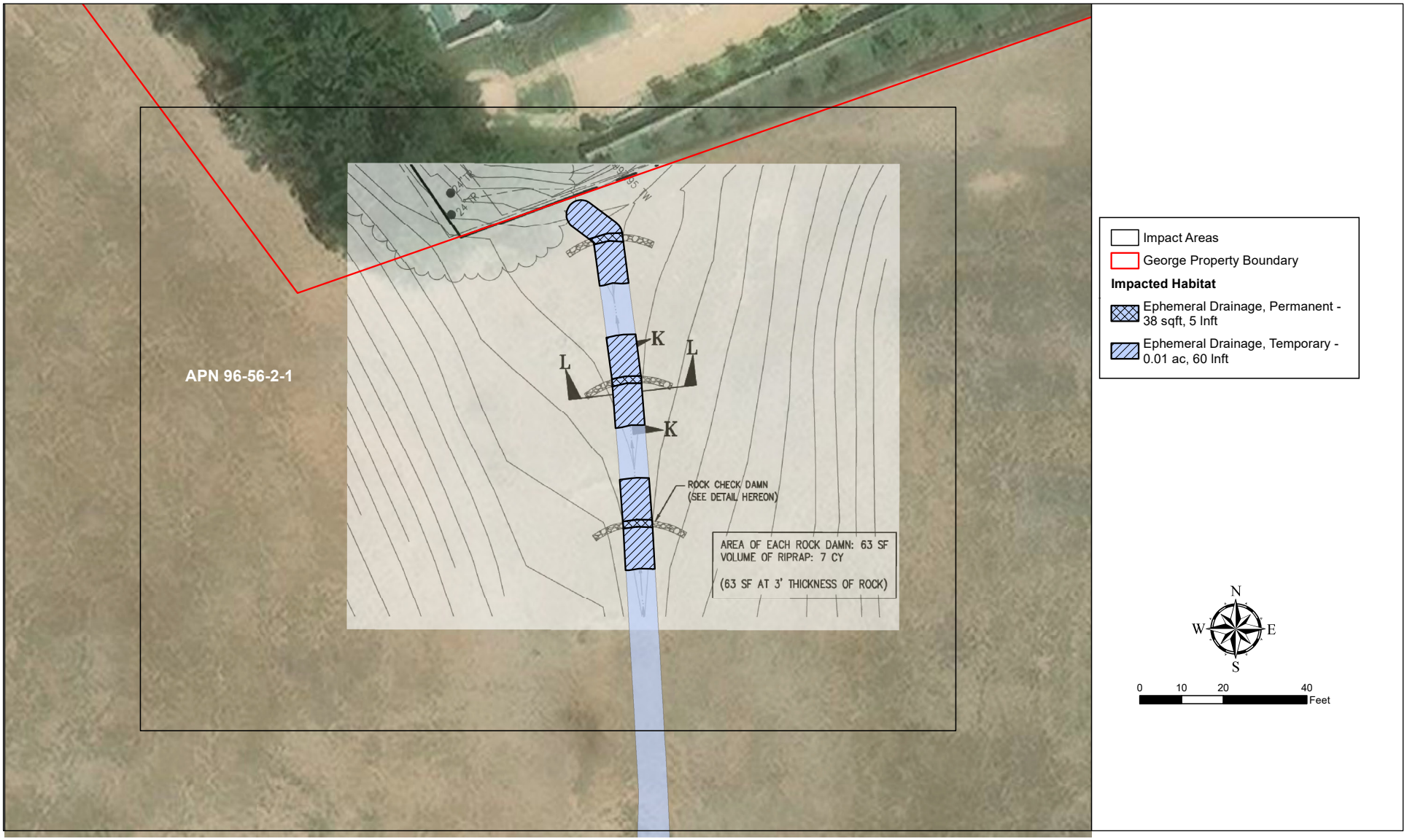


Figure 9

Overview of Activity 6 Improvements

Source: Olberding Environmental

NORTH ELEVATION - HOUSE

SOUTH ELEVATION - HOUSE

Figure 10

North and South Elevations of Proposed Home

Source: Mark Davis Design

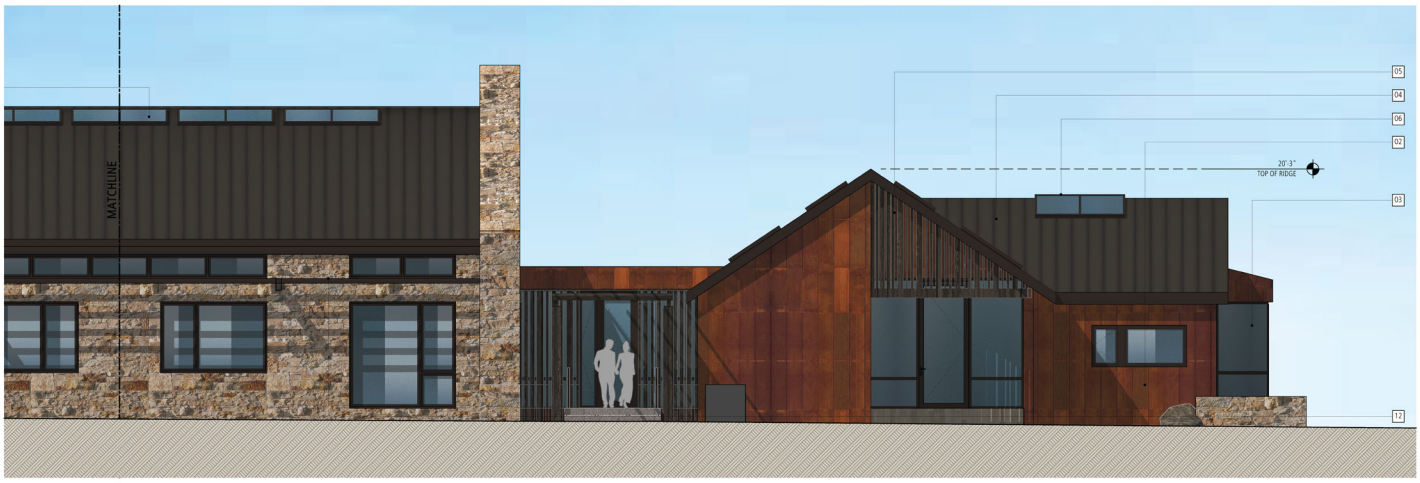
Figure 11

East Elevation of Proposed Home

Source: Mark Davis Design

WEST ELEVATION - CONTEXT

ENLARGED WEST ELEVATION - HOUSE



ENLARGED WEST ELEVATION - HOUSE

Figure 12

West Elevation of Proposed Home

Source: Mark Davis Design

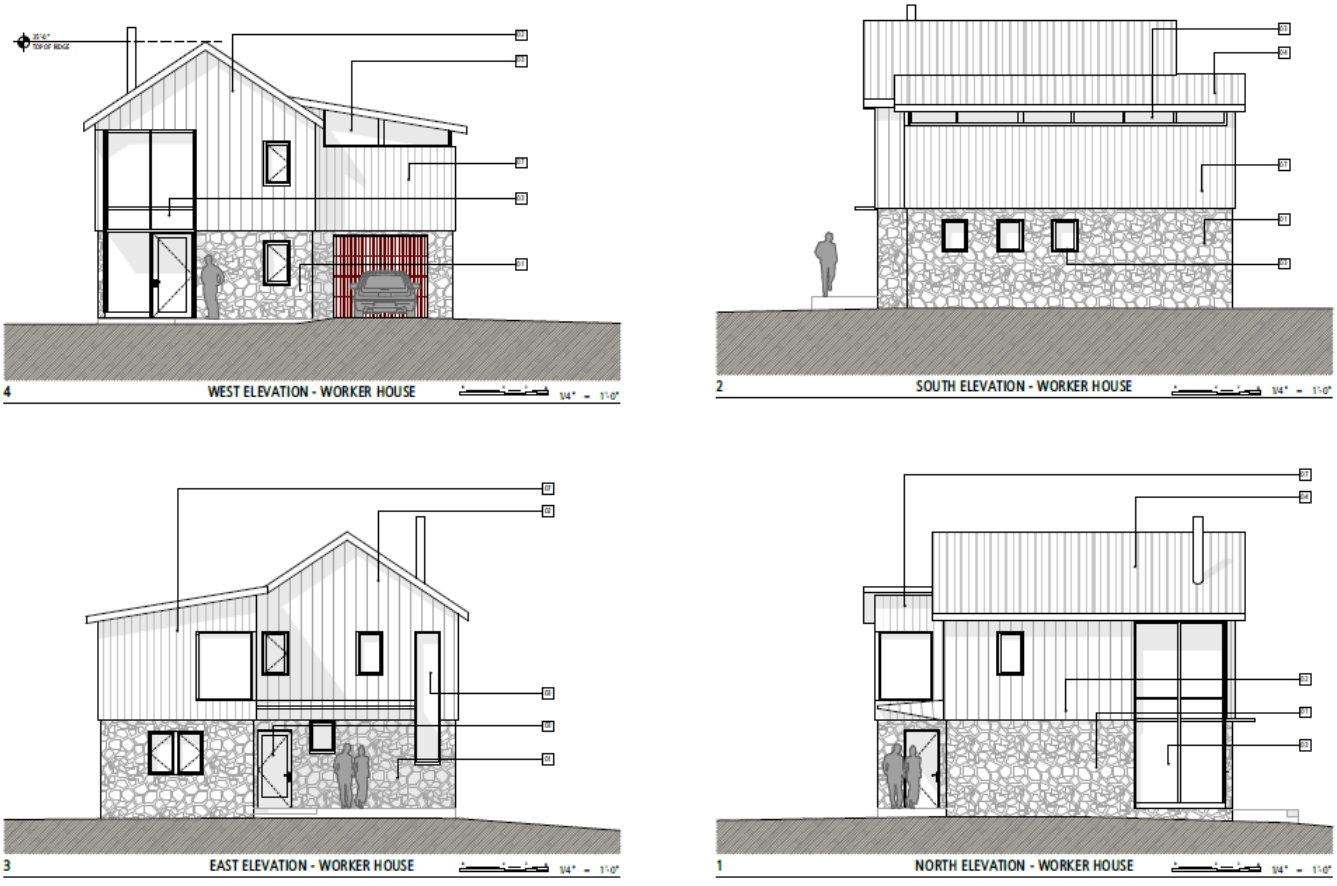
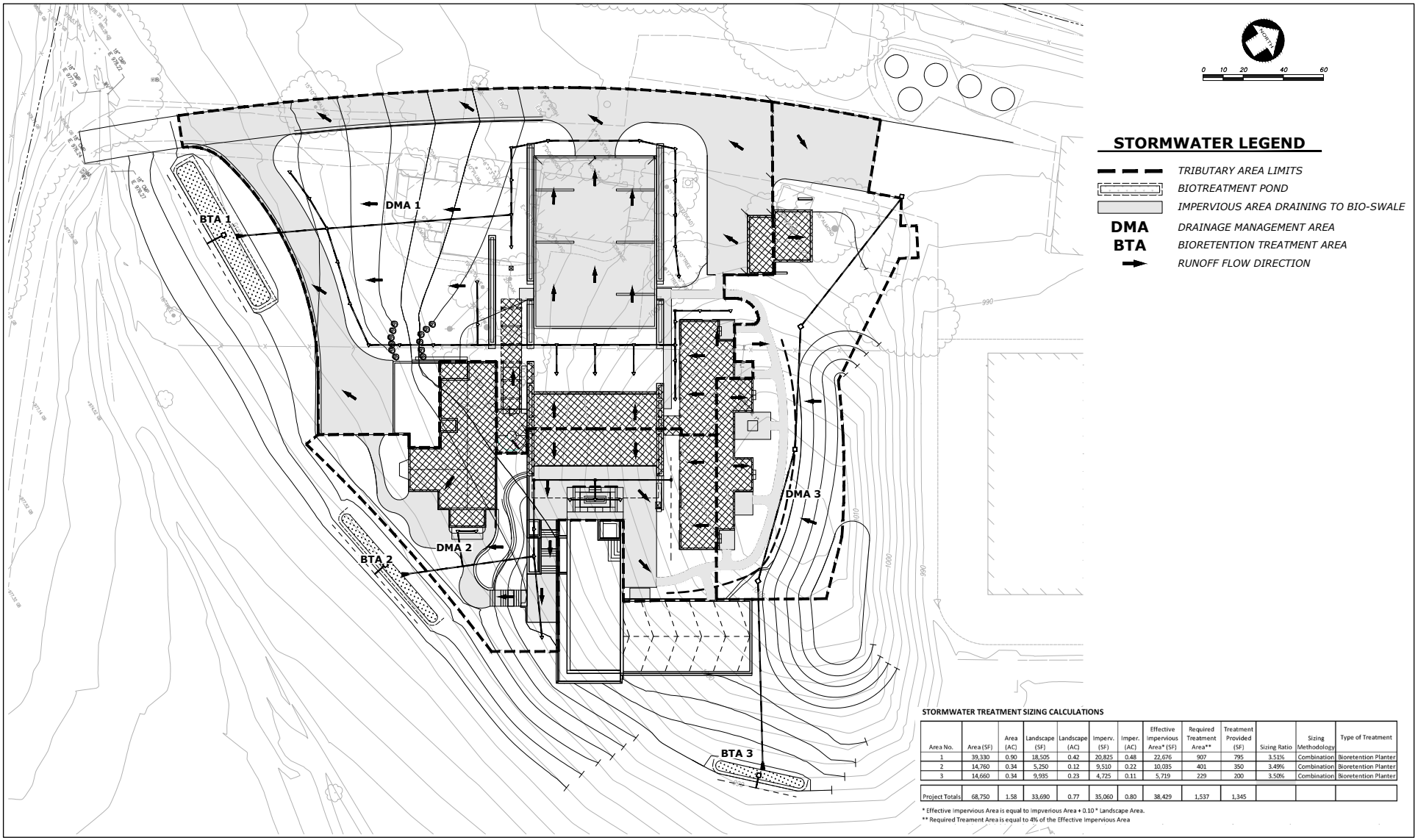


Figure 13

Elevations of Proposed Agricultural Caretaker Unit (ACU)

Source: Mark Davis Design



STORMWATER TREATMENT SIZING CALCULATIONS

Area No.	Area (SF)	Area (AC)	Landscape (SF)	Landscape (AC)	Imperv. (SF)	Imper. (AC)	Effective Impervious Area* (SF)	Required Treatment Area**	Treatment Provided (SF)	Sizing Ratio	Sizing Methodology	Type of Treatment
1	39,330	0.90	18,505	0.42	20,825	0.48	22,676	907	795	3.51%	Combination	Bioretention Planter
2	14,760	0.34	5,250	0.12	9,510	0.22	10,035	401	350	3.49%	Combination	Bioretention Planter
3	14,660	0.34	9,935	0.23	4,725	0.11	5,719	229	200	3.50%	Combination	Bioretention Planter
Project Totals	68,750	1.58	33,690	0.77	35,060	0.80	38,429	1,537	1,345			

* Effective Impervious Area is equal to Impverious Area + 0.10 * Landscape Area.
** Required Treament Area is equal to 4% of the Effective Impervious Area

Figure 14

Stormwater Control Plan

Source: Kier+Wright

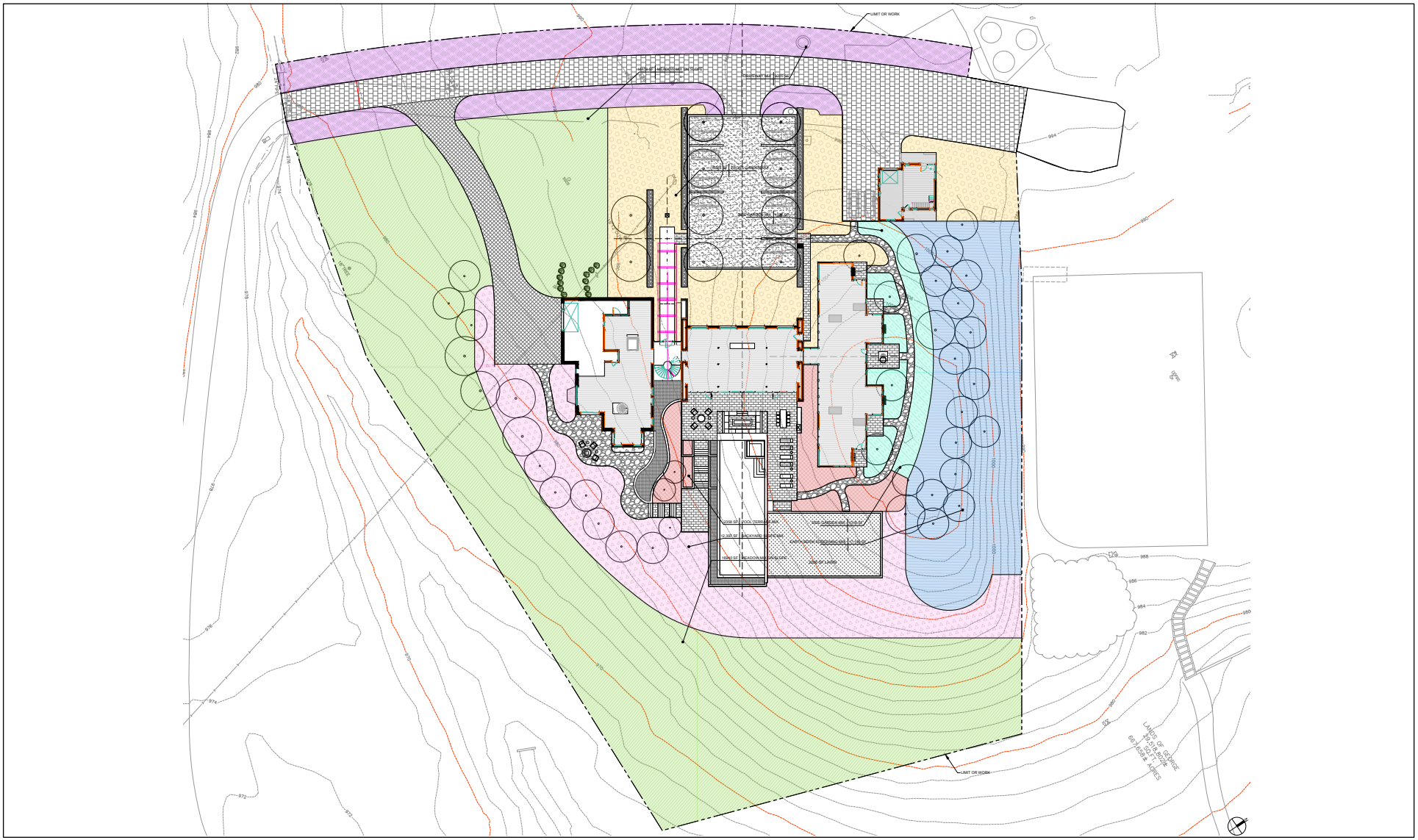


Figure 15

Landscape Plan

Source: Strata Landscape Architecture

a) Existing hillside and vineyard opposite the barn structure

b) Existing barn structure and single-family home.

Figure 16

Existing Conditions

Source: Olberding Environmental

a) Large pond east of proposed new home.

b) Intermittent drainage and willow riparian present at the southwestern end of the pond.

Figure 17

Existing Conditions

Source: Olberding Environmental

a) Typical hilly character of George Ranch property.

b) Intermittent drainage and willow riparian present at the southwestern end of the pond.

Figure 18

Existing Conditions

Source: Olberding Environmental

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

[ ] Aesthetics	[ ] Agricultural Resources	[X] Air Quality
[X] Biological Resources	[X] Cultural Resources	[ ] Energy
[X] Geology/Soils	[ ] GHG Emissions	[ ] Hazards & Haz. Materials
[ ] Hydrology/Water Quality	[ ] Land Use/Planning	[ ] Mineral Resources
[ ] Noise	[ ] Population/Housing	[ ] Public Services
[ ] Recreation	[ ] Transportation/Traffic	[X] Tribal Cultural Resources
[ ] Utilities/Service Systems	[ ] Wildfire	
[X] Mandatory Findings of Significance		

DETERMINATION:

On the basis of the initial evaluation:

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

Signature	Date
Printed name	For

EVALUATION OF ENVIRONMENTAL IMPACTS:

I. AESTHETICS — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐

Explanation: With respect to potential adverse effects on a scenic vista, the California Environmental Quality Act (CEQA) is primarily concerned with potential adverse effects on a publicly-accessible scenic vista. The only publicly-accessible vantage points providing partial views of the project area are located in Vargas Plateau Regional Park (VPRP), which is part of the East Bay Regional Park District (EBRPD), and along Morrison Canyon Road. VPRP adjoins the George Ranch property on the western boundary of the property. While the existing and proposed land improvements would be indistinguishable in the landscape when viewed from offsite locations in VPRP, and would have no impact on a scenic vista from these locations, the proposed single-family home would constitute a perceptible addition to the view where adequate lines-of-sight exist at offsite vantage points, such as from Morrison Canyon Road. A portion of the proposed single-family home and ACU would be visible from along Morrison Canyon Road along the final 700 feet of the roadway prior to its terminus at the project property, where a gate restricts access onto the private property.

While the City of Fremont General Plan identifies the Fremont Hills as a valuable scenic resource important to the residents of Fremont, it allows for the use of visual buffers or screening where potentially incompatible uses abut adjacent uses (Policy 4-5.1). Although the proposed development would occur on privately owned property that is not within the City of Fremont's jurisdiction, the project would nonetheless have a minimal effect on viewers along Morrison Canyon Road in proximity to the project site. Much of the development area is obscured by existing hillsides, and additional visual buffers would be provided by more than 40 trees surrounding the home and the ACU. The existing residence is currently partially visible from the roadway, so the existing view does not constitute a pristine natural scenic vista devoid of human development. The existing structures would be replaced with an attractively designed single-family home and ACU that would be well screened by the generous landscaping surrounding the new structures. Replacing existing structures on a private property with newer structures with far more screening than currently exists would not constitute a substantial adverse effect on a scenic vista.

Regarding views of the project from VPRP, undulations in the topography obscure views of the home site from most locations within the park. Limited views of the home site can be seen from just a few locations along the Deer Gulch Trail and the Upper Ranch Trail in VPRP. However, all of these vantage points are more than one-half mile from the home site, and this project area comprises a tiny portion of the overall viewshed from these locations. The existing buildings on the project site are barely noticeable when viewed at this distance, and the addition of a one-story single-family home would not appreciably alter the existing view. While the views visible from within VPRP undoubtedly constitute scenic vistas by any reasonable definition, the introduction of the proposed home into the landscape would barely be perceptible in the far larger viewshed, when viewed at more than one-half mile away. There is no potential for this negligible alteration in the viewshed from a few limited and distant locations to cause a substantial adverse effect on the scenic vistas available from those locations. Therefore, the project would have a ***less-than-significant impact*** on a scenic vista.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒

Explanation: State Highway 84 (Niles Canyon Road), which runs in an east-west direction to the north of the project site, is officially designated by Caltrans as a State scenic highway.[2] The highway comes quite close to the George Ranch property at one location, but it is more than 1 mile from the proposed home site at most locations, and the closest it comes to the home site is about 0.8 miles, at a southerly horseshoe bend in the road. Because the alignment of Highway 84 is parallel to Alameda Creek, which is located in the bottom of a steep canyon, the existing topography surrounding the highway completely obscures the project site from all locations along the highway. Therefore, the project would have ***no adverse impact*** on scenic resources within a State scenic highway.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Substantially degrade the existing visual character or quality of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urban area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐

Explanation: The proposed and already completed land improvements would have a negligible effect on the existing visual character of the site and its surroundings. Culverts pass under the roadway and are largely obscured from view except where they emerge outside the roadway. Swales are nestled into the ground and are typically lined with rock and/or native plants. Thus, they blend into and are part of the landscape.

The completed concrete and rock stepped spillway that connects Outfall 3 directly to the central pond (Activity 1) has been vegetated and blends in with the surrounding landscape. Similarly, the rock and cement spillway (Activity 5) at the northern end of the central pond has been vegetated and appears as a vegetated pathway leading down to the pond. All of the existing and proposed improvements are or will be integrated with the landscape and are or will be naturalized by rock and native plants. These improvements would not substantially degrade the existing visual character of the site. Furthermore, they are intended to significantly reduce soil erosion on the site which, if unchecked, would have a much greater adverse effect on the site's visual quality (not to mention downstream water quality).

The greatest visual change that would be created by the proposed project would be the new home and adjacent ACU. However, as depicted on the elevations (Figures 11 through 15), these highly articulated buildings have been attractively designed and would have architectural finishes, including generous use of

[2] California Department of Transportation, Officially Designated State Scenic Highways, accessed June 18, 2024 at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

stone veneer, that are compatible with the surrounding landscape. Only earth tones would be employed on the architectural finishes. The proposed home would be greatly enhanced by approximately 40 trees and other landscaping, as well as a reflecting pool. The portion of the property where the home would be constructed is already developed with agricultural buildings and graded areas occupied by vehicles and equipment. Within this immediate context, the proposed home and ACU would actually improve and enhance the existing visual character of this development area. Within the larger context of the surrounding ranch property, there is an existing contrast between the natural and built environment, and the project would not increase this difference or otherwise substantially degrade the visual character of the site or its surroundings. Furthermore, the changes that would be caused by the project would occur on a secluded private property that is only visually accessible by members of the public from the final 700 feet of Morrison Canyon Road before its terminus at the project property. Because this section of the roadway does not provide vehicular access to anything other than the project property, there is little to no inducement to travel on this roadway segment to drivers other than those traveling to the property. Thus, the number of drivers traveling this road segment who are not visiting or residing on the project property is exceedingly small. Even were a substantially greater number of members of the public traveling this roadway, the small visual changes to the landscape described above would not substantially degrade the visual character of the site or its surroundings.

It is acknowledged that the construction of the proposed improvements would create greater visual disruption and clutter during the construction period, an unavoidable component of all construction projects. However, this disruption would be temporary and not considered a significant adverse impact under CEQA. As with the permanent changes, and for the same reasons discussed above, very few members of the public would actually be able to see the areas of construction activity from publicly accessible viewpoints.

Based on the foregoing considerations, the proposed project would have a ***less-than-significant impact*** on the visual quality of the site.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

Explanation: The proposed home and ACU would have outdoor lighting consistent with all residential development. It would not create a substantial new source of nighttime light or glare, and there are no offsite properties that could be exposed to any light generated by the project. There would be ***no impact*** caused by a new source of substantial light or glare.

II. AGRICULTURAL RESOURCES — *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. 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 Forestry Legacy Assessment project, and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) 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?	☐	☐	☐	☒

Explanation: The project site is designated "Grazing Land" on the map of important farmland in Alameda County prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) by the Department of Conservation (DOC), a department of the California Resources Agency.[3] The DOC typically updates the maps every two years; however, the most recent map was prepared in 2020 and published in 2024.

Grazing land is land on which the existing vegetation is suited to the grazing of livestock, but it is not considered protected agricultural land. By definition, "Grazing Land" is not one of the categories of agricultural land defined by the FMMP, such as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Furthermore, the proposed home site is not utilized for agricultural production. Therefore, implementation of the project would have ***no impact*** on valuable farmland.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒

Explanation: Although the project site is zoned for agricultural use, it is not under a Williamson Act contract, based on records at the Alameda County Assessor's Office.[4] Two of the ranch parcels comprising 529.97 acres were previously under a Williamson Act contract established in February 1970, but on December 6, 2011 the Alameda County Board of Supervisors approved the property owner's request to non-renew the Williamson

[3] California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, "Alameda County Important Farmland 2020" (map), February 2024.

[4] County of Alameda, Office of Assessor, Parcel Viewer, Parcel Details for Parcel 96-56-3, accessed June 18, 2024 at: https://propinfo.acgov.org/?PRINT_PARCEL=96-56-3.

Act contract for Assessor Parcel Numbers 096-0056-003 and 096-0056-004-03.[5] Effective on January 1, 2012, the Assessor was able to reassess the property taxes for these parcels for the 2012 tax year. The other George Ranch parcels were not included in the previous Williamson Act contract. As noted above, the proposed home site is not utilized for agricultural production. Therefore, there is no potential for the project to conflict with existing zoning for agricultural use or a Williamson Act contract. There would be ***no impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined in Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*	☐	☐	☐	☒

Explanation: Neither the project site nor any of the surrounding lands are zoned as forest land.[6] The proposed project would therefore have no impact on forest or timber land. There would be ***no impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) *Result in the loss of forest land or conversion of forest land to a non-forest use?*	☐	☐	☐	☒

Explanation: Public Resources Code Section 12220(g) defines forest land as land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. There is no forest land on the proposed development area as defined in Public Resources Code Section 12220(g). There would be ***no impact***.

[5] Chris Bazar, Director, Alameda County Community Development Agency, Approval of a Notice [of] Non-Renewal for Agricultural and Open Space Preserves and Land Conservation (Williamson Act) Contracts–George [letter to Honorable Board of Supervisors], December 6, 2011.

[6] County of Alameda, Office of Assessor, Parcel Viewer, Parcel Details for Parcel 96-56-3, accessed June 18, 2024 at: https://propinfo.acgov.org/?PRINT_PARCEL=96-56-3.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Explanation: As discussed above, the project site does not contain farmland or forest land, and implementation of the proposed project would therefore have no potential to convert such lands to other uses. There would be ***no impact***.

III. 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 Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐

Explanation: The Bay Area Air Quality Management District (BAAQMD) adopted the current Bay Area Clean Air Plan (CAP) on April 19, 2017 in accordance with the requirements of the California Clean Air Act (CCAA) to implement all feasible measures to reduce ozone; provide a control strategy to reduce ozone, particulate matter, air toxics, and greenhouse gas (GHG) emissions in a single, integrated plan; and establish emission control measures to be adopted or implemented over the next three to five years.[7] The two closely-related primary goals of the 2017 Bay Area CAP are to protect public health and protect the climate. The plan lays the groundwork for a long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

The 2017 Clean Air Plan/Regional Climate Protection Strategy (CAP/RCPS) provides a roadmap for BAAQMD's efforts over the next few years to reduce air pollution and protect public health and the global climate. The CAP/RCPS includes the Bay Area's first-ever comprehensive RCPS, which identifies potential rules, control measures, and strategies that the BAAQMD can pursue to reduce GHG in the Bay Area. Measures of the 2017 CAP addressing the transportation sector are in direct support of *Plan Bay Area 2050*, which was prepared by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC) and includes the region's Sustainable Communities Strategy and the 2050 Regional Transportation Plan.[8] The 2017 Clean Air Plan control strategy is based on four key priorities:

[7] Bay Area Air Quality Management District, *Final 2017 Clean Air Plan*, adopted April 19, 2017.

[8] Metropolitan Transportation Commission and Association of Bay Area Governments, *Plan Bay Area 2050*, adopted October 21, 2021.

- Reduce emissions of criteria air pollutants and toxic air contaminants from all key sources.
- Reduce emissions of "super-GHGs" such as methane, black carbon, and fluorinated gases.
- Decrease demand for fossil fuels (gasoline, diesel, and natural gas).
    - ☐ Increase efficiency of our industrial processes, energy, and transportation systems.
    - ☐ Reduce demand for vehicle travel, and high-carbon goods and services.
- Decarbonize our energy system.
    - ☐ Make the electricity supply carbon-free.
    - ☐ Electrify the transportation and building sectors.

Targeting three major sectors, the control strategy includes the following key elements:

Stationary Sources:

- Decrease emissions of GHGs and criteria air pollutants through a region-wide strategy to reduce combustion and improve combustion efficiency at industrial facilities, beginning with the three largest sources of emissions: oil refineries, power plants, and cements plants.
- Reduce methane emissions from landfills, and from oil and natural gas production and distribution.
- Reduce emissions of toxic air contaminants by adopting more stringent thresholds and methods for evaluating toxic risks at existing and new facilities.

Transportation:

- Reduce motor vehicle travel by promoting transit, bicycling, walking, and ridesharing.
- Implement pricing measures to reduce travel demand.
- Direct new development to areas that are well served by transit, and conducive to bicycling and walking.
- Accelerate the widespread adoption of electric vehicles.
- Promote the use of clean fuels and low- or zero-carbon technologies in trucks and heavy-duty equipment.

Buildings and Energy:

- Expand the production of low-carbon, renewable energy by promoting on-site technologies such as rooftop solar, wind, and ground-source heat pumps.
- Support the expansion of community choice energy programs throughout the Bay Area.
- Promote energy and water efficiency in both new and existing buildings.
- Promote the switch from natural gas to electricity for space and water heating in Bay Area buildings.

The previous *Bay Area 2010 Clean Air Plan* identified 18 Stationary Source Measures (SSMs), 10 Mobile Source Measures (MSMs), 17 Transportation Control Measures (TCMs), six Land Use and Local Impact Measures (LUMs), and four Energy and Climate Measures (ECMs). The Air District and its partner agencies have taken action to implement the control measures in the *Bay Area 2010 Clean Air Plan*, with the result that eight of the 18 SSMs have been adopted in regulations or rules, and the remaining ten SSMs have been carried forward as part of the 2017 control strategy. Eight of the MSMs and all of the TCMs, LUMs, and ECMs have been carried forward in the current CAP. The 2017 CAP also adopts 30 new SSMs in addition to the eight carried over from

the previous CAP. Additionally, BAAQMD identified a number of potential measures that appear to have merit but need further evaluation before they can be included as formal control measures. These measures have been included as further study measures (FSMs). The CAP identifies 11 FSMs, nine of them pertaining to stationary sources, along with one for buildings and one for agriculture. None of the CAP control measures are directly applicable to the proposed project.

When a public agency contemplates approving a project where an air quality plan consistency determination is required, BAAQMD recommends that the agency analyze the project with respect to the three questions listed below. If the first two questions are concluded in the affirmative and the third question concluded in the negative, the BAAQMD considers the project consistent with air quality plans prepared for the Bay Area.

1) Does the project support the primary goals of the air quality plan?

Any project that would not support the 2017 CAP goals would not be considered consistent with the 2017 CAP. The recommended measure for determining project support of these goals is consistency with BAAQMD CEQA thresholds of significance. As discussed further in the subsequent sections, the proposed project would not exceed the BAAQMD significance thresholds; therefore, the proposed project would support the primary goals of the 2017 CAP.

2) Does the project include applicable control measures from the air quality plan?

As noted above, none of the CAP control measures are directly applicable to the project.

3) Does the project disrupt or hinder implementation of any 2017 CAP control measures?

The project would not disrupt or hinder implementation of any 2017 CAP control measures.

Based on these answers, the proposed project would be consistent with the 2017 CAP. Therefore, the project would not conflict with or obstructing implementation of the applicable air quality plan.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) *Result in a cumulatively considerable net increase of any criteria pollutant for which the region is non-attainment under an applicable federal or state ambient air quality standard?*	☐	☒	☐	☐

Explanation: Air quality standards for the San Francisco Bay Area are set by the Bay Area Air Quality Management District (BAAQMD). They are based on the National Ambient Air Quality Standards (NAAQS) established by the U.S. Environmental Protection Agency (USEPA) pursuant to the federal Clean Air Act (CAA), as well as the more stringent California Ambient Air Quality Standards (CAAQS) set by the California Air Resources Board (CARB).

BAAQMD's updated *CEQA Air Quality Guidelines*, adopted in April 2022, establish thresholds of significance for construction emissions of 54 pounds per day (lb./day) for reactive organic gases (ROG), fine particulate matter equal to or less than 2.5 microns ($PM_{2.5}$), and nitrogen oxides (NO_x), and 82 lb./day for respirable particulate matter equal to or less than 10 microns (PM_{10}). The same thresholds apply to operational emissions. The construction particulate matter (PM) thresholds apply to exhaust emissions only, not ground disturbance;

emissions from grading and other site disturbance, for which there is no adopted threshold of significance, are addressed through best management practices.

BAAQMD has developed both construction-related and operational screening criteria that provide lead agencies a conservative indication of whether a proposed project could potentially result in an exceedance of any of the thresholds of significance listed above. Because they were developed with very conservative assumptions, a project that falls below the screening criteria can be assumed to have no potential to exceed the adopted air quality thresholds of significance. For such projects, BAAQMD has determined that a quantified analysis of the project's potential emissions of criteria air pollutants and precursors is not necessary. The construction and operational screening criteria are discussed separately below.

As noted in BAAQMD's *CEQA Air Quality Guidelines*, air pollution is, by its very nature, largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. The BAAQMD *CEQA Air Quality Guidelines* recommend that cumulative air quality effects from criteria air pollutants be addressed by comparison to the project-level daily and annual emission thresholds. These significance thresholds were developed to identify a cumulatively considerable contribution to a significant regional air quality impact. According to the Air Quality Guidelines, if a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant. The Air Quality Guidelines state that a project's emissions would be cumulatively considerable if they would exceed the significance thresholds identified above. Conversely, if a project is determined to have less-than-significant project-level emissions, then it would also have a less-than-significant cumulative air quality impact.

Construction Impacts

Construction operations for any sizeable project have the potential to result in short-term but significant adverse air quality impacts. The BAAQMD recommends implementation of its Basic Construction Mitigation Measures by all projects subject to environmental review under CEQA.

The BAAQMD *CEQA Air Quality Guidelines* provide screening criteria for construction projects of a variety of land use development projects. Projects that fall below the operational thresholds are considered by BAAQMD to have less-than-significant construction-phase air pollutant emissions, provided the following additional conditions are met:

- All Basic Best Management Practices for Construction-Related Fugitive Dust Emissions would be included in the project design and implemented during construction;
- Construction-related activities would not overlap with operational activities; and
- Construction-related activities would not include any of the following:
    a. Demolition;
    b. Simultaneous occurrence of two or more construction phases (e.g., paving and building construction would occur simultaneously);
    c. Extensive site preparation (i.e., grading, cut and fill, or earth movement),
    d. Extensive material transport (i.e., soil import and export requiring a considerable amount of haul truck activity); or
    e. Stationary sources (e.g., backup generators) subject to Air District rules and regulations.

While project construction would require the demolition of an existing cottage of less than 1,400 square feet and a smaller modular home, demolition activities related to these small structures would not be extensive,

and the proposed construction is so far below the District's very conservative screening criterion that it can be reasonably assumed that there is no potential for development of the project to cause a significant air quality impact. The BAAQMD construction screening threshold for single-family residential housing is 254 dwelling units. With just a single home proposed by the project, the size of the development is far below the threshold at which BAAQMD recommends quantified modeling of air emissions. Therefore, there is no potential for construction of the project to violate air quality standards. Nonetheless, in accordance with BAAQMD's *CEQA Air Quality Guidelines*, absent implementation of BAAQMD's Basic Construction Mitigation Measures, the project's effects of construction-generated criteria pollutants are presumed to have a ***potentially significant impact*** on air quality. Implementation of the controls listed in Mitigation Measure AQ-1, which incorporates the Basic Best Management Practices identified by BAAQMD, would reduce the project's construction-related air quality impacts to a less-than-significant level.

Mitigation Measure AQ-1: The property owner/applicant shall require the construction contractor to reduce the severity of project construction period dust and equipment exhaust impacts by complying with the following control measures:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted wood chips, mulch, or gravel.
- Publicly visible signs shall be posted with the telephone number and name of the person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's General Air Pollution Complaints phone number shall also be visible to ensure compliance with applicable regulations.

Operational Impacts

As noted above, BAAQMD's operational thresholds of significance are the same as the construction thresholds. However, the screening criteria for project operations differ. The operational thresholds are 421 dwelling units for the single-family residential category. Again, the single home proposed by the project would be significantly

below BAAQMD's operational screening thresholds for the applicable land use category, and there is no potential for the project to exceed BAAQMD operational thresholds of significance. The proposed project's operational emissions from the project would be less than significant and, therefore, the project's emissions would not be cumulatively considerable. Therefore, the project would have a ***less-than-significant cumulative impact*** on air quality.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐

Explanation: BAAQMD's *CEQA Air Quality Guidelines* include recommended methods for screening and modeling risks from exposure of sensitive receptors to toxic air contaminants (TACs). The Office of Environmental Health Hazard Assessment (OEHHA) is responsible for identifying TACs, which are defined as pollutants that "may cause or contribute to an increase in deaths or in serious illness, or which may pose a present or potential hazard to human health" (Health and Safety Code Section 39655).

TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., gasoline service stations, dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, State, and federal level. TACs include fine particulate matter or $PM_{2.5}$ concentrations, which are generated by construction exhaust emissions.

When performing an air quality analysis for purposes of CEQA, BAAQMD recommends that the analysis employs a tiered approach that can be used to determine whether a proposed project would expose sensitive receptors to substantial pollutant concentrations that could exceed project-level or cumulative thresholds of significance. The project-level thresholds addresses the potential for an individual project to significantly elevate existing risks or hazards. A project would have a significant project-level impact if it resulted in:

- An excess cancer risk level of more than 10 in a million; or
- A non-cancer hazard index greater than 1.0 (acute or chronic); or
- An incremental increase of annual average $PM_{2.5}$ concentrations greater than 0.3 micrograms per cubic meter ($\mu g/m^3$).

The cumulative threshold addresses the potential that a project would have a cumulative significant impact if the aggregate total of all past, present, and foreseeable future sources within a 1,000-foot radius (or greater where appropriate) would result in:

- A excess cancer risk level of more than 100 in a million; or
- A non-cancer hazard index greater than 10.0 (chronic); or
- An annual average concentration of $PM_{2.5}$ greater than 0.8 $\mu g/m^3$.

For the first tier of screening, the Air District provides an online Stationary Source Screening Map, which is a Geographical Information System (GIS) map of all the stationary sources permitted by the Air District with risk and hazard estimates (tool does not estimate acute hazards since these screening levels were found to be

significantly below the thresholds). The entire George Ranch property was roughly delineated on the Screening Map, which generated a 1,000-foot radius around the property. BAAQMD recommends a 1,000-foot screening radius for cumulative impacts unless local conditions indicate a greater radius should be used, such as higher-magnitude emissions by offsite sources that may be proximate but outside the 1,000-foot screening radius.

The Stationary Source Screening Map[9] identified no permitted stationary sources near the ranch property; the nearest source is more than 1 mile east of the western property boundary and more than 2 miles east of the proposed home site. Therefore, there is no potential for occupants of the proposed home to be exposed to substantial pollutant concentrations. This would be a ***less-than-significant impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Explanation: Though offensive odors from stationary and mobile sources rarely cause any physical harm, they still remain unpleasant and can lead to public distress, generating citizen complaints to local governments. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors. Generally, odor emissions are highly dispersive, especially in areas with higher average wind speeds. However, odors disperse less quickly during inversions or during calm conditions, which hamper vertical mixing and dispersion.

The BAAQMD's significance criteria for odors are subjective and are based on the number of odor complaints generated by a project. Generally, the BAAQMD considers any project with the potential to frequently expose members of the public to objectionable odors to cause a significant impact. Although the odor threshold of significance adopted in the BAAQMD CEQA Guidelines is five confirmed complaints per year averaged over three years, the Guidelines state that this should not be used as an absolute threshold of significance, but as evidence to support a significance determination.

With respect to the proposed project, following completion of project construction, residential development is not typically associated with unpleasant odor emissions, so it is assumed there would be no objectionable odors generated during project operations. In the highly unlikely event that the project created an ongoing odor impact, it would be addressed through complaints to BAAQMD. During the short-term construction of the project, diesel-fueled equipment exhaust would generate some odors. However, these emissions typically dissipate quickly and would be unlikely to affect a substantial number of people. Due to the project site's hilly terrain that is exposed to prevailing westerly winds, upward dissipation of construction odors would be expected to occur more rapidly than at a flatland site surrounded by existing development. Due to its isolation, there are no offsite sensitive receptors who could be affected by odors generated by project construction equipment.

Occupants of the completed project would not be exposed to objectionable odors from offsite facilities. The BAAQMD CEQA Guidelines provide odor screening distances for a variety of odor-generating industrial

[9]Bay Area Air Quality Management District (BAAQMD), Health Risk Screening and Modeling, Stationary Source Screening Map, Accessed June 19, 2024 at; https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=845658c19eae4594b9f4b805fb9d89a3.

facilities, such as wastewater treatment plants, sanitary landfills, composting facilities, rendering plants, coffee roasters, animal feed lots, metal smelting plants, and more. The screening distances range from 1 to 2 miles. There are no existing odor-generating facilities within the applicable screening distances of the project site.

Based on the foregoing analysis, the project would have a ***less-than-significant odor impact***. during construction.

IV. BIOLOGICAL RESOURCES — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special- status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐

Explanation: The information presented in this section is based on a biological resources assessment (BRA) of the project property performed by Olberding Environmental in December 2023.[10] The assessment included a reconnaissance-level survey of the property by a qualified biologist on September 13 and October 4, 2022. The survey encompassed the three ranch parcels where activity would occur, encompassing 633.97 acres. The survey consisted of walking throughout the property and evaluating the site and adjacent lands for potential biological resources. Existing conditions, observed plants and wildlife, adjacent land use, soils, and potential biological resource constraints were recorded during the visit. A complete list of plant and animal species observed on the site during the biological survey is provided in Appendix A.

The California Department of Fish and Wildlife (CDFW) reviewed the BRA prepared by Olberding Environmental in the fall of 2024 and recommended that the applicant obtain an Incidental Take Permit (ITP) for potential impacts to species covered under the California Endangered Species Act (CESA), as well as CESA candidate species. However, the applicant has elected instead to implement all applicable mitigation measures for potential impacts to sensitive species identified in this IS/MND in lieu of obtaining an ITP. Implementation of the mitigation measures presented in this section would ensure that impacts to sensitive species would be less than significant.

The large ranch property on which the smaller project site is located is primarily comprised of rolling open space grasslands interspersed with oak woodland. Elevations on the undulating hillsides range from approximately 1,240 feet above sea level along the highest hilltop along the north-central boundary to 640 feet above sea level along the intermittent drainage located along the southeastern boundary.

As shown on Figure BIO-1, there are eight habitat types found within the property, including annual grassland, oak woodland, seasonal wetland/wetland swale, pond, intermittent drainage, scrub, developed/agricultural, and willow riparian. Characteristic vegetation found throughout the property includes, but is not limited to,

[10] Olberding Environmental, Inc., *Biological Resources Analysis Report for the George Property, Alameda County, California*, July 2024.

wild oat (*Avena fatua*), Italian rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), wall barley (*Hordeum murinum* ssp. *murinum*), coyote brush (*Baccharis pilularis*), California sage (*Artemisia californica*), coast live oak (*Quercus agrifolia*), willow (*Salix* spp.), and California bay (*Umbellularia californica*).

Intermittent drainages that are tributaries of Alameda Creek, which flows just outside the northern property boundary, are present throughout the ranch property. An intermittent drainage bisects the central portion of the property and flows onto the property at the eastern boundary, while another intermittent drainage flows along the southern boundary; both intermittent drainages flow through woodland habitat. Another intermittent drainage is present in the western portion of the property that supports willow riparian habitat. Ephemeral drainages are also present throughout the property, with the majority of these features originating on the fairly steep hillslopes, and conveying runoff into the various intermittent drainages, thus, all contributing to the greater Alameda Creek watershed.

Special-Status Plants

Special-status plant species falling under the regulatory authority of CEQA include species listed as Rare, Threatened, or Endangered by the U.S. Fish and Wildlife Service (USFWS) or by the California Department of Fish and Wildlife (CDFW); federal Proposed and Candidate species, as listed by the USFWS; and species listed by the California Native Plant Society (CNPS) on List 1A, List 1B, or List 2 of the CNPS Inventory. Plant species on the CNPS Inventory List 3 (Plants About Which We Need More Information—A Review List) or List 4 (Plants of Limited Distribution—A Watch List) are also considered special-status species, but they are of lower sensitivity, generally do not fall under specific State or federal regulatory authority, and do not generally require specific mitigation to offset project impacts.

A list of special-status plant species with the potential to occur on the project property, as identified in the California Natural Diversity Database (CNDDB) by the CDFW is presented in Appendix B. The special-status plant species identified by the CNDDB as potentially occurring on the property are known to grow only from specific habitat types. The specific habitats or "micro-climate" necessary for many of the plant species to occur are not found within the boundaries of the property. The habitats necessary for the CNDDB-reported plant species consist of valley and foothill grassland, cismontane woodlands, chaparral, playas, chenopod scrub, adobe clay soils, alkaline soils, serpentine soils, sandy soils, gravelly soils, coastal prairie, coastal scrub, coastal dunes, coastal bluff scrub, coastal salt marsh, vernal pools, seeps, meadows and sinks, marshes or swamps, riparian woodlands, on slopes near drainages, closed cone coniferous forest, north coast coniferous forest, redwood forest, lower montane coniferous forest, and broad-leafed upland forest. Occurrences of special-status plants within a 5-mile radius of the point roughly representing the center of the ranch property are shown on Figure BIO-2.

Only one special-status plant species was determined by Olberding Environmental to have a potential to occur on the property based on habitat types and nearby CNDDB occurrences within 5 miles of the property: Santa Clara Red Ribbons (*Clarkia concinna* ssp. *automixa*). This annual herb is found among chaparral and cismontane woodland at elevations ranging 295 feet to 4,920 feet. It blooms in May and June. The habitat present on the ranch property is moderately suitable for this species, so it could occur, though it was not identified during the biological survey.

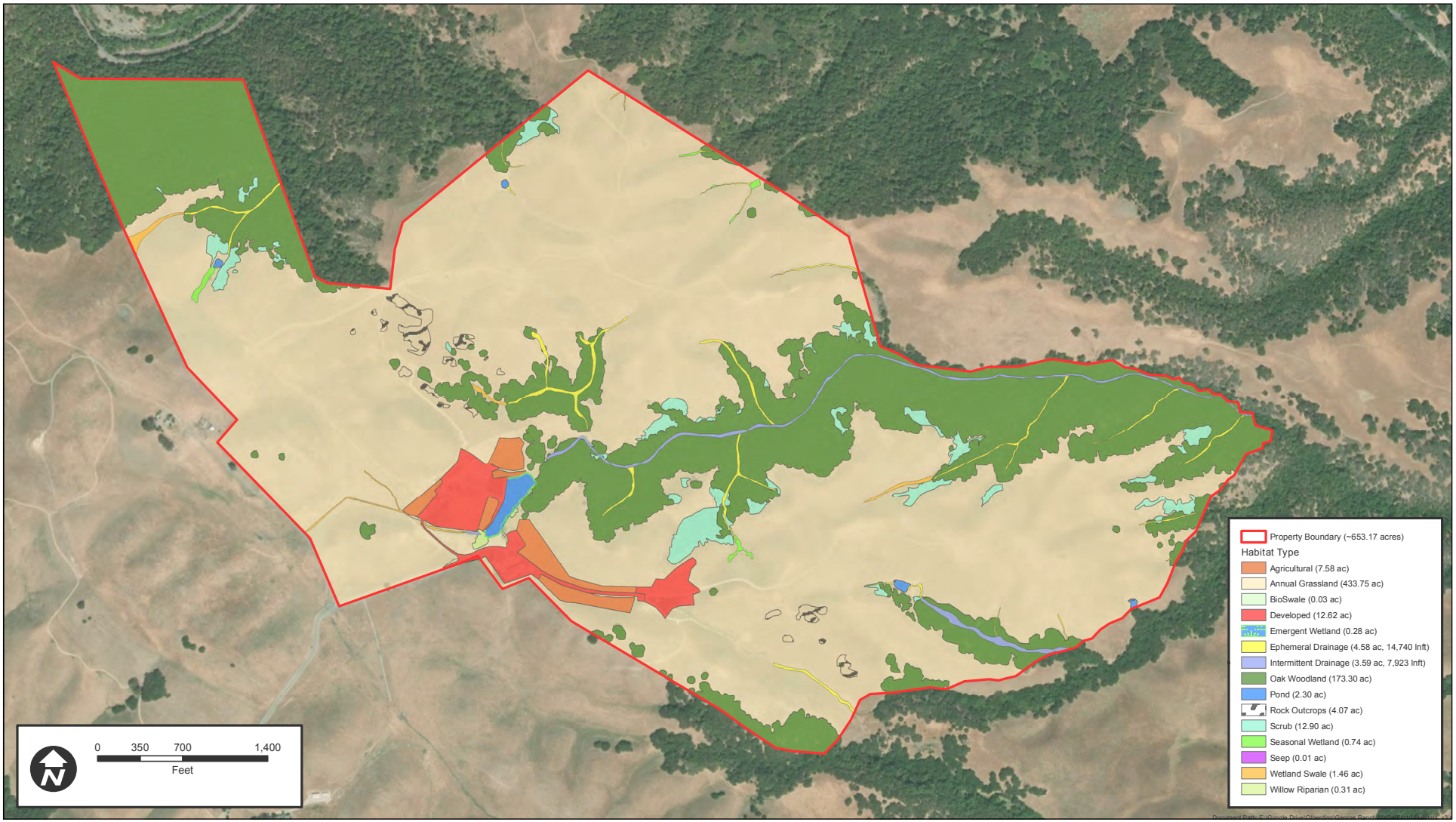


Figure BIO-1

Existing Habitat Communities and Wetlands on the Project Site

Source: Olberding Environmental

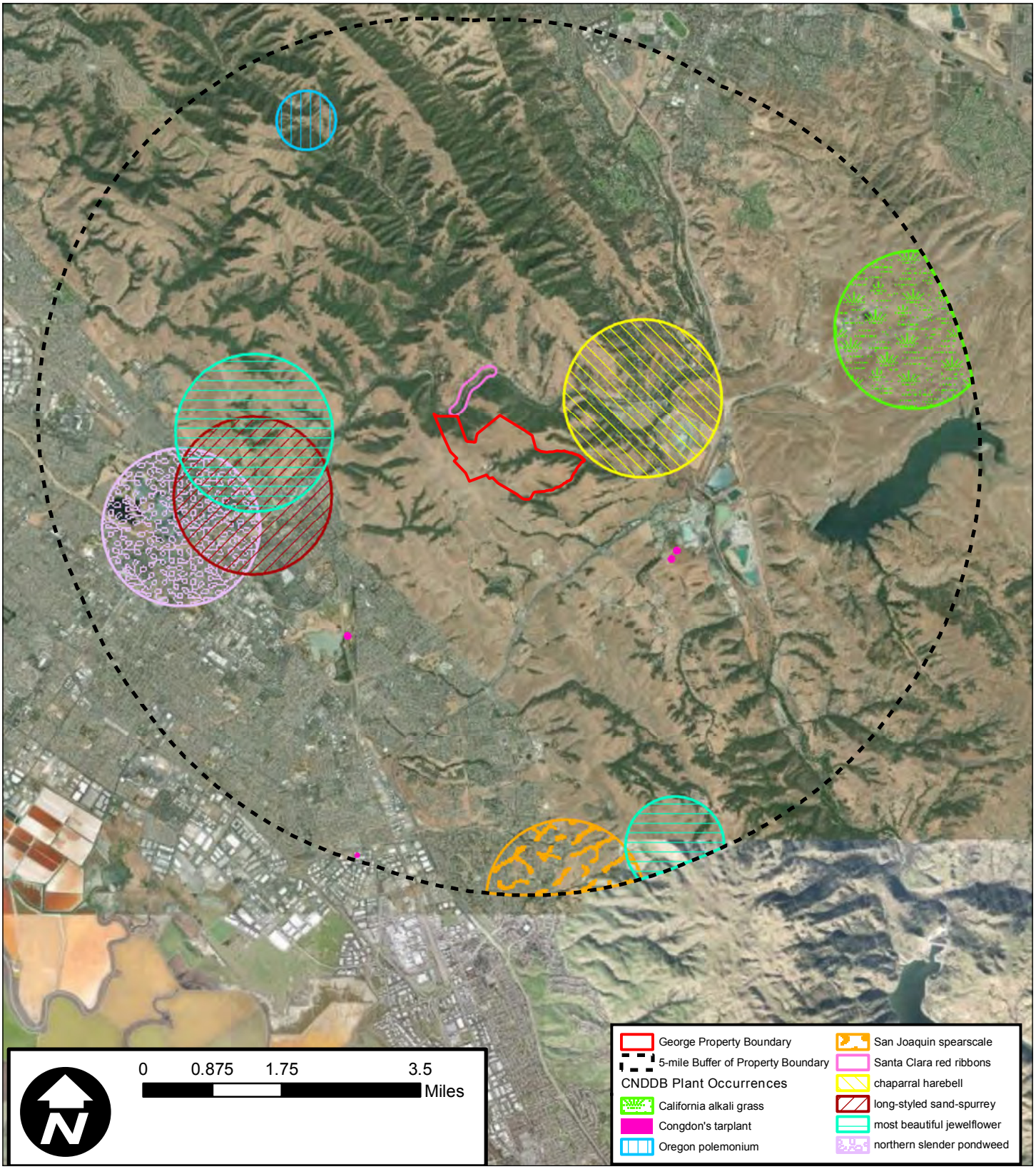


Figure BIO-2

CNDDB Search Results for Plants

Source: Olberding Environmental

Based on the results of the CNDDB search and the identification of suitable habitat on the site for Santa Clara Red Ribbons, this special-status plant species may occur on the project site. If these plants are present, they could be destroyed during site grading, which would constitute a ***significant impact*** pursuant to CEQA. Implementation of the following mitigation measure would reduce the impact to a less-than-significant level:

Mitigation Measure BIO-1: Prior to commencement of grading or other site disturbance, a qualified plant biologist shall conduct a rare plant survey during the blooming period (May through June) for Santa Clara Red Ribbons and any other special-status plant species. The survey shall be performed in accordance with guidelines for rare plant surveys published by the California Department of Fish and Wildlife (CDFW) and the California Native Plant Society (CNPS). Any rare, threatened, or endangered plant species, including but not limited to those listed in Attachment 2, Table 2, of the July 2024 biological resources assessment report prepared for the project by Olberding Environmental, Inc., shall be identified and mapped. If any special-status plant species are found on the site, the biologist shall consult with the U.S. Fish and Wildlife Service (USFWS) and/or CDFW to identify appropriate mitigation to protect the species. Any further mitigation recommended by USFWS and/or CDFW shall be implemented prior to the initiation of site grading or other site disturbance. The results of the rare plant survey, as well as any additional mitigation requirements identified by USFWS and/or CDFW, as applicable, and the successful implementation of those requirements, shall be documented by the biologist in a letter report to be submitted to the Alameda County Planning Department. The County shall not issue a grading permit until these requirements have been satisfied.

Special-Status Birds

The annual grassland habitat on the site provides many foraging opportunities for a wide range of bird species. Passerine species observed during the BRA survey include western meadowlark (*Sturnella neglecta*), dark-eyed junco (*Junco hyemalis*), California towhee (*Melozone crissalis*), black phoebe (*Sayornis nigricans*), California scrub jay (*Aphelocoma californica*), western bluebird (*Sialia mexicana*), and mourning dove (*Zenaida macroura*). Other avian species observed foraging within this habitat include American crow (*Corvus bracyrynchos*), common raven (*Corvus corax*), Anna's hummingbird (*Calypte anna*), turkey vulture (*Cathartes aura*), and wild turkey (*Meleagris gallopavo*). Special-status passerine species that could potentially utilize the grassland habitat as foraging habitat include the loggerhead shrike (*Lanius ludovicianus*).

The red-tailed hawk (*Buteo jamaicensis*) and the American kestrel (*Falco sparverius*) were the only raptor species observed foraging over the grassland habitat during the biological survey; however, the grassland habitat could potentially be utilized for foraging by other species including white-tailed kite (*Elanus leucurus*), red-shouldered hawk (*Buteo lineatus*), Cooper's hawk (*Accipiter cooperii*), peregrine falcon (*Falco peregrinus*), prairie falcon (*Falco mexicanus*), northern harrier (*Circus hudsonius*), burrowing owl (*Athene cunicularia*), and golden eagle (*Aquila chrysaetos*). California ground squirrel (*Otospermophilus beecheyi*) burrows were also observed within the grassland habitat and could provide potential breeding habitat for burrowing owl.

Based on the results of the CNDDB search and a review of federal and State databases of species listed as Threatened or Endangered (or listed as a "species of special concern" by the CDFW), ten special-status bird species were identified to have a moderate to high potential to occur on the project site in a nesting or foraging capacity. Occurrences of special-status birds and other wildlife within a 5-mile radius of the point roughly representing the center of the ranch property are shown on Figure BIO-3.The white-tailed kite and Cooper's

hawk have a high potential to occur in a nesting and foraging capacity. The burrowing owl, golden eagle, loggerhead shrike, northern harrier, American peregrine falcon, and tri-colored blackbird have a moderate potential to occur in a foraging and/or nesting capacity. A brief description of each species is provided below, along with the listing status:

- **White-Tailed Kite** (State Protected) is a falcon-shaped raptor with a long white tail and black patches on the shoulders that are highly visible while the bird is flying or perching. White-tailed kites forage in annual grasslands, farmlands, orchards, chaparral, and at the edges of marshes and meadows. They are found nesting in trees and shrubs such as willows (Salix sp.), California sycamore (Platanus racemosa), and coast live oak, often near marshes, lakes, rivers, or ponds. This raptor often hovers while inspecting the ground below for prey. The white-tailed kite eats mainly small mammals, as well as some birds, lizards, and insects. Annual grasslands are considered good foraging habitat for white-tailed kites, which will forage in human-impacted areas. The large trees present just outside the project site boundary could offer suitable nesting habitat, while the annual grassland habitat on the site provides foraging opportunities for this species. Although the CNDDB did not list the white-tailed kite as occurring within the vicinity of the property, the large trees present within and surrounding the property offer suitable nesting habitat. In addition, foraging opportunities occur throughout the property in the grassland habitat. Therefore, this species has a potential to occur on the property in a nesting and foraging capacity.

- **Copper's Hawk** (State Protected) is a medium- to large-size raptor, with an average wingspan of 28 to 34 inches. They are distinctive for the black and white horizontal banding on the elongated tail and blue-gray head, back, and upper wings. Additional characteristics include rusty red horizontal barring on a white breast, a large square head, and long yellow legs and feet. The oak woodlands on the property could offer suitable nesting habitat, while the annual grassland habitat on the site provides foraging opportunities for this species.

- **Burrowing Owl** (State Species of Special Concern) is a ground-dwelling member of the owl family. Burrowing owls are small brown- to tan-colored birds with bold spots and barring. Although they generally require open annual grassland habitats in which to nest, they can also be found on abandoned lots, roads, airports, and in other urban areas. Burrowing owls generally use abandoned California ground squirrel holes for their nesting burrow, but are also known to use pipes or other debris for nesting purposes. Burrowing owls prefer annual grassland habitats with low vegetative cover. The breeding season for burrowing owls occurs from March through August. Burrowing owls often nest in loose colonies about 100 yards apart. They lay three to twelve eggs from mid-May to early June. The female incubates the clutch for about 28 days, while the male provides her with food. The young owls begin appearing at the burrow's entrance two weeks after hatching and leave the nest to hunt for insects on their own after about 45 days. The chicks can fly well at six weeks old. The project area is historically known to provide suitable habitat for burrowing owls and the project site provides suitable grassland habitat for this species. The CNDDB listed four occurrences of burrowing owl within 5 miles of the project property. A plethora of ground squirrels and their burrows were observed on site during the BRA site reconnaissance. Although no sign (e.g., pellets, feathers, whitewash, etc.) were observed around the various ground squirrel burrow complexes during the September survey, the burrowing owl has a potential to occur on the property.

  The USFWS has identified the burrowing owl as a "candidate" species. Candidate species are animals and plants that may warrant official listing as threatened or endangered, but there is no conclusive data to give them this protection at the present time. As a candidate species, burrowing owls receive no legal protection under the Endangered Species Act (ESA). However, this species does receive some legal protection from the U.S. through the Migratory Bird Treaty Act, which forbids the destruction of the birds and active nests. In California, the burrowing owl considered a "species of special concern."

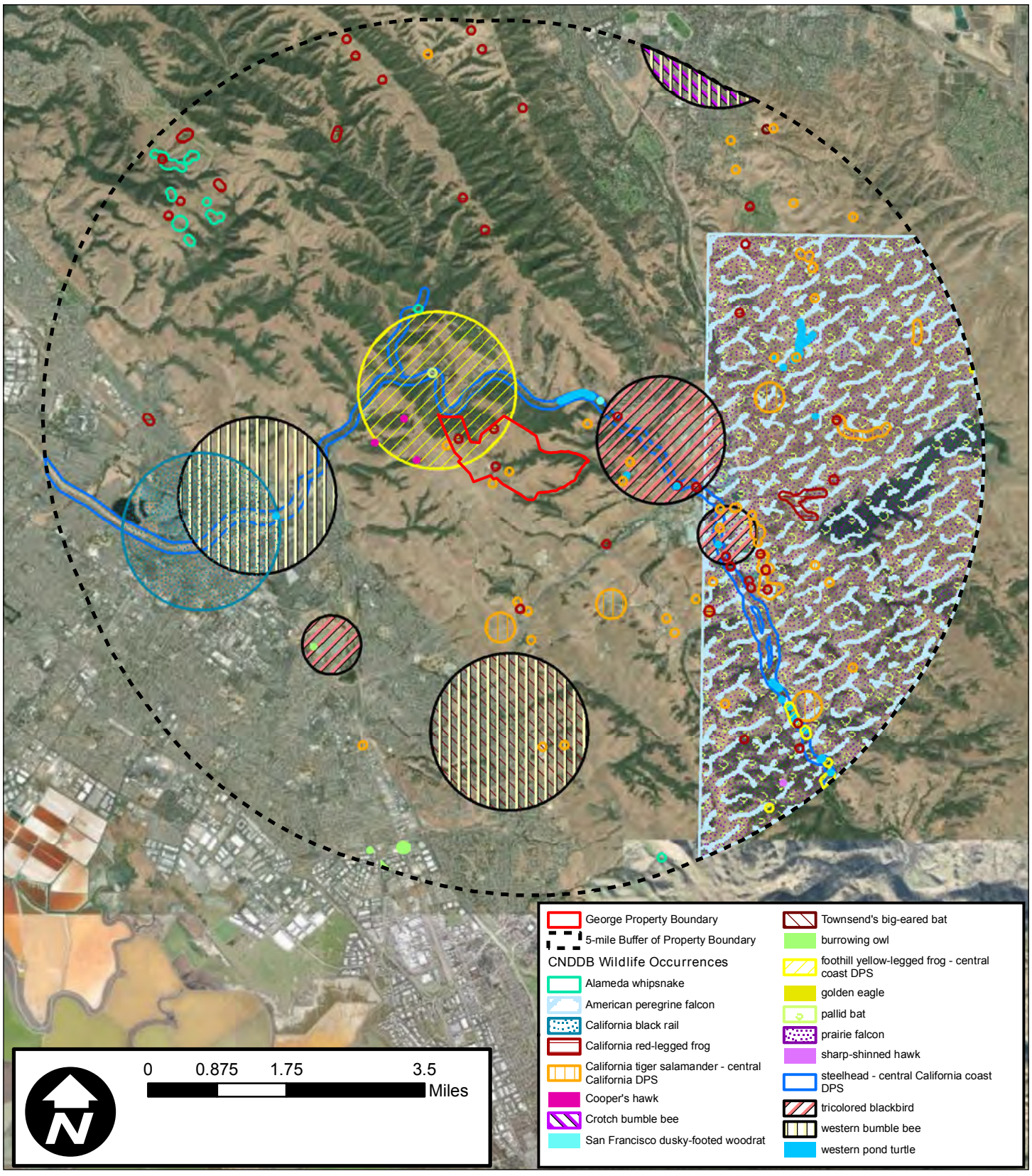


Figure BIO-3

CNDDB Search Results for Wildlife

Source: Olberding Environmental

- **Golden Eagle** (Federal and State Protected) is typically found in open grasslands, pastures, and oak woodland, often near lakes and rivers. The plumage of this raptor is dark brown overall, with some white at the base of the tail, and golden-to-blonde feathers on the nape of the neck. The bill and talons are black and the cere (soft membrane that covers the nostrils) and feet are yellow. Immature birds have a broad, white tail band with a black edge and large white patches on the undersides of the wings at the base of the primary feathers. Adult males weigh nine pounds with adult females weighing 12.5 pounds. Masters of soaring, golden eagle can reach speeds up to 200 mph with their 6.5- to 7.5-foot wingspans. Golden Eagles nest in high densities in open and semi-open habitat, but also may nest at lower densities in coniferous habitat when open space is available, (e. g. fire breaks, clear-cuts, burned areas, pasture-land, etc.). They can be found from the tundra, through grasslands, woodland-brushlands, and forested habitat, south to arid deserts, including Death Valley, California. Golden Eagles avoid nesting near urban habitat and do not generally nest in densely forested habitat. Individuals will occasionally nest near semi-urban areas where housing density is low and in farmland habitat. They nest on cliffs, in the upper one third of deciduous and coniferous trees, or on manmade structures such as windmills, electricity transmission towers, artificial nesting platforms, etc. They typically build nests that afford an unobstructed view of the surrounding habitat. Nests are constructed to create a strong, flat or bowl shaped platform, and existing nests may be reused with the addition of sticks and soft materials. The CNDDB listed one occurrence (#48) of golden eagle as occurring within the 5-mile radius of the ranch property. This occurrence, from 1993, is located 4.99 miles from the property. The large trees present within the oak woodland habitat on the project property offer suitable nesting habitat, and the open grasslands provide foraging habitat.
- **Loggerhead Shrike** (State Species of Special Concern) is a black and white perching bird with a black face mask that extends over the bill. A common resident and winter visitor in lowlands and foothills throughout California, it prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. It occurs only rarely in heavily urbanized areas, but is often found in open cropland. This species hunts large insects, small rodents and even small birds. Loggerhead shrikes are known for their habit of impaling their food on thorns or barb wire for future consumption. The range and habitat for the loggerhead shrike has steadily shrunk due to human development within grasslands; however, this species is often found on lands grazed by cattle that are fenced with barb wire. These birds use shrubs, dense trees, and thickets of vegetation for nesting sites. The CNDDB did not list the loggerhead shrike as occurring within the vicinity of the property. However, the shrubs found within the scrub habitat offer potentially suitable nesting habitat. In addition, foraging opportunities occur across the property and cattle fencing is abundant. Given the above information, the loggerhead shrike has a potential to occur on the property in a foraging and nesting capacity.
- **Northern Harrier** (State Species of Special Concern) is a slim, long-tailed raptor distinguished from other similar species by their prominent white rump patch. Males are pale gray in color, while females are brown with dark streaking on the breast. These birds are ground nesters and utilize habitats ranging from annual grassland to seasonal wetland for this purpose. They prefer dense ground vegetation or grasses in which to build nests, and may nest in willows, grasses, sedges, reeds, bulrushes, and cattails. This **species** breeds once per season, with primary females breeding from April to July, and secondary females breeding from May through September. An average of four eggs per clutch will take 28 to 36 days to hatch, with the young fledging 30 to 35 days after hatching. Although the CNDDB did not list the northern harrier as occurring within the 5-mile vicinity of the property, the grassland habitat on the site provides ample foraging opportunities for this species. Additionally, nesting opportunities are present within the willow riparian and dense clumps of vegetation surrounding a small pond located about one-half mile northwest of the proposed home site (Pond 5). Therefore, the northern harrier has a potential to occur in a nesting and foraging capacity.

- **American Peregrine Falcon** (Federally Delisted, State Delisted, CDFW: Fully Protected). The peregrine falcon is a powerful, wide-bodied raptor with a dark, nearly black head resembling a hood, steel blue back and tail, pale to white breast and underwings, dark horizontal barring on underparts, black mustache markings, and yellow base of bill, eye rings, legs and feet. This species, which is a bird hunting specialist, forages on the wing, catching prey in the air or on the ground. They hunt mainly via high-speed stoops, and can reach speeds over 200 mph. It is found mostly in open terrain including farmland, marshes, and even urban environments. Prey items include waterbirds, rock doves, and other small birds and mammals. Peregrine falcons need tall sheltered areas such as cliffs or tall buildings for cover. They are increasingly able to exploit urban habitats for both foraging and nesting sites.

  CNDDB listed three occurrences of the peregrine falcon as occurring within the vicinity of the property. The nearest occurrence (Occurrence #2), from 1993, is located approximately 1.48 miles from the property. Foraging opportunities occur throughout the property in the grassland habitat and other open areas, but the property does not offer potential nesting habitat. Thus, the peregrine falcon has a moderate potential to occur on the property in a foraging capacity only.

- **Tri-colored Blackbird** (State Threatened, California Species of Special Concern) is a close relative of the red-winged blackbird (*Agelaius phoeniceus*), the tri-colored blackbird is distinguished by a white patch underscoring the bright red epaulettes that are prominent in the males of both species. Often found in large flocks of red-winged blackbirds, this species is highly colonial. Nesting colonies usually occur in marshy habitats, often in large stands of blackberry and cattail near stock ponds or irrigated pastures. However, this species also nests within agricultural triticale fields. Foraging habitats consist of cultivated fields, feedlots associated with dairy farms, and wetlands.

  CNDDB listed three occurrences of tricolored blackbird within the 5-mile vicinity of the ranch property. The closest occurrence (Occurrence #27), from 1994, is located approximately 766 feet from the property. The wetland habitat present throughout the property offers suitable foraging habitat while the dense vegetation surrounding Pond 5 and the blackberry thickets present within the wetland swales provide potential nesting habitat. Therefore, the tri-colored blackbird has a potential to occur onsite in a nesting and foraging capacity.

In addition to the raptor species listed above, the following raptor species protected under the Migratory Bird Treaty Act were observed foraging over the property.

- Red-tailed hawk (*Buteo jamaicensis*) – observed September and October 2022
- American kestrel (*Falco sparverius*) – observed September and October 2022

CNDDB does not track occurrences of American kestrel, or red-tailed hawk; however, the woodland habitat provides abundant nesting opportunities for these species while the grassland provides foraging habitat. Additionally, the red-tailed hawk and American kestrel were both observed foraging on the property during the surveys.

As previously noted, the ten special-status bird species described above all have the potential to utilize the project site for nesting and/or foraging, and red-tailed hawk and American kestrel were observed on the property during the single reconnaissance of the site. Site disturbance during project construction, including removal of trees, have the potential to destroy the nests of birds nesting on the site and disturb birds utilizing the site for foraging opportunities, which would be a ***potentially significant impact***. Implementation of the following mitigation measures would reduce the impact to a less-than-significant level:

Mitigation Measure BIO-2: If site grading or other project construction activities would take place during the bird nesting season (February through August), pre-

construction surveys of the project site and the adjacent large trees shall be conducted by a qualified wildlife biologist to identify any nesting passerine birds, raptors (birds of prey), or waterfowl. The surveys shall be conducted within 14 days prior to the commencement of the tree removal or site grading activities. Surveys should focus on areas where birds are likely to nest, including trees, shrubs, grasslands, rock faces, stream banks, or under eves of structures. If any bird listed under the Migratory Bird Treaty Act is found to be nesting within the project site or adjacent trees, a protective buffer zone shall be established by the biologist to protect the nesting site. This buffer shall be a minimum of 75 feet from the project activities for passerine birds, and a minimum of 250 feet for raptors. The distance shall be determined by the biologist, based on the sensitivity of the birds nesting and site conditions, such as whether the nest is in a line-of-sight of the construction activities. The nest site(s) shall be monitored by the biologist at least weekly during construction to see if the birds are stressed by the construction and if the protective buffer needs to be increased. Once the young have fledged and are flying well enough to avoid project construction zones (typically by August), project construction can proceed without further regard to the nest site(s). Active nests, including those in the process of being constructed, shall not be disturbed. Surveys shall be repeated in areas where project construction activities lapse for a period of seven days or more.

Mitigation Measure BIO-3: Prior to issuance of a grading permit or any ground-disturbing activities, a qualified biologist shall conduct an initial protocol-level survey during the peak of the breeding season (mid-April to mid–July) to determine whether the burrowing owl breeds on or within 250 feet of the construction site. A pre-construction survey shall also be conducted no more than 14 days prior to any ground-disturbing activities. Occupancy of burrowing owl habitat is confirmed at a site when at least one burrowing owl or its sign at or near a burrow entrance is observed within the last three years. If a burrowing owl or sign is present on the property, three additional protocol level surveys shall be performed. The results of the pre-construction burrowing owl habitat assessment survey and any required subsequent surveys shall be documented in a letter report to be submitted to the Alameda County Planning Department.

If owls are encountered during any of the surveys, a Burrowing Owl Mitigation Plan shall be prepared, to be approved by the Alameda County Planning Department and the California Department of Fish and Wildlife (CDFW) prior to issuance of a grading permit, and implemented. The mitigation plan shall include the establishment of 250-foot non-disturbance buffers around occupied burrows during the nesting season (February 1st through August 31st) and 160-foot buffers during the non-breeding season (September 1st to January 31st). The mitigation plan may include passive relocation during the non-breeding season, but no burrowing owls shall be evicted from burrows during the nesting season unless evidence indicates that nesting is not actively occurring (e.g., because the owls have not yet begun nesting early in the season, or because young have already fledged late in the season). During the

nesting season, a 250-foot buffer, within which no new activity will be permissible, shall be maintained between project activities and occupied burrows.

Special-Status Mammals

Multiple mule deer (*Odocoileus hemionous*) were observed foraging within the grassland and woodland habitat during the September and October biological surveys. A single coyote (*Canis latrans*) was observed and striped skunk (*Mephitis mephitis*) droppings were also observed within the grassland habitat. The grassland habitat provides foraging opportunities for special-status bat species such as pallid bat (*Antrozous pallidus*) and Townsend's big-eared bat (*Corynorhinus townsendii*), both Species of Special Concern, and adjacent trees provide roosting habitat. However, no immediate signs of these species were present during the initial biological survey. The special-status American badger (*Taxidea taxus*) could also utilize this habitat and edges of oak woodland habitats to den. The San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*) has potential to occur on the property within the woodland habitat. Additional details on these latter two species are provided below.

- **American Badger** (California Species of Special Concern). This large member of the weasel family is an excellent digger, with a flat body with short, stout legs ideally suited for digging burrows. A distinctive white stripe extends from the nose, and over the back of the head, that is rather small in proportion to its body. This species has long foreclaws which they use to excavate dens for refuge, food caches, and birthing sites. Their den entrance is generally shaped like a sideways "D" with the excavated soil piled outside of the entrance. Found in open plains, prairies, forests and grasslands, this carnivorous species feeds on ground squirrels, mice, and gophers, but will also consume rattlesnakes and other reptiles, and ground-nesting birds such as burrowing owl. Primarily solitary outside of the breeding season, badgers mate during late summer, but do not give birth until March or April.

  The CNDDB did not list any occurrences of American badger within the 5-mile radius of the project property. The grassland and woodland habitat offer suitable habitat for this species while the presence of ground squirrels and the potential for ground-nesting birds offers ample foraging opportunities. While no evidence of large, excavated burrows were observed during the initial September 2022 survey, the American badger has a potential to occur on the property.

- **San Francisco Dusky-Footed Woodrat** (California Species of Special Concern) is one of 11 subspecies of the dusky-footed woodrat (*N. fuscipes*). Woodrats prefer moderate canopy and a brushy understory in a variety of habitats. Nests (also called middens or lodges) are constructed from sticks, leaves and other debris either at the base of trees or in the branches of a tree and may measure up to 8 feet in height and in diameter. Nests are located within the stick houses, and are constructed of shredded grasses and leaves, and other miscellaneous materials such as bird feathers. This species may be limited in a particular area by the availability of suitable nest materials. Mostly nocturnal, this species feeds mainly on woody plants (e.g., fruits, shoots and leaves), especially from oak, maple, coffeeberry, alder, and elderberry when available. Other small mammals and amphibians and reptiles are known to utilize woodrat houses as refugia.

  The CNDDB listed one occurrence of dusky-footed woodrat within a 5-mile radius of the project property. The closest occurrence (Occurrence #6) from 2006, is located approximately 0.7 miles northeast of the property. The woodland habitat offers suitable habitat for this species, with an abundance of available nesting materials and food resources. The BRA concluded that the dusky-footed woodrat has a potential to occur on the property.

Project construction activities have the potential to disturb roosting bats that could be present on the site as well as nesting or denning special-status mammals that may occur on the site, which would be a ***potentially***

significant adverse impact. Implementation of the following mitigation measures would reduce potentially significant impacts to a less-than-significant level.

Mitigation Measure BIO-4: For all project demolition and construction activities planned in or adjacent to potential bat roosting habitat, such as structures and/or involving woody vegetation modification or removal of any and all trees, a qualified biologist shall conduct daytime and evening acoustic surveys in addition to extensive visual surveys of potential habitat for special-status bats at least 7 days prior to initiation of project activities. If bats are found on-site, a qualified biologist shall identify the species, estimated quantity present, roost type, and roost status, but shall avoid disturbing bats during surveys. A qualified biologist shall also create a Bat Mitigation and Monitoring Plan if special-status bat species are detected prior to the start of project activities. The Bat Mitigation and Monitoring Plan shall include: (1) an assessment of all project impacts to special-status bats, including noise disturbance during construction; (2) effective avoidance and minimization measures to protect special-status bats; (3) and compensatory mitigation for permanent impacts to special-status bats or their nesting/roosting habitat. If structures, trees, or other refugia equivalents are slated for limbing, removal, or modification, the Bat Mitigation and Monitoring Plan shall include the following measures:

- To ensure that special-status bats have left potential roosting refugia, work shall occur over the course of two days. On the first day, smaller limbs or items from the identified trees or structures shall be brushed back or modified in the late afternoon. This disturbance should cause any potential roosting bats to seek other roosts during their nighttime foraging. The remainder of the refugia item can then be further limbed or removed as needed on the second day as late in the afternoon as feasible. If bats are found injured, or if bat mortality occurs during the course of tree work, a qualified biologist shall record the species impacted, and the number of individuals documented.
- Tree limbing, modification, removal, or work on structural refugia shall not be performed under any of the following conditions: during any precipitation events, when ambient temperatures are below 4.5 degrees Celsius, when windspeeds exceed 11 miles per hour, and/or any other condition which may lead to bats seeking refuge.
- If special-status bats are found utilizing a tree, structure, or equivalent for roosting, the Bat Mitigation and Monitoring Plan shall include permanent artificial roosting habitat installations that shall be adjacent to, and sufficient for, the species observed and associated ecology thereof. Effective buffer zones for the installation and monitoring of the artificial roosts shall be determined and established by a qualified biologist.

Mitigation Measure BIO-5: A qualified biologist shall conduct pre-construction ground surveys for special-status mammals that should commence generally no more than 30 days prior to construction start-up. Any suitable habitats, burrows, and

dens observed for these species shall be identified and mapped. Any signs of other direct or indirect evidence such as scat, tracks, prey items shall also be identified and mapped. A protective buffer shall be established around any burrows or dens identified with orange construction fencing, and a biological monitor shall be present upon the initiation of construction to monitor construction activities to ensure that the nests are not disturbed. If any occupied burrows or dens cannot be avoided during project construction, a mitigation plan shall be prepared by a qualified biologist to be implemented as directed by the biologist.

Mitigation Measure BIO-6: Prior to commencing any project activities that may result in the destruction of dusky-footed woodrat nests, surveys shall be conducted by a qualified biologist to determine the occurrence of active nests throughout the property where suitable habitats are present. If found, orange construction fencing shall be installed as a buffer around the nest at a suitable distance, and a biological monitor shall be present upon the initiation of construction to monitor construction activities to ensure that the nests are not disturbed. If any woodrat nests cannot be avoided during project construction, a mitigation plan shall be prepared by a qualified biologist to be implemented as directed by the biologist.

Special-Status Amphibians

Three amphibian species were identified as having a potential to occur on the project property: California red-legged frog (*Rana draytonii*) (CRLF), California tiger salamander (*Ambystoma californiense*) (CTS), and Foothill yellow-legged frog (*Rana boylii*) (FHYF). Multiple CNDDB occurrences of these species are recorded on and within the vicinity of the property and the property contains suitable habitat in the ponds, wetlands, and intermittent drainages. Additionally, juvenile CRLF were observed within the large pond (P5) located about 250 feet east of the proposed home. For these reasons CTS, CRLF, and FHYF have a potential to occur in a breeding, foraging and dispersal capacity and CRLF is currently present. FHYF were determined to have a potential to occur on the property based on the intermittent drainages present on the property functioning as tributaries to Alameda Creek. Each of these amphibian species is described below.

- **California Red-Legged Frog** (Federally Threatened, California Species of Special Concern) was listed as a Federal threatened species on May 31, 1996 and is considered threatened throughout its range. If a proposed project may jeopardize listed species, Section 7 of the ESA requires consideration of those species through formal consultations with the USFWS. On April 13, 2006, USFWS designated approximately 450,288 acres as critical habitat for the CRLF under the ESA. A new ruling by the USFWS on March 17, 2010 revised the designation of critical habitat for CRLF to encompass a total of approximately 1,636,609 acres of critical habitat in 27 California counties; this rule became effective on April 16, 2010. CRLF critical habitat within the project area is shown on Figure BIO-4.

  The CRLF is a rather large frog, measuring 1-½ to 5 inches in length. They are reddish-brown to gray in color, with dorsolateral folds and many poorly defined dark specks and blotches. The underside of the CRLF is washed with red on the lower abdomen and hind legs. The CRLF has a dark mask bordered by a light stripe on the jaw, smooth eardrums, and not fully webbed toes. The male has enlarged forearms and swollen thumbs. Its vocal expressions consist of a series of weak throaty notes, rather harsh, and lasting 2 to 3 seconds. Breeding occurs from December to March, with egg masses laid in permanent bodies of water.

  The CRLF is found in lowlands, foothill woodland and grasslands, near marshes, lakes, ponds or other water sources. These amphibians require dense shrubby or emergent vegetation closely associated

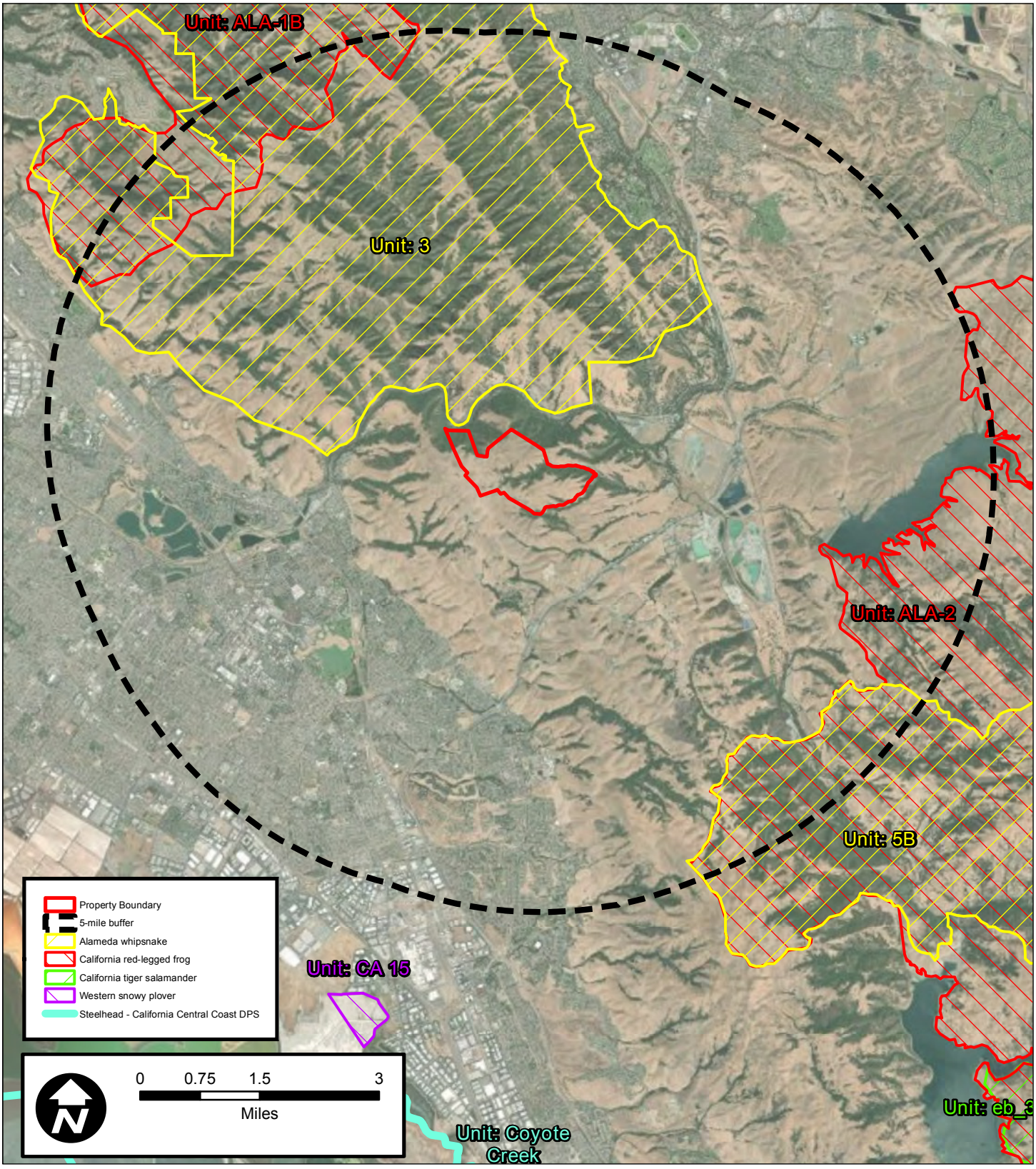


Figure BIO-4

USFWS-Designated Critical Habitat Map

Source: Olberding Environmental

with deep still or slow-moving water. Generally, these frogs favor intermittent streams with water at least 2-½ feet deep and where the shoreline has relatively intact emergent or shoreline vegetation. CRLF is known from streams with relatively low gradients and those waters where introduced fish and bullfrogs are absent. CRLF are known to take refuge upland in small mammal burrows during periods of high water flow. CRLF occurs west of the Sierra Nevada-Cascade and in the Coast Ranges along the entire length of the state. Historically, they occurred throughout the Central Valley and Sierra Nevada foothills south to northern Baja California. Now they are found from Sonoma and Butte Counties south to Riverside County, but mainly in Monterey, San Luis Obispo, and Santa Barbara Counties.

The CNDDB listed 32 occurrences of CRLF occurring within the 5-mile vicinity of the property. Three occurrences (#581, #568, #569), all from 2000, are located on the property. The wetlands, drainages, and pond features present within the property offer suitable habitat to support breeding, foraging, and aquatic dispersal for this species. Additionally, multiple juvenile CRLF were observed within Pond P5 during the September survey. Vegetative debris throughout the woodland habitat, and small mammal burrows within the grassland habitat offer abundant summer refugia sites. USFWS-designated CRLF critical habitat, Unit: ALA-1B and Unit: ALA- 2, lie approximately 4.2 miles northwest

and 3 miles southeast of the property respectively. For these reasons, CRLF has a potential to occur on site in a breeding and foraging capacity and is currently present.

- **California Tiger Salamander** (Federally Threatened, State Threatened). Adult California tiger salamanders (CTS) inhabit rolling grassland and oak savanna. Adults spend most of the year in subterranean retreats such as rodent burrows, but may be found on the surface during dispersal to and from breeding sites. The preferred breeding sites are vernal pools and other temporary ponds. However, CTS may use permanent manmade ponds as breeding habitat. CTS adults begin migrating to ponds after the first heavy rains of fall and can be found in or around the breeding ponds during and after winter rainstorm events. In extremely dry years, CTS may not reproduce.

  After mating, females lay several small clusters of eggs, which contain from one to over 100 eggs. The eggs are deposited on both emergent and submerged vegetation, as well as submerged detritus. A minimum of 10 weeks is required to complete the aquatic phase of larval development through metamorphosis, at which time the larvae will normally weigh about 10 grams. Larvae remaining in pools for a longer time period can grow to much larger sizes. Upon metamorphosis, juvenile CTS migrate in large masses at night from the drying breeding sites to refuge sites. Prior to this migration, the juveniles spend anywhere from a few hours to a few days near the pond margin. Adult CTS are largely opportunistic feeders, preying upon arthropod and annelid species that occur in burrow systems, as well as aquatic invertebrates found within seasonal pools. The larvae feed on aquatic invertebrates and insects, showing a distinct preference for tadpole larvae of the Pacific tree frog.

  On August 4, 2004, the USFWS announced the listing of the CTS as threatened throughout its range with the exception of the Sonoma and Santa Barbara County populations which are listed as endangered. On March 3, 2010, the California Fish and Game Commission designated CTS as threatened under the California Endangered Species Act (CESA). On August 23, 2005, the USFWS designated 199,109 acres of critical habitat in 19 counties for the central California population of the CTS.

  CNDDB has listed 35 occurrences of CTS as occurring within the 5-mile vicinity of the property. The closest occurrence (# 536), from 2001, is located on the property while the second closest occurrence (#1094), from 2015, is located 248 feet east of the property. Suitable breeding habitat for CTS can be found within the seasonal ponds and wetlands found throughout the property. A review of aerial imagery showed that both Pond P2, located ½ mile north of the proposed home site, and Pond P4, located 0.7-mile east of the home site, both held water until June 2022, though they were both dry during the September 2022 survey. Additionally, ponds P1 and P5 could also potentially provide

breeding habitat. Upland refugial habitat is also present on the property with the presence of California ground squirrel and other small mammal burrows. Thus, the BRA determined that there is a potential for CTS to occur on the property and is presumed present.

- **Foothill Yellow-Legged Frog** (Proposed for Federal Threatened, State Endangered). At its December 2019 meeting in Sacramento, the California Fish and Game Commission made a listing decision under CESA regarding the foothill yellow-legged frog. Due to the level of genetic divergence, geographic isolation, and differing levels of imperilment between populations and threats within these populations, the California Department of Fish and Wildlife (CDFW) recommended separating the listing into different clades for the foothill yellow-legged frog. The Commission's decision was consistent with that recommendation. The Commission listed the Southern Sierra, Central Coast and South Coast clades as endangered under CESA, and the Feather River and Northern Sierra clades as threatened under CESA. The Commission also decided that listing the North Coast clade is not warranted at this time. The Commission is scheduled to adopt findings for the decision at its February 2020 meeting.

  The foothill yellow-legged frog (FHYF) is a small- to medium-sized frog; adults range from 1.5 to 3.2 inches. FHYF are typically gray, brown, olive, or reddish with brown-black flecking and mottling, which generally matches the substrate of the stream in which they reside. FHYF have a relatively squat body and granular skin, giving them a rough appearance similar to a toad, and fully webbed feet. FHYF inhabit rivers and streams ranging from primarily rain-fed (coastal populations) to primarily snow-influenced (most Sierra Nevada and Klamath-Cascade populations), from headwater streams to large rivers. Foothill yellow-legged frog habitat is generally characterized as partly-shaded, shallow, perennial rivers and streams with a low gradient and rocky substrate that is at least cobble-sized. However, the use of intermittent and ephemeral streams by post-metamorphic FHYF may not be all that uncommon in some parts of the species' range in California. The species has been reported from some atypical habitats as well, including small impoundments, isolated pools in intermittent streams, and meadows along the edge of streams that lack a rocky substrate.

  CNDDB has listed four occurrences of FHYF as occurring within the 5-mile vicinity of the property. The closest occurrence (# 2123) overlaps with the property; however, this occurrence is from 1953 and thus considered historical. The other three occurrences (#197, #1333, #1332) are not historical and occurred in 2019, 2016, and 2017 respectively. These occurrences were all located approximately 4-5 miles southeast of the property, within Alameda Creek. The intermittent drainages on site lack the rocky cobble bottoms and perennial waters that the FHYF generally prefers; however, the intermittent drainages are tributaries of Alameda Creek, which does contain rocky cobble bottoms, is perennial, and contains recorded occurrences of this species. Therefore, the FHYF could potentially use the drainages as dispersal habitat from Alameda Creek during the rainy season. Thus, there is a potential for this species to occur on the property.

Construction of the proposed land improvements have the potential to adversely affect sensitive amphibian species that may be present in the ponds and tributaries on the site, including CRLF, known to be present in Pond P5. The CRLF and CTS could also utilize the grassland as upland habitat; therefore, construction of the proposed home and ACU could also adversely affect these species. This would be a ***potentially significant impact***, which would be reduced to a less-than-significant level through implementation of the following mitigation measures:

Mitigation Measure BIO-7: A qualified biologist shall conduct protocol-level pre-construction surveys for California red-legged frog (CRLF), California tiger salamander (CTS), and foothill yellow-legged frog (FHYF) prior to ground-disturbing activities in any areas of the property located within 1.2 miles (the known dispersal distance for CTS) of suitable breeding habitat. The surveys shall be

conducted in accordance with the U.S. Fish and Wildlife Service's (USFWS) Interim Guidance document (USFWS, 2003). The surveys shall include a 100-foot buffer around the project disturbance area in all areas of wetland and upland habitat that could support CTS. The survey findings shall be submitted to the California Department of Fish and Wildlife (CDFW) for review. Acceptance of a negative finding for CTS requires protocol-level surveys to be conducted for two consecutive annual wet seasons, prior to any site disturbance.

The intermittent drainages, wetlands and wetland swales, and ponds may provide suitable habitat for these species while the grassland/woodland habitats could provide potential suitable upland habitat. A qualified biologist shall survey the project site for CRLF, CTS, and FHYF preceding the commencement of construction activities to verify absence/presence of the species. All ruts, holes, and burrows located within the dispersal distance for each species shall be inspected for these species prior to and during excavation or removal. The biological monitor shall precede initial grading equipment to look for and avoid amphibians that may be present on the property. If any amphibians are found during initial clearing and grubbing, a qualified biologist possessing a valid ESA Section 10(a)(1)(A) permit or USFWS-approved under an active biological opinion, may be required to move amphibians to nearby suitable habitat outside the fenced project site.

If aquatic habitat is present, a qualified biologist shall stake and flag an exclusion zone prior to initiation of construction activities in order to prevent the dispersal of amphibians into the grading and work areas. The exclusion zone shall be fenced with orange construction zone and erosion control fencing (to be installed by construction crew). The exclusion zone shall encompass the maximum practicable distance from the work site but shall be at least 500 feet from the wet or dry aquatic feature and at least 50 feet around any identified small mammal burrows or occupied breeding pools within and adjacent to the project disturbance footprint. Any impacts that could alter the hydrology or result in sedimentation of breeding pools shall be avoided. If avoidance is not feasible, consultation with CDFW is warranted to determine if the Project can avoid take. Barrier fencing shall be removed within 72 hours of the completion of construction activity.

The project biologist shall contact the USFWS and/or the CDFW to determine the typical dispersal distance for amphibian species determined to be present, based on the latest research on this distance for the pertinent species.

Fencing shall be trenched into the ground at a minimum of 6 inches and a lip should be formed along the top of the fence line. A Designated Biologist or Biological Monitor shall be onsite during initial ground-disturbing activities in order to inspect the work area and fence lines daily for special-status amphibians and other wildlife. Worker Environmental Awareness training discussing the potential for these species to be encountered shall be conducted by the Designated Biologist or Biological

Monitor for all construction personnel working within the project site. If any CRLF or other listed amphibians are found during construction activities, the U.S. Fish and Wildlife Service shall be consulted to approve capture and relocation by a Qualified Biologist.

Mitigation Measure BIO-8: Pre-construction surveys for California red-legged frog (CRLF) shall be conducted in accordance with U.S. Fish and Wildlife Service (USFWS) protocol, in compliance with the following schedule:

- Surveys Performed during the breeding season (October 1- June 30): USFWS recommends a total of up to eight surveys to determine the absence of CRLF at or a near a project site. Two day surveys and four night surveys would be required during the breeding season. If CRLF are identified at any time during the course of surveys, no additional surveys are needed.
- Surveys Performed during the non-breeding season (July 1- September 30): One day and one night survey would be required during the non-breeding season. At least one survey must be completed between January 1 and August 15. If CRLF are identified at any time during the course of surveys, no additional surveys are needed.

The main purpose of day surveys during breeding season are to look for larvae, metamorphs, and egg masses while the purpose for day surveys during non-breeding season are to look for sub-adult metamorphs and non-breeding adults. Day surveys should be conducted between one hour after sunrise and one hour before sunset. Night surveys are used to identify and locate adult and metamorphs and are to take place no earlier than one hour after sunset.

If any CRLF are encountered, they shall be relocated in consultation with the USFWS. If required by the USFWS, the applicant shall obtain an Incidental Take Permit from the USFWS, pursuant to Section 10 of the federal ESA.

Special-Status Reptiles

The BRA determined that two special-status amphibian species have the potential to occur on the ranch property. The Alameda whipsnake (*Masticophis lateralis euryxanthus*) was identified by the CNDDB as occurring in the vicinity of the property, and the BRA concluded that the site provides suitable habitat to support Alameda whipsnake and this species has a potential to occur on the property. Western pond turtle (*Emys marmorata*) was also determined to have a potential to occur on the property due to the perennial nature of the large Pond P1 habitat. These species are described below.

- **Alameda Whipsnake** (Federally Threatened, State Threatened). The Alameda whipsnake is one of two subspecies of the California whipsnake. It is distinguished from the chaparral whipsnake (*M. l. lateralis*) by the broad orange striping on its sides. Adults reach approximately 3 to 5 feet in length and show a sooty black to dark brown back, cream-colored undersides and pinkish tail. This species is typically found in chaparral, northern coastal sage scrub, and coastal sage habitats; however, annual grasslands, oak woodlands, and oak savanna embedded with exposed rock outcroppings serve as habitat during the breeding season. Egg-laying occurs near scrub habitat on ungrazed grasslands with scattered shrub

cover. The known distribution for Alameda whipsnake includes Sobrante Ridge, Oakland Hills, Mount Diablo, the Black Hills, and Wauhab Ridge.

Male and female snakes are active from April to November finding mates. During the breeding season from late March through mid-June, male snakes exhibit more movement throughout their home range, while female snakes remain sedentary from March until egg laying. Females lay a clutch of six to eleven eggs, usually in loose soil or under logs or rocks.

CNDDB listed six occurrences of the Alameda whipsnake within the vicinity of the property. The closest occurrence (# 183) is located approximately 1.38 miles northeast of the property. USFWS designated critical habitat (Unit 3) is located approximately 0.2 mile north of the property, as shown on Figure BIO-4. Large portions of the grassland habitat on of the property are ungrazed which is suitable for the Alameda whipsnake due to the cover the high vegetation height provides. Rock outcroppings are also present throughout the grasslands. Additionally, the intermixing of scrub, grassland, and oak woodland provides the mosaic habitat which the Alameda whipsnake characteristically prefers. The majority of the property is surrounded by open space and woodland habitat; thus, there are no major dispersal barriers separating the property from previous occurrences and/or critical habitat. For these reasons, Alameda whipsnake has a potential to occur on the property.

- **Western Pond Turtle** (California Species of Special Concern) is a thoroughly aquatic turtle that may be found in marshes, ponds, streams and irrigation ditches where aquatic vegetation is present. The turtles, which range from 9 to 10 inches in size, require basking sites and suitable upland habitat for egg laying. Suitable breeding upland habitats may consist of sandy banks or grassy open fields. The western pond turtle has a dark brown to olive-colored carapace with hexagonal scales that lack prominent markings.

  Nesting and incubation occur from April to September, with a peak time for mating and egg laying occurring from March to May. After a 73- to 80-day gestation or incubation period, five to thirteen eggs will be laid from July to October. Eggs are produced either once or twice a year. Females may travel some distance from water for egg-laying, moving as much as 0.8 kilometers (½ mile) away from and up to 90 meters (300 feet) above the nearest source of water. Most nests are with 90 meters 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. The nest is flask-shaped with an opening of about 5 centimeters (2 inches). Females spend considerable time covering up the nest with soil and adjacent low vegetation, making it difficult for a person to find unless it has been disturbed by a predator.

  Activity slows from November to February. During the winter when water and air temperatures cool, usually from September to March, the turtles begin to hibernate. During hibernation, turtles either bury themselves in the mud at the bottom of ponds or will bury themselves on land in duff (top layer of decomposing vegetation and soil). Some turtles travel more than ½ mile to over-winter on land, though many select the nearest wooded or shrubby area they can bury in. Turtles then emerge from hibernation in the spring to start the yearly cycle again.

  The CNDDB listed nine occurrences of the western pond turtle within the 5-mile vicinity of the property. The closest occurrence (# 1222) is located approximately 0.5 miles east of the property. Pond habitat throughout the property offers potentially suitable habitat for the species; specifically, Pond P1, which is perennial, and surrounded by grassy banks. Additionally, the intermittent drainage, which is a tributary of Alameda Creek, present throughout the property could also provide suitable habitat during the rainy season. Therefore, western pond turtle has a potential to occur on the property.

Project construction activities could harm or kill Alameda whipsnakes and/or western pond turtles that may utilize the site, which would be a ***potentially significant impact***. Implementation of the following mitigation measure would reduce the impact to a less-than-significant level:

Mitigation Measure BIO-9: A pre-construction survey of the project site for the potential presence of Alameda whipsnake and western pond turtle shall be conducted by a qualified wildlife biologist no more than 48 hours prior to commencement of ground disturbance or vegetation removal. If any whipsnakes or pond turtles are identified, the biologist shall develop appropriate mitigation to protect the species and compensate for lost habitat, if applicable. The mitigation shall be determined in consultation with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) and implemented to the satisfaction of those agencies. Incidental take permits shall be obtained from these agencies prior to the County issuing a grading permit or any ground-disturbing activities. Worker Environmental Awareness training discussing the potential for these species to be encountered shall be conducted by the Designated Biologist or Biological Monitor for all construction personnel working within the project site.

At a minimum, the mitigation for impacts to Alameda whipsnake and/or western pond turtle shall include the following measures to be implemented during project construction:

- Barrier fencing as stipulated in Mitigation Measure BIO-7 shall be used to exclude focal reptiles. Barrier fencing shall be removed within 72 hours of completion of work. No monofilament plastic shall be used for erosion control.
- Construction crews or the on-site Biological Monitor shall inspect open trenches in the morning and evening for trapped reptiles.
- Ground disturbance within suitable whipsnake or pond turtle habitat shall be minimized. A USFWS- and CDFW-approved Biological Monitor shall be present to monitor all ground-disturbing activities within suitable whipsnake or pond turtle habitat.
- A qualified biologist possessing a valid ESA Section 10(a)(1)(A) permit or Service approved under an active biological opinion, and approved by CDFG will be contracted to trap and to move reptiles to nearby suitable habitat if listed reptiles are found inside fenced area.

Special-Status Invertebrates

The Biological Resources Assessment performed by Olberding Environmental determined that special-status invertebrates, including crotch bumble bee (*Bombus crotchii*) and western bumble bee (*Bombus occidentalis*), are not likely to occur on the project property. The property contains very little of the required food plants for these species, and all nearby CNDDB occurrences of these species are historic. Nonetheless, per a request from CDFW, the possibility of special-status bumble bees being present on the site cannot be ruled out. Were they to be present, project construction activities could potentially destroy nests and/or individual bees, which

would be considered by CDFW to be a ***potentially significant impact***. Implementation of the following mitigation measure would reduce the impact to a less-than-significant level:

Mitigation Measure BIO-10: A pre-construction habitat assessment evaluating the likelihood of the Crotch's bumble bee or other special-status bumble bee occurring within and adjacent to the project area shall be performed by a qualified biologist prior to the County issuing a grading permit or any ground-disturbing activities and results shall be submitted to CDFW prior to initiation of ground-disturbing project activities. The assessment shall include historical and current species occurrences, data from site visits on potential foraging, nesting, and/or overwintering resources, and blooming plant species present and their percent cover. These resources shall be quantified across multiple site visits, corresponding with the Colony Active Season for Crotch's bumble bee (April – August). If it is determined that there is potential for the species to occur, then on-site surveys shall be performed prior to initiation of ground-disturbing project activities.

If on-site surveys are required as a result of the habitat assessment, at least three on-site surveys shall be performed and the survey results shall be submitted to CDFW prior to initiation of ground-disturbing project activities. Each survey shall be spaced two to four weeks apart, corresponding with the Colony Active Season for Crotch's bumble bee (April – August). The survey shall be performed in accordance with the method of non-lethal photo vouchers of captured bumble bees outlined in CDFW's *Survey Considerations for CESA Candidate Bumble Bee Species* (CDFW 2023). This survey methodology will require receiving a 2081(a) Memorandum of Understanding (MOU) with CDFW.

If no Crotch's bumble bee has been detected during the multiple rounds of focused surveys, but the habitat assessment identified suitable nesting, foraging, or overwintering habitat within the project site, a qualified biological monitor shall be present onsite to observe work during vegetation or ground disturbing activities that take place during any of the Queen and Gyne Flight Period and Colony Active Period for the species (February – October). If the biological monitor identifies potential impacts to Crotch's bumble bee or other special-status bumble bees, work shall be halted until appropriate protections identified by the biological monitor can be implemented to the satisfaction of the biological monitor.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒

Explanation: One of the intermittent drainages present in the western portion of the property supports willow riparian habitat. Within this habitat there are a variety of willow species, including arroyo willow (*Salix lasiolepis*). Understory plants observed include pennyroyal (*Mentha pulegium*) and floating primrose willow (*Ludwigia peploides*). The BRA did not identify any potential impacts to riparian habitat. There would be ***no impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐

Explanation: The federal government, acting through the U.S. Army Corps of Engineers (ACOE, or Corps) and the Environmental Protection Agency (EPA), has jurisdiction over all "waters of the United States" as authorized by Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act of 1899 (33 CFR Parts 320-330). Properties that cause the discharge of dredged or fill material into waters of the United States require permitting by the Corps. Actions affecting small areas of jurisdictional waters of the United States may qualify for a Nationwide Permit (NWP), provided conditions of the permit are met, such as avoiding impacts to threatened or endangered species or to important cultural sites. Properties that affect larger areas or which do not meet the conditions of an NWP require an Individual Permit. The process for obtaining an Individual Permit requires a detailed alternatives analysis and development of a comprehensive mitigation/monitoring plan.

Waters of the United States are defined as territorial seas and traditionally navigable waters, tributaries, lakes and ponds, and impoundments of jurisdictional waters, and adjacent wetlands. Under federal regulation, wetlands are defined as areas that are inundated or saturated by surface of groundwater at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. (33 CFR Part 328.3(c)(16)). Wetlands generally include swamps, marshes, bogs, and similar areas. In addition, portions of the riparian habitat along a river or stream may be a wetland where the riparian vegetation is at or below the ordinary high water mark and thus also meets the wetland hydrology and hydric soil criteria.

Navigable waters include all waters subject to the ebb and flow of the tides, including the open ocean, tidal bays, and tidal sloughs. Navigable waters also include some large, non-tidal rivers and lakes, which are important for transportation in commerce. The jurisdictional limit over navigable waters extends laterally to the entire water surface and bed of the waterbody landward to the limits of the mean high tide line. For non-tidal rivers or lakes, which have been designated (by the Corps) to be navigable waters, the limit of jurisdiction along the shoreline is defined by the ordinary high water mark. "Other waters" refer to waters of the United States other than wetlands or navigable waters. Other waters include streams and ponds, which are generally open water bodies and are not vegetated. Other waters can be perennial or intermittent water bodies and waterways. The ACOE regulates other waters to the outward limit of the ordinary high water mark. Streams should exhibit a defined channel, bed, and banks to be delineated as other waters.

The ACOE does not generally consider "non-tidal drainage and irrigation ditches excavated on dry land" to be jurisdictional waters of the United States (and such ditches would therefore not be regulated by the ACOE (33 CFR Parts 320-330, November 13, 1986). Other areas generally not considered jurisdictional waters include: 1) artificially irrigated areas that would revert to upland habitat if the irrigation ceased; 2) artificial lakes and ponds created by excavating and/or diking of dry land to collect and retain water, used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing; 3) waste treatment ponds; 4) ponds formed by construction activities including borrow pits until abandoned; and 5) ponds created for aesthetic reasons such as reflecting or ornamental ponds (33 CFR Part 328.3). However, the preamble also states "the Corps reserves the right on a case-by-case basis to determine that a particular waterbody within these categories" can be regulated as jurisdictional water. The EPA also has authority to determine jurisdictional waters of the U.S. on a case-by-case basis. Riparian habitat that is above the ordinary high water mark and does not meet the three-parameter criteria for a wetland would not be regulated as jurisdictional waters of the United States.

The RWQCB also regulates activities in wetlands and other waters through Section 401 of the Clean Water Act. Section 401 requires a State water quality certification for properties subject to Section 404 regulations. Requirements of the certification include mitigation for loss of wetland habitat. In the San Francisco Bay region, the Regional Water Quality Control Board (RWQCB) may identify additional wetland mitigation beyond the mitigation required by the Corps. California Fish and Game Code Sections 1600-1607 require the CDFW be notified of any activity that could affect the bank or bed of any stream that has value to fish and wildlife. Upon notification, the CDFW has the discretion to execute a Streambed Alteration Agreement. The CDFW defines a stream as follows:

> *"... a body of water that flows at least periodically...through a bed or channel having banks and supporting fish and other aquatic life. This includes watercourses having a subsurface flow that supports or has supported riparian vegetation."*
> (Source: Streambed Alteration Program, California Department of Fish and Wildlife, 2016).

In practice, CDFW authority is extended to any "blue line" stream shown on a U.S. Geological Survey (USGS) topographic map, as well as unmapped channels with a definable bank and bed. Wetlands, as defined by the Corps, need not be present for CDFW to exert authority.

Multiple seasonal wetlands and seasonal wetland swales are present throughout the ranch property, as shown on Figure BIO-1. Approximately 7,923 linear feet of intermittent drainage feature flows throughout the central, western, and along the southern and eastern boundaries of the ranch property. The largest of these features, located in the central and southeastern portions of the property, flow through oak woodland habitat and are largely devoid of an herbaceous ground layer. No surface water was present in these drainages during the September 2022 biological survey. The western intermittent drainage flows into the willow riparian located along the western boundary of the perennial pond (P1), after gradually transitioning from a wetland swale. This feature has a well-developed herbaceous component of hydrophytic herbs and graminoids (i.e., grasses

and grass-like plants) including shortspike canarygrass (*Phalaris brachystachys*), curly dock (*Rumex crispus*), tall flatsedge (*Cyperus eragrostis*), pennyroyal (*Mentha pulegium*), hard-stem bulrush (*Schoenoplectus acutus*), Baltic rush (*Juncus balticus* ssp. *ater*), poison hemlock (*Conium maculatum*), dallisgrass (*Paspalum dilatatum*), tule (*Schoenoplectus acutus* var. *occidentalis*), saltgrass (*Distichlis spicata*), and redroot amaranth (*Amaranthus retroflexus*). A coast live oak is present on the bank at the point of transition from wetland swale to intermittent drainage.

Additional intermittent drainage features that are tributaries of Alameda Creek flow through woodland components in the central portion of the ranch property and along the eastern and southern boundaries. The majority of these features originate on the fairly steep hillslopes and convey runoff into the various intermittent drainages, all contributing to the greater Alameda Creek watershed. While a number of the ephemeral drainages were vegetated primarily with grasses, a few also contained scattered shrub species such as coyote brush (*Baccharis pilularis*) and tree species including small coast live oak saplings. An ephemeral drainage also exists along the western boundary near the entrance to the property. This drainage flows from a culvert located on the north side of Morrison Canyon Road onto the property and then continues under the paved access road located throughout the developed habitat. The drainage eventually flows into the willow riparian habitat via a man-made culvert.

Multiple seasonal wetlands and seasonal wetland swales are present throughout the property. The most vegetated wetland swale (WS6) occurs in the western portion of the property. This swale originates along the western-central boundary and appears to receive tail water discharges associated with agricultural runoff. The swale continues southeast, flowing under the paved access road that connects the developed portion of the property, via a manmade culvert. The swale then continues on the eastern side of the road, eventually transitioning into an intermittent drainage (ID3) that flows into the willow riparian habitat located at the western end of Pond P5. Vegetation observed in the wetland swale consisted of shortspike canarygrass, tall flatsedge, and Himalayan blackberry (*Rubus armeniacus*).

Seasonal wetland features are also present in the northern portions of the project property. A seasonal wetland feature (WS2) lies immediately adjacent to Pond P1. Vegetation observed within this feature consisted of spiny cocklebur (*Xanthium spinosum*), clover sp. (*Trifolium* sp.), and hyssop loosestrife (*Lythrum hyssopfolia*). Vegetation observed in this wetland feature consisted of turkey mullein (*Croton setiger*) and various species of annual grasses. An additional swale feature (WS1) occurs just north of WS2. Five seasonal wetland features are also present at the north-central boundary of the property. The first of these wetland features (SW1) exists west of ephemeral drainage 5 (ED5), while the second (SW2) occurs at the base of two converging ephemeral drainages (ED6-ED7). The third, fourth, and fifth seasonal wetland features (SW3-SW5) are present within these ephemeral drainages (ED6-ED7). Vegetation observed within these features included turkey mullein and bull thistle (*Cirsium vulgare*), Baltic rush, spiny cocklebur, creeping wild rye (*Elymus triticoides*), blue-eyed grass (*Sisyrinchium bellum*), and curly dock. An additional Y-shaped feature (SW-6) is located in the central portion of the property.

The seasonal wetland/wetland swales offer potentially suitable foraging habitat for a variety of avian and amphibian species similar to those that may be observed within the pond habitat. Special-status amphibian species such as CRLF and CTS could utilize this habitat for dispersal, foraging, and potential breeding habitat. Avian special-status species such as the tri-colored blackbird could also utilize the wetland habitat for foraging. Species observed utilizing the blackberry bramble within the wetland swales as cover included California quail (*Callipepla californica*) and house finch (*Haemorhous mexicanus*).

Jurisdictional wetlands and waters potentially regulated under the authority of the Corps, RWQCB, and CDFW are present on the project property. Fill of these regulated features may require authorization under Sections 404 and 401 of the Clean Water Act (CWA) and authorization under Section 1600 of the Fish and Wildlife Code. Any discharge into or loss of wetland habitat on the site would be ***a potentially significant impact***.

Implementation of the following measures would reduce the impact to less than significant. Implementation of Mitigation Measure BIO-10 would not be required if no impacts to jurisdictional would occur.

A jurisdictional wetland delineation was previously prepared by Olberding Environmental that was verified by the Corps on November 15, 2023. The delineation confirms the actual extent of jurisdictional features on the site. Although construction activity is not currently anticipated to result in impacts to wetlands/waters, were any construction activities to occur that could impact these features, permits would be required prior to construction. Setbacks from the wetlands/water features could be required to protect habitat quality and to protect water quality. Permitting to allow impacts to wetlands/waters features may also require mitigation.

Mitigation Measure BIO-11: Prior to the County issuing a grading permit or any ground-disturbing activities, the project sponsor shall retain the services of a qualified biologist to implement the following measures:

a) A formal wetland delineation shall be prepared and submitted to the U.S. Army Corps of Engineers (ACOE) for a jurisdictional determination. If it is determined by the ACOE that intermittent drainages or seasonal wetland/wetland swales on site are regulated under the Clean Water Act, the project sponsor shall implement Mitigation Measure BIO-10(b), below. Whether or not it is determined that wetlands on site are not regulated under the Clean Water Act, the project sponsor shall implement Mitigation Measure BIO-10(c).

b) Prior to the placement of fill into regulated wetlands or drainages, the project sponsor shall obtain permits under Sections 401 and 404 of the Clean Water Act. These permits, administered by the San Francisco Bay Regional Water Quality Control Board (RWQCB) and ACOE, respectively, would identify specific mitigation measures that would be imposed on the project as permit conditions. At a minimum, the project sponsor shall implement Mitigation Measure BIO-10(d) or BIO-10(e).

c) If project construction activities would divert or obstruct the natural flow of any river, stream, or lake; change the bed, channel, or bank of any river, stream, or lake; use material from any river, stream, or lake; or deposit or dispose of material into any river, stream, or lake (none of these activities are currently anticipated), the applicant shall also apply for and obtain a Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW) pursuant to California Fish and Game Code Section 1602 prior to initiating project construction. Any impacts to State or federal jurisdictional features shall be mitigated at a 2:1 replacement ratio.

d) In order to determine the presence or absence of waters of the State subject to the jurisdiction of State regulatory agencies, a description of existing habitats on site shall be submitted to the California Department of Fish and Wildlife (CDFW) and RWQCB for review. If waters of State are determined to fall under one or both of these agencies, the project sponsor shall obtain the appropriate permits. These permits would identify specific

mitigation measures that would be imposed on the project as permit conditions. At a minimum, the project sponsor shall implement Mitigation Measure BIO-10(d) or BIO-10(e).

e) As part of the permitting process, the project sponsor shall comply with all permit conditions of the regulatory agencies, including the implementation of an appropriate compensatory mitigation plan for unavoidable impacts to wetlands. At the discretion of the regulatory agencies, the project sponsor may seek a public or private entity in control of lands at a suitable off–site location with planned habitat restoration measures, to which an in-lieu-of of fee could be paid. The recipient may be either an approved mitigation bank or public or private entity undertaking habitat restoration measures. The type of restoration project and amount of the in-lieu-of fee would be determined in consultation with the regulatory agencies with the ultimate objective of satisfying agency concerns and permit conditions. If payment of in-lieu-of fees is not acceptable to one or more of the regulatory agencies or a suitable recipient cannot be found, the project sponsor shall implement on–site wetland mitigation, as outlined in Mitigation Measure BIO-10(e).

f) A Wetland Mitigation and Monitoring Plan shall be prepared and submitted for agency review. Detailed wetland protection, replacement, and restoration plans shall be prepared by a qualified wetland restorationist paid for by the project sponsor. The plans shall accurately identify the total wetlands and other jurisdictional areas that could be affected by the proposed project. The plans shall provide for re-establishment, enhancement, and/or replacement of wetland habitat and vegetation, and be approved by the regulatory agencies; in certain instances, cash contributions earmarked specifically for wetland creation, enhancement, or restoration offsite may be deemed appropriate and acceptable to the regulatory agencies. Mitigation plantings shall be monitored for no less than five years following completion of plant installation or as otherwise specified in the permit conditions. Annual reports shall be submitted to the Alameda County Planning Department and each permitting agency, e.g., ACOE, RWQCB, and/or CDFW. Additionally, the Alameda County Planning Department shall ensure that all mitigation areas, along with an appropriate upland buffer, be placed in a permanent conservation easement, or similar deed restriction, and preserved in perpetuity, as specified in the permit conditions. Prior to the issuance of grading permits by the County, the project sponsor shall provide evidence of the required approvals from all regulatory agencies.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with any established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒

Explanation: The BRA for the project site did not identify any migratory corridor for wildlife or wildlife nursery sites on the project site. There is no fish habitat on the site, so there is no potential for the project to interfere with migratory fish. While the site may be utilized for foraging by birds and other wildlife species, there is no evidence the site functions as a significant migration corridor. This would be ***no impact*** to migratory fish or other wildlife.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒

Explanation: While Alameda County regulates the removal of trees from a public right-of-way, it does not regulate removal of trees from private properties. The project would have ***no impact*** on policies related to protection of biological resources.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Explanation: There are no habitat conservation plans applicable to the project site. There would be ***no impact***.

V. CULTURAL RESOURCES — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☒	☐	☐

Explanation: In order to be considered a significant historical resource as defined in Section 15064.5 of the *CEQA Guidelines*, a building must be at least 50 years old. In addition, Section 15064.5 defines an historical resource as, "… a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources," properties included in a local register of historical resources, or properties deemed significant pursuant to criteria set forth in *Public Resources Code* Section 5024.1(g). According to *CEQA Guidelines* Section 15064.5(a)(3), a lead agency can determine that a resource is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided that the determination is supported by substantial evidence in light of the whole record.

In order to be eligible for listing in the California Register of Historical Resources (CRHR), a property must meet at least one of the following criteria:

- Criterion 1: Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Criterion 2: Is associated with the lives of persons important in our past;
- Criterion 3: Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Criterion 4: Has yielded, or may be likely to yield, information important in prehistory or history.[11]

In addition, to be eligible for the California Register, the resource must retain enough of its historic integrity to be recognizable as an historical resource, and typically must be at least 50 years old. Following the National Register of Historic Places integrity criteria, California Register regulations specify that integrity is a quality that applies to historic resources in seven ways: location, design, setting, materials, workmanship, feeling, and association.[12]

A Cultural Resources Assessment of the property was performed by the archaeological consulting firm of Peak & Associates in July 2023, which included archival research and a pedestrian survey within the Area of Potential Effect (APE), the general area where project construction activities would occur.[13] With respect to historic resources (prehistoric resources are addressed separately below), the archival research identified a 2014 study

[11] California Resources Agency, *CEQA Guidelines*, Section 15064.5(a)(3), as amended December 28, 2018.

[12] The definition of integrity under the California Register follows National Register of Historic Places criteria. Detailed definitions of the qualities of historic integrity are in National Register Bulletin 15, *How to Apply National Register Criteria for Evaluation*, published by the National Park Service.

[13] Park & Associates, Inc., *Cultural Resources Assessment for the George Property Project, Alameda County, California* (Job #23-012), July 12, 2023.

by Shoup and Hill that evaluated and recorded the George property historic complex P-01-011613 and filed document S-045683 on the historic complex with the Northwest Information Center (NWIC) at Sonoma State University, which is part of the California Historical Resources Information Center (CHRIS).

Peak & Associates found no evidence of historic or prehistoric cultural resources during its pedestrian survey of the project site within the APE, and concluded that it is unlikely that historic resources are present in the APE. However, the two residential structures proposed for demolition will be subject to a separate historical evaluation by the Alameda County Planning Department prior to issuance of a demolition permit They recommended that if any artifacts are encountered during project construction that work should be halted in the area until a qualified archaeologist can examine the find and make recommendations for further measures. This recommendation has been incorporated in the mitigation requirements set forth in the next subsection.

While no historic resources have been identified within the project area, the possibility for such resources to exist cannot be ruled out. Were such resources to be present, ground-disturbing activities during project construction could damage or destroy the resource(s), which would be a ***potentially significant impact***. Implementation of Mitigation Measure CUL-1, set forth in the next subsection, would ensure that impacts to historic resources would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐

Explanation: The San Francisco Bay area was occupied by Native Americans as far back as 3,000 to 4,000 years ago. Recorded archaeological sites in Alameda and the surrounding region indicate that at the time of initial Euroamerican incursion into the project area (circa 1770), the region was occupied by Native Americans who spoke Chochenyo. These people were a subset of the Penutian-speaking Ohlone (referred to as "Costanoans" by the Spanish) residing in northern California at the time the Spanish arrived in the region. The Ohlone territory encompassed much of the San Francisco Bay area and extended eastward to the Central Valley and southward through Monterey Bay. Previously undiscovered Native American resources are often encountered on the Bay margins and in proximity to historic water sources, among other places.

According to ethnographic research, the tribal group who lived in the vicinity of the project site at the time of contact with European settlers were the Tuibun and Alson tribelets of the Ohlone. The Ohlone tended to situate their permanent villages on high ground above seasonal marshes that were inundated by highwater for a few months of the year. Access to fresh drinking water was a criterion for selecting a village location. They also established seasonal camps as they pursued seasonal subsistence activities, gathering plant and animal foods and materials for making baskets and other goods. The Ohlone hunted large mammals such as black-tailed deer, elk, antelope, grizzly bear, mountain lion, sea lion, and whale. They also consumed smaller animals, including dog, wildcat, skunk, raccoon, brush rabbit, cottontail, jackrabbit, tree squirrel, ground squirrel, woodrat, mouse, and mole. The types of fowl they ate included the Canadian goose, snow goose, pintail mallard, and the mourning dove. Acorns comprised an important part of the Ohlone diet, which also included, buckeye seeds and berries including blackberries, strawberries, and wild grapes among others.

Spanish incursion into the region beginning in 1767 progressively eroded the Ohlone way of life through conversion to Catholocism (often coerced), cultural genocide, and warfare. Archival literature indicates that Ohlone tribelets living an aboriginal existence had disappeared by 1810, and that by 1832 the Ohlone

population had decreased to one-fifth or less than its pre-contact size. After the Mexican government secularized the missions (between 1834 and 1836), some Ohlone people returned to traditional religious and subsistence practices while others worked on Mexican ranchos. Former mission residents formed multi-tribal Indian communities in Pleasanton and other locations within Ohlone territory.

As noted in the previous subsection, Peak & Associates conducted a Cultural Resources Assessment of the project site in July 2023, which included a search of archival records at the Northwest Information Center (NWIC) at Sonoma State University to identify previous archaeological investigations of the project area and any previously-recorded archaeological resources in the area. Although no relevant reports or resource records were found in the NWIC archives, the project applicant provided the investigators a prior survey report prepared in 2011 by Archaeor that covered the entire ranch property; this report was never filed with the NWIC. Archaeor documented six prehistoric sites on the ranch property, but none of them were within or in close proximity to the proposed project area. As discussed further in Section XVIII, no Sacred Lands in the project vicinity are on file with the Native American Heritage Commission. Peak & Associates also conducted an intensive and systematic ground survey of the project area and did not identify any cultural resources within the APE.

Based on the results of their archival research and systematic reconnaissance of the project area, Peak & Associates found no evidence of prehistoric or historic cultural resources, and concluded that it is unlikely that such resources exist within the proposed project area. Nonetheless, the possibility that significant cultural resources exist on the site cannot be completely ruled out. Were such resources to be present, excavation or other surface/subsurface disturbance undertaken during the development of the project could damage or destroy the resources, which could result in a ***significant, adverse impact*** on archaeological resources. Implementation of the following standard CEQA mitigation measure, required by Section 15064.5 of the *CEQA Guidelines*, would reduce the potential impact to a less-than-significant level:

Mitigation Measure CUL-1: In the event that any cultural resources are encountered during site grading or other ground-disturbing project construction activities, all ground disturbance within 100 feet of the find shall be halted until a qualified archaeologist can evaluate the resource(s) and, if necessary, recommend mitigation measures to document and prevent any significant adverse effects on the resource(s). (Construction personnel shall not collect any cultural resources.) Any further mitigation measures recommended by the archaeologist shall be implemented and construction shall not resume in the vicinity of the find until the archaeologist has authorized the resumption of work. The results of any additional archaeological effort required through the implementation of this measure and/or Mitigation Measure CUL-2 shall be presented in a professional-quality report, to be submitted to the Alameda County Planning Department and the Northwest Information Center at Sonoma State University in Rohnert Park.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Explanation: Similar to the potential to encounter cultural artifacts described in the preceding subsection, there is a possibility—however remote—that human remains associated with the possible prehistoric occupation of the site by Native Americans could exist within the subsurface of the site. Such remains are considered sacred by Native Americans tribal groups, and their disturbance or destruction during site grading or other project construction activities would be a ***potentially significant impact***. Implementation of the following mitigation measure would reduce the potential impact to less than significant with mitigation.

Mitigation Measure CUL-2: In the event that any human remains are encountered during site disturbance, all ground-disturbing work shall cease immediately and a qualified archaeologist shall notify the Office of the Alameda County Coroner and advise that office as to whether the remains are likely to be prehistoric or historic period in date. If determined to be prehistoric, the Coroner's Office will notify the Native American Heritage Commission of the find, which, in turn, will then appoint a "Most Likely Descendant" (MLD). The MLD in consultation with the archaeological consultant and the County, will advise and help formulate an appropriate plan for treatment of the remains, which might include recordation, removal, and scientific study of the remains and any associated artifacts. After completion of analysis and preparation of the report of findings, the remains and associated grave goods shall be returned to the MLD for reburial.

VI. ENERGY — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	☐	☐	☒	☐

Explanation: Construction of the proposed project would require consumption of gasoline and diesel fuel by construction workers travelling to and from the site, by trucks delivering construction materials and supplies to the site, and by earthmoving, paving, and other construction equipment. There would be negligible energy expenditures associated with the land improvements once construction is completed, limited to minor amounts of energy that would be used for periodic maintenance activities. Once construction of the proposed home and ACU is completed, gasoline and diesel fuel would continue to be consumed by residents, visitors, delivery and repair vehicles, and service providers traveling to and from the site. Electricity and natural gas

would be consumed for space and water heating and landscape maintenance (i.e., electricity to control irrigation equipment, if installed), as well as the operation of household appliances and amenities that the residents might use, such as hot tubs or electric vehicle charging.

During construction of the project, the building contractor would be required to comply with the County's Construction and Demolition (C&D) Debris Management Ordinance codified in Chapter 15.08.190 of the County Code, which mandates recycling or diversion from landfill disposal of 75 percent of inert solids, 65 percent of all other construction waste, and, for non-residential projects, 100 percent of soil and land-clearing debris. Inert solids include asphalt, concrete, rock, stone, brick, sand, soil and fines.

The ordinance applies to: a) any project requiring a demolition permit; b) all residential construction including new construction, additions, alterations, or repairs where the area of work exceeds 1,000 square feet; and c) all non-residential construction including, new construction, additions, alterations, or repairs where the area of work exceeds 3,000 square feet. The applicant will be required to prepare and implement a Debris Management Plan, subject to approval by the County, that tracks the amount of C&D debris reused, recycled, disposed of, and diverted throughout the construction period. Compliance with the ordinance would help reduce consumption of energy associated with transport, processing, and disposal of solid waste at landfills.

Once the project is completed and occupied, the County won't have direct control over how residents consume energy, but inefficient use of energy would be minimized through compliance with applicable provisions of the California Green Building Standards Code, codified in Title 24 of the California Code of Regulations (CCR), and with general building energy efficiency standards, also part of Title 24, which require energy-efficient ceiling and rafter roof insulation, walls, floors, windows, doors, luminaires, heating and cooling systems, appliances, water heaters, and pool and spa systems.

Part 6 of Title 24 also sets energy and/or water efficiency standards for home appliances, including refrigerators, freezers, dishwashers, clothes washers and dryers, stoves, room and central air conditioners, space heaters, water heaters, pool heaters, plumbing fixtures, incandescent and fluorescent lamps, emergency lighting, luminaires, computers, televisions, audio and video equipment, battery charger systems, and more. There are also federal regulations pertaining to appliance efficiency, and in many cases, the California standards are the same as the federal standards. It should be noted that water efficiency contributes to energy efficiency by reducing energy requirements for treating and pumping domestic water.

Compliance with these required regulations would ensure that construction and operation of the proposed home would not result in wasteful, inefficient, or unnecessary consumption of energy resources. The project would have a ***less-than-significant impact*** on energy resources.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Explanation: Statewide, the *Integrated Energy Policy Report* prepared by the California Energy Commission provides a blueprint for continuing to grow the California economy while reducing the environmental footprint of its energy system.[14] The State's energy system includes energy extraction, transport, conversion (such as

[14] California Energy Commission, *2023 Integrated Energy Policy Report*, February 2024.

combusting natural gas in power plants to generate electricity or producing gasoline and diesel from crude oil in refineries), and consumption for services (such as electricity for lighting, natural gas use in homes and buildings for space and water heating, pumping water to communities and crops, and gasoline and diesel to fuel cars and trucks), as well as electricity from out-of-State plants serving California.

California's electricity generation capacity is composed of multiple fuel sources, including coal, hydroelectric, natural gas, nuclear, oil, petroleum coke, waste heat, biomass, geothermal, solar photovoltaic, solar thermal, and wind. In 2023, the State had an installed generation capacity from these multiple sources of 215,625 gigawatt hours (GWh).[15] The composition of California's in-State generation capacity has shifted since the 2002 passage of Senate Bill 1078, which required that 20 percent of electric production come from renewable resources by 2017. With the passage of SB X1-2 in 2011, this was increased to 33 percent renewables by 2020; it was raised again to 50 percent renewables by December 31, 2030 by SB 350, passed in 2015.

Because energy consumption is directly tied to the emissions of GHGs, and in fact, is the source of 80 percent of GHG emissions in the State,[16] Alameda County's Community Climate Action Plan (CCAP), intended to reduce emissions of GHGs, can be viewed as a local plan for energy efficiency, and in fact it contains GHG reduction measures specifically pertaining to building and energy efficiency as well as measures to conserve water. (As noted above, water conservation has a beneficial effect on energy consumption.) As discussed in more detail in Section VIII-b, below, the project would not conflict with the County's CCAP, and therefore would not conflict with a local plan for energy efficiency.

Because the CEC's *Integrated Energy Policy Report* is intended to reduce GHG emissions by transitioning the State's energy portfolio to more renewable energy sources, it can also be viewed as a plan for renewable energy and energy efficiency on the Statewide level. As discussed in Section VI-a, above, the proposed project would be required to comply with a variety of building and appliance energy efficiency standards, which would maximize its energy efficiency. Therefore, the project would not conflict with a State plan for energy efficiency.

[15] California Energy Commission, *California Energy Almanac*, Electric Generation Capacity & Energy, In-State Electric Generation by Fuel Type, Accessed June 29, 2024 at: http://www.energy.ca.gov/almanac/ electricity_data/electric_generation_capacity.html.

[16] California Energy Commission, *2016 IEPR Update: Integrated Energy Policy Report*, Publication No. CEC-100-2016-003-CMF, Chapter 1: Environmental Performance of the Electricity Generation System, 2016.

VII. GEOLOGY AND SOILS — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒

Explanation: Although the Hayward fault is located about 2.6 miles northwest of the project site and the Northern Calaveras fault is located about 2.5 miles northeast of the site, the site lies well outside the Alquist-Priolo fault zones that flank these faults.[17] No seismically active fault crosses the project site or in proximity to the site. Therefore, there is no risk for ground rupture at the site from a major seismic event.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
ii) Strong seismic ground shaking?	☐	☐	☒	☐

Explanation: Similar to most locations throughout the San Francisco Bay Area, the project site is potentially subject to strong seismic ground shaking during an earthquake on one of the major active earthquake faults that transect the region. The Association of Bay Area Governments (ABAG) indicates that the project site is in a region that could be exposed seismic shaking with a Modified Mercalli Intensity (MMI) of 7 (Very Strong).[18]

Major earthquakes in the region have occurred on the Hayward, Calaveras, and San Andreas faults during the past 200 years, and numerous minor earthquakes occur along these faults every year. At least five known earthquakes of Richter magnitude (RM) 6.5, four of them greater than RM 7.0, have occurred within the San Francisco Bay Area within the last 150 years. This includes the great 1908 San Francisco earthquake (moment magnitude 7.8) and the 1989 Loma Prieta earthquake (RM 6.9).

[17] Wayne Ting & Associates, Inc., *Geotechnical Investigation, Proposed Primary Residence Dwelling Unit with a Basement, Swimming Pool, and Detached Garage, 3163 Morrison Canyon Road, Fremont, California*, Project No. 6336, February 3, 2023.

[18] Association of Bay Area Governments, MTC/ABAG Hazard Viewer Map, Probabilistic Earthquake Shaking Hazard, accessed June 29, 2024 at: https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd 086fc8.

According to a 2014 analysis by the Working Group on California Earthquake Probabilities (WGCEP), an expert panel co-chaired by U.S. Geological Society seismologists, there is a 72 percent probability that an earthquake of magnitude 6.7 or greater will occur in the San Francisco Bay Area in the next 30 years and a 20 percent probability that an RM 7.5 earthquake will occur (starting from 2014).[19] The WGCEP estimates there is a 14.3-percent chance of an RM 6.7 quake occurring on the Hayward fault in the next 30 years. It is therefore likely that a major earthquake will be experienced in the region during the life of the project that could produce strong seismic ground shaking at the project site.

Given the magnitude of seismic ground shaking and related peak ground acceleration that could be experienced at the site, there is potential for a strong seismic event in the region to result in severe damage or even structural failure of the proposed home, with potential to severely injure or kill building occupants. However, in accordance with recent CEQA case law (e.g., *California Building Industry Association v. Bay Area Air Quality Management District* (Aug.12, 2016) 2 Cal.App.5th 1057), CEQA generally no longer considers an impact of the environment on a project to be a significant impact. Accordingly, this would be a ***less-than-significant impact***. However, pursuant to County Code Section 15.36.320, the project applicant was required to submit a site-specific geotechnical report prepared by a geotechnical engineer that includes recommendations for site preparation and foundation design.

The geotechnical report prepared for the project by Wayne Ting & Associates includes recommendations for site preparation and grading, placement and compaction of engineered fill, utilization of a shoring system during excavation of the proposed basement, design of subgrade piers below the basement, building foundation design, parameters for slabs-on-grade and concrete flatwork, retaining walls, pavements, drainage, and more. It is recommended that the home be supported on a mat slab foundation designed with an allowable bearing capacity of 3,000 pounds per square foot (psf) due to deal loads plus design live loads, and a capacity of 4,000 psf for all loads, including wind and seismic forces.

The Alameda County Building Department will ensure that the project design incorporates the recommendations in the geotechnical report. In addition, the Building Department will ensure that the project complies with the current California Building Standards Code, which includes detailed structural design requirements intended to provide adequate structural integrity to withstand the maximum credible earthquake and the associated ground motion acceleration. Compliance with the applicable building codes will maximize the structural stability of the proposed building and minimize the potential for damage and injury during a strong seismic event.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐

Explanation: Liquefaction occurs when clean, loose, saturated, uniformly graded, fine–grained soils are exposed to strong seismic ground shaking. The soils temporarily lose strength and cohesion, resulting in a loss of ground stability that can cause building foundations to fail. Based on the results of subsurface testing of the site and the absence of groundwater, the geotechnical investigation report prepared for the project concluded

[19] Edward H. Field and Members of the 2014 Working Group on California Earthquake Probabilities, U.S. Geological Survey, California Geological Survey, *UCERF3: A New Earthquake Forecast for California's Complex Fault System*, USGS Open File Report 2015-3009, March 2015, Accessed June 29, 2024 at: https://pubs.usgs.gov/fs/2015/3009/pdf/fs2015-3009.pdf.

that there is low probability for liquefaction to occur at the site. Furthermore, it is mapped as having Very Low Liquefaction Susceptibility by the U.S. Geological Survey.[20]

Lateral spreading, another form of seismic ground failure, is generally associated with liquefaction; since there is very low potential for liquefaction at the site, the geotechnical investigation report concludes that the potential for lateral spreading is very low to none. As noted in Section VII-a-ii, the geotechnical investigation report prepared for the project includes site and building foundation design recommendations that will ensure the structural stability of the proposed homes and pavements. For the reasons set forth in Section VI-a-ii, this would be a ***less-than-significant impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
iv) Landslides?	☐	☐	☒	☐

Explanation: The geotechnical report states that the project site is underlain by shallow rock, and there is not any apparent hazard from landsliding. The report concludes that the site is geotechnically suitable for the proposed single-family home with basement, and garage provided that the recommendations presented in the report are incorporated into the project plans and specifications. As previously noted, the Alameda County Building Department will ensure that the project design incorporates the recommendations in the geotechnical report. Therefore, landslide potential would be minimized, and this would be a ***less-than-significant impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

Explanation: Any construction project that exposes surface soils creates a potential for erosion from wind and stormwater runoff. The potential for erosion increases on large, steep, or windy sites; it also increases significantly during rainstorms. With an existing gradient on the proposed home site of up to 25 percent, the home site is particularly susceptible to erosion due to its hilly terrain and exposure to westerly winds. Similarly, although the proposed land improvements are specifically intended to reduce erosion on the site, disturbance of soils during construction of the improvements would temporarily increase the soil erosion potential at the site. Increased erosion could introduce high sediments loads into downstream receiving waters, including Alameda Creek, adversely affecting water quality.

Construction-related site disturbance and grading is expected to occur throughout the 2025-2026 rainy season, which would substantially increase the potential for erosion at the site. Extensive grading is not anticipated and the area of disturbance would be quite modest in comparison with many construction projects. Nonetheless, project construction would increase the potential for exposure of soils to the erosional effects of wind and rain. As discussed in more detail in Section X-a, the project would be required to prepare and

[20] U.S. Geological Survey in cooperation with the California Geological Survey, Maps Of Quaternary Deposits And Liquefaction Susceptibility In The Central San Francisco Bay Region, California, Liquefaction Susceptibility [map], Open File Report 06-1037, 2006.

implement a Stormwater Pollution Prevention Plan (SWPPP) in compliance with State Water Resources Control Board (SWRCB) regulations. Implementation of the required SWPPP would ensure that this potentially significant impact would remain a ***less-than-significant impact*** on the environment.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐

Explanation: The potential for landslide is discussed in Section VII-a-iv, above. The potential for liquefaction and lateral spreading are addressed in Section VII-a-iii. The site is underlain by firm, moist, medium brown sandy clay to a depth of about 2 feet, followed by severely weathered and fractured yellowish, grayish brown sandstone with clay to a depth of about 4 feet, the maximum depth explored. The geotechnical consultant characterized these materials as rock. These conditions do not demonstrate susceptibility to subsidence or collapse. No other types of seismically-induced ground failure were identified in the geotechnical investigation report, which concludes that there are no geologic hazards constraining the proposed project, provided the site preparation and project design recommendations presented in the report are implemented. As previously noted, the applicant will be required to implement the recommendations in the geotechnical report and comply with all applicable building codes and seismic requirements, which would ensure that the proposed home would not be exposed to unstable ground that could result in structural failure. This would therefore be a ***less-than-significant impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐

Explanation: Given the underlying rock at the proposed home site, as identified in the geotechnical report prepared for the project, expansive soils are not a hazard at the site. Because the applicant will be required to implement the recommendations in the geotechnical report and comply with the site preparation, foundation, and structural design requirements of the California Building Code, including provisions for expansive soils, the project would not be subject to structural failure due to expansive soils. This would be a ***less-than-significant impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Explanation: There is an existing septic tank system on the site that has historically been utilized by the George Ranch property. The longtime and ongoing functioning of the septic system demonstrates that the underlying soils adequately support this system. The applicant has submitted a plan to abandon this Onsite Wastewater Treatment System (OWTS) and replace it with a new OWTS to serve the proposed new home. The proposed OWTS has been designed by a professional geologist, the Principal of BioSphere Consulting, Inc., which specializes in site evaluation and design of onsite wastewater treatment systems. The Alameda County Department of Environmental Health (ACDEH) has reviewed and approved the plans, subject to standard conditions.[21] A final sign-off by ACDEH will be required prior to its issuance of an Operating Permit for the OWTS. Therefore, the onsite soils are capable of supporting the proposed OWTS. There would be ***no impact*** from the project's wastewater disposal.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Explanation: Paleontological resources are the fossilized remains of vertebrate or invertebrate organisms from prehistoric environments found in geologic strata. They are valued for the information they yield about the history of the earth and its past ecological settings. They are most typically embedded in sedimentary rock foundations, and may be encountered in surface rock outcroppings or in the subsurface during site grading.

Although the potential for paleontological resources to be present at the project site is unknown, if any unique paleontological resources were encountered during project construction, they could be damaged, destroyed, or lost during subsurface disturbance of the site. This would be a ***potentially significant impact***. Implementation of the following mitigation measure would reduce this potential impact to less than significant:

Mitigation Measure GS-1: If any paleontological resources—such as fossilized bone, teeth, shell, tracks, trails, casts, molds, or impressions—are encountered during site grading or other construction activities, all ground disturbance within 100 feet of the find shall be halted until the services of a qualified paleontologist can be retained to identify and evaluate the scientific value of the resource(s) and, if necessary, recommend mitigation measures to document and prevent any significant adverse effects on the resource(s).

[21] Alameda County Department of Environmental Health, Plan Approval for a new Onsite Wastewater Treatment System (OWTS) 3163 Morrison Canyon Road, Fremont, CA (APN: 96-56-3) [approval letter], December 11, 2023.

Any further mitigation measures recommended by the paleontologist shall be implemented and construction shall not resume in the vicinity of the find until the paleontologist has authorized the resumption of work. Significant paleontological resources shall be salvaged and deposited in an accredited and permanent scientific institution, such as the University of California Museum of Paleontology (UCMP).

VIII. GREENHOUSE GAS EMISSIONS — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐

Explanation: Greenhouse gases (GHGs) refer to gases that trap heat in the atmosphere and contribute to global warming. The primary GHGs are carbon dioxide (CO_s), methane (CH_4), nitrous oxide (NO_x), sulfur hexafluoride (SF_6), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and water vapor (H_2O). The majority of GHG emissions in the Bay Area come from transportation (41 percent), followed by industrial sources (26 percent) electricity generation/cogeneration (14 percent), and residential/commercial (10 percent). Construction equipment and other off-road equipment contribute 1.5 percent of the total GHG emissions.[22]

The BAAQMD CEQA Guidelines referenced in Section III-b state that an individual project's emissions will typically not have an appreciable impact on climate change, but it can contribute to a "cumulatively considerable" impact caused by GHG emissions from other sources around the planet. BAAQMD recommends that lead agencies use a "fair share" approach for determining whether individual project's GHG emissions would be cumulatively considerable. The BAAQMD CEQA Guidelines state that for a project's GHG emissions to be less than significant, it must either include certain design elements, or it must be consistent with a local GHG reduction strategy that meets the criteria established in *CEQA Guidelines* Section 15183.5(b).

Alameda County's *Community Climate Action Plan* (CCAP) is the County's GHG reduction strategy meeting the criteria in Section 15183.5(b).[23] The CCAP identifies a range of GHG reduction strategies and measures that are anticipated to achieve a 15.6-percent reduction in Countywide GHG emissions below 2005 levels by 2020, reducing overall emissions by 243,619 metric tons of carbon dioxide equivalent per year (MT CO_2e/yr). The reduction measures were also evaluated for co-benefits, such as reduced water usage, improved water quality, improved air quality, reduced energy consumption, increased habitat, reduced urban heat island effect, and more.

The 48 GHG reduction measures identified in the CCAP target the following sectors:

[22] Bay Area Air Quality Management District, *Greenhouse Gas Emission Estimates and Draft Forecasts,* , Figure 2: Bay Area GHG Emissions, by Sector, updated March 2017, Accessed June 30, 2024 at: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/ghg_emissions_and_forecasts_draft.pdf?rev=03f881a814054a93a8f1d29b9dec09fa&sc_lang=en.

[23] Alameda County, *Community Climate Action Plan*, February 14, 2014.

- Transportation (14)
- Land Use (5)
- Building Energy (16)
- Water Use (4)
- Waste (4)
- Green Infrastructure (5)

None of the 14 transportation or five land use measures can be implemented by individual project applicants and they are not applicable to the proposed project. While the 16 building energy measures require implementation by the County at a countywide level, and a number of them call for policies that would apply to commercial projects, the proposed project does include features that would improve the energy efficiency of the proposed home. The home would include rooftop solar as the primary source of electrical energy, and the project would not include natural gas plumbing or appliances. The home would employ radiant heating via efficient heat pumps and passive cooling. As discussed in Section VI-a, the project would comply with all of the Title 24 California Green Building Standards code requirements pertaining to energy efficiency.

Two of the CCAP water use reduction measures are relevant to the project. Measure WT-1 encourages residents and businesses to conserve water in existing buildings and landscapes, while Measure WT-2 requires new landscape projects to reduce outdoor potable water use by 40 percent below the baseline requirements established for residential construction in CAL Green. The proposed landscaping for the new home includes only trees and other plants with low water demand. There would be no turf areas, but rather a meadow slope behind the house vegetated with unirrigated native grasses. A water-efficient irrigation system would be used, with plants grouped and irrigated in zones tailored to the water needs of each zone. The overall landscape would be required to reduce outdoor potable water use by 40 percent below the CAL Green baseline requirements, subject to verification by the County.

The waste and green infrastructure measures in the CCAP also require implementation by the County at a countywide level, but the proposed project would not conflict with any of the measures or impede the County's ability to implement them.

The project would be consistent with the local GHG reduction strategy embodied in the CCAP. Therefore, the proposed project would have a ***less-than-significant impact*** from its emissions of GHGs.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

Explanation: There are a variety of Statewide plans, policies, and regulations that have been adopted since 2002 for the purpose or reducing GHG emissions, as well as the County's *Community Climate Action Plan* (CCAP) adopted in 2014.[24] Most notably, California passed landmark climate change legislation with Assembly Bill (AB)

[24] Alameda County, *Community Climate Action Plan*, February 4, 2014.

32, the California Global Warming Solutions Act of 2006, which requires Statewide GHG emissions to be reduced to 1990 levels by 2020, a reduction of approximately 15 percent below emissions expected under a "business as usual" scenario. This goal was initially established by former Governor Arnold Schwarzenegger's issuance in 2005 of Executive Order S-3-05, which also set a target of reducing GHG emissions to 80 percent below 1990 levels by 2050.

The State's GHG reduction goals were further focused by Executive Order B-30-15, issued on April 29, 2015 by then-Governor Edmund G. Brown. This order established a mid-term GHG Statewide reduction goal of 40 percent below 1990 levels by 2030. This requirement was codified by the Legislature with the 2016 passage of Senate Bill (SB) 32. The California Air Resources Board (CARB) has developed a Scoping Plan that describes the approach California will take to reduce GHGs to achieve the reduction goals established by these executive orders and legislative acts.

The third update to the Scoping Plan, adopted by CARB in late 2017, notes that local governments are essential partners in achieving California's GHG reduction goals.[25] *California's 2017 Climate Change Scoping Plan* identifies how the State can reach the 2030 climate target to reduce GHG emissions by 40 percent from 1990 levels, and substantially advance toward the State's 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels. On December 19, 2022, CARB approved its third update to the Scoping Plan (the 2022 Scoping Plan), which lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by Assembly Bill 1279.

As discussed in the preceding subsection, Alameda County adopted its CCAP to reduce Greenhouse Gas (GHG) emissions 15 percent below 2005 levels by 2020 and 80 percent below 1990 levels by 2050. Section VIII-a provides an explanation for why the project would not conflict with the CCAP. There would be ***no impact***.

IX. HAZARDS AND HAZARDOUS MATERIALS — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐

Explanation: The proposed project would not involve the routine transport, use, or disposal of hazardous materials. While construction of the project could entail transport and use of hazardous materials for equipment operation and maintenance, such as motor oil, transmission fluid, or solvents, such use would not be in quantities large enough to pose an environmental hazard, nor would it constitute routine, ongoing use. Such us is typical of most construction projects and does not represent a significant hazard. Once construction is complete and the project is occupied, the residents of the new home would be expected to store and use small containerized quantities of hazardous household, outdoor landscape care, and automotive products of a wide variety. This type of usage is typical of all residential development, and would not constitute a significant hazard to the public or the environment. The project would have a ***less-than-significant impact*** from the transport, use, or disposal of hazardous materials.

[25] California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, November 2017.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*	☐	☐	☐	☒

Explanation: As discussed in Section IX-a above, the proposed project would not introduce hazardous materials beyond those generally found within residential uses, including containerized household, yard care, and automotive products.

There are no active permitted underground storage tank (UST) facilities, leaking underground storage tank (LUST) cleanup sites, or other hazardous materials release sites on the project site or within a 1,000-foot radius of the site as tracked by the State Water Resources Control Board (SWRCB) on its GeoTracker database.[26] In addition, there are no hazardous waste or hazardous materials release sites within a 1,000 feet of the project site listed on the California Department of Toxic Substances Control's EnviroStor database (which includes Federal Superfund Sites, State Response Sites, Voluntary Cleanup Sites, School Cleanup Sites, Corrective Action Sites, Tiered Permit Sites, Permitted Hazardous Waste Facilities, Post Closure and Hazardous Waste Facilities, and Historical Non-Operating Hazardous Waste Facilities).[27]

There is no known documented historical use of hazardous materials on or in the vicinity of the project site. Historical aerial photographs dating back to 1946 and historical topographic maps dating back to 1906 were reviewed as part of this environmental review and there was no evidence identified in any of the photos or maps examined that there has ever been any industrial land use on the project site or other use that typically entails use of hazardous materials that could have resulted in contamination of soil or groundwater at the site.[28]

The project site is part of a large ranch property that has no history of development. Historically, the area was used for livestock grazing. There is no evidence of significant quantities of hazardous materials ever being used or stored on or in proximity to the site. There would be ***no impact*** from release of hazardous materials into the environment.

[26] California Environmental Protection Agency, State Water Resources Control Board, Groundwater Ambient Monitoring & Assessment Program (GAMA), GeoTracker GAMA Groundwater Data Sources, Accessed June 19, 2024 at: https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=3163+Morrison+Canyon+Road,+Fremont,+CA.

[27] California Department of Toxic Substances Control, EnviroStor Data Base of Cleanup Sites and Hazardous Waste Permitted Facilities, accessed June 19, 2024 at: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=3163+Morrison+Canyon+Road,+Fremont,+CA.

[28] Netronline, Historical Aerials, accessed June 30, 2024 at: https://www.historicaerials.com/viewer.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒

Explanation: There are no schools near the project site. Furthermore, the proposed residential use would not emit hazardous emissions, handle hazardous materials, or generate hazardous waste. There would be ***no impact*** on schools related to hazardous materials as a result of project implementation.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

Explanation: The list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 actually consists of several lists, including:

- A list of hazardous waste sites compiled by the California Department of Toxic Substances Control (DTSC);
- A list of contaminated water wells compiled by the California Department of Health Services (DHS) (subsequently reorganized into the California Department of Health Care Services and the California Department of Public Health);
- A list of leaking underground storage tank sites and solid waste disposal facilities from which there is a migration of hazardous waste, compiled by the State Water Resources Control Board (SWRCB); and
- A list of solid waste disposal facilities from which there is a migration of hazardous waste, compiled by the Local Enforcement Agency (LEA). These lists are consolidated by the Department of Resources Recycling and Recovery (CalRecycle).

Each of these lists must be updated at least annually, and must be submitted to the Secretary for Environmental Protection, the head of the California Environmental Protection Agency (CalEPA). DTSC maintains the EnviroStor database for purposes of complying with Section 65962.5, while the SWRCB maintains the GeoTracker database. As discussed in Section VIII(b), both of these databases were consulted during this environmental review. The project site is not listed on the EnviroStor or GeoTracker databases and there were no hazardous waste sites or facilities identified within 1,000 feet of the project site on either database. There would be ***no impact*** related to hazardous materials sites compiled pursuant to Government Code Section 65962.5.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) For a project within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

Explanation: There are no airports near the project site; the nearest public airport is Livermore Municipal Airport located about 9.4 miles northeast of the site. The proposed project would not expose people to a safety hazard from airport operations.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

Explanation: There are no private airstrips in the vicinity of the project site. The nearest private airstrip is Hayward Executive Airport, located more than 12 miles northwest of the site.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒

Explanation: The project would not block or impede access to emergency evacuation routes, and the development of a single-family home would not have the potential to interfere with implementation of the County's emergency operations plan.

The County's 2023 *Emergency Operations Plan* (EOP), which is an extension of the California State Emergency Plan, was reviewed to identify any potential conflicts that could be caused by the proposed project.[29] The plan details procedures and responsibilities during disasters for a wide range of potential emergencies, including civil disturbance, dam failure, earthquake, flood, hazardous materials spill, train derailment, landslide, terrorism, wildfire, and more. The priorities of the plan are to: 1) save lives, 2) protect health and safety, 3) protect property, and 4) preserve the environment. The EOP describes responsibilities of and coordination

[29] Alameda County, Office of Emergency Services, *Emergency Operations Plan*, August 2, 2023.

between Alameda County departments, elected County officials, and representatives of private corporations and non-governmental organizations (NGOs) responsible for staffing positions in the County Emergency Operations Center (EOC).

Construction of the proposed land improvements and single-family home would not have the potential to interfere with implementation of the EOP. There would be ***no impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Expose people or structures to significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

Explanation: Pursuant to Public Resources Code Sections 4201 *et. seq*., the California Department of Forestry and Fire Protection (CAL FIRE) has developed maps covering the State of California that identify State Responsibility Areas (SRAs)—areas within its jurisdiction—and has mapped fire hazard severity zones within the SRAs. CAL FIRE has also mapped fire hazards within Local Responsibility Areas (LRAs) that are not under the direct jurisdiction of CAL FIRE, where local fire-fighting agencies have primary responsibility for fire response. CAL FIRE's mapping of Very High Fire Hazard Severity Zones (VHFHSZs) is based on data and models of potential fuels over a 30- to 50-year time horizon and their expected fire behavior and burn probabilities. The project site and all surrounding lands are designated as an SRA, but they are not within a VHFHSZ.[30] The project site and surrounding land is designated with a Moderate fire hazard, while lands to the north surrounding Highway 84 are designated as a High Fire Hazard Severity Zone.

There is a large stand of trees about 500 feet east of the proposed home site, but there is a large pond located between the trees and the house. Were a wildfire to rage within this stand of trees, the intervening body of water would prevent the fire from encroaching upon the planned home. Because the project site is surrounded by open space grasslands interspersed with forested areas, there is inherently some risk of wildlfires occurring in the area. However, the project area has been developed with residential use and ranch buildings for many decades. Development of the proposed home would not substantially increase this existing hazard or increase the number of people who could potentially be exposed to wildfire. This would be a ***less-than-significant impact***.

[30] California Department of Forestry and Fire Protection (CAL FIRE), Alameda County State Responsibility Area Fire Hazard Severity Zones [map], November 21, 2022.

X. HYDROLOGY AND WATER QUALITY — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐

Explanation:

Construction Impacts

Construction activities could potentially affect water quality as a result of erosion of sediment. In addition, leaks from construction equipment; accidental spills of fuel, oil, or hazardous liquids used for equipment maintenance; and accidental spills of construction materials are all potential sources of pollutants that could degrade water quality during construction. Stormwater runoff from the site is collected within the Upper Alameda Creek watershed, which is ultimately discharged without treatment to San Francisco Bay, which is on the list of impaired water bodies compiled by the San Francisco Bay Regional Water Quality Control Board (RWQCB) pursuant to the federal Clean Water Act. Because the State is required to develop action plans and establish Total Maximum Daily Loads (TMDLs) to improve water quality within these water bodies, uncontrolled discharge of pollutants into them is considered particularly detrimental.

Generally, new development that entails "land disturbance" of 1 acre or more requires the project sponsor to obtain coverage under Construction General Permit (CGP) No. CAS000002, as modified by State Water Resources Control Board (SWRCB) Order No. 2022-0057-DWQ on September 8, 2022. The order became effective on September 1, 2023 and superseded prior Order 2009-0009-DWQ; it is administered by the RWQCB.

Disturbance includes clearing, grading, excavation, stockpiling, and demolition activities that expose or disturb soil. With a work area of approximately 2 acres, at least half of which would be graded or otherwise disturbed, the project would be required to obtain coverage under the CGP. To obtain coverage, the applicant must electronically file a number of permit-related compliance documents referred to as Permit Registration Documents (PRDs). The required PRDs include a Notice of Intent (NOI), a risk assessment, site map, signed certification, Stormwater Pollution Prevention Plan (SWPPP), Notice of Termination (NOT), numeric action levels (NALs) exceedance reports, and other site-specific PRDs that may be required. The PRDs must be prepared by a Qualified SWPPP Practitioner (QSP) or Qualified SWPPP Developer (QSD) and filed by a Legally Responsible Person (LRP) on the RWQCB's Stormwater Multi-Application Report Tracking System (SMARTS). Once filed, these documents become immediately available to the public for review and comment. An applicant (discharger) is considered to have CGP coverage upon receipt of a Waste Discharge Identification (WDID) number. Failure to obtain CGP coverage is a violation of the federal Clean Water Act and the California Water Code.

The CGP would require the applicant to carry out measures necessary to manage and control erosion from the site during construction pursuant to the requirements of the Regional Water Quality Control Board. Best Management Practices (BMPs) would include, but not be limited to, minimizing the migration of sediments off-site; covering soil stockpiles, stored materials, and waste containers; watertight storage of chemicals with secondary containment; prevention of pollutant discharge from equipment and vehicle washing; sweeping soil

from streets or other paved areas; providing secondary containment of portable toilets; site preparation in dry periods; and the planting of vegetation or landscaping in a timely manner. Other construction BMPs to minimize erosion may include features such as hay bales, water bars, covers, sediment fences, sensitive area access restrictions (for example, flagging), vehicle mats in wet areas, and retention/settlement ponds to be installed before extensive clearing and grading begins. Mulching, seeding, or other suitable stabilization measures should be used to protect exposed areas during construction activities. Application of erodible landscape materials should be discontinued at least two days prior to a forecast rain storm. These measures should be consistent with the Association of Bay Area Governments' *Manual of Standards for Erosion and Sedimentation Control Measures* (2005 Updated Edition). BMPs may also include active or passive treatment systems. All of the BMPs are to be documented in the SWPPP for each phase of construction.

The CGP also requires project sponsors to implement post-construction BMPs to reduce runoff and pollutants in stormwater discharges that are reasonably foreseeable after completion of project construction. The discharger should use structural or non-structural measures to ensure that stormwater runoff does not exceed the pre-project runoff from the 85th-percentile, 24-hour storm event. On sites larger than 2 acres, dischargers must ensure that the drainage density of streams and drainage channels after construction is the same as it was before construction, such that the time of concentration—i.e., the time it takes for the site's stormwater runoff to drain to into downstream receiving waters—does not increase. Post-construction plans, calculations, and supporting documentation must be submitted to SMARTS as part of the PRDs discussed above.

Although project construction effects on surface water quality could result in a potentially significant impact, compliance with the required CGP would ensure that construction impacts on water quality remain ***less than significant***.

Operational Impacts

The primary source of water pollutants from residential development is from automotive vehicles traveling on site roadways. Moving vehicles deposit oil and grease, fuel residues, heavy metals (e.g. lead, copper, cadmium, and zinc), tire particles, and other pollutants. They emit polycyclic aromatic hydrocarbons (PAHs) from their exhaust, resulting from incomplete combustion of gasoline, which settles to the ground. Even parked vehicles can deposit oil and other pollutants. All of the pollutants described above collect on the impervious pavements, where they can be washed by stormwater into downstream surface waters, thereby degrading water quality. Pesticides that may be used on landscaping or around buildings can potentially contribute to the depletion of dissolved oxygen and/or toxic concentrations of dissolved ammonia in downstream receiving waters, creating acute toxicity for aquatic wildlife.

Buildings and equipment enclosures also provide potential sources of water pollutants because weathered paint and eroded metals from painted and unpainted surfaces can be washed away by stormwater. In addition, mercury and polychlorinated biphenyls (PCBs) that get deposited on roofs and other impervious surfaces as airborne pollutants can be washed into surface waters during storm events. Microbial pathogens are yet another pollutant that can be entrained in stormwater coming in contact with poorly protected trash collection areas, though this is more of a problem with multi-family residential development than single-family homes.

While the incremental pollutant load from a single site may not be significant, the additive, regional effects of pollutants from all development have a significant adverse effect on water quality and the innumerable organisms that depend on the region's surface water bodies. Even low concentrations of heavy metals such as mercury bioaccumulate in fish, resulting in levels that adversely affect the health of sea animals and humans that eat them. Testing in the San Francisco Bay Area has shown elevated levels of mercury and PCBs in the sediment of urban storm drains throughout the region.

Operational stormwater discharges from new development are regulated under the National Pollutant Discharge Elimination System (NPDES), administered by the RWQCB under authority of the U.S. Environmental Protection Agency. In accordance with the NPDES, the RWQCB regulates stormwater discharges via municipal stormwater permits issued to the cities, counties, water districts, and flood control districts under its jurisdiction in the San Francisco Bay Area. In Alameda County, development projects must comply with NPDES Permit No. CAS612008, issued to the Alameda Countywide Clean Water Program (ACCWP) and other Bay Area jurisdictions by the RWQCB (NPDES Order No. R2-2022-0018). The revised Municipal Regional Stormwater Permit (MRP) was adopted on May 11, 2022 and became effective on July 1, 2022. This permit replaced the previous permit issued on November 19, 2015 (Order No. R2-2015-0049, as amended by Order No. R2-2019-0004), which was formally rescinded by the RWQCB. The current MRP consolidates the multiple countywide permits previously issued to member agencies in the San Francisco Bay Area under a single MRP regulating stormwater discharges from municipalities and local agencies in Alameda, Contra Costa, San Mateo, and Santa Clara counties and the cities of Fairfield, Suisun City, and Vallejo.

Although the MRP imposes a variety of responsibilities for monitoring and protecting stormwater quality on member agencies, it also includes requirements for individual development projects. Specifically, Provision C.3 of the MRP requires any private or public development project that would create or modify 5,000 square feet or more of impervious surfaces (reduced from 10,000 square feet under the prior permit) to take measures to improve water quality of stormwater discharges from the project site (i.e., stormwater runoff), including providing treatment of 100 percent of the stormwater runoff from the site. The new MRP adds large detached single-family homes as a new category of regulated projects, subjecting homes that create or replace 10,000 square feet or more of impervious surfaces to the C.3 provisions.

The new MRP also reduces the size threshold from 10,000 square feet to 5,000 square feet for "other redevelopment projects," which covers a wide range of commercial, industrial, residential, and mixed-use projects as well as public projects, such as sidewalks, curb extensions and ramps, and other right-of-way projects, but not including roads or trails, which are covered in a separate subsection of the MRP. Road maintenance work, including resurfacing (but not pavement replacement), is excluded from C.3 provisions.

Introduced in the previous MRP, Provision C.3 also requires small projects with 2,500 square feet to 10,000 square feet of new and replaced impervious surfaces and detached single-family home projects that create and/or replace 2,500 square feet or more but less than 10,000 square feet of impervious surfaces to install at least one of the following site design measures to reduce uncontrolled stormwater runoff:

- Direct roof runoff into cisterns or barrels for reuse;
- Direct roof runoff onto vegetated areas;
- Direct roof runoff from sidewalks, walkways, and/or patios onto vegetated areas;
- Direct roof runoff from driveways and/or uncovered parking lots onto vegetated areas;
- Construct sidewalks, walkways, and/or patios with permeable surfaces;
- Construct bike lanes, driveways, and/or uncovered parking lots with permeable surfaces.

There are numerous new C.3 requirements in the new MRP that are applicable to the permittees and are not the responsibility of individual development projects. These additional requirements are therefore not discussed herein.

Projects subject to Provision C.3 must include low-impact development (LID) measures to capture and perform onsite treatment of all stormwater from the site prior to its discharge, including rainwater falling on building rooftops. Project applicants are required to implement appropriate source control and site design measures and to design and implement onsite stormwater treatment measures in order to reduce the discharge of

stormwater pollutants to the *maximum extent practicable* (MEP), a standard established by the 1987 amendments to the federal Clean Water Act. Alternatively, stormwater from a development site can be treated offsite at a joint stormwater treatment facility that treats runoff from two or more regulated projects. An exemption from the LID requirements of Provision C.3.c. may be granted to any regulated project as long as stormwater treatment with media filters is provided that comply with the hydraulic sizing requirements of Provision C.3.d.

The goal of LID is to reduce runoff and mimic a site's predevelopment hydrology by minimizing disturbed areas and impervious cover and then infiltrating, storing, detaining, evapotranspiring, and/or biotreating stormwater runoff close to its source. LID employs principles such as preserving and recreating natural landscape features and minimizing imperviousness to create functional and appealing site drainage that treats stormwater as a resource, rather than a waste product. Practices used to adhere to these LID principles include measures such as rain barrels and cisterns, green roofs, permeable pavement, preserving undeveloped open space, and bio-treatment through rain gardens, bio-retention units, bioswales, and planter/tree boxes.

At a minimum, source control measures must include efficient irrigation systems and landscaping that minimizes irrigation and runoff, promotes surface infiltration, minimizes the use of pesticides and fertilizers, and incorporates other appropriate sustainable landscaping practices and programs, such as those promoted by the Bay-Friendly Landscaping and Gardening Coalition. Site design should conserve natural areas, limit disturbance to natural water bodies and drainage systems, minimize compaction of highly permeable soils, protect slopes and channels, minimize impervious surfaces, and minimize stormwater runoff by implementing one or more of the following site design measures:

- Direct roof runoff into cisterns or rain barrels for reuse;
- Direct roof runoff onto vegetated areas;
- Direct runoff from sidewalks, walkways, and/or patios onto vegetated areas;
- Direct runoff from driveways and/or uncovered parking lots onto vegetated areas;
- Construct sidewalks, walkways, and/or patios with pervious pavement systems; and
- Construct driveways, bike lanes, and/or uncovered parking lots with pervious pavement systems.

Projects subject to the C.3 stormwater requirements must incorporate LID measures to treat 100 percent of the runoff calculated using stipulated hydraulic sizing design criteria. These criteria are based on stormwater volume from the 85th-percentile 24-hour storm event, stormwater flow rate based on historical peak flow rates (there are several flow rate options, including 10 percent of the 50-year peak flow rate), or a combination of flow and volume criteria. Biotreatment or bioretention systems must be designed to have a surface area sufficient to accommodate a stormwater runoff rate of 5 inches per hour, must infiltrate the treatment media at the same rate, and must maximize infiltration to the native soil during the life of the project. Specifications for biotreatment soil media are stipulated in the MRP.

Provision C.3.g of the MRP also includes hydromodification management (HM) requirements for certain projects. Hydrograph modification occurs when an undeveloped site is developed with impervious surfaces such as buildings and pavements, which prevents natural infiltration by rain water, and which results in an increase in the volume and rate of stormwater runoff from the site. Hydrograph modification has the undesirable effect of increasing erosion of natural creeks and earthen channels, which can cause flooding, property damage, degradation of stream habitat, and deterioration of water quality.

When required, the HM controls must be designed such that the post-project discharge rates and durations match pre-project discharge rates and durations ranging from 10 percent of the pre-project 2-year peak flow up to the pre-project 10-year peak flow. HM measures can include site design and hydrologic source control

measures, on-site structural HM measures, regional HM control structures, in-stream restorative measures, or a combination thereof. However, in-stream measures may only be used when the receiving stream is in a hardened channel or already shows evidence of excessive sediment, erosion, or deposition. An alternative exemption to the HM requirements can be granted if a project proponent can demonstrate the project runoff would not accelerate erosion of the receiving stream.

The applicability of the HM requirements vary by jurisdiction. For example, in some counties, they only apply to certain projects located in areas mapped as being susceptible to hydrograph modification. In Alameda County, HM requirements apply to all projects throughout the County that meet the following applicability criteria:

- The project creates and/or replaces 1 acre or more of impervious surfaces;
- The project will increase the amount of impervious surface in comparison with pre-project conditions;
- The project is located in a catchment or sub-watershed that is highly developed (i.e., that is 70-percent or more impervious), AND
- The project is located in a susceptible area, as shown on the default susceptibility map.

The requirements do not apply to projects that drain directly to the San Francisco Bay or tidal channels, nor to projects that drain into channel segments that have been hardened on three sides and/or are contained in culverts continuously downstream to their outfall in a tidal area. However, project sites draining to earthen flood control channels are not automatically exempt from HM requirements.

The project site is located within an area subject to HM requirements, as shown on the HMP Susceptibility Map attached to the Alameda County MRP.[31] It is located in an area designated as "Special Consideration – San Lorenzo & Alameda Creeks." In addition, nearby Alameda Creek and the tributaries to the creek on the project site are designated as susceptible to hydromodification. However, the proposed project would not require HM controls for two reasons: 1) With 38,429 square feet (0.88 acres) of new impervious surfaces proposed, the project is below the threshold for the HM requirements; and 2) the sub-watershed in which the project would be located is far below the 70-percent developed threshold.

As part of compliance with the C.3 requirements, the project sponsor will be required to prepare and implement a C.3 Stormwater Control Plan to reference and incorporate current construction and post-construction requirements specified by State Water Resources Control Board (SWRCB) Order No. 2022-0057-DWQ (previously discussed) and the post-construction requirements specified by NPDES Order No. R2-2022-0018 and the ACCWP. The C.3 Stormwater Control Plan should be developed in accordance with the provisions of ACCWP's current *Stormwater C.3 Technical Guidance* manual (8th Edition).

A preliminary C.3 Stormwater Control Plan (SCP) has been prepared for the project in compliance with the MRP for the San Francisco Bay Area, shown on Figure 14. The applicant will be required to submit hydrologic and hydraulic analyses prepared as part of the SCP for review by the Alameda County Public Works Agency Clean Water Program. The preliminary C.3 plan divides the home site into three Drainage Management Areas (DMAs), with each one discharging into the bioretention basin for that DMA. A total of approximately 38,429 square feet of new effective impervious surfaces would be created by the project, including rooftops, the driveway, walkways, and the repaved access road/drive along the frontage of the home. (The effective impervious area is equal to the impervious area plus 10 percent of the landscape area.) This would require a treatment area of at least 1,537 square feet; the treatment area must equal 4 percent or more of the effective impervious area. The preliminary C.3 plan indicates that the proposed biotreatment areas would total 1,345

[31] Alameda Countywide Clean Water Program, *C.3 Stormwater Technical Guidance: A Handbook for Developers, Builders, and Project* Applicants, Version 8.2, Attachment A: HMP Susceptibility Map (January 26, 2007), May 19, 2024.

square feet. While this represents a shortfall relative to the required treatment area, it is assumed that the plan will be revised to meet the ACCWP requirements prior to project approval.

A network of 8-inch diameter storm drains arrayed around the house and adjacent to walkways and driveways would collect stormwater captured from the house and other impervious surfaces via small catch basins, then discharge the collected water into a 12-inch diameter storm drain discharging into each of the three bioretention areas. Although detailed plans of the proposed bioretention planters were not available during this environmental review, they would be required to meet ACCWP specifications, which call for at least 18 inches of a biotreatment soil mix underlain by at least 12 inches of Class II permeable virgin rock meeting Caltrans specifications. Excess water must be collected from the bottom of the aggregate layer by a perforated and sloped underdrain pipe that includes a capped cleanout pipe extending vertically to the finished ground surface. Water collected in the bioretention areas would be treated by the action of beneficial soil bacteria, chemical action, and by uptake into the root systems of water-tolerant plants in the surface of the bioretention area. The bioretention areas would also function as detention facilities, slowing the rate and volume of treated stormwater discharge from the bioretention basins. They are expected to detain stormwater up to the volume and rate of the 10-year storm.[32]

Treated stormwater would discharge from the perforated pipe in the bioretention basins into a perforated pipe running through a rock-filled energy dissipater ditch extending along the downhill side of each bioretention basin. From here, treated stormwater would percolate to groundwater and flow downhill as sheetflow.

The proposed system of bioretention facilities will provide onsite biological treatment of all stormwater runoff from the site's impervious surfaces under normal rainfall conditions. The Alameda County Public Works Agency will confirm that the Stormwater Control Plan complies with the C.3 Provisions of the MRP prior to issuance of a stormwater permit, and inspections will verify construction of the stormwater controls in accordance with the approved plan. Compliance with the C.3 Provisions of the MRP will ensure that operation of the project will have a ***less-than-significant impact*** on water quality and local hydrology.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒

Explanation: The groundwater does not appear to be a regulated groundwater basin. The interactive online map of groundwater basins in California managed by the California Department of Water Resources (DWR) pursuant to the Sustainable Groundwater Management Act (SGMA) shows the Sunol Valley Groundwater Basin 2-011 to the east of Morrison Canyon and the Santa Clara Valley-Niles Cone Groundwater Basin 2-009.01 to the west of the valley, but nothing under the canyon in which George Ranch is situated.[33] Similarly, the Groundwater Information System managed by the State Water Resources Control Board as part of its Groundwater Ambient Monitoring and Assessment (GAMA) Program, shows the two groundwater basins

[32] Steven Hunn, Senior Civil Engineer, Kier + Wright, personal communication, July 19, 2024.

[33] Accessed July 18, 2024 at: https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer - boundaries.

flanking Morrison Canyon, and nothing underlying the canyon itself.[34] It is therefore assumed that the groundwater under the project site is not managed in accordance with the SGMA, and the project would have ***no impact*** on management of the basin.

The water supply at George Ranch is drawn from a couple of existing wells on the site, and these wells would supply the domestic water consumed by the residents of the new home. Since they already reside in the existing residences that would be replaced by the proposed new home, water demand is not expected to appreciably increase following project implementation.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river of through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☒

Explanation: Construction-related impacts relating to erosion or siltation both on and off-site are discussed in Section X-a, and additional discussion is provided in the next subsection. As discussed in Section X-a, the applicant would be required to implement erosion controls identified in the required SWPPP that woud minimize erosion effects that could occur after completion of construction. The land improvements that are included in the project are specifically intended to reduce erosion potential. Thus, although they would result in minor alterations of existing drainage patterns, they would have a beneficial effect of reducing erosion and downstream siltation. There would be ***no adverse impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐

Explanation: As discussed in Section X-a, the project includes construction of on-site stormwater treatment facilities that would have a secondary benefit of retarding the rate and volume of peak discharge from the site such that there would not be a substantial increase in peak stormwater discharged from the site in comparison with existing conditions. Furthermore, construction of the concrete and rock stepped spillway (Activity 1), properly sized outfall structures (Activity 3), storm drain inlet (Activity 4), rock and cement spillway at the northern end of the pond (Activity 5), three rock check dams (Activity 6), and stormwater detention basin

[34] State Water Resources Control Board, GAMA Groundwater Information System, Accessed July 18, 2024 at: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/.

(Activity 8) is intended to reduce and/or retard stormwater discharge during storm events, which would reduce the potential for flooding. This would be a ***less-than-significant impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
iii) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐

Explanation: Section X-c-ii provides a discussion about why the storm runoff from the project would not exceed the capacity of the existing stormwater drainage system and Section X-a provides a detailed discussion about the required on-site stormwater treatment facilities that would ensure the project would not be a substantial source of polluted runoff. This would be a ***less-than-significant impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒

Explanation: Although land adjacent to the Alameda Creek channel, which is located about 4,000 feet north of the project site, is within a 100-year flood plain, neither the project site nor the larger ranch property lie within or near a 100-year flood plain.[35] The property is within Zone X, Other Areas, which is assigned to areas outside of the 0.2-percent annual chance flood (i.e., 500-year flood). Given the site's hilly terrain, there is no potential for flooding at the site, and Section X-c-ii explains why the project would not cause off-site flooding.

In the San Francisco Bay Area, any potential tsunami would originate in the Pacific Ocean, and to reach the project site, would need to pass through the relatively narrow Golden Gate and into San Francisco Bay, where it would lose much of its energy. The project site is nearly 35 miles from the Golden Gate, and it lies east of the ridgeline of the East Bay Hills, which rise hundreds of feet from the low-lying East Bay Plain flanking San Francisco Bay, which would be in insurmountable barrier to tsunamis inundation. There is no potential for tsunamis inundation at the project site. This confirmed on the MTC/ABAG Hazard Viewer Map of tsunami evacuation zones around the Bay, produced by the Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG).[36]

A seiche is a free or standing wave oscillation(s) of the surface of water in an enclosed or semi-enclosed basin that may be initiated by an earthquake. There are no large bodies of surface water in proximity to the project site. The small, shallow pond on the site is less than 650 feet long and around 100 feet wide along most of its

[35] Federal Emergency Management Agency, Flood Insurance Rate Map, Alameda County, California and Incorporated Areas, Community Panel Number 06001C0460G, August 3, 2009.

[36] Association of Bay Area Governments, Resilience Program, Tsunami Inundation Area for Emergency Planning, Accessed July 19, 2024 at: https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8.

length, which is not large enough to generate a seiche. There is therefore no potential for inundation of the site due to seiche.

With no potential for inundation by flood, tsunami, or seiche, there would be no potential for the project to release pollutants into waters resulting from inundation. The project would have ***no impact*** due to releasing pollutants during inundation of the project site.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Water Quality Control Plan

The *Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan) is the master water quality control planning document adopted by the San Francisco Bay Regional Water Quality Control Board (RWQCB) in accordance with the Porter-Cologne Water Quality Control Act of 1969.[37] It designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. It also includes programs of implementation to achieve water quality objectives. The Basin Plan has been adopted and approved by the State Water Resources Control Board, U.S. Environmental Protection Agency (USEPA), and the Office of Administrative Law, where required.

Among other provisions, the Basin Plan establishes conditions (discharge prohibitions) that must be met at all times. These include restrictions on discharge of wastewater, wastewater sludge, biocides (i.e., pesticides, herbicides, copper, etc.), oils, and a wide range of solid materials, including silt, sand, and clay. Point source discharges must be made in accordance with waste discharge requirements (WDRs) established by the RWQCB in accordance with the NPDES program described in Section X-a.

The Basin Plan is a large and complex document with many specific provisions, policies, and implementation plans all with the overarching goal of protecting water quality for beneficial uses, such as:

- agricultural, municipal, domestic, and industrial supply;
- marine, estuarine, and warm and cold freshwater wildlife habitats;
- commercial and sport fishing;
- navigation;
- preservation of rare and endangered species;
- contact and non-contact water recreation;
- shellfish harvesting;
- fish spawning;
- and more.

[37] California Regional Water Quality Control Board, San Francisco Bay Region, *San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan)*, May 4, 2017.

Many of the programs and other provisions described in the Basin Plan are not applicable to the proposed project. However, the proposed project would be required to comply with the NPDES regulations pertaining to construction and operation of new development sites, described in detail in Section X-a, above. By complying with the applicable provisions of these regulations, potential water pollutants generated by construction and operation of the project would be minimized and would not adversely affect surface or groundwater quality. Therefore, the project would not conflict with or obstruct implementation of the applicable water quality control plan. This would be a ***less-than-significant*** impact.

Sustainable Groundwater Management Plan

Despite California's heavy reliance on groundwater, the extraction of groundwater was never regulated until the 2014 passage of a package of bills that collectively formed the Sustainable Groundwater Management Act (SGMA). Senate Bill (SB) 1168, Assembly Bill (AB) 1739, and SB 1319 (which amended AB 1739) established a comprehensive Statewide groundwater management program with the primary goal of achieving sustainable groundwater basins over the next 20 years. Improved groundwater management is intended to provide a water supply buffer during periods of drought.

Rather than regulating groundwater at the State level, the SGMA allocates responsibility for local management of groundwater basins. The basins are to be managed by Groundwater Sustainability Agencies (GSAs), which can be formed by any local agency or coordinated group of agencies for purpose of complying with the SGMA. If no agency is formed, the county is presumed to be the local GSA unless the county explicitly opts out. In some cases, the legislation lists new special districts, which have exclusive authority for managing groundwater within their jurisdictional boundaries.

GSAs have authority to acquire land and water for purposes of recharging the groundwater basin and storing and transporting water. The GSAs must submit annual reports to the California Department of Water Resources (DWR), listing groundwater elevation data, amount of groundwater storage, use of surface water for groundwater recharge (or as water supply), and total use of water within the GSA's boundaries.

The DWR was required by prior legislation to rank the priority of each of the State's 515 groundwater basins and subbasins as either high, medium, low, or very low priority by January 31, 2015. These rankings were made in accordance with the California Statewide Groundwater Elevation Monitoring (CASGEM) program. The CASGEM program considers such factors as the number of public wells in the basin, population served, acreage of land above the basin, reliance on groundwater, history of overdrafting, occurrence of subsidence, degradation in water quality, and other factors.

The SGMA requires Groundwater Sustainability Agencies (GSAs) to form in the State’s high- and medium-priority basins and subbasins by June 30, 2017. For groundwater basins designed as medium or high priority, the SGMA requires the responsible GSA to prepare and adopt a Groundwater Sustainability Plan (GSP). Under certain conditions, including where a GSA has performed an analysis that demonstrates the groundwater basin under its purview has been operated within its sustainable yield over a period of at least 10 years, the GSA may prepare an Alternative to a GSP. The GSPs or Alternative GSPs must encompass an entire basin or subbasin and must demonstrate that the basin can achieve sustainable groundwater management within 20 years of adoption of the plan.

As discussed in Section X-b, above, the George Ranch property is not underlain by a groundwater basin regulated pursuant to the Sustainable Groundwater Management Act. Therefore, there is no potential for the project to conflict with a sustainable groundwater management plan. There would be ***no impact***.

XI. LAND USE AND PLANNING — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒

Explanation: The proposed project would construct a new single-family home adjacent to an area on the larger ranch property that has long been developed with residential and agricultural buildings. The new home would be accessed via an existing private road that already serves the existing development. There is no surrounding community in proximity to the proposed home and land improvements and, therefore, no potential to physically divide an established community. There would be ***no impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purposed of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

Explanation: The project site is located within the planning area of the *East County Area Plan* (ECAP), a part of the Alameda County General Plan. The project is therefore subject to the policies of the ECAP as well as countywide policies promulgated in the General Plan. Each of these documents was reviewed to evaluate the proposed project's consistency with applicable policies.

General Plan

Conformance with the General Plan: The *East County Area Plan* adopted May 5, 1994, designates the site Resource Management which requires a minimum parcel size of 100 acres and a maximum building intensity for non-residential uses of 0.01 FAR but not less than 20,000 square feet. One single-family home per parcel is allowed provided that all other County standards are met for adequate road access, sewer, and water facilities, building envelope location, visual protection, and public services. Residential and residential accessory buildings shall have a maximum floor space of 12,000 square feet. All buildings shall be located on a contiguous development envelope not to exceed 2 acres, except they may be located outside the envelope if necessary for security reasons or, if structures for agricultural use, or necessary for agricultural use.

Table 6, within the East County Area Plan (page T-13) provides a list of typical uses under the Resource Management land use designation. These include Agriculture, grazing, recreation, open space uses, arroyos, steep slopes, habitat, and environmentally sensitive areas. This designation is intended for long-term preservation of open space and agricultural uses.

Per the County Assessor's information, the subject property with APN: 096-0056-003-00 has an area of approximately 221.71 acres or 9,657,687.6 square feet in area which is the parcel that is proposing a new residential building. As such, the 0.01 FAR allows 96,576.876 square feet of building intensity for non-residential buildings, however, all properties are permitted no less than 20,000 square feet.

The proposal includes a new 1,155 sq. ft. agricultural caretaker home, an existing 2,880 sq. ft. greenhouse, and three existing agricultural buildings at 6,000 sq. ft. each. These total 22,035 sq. ft. of non -residential structures.

The residential and residential accessory buildings are limited to a maximum floor space of 12,000 square feet. The new proposed 11,255 sq. ft. single-family home and garage, plus the existing 335 sq. ft. gazebo structure total 11,590 sq. ft., which is less than the allowable 12,000 sq. ft.

Based on the project plans submitted by the applicant, the proposed and existing residential and residential accessory buildings are located in a 2-acre building envelope as required by the East County General Plan, description of land use designation for Resource Management. If one takes out the greenhouse and the agricultural caretaker dwelling unit, the proposed residence plus the septic area and leach lines plus gazebo measure 67,061 sq. ft., or 1.3 acres.

This project meets the requirements of the general plan because the development is within the maximum building intensity for residential and residential accessory buildings.

Zoning

The project site is zoned A (Agriculture). Chapter 17.06 of the County Code establishes a long list of permitted, conditional, and accessory uses in the A zoning district, the majority of which do not pertain to the proposed project. Pertinent to the project, the permitted uses include a one-family dwelling and a secondary dwelling unit on parcels of 25 acres or more. Grazing and vine agriculture—two existing uses on the ranch property—are also principal permitted uses. Accessory uses include barns and other farm buildings, which are also existing uses on the property.

County Code Section 17.06.030(I) stipulates that an agricultural caretaker unit, such as the proposed ACU, is subject to Site Development Review when found by the Planning Director to provide housing for the agricultural caretaker and his/her family. The agricultural caretaker dwelling unit is needed to provide housing for the agricultural caretaker for the ranch property for grazing cattle and buffalo, hay production, and grape and wine production from a 5-acre vineyard located to the east of the pond.

Parcels in A districts must be at least 100 acres in size. The regulations require a front yard at least 30 feet deep, and side and rear yards of at least 10 feet. Site Development Review is required for every new dwelling or addition to an existing dwelling exceeding 500 square feet in floor area or 30 feet in height.

The proposed single-family home and ACU are consistent with the permitted uses in the A zoning district. The ACU would have a floor area of 1,155 square feet, well within the allowed size of 2,500 square feet. The site plan demonstrates that the front, rear, and side setback requirements would be met. No other development regulations are stipulated in Chapter 17.06. Therefore, the project would not conflict with the applicable provisions of the County Zoning Code.

Table LU-1

Permitted and Proposed Development Densities

ECAP MAX FAR LIMITATIONS			
	EXISTING	**PROPOSED**	**Totals**
RESIDENTIAL			
Primary Residence		10,536	
Primary Residence Garage		719	
Existing manufactured home to be demolished TBD	1,140		0
Existing cottage to be demolished TBD	1,200		0
RESIDENTIAL ACCESSORY STRUCTURES			
Gazebo	335		
Total proposed		11,255	
Total Existing (to remain)	335		
Total Residential	335 +	11,255 =	11,590
Allowed Residential	12,000	<	11,590
NON-RESIDENTIAL			
Ag caretaker		823	
Ag caretaker garage		332	
Greenhouse	2,880		
Agriculture Bldg. 1	6,000		
Agriculture Bldg. 2	6,000		
Agriculture Bldg. 3	6,000		
Total Existing Non-Residential	20,880 +	1,155 =	22,035
Allowed .01 FAR	96,576.9	>	22,035

As previously noted, both the single-family home and the ACU would be subject to the County's Site Development Review process, which is intended to promote orderly, attractive, and harmonious development; recognize environmental limitations on development; stabilize land values and investments; and promote the general welfare by preventing establishment of uses or erection of structures having qualities which would not meet the specific intent clauses or performance standards of the Zoning Ordinance or which are not properly related to their sites, surroundings, traffic circulation, or their environmental setting. Where the use proposed, the adjacent land uses, environmental significance or limitations, topography, or traffic circulation is found to so require, the Planning Director may establish more stringent regulations than those otherwise specified for the district. However, based on the codified regulations pertaining to new development within the A district, the proposed project would not conflict with applicable zoning regulations.

As summarized in the preceding discussion, the proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purposed of avoiding or mitigating an environmental effect. There would be ***no impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☒	☐	☐

Explanation: This issue is addressed in Section IV-f.

XII. MINERAL RESOURCES — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	☐	☐	☐	☒

Explanation: Although there are a number of active aggregate mines within a few miles of George Ranch—including Sheridan Road/Stevens Creek Quarry, located about 1 mile southeast of the project site, and Sunol Aggregates, located about 1.5 miles to the east, among others—the entire George Ranch property, including the project site, is not classified with a Mineral Resource Zone (MRZ) category by the California Department of Conservation's Division of Mines and Geology (DMG).[38] Therefore, the project would have **no impact** on the availability of a known mineral resource that would be of value to the region or the State.

[38] California Department of Conservation, Division of Mines and Geology, Revised Generalized Mineral Land Classification Map, Aggregate Resources Only, South San Francisco Bay Production-Consumption Region, Niles Quadrangle (Plate 3 of 29), 1996.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

Explanation: The Alameda County General Plan does not separately map aggregate resources within the County, but rather has incorporated by reference the mineral mapping conducted by the State, discussed in the preceding subsection.[39] As noted above, the proposed project would have no effect on the availability of a valuable mineral resource known to the State. Therefore, the project would have **no impact** on the availability of a locally-important mineral resource designated on the general plan.

XIII. NOISE — *Would the project result in:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐

Explanation: Similar to most jurisdictions, Alameda County's regulation of noise is based on commonly-employed noise parameters that are based on the fundamental metric of a decibel (dB), which is a unit of sound energy intensity caused by rapid fluctuation of air pressure as sound waves travel outward from a source. Decibels are logarithmic units that compare the wide range of sound intensities to which the human ear is sensitive, with 0 dB corresponding roughly to the threshold of hearing.

A frequency weighting measure, which simulates human perception, is commonly used to describe noise environments and to assess impacts on noise-sensitive areas. A-weighting of sound levels best reflects the human ear's reduced sensitivity to low and extremely high frequencies, and correlates well with human perceptions of the annoying aspects of noise. An A-weighted decibel (dBA) is a decibel corrected for the variation in frequency response to the typical human ear at commonly encountered noise levels. The A-weighted decibel scale (dBA) is cited in most noise criteria, including Union City's.

Several time-averaged scales represent noise environments and consequences of human activities. The most commonly used noise descriptors are equivalent A-weighted sound level over a given time period (L_{eq});[40]

[39] Alameda County, Community Development Agency, Neighborhood Preservation and Sustainability Department, About Us, Accessed July 9, 2024 at: https://nps.acgov.org/aboutus.page.

[40] The Equivalent Sound Level (L_{eq}) is a single value of a constant sound level for the same measurement period duration, which has sound energy equal to the time-varying sound energy in the measurement period.

average day-night 24-hour average sound level (L_{dn})[41] with a nighttime increase of 10 dBA to account for sensitivity to noise during the nighttime; and community noise equivalent level (CNEL),[42] also a 24-hour average that includes both an evening and a nighttime weighting. Noise levels are generally considered low when ambient levels are below 45 dBA, moderate in the 45-60 dBA range, and high above 60 dBA. Outdoor day/night sound levels (L_{dn}) vary over 50 dBA, depending on the specific type of land use. The L_{dn} noise levels average approximately 35 dBA in wilderness areas, 40 to 50 dBA in small towns or wooded residential areas, 75 dBA in major metropolis downtown areas, and 85 dBA near major freeways and airports. Although people often accept the higher levels associated with very noisy urban residential and residential-commercial zones, they nevertheless are considered to be adverse levels of noise with respect to public health.

The County has mapped 65-dB CNEL contours within its jurisdiction, and shows both Highway 84 and I-680 to be flanked by 65-dB contours.[43] The project site is not located in proximity to these roadways and, due to intervening terrain, traffic noise from these sources is not perceptible at the project site.

The General Plan does not stipulate acceptable limits of noise for various land use types, but refers to noise limits established in the Alameda County Code. Section 6.60.040 of the County Code establishes exterior noise limits for residential and other noise-sensitive land uses, such as schools, hospitals, and churches. During daytime hours (7 a.m. to 10 p.m.), a noise level of 65 dBA shall not be exceeded for more than one consecutive minute during any one-hour time period. Noise levels of 60, 55, and 50 dBA shall not be exceeded for more than 5, 15, and 30 consecutive minutes, respectively, during any one-hour time period. Each of these noise limits is reduced by 5 dBA during nighttime hours (10 p.m. to 7 a.m.). Separate noise standards are stipulated for commercial properties.

Noise generated by construction activity is not subject to the limits established in County Code Section 6.60.040, provided such activities occur only from 7 a.m. to 7 p.m. on weekdays and from 8 a.m. to 5 p.m. on weekends. (Holiday hours are not stipulated.) The noise limits also do not apply to maintenance of residential property, provided such activities occur only from 7 a.m. to 9 p.m. on weekdays and from 9 a.m. to 8 p.m. on weekends.

While construction of the proposed home and the land improvements would generate elevated noise levels, particularly during early phases of the project when heavy equipment would be operated for site clearing, grading, and excavation, and for movement of rock and soil, the construction contractor would be expected to adhere to the allowable construction hours established in County Code Section 6.60.040. Furthermore, there are no nearby receptors who could be disturbed by construction noise, other than the applicant. Therefore, the temporary construction noise would not constitute a significant noise impact.

Operation of the project would generate a negligible amount of noise, primarily by passenger vehicles of the residents and their visitors, delivery trucks, and maintenance/service vehicles arriving to and departing from the single-family home. Periodic maintenance of landscaping could generate short-term elevated noise levels, such as during operation of a lawn mower or leaf blower. These noise sources are common to all residential development, and are not considered noise disturbances subject to regulation. Furthermore, as previously noted, there are no noise receptors in the project vicinity other than the applicant who is proposing the project. Therefore, operation of the project would not have the potential to exceed noise limits established in the

[41] L_{dn} is the day-night average sound level that is equal to the 24-hour A-weighted equivalent sound level with a ten-decibel penalty applied to night between 10:00 p.m. and 7:00 a.m..

[42] CNEL is the average A-weighted noise level during a 24-hour day, obtained by addition of 5 decibels in the evening from 7:00 to 10:00 p.m., and an addition of a 10-decibel penalty in the night between 10:00 p.m. and 7:00 a.m.

[43] Alameda County, Noise Element of the Alameda County General Plan, Map 8, 1975.

Alameda County General Plan or the County Code. The proposed project would have a ***less-than-significant noise impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

Explanation: While vibration generated by construction activity can cause annoyance to nearby receptors, operation of typical construction equipment that would be employed during development of the project is not associated with excessive levels of groundborne vibration or noise. Any vibration generated during project construction would be minimal, intermittent, and would occur only during the short-term grading period or other construction phases involving operation of heavy equipment. Furthermore, groundborne vibration falls off quickly with distance, and at a distance of 25 feet from the equipment, vibration caused by bulldozers and excavators has no potential to cause structural or non-structural damage to buildings. For example, operation of a large bulldozer produces a vibration level at 25 feet of 0.089 inches per second (in/sec) of peak particle velocity (PPV).[44] In comparison, a recommended exposure threshold for more vulnerable older and historic buildings is 0.5 in/sec PPV.[45] The nearest existing structure to where construction of the proposed home would occur (other than the trailer and cottage, which would be demolished prior to construction) is a barn structure located about 180 feet to the north. This is not a vulnerable building, and it would not be susceptible to damage from construction-related vibration. Following completion of construction, there would be no operational generation of vibration. This would be a ***less-than-significant*** impact.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒

Explanation: As discussed above in Section XIII-a, once construction of the proposed home is completed, the generation of noise by occupants of the home would be negligible, and there are no neighboring properties to experience any noise generated by the home's residents or by visitors or service vehicles. The proposed land improvements are passive features that would not generate any appreciable noise. The project would have ***no adverse impact*** due to a permanent increase in ambient noise levels.

[44] Federal Transit Administration (FTA), *Transit Noise and Vibration Impact Assessment Manual*, Table 7-4: Vibration Source Levels for Construction Equipment, FTA Report No. 0123, September 2018.

[45] California Department of Transportation (Caltrans), *Transportation and Construction Vibration Guidance* Manual, Table 14: Dowding Building Structure Vibration Criteria, September 2013.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐

Explanation: The temporary, short-term noise that would be generated during construction of the proposed home and land improvements is discussed in Section XIII-a, above. The temporary construction noise would be a ***less-than-significant impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Explanation: As discussed in Section IX-e, the nearest public airport is located more than 9 miles from the project site. There would be ***no impact*** from airport noise.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Explanation: There are no private airstrips in the vicinity of the project. There would be ***no impact*** from private airstrip noise.

XIV. POPULATION AND HOUSING — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒

Explanation: The proposed project would create just one new single-family residence, to be occupied by current residents of the George Ranch property. Therefore, the project would not induce even negligible population growth. Implementation of the project would have ***no impact*** on population growth.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Explanation: No existing housing would be displaced as a result of the project. There would be ***no impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Explanation: No people would be displaced as a result of project implementation. There would be ***no impact***.

XV. PUBLIC SERVICES - *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Fire protection?	☐	☐	☒	☐

Explanation: Fire protection services are provided to the site by the Alameda County Fire Department (ACFD) and by the California Department of Forestry and Fire Protection (CAL FIRE). Although the Alameda County General Plan does not establish a target response time for fire protection, the ACFD website indicates that it has a target response time of 5 minutes. The proposed project would replace two existing residential structures, one a wood cottage, with a highly fire-resistant new home. The project would reduce the potential for fire on the property in comparison with existing conditions, and therefore would incrementally reduce potential demand for fire protection services. Consequently, implementation of the project would not result in the need for construction of new or expanded fire protection facilities, and would have no environmental impacts resulting from the construction of such facilities. This would be a ***less-than-impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Police protection?	☐	☐	☐	☒

Explanation: Police protection services are provided to the project site by the Alameda County Sheriff's Office, which is staffed by more than 1,200 sworn officers. Implementation of the proposed project would have no effect on police protection services because it would not increase the population on the site or introduce a new use with the potential to increase demand for police protection services. The project would replace two existing residential structures with a new, large home. These changes to the site could not result in increased demand for police protection services sufficient to require construction of new police facilities. Therefore, there would be no environmental impacts resulting from the construction of such facilities. There would be ***no impact*** on police protection services.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Schools?	☐	☐	☐	☒

Explanation: As noted above, implementation of the project would not increase the population on the site, and would therefore not generate new students and the associated demand for school services that occurs with increased population. The project is also not expected to create a substantial number of new jobs that could indirectly lead to an increase in the County's population. The proposed project would have ***no impact*** on schools.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Parks?	☐	☐	☐	☒

Explanation: As stated in Section XV-c, above, implementation of the project would not increase the population of Alameda County, and would therefore not generate increased demand for parks. The proposed project would have ***no impact*** on parks.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Other public facilities?	☐	☐	☐	☒

Explanation: With no increase in population, the proposed project would have no direct effect on the demand for other public facilities, such as libraries, and expansion of such facilities would not be required. The proposed project would have ***no impact*** on other public facilities.

XVI. RECREATION —

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒

Explanation: As discussed in Section XV, above, implementation of the project would not increase the population of Alameda County, and would therefore not generate increased demand for parks or other recreational facilities. The proposed project would have ***no impact*** on recreation facilities and no impact on parks, as previously noted.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Explanation: The proposed project does not include construction of any recreational facilities. Therefore, there would be ***no impact***.

XVII. TRANSPORTATION/TRAFFIC — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒

Explanation: The local plan establishing measures governing the performance of the transportation system is the *East County Area Plan* (ECAP), a component of the *Alameda County General Plan*. ECAP Policy 189 requires major projects to promote the use of transit, bicycle, and pedestrian paths and sidewalks. However, major residential projects are defined as 500 or more dwelling units. The proposed project would replace two existing residential units with a single home, which is not expected to increase the population on the site or generate increased traffic. Thus, there is no potential for the project to conflict with the ECAP, which also establishes Level of Service (LOS) for streets and highways.

ECAP Policy 179 states that the County shall adhere to the Countywide Transportation Plan., to the extent it does not conflict with the Save Agriculture and Open Space Lands Initiative passed by the electorate in November 2000. The *Alameda Countywide Transportation Plan* (2020) establishes near-term projects, programs, and strategic priorities, details a 30-year transportation vision, and guides the decision-making of the Alameda County Transportation Commission (Alameda CTC), an agency responsible for planning, funding, and delivering transportation improvements throughout Alameda County. The *Alameda Countywide Transportation Plan* does not promulgate specific policies and it does not established performance standards, but rather it identifies strategies for public agencies in Alameda County to shift to a multi-modal transportation system that meets the needs of all communities, including disadvantage communities and citizens with mobility restrictions. One of its key strategies is to incentivize the use of alternative transportation modes, including public transit. Again, the project is not expected to generate new traffic, and the existing use of the property would remain unchanged. Thus, there is no potential for the project to conflict with the Countywide Transportation Plan. There would be ***no impact*** due to a conflict with an applicable transportation plan.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒

Explanation: The congestion management agency for Alameda County is the Alameda County Transportation Commission (Alameda CTC). Alameda CTC's Congestion Management Program (CMP) only requires review of potential impacts on CMP roadways from proposed land use actions that would cause a net increase of 100 PM peak-hour vehicle trips or more. Implementation of the proposed project would not generate new traffic, so there would be ***no impact*** on CMP roadways and no potential to conflict with the CMP.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒

Explanation: The proposed project would have no effect on air traffic patterns. There would be ***no impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒

Explanation: The proposed project would not include construction of new roadways or intersections, or any other features with the potential to create or increase traffic hazards. Thus, the proposed project would have ***no adverse impact*** related to traffic hazards.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Result in inadequate emergency access?	☐	☐	☐	☒

Explanation: The proposed project does not include any improvements that would reduce or impair emergency access. Existing emergency access to the site is surprisingly good, given its somewhat remote location. Morrison Canyon Road, which provides direct access to the site, connects with Vargas Road about 0.75-mile southwest of the site, and Vargas Road connects with I-680 about 1.5 miles to the south. The densely-developed City of Fremont, where a full complement of emergency services is available, begins less than 1 mile south on this regional freeway. Implementation of the project would have no effect on the existing emergency access to the site. There would be ***no impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety to such facilities?	☐	☐	☐	☒

Explanation: The ECAP establishes a variety of goals and policies intended to promote the creation of new and expanded bicycle and pedestrian facilities and promoting the use and expansion of BART and other public transit facilities. The proposed project would not conflict with any of the policies or impair their implementation. Although ECAP Policy 207 states that the County shall require all new development to pay its fair share of the costs of meeting East County transit needs, it's unclear whether or how this requirement would apply to a new single-family home replacing two existing housing units. However, the applicant would pay whatever fee applies, and this is not an environmental issue. Therefore, the proposed project would not conflict with the adopted policies, plans, and programs pertaining to these alternative modes of transportation, or impair the performance or safety of alternative transportation facilities. There would be ***no impact***.

XVIII. TRIBAL CULTURAL RESOURCES — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) 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)?	☐	☒	☐	☐

Explanation: Pursuant to Assembly Bill (AB) 52, passed by the California Legislature in September 2014, the County proactively contacted Native American tribal groups who may be traditionally and culturally affiliated with the project area. These tribes were previously identified by the Native American Heritage Commission (NAHC) as being affiliated with the area. The NAHC identified the following tribal groups as having potential affiliation with the City:

- Amah Mutsun Tribal Band of Mission San Juan Bautista
- Indian Canyon Mutsun Band of Costanoan
- Muwekma Ohlone Indian Tribe of the San Francisco Bay Area
- North Valley Yokuts Tribe
- The Ohlone Indian Tribe
- Wilton Rancheria
- Wuksachi Indian Tribe/Eshom Valley Band
- Confederated Villages of Lisjan Nation
- Tamien Nation
- Costanoan Rumsen Carmel Tribe

Letters were mailed to each of the representatives of these tribal groups on July 8 and July 11, 2024, offering them the opportunity to provide input regarding any concerns their tribes may have about the potential impacts implementation of the proposed project could have on tribal cultural resources. The Tamien Tribe did reach out and tried to set up a meeting to meet on October 24, 2024, and October 29, 2024, and both meetings were canceled. After those canceled meetings there were no new meetings scheduled. The County has therefore completed its obligations pursuant to AB 52 for this project.

As discussed further in Section V, the possible presence of buried prehistoric cultural materials, including tribal cultural resources, at the sites of proposed land improvements and/or the proposed home site cannot be ruled out, and any disturbance to such resources, were they to exist, could result in a ***significant, adverse impact*** on tribal cultural resources. Implementation of Mitigation Measures CUL-1 and CUL-2, set forth in Section V, would reduce the potential impact to a less-than-significant level:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) A resource determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the Lead Agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Explanation: Public Resources Code Section 5024.1 establishes the California Register of Historical Resources and defines the criteria for inclusion on the California Register. No historic resources are known or suspected to be present at the locations of proposed home and land improvements. However, as discussed in Section V-a, their potential presence cannot be completely ruled out. Were such resources to be present, disturbance of the subsurface during construction could damage or destroy the resource(s), which would be a ***potentially significant impact*** on historic resources. Implementation of Mitigation Measure CUL-1 (see Section V) would reduce the impact to a less-than-significant level.

XIX. UTILITIES AND SERVICE SYSTEMS — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒

Explanation: As discussed in more detail in Section VII-e, the project would replace an existing on-site septic system with a new Onsite Wastewater Treatment System (OWTS) to serve the proposed new home. Because the project would not discharge wastewater into a wastewater treatment plant regulated by the Regional Water Quality Control Board (RWQCB), there is no potential for the project to cause or contribute to an exceedance of the RWQCB's wastewater treatment requirements. The project would have ***no impact*** due to exceeding wastewater treatment requirements.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒

Explanation: Because the project would not utilize off-site wastewater treatment facilities and would not take domestic water from a public utility, relying instead on an on-site septic system and on-site water well, the project would not increase demand on a public wastewater treatment plant or a potable treatment plant. Therefore, the project would have ***no impact*** on water or wastewater treatment facilities.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐

Explanation: The proposed land improvements are intended to improve stormwater drainage on the property and reduce adverse environmental effects related to erosion and sedimentation of receiving surface waters on and off the site. The stormwater runoff from the proposed home and ACU would be collected and treated onsite prior to percolation into the underlying soils and controlled discharge onto adjacent slopes. Other than these onsite facilities, no new or expanded stormwater drainage facilities are proposed as part of the project. While construction of the onsite facilities could have potential erosion and sedimentation impacts, implementation of the required SWPPP discussed in Section X-a would ensure that these impacts would not be significant. Therefore, the project would have a ***less-than-significant impact*** from the construction of new stormwater drainage facilities.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒

Explanation: The water supply at George Ranch is drawn from an existing well on the site, and this well would supply the domestic water consumed by the residents of the new home. Since they already reside in the existing residences that would be replaced by the proposed new home, water demand is not expected to appreciably increase following project implementation. No water would be required from a public or private

water purveyor and, therefore, no new or expanded water entitlements would be required. The project would have a ***no impact*** on water supplies.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒

Explanation: See Section XIX-b, above.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐

Explanation: The project site is within the waste collection service area of Republic Services and solid waste from the area is disposed of at the Newby Island Sanitary Landfill, located at 1601 Dixon Landing Road in Milpitas. This 342-acre landfill (with a disposal area of 298 acres) is permitted to dispose of up to 4,000 tons per day of municipal solid waste, with a maximum permitted capacity of 57,500,000 cubic yards.[46] As of January 31, 2020 the landfill had remaining capacity of 16,400,000 cubic yards and an anticipated closure date of January 1, 2041, though the operator could request an expansion prior to that date, which is a common step for sanitary landfills. The landfill is operating well below its permitted throughput capacity, with average disposal of 2,281 tons per day, or about 57 percent of permitted daily throughput.[47] Thus, it is highly likely that the nominal closing date is very conservative, and that there are several decades of remaining permitted capacity. In any event, other than temporary generation of additional waste during project construction, the proposed project would not result in an appreciable increase in the amount of solid waste generated at the site. The residents of the new home would generate waste, but there are currently two occupied residences on the site that would be replaced by the proposed home, so the amount of waste currently generated is expected to change nominally, if at all. The existing capacity of Newby Island Sanitary Landfill is more than sufficient to accommodate the project's solid waste disposal needs.

As noted in Section VI-a, the construction contractor would be required to comply with the County's Construction and Demolition (C&D) Debris Management Ordinance codified in Chapter 15.08.190 of the County Code, which mandates recycling or diversion from landfill disposal of 75 percent of inert solids, 65

[46] California Department of Resources Recycling and Recovery (CalRecycle), California Integrated Waste Management Board, Solid Waste Information System (SWIS) [online database] Assessed July 12, 2024 at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1362?siteID=3388.

[47] Republic Services, Inc., April 2024 Newby Island LF Tonnage Log, May 29, 2024.

percent of all other construction waste, and, for non-residential projects, 100 percent of soil and land-clearing debris. Inert solids include asphalt, concrete, rock, stone, brick, sand, soil and fines. Compliance with the ordinance will be tracked by the required Debris Management Plan.

The bulk of the waste that would be generated during construction of the project would not be disposed of in a solid waste landfill, but would be repurposed for other uses. The amount of C&D waste going to landfill would not be substantial, and the project would have a ***less-than-significant impact*** on landfill disposal capacity.

XX. WILDFIRE — *If located in or near a State Responsibility Area or lands classified as a Very High Fire Hazard Severity Zone, would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒

Explanation: As discussed in more detail in Section IX-g, the project would not block or impede access to emergency evacuation routes, and the development of one new single-family home and an ACU—replacing two existing residential units—would not have the potential to interfere with emergency response or evacuation procedures. Neither the Alameda County Planning Department's nor the Alameda County Fire Department's Fire Department's ACFD) websites provide information on or links to an adopted emergency response plan or emergency evacuation plan. Numerous attempts were made during this environmental review to contact the Alameda County Fire Department's Emergency Preparedness Manager to identify any potential conflicts with an adopted emergency response plan or emergency evacuation plan, but no response was received. However, there is no evidence to suggest that the very limited scope of the proposed project could conflict with or impair implementation of any such plan. There would be ***no impact*** due to a conflict with an adopted emergency response plan or emergency evacuation plan.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire of the uncontrolled spread of a wildfire?	☐	☐	☒	☐

Explanation: The project site is surrounded by grasslands that become dried out during summer and fall, prior to the onset of the winter rainy season. Periodic droughts can extend the dry conditions into the winter or even into the following dry season. Dry conditions are exacerbated by the increased temperatures that are accompanying ongoing global warming.

Dry grasslands and shrublands burn at a relatively low intensity in comparison with woodlands, but the fuel is very dry, leading to high combustibility potential and rapid spread of fire. Furthermore, 100 percent of dried grassland typically burns during a wildfire, while in woodlands as little as 5 percent of the fuels may burn during wildfire. On the other hand, these fuels burn themselves out much more quickly than dry forests. There is a dense riparian corridor east of the proposed home that extends to within 400 feet of the home site that could also be a source of wildfire fuel that could burn hotter and longer. However, the large pond separating the woodland from the home site would be a highly effective fuel break. Nonetheless, the surrounding grasslands represent a potential fire hazard during dry conditions, and the spread of wildfire could be accelerated by winds blowing down the slopes surrounding the home site. According to myPerfectWeather, the average wind speeds in Sunol average 8 mph during winter months and 11 mph during June, July, and August.[48] Sunol is located about 2 miles east of the project site and is used here as a proxy for the project site. Prevailing winds in this region are from predominantly from the west, and from the southwest about 10 to 20 percent of the time during the dry season when wildfire risk is highest.[49]

Despite these factors, the risk of wildfire at the site is not considered high. As previously discussed in Section IX-h, CAL FIRE maps of areas within the State that are deemed to have a high potential wildfire hazard do not identify the project site or the surrounding lands as being within a Very High Fire Hazard Severity Zone (VHFHSZ); the George Ranch property has a Moderate fire hazard rating. While the project site and upslope areas are covered with grasses and weeds that become dry and flammable during the summer and fall, CAL FIRE does not consider grassland to be a fire fuel with a high or very high hazard; it is assigned a moderate fuel rank.[50]

Current building codes and standards reduce the risk of burning embers igniting buildings. These codes place standards on roofing construction and attic venting. They also require building siding materials, exterior doors, decking, windows, eaves wall vents, and enclosed overhanging decks to meet fire test standards. Construction of the new home in accordance with these standards would minimize their susceptibility to fire; the proposed home would meet and exceed these standards. The home and ACU would be extremely fire-resistant, featuring steel siding mixed with stone veneer, a standing-seam metal roof, and steel-framed windows and doors. The ACU would also have some charred vertical Shou Sugi Ban wood siding, which is also fire-resistant. Both the home and ACU would include fire suppression sprinklers in all interior rooms and hallways. In addition, the applicant has five existing 5,000-gallon water tanks on the property, providing a total of 25,000 gallons of stored water dedicated for the use of fire suppression, in accordance with CAL FIRE requirements. If the Alameda County Fire Department (ACFD) determines that additional tank storage is required for the new residence, the applicant will install those additional storage tanks.

Finally, the site is situated fairly close to fire protection services. CAL FIRE Fire Station No. 14 is located about 2.5 miles northeast of the proposed home site (approximately 7.3 driving miles), a driving time of roughly 14 minutes, though freeway congestion could add to the travel time (the drive includes about 4 miles on I-680). While this exceeds typical target response times for urban cities, residents in remote rural areas must accept that emergency response in remote areas cannot feasibly match response times in remote areas, and this is an incremental risk that is part of rural living. In addition, Fremont Fire Station No. 9, located at 39609 Stevenson Place in Fremont, is about 2.25 miles southwest of the site (roughly 5.7 travel miles), and could provide response support. Both the Fremont and the Alameda County fire departments are part of the State Master

[48] myPerfectWeather, Climate and Average Weather Year Round in Sunol, California, Accessed July 12, 2024 at: https://myperfectweather.com/api/cityinfo/6001Sun/degF/Average-Weather-in-Sunol-California-United-States-Year-Round.

[49] Weather Spark, Climate and Average Weather Year Round in Fremont, California, United States, accessed July 12, 2024 at: https://weatherspark.com/y/1076/Average-Weather-in-Fremont-California-United-States-Year-Round - Sections-Wind.

[50] California Department of Forestry and Fire Protection, *Draft Environmental Impact Report for the Draft Jackson Demonstration State Forest Management Plan*, SCH#2004022025, Chapter 8: Hazards and Hazardous Materials, December 2005.

Mutual Aid Plan. Based on all of the foregoing considerations, the project would have a ***less-than-significant impact*** due to increased risk of wildfire.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐

Explanation: The project site is already adequately served by existing roads, and has an on-site water supply. There is an existing fuel break in the form of the large pond situated between the proposed home site and the wooded riparian habitat located about 500 feet from the proposed home. No new infrastructure would be required would be required to serve the project. The potential environmental impacts that would result from the construction of the project—such as potential impacts to air quality, water quality, and noise—are addressed throughout this Initial Study. This would be a ***less-than-significant impact***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

Explanation: The potential for flooding is addressed in Section X-g and the potential for landslide is addressed in Section VII-a.iv. As discussed in Section XX-b, above, there is not a significant risk of wildfire at or near the project site, so secondary effects such as post-five slope instability are highly unlikely. Furthermore, there are no downslope receivers from the proposed home. There would be ***no impact***.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE —

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to 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, 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?	☐	☒	☐	☐

Explanation: Project construction projects could have short-term impacts on air quality. A mitigation measure addressing short-term construction impacts have been identified in this Initial Study to ensure that air quality impacts remain less than significant. Construction of the project also has the potential to adversely affect special-status birds and other wildlife, reptiles, and amphibians. Project construction could also adversely affect wetlands and other regulated waters. Mitigation measures have been identified to ensure that all potential impacts to biological resources would be less than significant. There is a possibility for prehistoric or historic cultural resources to be buried under sites where project construction activities could involve disturbance of the subsurface. This activity could damage or destroy any buried cultural resources that may be present. Similarly, if paleontological resources are present, they could also be damaged or destroyed during construction activities. However, mitigation measures have been identified to ensure that these potential impacts would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☒	☐

Explanation: No significant cumulative impacts were identified for the proposed project.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) *Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?*	☐	☒	☐	☐

Explanation: The proposed project would not introduce any significant hazards to the project area. Measures have been identified to address potentially significant impacts associated with particulate emissions during project construction. There is some potential to expose future residents to risk of wildfire, but the site is not within a Very High Fire Hazard Severity Zone, and the proposed home would be constructed of fire-resistant materials. With implementation of all mitigation measures identified in this Initial Study, the project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.

REPORT PREPARATION

This Initial Study/Mitigated Negative Declaration was prepared under the direction of Douglas Herring & Associates, with assistance from the Alameda County Planning Department.

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MITIGATION MEASURES

Air Quality

Mitigation Measure AQ-1: The property owner/applicant shall require the construction contractor to reduce the severity of project construction period dust and equipment exhaust impacts by complying with the following control measures:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted wood chips, mulch, or gravel.
- Publicly visible signs shall be posted with the telephone number and name of the person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's General Air Pollution Complaints phone number shall also be visible to ensure compliance with applicable regulations.

Biological Resources

Mitigation Measure BIO-1: Prior to commencement of grading or other site disturbance, a qualified plant biologist shall conduct a rare plant survey during the blooming period (May through June) for Santa Clara Red Ribbons and any other special-status plant species. The survey shall be performed in accordance with guidelines for rare plant surveys published by the California Department of Fish and Wildlife (CDFW) and the California Native Plant Society (CNPS). Any rare, threatened, or endangered plant species, including but not limited to those listed in Attachment 2, Table 2, of the July 2024 biological resources assessment report prepared for the project

by Olberding Environmental, Inc., shall be identified and mapped. If any special-status plant species are found on the site, the biologist shall consult with the U.S. Fish and Wildlife Service (USFWS) and/or CDFW to identify appropriate mitigation to protect the species. Any further mitigation recommended by USFWS and/or CDFW shall be implemented prior to the initiation of site grading or other site disturbance. The results of the rare plant survey, as well as any additional mitigation requirements identified by USFWS and/or CDFW, as applicable, and the successful implementation of those requirements, shall be documented by the biologist in a letter report to be submitted to the Alameda County Planning Department. The County shall not issue a grading permit until these requirements have been satisfied.

Mitigation Measure BIO-2: If site grading or other project construction activities would take place during the bird nesting season (February through August), pre-construction surveys of the project site and the adjacent large trees shall be conducted by a qualified wildlife biologist to identify any nesting passerine birds, raptors (birds of prey), or waterfowl. The surveys shall be conducted within 14 days prior to the commencement of the tree removal or site grading activities. Surveys should focus on areas where birds are likely to nest, including trees, shrubs, grasslands, rock faces, stream banks, or under eves of structures. If any bird listed under the Migratory Bird Treaty Act is found to be nesting within the project site or adjacent trees, a protective buffer zone shall be established by the biologist to protect the nesting site. This buffer shall be a minimum of 75 feet from the project activities for passerine birds, and a minimum of 250 feet for raptors. The distance shall be determined by the biologist, based on the sensitivity of the birds nesting and site conditions, such as whether the nest is in a line-of-sight of the construction activities. The nest site(s) shall be monitored by the biologist at least weekly during construction to see if the birds are stressed by the construction and if the protective buffer needs to be increased. Once the young have fledged and are flying well enough to avoid project construction zones (typically by August), project construction can proceed without further regard to the nest site(s). Active nests, including those in the process of being constructed, shall not be disturbed. Surveys shall be repeated in areas where project construction activities lapse for a period of seven days or more.

Mitigation Measure BIO-3: Prior to issuance of a grading permit or any ground-disturbing activities, a qualified biologist shall conduct an initial protocol-level survey during the peak of the breeding season (mid-April to mid–July) to determine whether the burrowing owl breeds on or within 250 feet of the construction site. A pre-construction survey shall also be conducted no more than 14 days prior to any ground-disturbing activities. Occupancy of burrowing owl habitat is confirmed at a site when at least one burrowing owl or its sign at or near a burrow entrance is observed within the last three years. If a burrowing owl or sign is present on the property, three additional protocol level surveys shall be performed. The results of the pre-construction burrowing owl habitat assessment survey and any

required subsequent surveys shall be documented in a letter report to be submitted to the Alameda County Planning Department.

If owls are encountered during any of the surveys, a Burrowing Owl Mitigation Plan shall be prepared, to be approved by the Alameda County Planning Department and the California Department of Fish and Wildlife (CDFW) prior to issuance of a grading permit, and implemented. The mitigation plan shall include the establishment of 250-foot non-disturbance buffers around occupied burrows during the nesting season (February 1st through August 31st) and 160-foot buffers during the non-breeding season (September 1st to January 31st). The mitigation plan may include passive relocation during the non-breeding season, but no burrowing owls shall be evicted from burrows during the nesting season unless evidence indicates that nesting is not actively occurring (e.g., because the owls have not yet begun nesting early in the season, or because young have already fledged late in the season). During the nesting season, a 250-foot buffer, within which no new activity will be permissible, shall be maintained between project activities and occupied burrows.

Mitigation Measure BIO-4:

For all project demolition and construction activities planned in or adjacent to potential bat roosting habitat, such as structures and/or involving woody vegetation modification or removal of any and all trees, a qualified biologist shall conduct daytime and evening acoustic surveys in addition to extensive visual surveys of potential habitat for special-status bats at least 7 days prior to initiation of project activities. If bats are found on-site, a qualified biologist shall identify the species, estimated quantity present, roost type, and roost status, but shall avoid disturbing bats during surveys. A qualified biologist shall also create a Bat Mitigation and Monitoring Plan if special-status bat species are detected prior to the start of project activities. The Bat Mitigation and Monitoring Plan shall include: (1) an assessment of all project impacts to special-status bats, including noise disturbance during construction; (2) effective avoidance and minimization measures to protect special-status bats; (3) and compensatory mitigation for permanent impacts to special-status bats or their nesting/roosting habitat. If structures, trees, or other refugia equivalents are slated for limbing, removal, or modification, the Bat Mitigation and Monitoring Plan shall include the following measures:

- To ensure that special-status bats have left potential roosting refugia, work shall occur over the course of two days. On the first day, smaller limbs or items from the identified trees or structures shall be brushed back or modified in the late afternoon. This disturbance should cause any potential roosting bats to seek other roosts during their nighttime foraging. The remainder of the refugia item can then be further limbed or removed as needed on the second day as late in the afternoon as feasible. If bats are found injured, or if bat mortality occurs during the course of tree work, a qualified biologist shall record the species impacted, and the number of individuals documented.

- Tree limbing, modification, removal, or work on structural refugia shall not be performed under any of the following conditions: during any precipitation events, when ambient temperatures are below 4.5 degrees Celsius, when windspeeds exceed 11 miles per hour, and/or any other condition which may lead to bats seeking refuge.
- If special-status bats are found utilizing a tree, structure, or equivalent for roosting, the Bat Mitigation and Monitoring Plan shall include permanent artificial roosting habitat installations that shall be adjacent to, and sufficient for, the species observed and associated ecology thereof. Effective buffer zones for the installation and monitoring of the artificial roosts shall be determined and established by a qualified biologist.

Mitigation Measure BIO-5: A qualified biologist shall conduct pre-construction ground surveys for special-status mammals that should commence generally no more than 30 days prior to construction start-up. Any suitable habitats, burrows, and dens observed for these species shall be identified and mapped. Any signs of other direct or indirect evidence such as scat, tracks, prey items shall also be identified and mapped. A protective buffer shall be established around any burrows or dens identified with orange construction fencing, and a biological monitor shall be present upon the initiation of construction to monitor construction activities to ensure that the nests are not disturbed. If any occupied burrows or dens cannot be avoided during project construction, a mitigation plan shall be prepared by a qualified biologist to be implemented as directed by the biologist.

Mitigation Measure BIO-6: Prior to commencing any project activities that may result in the destruction of dusky-footed woodrat nests, surveys shall be conducted by a qualified biologist to determine the occurrence of active nests throughout the property where suitable habitats are present. If found, orange construction fencing shall be installed as a buffer around the nest at a suitable distance, and a biological monitor shall be present upon the initiation of construction to monitor construction activities to ensure that the nests are not disturbed. If any woodrat nests cannot be avoided during project construction, a mitigation plan shall be prepared by a qualified biologist to be implemented as directed by the biologist.

Mitigation Measure BIO-7: A qualified biologist shall conduct protocol-level pre-construction surveys for California red-legged frog (CRLF), California tiger salamander (CTS), and foothill yellow-legged frog (FHYF) prior to ground-disturbing activities in any areas of the property located within 1.2 miles (the known dispersal distance for CTS) of suitable breeding habitat. The surveys shall be conducted in accordance with the U.S. Fish and Wildlife Service's (USFWS) Interim Guidance document (USFWS, 2003). The surveys shall include a 100-foot buffer around the project disturbance area in all areas of wetland and upland habitat that could support CTS. The survey findings shall be submitted to the California Department of Fish and Wildlife (CDFW) for review. Acceptance of a negative finding for CTS requires

protocol-level surveys to be conducted for two consecutive annual wet seasons, prior to any site disturbance.

The intermittent drainages, wetlands and wetland swales, and ponds may provide suitable habitat for these species while the grassland/woodland habitats could provide potential suitable upland habitat. A qualified biologist shall survey the project site for CRLF, CTS, and FHYF preceding the commencement of construction activities to verify absence/presence of the species. All ruts, holes, and burrows located within the dispersal distance for each species shall be inspected for these species prior to and during excavation or removal. The biological monitor shall precede initial grading equipment to look for and avoid amphibians that may be present on the property. If any amphibians are found during initial clearing and grubbing, a qualified biologist possessing a valid ESA Section 10(a)(1)(A) permit or USFWS-approved under an active biological opinion, may be required to move amphibians to nearby suitable habitat outside the fenced project site.

If aquatic habitat is present, a qualified biologist shall stake and flag an exclusion zone prior to initiation of construction activities in order to prevent the dispersal of amphibians into the grading and work areas. The exclusion zone shall be fenced with orange construction zone and erosion control fencing (to be installed by construction crew). The exclusion zone shall encompass the maximum practicable distance from the work site but shall be at least 500 feet from the wet or dry aquatic feature and at least 50 feet around any identified small mammal burrows or occupied breeding pools within and adjacent to the project disturbance footprint. Any impacts that could alter the hydrology or result in sedimentation of breeding pools shall be avoided. If avoidance is not feasible, consultation with CDFW is warranted to determine if the Project can avoid take. Barrier fencing shall be removed within 72 hours of the completion of construction activity.

The project biologist shall contact the USFWS and/or the CDFW to determine the typical dispersal distance for amphibian species determined to be present, based on the latest research on this distance for the pertinent species.

Fencing shall be trenched into the ground at a minimum of 6 inches and a lip should be formed along the top of the fence line. A Designated Biologist or Biological Monitor shall be onsite during initial ground-disturbing activities in order to inspect the work area and fence lines daily for special-status amphibians and other wildlife. Worker Environmental Awareness training discussing the potential for these species to be encountered shall be conducted by the Designated Biologist or Biological Monitor for all construction personnel working within the project site. If any CRLF or other listed amphibians are found during construction activities, the U.S. Fish and Wildlife Service shall be consulted to approve capture and relocation by a Qualified Biologist.

Mitigation Measure BIO-8: Pre-construction surveys for California red-legged frog (CRLF) shall be conducted in accordance with U.S. Fish and Wildlife Service (USFWS) protocol, in compliance with the following schedule:

- Surveys Performed during the breeding season (October 1- June 30): USFWS recommends a total of up to eight surveys to determine the absence of CRLF at or a near a project site. Two day surveys and four night surveys would be required during the breeding season. If CRLF are identified at any time during the course of surveys, no additional surveys are needed.
- Surveys Performed during the non-breeding season (July 1- September 30): One day and one night survey would be required during the non-breeding season. At least one survey must be completed between January 1 and August 15. If CRLF are identified at any time during the course of surveys, no additional surveys are needed.

The main purpose of day surveys during breeding season are to look for larvae, metamorphs, and egg masses while the purpose for day surveys during non-breeding season are to look for sub-adult metamorphs and non-breeding adults. Day surveys should be conducted between one hour after sunrise and one hour before sunset. Night surveys are used to identify and locate adult and metamorphs and are to take place no earlier than one hour after sunset.

If any CRLF are encountered, they shall be relocated in consultation with the USFWS. If required by the USFWS, the applicant shall obtain an Incidental Take Permit from the USFWS, pursuant to Section 10 of the federal ESA.

Mitigation Measure BIO-9: A pre-construction survey of the project site for the potential presence of Alameda whipsnake and western pond turtle shall be conducted by a qualified wildlife biologist no more than 48 hours prior to commencement of ground disturbance or vegetation removal. If any whipsnakes or pond turtles are identified, the biologist shall develop appropriate mitigation to protect the species and compensate for lost habitat, if applicable. The mitigation shall be determined in consultation with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) and implemented to the satisfaction of those agencies. Incidental take permits shall be obtained from these agencies prior to the County issuing a grading permit or any ground-disturbing activities. Worker Environmental Awareness training discussing the potential for these species to be encountered shall be conducted by the Designated Biologist or Biological Monitor for all construction personnel working within the project site.

At a minimum, the mitigation for impacts to Alameda whipsnake and/or western pond turtle shall include the following measures to be implemented during project construction:

- Barrier fencing as stipulated in Mitigation Measure BIO-7 shall be used to exclude focal reptiles. Barrier fencing shall be removed within 72 hours of completion of work. No monofilament plastic shall be used for erosion control.
- Construction crews or the on-site Biological Monitor shall inspect open trenches in the morning and evening for trapped reptiles.
- Ground disturbance within suitable whipsnake or pond turtle habitat shall be minimized. A USFWS- and CDFW-approved Biological Monitor shall be present to monitor all ground-disturbing activities within suitable whipsnake or pond turtle habitat.
- A qualified biologist possessing a valid ESA Section 10(a)(1)(A) permit or Service approved under an active biological opinion, and approved by CDFG will be contracted to trap and to move reptiles to nearby suitable habitat if listed reptiles are found inside fenced area.

Mitigation Measure BIO-10: A pre-construction habitat assessment evaluating the likelihood of the Crotch's bumble bee or other special-status bumble bee occurring within and adjacent to the project area shall be performed by a qualified biologist prior to the County issuing a grading permit or any ground-disturbing activities and results shall be submitted to CDFW prior to initiation of ground-disturbing project activities. The assessment shall include historical and current species occurrences, data from site visits on potential foraging, nesting, and/or overwintering resources, and blooming plant species present and their percent cover. These resources shall be quantified across multiple site visits, corresponding with the Colony Active Season for Crotch's bumble bee (April – August). If it is determined that there is potential for the species to occur, then on-site surveys shall be performed prior to initiation of ground-disturbing project activities.

If on-site surveys are required as a result of the habitat assessment, at least three on-site surveys shall be performed and the survey results shall be submitted to CDFW prior to initiation of ground-disturbing project activities. Each survey shall be spaced two to four weeks apart, corresponding with the Colony Active Season for Crotch's bumble bee (April – August). The survey shall be performed in accordance with the method of non-lethal photo vouchers of captured bumble bees outlined in CDFW's Survey Considerations for CESA Candidate Bumble Bee Species (CDFW 2023). This survey methodology will require receiving a 2081(a) Memorandum of Understanding (MOU) with CDFW.

If no Crotch's bumble bee has been detected during the multiple rounds of focused surveys, but the habitat assessment identified suitable nesting, foraging, or overwintering habitat within the project site, a qualified biological monitor shall be present onsite to observe work during vegetation or ground disturbing activities that take place during any of the Queen and Gyne Flight Period and Colony Active Period for the

species (February – October). If the biological monitor identifies potential impacts to Crotch's bumble bee or other special-status bumble bees, work shall be halted until appropriate protections identified by the biological monitor can be implemented to the satisfaction of the biological monitor.

Mitigation Measure BIO-11: Prior to the County issuing a grading permit or any ground-disturbing activities, the project sponsor shall retain the services of a qualified biologist to implement the following measures:

a) A formal wetland delineation shall be prepared and submitted to the U.S. Army Corps of Engineers (ACOE) for a jurisdictional determination. If it is determined by the ACOE that intermittent drainages or seasonal wetland/wetland swales on site are regulated under the Clean Water Act, the project sponsor shall implement Mitigation Measure BIO-10(b), below. Whether or not it is determined that wetlands on site are not regulated under the Clean Water Act, the project sponsor shall implement Mitigation Measure BIO-10(c).

b) Prior to the placement of fill into regulated wetlands or drainages, the project sponsor shall obtain permits under Sections 401 and 404 of the Clean Water Act. These permits, administered by the San Francisco Bay Regional Water Quality Control Board (RWQCB) and ACOE, respectively, would identify specific mitigation measures that would be imposed on the project as permit conditions. At a minimum, the project sponsor shall implement Mitigation Measure BIO-10(d) or BIO-10(e).

c) If project construction activities would divert or obstruct the natural flow of any river, stream, or lake; change the bed, channel, or bank of any river, stream, or lake; use material from any river, stream, or lake; or deposit or dispose of material into any river, stream, or lake (none of these activities are currently anticipated), the applicant shall also apply for and obtain a Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW) pursuant to California Fish and Game Code Section 1602 prior to initiating project construction. Any impacts to State or federal jurisdictional features shall be mitigated at a 2:1 replacement ratio.

d) In order to determine the presence or absence of waters of the State subject to the jurisdiction of State regulatory agencies, a description of existing habitats on site shall be submitted to the California Department of Fish and Wildlife (CDFW) and RWQCB for review. If waters of State are determined to fall under one or both of these agencies, the project sponsor shall obtain the appropriate permits. These permits would identify specific mitigation measures that would be imposed on the project as

permit conditions. At a minimum, the project sponsor shall implement Mitigation Measure BIO-10(d) or BIO-10(e).

e) As part of the permitting process, the project sponsor shall comply with all permit conditions of the regulatory agencies, including the implementation of an appropriate compensatory mitigation plan for unavoidable impacts to wetlands. At the discretion of the regulatory agencies, the project sponsor may seek a public or private entity in control of lands at a suitable off–site location with planned habitat restoration measures, to which an in-lieu-of of fee could be paid. The recipient may be either an approved mitigation bank or public or private entity undertaking habitat restoration measures. The type of restoration project and amount of the in-lieu-of fee would be determined in consultation with the regulatory agencies with the ultimate objective of satisfying agency concerns and permit conditions. If payment of in-lieu-of fees is not acceptable to one or more of the regulatory agencies or a suitable recipient cannot be found, the project sponsor shall implement on–site wetland mitigation, as outlined in Mitigation Measure BIO-10(e).

f) A Wetland Mitigation and Monitoring Plan shall be prepared and submitted for agency review. Detailed wetland protection, replacement, and restoration plans shall be prepared by a qualified wetland restorationist paid for by the project sponsor. The plans shall accurately identify the total wetlands and other jurisdictional areas that could be affected by the proposed project. The plans shall provide for re-establishment, enhancement, and/or replacement of wetland habitat and vegetation, and be approved by the regulatory agencies; in certain instances, cash contributions earmarked specifically for wetland creation, enhancement, or restoration offsite may be deemed appropriate and acceptable to the regulatory agencies. Mitigation plantings shall be monitored for no less than five years following completion of plant installation or as otherwise specified in the permit conditions. Annual reports shall be submitted to the Alameda County Planning Department and each permitting agency, e.g., ACOE, RWQCB, and/or CDFG. Additionally, the Alameda County Planning Department shall ensure that all mitigation areas, along with an appropriate upland buffer, be placed in a permanent conservation easement, or similar deed restriction, and preserved in perpetuity, as specified in the permit conditions. Prior to the issuance of grading permits by the County or prior to any ground-disturbing activities, the project sponsor shall provide evidence of the required approvals from all regulatory agencies.

Cultural Resources

Mitigation Measure CUL-1: In the event that any cultural resources are encountered during site grading or other ground-disturbing project construction activities, all ground

disturbance within 100 feet of the find shall be halted until a qualified archaeologist can evaluate the resource(s) and, if necessary, recommend mitigation measures to document and prevent any significant adverse effects on the resource(s). (Construction personnel shall not collect any cultural resources.) Any further mitigation measures recommended by the archaeologist shall be implemented and construction shall not resume in the vicinity of the find until the archaeologist has authorized the resumption of work. The results of any additional archaeological effort required through the implementation of this measure and/or Mitigation Measure CUL-2 shall be presented in a professional-quality report, to be submitted to the Alameda County Planning Department and the Northwest Information Center at Sonoma State University in Rohnert Park.

Mitigation Measure CUL-2: In the event that any human remains are encountered during site disturbance, all ground-disturbing work shall cease immediately and a qualified archaeologist shall notify the Office of the Alameda County Coroner and advise that office as to whether the remains are likely to be prehistoric or historic period in date. If determined to be prehistoric, the Coroner's Office will notify the Native American Heritage Commission of the find, which, in turn, will then appoint a "Most Likely Descendant" (MLD). The MLD in consultation with the archaeological consultant and the County, will advise and help formulate an appropriate plan for treatment of the remains, which might include recordation, removal, and scientific study of the remains and any associated artifacts. After completion of analysis and preparation of the report of findings, the remains and associated grave goods shall be returned to the MLD for reburial.

Geology and Soils

Mitigation Measure GS-1: If any paleontological resources—such as fossilized bone, teeth, shell, tracks, trails, casts, molds, or impressions—are encountered during site grading or other construction activities, all ground disturbance within 100 feet of the find shall be halted until the services of a qualified paleontologist can be retained to identify and evaluate the scientific value of the resource(s) and, if necessary, recommend mitigation measures to document and prevent any significant adverse effects on the resource(s). Any further mitigation measures recommended by the paleontologist shall be implemented and construction shall not resume in the vicinity of the find until the paleontologist has authorized the resumption of work. Significant paleontological resources shall be salvaged and deposited in an accredited and permanent scientific institution, such as the University of California Museum of Paleontology (UCMP).

Tribal Cultural Resources

See Mitigation Measures CUL-1 and CUL-2, above.

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