COUNTY OF SAN MATEO, PLANNING AND BUILDING DEPARTMENT

NOTICE OF INTENT TO ADOPT
MITIGATED NEGATIVE DECLARATION

A notice, pursuant to the California Environmental Quality Act of 1970, as amended (Public Resources Code 21,000, et seq.), that the following project: *Bean Hollow Farms Project* when adopted and implemented, will not have a significant impact on the environment.

FILE NO.: PLN2021-00022

OWNER: Bean Hollow Farms LLC

APPLICANT: Brian Lee

NAME OF PERSON UNDERTAKING THE PROJECT OR RECEIVING THE PROJECT APPROVAL (IF DIFFERENT FROM APPLICANT): Same as Applicant

ASSESSOR'S PARCEL NO.: APN 086-191-100

LOCATION: Bean Hollow Road, east of Cabrillo Highway in the community of Pescadero

PROJECT DESCRIPTION

The applicant is seeking a Coastal Development Permit (CDP), Planned Agricultural District (PAD) Permit, and Grading Permit for a new 3,658 sq. ft. single-family residence, attached 1,358 sq. ft. garage/workshop/unconditioned storage, and a 718 sq. ft. greenhouse. The project includes the conversion of an agricultural well to domestic use with the addition of a water lateral connecting the well to the new home, a new septic system, new water tanks, and 1,800 cubic yards of grading (1,200 c.y. of cut and 600 c.y. of fill) for the residence, 4 fire engine turnouts and a new driveway. The new driveway includes a 15 foot culvert to span over an existing man made drainage ditch. The legality of the 38 acre parcel was established by a determination for a Certificate of Compliance, Type A (COC 92-0001). No tree removal is proposed. The parcel is not under a Williamson Act contract.

FINDINGS AND BASIS FOR A MITIGATED NEGATIVE DECLARATION

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

1. The project will not adversely affect water or air quality or increase noise levels substantially.

2. The project will not have adverse impacts on the flora or fauna of the area.

3. The project will not degrade the aesthetic quality of the area.

4. The project will not have adverse impacts on traffic or land use.

5. In addition, the project will not:

    a. Create impacts which have the potential to degrade the quality of the environment.

    b. Create impacts which achieve short-term to the disadvantage of long-term environmental goals.

    c. Create impacts for a project which are individually limited, but cumulatively considerable.

    d. Create environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

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

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

Mitigation Measure 1: All proposed exterior lighting shall be designed and located so as to confine direct rays to the subject property and prevent glare in the surrounding area. Manufacturer cut sheets for any exterior light fixtures shall be submitted for review and approval prior to the issuance of a building permit.

Mitigation Measure 2: Final finishes of all exterior materials and/or colors, including glass windows and/or panels, shall be non-reflective.

Mitigation Measure 3: The applicant shall require construction contractors to implement all the Bay Area Air Quality Management District's Basic Construction Mitigation Measures, listed below:

a) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access road) shall be watered two times per day.

b) All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

c) All visible mud or dirt track-out onto adjacent paved roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

d) All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.

e) 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.

f) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.

g) Idling times shall be minimized either by shutting equipment or vehicles off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

h) Post a publicly visible sign with the telephone number and person to contact at the project site regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Bay Area Air Quality Management District's phone number shall also be visible to ensure compliance with applicable regulations.

Mitigation Measure 4: Pre-construction surveys shall be performed between April and June for rose leptosiphon, marsh microseris, Choris' popcornflower, and Scouler's catchfly. If found, the plant shall be avoided to extent possible, or a translocation plan shall be prepared prior to the start of activities and submitted for review and approval by the San Mateo County Planning and Building Department prior to implementation.

Mitigation Measure 5: An environmental training shall be provided to all construction workers prior to the start of work. The training will educate workers on: (1) any sensitive resources or special-status species that may occur in the work area, (2) procedures to follow in the event a species is observed, and (3) other environmental BMPs for ensuring take is avoided.

Mitigation Measure 6: Wildlife exclusion fencing shall be placed around the perimeter of project footprint and any staging areas to prevent animals including California Red-Legged Frog and/or San Francisco Garter Snake from entering the work area. Fencing should be a minimum of 36 inches high, with a minimum of 4 inches trenched into the ground. Fencing shall be installed under the guidance of a qualified biologist and maintained throughout the duration of ground-disturbing activities.

Mitigation Measure 7: If work is to be initiated during the nesting bird season, between February 1 and August 31, a pre-construction nesting bird survey shall be performed in all areas within 250 feet of proposed activities. If nests are found, an appropriately sized no-disturbance buffer shall be placed around the nest at the direction of the qualified biologist conducting the survey. Buffers for common songbird species is 25 to 50 feet, and between 100 up to 500 feet for special-status birds and/or raptors depending on the species and status of the nest. Buffers shall remain in place until all young have fledged, or the biologist has confirmed that the nest

has been naturally predated.

Mitigation Measure 8: A pre-construction survey for San Francisco Dusky-Footed Wood Rat (SFDW) nests shall be performed prior to the start of work within 25 feet of proposed activities. If an active SFDW nest is found and cannot be avoided, the biologist shall supervise dismantling of the nest by hand. If young are found, material shall be set back on the house and the house avoided for a minimum of 3 weeks to allow young to wean and leave the nest. Following completion of the dismantling, nest material shall be placed in nearby habitat where it can be completely avoided.

Mitigation Measure 9: A pre-construction survey for Western Pond Turtle, California Red-Legged Frog, and San Francisco Garter Snake shall be conducted prior to initiation of project activities within 48 hours of the start of work. Surveys are to be conducted by approved qualified biologist(s) with experience surveying for each species. If any species is found on the Project Site, it should be allowed to leave the area on its own. If the animal does not leave the area on its own, the USFWS and CDFW shall be contacted.

Mitigation Measure 10: No ground-disturbing work (e.g. vegetation removal, grading, or trenchwork) shall be performed if a 70 percent or greater chance of rainfall is predicted within 72 hours of project activity or within 24 hours of any rain event (greater than 0.5 inches) occurring between October 31 and April 31 when frogs are most likely to disperse into upland habitats. No work shall occur within 30 minutes of sunrise or sunset.

Mitigation Measure 11: Trenches and holes shall be covered and inspected daily for stranded animals. Trenches and holes deeper than one-foot should contain escape ramps at a maximum slope of 2:1 to allow trapped animals to escape.

Mitigation Measure 12: Tightly woven fiber netting or similar material shall be used for erosion control or other purposes to ensure amphibian and reptile species do not get trapped. Plastic monofilament netting (erosion control matting), rolled erosion control products, or similar material shall not be used. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.

Mitigation Measure 13: All food and food-related trash must be enclosed in sealed trash containers at the end of each day and removed completely from the site every three days to avoid attracting wildlife that may prey on listed species in the area.

Mitigation Measure 14: In the event that archaeological resources are inadvertently discovered during construction, work in the immediate vicinity (within 50 feet) of the find must stop until a qualified archaeologist can evaluate the significance of the find. Construction activities may continue in other areas beyond the 50-foot stop work area. A qualified archaeologist is defined as someone who meets the Secretary of the Interior's Professional Qualifications Standards in archaeology. The Current Planning Section shall be notified of such findings, and no additional work shall be done in the stop work area until the archaeologist has recommended appropriate measures, and those measures have been approved by the Current Planning Section and implemented.

Mitigation Measure 15: Should any human remains be discovered during construction, all ground disturbing work shall cease and the County Coroner shall be immediately notified, pursuant to Section 7050.5 of the State of California Health and Safety Code. Work must stop until the County Coroner can make a determination of origin and disposition of the remains

pursuant to California Public Resources Code Section 5097.98 for the naming of a Most Likely Descendant and the recommendations for disposition. Additionally, the State Native American Heritage Commission may need to be notified to seek recommendations from a Most Likely Descendant (Tribal Contact) before any further action at the location of the find can proceed.

Mitigation Measure 16: The applicant shall submit an erosion control plan in compliance with the County's General Erosion and Sediment Control Plan Guidelines Checklist for review and approval as part of the building permit plans submittal.

Mitigation Measure 17: No grading shall be allowed during the wet weather season (October 1 through April 30) to avoid increased potential soil erosion, unless the applicant applies for an Exception to the Winter Grading Moratorium and the San Mateo County Community Development Director grants the exception. Exceptions will only be granted if dry weather is forecasted during scheduled grading operations, and the erosion control plan includes adequate winterization measures (amongst other determining factors).

Mitigation Measure 18: An Erosion Control and Tree Protection Pre-Site Inspection shall be conducted prior to the issuance of a grading permit "hard card" and/or building permit to ensure the approved erosion control and tree protection measures are appropriately implemented.

Mitigation Measure 19: In the event that tribal cultural resources are inadvertently discovered during project implementation, all work shall stop until a qualified professional can evaluate the find and recommend appropriate measures to avoid and preserve the resource in place, or minimize adverse impacts to the resource, and those measures shall be approved by the Current Planning Section prior to implementation and continuing any work associated with the project.

Mitigation Measure 20: In the event that tribal cultural resources are inadvertently discovered during project implementation, consultation with the affiliated Native American tribe shall be made prior to continuing any work associated with the project to ensure the resource is treated with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

INITIAL STUDY

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

REVIEW PERIOD: A 20-day public review period for the IS/MND will commence July 13, 2022 and continue through August 2, 2022. All comments regarding the correctness, completeness, or adequacy of this Negative Declaration must be received by the County Planning and Building Department, 455 County Center, Second Floor, Redwood City, no later than 5:00 p.m., August 2, 2022. Please send your comments to:

Kanoa Kelley, Planner II
San Mateo County Planning and Building Department
455 County Center, Redwood City, CA 94063

Email: kkelley@smcgov.org

Document Availability: Copies of the IS/MND and all documents referenced in the IS/MND are available to view and download on the County's website: https://planning.smcgov.org/ceqa-docs

Kanoa Kelley, Project Planner

County of San Mateo
Planning and Building Department

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

1. **Project Title:** Bean Hollow Farm Project

2. **County File Number:** PLN2021-00022

3. **Lead Agency Name and Address:**
   County of San Mateo Planning and Building Department
   455 County Center, 2nd Floor
   Redwood City, CA 94063

4. **Contact Person and Phone Number:** Kanoa Kelley; Kkelley@smcgov.org

5. **Project Location:** Bean Hollow Road, east of Cabrillo Highway in the community of Pescadero

6. **Assessor's Parcel Number and Size of Parcel:** 086-191-100; 38.2 acres

7. **Project Sponsor's Name and Address:**
   Bean Hollow Farm LLC
   Brian Douglas Lee
   340 E. Randolph Street #5802c
   Chicago, IL 60601

8. **Name of Person Undertaking the Project or Receiving the Project Approval (if different from Project Sponsor):** Brian Lee

9. **General Plan Designation:** Agriculture

10. **Zoning:** Planned Agricultural District (PAD) / Coastal Development (CD)

11. **Description of the Project:** The applicant is seeking a Coastal Development Permit (CDP), Planned Agricultural District (PAD) Permit, and Grading Permit for a new 3,658 sq. ft. single-family residence, attached 1,358 sq. ft. garage/workshop/unconditioned storage, and a 718 sq. ft. greenhouse. The project includes the conversion of an agricultural well to domestic use with the addition of a water lateral connecting the well to the new home, a new septic system, new water tanks, and 1,800 cubic yards of grading (1,200 c.y. of cut and 600 c.y. of fill) for the residence, 4 fire engine turnouts and a new driveway. The new driveway includes a 15 foot culvert to span over an existing man made drainage ditch. The legality of the 38 acre parcel was established by a determination for a Certificate of Compliance, Type A (COC 92-0001). No tree removal is proposed. The parcel is not under a Williamson Act contract.

12. **Surrounding Land Uses and Setting:** The legal 38-acre project parcel borders Cabrillo Highway on the parcel's west side and is accessed via Bean Hollow Road from Cabrillo Highway (Hwy 1). The parcel is located in a rural area surrounded by single-family residential and dedicated farmland developed parcels ranging in size between 5 to 45 acres. The parcel is currently used as an agricultural operation. The site is mostly cleared farmland with a few mature trees and ponds. Topography in the area consists of relatively gentle sloped terrains.

13. **Other Public Agencies Whose Approval is Required:** N/A

14. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?:**

    This project is subject to California Public Resources Code 21080.3.1 which requires a tribal consultation request be sent within 14 days of determining that an application has been deemed complete or a public agency decides to undertake a project. The County of San Mateo has received a request for formal notification from the Tamien Nation of the greater Santa Clara County. Additionally, a list of local tribes was obtained from the Native American Heritage Commission (NAHC). A notice for consultation was sent to the Tamien Nation and all tribes on the list provided by the NAHC on May 23, 2022. California Native American Tribes have 30 days from the date the tribal consultation notice was received to request consultation. As of the date of this report, no tribes have contacted the County requesting formal consultation on this project.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.

4. "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in 5. below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other California Environmental Quality Act (CEQA) process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:

    a. Earlier Analysis Used. Identify and state where they are available for review.

    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

    c. Mitigation Measures. For effects that are "Less Than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources. Sources used or individuals contacted should be cited in the discussion.

1.	**AESTHETICS**. Except as provided in Public Resources Code Section 21099, would the project:				
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
1.a.	Have a substantial adverse effect on a scenic vista, views from existing residential areas, public lands, water bodies, or roads?			X	

Discussion: The subject parcel is located entirely within the Cabrillo Highway State Scenic Corridor. The scenic corridor begins at the Pacific Ocean shoreline and expands east of Highway 1 (Cabrillo Highway). The parcel is located east of Cabrillo Highway and the new single-family residence will be located approximately 1,000 feet east of Cabrillo Highway. Due to the vertical slope from Cabrillo Highway and existing vegetation, no proposed structures will be seen from Cabrillo Highway. Photo simulations have been included in the submitted plans showing views from 35 different angles along Cabrillo Highway and Bean Hollow Road. The photo simulations demonstrate that the home will not be visible from Cabrillo Highway and will minimally impact views from the Bean Hollow access road. The project does not propose the removal of any existing vegetation or trees, therefore, the project will not have an adverse effect on scenic vistas or views.

Source: Project Plans, Project Location.

1.b.	Substantially damage or destroy scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X

Discussion: There are no historic buildings or rock outcroppings located on the site, as the parcel has been maintained as farmland. No trees or grading is proposed adjacent to the State Scenic Highway.

Source: Project Plans, Project Location.

1.c.	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings, such as significant change in topography or ground surface relief features, and/or development on a ridgeline? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				X

Discussion: The project site is located in a rural coastal area in the community of Pescadero. Given the rural project parcel consists of relatively flat farmland there are no scenic qualities on the site that would be impacted by the project proposal. All existing trees and vegetation onsite would be preserved.

Source: Project Plans, Project Location.

1.d.	Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?		X		

Discussion: New light sources and glare from development has the potential to generate adverse impacts on day and nighttime views. The following mitigation measures are recommended to minimize any adverse daytime or nighttime view impacts from light or glare that the project may introduce to the area:

Mitigation Measure 1: All proposed exterior lighting shall be designed and located so as to confine direct rays to the subject property and prevent glare in the surrounding area. Manufacturer cut sheets for any exterior light fixtures shall be submitted for review and approval prior to the issuance of a building permit.

Mitigation Measure 2: Final finishes of all exterior materials and/or colors, including glass windows and/or panels, shall be non-reflective.

Source: Project Plans, Project Location.

1.e.	Be adjacent to a designated Scenic Highway or within a State or County Scenic Corridor?				X

Discussion: See discussion in response to 1.a.

Source: Project Location, Project Plans.

1.f.	If within a Design Review District, conflict with applicable General Plan or Zoning Ordinance provisions?				X

Discussion: The project site is not located within a Design Review District and will not conflict with any applicable General Plan or Zoning Ordinance provisions.

Source: San Mateo County Zoning Regulations, San Mateo County General Plan, San Mateo County GIS, Project Location.

1.g.	Visually intrude into an area having natural scenic qualities?			X	

Discussion: The site is located east of Cabrillo Highway and is not visible due to an upward slope from the freeway and existing trees and vegetations. The project would not block scenic views which are west of Cabrillo Highway. See staff's discussion in Section 1.a. - 1.d. above.

Source: Project Plans, Project Location.

2.	**AGRICULTURAL AND FOREST RESOURCES**. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
2.a.	For lands outside the Coastal Zone, convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
Discussion: The project is located inside of the Coastal Zone. **Source:** California Department of Conservation Farmland Mapping and Monitoring Program (2017), Project Plans, Project Location.					
2.b.	Conflict with existing zoning for agricultural use, an existing Open Space Easement, or a Williamson Act contract?				X
Discussion: The project parcel is zoned Planned Agricultural District (PAD) which permits residential uses subject to a PAD Permit. The parcel is not protected by an existing Open Space Easement or Williamson Act contract. An Agricultural Land Management Plan has been submitted by the applicant that proposes to maintain an agricultural operation on the site, which is consistent with the existing zoning. **Source:** San Mateo County Zoning Regulations, San Mateo County Agricultural Preserves Map, Project Plans.					
2.c.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forestland to non-forest use?			X	
Discussion: The project parcel is located in an area suitable for farmland and has been maintained as farmland since the early 1900's. The design of the single-family home and septic system has avoided all areas designated important farmland according to the Farmland Mapping and Monitoring					

Program Map The placement of all structures will avoid prime farmland therefore, no viable farmland will be converted. There is no forestland on the subject parcel.

Source: California Department of Conservation, Farmland Mapping and Monitoring Program Map (2017); Public Resources Code Section 12220(g); Project Location, Project Plans.

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

Discussion: The project site is located within the Coastal Zone in the community of Pescadero. The site contains both Class 3 and Class 2 prime soils. All proposed structures will be placed on non-prime soils located in the center of the parcel, therefore, avoiding any conversion of prime soils to residential uses. No subdivision has been proposed as part of this project.

Source: Project Location, Agricultural Land Management Plan, County of San Mateo GIS

2.e.	Result in damage to soil capability or loss of agricultural land?			X	

Discussion: The project site is designated as productive soil for irrigated crops as shown on the Productive Soil Resources Map. Due to the location of proposed development no agricultural land would be lost. The applicant has proposed to continue farming operations on the parcel. See discussion in 2.d. for additional information.

Source: San Mateo County General Plan, Productive Soil Resources Map, Project Agricultural Management Plan.

2.f.	Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? *Note to reader: This question seeks to address the economic impact of converting forestland to a non-timber harvesting use.*				X

Discussion: The property is zoned Planned Agricultural District (PAD). No proposed zoning changes are included as part of this project as the addition of a single-family residence is permitted by current zoning with a PAD Permit. Additionally, the project is not located in forestland or timberland preserve areas.

Source: Project Plans, San Mateo County Zoning Regulations.

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

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

Discussion: The Bay Area 2017 Clean Air Plan (CAP), developed by the Bay Area Air Quality Management District (BAAQMD), is the current regulating air quality plan for San Mateo County. The CAP was created to improve Bay Area air quality and to protect public health and the climate.

The project would not conflict with or obstruct the implementation of the BAAQMD's 2017 CAP. During construction of required shared infrastructure and installation of utilities and residential construction, air emissions would be generated from site grading, equipment, and work vehicles; however, any such grading-related emissions would be temporary and localized. Once constructed, residential use of the project site would have minimal impacts to the air quality standards set forth for the region by the BAAQMD.

Source: BAAQMD 2017 Clean Air Plan, Project Plans.

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

Discussion: The San Francisco Bay Area is in non-attainment for ozone and particulate matter (PM), including PM 10 (state status) and PM 2.5 (state status), including the 24-hour PM 2.5 national standard. Therefore, any increase in these criteria pollutants is significant. Implementation of the project will generate temporary increases in these criteria pollutants due to construction vehicle emissions and dust generated from earthwork activities. Mitigation Measure 3 below will minimize increases in non-attainment criteria pollutants generated from project construction to a less than significant level. Furthermore, the California Air Resources Board (CARB) provides regulation over vehicles of residents in the State of California, including the operation of any vehicles that would be associated with the future development of single-family residences, to ensure vehicle operating emissions are minimized in the effort towards reaching attainment for ozone, among other goals. The current project is not expected to generate a significant change.

Mitigation Measure 3: The applicant shall require construction contractors to implement all the Bay Area Air Quality Management District's Basic Construction Mitigation Measures, listed below:

a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

c. All visible mud or dirt track-out onto adjacent paved roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

d. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.

e. 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.

f. All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. All equipment shall be checked by a certified visible emissions evaluator.

g. Idling times shall be minimized either by shutting equipment or vehicles off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485, of the California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

h. Post a publicly visible sign with the telephone number and person to contact at the project site regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Bay Area Air Quality Management District's phone number shall also be visible to ensure compliance with applicable regulations.

Source: Bay Area Air Quality Management District, Project Plans.

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

Discussion: Any pollutant emissions generated from construction will primarily be temporary in nature. Additionally, Mitigation Measure 3 will minimize any potential significant exposure to nearby sensitive receptors to a less than significant level.

Source: Project Plans, Project Location.

3.d.	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

Discussion: Once constructed, the proposed project will not result in adverse emissions. The project has the potential to generate emissions during grading and construction such as noise and odor. However, any such noise and odors will be temporary and are expected to be minimal.

Source: Project Plans.

4. BIOLOGICAL RESOURCES. Would the project:

		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
4.a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in		X		

local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				

Discussion: A biological resources report has been prepared by Sol Ecology dated August 8, 2020. As shown in Tables 1 and 2 below, the report identified eight special-status plant species and eight special-status animal species with potential habitat on the subject parcel. The potential for occurrence of these plant and animal species range from low to high with the presence of California red-legged frog observed during the biological inspection. There are two ponds on site that, although man-made, are surrounded by wetland and riparian vegetation that create an ideal environment for special-status plant and animal species. Due to the high potential for special-status and endangered plants and animals to occur within the riparian and wetland areas, mitigation measures as recommended by the project biologist have been added to reduce the impacts to biological resources to a less than significant level. These mitigations include a pre-construction survey, wildlife exclusion fencing, environmental training for workers and other avoidance measures during construction. A 15 foot culvert is proposed as part of the new driveway providing access to the house from the existing access road. The culvert spans an existing ditch dug by early farmers. Per the biological report the ditch is not riparian as the vegetation is not comprised of wetland plants and the ditch is ephemeral in nature, therefore no setback or mitigation measures are necessary.

Table 1. Special Status Plants with Potential to Occur in the Project Study Area.

Scientific Name/ Common Name	Status	Habitat	Blooming Period	Potential for Occurrence
Astragalus pycnostachyus var. *pycnostachyus* coastal marsh milkvetch	1B.2	Coastal dunes (mesic), coastal scrub, marshes and swamps (coastal salt, streamsides). 0-30m	(Apr) Jun-Oct	**Moderate:** May be present near pond habitats; not likely to be impacted by project.
Fritillaria liliacea fragrant fritillary	1B.2	Often serpentinite; cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland. 3-410m	Feb-Apr	**Low:** May be present in grassland habitats near access road. Not observed during February site visit.
Lasthenia californica subsp. *macrantha* perennial goldfields	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub; grassland, dunes along immediate coast. 5-520m	Jan-Nov	**Low:** May be present in grassland habitats near access road. Not observed during February site visit.
Leptosiphon croceus coast yellow (rose) leptosiphon	1B.1	Coastal bluff scrub, coastal prairie; local, open, grassy areas. 10-150m	Apr-Jun	**Moderate:** May be present in open grassland habitats near access road.
Limnanthes douglasii subsp. *sulphurea* Point Reyes meadowfoam	SE, 1B.2	Coastal prairie, meadows and seeps (mesic), marshes and swamps (freshwater), vernal pools. 0-140m	Mar-May	**Moderate:** May be present near pond habitats; not likely to be impacted by project.
Microseris paludosa marsh microseris	1B.2	Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland. 5-355m	Apr-Jun (Jul)	**Moderate:** May be present in open grassland habitats near access road.
Plagiobothrys chorisianus var. *chorisianus* Choris' popcornflower	1B.2	Mesic; chaparral, coastal prairie, coastal scrub. 3-160m	Mar-Jun	**Moderate:** May be present in open grassland habitats near access road.
Silene scouleri subsp. *scouleri* Scouler's catchfly	2B.2	Coastal bluff scrub, coastal prairie, valley and foothill grassland. 0-600m	Mar-Aug (Sep)	**Moderate:** May be present in open grassland habitats near access road.

[1] SE – State Endangered; California Rare Plant Rank
1B – Plants rare, threatened, or endangered in California and elsewhere.
2B – Plants rare, threatened, or endangered in California but more common elsewhere.
0.1 – Seriously threatened in California
0.2 – Moderately threatened in California
0.3 – Not very threatened in California

Table 2. Special Status Wildlife with Potential to Occur in the Project Study Area.

Common Name /Scientific Name	Status	Habitat	Potential for Occurrence
San Francisco dusky-footed woodrat *Neotoma fuscipes annectens*	SSC	Forest habitats of moderate canopy and moderate to dense understory as well as chaparral and riparian scrub habitats. Constructs nests of shredded grass, leaves, and other material. May be limited by availability of nest-building materials.	**Moderate:** Suitable habitat is present around ponds and near existing access road; not likely in project footprint.
common yellowthroat *Geothlypis trichas sinuosa*	BCC	Resident of fresh and saltwater marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	**Moderate:** Suitable nesting habitat is present in willows surrounding ponds.
tricolored blackbird *Agelaius tricolor*	SCE, SSC, BCC	Most numerous in the Central Valley and vicinity. Highly colonial, nesting in dense aggregations over or near freshwater in emergent growth or riparian thickets or flooded agricultural fields.	**Moderate:** Suitable nesting & foraging habitat is present; not documented in region.
Allen's hummingbird *Selasphorus sasin*	BCC	Summer resident along the California coast, breeding in a variety of woodland and forest habitats. Nest in shrubs and trees with dense vegetation; commonly found nesting in Monterey pines.	**High:** Suitable nesting habitat is present.
California red-legged frog *Rana draytonii*	FT, SSC	Associated with quiet perennial to intermittent ponds, stream pools and wetlands with dense, shrubby, or emergent riparian vegetation. Prefers shorelines with extensive vegetation. Disperses through upland habitats after rains.	**Present:** Observed above lower pond near pumphouse on Feb. 24. Not likely to occur in onsite ditches.
San Francisco garter snake *Thamnophis sirtalis tetrataenia*	FE, SE, CFP	Vicinity of freshwater marshes, ponds, and slow-moving streams in San Mateo County. Prefers dense cover and water depths of at least one foot. Upland areas near water are also important.	**High:** Suitable pond habitat is present. Documented in Pescadero marsh.
western pond turtle *Actinemys marmorata*	SSC	Occurs in ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Require basking sites such as partially submerged logs, vegetation mats, or open mud banks, and suitable upland habitat for egg-laying.	**High:** Suitable pond habitat is present. Documented within one mile.
monarch butterfly *Danaus plexippus*	SSI	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, Monterey cypress), with nectar and water sources nearby.	**Moderate**: Documented in stand of pines just south of parcel; limited habitat on-site.

FE/SE – Federal/State Endangered FT/ST – Federal/State Threatened FC/SC – Federal/State Candidate
CFP – California Fully Protected SSC – Species of Special Concern BCC – Bird of Conservation Concern SSI – Special Status Invertebrate

Mitigation Measure 4: Pre-construction surveys shall be performed between April and June for rose leptosiphon, marsh microseris, Choris' popcornflower, and Scouler's catchfly. If found, the plant shall be avoided to extent possible, or a translocation plan shall be prepared prior to the start of activities and submitted for review and approval by the San Mateo County Planning and Building Department prior to implementation.

Mitigation Measure 5: An environmental training shall be provided to all construction workers prior to the start of work. The training will educate workers on: (1) any sensitive resources or special-status species that may occur in the work area, (2) procedures to follow in the event a species is observed, and (3) other environmental BMPs for ensuring take is avoided.

Mitigation Measure 6: Wildlife exclusion fencing shall be placed around the perimeter of project footprint and any staging areas to prevent animals including California Red-Legged Frog and/or San Francisco Garter Snake from entering the work area. Fencing should be a minimum of 36 inches high, with a minimum of 4 inches trenched into the ground. Fencing shall be installed under the guidance of a qualified biologist and maintained throughout the duration of ground-disturbing activities.

Mitigation Measure 7: If work is to be initiated during the nesting bird season, between February 1 and August 31, a pre-construction nesting bird survey shall be performed in all areas within 250 feet of proposed activities. If nests are found, an appropriately sized no-disturbance buffer shall be placed around the nest at the direction of the qualified biologist conducting the survey. Buffers for common songbird species is 25 to 50 feet, and between 100 up to 500 feet for special-status birds and/or raptors depending on the species and status of the nest. Buffers shall remain in place until all young have fledged, or the biologist has confirmed that the nest has been naturally predated.

Mitigation Measure 8: A pre-construction survey for San Francisco Dusky-Footed Wood Rat (SFDW) nests shall be performed prior to the start of work within 25 feet of proposed activities. If an active SFDW nest is found and cannot be avoided, the biologist shall supervise dismantling of the

nest by hand. If young are found, material shall be set back on the house and the house avoided for a minimum of 3 weeks to allow young to wean and leave the nest. Following completion of the dismantling, nest material shall be placed in nearby habitat where it can be completely avoided.

Mitigation Measure 9: A pre-construction survey for Western Pond Turtle, California Red-Legged Frog, and San Francisco Garter Snake shall be conducted prior to initiation of project activities within 48 hours of the start of work. Surveys are to be conducted by approved qualified biologist(s) with experience surveying for each species. If any species is found on the Project Site, it should be allowed to leave the area on its own. If the animal does not leave the area on its own, the USFWS and CDFW shall be contacted.

Mitigation Measure 10: No ground-disturbing work (e.g. vegetation removal, grading, or trenchwork) shall be performed if a 70 percent or greater chance of rainfall is predicted within 72 hours of project activity or within 24 hours of any rain event (greater than 0.5 inches) occurring between October 31 and April 31 when frogs are most likely to disperse into upland habitats. No work shall occur within 30 minutes of sunrise or sunset.

Mitigation Measure 11: Trenches and holes shall be covered and inspected daily for stranded animals. Trenches and holes deeper than one-foot should contain escape ramps at a maximum slope of 2:1 to allow trapped animals to escape.

Mitigation Measure 12: Tightly woven fiber netting or similar material shall be used for erosion control or other purposes to ensure amphibian and reptile species do not get trapped. Plastic monofilament netting (erosion control matting), rolled erosion control products, or similar material shall not be used. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.

Mitigation Measure 13: All food and food-related trash must be enclosed in sealed trash containers at the end of each day and removed completely from the site every three days to avoid attracting wildlife that may prey on listed species in the area.

Source: California Natural Diversity Database, San Mateo County Local Coastal Program, San Mateo County General Plan, Biological Report (Sol Ecology, 2020).

4.b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			X	

Discussion: As discussed in Section 4.a, the parcel contains riparian and wetlands. In compliance with LCP Policy 7.11 (Establishment of Buffer Zones [Riparian Corridors]) and 7.18 (Establishment of Buffer Zones [Wetlands]), a minimum buffer zone of 50 feet from riparian habitat and 100 feet from wetlands must be maintained. In consultation with a qualified biologist, the project has mapped a 100-foot buffer from all ponds and wetlands and riparian habitat, where no project construction will occur. The project therefore complies with the LCP policies and will not have substantial effect on any riparian habitat or wetland, thus, no mitigation is required.

Source: San Mateo County General Plan; San Mateo County Local Coastal Program, Project Plans, Biological Report (Sol Ecology, 2020).

4.c.	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	

Discussion: According to the National Wetlands Inventory, the pond located in the center of the parcel, identified using photo interpretation, is classified as System: Palustrine (P), Class: Unconsolidated Bottom (UB), Water Regime: Permanently Flooded (H), Diked/Impounded (h). The proposed project will not impact the pond and a 100-foot buffer has been established from all wetlands where no development can occur. The project therefore will not impact protected wetlands.

Source: U.S. Fish and Wildlife Service, Wetland Mapper, Project Plans, Biological Report (Sol Ecology, 2020).

4.d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?		X		

Discussion: See discussion section 4.a that details construction mitigation measures to avoid impacts to endangered or special-status wildlife. Mitigation measures will ensure that habitat and nests of migratory birds are not disturbed during construction. The construction of the single-family home as documented in the biological report will not disturb habitat for protected or endangered species and will have no impact to the functional capacity for migration of animals. If habitat for rare or endangered species are found during pre-site surveys, additional setbacks may be required. The proposed pasture fencing does pose a risk to the migration of wildlife mitigation measure 14 has been added to ensure the fencing is designed in coordination with a biologist to ensure safe passage of wildlife.

Mitigation Measure 14: All fencing shall be designed in consultation with a biologist to facilitate the safe passage of wildlife through the subject site. The final design of all fencing on site shall be reviewed and approved by the community development director prior to issuance of a building permit.

Source: California Natural Diversity Database, Project Plans, Biological Report (Sol Ecology, 2008).

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

Discussion: There are two (2) pine trees in close proximity to the construction area. All trees will be protected during construction in compliance with the County's Significant Tree Ordinance Section 12,020.5. A tree protection plan will be submitted and approved prior to the commencement of any grading or construction and a pre-construction inspection to ensure approved tree protection measures are installed is required pursuant to County Ordinance. Therefore, no mitigation is required.

Source: Project Plans, San Mateo County Zoning Regulations, San Mateo County Significant Tree Ordinance, San Mateo County Heritage Tree Ordinance.				
Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, other approved local, regional, or state habitat conservation plan?				X
Discussion: There are no adopted Habitat Conservation Plans, Natural Conservation Community Plans or other approved local, regional, or State habitat conservation plans for the project site. **Source:** California Department of Fish and Wildlife, Habitat Conservation Planning, California Regional Conservation Plans Map.				
4.g. Be located inside or within 200 feet of a marine or wildlife reserve?				X
Discussion: The project site is not located inside or within 200 feet of a marine or wildlife reserve. **Source**: U.S. Fish and Wildlife Services, National Wildlife Refuge System Locator.				
4.h. Result in loss of oak woodlands or other non-timber woodlands?				X
Discussion: State Senate Concurrent Resolution No. 17 requires state agencies to preserve and protect native oak woodlands to the maximum extent feasible or provide replacement plantings when oak woodlands are removed. For the purposes of the measure, "oak woodlands" means a five-acre circular area containing five or more oak trees per acre. The project parcel does not contain areas defined as oak woodlands pursuant to State Senate Resolution. Additionally, the project does not have the potential with future development to remove non-timber woodlands as there are no woodlands on site and no tree removal is proposed. **Source**: State Senate Concurrent Resolution No. 17, Project Location.				

5. CULTURAL RESOURCES. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
5.a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?				X
Discussion: According to a search of the California Historical Resources Information System, the project site does not contain any historical resources. **Source**: Project Plans, Project Location, California Office of Historic Preservation, Northwest Information Center.				

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

Discussion: According to a search of the California Historical Resources Information System there is no record of archeological resources at the subject site. However, the database is not comprehensive and the discovery of subsurface archaeological materials during grading or construction work is always a possibility, therefore, the following mitigation measure is recommended:

Mitigation Measure 15: In the event that archaeological resources are inadvertently discovered during construction, work in the immediate vicinity (within 50 feet) of the find must stop until a qualified archaeologist can evaluate the significance of the find. Construction activities may continue in other areas beyond the 50-foot stop work area. A qualified archaeologist is defined as someone who meets the Secretary of the Interior's Professional Qualifications Standards in archaeology. The Current Planning Section shall be notified of such findings, and no additional work shall be done in the stop work area until the archaeologist has recommended appropriate measures, and those measures have been approved by the Current Planning Section and implemented.

Source: Project Plans, Project Location, California Office of Historic Preservation, Northwestern Information Center.

5.c.	Disturb any human remains, including those interred outside of formal cemeteries?		X		

Discussion: In the inadvertent event that human remains are discovered during ground disturbance and/or construction related activities, the following mitigation measure is recommended:

Mitigation Measure 16: Should any human remains be discovered during construction, all ground disturbing work shall cease and the County Coroner shall be immediately notified, pursuant to Section 7050.5 of the State of California Health and Safety Code. Work must stop until the County Coroner can make a determination of origin and disposition of the remains pursuant to California Public Resources Code Section 5097.98 for the naming of a Most Likely Descendant and the recommendations for disposition. Additionally, the State Native American Heritage Commission may need to be notified to seek recommendations from a Most Likely Descendant (Tribal Contact) before any further action at the location of the find can proceed.

Source: Project Location, Northwestern Information Center.

6.	**ENERGY**. Would the project:				
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
6.a.	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption			X	

of energy resources, during project construction or operation?				

Discussion: Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the California Energy Commission[CEC]) in June 1977 and are updated every 3 years (Title 24, Part 6, of the California Code of Regulations). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On May 9, 2018, the CEC adopted the 2019 Building Energy Efficiency Standards, which went into effect on January 1, 2020. Under the 2019 Standards, residential buildings are 28 percent more energy efficient and nonresidential buildings are 5 percent more energy efficient than under the previous 2013 Standards. Development at the project site would be required to comply with the current Building Energy Efficiency Standards which would be verified by the San Mateo County Building Division prior to the issuance of building permits. Future development would also be required to adhere to the provisions of CAL Green, which establishes planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.

Construction

The residential development of the project site would require the consumption of nonrenewable energy resources, primarily in the form of fossil fuels (e.g., fuel oil, natural gas, and gasoline) for automobiles (transportation) and construction equipment. Transportation energy use during grading and construction would come from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction employee vehicles that would use diesel fuel and/or gasoline. The use of energy resources by these vehicles would fluctuate according to the phase of construction and would be temporary and would not require expanded energy supplies or the construction of new infrastructure. Most construction equipment during grading and construction would be gas-powered or diesel-powered, and the later construction phases would require electricity-powered equipment.

Operation

During residential development, energy consumption would be associated with resident and visitor vehicle trips and delivery and supply trucks. The project would support future residential development near Cabrillo Highway served by existing road infrastructure. Pacific Gas and Electric (PG&E) provides electricity to the project area. Currently, the existing site does not use any electricity because it is an undeveloped parcel. Therefore, =future residential development would result in a permanent increase in electricity over existing conditions. However, such an increase to serve future residential development would represent an insignificant percent increase compared to overall demand in PG&E's service area. The nominal increased demand is expected to be adequately served by the existing PG&E electrical facilities and the projected electrical demand would not significantly impact PG&E's level of service. Any future development would be required to conform with all applicable energy and utility service standards to support the development density proposed at that time. It is expected that nonrenewable energy resources would be used efficiently during operation and construction of the project given the financial implication of the inefficient use of such resources. As such, the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources.

Source: California Building Code, California Energy Commission, Project Plans, Project Location.

6.b.	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.			X	

Discussion: The proposed project is not expected to conflict with or obstruct any state or local plan for renewable energy or energy efficiency and the development is not expected to cause inefficient, wasteful, and/or unnecessary energy consumption. Furthermore, the project would be required to comply with all State and local building energy efficiency standards, appliance efficiency regulations, and green building standards.

Source: Project Plans.

7. GEOLOGY AND SOILS. Would the project:

		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
7.a.	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving the following, or create a situation that results in:				
	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? *Note: Refer to Division of Mines and Geology Special Publication 42 and the County Geotechnical Hazards Synthesis Map.*			X	

Discussion: A geotechnical report was prepared by Sigma Prime Geosciences, Inc., dated November 30, 2020. The project site is located in the coastal Pescadero area, an area of high seismicity. The closest active fault is the San Gregorio Fault located 4 kilometers east of the parcel. According to the report, the site is not located in an Alquist-Priolo special studies area or zone where fault rupture is considered likely (California Division of Mines and Geology, 1974). Therefore, active faults are not believed to exist beneath the site, and the potential for fault rupture to occur at the site is low.

All development is subject to the issuance of a building permit and all work shall be completed in accordance with the California Building Code and subject to recommendations made by the applicant's geotechnical engineer to ensure the health and safety of occupants.

Source: Project Location; County GIS, Association of Bay Area Governments Resilience Program Map, Geotechnical Report (Sigma Prime Geosciences, November 30, 2020)

	ii. Strong seismic ground shaking?			X	

Discussion: The project site is subject to violent shaking as it is in an active seismic area. A soils report and an updated geotechnical investigation will be required at the building permit stage when development is proposed subject to approval by the County's Geotechnical Section. All future development will be subject to the issuance of a building permit and all work shall be completed in accordance with the California Building Code and subject to recommendations made by the applicant's engineer to ensure the health and safety of occupants. The design of the home will be subject to the latest earthquake resistance standards. **Source:** San Mateo County Earthquake Shaking Fault Maps (San Andreas Fault); Geotechnical Report (Sigma Prime Geosciences, November 30, 2020)				
iii. Seismic-related ground failure, including liquefaction and differential settling?			X	
Discussion: The project site is in an area with low susceptibility for liquefaction and is not in an area of known liquefaction according to the County of San Mateo liquefaction maps. The geotechnical report (Sigma Prime Geosciences, November 30, 2020) indicates that there may be saturated loose silty sands beneath the house and has made recommendations accounting for minor settling due to site conditions. **Source:** Association of Bay Area Governments Resilience Program; Geotechnical Report (Sigma Prime Geosciences, November 30, 2020)				
iv. Landslides?			X	
Discussion: Based on site reconnaissance and geologic maps there are no indications that the project site is susceptible to landslides. The project is required to comply with the current California Building Code (CBC) and at the time of building permit is required to submit an updated geotechnical report in compliance with CBC 2019, or current edition, and follow all design recommendations outlined in the geotechnical report. **Source:** California Geological Survey; Association of Bay Area Governments Resilience Program, Purcell, Geotechnical Report (Sigma Prime Geosciences, November 30, 2020)				
v. Coastal cliff/bluff instability or erosion? *Note to reader: This question is looking at instability under current conditions. Future, potential instability is looked at in Section 7 (Climate Change).*				X
Discussion: The project site is not located on a coastal cliff or bluff. **Source:** Project location, Geotechnical Report (Sigma Prime Geosciences, November 30, 2020)				
7.b. Result in substantial soil erosion or the loss of topsoil?		X		
Discussion: The project includes 1,800 cubic yards (c.y.) of grading, including 1200 c.y. of cut and 600 c.y. of fill. Given the topography of the project site, there is a potential for erosion to occur if proper erosion control measures are not implemented. The applicant has developed an erosion control plan that includes straw wattles placed at the top of the project site adjacent to the gravel access road, biological protection fencing will be placed around the perimeter of the project site. A				

stabilized construction entrance will be placed at the emergency vehicle access point off of Cabrillo Highway, and other best management erosion control measures will be implemented. Staff is recommending the following mitigation measures to further minimize erosion and runoff from the project area and to ensure that grading and erosion control measures are implemented appropriately:

Mitigation Measure 17: The applicant shall submit an erosion control plan in compliance with the County's General Erosion and Sediment Control Plan Guidelines Checklist for review and approval as part of the building permit plans submittal.

Mitigation Measure 18: No grading shall be allowed during the wet weather season (October 1 through April 30) to avoid increased potential soil erosion, unless the applicant applies for an Exception to the Winter Grading Moratorium and the San Mateo County Community Development Director grants the exception. Exceptions will only be granted if dry weather is forecasted during scheduled grading operations, and the erosion control plan includes adequate winterization measures (amongst other determining factors).

Mitigation Measure 19: An Erosion Control and Tree Protection Pre-Site Inspection shall be conducted prior to the issuance of a grading permit "hard card" and/or building permit to ensure the approved erosion control and tree protection measures are appropriately implemented.

Source: Project Plans, County of San Mateo Grading Ordinance, San Mateo County Wide Stormwater Pollution Prevention Program.

7.c.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, severe erosion, liquefaction or collapse?			X	

Discussion: Liquification, lateral spreading, subsidence, and collapse are not identified as potentially significant impacts to the project according to the geotechnical analysis. There is a moderate potential for erosion from project construction, see discussion in Section 7.b. above.

Source: Project Plans, Geotechnical Report (Sigma Prime Geosciences, November 30, 2020)

7.d.	Be located on expansive soil, as defined in Table 18-1-B of Uniform Building Code, creating substantial direct or indirect risks to life or property?				X

Discussion: The submitted geotechnical report does not note any expansive soils on the subject parcel. Therefore, there are no significant impacts associated with the presence of expansive soils.

Source: Project Location; Geotechnical Report (Sigma Prime Geosciences, November 30, 2020)

7.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?			X	

Discussion: The project site will install a new septic system to serve the single-family home. The soil analysis and design of the septic system has been reviewed and preliminary approved by San Mateo County Environmental Health Services.

Source: Project Plans.

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

Discussion: There are no mapped unique paleontological resources or geological features on the project parcel. The site is primarily flat agricultural land and possesses no unique geological features.

Source: Project Location; U.S. Geological Survey Geologic Map of the San Francisco Bay Region, 2006.

8. CLIMATE CHANGE. Would the project:

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

Discussion: Grading and construction activities associated with the project will result in the temporary generation of GHG emissions primarily from construction-related vehicles and equipment. Any such potential increase in GHG emission levels will be minimal and temporary.

The project would support future residential development pursuant to local zoning regulations and any applicable State laws. Any increase in GHG emissions associated with new residential development is not expected to be significant as residential use does not generate a high demand for traffic.

The County has identified Energy Efficient Climate Action Plan (EECAP) goals which can be implemented in new development projects. Per Mitigation Measure 3, the project is required to incorporate applicable measures from the County's EECAP Development Checklist and BAAQMD Best Management Practices (BMPs) that, once implemented, will reduce the project's generation of greenhouse gas emissions.

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

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

Discussion: The project does not conflict with the San Mateo County Energy Efficiency Climate Action Plan (EECAP). Future development would be required to comply with EECAP guidelines. **Source**: San Mateo County Energy Efficiency Climate Action Plan.					
8.c.	Result in the loss of forestland or conversion of forestland to non-forest use, such that it would release significant amounts of GHG emissions, or significantly reduce GHG sequestering?				X
Discussion: The project site is located in an area zoned for agricultural uses. The parcel is relatively flat and supports agricultural crop production, therefore, the parcel does not meet the definition of forestland and would not have any impacts to the loss of forestland. **Source**: Public Resources Code, Project location.					
8.d.	Expose new or existing structures and/or infrastructure (e.g., leach fields) to accelerated coastal cliff/bluff erosion due to rising sea levels?				X
Discussion: The project is not located on or adjacent to a coastal cliff or bluff. **Source:** Project location.					
8.e.	Expose people or structures to a significant risk of loss, injury or death involving sea level rise?			X	
Discussion: The project parcel is located across Cabrillo Highway from Bean Hollow State Beach. The single-family home will be located approximately 1,800 feet from the shore with a gentle upward slope across Cabrillo Highway. Due to the location of development and terrain, sea level rise is not expected to impact the project. **Source:** Project location.					
8.f.	Place structures within an anticipated 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
Discussion: The subject parcel is located in Flood Zone X (Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level), per FEMA Panel No. 06081C0431F, effective August 2, 2017. **Source:** FEMA Panel No. 06081C0431F, effective August 2, 2017.					
8.g.	Place within an anticipated 100-year flood hazard area structures that would impede or redirect flood flows?				X

Discussion: The subject parcel is located in Flood Zone X (Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level), per FEMA Panel No. 06081C0431F, effective August 2, 2017.

Source: FEMA Panel No. 06081C0431F, effective August 2, 2017.

9. HAZARDS AND HAZARDOUS MATERIALS. Would the project:					
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
9.a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (e.g., pesticides, herbicides, other toxic substances, or radioactive material)?				X
Discussion: Neither the construction nor associated grading would result in a significant impact involving the transport, use, or disposal of hazardous material or toxic substances. **Source**: Project Scope.					
9.b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
Discussion: No significant use of hazardous materials is proposed. Development of the parcel would involve earthwork and construction of residential uses. **Source**: Project Scope.					
9.c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
Discussion: No use involving significant emission of or handling of hazardous materials or waste is proposed. **Source**: Project Scope.					

9.d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
Discussion: The project site is not a listed hazardous materials site. **Source**: California Department of Toxic Substances Control, Hazardous Waste and Substances Site List (2019).					
9.e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?				X
Discussion: The site is not located within 2 miles of a public airport and is not within any airport land use areas of influence. The closest airport is Half Moon Bay airport located 22 miles north of the site. **Source:** Project Location, SFO Airport Land Use Compatibility Plan, Half Moon Bay Airport Land Use Compatibility Plan.					
9.f.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
Discussion: The construction of residential structures would not permanently or significantly impede access on existing public roads. The plan has been reviewed and conditionally approved by the San Mateo County Fire Department for emergency vehicle access and by the County Department of Public Works for traffic safety. There is emergency vehicle access off of Cabrillo Highway and four firetruck turnouts proposed on the project plans to comply with Fire Department requirements. There are no changes proposed that would impede access or evacuation from Bean Hollow Road. **Source:** Project Location, Project Plans, San Mateo County Fire Department.					
9.g.	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	
Discussion: The project site is not located within a Fire Hazard Severity Zone. The project was reviewed and conditionally approved by the San Mateo County Fire Department. The development of the parcel will be subject to compliance with California Building Code and County Fire requirements that include fire sprinklers, appropriate emergency vehicle access, a new hydrant with appropriate fire flow, and the maintenance of a fuel break 30 feet from structures, among other fire					

prevention requirements. No further mitigation, beyond compliance with the standards and requirements of the San Mateo County Fire Department, is necessary. **Source**: CalFire, Fire Hazard Severity Zones Maps; San Mateo County Fire Department.					
9.h.	Place housing within an existing 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
Discussion: The subject parcel is located in Flood Zone X (Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level), per FEMA Panel No. 06081C0431F, effective August 2, 2017. **Source:** FEMA Panel No. 06081C0431F, effective August 2, 2017.					
9.i.	Place within an existing 100-year flood hazard area structures that would impede or redirect flood flows?				X
Discussion: The subject parcel is located in Flood Zone X (Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level), per FEMA Panel No. 06081C0431F, effective August 2, 2017. **Source:** FEMA Panel No. 06081C0431F, effective August 2, 2017.					
9.j.	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
Discussion: The project parcel is not located in an area that would be impacted by failure of a dam or levee. **Source:** Project Location, San Mateo County General Plan Hazards Map.					
9.k.	Inundation by seiche, tsunami, or mudflow?				X
Discussion: Risk of inundation by seiche, tsunami, or mudflow is considered insignificant as the project site is not located in an inundation area as identified by the San Mateo County GIS. **Source:** Project Location, San Mateo County GIS Tsunami and Seiche Inundation Areas.					

10.	**HYDROLOGY AND WATER QUALITY**. Would the project:				
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
10.a.	Violate any water quality standards or waste discharge requirements or			X	

	otherwise substantially degrade surface or ground water quality (consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical stormwater pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash))?				
Discussion: Development of the project site has the potential to generate polluted stormwater runoff during site grading and construction-related activities. The residential development is estimated to introduce 1,375 sq. ft. of new impervious surfaces. As a single-family home, the project is not required to comply with Municipal Regional Permit (MRP) C.3 requirements. However, development will be required to comply with the County's Drainage Policy requiring post-construction stormwater flows to be at, or below, pre-construction flow rates. The applicant has submitted a drainage plan that includes the implementation of an infiltration-based retention feature with a detention basin and a green roof. The preliminary drainage plans have been reviewed and conditionally approved by the County Drainage Section and Department of Public Works. A final drainage analysis is required at the building permit stage. The proposed installation of a septic system will be required to comply with the County's Onsite Waste Water Treatment System Ordinance and the applicant will be required to obtain a permit from the San Mateo County Environmental Health Services, which will ensure compliance with environmental health standards that will protect ground water and wells from exposure to pathogens. **Source**: Project Plans; C.3/C.6 Development Review Checklist; County of San Mateo Drainage Policy; San Mateo County Municipal Regional Stormwater Permit, San Mateo County Sanitation and Health Code, Title 4.				
10.b.	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
Discussion: The project is not expected to deplete any groundwater supplies or interfere with groundwater recharge. The existing well on the east side of the property will be tied into the house using a new water lateral and will not be used for irrigation. According to well tests, the well is adequate to serve the single-family home. A majority of the site will remain undeveloped pervious surface allowing the Pescadero Valley water basin to be recharged by irrigation water and rain. **Source**: Project plans, San Mateo Office of Sustainability, Well Report (Simms Plumbing and Water Equipment, 2018).					
10.c.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:				

i. Result in substantial erosion or siltation on- or off-site;			X	
Discussion: The project does not involve the alteration of the course of a stream or river. Existing drainage patterns, consisting of sheet flow, will be altered by grading and development of the property. An erosion and sediment control plan has been prepared by Sigma Prime Geosciences to reduce stormwater-related erosion and sediment from the project site during grading and construction. Additionally, the project has been preliminarily reviewed and conditionally approved by the County's Drainage Review Section and Department of Public Works for grading and drainage compliance. **Source**: Project Plans; County of San Mateo Drainage Review Section; Department of Public Works.				
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;			X	
Discussion: The project would introduce new impervious surfaces to the site, however, required compliance with the County's Drainage Policy will ensure that any increased runoff is captured and released on-site in conformance with all local regulations. Furthermore, see staff's discussion in Section 10.a. and 10.c. above. **Source**: Project Plans, County Drainage Policy, County Municipal Regional Stormwater Permit.				
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			X	
Discussion: Compliance with the County's Drainage Policy is mandatory and would prevent the creation of significant additional sources of polluted runoff. **Source**: San Mateo County Drainage Policy; San Mateo County Municipal Regional Stormwater Permit.				
iv. Impede or redirect flood flows?				X
Discussion: The subject parcel is located in Flood Zone X (Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level), per FEMA Panel No. 06081C0431F, effective August 2, 2017. The proposed project will not impede or redirect flood flows. **Source:** FEMA Panel No. 06081C0431F, effective August 2, 2017.				
10.d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
Discussion: The project parcel is not located in a flood hazard, tsunami, or seiche zone. **Source:** Project Location; San Mateo County General Plan Hazards Map.				

10.e.	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X
Discussion: There are currently no ground water management plans as all 9 water basins in San Mateo County are designated as Low Priority. **Source:** Project Location, San Mateo County Department of Sustainability.					
10.f.	Significantly degrade surface or ground-water water quality?		X		
Discussion: The project is required to comply with the County's Drainage Policy and the County's Municipal Regional Stormwater Permit drainage requirements which will prevent significant degradation of surface water quality after construction. Mitigation Measures 17-19 will reduce construction-related stormwater impacts to a less than significant level. **Source**: Project Plans, County Drainage Policy, County Municipal Regional Stormwater Permit.					
10.g.	Result in increased impervious surfaces and associated increased runoff?		X		
Discussion: The project will result in increased impervious surfaces and associated increased runoff. The implementation of Mitigation Measures 17-19 will reduce project-related impacts to a less than significant level. No further mitigation measures are necessary. **Source**: Project Plans.					

11.	**LAND USE AND PLANNING**. Would the project:				
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
11.a.	Physically divide an established community?				X
Discussion: The project does not involve a land division or development that would result in the division of an established community. The project involves construction of a single-family home on active farmland in a rural area of the County. Residential development would be as allowed by local zoning regulations and any applicable State laws at the time of development. **Source**: Project Plans; Project Location.					
11.b.	Cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

Discussion: The project complies with all PAD district regulations, which permits single-family development that will not convert prime farmland. The San Mateo County General Plan land use designation is Agriculture. No exceptions or variances are proposed, therefore the project will not conflict with any County land use policy. Additionally, the project complies with all PAD district and Local Coastal Program (LCP) requirements, see staff's discussion in Section 2 (Agricultural and Forest Resources) and 4 (Biological Resources) for details on compliance with LCP and PAD policies.

Source: Project Plans, San Mateo County Zoning Ordinance, San Mateo County General Plan, San Mateo County Local Coastal Program

11.c.	Serve to encourage off-site development of presently undeveloped areas or increase development intensity of already developed areas (examples include the introduction of new or expanded public utilities, new industry, commercial facilities or recreation activities)?			X	

Discussion: The project proposes improvements to serve the subject parcel only. The single-family dwelling is not anticipated to increase development intensity as it will not introduce new industry, commercial facilities, or public uses.

Source: Project Plans.

12. MINERAL RESOURCES. Would the project:

		Potentially Significant Impacts	*Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
12.a.	Result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State?				X

Discussion: There are no known mineral resources identified on the project parcel.

Source: Project Location, San Mateo County General Plan.

12.b.	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Discussion: There are no identified locally important mineral resource recovery site(s) delineated on the County's General Plan, any specific plan, or any other land use plan.

Source: Project Location, San Mateo County General Plan.

13.	**NOISE**. Would the project result in:				
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
13.a.	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
Discussion: During project grading and construction, excessive noise could be generated on a temporary basis. However, such temporary noise is regulated by Section 4.88.360 (Exemptions) of the County Ordinance Code for Noise Control. Once construction is complete, the project is not expected to generate significant amounts of noise. **Source**: Project Plans, San Mateo County Noise Ordinance.					
13.b.	Generation of excessive ground-borne vibration or ground-borne noise levels?			X	
Discussion: The project would generate short-term ground-borne vibration from construction and grading activities; however, any such increase would be temporary and localized to the project site. No mitigation is necessary. **Source**: Project Plans.					
13.c.	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, exposure to people residing or working in the project area to excessive noise levels?				X
Discussion: The site is not located within 2 miles of a public airport and is not within any airport land use areas of influence. The closest airport is Half Moon Bay airport located 22 miles north of the site. **Source:** Project location, SFO Airport Land Use Compatibility Plan, Half Moon Bay Airport Land Use Compatibility Plan.					

14.	**POPULATION AND HOUSING**. Would the project:

		Potentially Significant Impacts	*Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
14.a.	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
Discussion: All improvements associated with the proposed project are completely within the subject parcel's boundaries and are only sufficient to serve the single-family residence. Furthermore, see staff's discussion in Section 11.c. **Source:** Project Plans.					
14.b.	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X
Discussion: The project does not propose to displace existing housing but proposes to create a new residential development, increasing available housing. **Source:** Project scope.					

15.	**PUBLIC SERVICES**. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
		Potentially Significant Impacts	*Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
15.a.	Fire protection?				X
15.b.	Police protection?				X
15.c.	Schools?				X
15.d.	Parks?				X
15.e.	Other public facilities or utilities (e.g., hospitals, or electrical/natural gas supply systems)?				X
Discussion: The project is limited to the construction of one new single-family residence and, therefore, will not involve new or physically altered government facilities or increase the need for					

new or physically altered government facilities. Additionally, the project is not expected to affect service ratios, response times, or other performance objectives for any of the public services in the area.

Source: Project Plans.

16. RECREATION. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
16.a. Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
Discussion: The residential development would not significantly increase the use of existing neighborhood or regional parks or other recreational facilities such that significant physical deterioration of the facility is expected to occur or be accelerated. **Source:** Project Plans.				
16.b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X
Discussion: The project does not include any recreational facilities and is limited to residential use. **Source:** Project Plans.				

17. TRANSPORTATION. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
17.a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, and parking?			X	
Discussion: Proposed project improvements include the construction of a new driveway off of bean Hollow Road to serve the three proposed parcels and upgrades to emergency vehicle access off of Cabrillo Highway. The project has been reviewed and conditionally approved by the San Mateo County Fire Department and the County Department of Public Works for emergency access and				

traffic safety. The grading work and construction associated with the improvements for residential development would result in a temporary increase in traffic levels and a negligible permanent increase in traffic levels after construction. Therefore, the project is not expected to conflict with any plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. **Source**: Project Scope, San Mateo County Department of Public Works, San Mateo County Fire Department.				
17.b. Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b) *Criteria for Analyzing Transportation Impacts*? *Note to reader: Section 15064.3 refers to land use and transportation projects, qualitative analysis, and methodology.*				X
Discussion: The project is exempt from the requirement for a Vehicle Miles Traveled (VMT) analysis pursuant to Senate Bill (SB) 743 and Section 15064.3 of the CEQA Guidelines as a "small project" based on the State of California Governor's Office of Planning and Research's (OPR) December 2018 Technical Advisory for Evaluating Transportation Impacts in CEQA to achieve compliance with SB 743 as the residential development would be expected to generate significantly less than 110 daily trips, is consistent with the General Plan, and suggests no evidence indicating a potentially significant level of VMT would result. **Source:** Project proposal; State of California Governor's OPR December 2018 Technical Advisory; San Mateo County Department of Public Works, Board of Supervisors Members Memo, dated September 23, 2020 for Change to Vehicle Miles Traveled as Metric to Determine Transportation Impacts under CEQA Analysis; Caltrans Transportation Impact Study Guide, dated May 20, 2020.				
17.c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
Discussion: The project includes the construction of a new driveway off of Bean Hollow Road to serve the single-family development. The access design has been reviewed and conditionally approved by the County Department of Public Works for traffic safety of the proposed driveway onto Bean Hollow Road. The new driveway will tie into an existing gravel access road on the parcel and would not introduce any hazards to vehicles traveling on Bean Hollow Road. **Source**: Project Plans; San Mateo County Department of Public Works.				
17.d. Result in inadequate emergency access?				X
Discussion: The project has been reviewed and approved with conditions by the San Mateo County Fire Department, and the design of the emergency vehicle access road, which includes 4 firetruck turnouts, is adequate to serve the single-family home. **Source**: San Mateo County Fire Department.				

18. TRIBAL CULTURAL RESOURCES. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
18.a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. 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)				X
Discussion: The project site is not listed or eligible for listing in the California Register of Historical Resources. Furthermore, the project is not listed in a local register of historical resources, pursuant to any local ordinance or resolution as defined in Public Resources Code Section 5020.1(k). **Source**: Project Location; State Parks, Office of Historic Preservation, Listed California Historical Resources; County General Plan, Background, Historical and Archaeological Resources Appendices.				
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Subdivision (c) of Public Resources Code Section 5024.1. (In applying the criteria set forth in Subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.)		X		
Discussion: Staff requested a Sacred Lands file search of the project vicinity, which was conducted by the Native American Heritage Commission (NAHC) and resulted in no found records. A request for a search of the California Historic Resources Information System (CHRIS) was made to the Northwest Information Center and a response was provided on May 16, 2022. The Northwest Information Center found no record of any previous cultural resources field surveys at the subject site. While the proposed site for development is currently undeveloped, a majority of the parcel has				

been used for agricultural purpose since the turn of the century and has not encountered any resources which could be considered significant to a California Native American tribe. Therefore, the project is not expected to cause a substantial adverse change to any potential tribal cultural resources.

This project is subject to California Public Resources code 21080.3.1 which requires tribal consultation within 14 days of determining that an application has been deemed complete or a public agency decides to undertake a project. The County of San Mateo has received a request for formal notification from the Tamien Nation of the greater Santa Clara County. Additionally, a list of local tribes was obtained from the Native American Heritage Commission (NAHC). A notice for consultation was sent to the Tamien Nation and all tribes on the list provided by the NAHC on May 23, 2022. As of the date of this report, no tribes have contacted the County requesting formal consultation on this project. However, in following the NAHC's recommended best practices, the following mitigation measures 20 and 21 are recommended to minimize any potential significant impacts to unknown tribal cultural resources.

Mitigation Measure 20: In the event that tribal cultural resources are inadvertently discovered during project implementation, all work shall stop until a qualified professional can evaluate the find and recommend appropriate measures to avoid and preserve the resource in place, or minimize adverse impacts to the resource, and those measures shall be approved by the Current Planning Section prior to implementation and continuing any work associated with the project.

Mitigation Measure 21: In the event that tribal cultural resources are inadvertently discovered during project implementation, consultation with the affiliated Native American tribe shall be made prior to continuing any work associated with the project to ensure the resource is treated with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

Source: Project Plans; Project Location; Native American Heritage Commission, California Assembly Bill 52, California Historical Resources Information System

19. UTILITIES AND SERVICE SYSTEMS. Would the project:

		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
19.a.	Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	

Discussion: The project includes a new water lateral from an existing on site well to the new residence for water supply and a new septic system. Well certification has been reviewed and pump tests show there is adequate flow to serve the single-family home. Percolation tests, the design and location of the septic system, and well certification has been preliminarily approved by the San Mateo County Environmental Health Services. In order to comply with San Mateo County's drainage

policies, stormwater measures would be required to conform with all County standards as applicable to the project scope. On-site stormwater measures were designed by a licensed civil engineer and have been reviewed and preliminarily approved by the San Mateo County Drainage Review Section. There is no indication that the installation of these measures will cause any significant environmental effects. **Source**: Project Plans, Well Report (Simms Plumbing and Water Equipment, 2018).				
19.b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
Discussion: The project has access to an existing on site well to provide water for the single-family dwelling. Well tests show there is adequate water supply to serve the project. **Source:** Project Plans, Well Report (Simms Plumbing and Water Equipment, 2018).				
19.c. Result in a determination by the waste-water treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
Discussion: See Question 19.a and 19.b. The project will utilize a new on-site septic system for treatment of wastewater. **Source:** Project Plans.				
19.d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				X
Discussion: The project will have negligible impact on the capacity of local landfills. Single-family residential development has negligible impact on the capacity of local landfills. **Source**: Project Scope.				
19.e. Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?				X
Discussion: The project would support single-family residential development in an existing rural residential and agricultural community which would result in a negligible increase in solid waste disposal needs. All elements of the project will comply with regulations related to solid waste. **Source**: Project Scope.				

20.	**WILDFIRE**. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
20.a.	Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
Discussion: No revisions to the County adopted Emergency Operations Plan would be required as a result of the proposed project. The nearest public fire service is the Central County Fire Department Station 59 located approximately 3.5 miles southwest of the project site and would not be impacted because primary access to all major roads would be maintained during grading and construction of residential development, as well as habitation of the residence. As discussed in Section 9 (Hazards and Hazardous Materials), the proposed project has been reviewed and conditionally approved by the San Mateo County Fire Department and would not impair or physically interfere with an adopted emergency response or evacuation plan. Therefore, impacts would be less than significant, and no mitigation is required. **Source:** Project Plans; Project Location; San Mateo County Fire Department.					
20.b.	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			X	
Discussion: The project is not located in a Very High/Fire Hazard State Responsibility Area as identified by the County's GIS maps but is located in a wildland urban interface. Residential development would include fire detection and extinguishing systems, water tanks, hydrants, and other fire control measures. Due to the proximity of the project site to San Mateo County Fire Station 59 and the very short response time to reported fires, the likelihood of injuries or pollutant emissions due to a wildfire is minimal. Additionally, the project site is principally used for agricultural crops with minimal unmanaged flammable vegetation. Therefore, the proposed project would not exacerbate wildfire risks or expose occupants to pollutant concentrations from a wildfire, or to the uncontrolled spread of wildfire. **Source:** Project Plans; Project Location; San Mateo County GIS.					
20.c.	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			X	
Discussion: The project site adjoins other single-family rural residential development and does not require the installation of new roads, fuel breaks, or power lines. The project includes the					

construction of four fire truck turnouts and water tanks that have been reviewed and conditionally approved by the San Mateo County Fire Department. No further mitigation is necessary. **Source:** Project Plans, San Mateo County Fire Department.				
20.d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X
Discussion: Overall the parcel moderately slopes upward toward the East. The proposed on-site drainage facilities have been sized and appropriately placed to retain the stormwater on-site and would allow the stormwater to percolate into the ground as determined by review from the County's Drainage Section. As the project would not increase the risk of wildfire or the severity of wildfires, the project would not expose the proposed structure to significant risk from flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. **Source:** Project Plans.				

21. MANDATORY FINDINGS OF SIGNIFICANCE.				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
21.a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
Discussion: See Section 4 (Biological Resources) for a detailed discussion of impacts to biological resources. There are wetlands and habitat for protected species on-site. Mitigation measures 4-13 will reduce biological impacts to less than significant levels. With the required mitigation measures, the construction of a single-family residence will not impact or reduce the habitat of fish or wildlife species or eliminate a plant or animal community. There are no known landmarks or natural formations that are examples of California History on the project site. **Source**: California Natural Diversity Database; San Mateo County General Plan, Sensitive Habitats Map; Project Plans; Project Location, Biological Report (Sol Ecology, 2020).				
21.b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively consider-		X		

able" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)				

Discussion: The majority of the surrounding parcels off of Bean Hollow Road support existing agricultural operations and/or single-family residences. It is not likely that the incremental effects of this project are considerable when viewed in conjunction with the effects of past, current, and future private or public projects in this area. The project site is located in a rural area within an established community where the rate and intensity of development has been, and is expected to continue to be, low. While the project will potentially result in site specific impacts as discussed in this document, incorporation of the recommended mitigation measures will reduce these impacts to a less than significant level. Currently, no other new residential development is proposed in the area. Any further future development would be required to conform with all applicable codes and standards commensurate to support the development density proposed at that time, and would be subject to the California Environmental Quality Act.

Source: Subject Document; Project Plans.

21.c.	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

Discussion: The project could result in environmental impacts that could both directly and indirectly cause impacts on human beings, including the introduction of new sources of light and glare, temporary air quality impacts from construction-related emissions, and temporary greenhouse gas emissions from construction-related activities, as discussed within this document. However, the implementation of the recommended mitigation measures included in this document, and mitigation measures proposed in the project plans, will adequately reduce any potential impacts to a less than significant level.

Source: Subject Document; Project Plans.

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

AGENCY	YES	NO	TYPE OF APPROVAL
Bay Area Air Quality Management District		X	
Caltrans		X	
City		X	
California Coastal Commission		X	
County Airport Land Use Commission (ALUC)		X	
Other: _____		X	

AGENCY	YES	NO	TYPE OF APPROVAL
Regional Water Quality Control Board		X	
San Francisco Bay Conservation and Development Commission (BCDC)		X	
Sewer/Water District: County Environmental Health Services	X		Septic and well permits
State Department of Fish and Wildlife		X	
State Department of Public Health		X	
State Water Resources Control Board		X	
U.S. Army Corps of Engineers (CE)		X	
U.S. Environmental Protection Agency (EPA)		X	
U.S. Fish and Wildlife Service		X	

MITIGATION MEASURES

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

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

Mitigation Measure 1: All proposed exterior lighting shall be designed and located so as to confine direct rays to the subject property and prevent glare in the surrounding area. Manufacturer cut sheets for any exterior light fixtures shall be submitted for review and approval prior to the issuance of a building permit.

Mitigation Measure 2: Final finishes of all exterior materials and/or colors, including glass windows and/or panels, shall be non-reflective.

Mitigation Measure 3: The applicant shall require construction contractors to implement all the Bay Area Air Quality Management District's Basic Construction Mitigation Measures, listed below:

a) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access road) shall be watered two times per day.
b) All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
c) All visible mud or dirt track-out onto adjacent paved roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
d) All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
e) 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.

f) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
g) Idling times shall be minimized either by shutting equipment or vehicles off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
h) Post a publicly visible sign with the telephone number and person to contact at the project site regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Bay Area Air Quality Management District's phone number shall also be visible to ensure compliance with applicable regulations.

Mitigation Measure 4: Pre-construction surveys shall be performed between April and June for rose leptosiphon, marsh microseris, Choris' popcornflower, and Scouler's catchfly. If found, the plant shall be avoided to extent possible, or a translocation plan shall be prepared prior to the start of activities and submitted for review and approval by the San Mateo County Planning and Building Department prior to implementation.

Mitigation Measure 5: An environmental training shall be provided to all construction workers prior to the start of work. The training will educate workers on: (1) any sensitive resources or special-status species that may occur in the work area, (2) procedures to follow in the event a species is observed, and (3) other environmental BMPs for ensuring take is avoided.

Mitigation Measure 6: Wildlife exclusion fencing shall be placed around the perimeter of project footprint and any staging areas to prevent animals including California Red-Legged Frog and/or San Francisco Garter Snake from entering the work area. Fencing should be a minimum of 36 inches high, with a minimum of 4 inches trenched into the ground. Fencing shall be installed under the guidance of a qualified biologist and maintained throughout the duration of ground-disturbing activities.

Mitigation Measure 7: If work is to be initiated during the nesting bird season, between February 1 and August 31, a pre-construction nesting bird survey shall be performed in all areas within 250 feet of proposed activities. If nests are found, an appropriately sized no-disturbance buffer shall be placed around the nest at the direction of the qualified biologist conducting the survey. Buffers for common songbird species is 25 to 50 feet, and between 100 up to 500 feet for special-status birds and/or raptors depending on the species and status of the nest. Buffers shall remain in place until all young have fledged, or the biologist has confirmed that the nest has been naturally predated.

Mitigation Measure 8: A pre-construction survey for San Francisco Dusky-Footed Wood Rat (SFDW) nests shall be performed prior to the start of work within 25 feet of proposed activities. If an active SFDW nest is found and cannot be avoided, the biologist shall supervise dismantling of the nest by hand. If young are found, material shall be set back on the house and the house avoided for a minimum of 3 weeks to allow young to wean and leave the nest. Following completion of the dismantling, nest material shall be placed in nearby habitat where it can be completely avoided.

Mitigation Measure 9: A pre-construction survey for Western Pond Turtle, California Red-Legged Frog, and San Francisco Garter Snake shall be conducted prior to initiation of project activities within 48 hours of the start of work. Surveys are to be conducted by approved qualified biologist(s) with experience surveying for each species. If any species is found on the Project Site, it should be allowed to leave the area on its own. If the animal does not leave the area on its own, the USFWS and CDFW shall be contacted.

Mitigation Measure 10: No ground-disturbing work (e.g. vegetation removal, grading, or trenchwork) shall be performed if a 70 percent or greater chance of rainfall is predicted within 72

hours of project activity or within 24 hours of any rain event (greater than 0.5 inches) occurring between October 31 and April 31 when frogs are most likely to disperse into upland habitats. No work shall occur within 30 minutes of sunrise or sunset.

Mitigation Measure 11: Trenches and holes shall be covered and inspected daily for stranded animals. Trenches and holes deeper than one-foot should contain escape ramps at a maximum slope of 2:1 to allow trapped animals to escape.

Mitigation Measure 12: Tightly woven fiber netting or similar material shall be used for erosion control or other purposes to ensure amphibian and reptile species do not get trapped. Plastic monofilament netting (erosion control matting), rolled erosion control products, or similar material shall not be used. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.

Mitigation Measure 13: All food and food-related trash must be enclosed in sealed trash containers at the end of each day and removed completely from the site every three days to avoid attracting wildlife that may prey on listed species in the area.

Mitigation Measure 14: All fencing shall be designed in consultation with a biologist to facilitate the safe passage of wildlife through the subject site. The final design of all fencing on site shall be reviewed and approved by the community development director prior to issuance of a building permit.

Mitigation Measure 15: In the event that archaeological resources are inadvertently discovered during construction, work in the immediate vicinity (within 50 feet) of the find must stop until a qualified archaeologist can evaluate the significance of the find. Construction activities may continue in other areas beyond the 50-foot stop work area. A qualified archaeologist is defined as someone who meets the Secretary of the Interior's Professional Qualifications Standards in archaeology. The Current Planning Section shall be notified of such findings, and no additional work shall be done in the stop work area until the archaeologist has recommended appropriate measures, and those measures have been approved by the Current Planning Section and implemented.

Mitigation Measure 16: Should any human remains be discovered during construction, all ground disturbing work shall cease and the County Coroner shall be immediately notified, pursuant to Section 7050.5 of the State of California Health and Safety Code. Work must stop until the County Coroner can make a determination of origin and disposition of the remains pursuant to California Public Resources Code Section 5097.98 for the naming of a Most Likely Descendant and the recommendations for disposition. Additionally, the State Native American Heritage Commission may need to be notified to seek recommendations from a Most Likely Descendant (Tribal Contact) before any further action at the location of the find can proceed.

Mitigation Measure 17: The applicant shall submit an erosion control plan in compliance with the County's General Erosion and Sediment Control Plan Guidelines Checklist for review and approval as part of the building permit plans submittal.

Mitigation Measure 18: No grading shall be allowed during the wet weather season (October 1 through April 30) to avoid increased potential soil erosion, unless the applicant applies for an Exception to the Winter Grading Moratorium and the San Mateo County Community Development Director grants the exception. Exceptions will only be granted if dry weather is forecasted during scheduled grading operations, and the erosion control plan includes adequate winterization measures (amongst other determining factors).

Mitigation Measure 19: An Erosion Control and Tree Protection Pre-Site Inspection shall be conducted prior to the issuance of a grading permit "hard card" and/or building permit to ensure the approved erosion control and tree protection measures are appropriately implemented.

Mitigation Measure 20: In the event that tribal cultural resources are inadvertently discovered during project implementation, all work shall stop until a qualified professional can evaluate the find and recommend appropriate measures to avoid and preserve the resource in place, or minimize adverse impacts to the resource, and those measures shall be approved by the Current Planning Section prior to implementation and continuing any work associated with the project.

Mitigation Measure 21: In the event that tribal cultural resources are inadvertently discovered during project implementation, consultation with the affiliated Native American tribe shall be made prior to continuing any work associated with the project to ensure the resource is treated with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

DETERMINATION (to be completed by the Lead Agency).

On the basis of this initial evaluation:

	I find the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared by the Planning Department.
X	I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because of the mitigation measures in the discussion have been included as part of the proposed project. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

(Signature)

Date

(Title)

ATTACHMENTS

A. Vicinity/Project Location Map
B. Project Plans
C. Geological Report
D. Biological Report
E. Agricultural Land Management Plan

San Mateo County

County San Mateo, CA

0.57 0 0.28 0.57 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

1: 18,056

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

BH

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SAN MATEO COUNTY, CA

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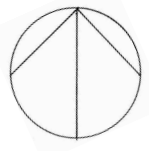
2020.12.24 SMC



LOCATION MAP

BEAN HOLLOW FARMHOUSE
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SAN MATEO COUNTY, CA

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CONTEXT PLAN

BH
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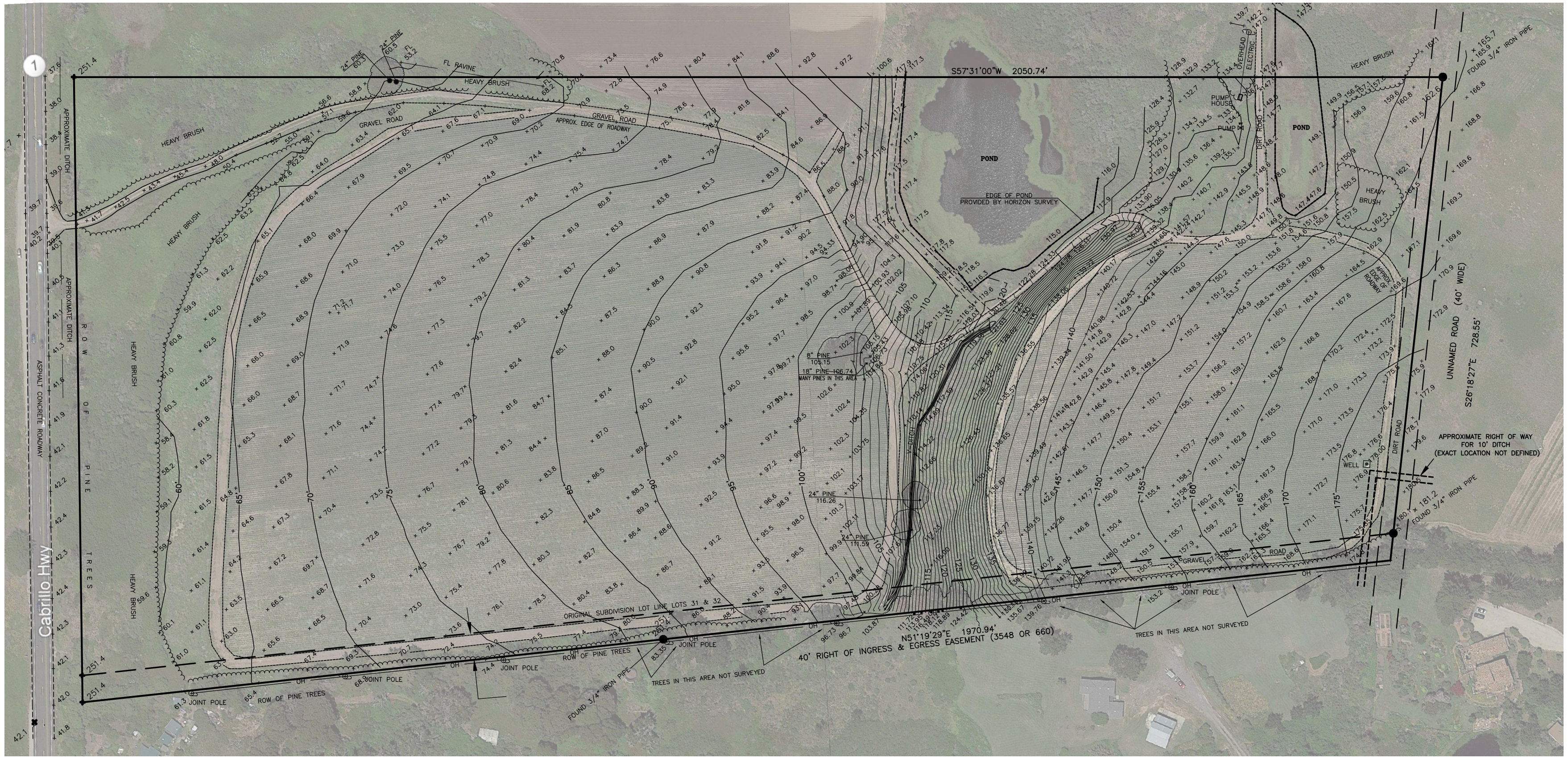
BEFORE EXCAVATING CALL U.S.A.

OWNER AND/OR CONTRACTOR ARE RESPONSIBLE FOR LOCATION AND VERIFICATION OF ALL EXISTING UNDERGROUND UTILITIES. UNDERGROUND SERVICE ALERT (USA) SHOULD BE NOTIFIED FOR ASSISTANCE IN THIS MATTER AT (800) 227–2600, 48 HOURS PRIOR TO ANY CONSTRUCTION. THE (USA) AUTHORIZATION NUMBER SHALL BE KEPT AT THE JOB SITE. LOCATION AND CHARACTER OF ANY UTILITIES IF SHOWN HEREON ARE APPROXIMATE, AND TAKEN FROM A COMBINATION OF SURFACE STRUCTURE OBSERVATION AND/OR THE RECORDS OF THE CONTROLLING AGENCY. HUMANN COMPANY DOES NOT ASSUME RESPONSIBILITY FOR THE LOCATION OF ANY EXISTING UTILITIES OR OTHER UNDERGROUND FEATURES SUCH AS VAULTS, TANKS, BASEMENTS, BURIED OBJECTS, ...ETC.

0 60 120 180
(IN FEET)
1 inch = 60 ft.

LEGEND
JOINT POLE
× 742.6 EXISTING GRADE



GENERAL NOTES

THE SCOPE AND LIMIT OF THIS SURVEY WAS DEFINED IN JUNE, 2018 BY BRIAN LEE. USE OF THIS SURVEY IS LIMITED TO THE PROPERTY OWNER AS REFERENCED IN THE TITLE BLOCK AND CONSULTANTS FOR THE SPECIFIC PROJECT. OTHERS MAY NOT USE THIS MAP WITHOUT THE PERMISSION OF THE CLIENT AND HUMANN COMPANY. BOUNDARY AND BASIS OF BEARINGS ARE PER THE UNDERLYING RECORD MAP AS REFERENCED IN THE TITLE BLOCK HEREON.

TITLE REPORT FOR THIS SURVEY WAS PREPARED BY OLD REPUBLIC TITLE COMPANY, DATED JULY 1, 2000, ORDER NO.280708.

THE ELECTRONIC FILE IF SUPPLIED, IS BEING DONE SO AS A COURTESY AND CONVENIENCE, AND IS SUBORDINATE TO THE PROVIDED SIGNED HARD COPY MAP WITH RESPECT TO CONTENT, ACCURACY AND QUALITY. HUMANN COMPANY MAKES NO WARRANTEE OR GUARANTEE, EXPRESSED OR IMPLIED FOR ANY COPIES OF THE DRAWINGS OR WORK ASSOCIATED WITH THE ELECTRONIC FILE BY OTHERS.

TREES AND DRIP LINES AS SHOWN ARE LOCATED SUFFICIENTLY FOR GENERAL ARCHITECTURAL SITE PLANNING. ANY CONSTRUCTION ACTIVITY PLANNED IMMEDIATELY ADJACENT TO THE TREES OR DRIP LINES SHOULD BE REVIEWED WITH THE APPROPRIATE CONSULTANT. IF IT IS DETERMINED THAT DETAILED TREE AND/OR BRANCH MEASUREMENTS ARE NEEDED, FURTHER SURVEYING MAY BE NECESSARY AND SHOULD BE ARRANGED BY THE OWNER AND/OR CONSULTANT. SPECIES AS REFERENCED ON THE SURVEY SHOULD BE CONFIRMED BY A LICENSED ARBORIST OR LANDSCAPE ARCHITECT IF THE SPECIFIC TREE(S) IS SUSPECTED OF BEING A PROTECTED OR CRITICAL ONE(S).

PORTIONS OF TOPOGRAPHIC INFORMATION SHOWN HEREON AS PROVIDED BY HORIZON SURVEY, ELECTRONIC MAILING OF POINTS AND PARTIAL TOPOGRAPHIC SURVEY PLAN, DATED AUGUST 2000.

DATUM: TEMPORARY BENCHMARK: "X" SET ON CONCRETE WELL LOCATED NEAR THE SOUTHEASTERLY CORNER OF THE SITE, ELEVATION TAKEN AS 178.0 FEET, SAID TEMPORARY BENCHMARK WAS SHOWN ON TOPOGRAPHY SURVEY BY HORIZON SURVEY, DATED AUGUST, 2000. SAID BENCHMARK WAS BASED UPON USGS BENCHMARK (SAN MATEO COUNTY DATUM) FOUND ALONG BEAN HOLLOW ROAD PER SAID HORIZON SURVEY TOPOGRAPHY, ELEVATION WAS 251.40 FEET.

CONTOUR INTERVAL: 1–5 FEET

LICENSED LAND SURVEYOR · ERIC A. HUMANN · Exp. 9-30-00 · No. 5452 · STATE OF CALIFORNIA

ERIC (RICK) A. HUMANN PLS 5452

DATE 07/30/2018

REVISIONS

SCALE	1" = 60'
DATE	07/30/18
DRAWN	CS
CHECKED	RH
JOB NO.	18087

TOPOGRAPHIC SURVEY

PORTION OF LOT 11, BOOK 11 PAGE 18-26 (APN: 086-191-100)

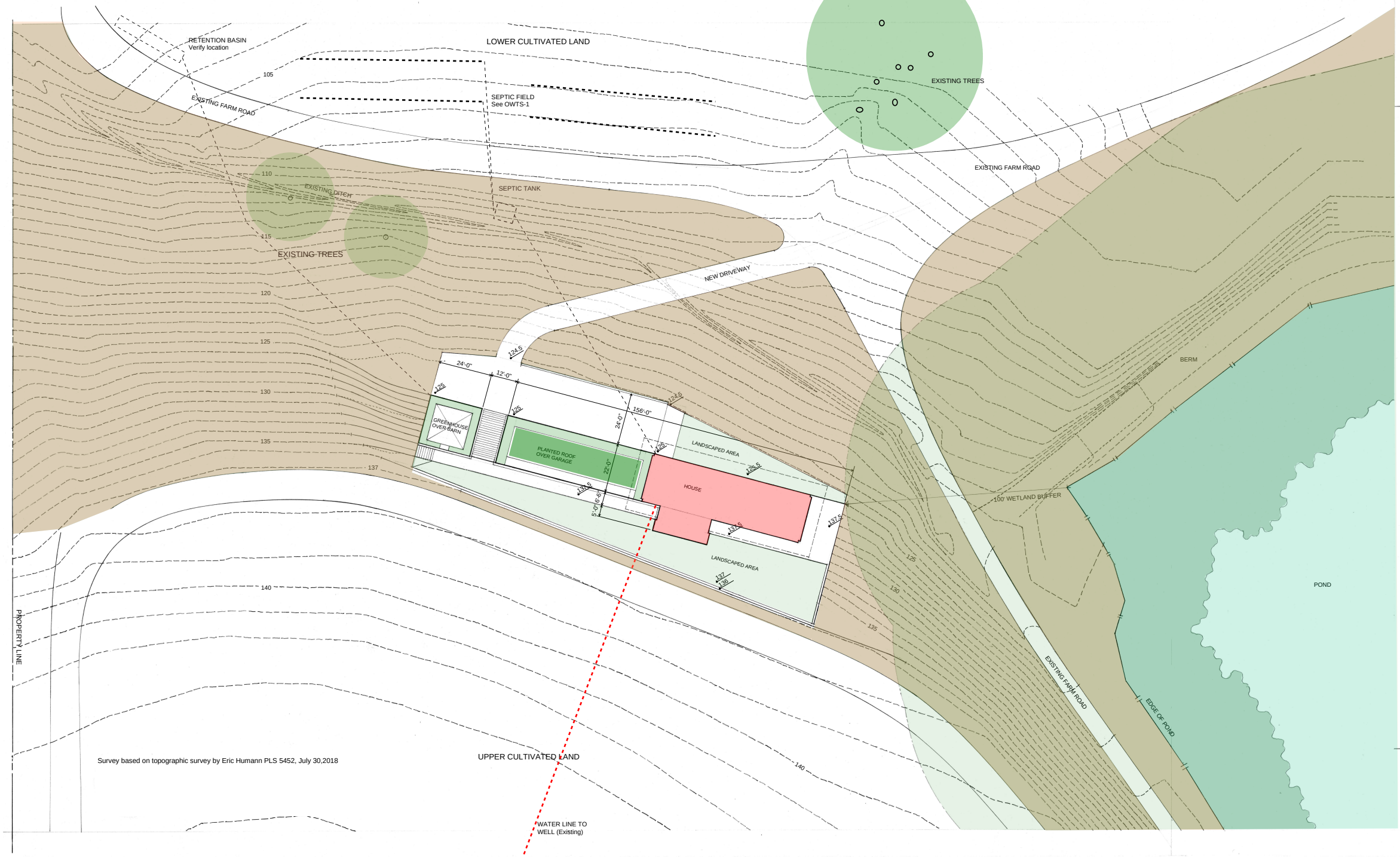
LEE FARM - - CABRILLO HIGHWAY, PESCADERO

SAN MATEO COUNTY CALIFORNIA

HUMANN COMPANY INC.
ENGINEERING - SURVEYING
1021 BROWN AVE. LAFAYETTE, CA 94549
PH (925)283-5000 FAX (925)283-3578
www.humannco.com

SHEET 1 OF 2 SHEETS

JOB NO. 18087



Survey based on topographic survey by Eric Humann PLS 5452, July 30,2018

BH

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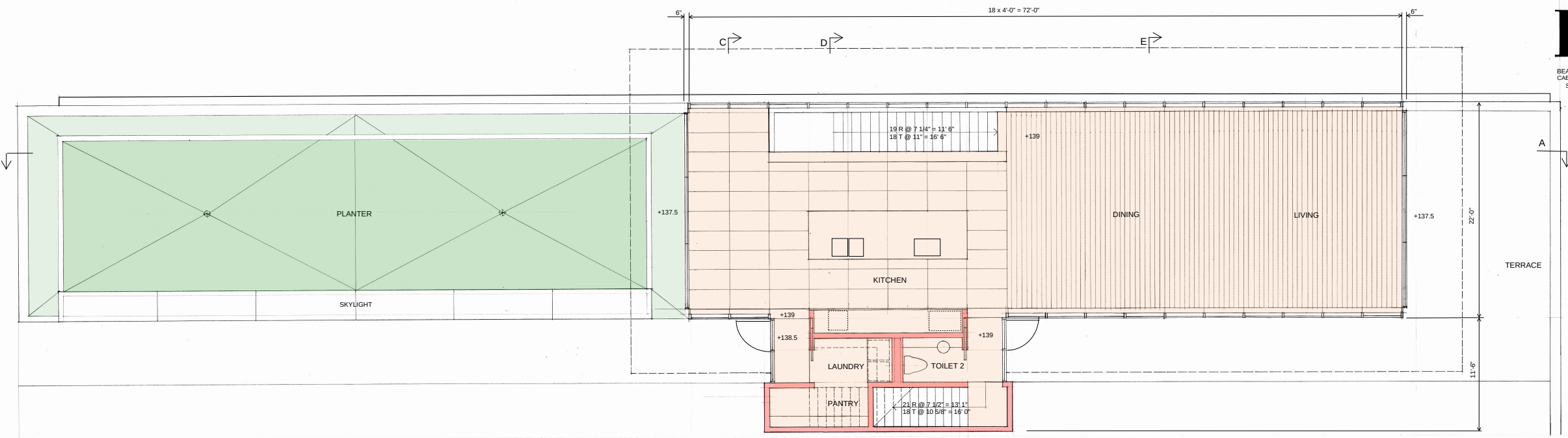
250
100
50
40
30
20
10
5
0

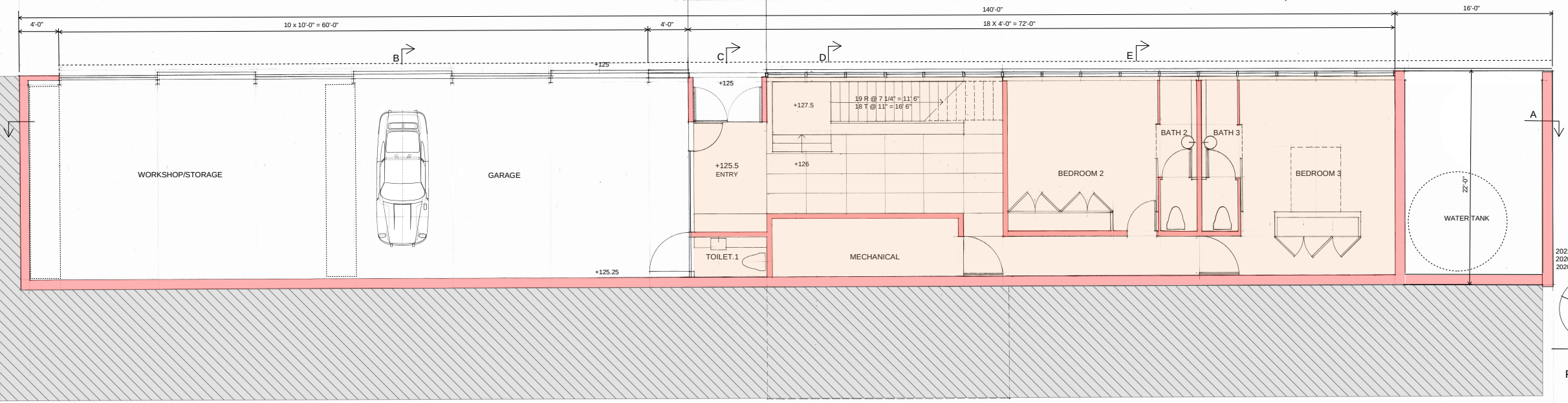
2021.01.10 SMC
2020.12.24
2020.03.04 PLANNING
2020.01.04 CONCEPT

SITE PLAN

A1



LEVEL 2 1,629 sf



LEVEL 1 1,409 sf (1.358 sf Garage/ Workshop/ Storage)

BH

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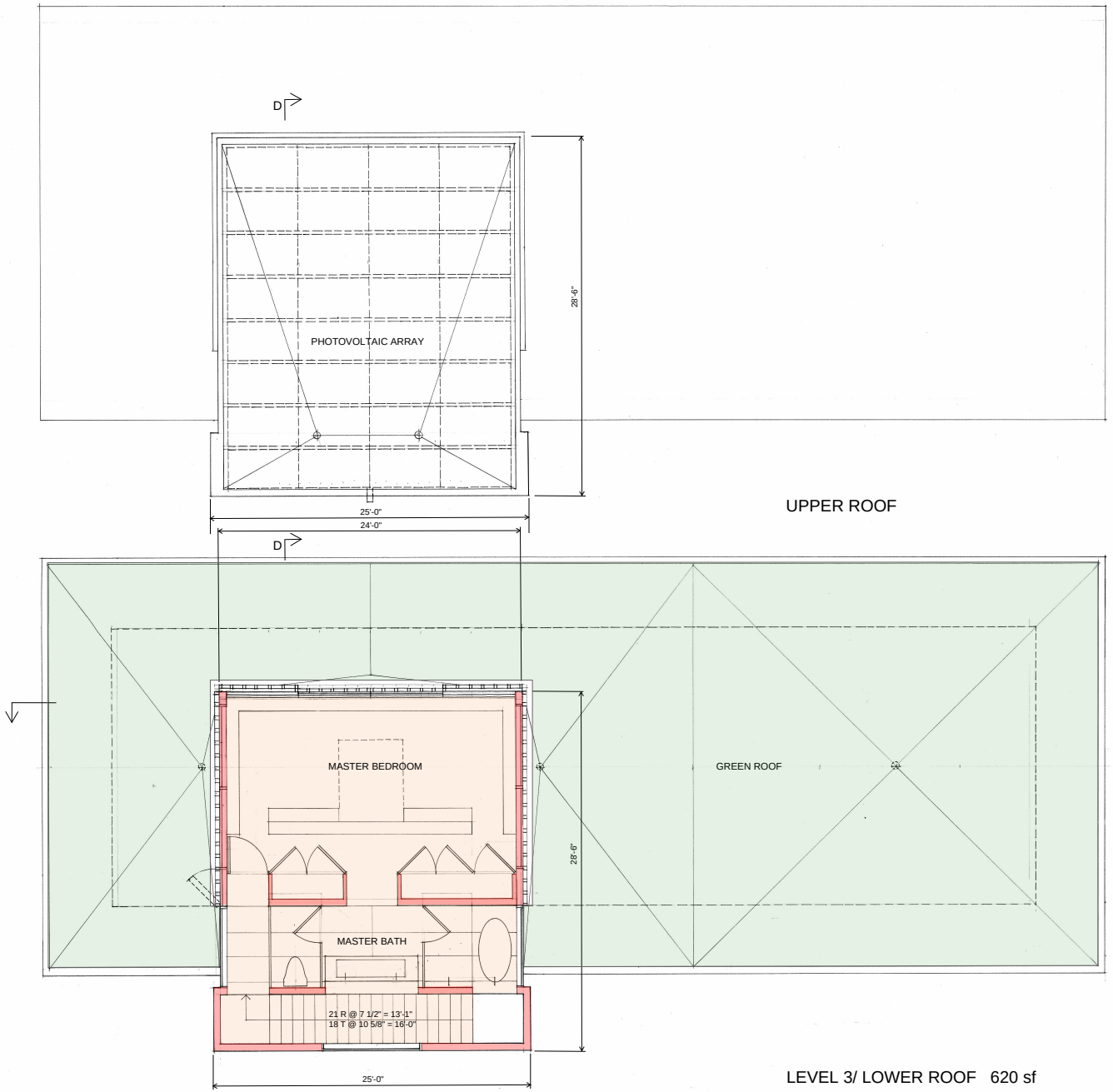
2021.01.10 SMC
2020.12.24
2020.01.06 CONCEPT

FLOOR PLANS

A2



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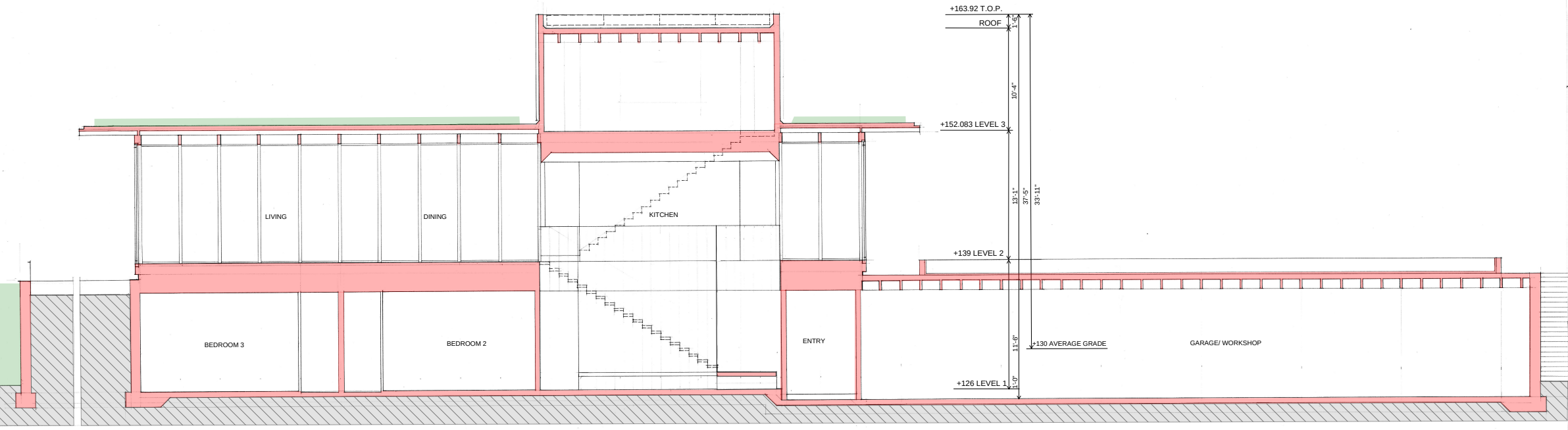
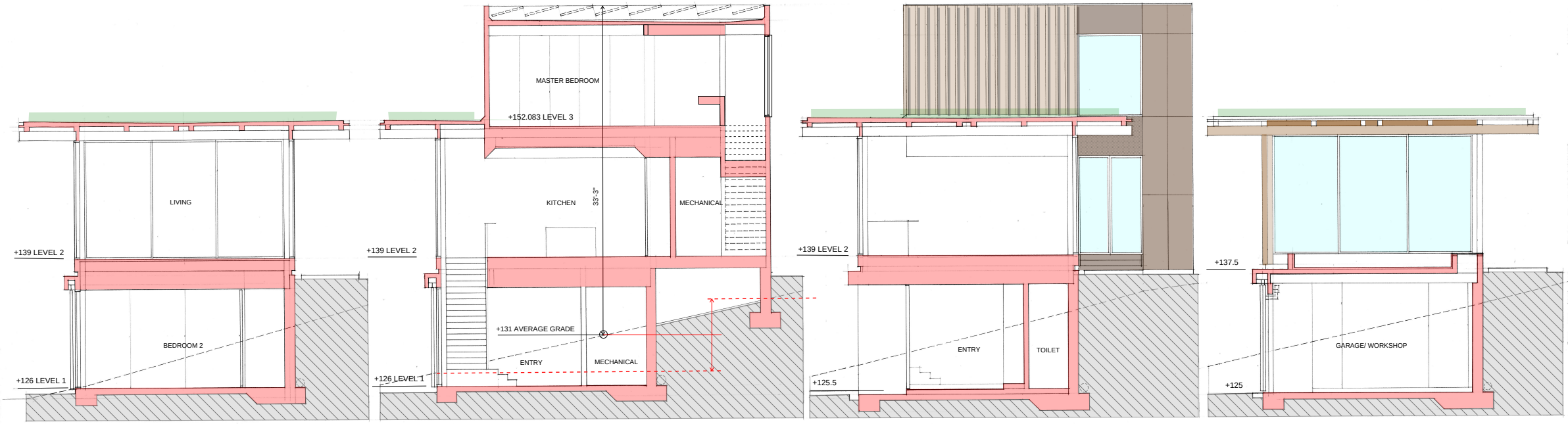
2021.01.10 SMC
2020.12.24
2020.01.06 CONCEPT

FLOOR/ROOF PLANS

A3



SECTION A



SECTION E

SECTION D

SECTION C

SECTION B

BEAN HOLLOW FARMHOUSE
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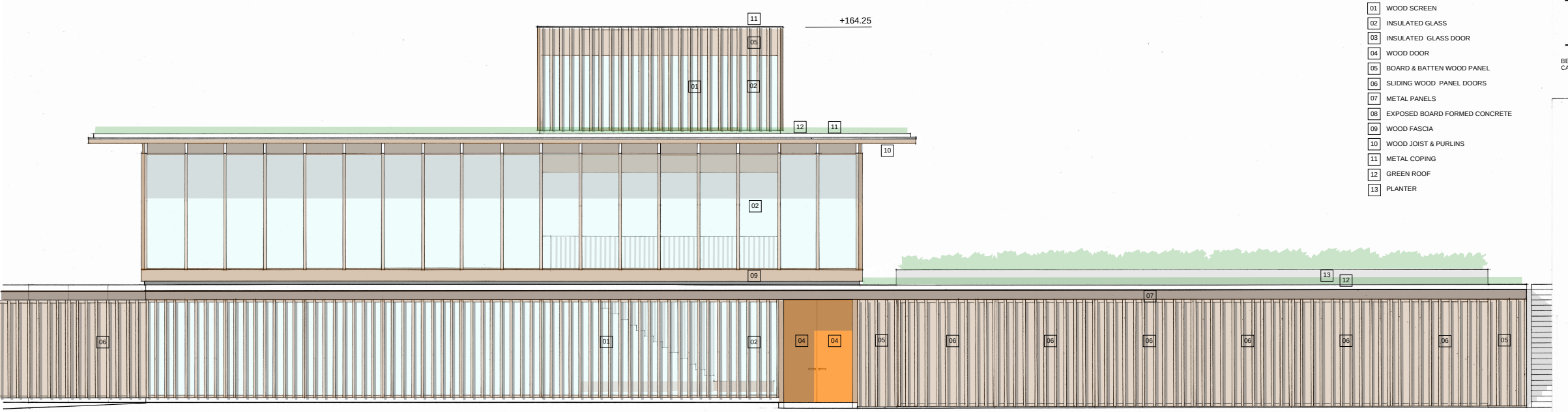
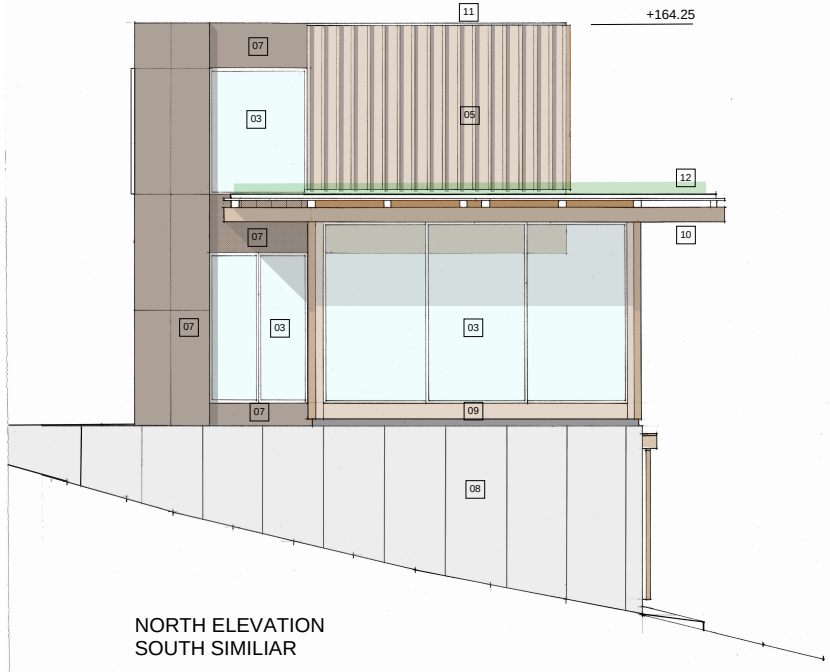
SECTIONS

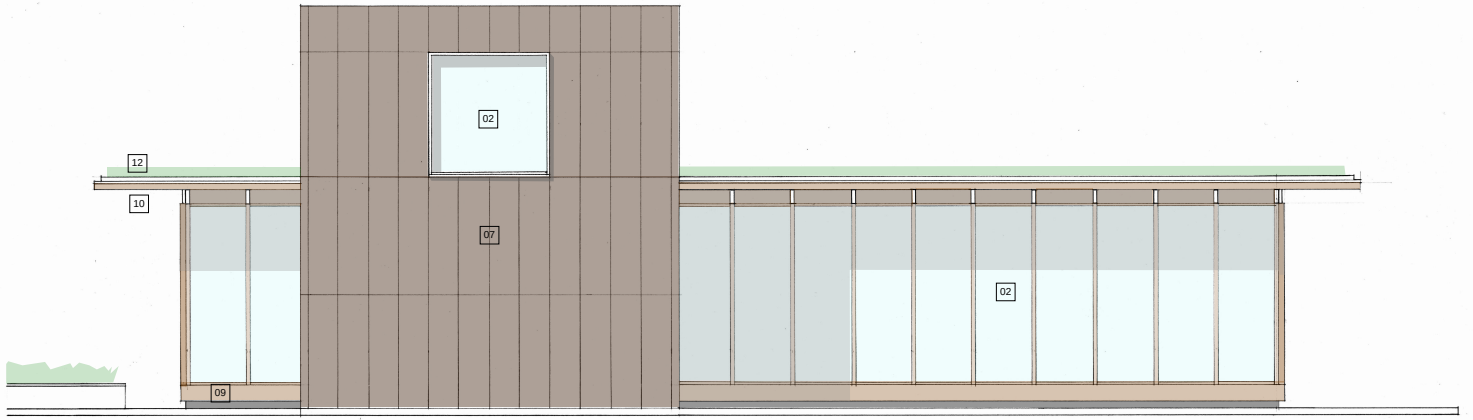
A4



WEST ELEVATION



NORTH ELEVATION
SOUTH SIMILIAR



EAST ELEVATION

01 WOOD SCREEN
02 INSULATED GLASS
03 INSULATED GLASS DOOR
04 WOOD DOOR
05 BOARD & BATTEN WOOD PANEL
06 SLIDING WOOD PANEL DOORS
07 METAL PANELS
08 EXPOSED BOARD FORMED CONCRETE
09 WOOD FASCIA
10 WOOD JOIST & PURLINS
11 METAL COPING
12 GREEN ROOF
13 PLANTER

BH

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2020.12.24
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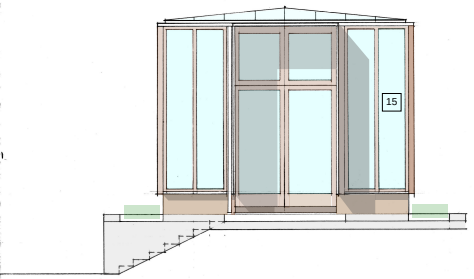
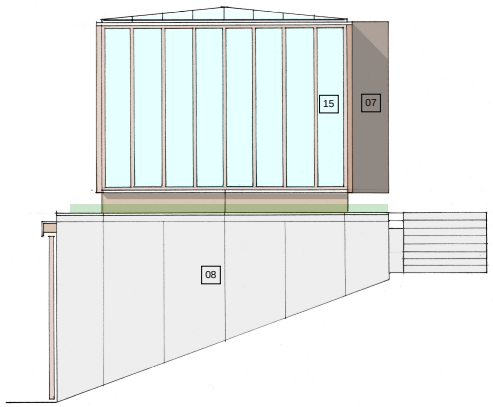
2020.01.06 CONCEPT

ELEVATIONS

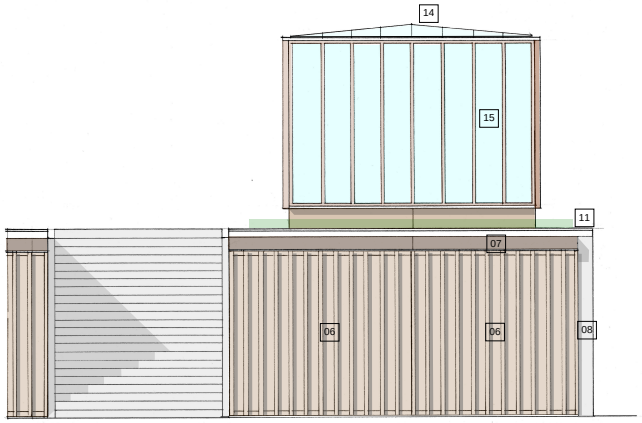
A5



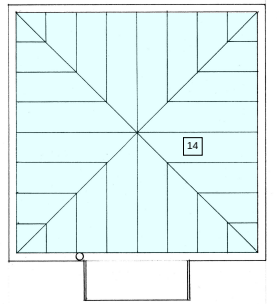
EAST ELEVATION



SOUTH ELEVATION

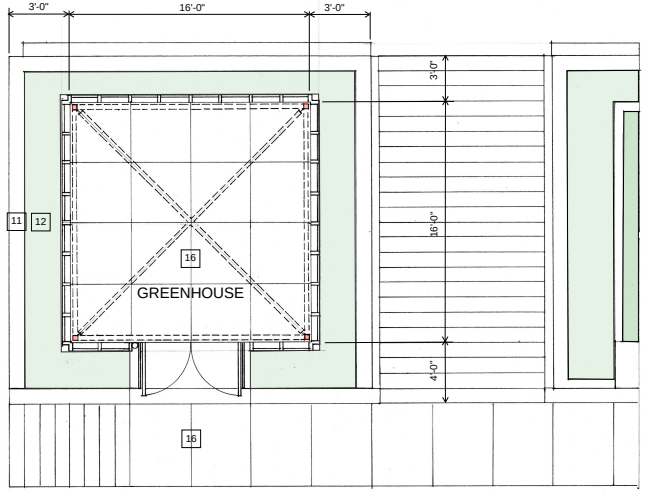


WEST ELEVATION

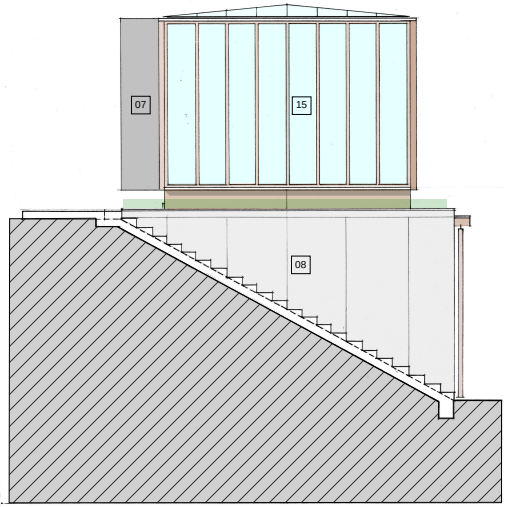


ROOF

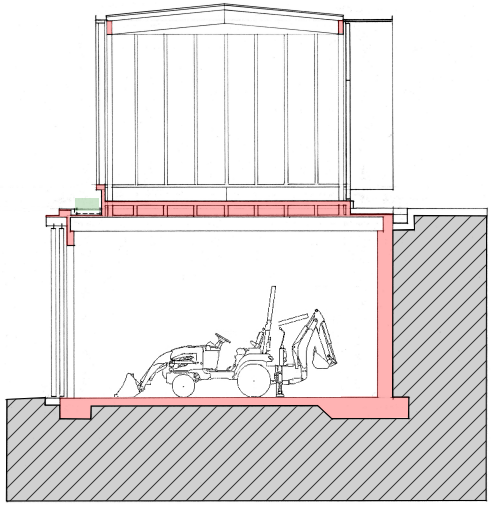
01	WOOD SCREEN
02	INSULATED GLASS
03	INSULATED GLASS DOOR
04	WOOD DOOR
05	BOARD & BATTEN WOOD PANEL
06	SLIDING WOOD PANEL DOORS
07	METAL PANELS
08	EXPOSED BOARD FORMED CONCRETE
09	WOOD FASCIA
10	WOOD JOIST & PURLINS
11	METAL COPING
12	GREEN ROOF
13	PLANTER
14	SKYLIGHT
15	SINGLE GLAZING
16	CONCRETE PAVING



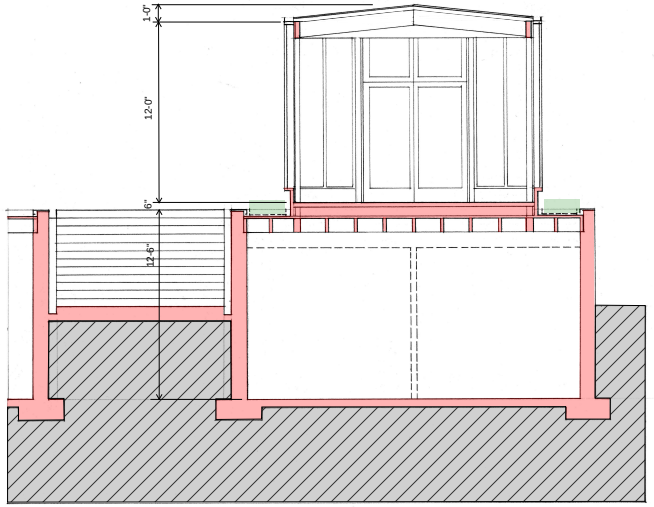
LEVEL 2 256 sf



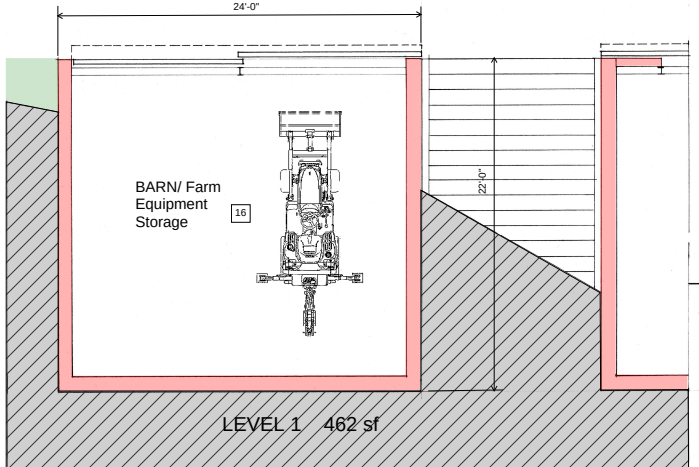
NORTH ELEVATION



SECTION B



SECTION A



LEVEL 1 462 sf

BH

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2021.01.10 SMC
2020.12.24
2020.03.04 PLANNING

GREENHOUSE/
BARN

A6

BH

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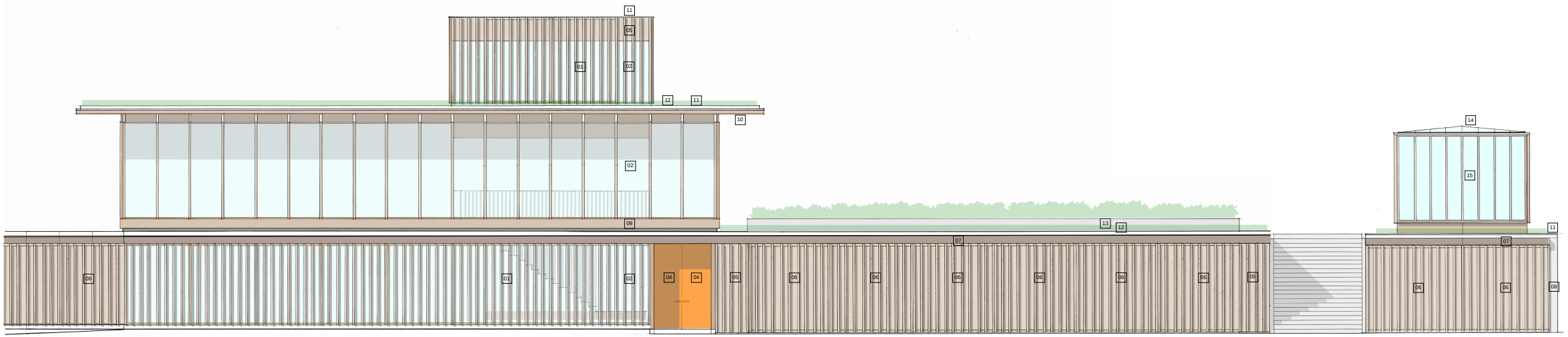
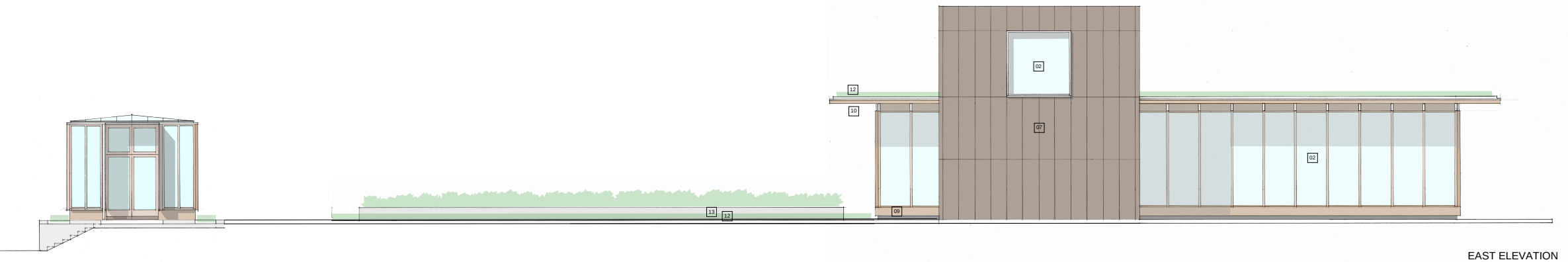


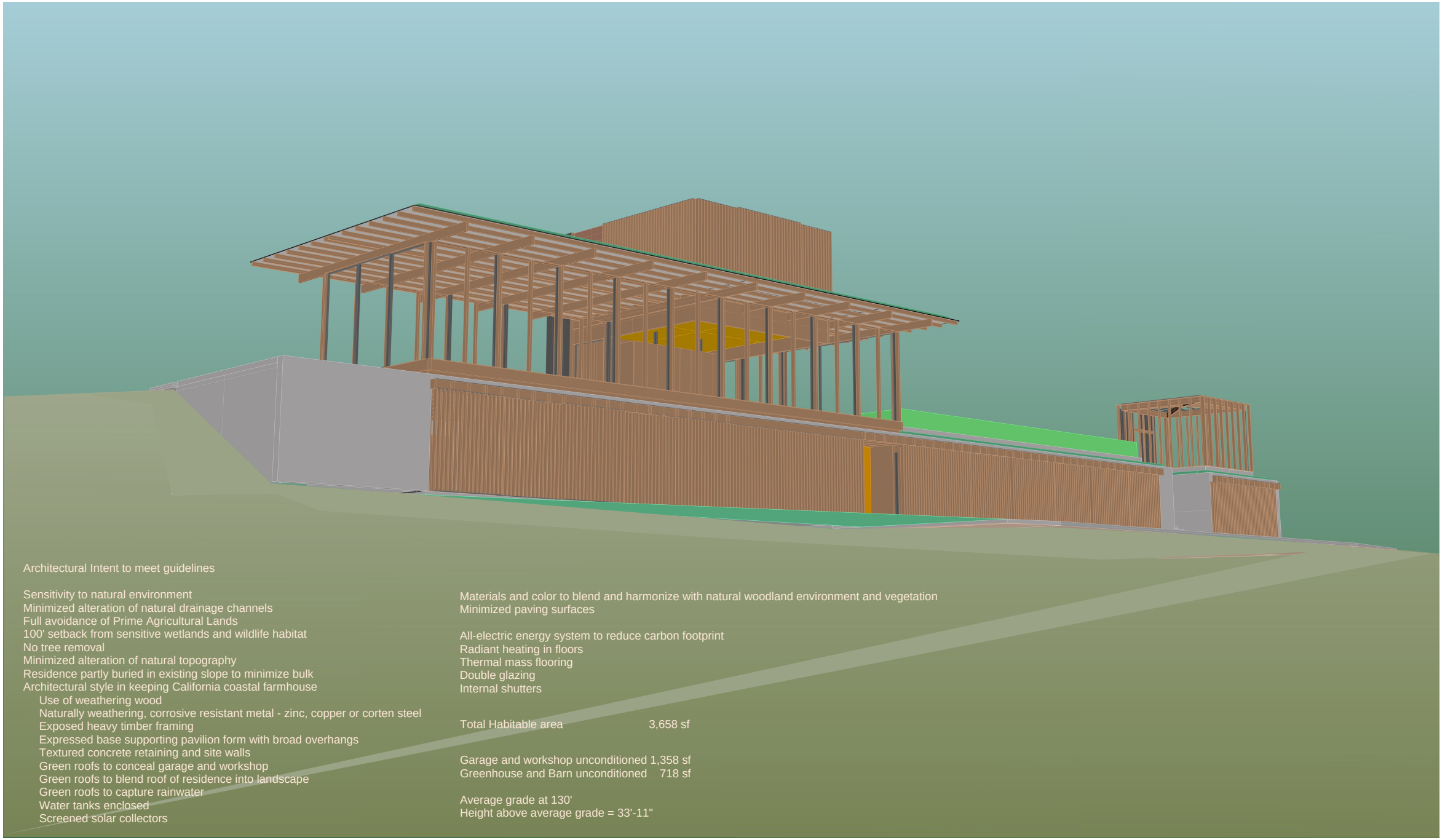
WEST ELEVATION



EAST ELEVATION

COMPOSITE
ELEVATIONS

A7



Architectural Intent to meet guidelines

Sensitivity to natural environment
Minimized alteration of natural drainage channels
Full avoidance of Prime Agricultural Lands
100' setback from sensitive wetlands and wildlife habitat
No tree removal
Minimized alteration of natural topography
Residence partly buried in existing slope to minimize bulk
Architectural style in keeping California coastal farmhouse
- Use of weathering wood
- Naturally weathering, corrosive resistant metal - zinc, copper or corten steel
- Exposed heavy timber framing
- Expressed base supporting pavilion form with broad overhangs
- Textured concrete retaining and site walls
- Green roofs to conceal garage and workshop
- Green roofs to blend roof of residence into landscape
- Green roofs to capture rainwater
- Water tanks enclosed
- Screened solar collectors

Materials and color to blend and harmonize with natural woodland environment and vegetation
Minimized paving surfaces

All-electric energy system to reduce carbon footprint
Radiant heating in floors
Thermal mass flooring
Double glazing
Internal shutters

Total Habitable area 3,658 sf

Garage and workshop unconditioned 1,358 sf
Greenhouse and Barn unconditioned 718 sf

Average grade at 130'
Height above average grade = 33'-11"

BH

BEAN HOLLOW FARMHOUSE
CABRILLO HWY APN 086191100
SAN MATEO COUNTY, CA

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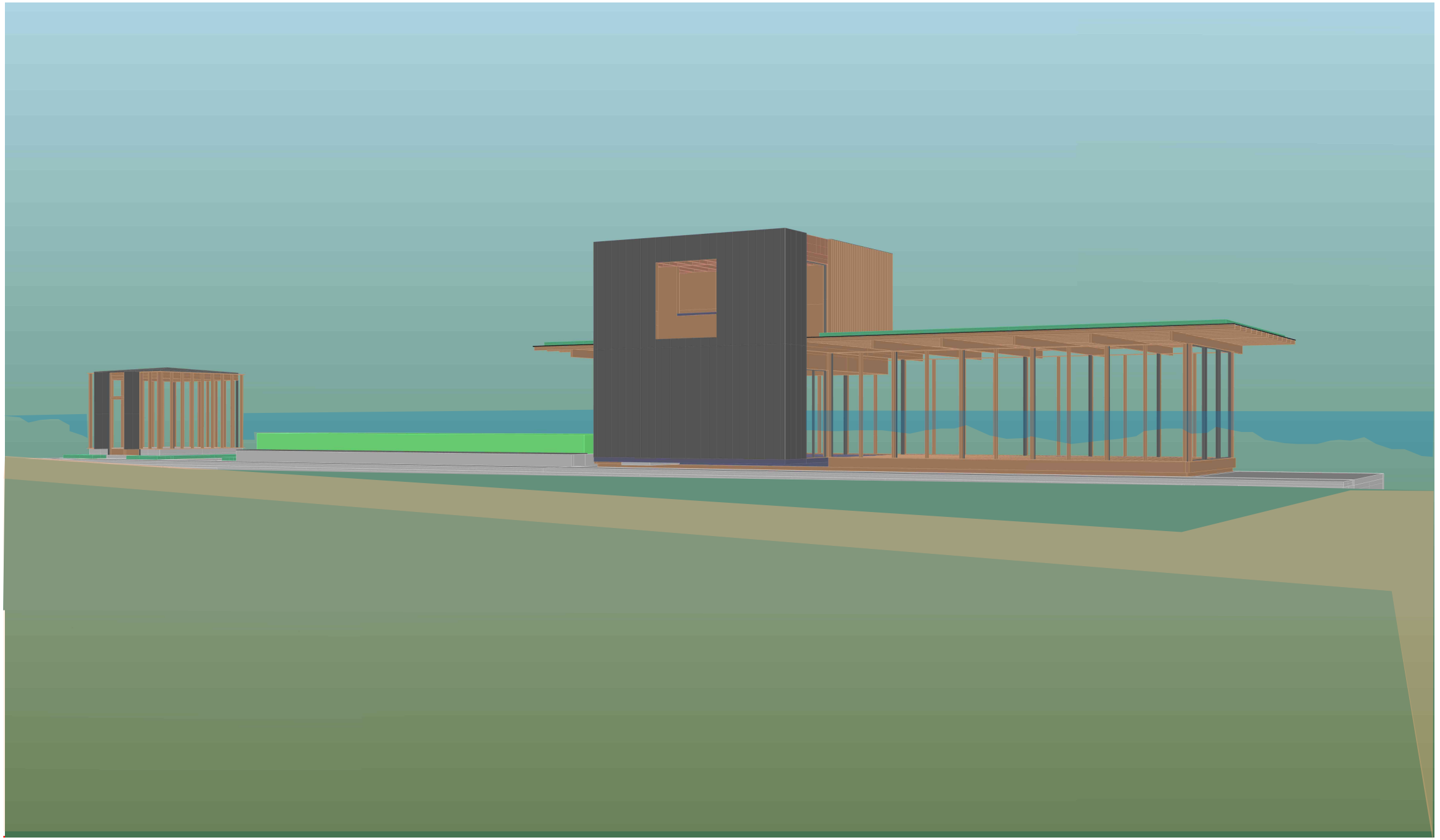
2020.12.24 SMC
2020.03.04 PLANNING

NW VIEW

A8



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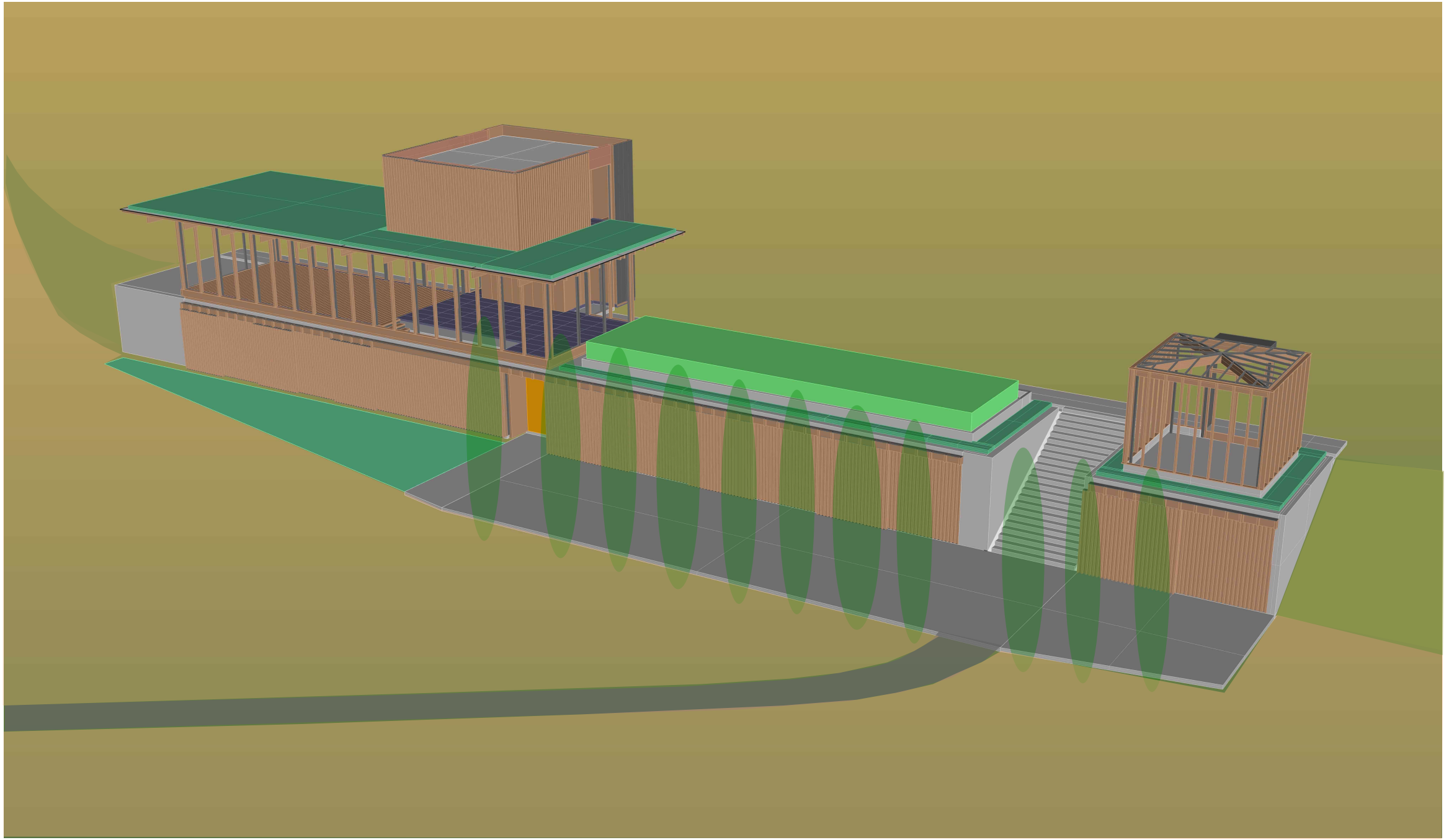
NE VIEW

A9



BH

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SW VIEW

A10

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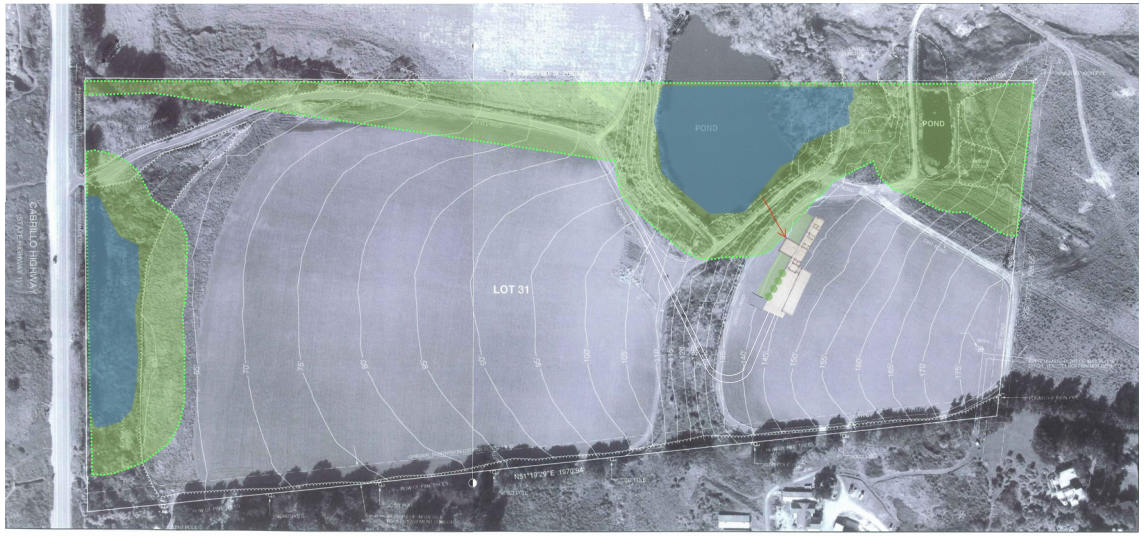
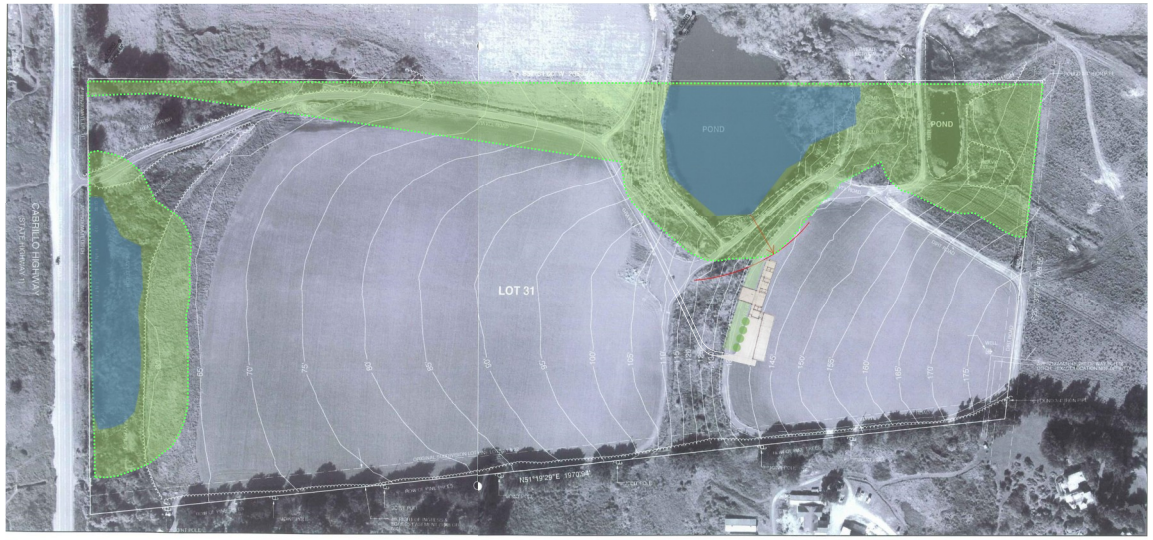
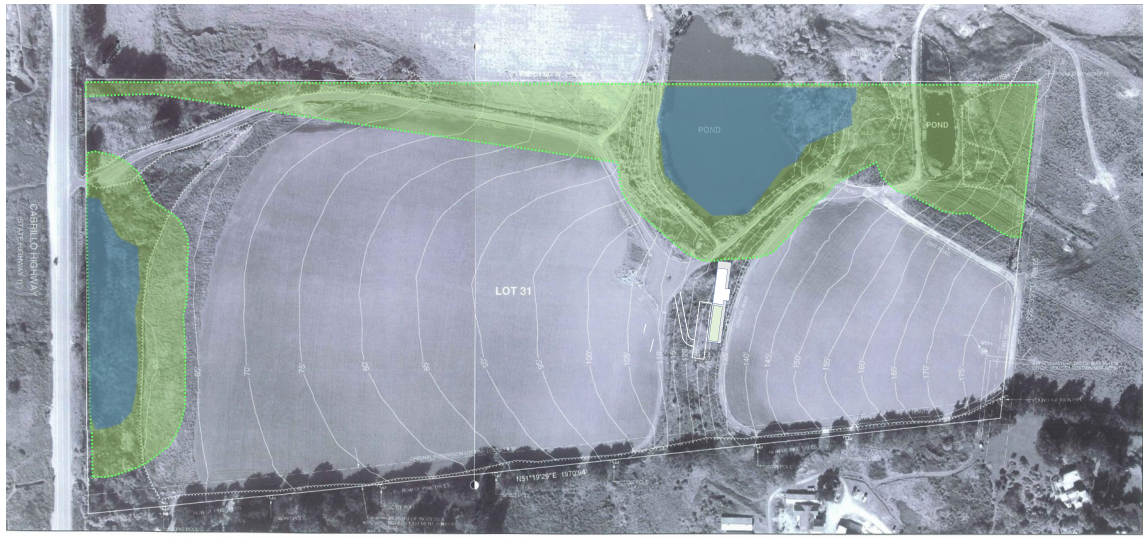


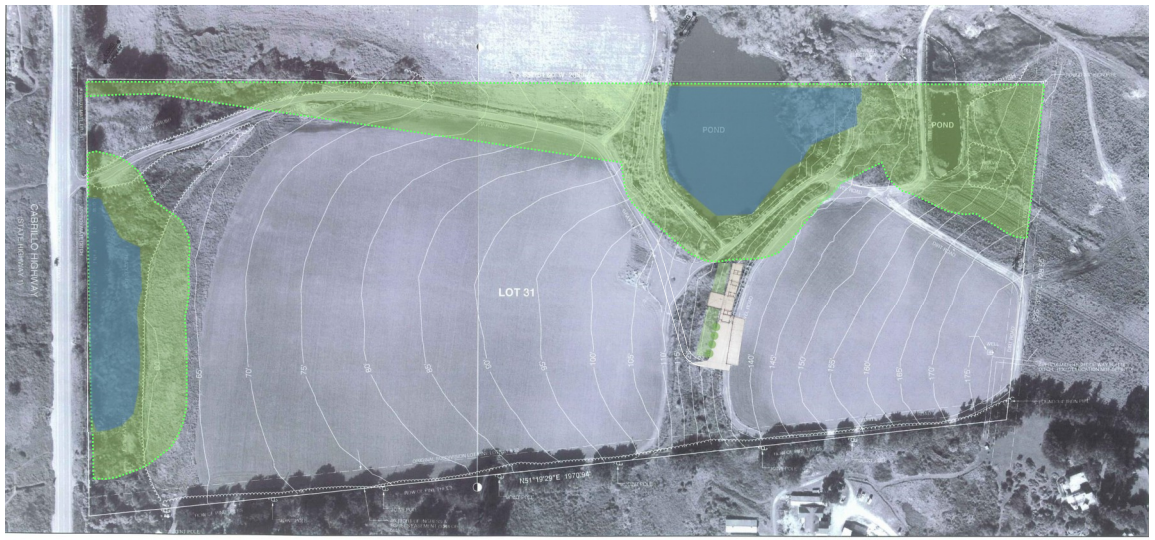
Scheme A Upper cultivated lands - Flat site overlooking pond
Minimal grading, but more visual impact, on prime soils, and longer driveway



Scheme B Upper cultivated lands - Flat site
Minimal grading, but more visual impact, on prime soils



Scheme D
Project Plan
Consolidated plan, siting on bank for house and garage
All on non-prime soils, most compact plan, less driveway, less visibility,

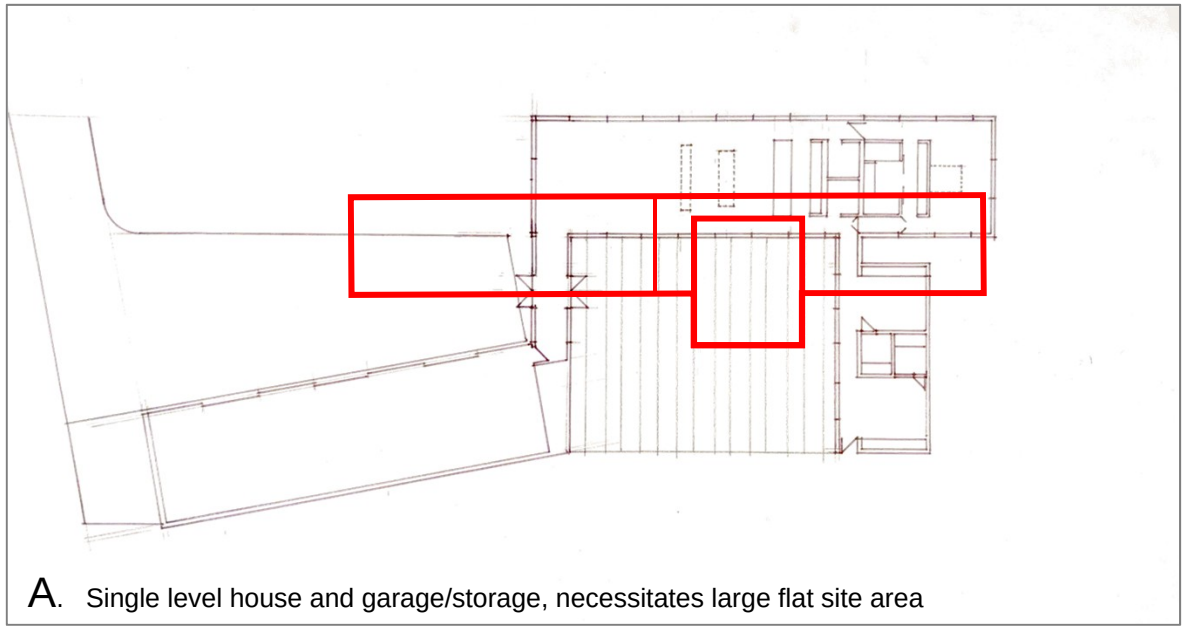


Scheme C Partial siting on bank for house and upper cultivated land for garage
Partial grading with some conversion of prime soils

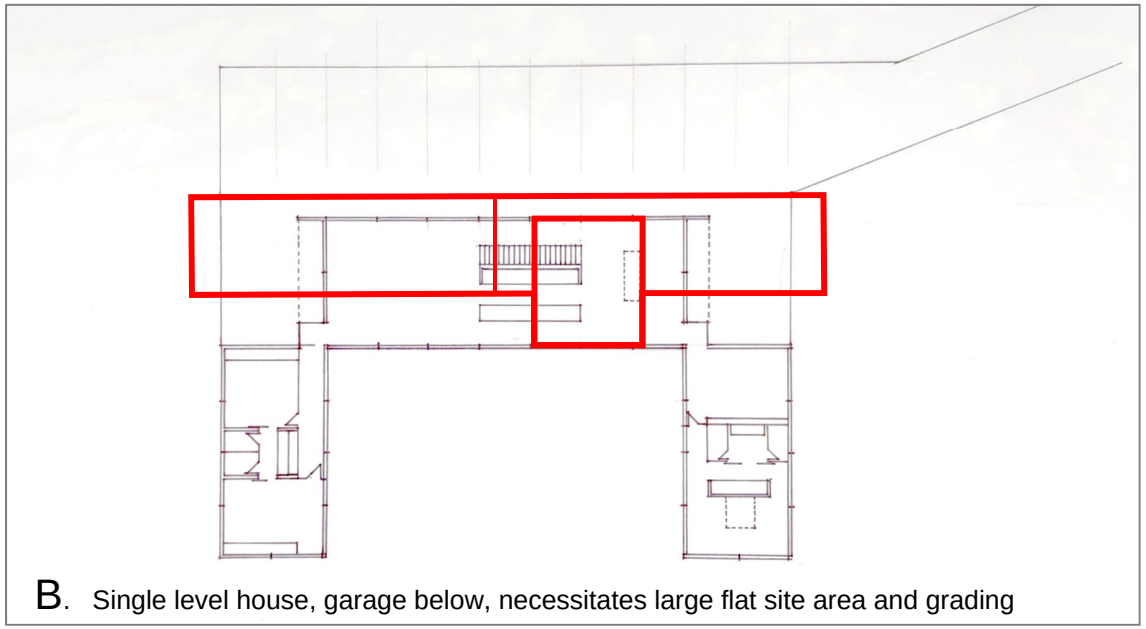
2020.12.24 SMC
2020.03.04 PLANNING

ALTERNATIVE SITING

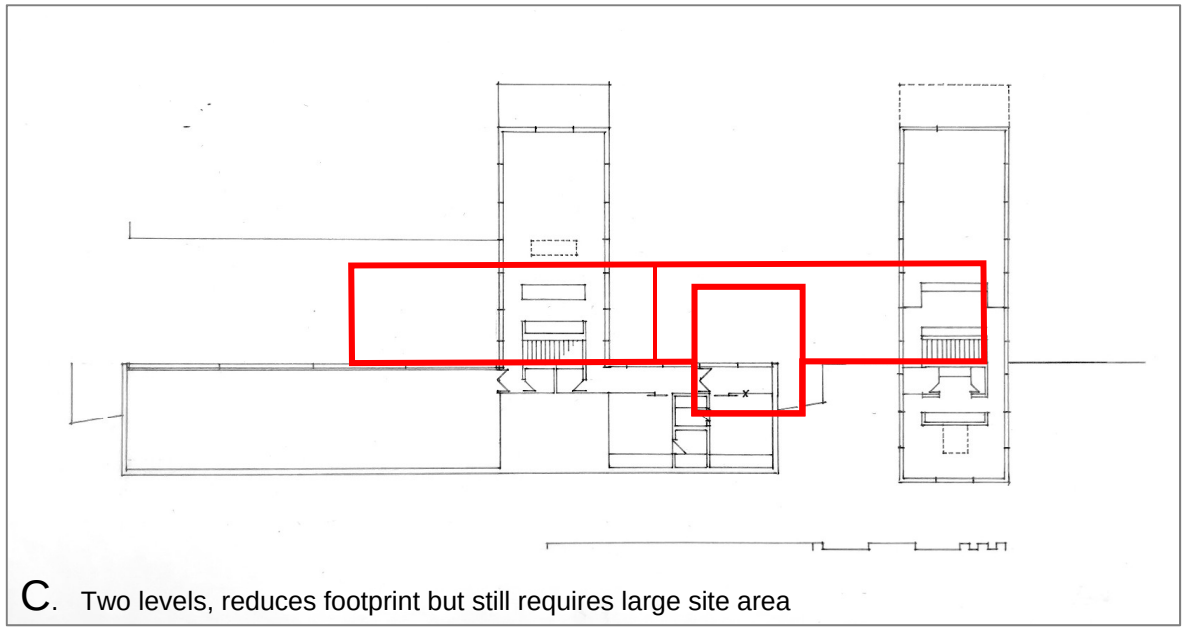
Aa



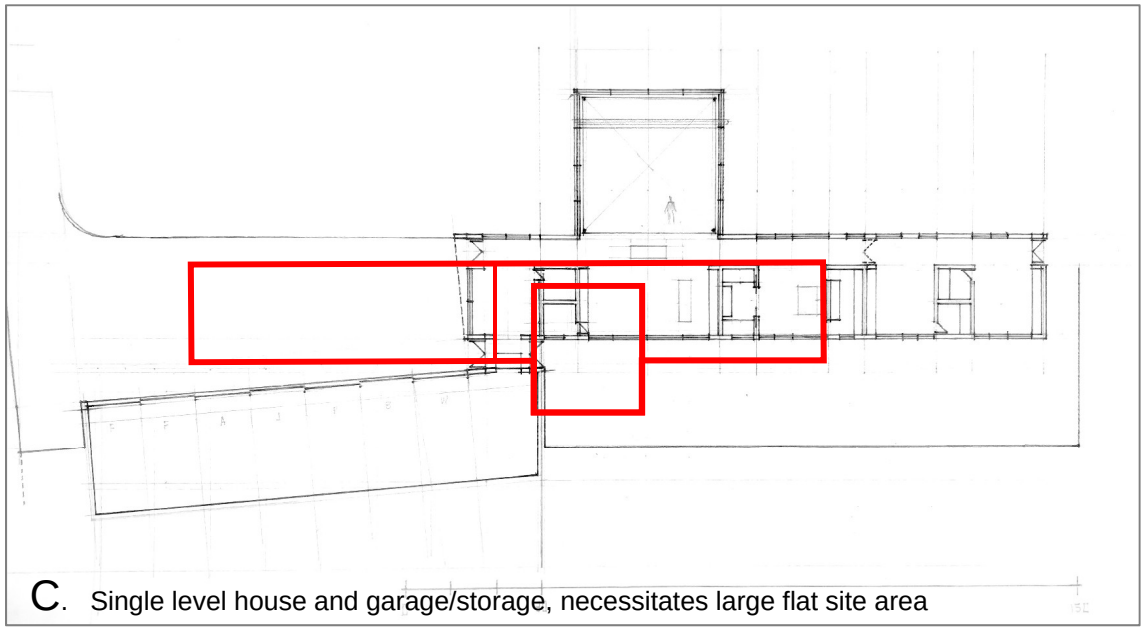
A. Single level house and garage/storage, necessitates large flat site area



B. Single level house, garage below, necessitates large flat site area and grading



C. Two levels, reduces footprint but still requires large site area



C. Single level house and garage/storage, necessitates large flat site area

Linear plan (red outline) results in most compact plan with least disturbance to site

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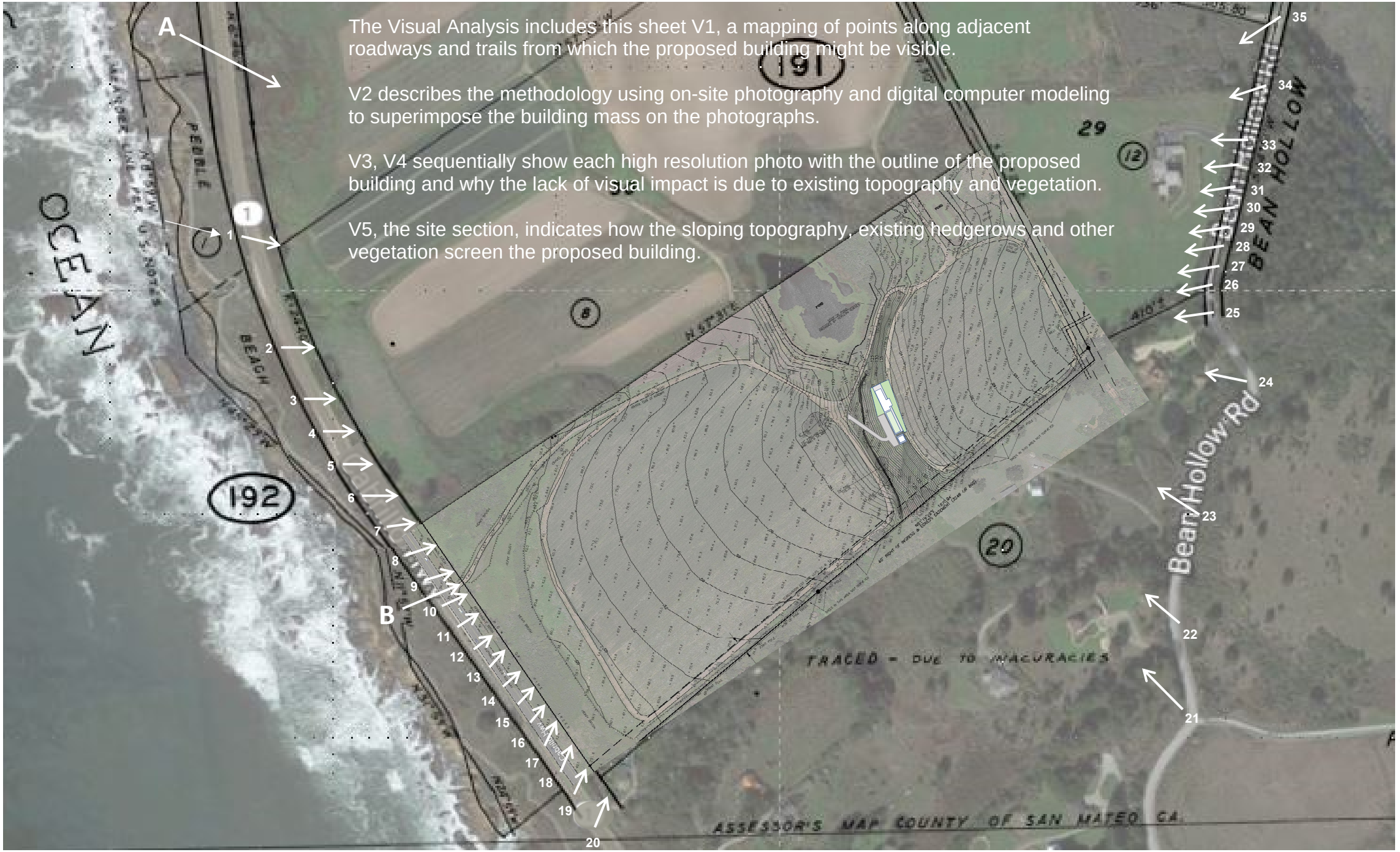
ALTERNATIVE PLANS

Ab



The Visual Analysis includes this sheet V1, a mapping of points along adjacent roadways and trails from which the proposed building might be visible.

V2 describes the methodology using on-site photography and digital computer modeling to superimpose the building mass on the photographs.

V3, V4 sequentially show each high resolution photo with the outline of the proposed building and why the lack of visual impact is due to existing topography and vegetation.

V5, the site section, indicates how the sloping topography, existing hedgerows and other vegetation screen the proposed building.

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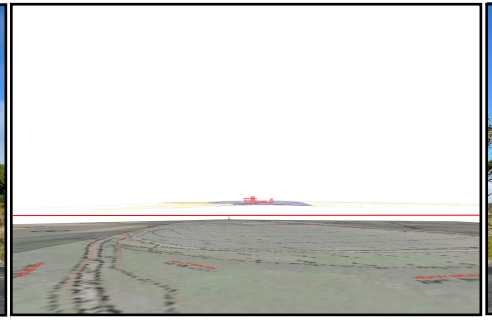
2020.12.24 SMC
2020.03.04 PLANNING

VIEW MAP
VISUAL ANALYSIS

V1

PHOTOGRAPH TOWARD HOUSE SITE

LOCATION NOTED ALONG HIGHWAY 1
OR BEAN HOLLOW ROAD



VIEW TOWARD HOUSE MAPPED FROM SAME LOCATION AND ELEVATION ON 3D DIGITAL MODEL

HORIZON LINE USED AS REFERENCE
DIGITAL VIEW SAME FOCAL LENGTH AS CAMERA

DIGITAL VIEW CAPTURED AND SUPERIMPOSED ON SITE PHOTOGRAPH

HOUSE MASS OUTLINED FOR CLARITY

OUTLINE SHOWS HOUSE NOT VISIBLE DUE TO HEAVY SITE VEGETATION

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DIGITAL MODEL
& METHODOLOGY
VISUAL ANALYSIS

V2

BH

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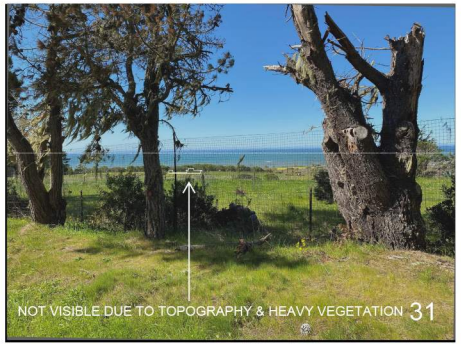
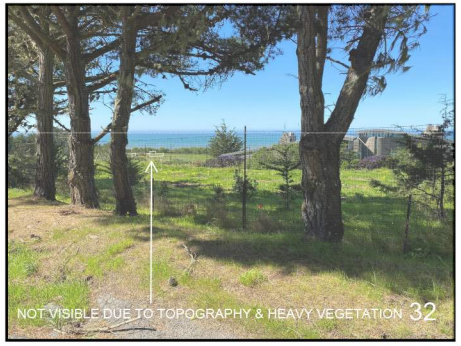
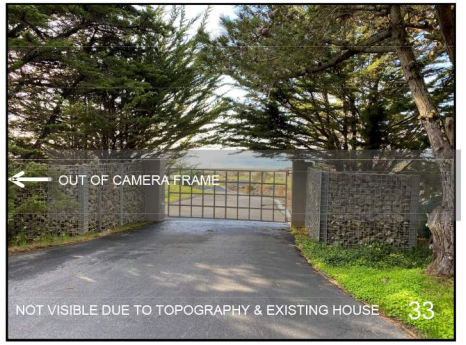
2020.12.24 SMC

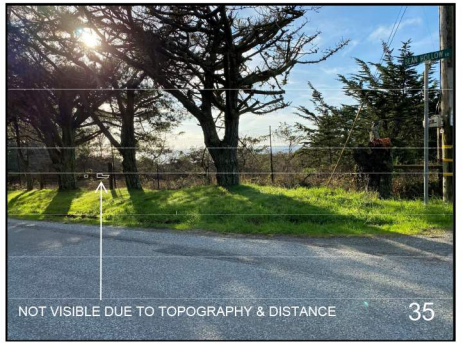
VIEWS TO SITE
VISUAL ANALYSIS

V3









VIEW FROM PEBBLE BEACH @ BEAN HOLLOW

VIEW FROM ARROYO DE LOS FRIJOLES TRAIL

BH

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2020.12.24 SMC

VIEWS TO SITE
VISUAL ANALYSIS

V4

BH

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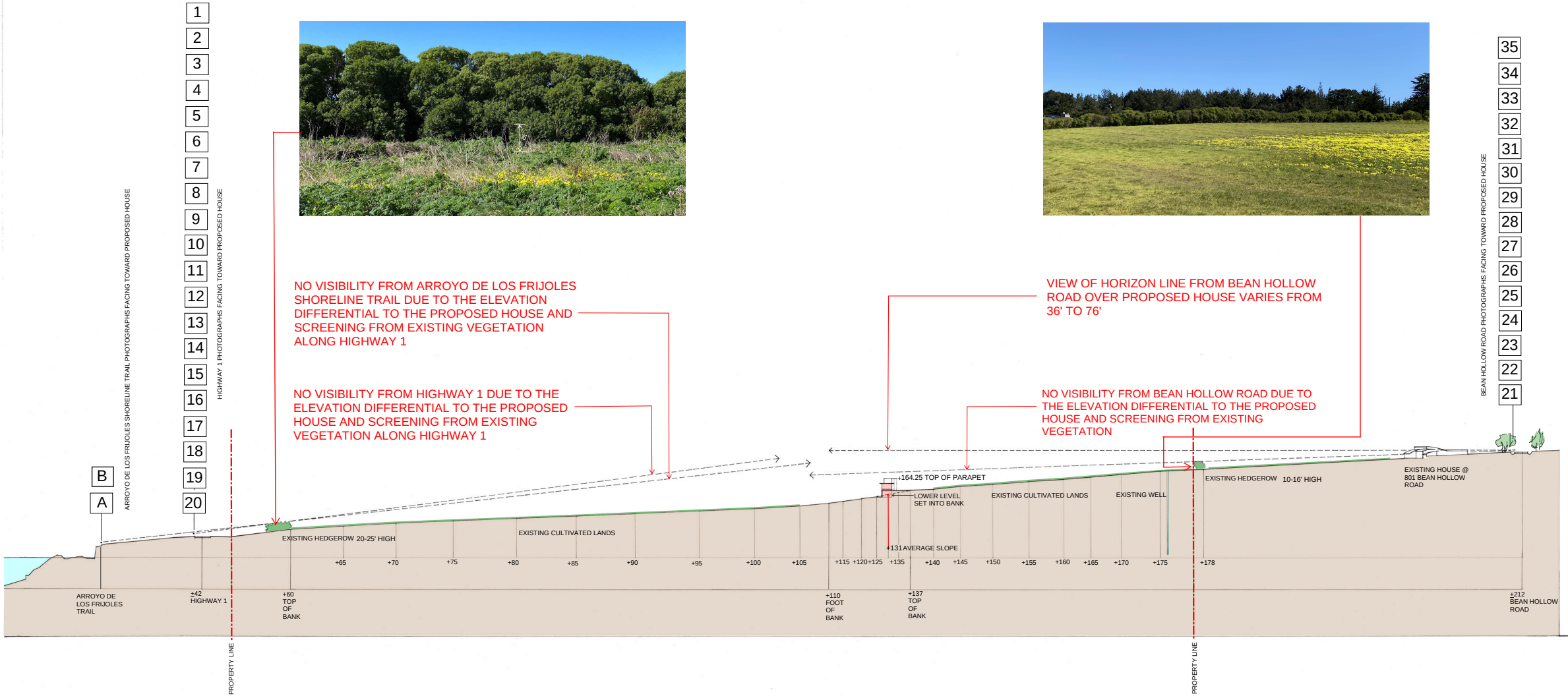
NO VISIBILITY FROM ARROYO DE LOS FRIJOLES SHORELINE TRAIL DUE TO THE ELEVATION DIFFERENTIAL TO THE PROPOSED HOUSE AND SCREENING FROM EXISTING VEGETATION ALONG HIGHWAY 1

NO VISIBILITY FROM HIGHWAY 1 DUE TO THE ELEVATION DIFFERENTIAL TO THE PROPOSED HOUSE AND SCREENING FROM EXISTING VEGETATION ALONG HIGHWAY 1

VIEW OF HORIZON LINE FROM BEAN HOLLOW ROAD OVER PROPOSED HOUSE VARIES FROM 36' TO 76'

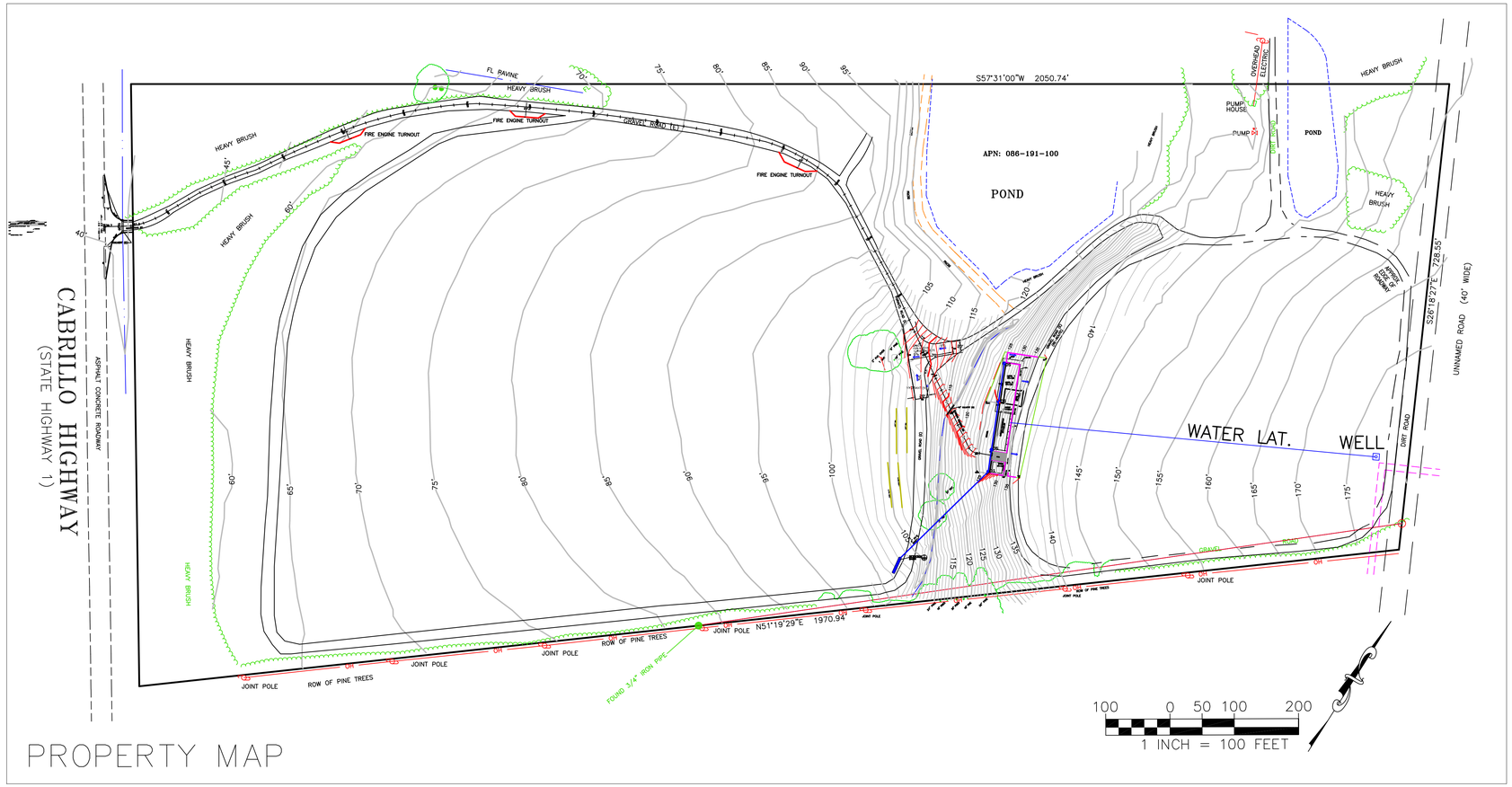
NO VISIBILITY FROM BEAN HOLLOW ROAD DUE TO THE ELEVATION DIFFERENTIAL TO THE PROPOSED HOUSE AND SCREENING FROM EXISTING VEGETATION



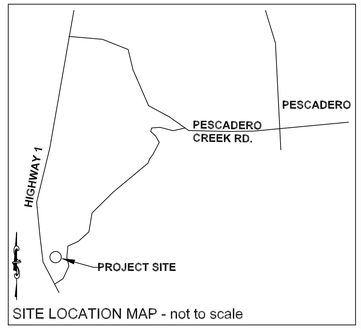
2021.01.10 SMC
2020.12.24
2020/03/04 PLANNING

SITE SECTION
VISUAL ANALYSIS

V5



PROPERTY MAP

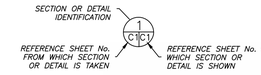


SITE LOCATION MAP - not to scale

GENERAL NOTES

1. PLANS PREPARED AT THE REQUEST OF:
   BRIAN LEE, OWNER
2. TOPOGRAPHY BY OTHERS.
3. THIS IS NOT A BOUNDARY SURVEY.
4. ELEVATION DATUM ASSUMED.
5. THE GEOTECHNICAL REPORT:
GEOTECHNICAL STUDY: LEE PROPERTY, PESCADERO, BY SIGMA PRIME GEOSCIENCES, INC. PROJECT NO. 19-143, DATED 11-30-20 SHALL BE RETAINED ON THE CONSTRUCTION SITE. THE GEOTECHNICAL ENGINEER OF RECORD IS SIGMA PRIME GEOSCIENCES, INC. ASSOCIATES, WITH THE CONTACT NUMBER (650)-728-3590. THE CONTRACTOR MUST SHALL NOTIFY THE GEOTECHNICAL ENGINEER OF RECORD AT LEAST 48 HOURS BEFORE CONSTRUCTION OF GEOTECHNICAL
RELATED WORK. THE GEOTECHNICAL PART OF CONSTRUCTION WORK, INCLUDING BUT NOT LIMITED TO, ALL THE EARTHWORK AND FOUNDATION CONSTRUCTIONS, MUST SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER OF RECORD.
6. STORMWATER MANAGEMENT CONSTRUCTION INSPECTIONS SHALL BE SCHEDULED FOR APPLICABLE DRAINAGE INSPECTIONS, WHICH INCLUDE SITE CLEARANCE AND EROSION CONTROL MEASURES INSTALLATION AS WELL AS INSPECTION OF MAJOR DRAINAGE CONTAINMENT, TREATMENT, AND CONVEYANCE DEVICES BEFORE BEING BURIED (INCLUDING REQUIRED MATERIAL LABELS, E.G. PIPES, SUG-BGRADE MATERIALS, ETC.). PLEASE FOLLOW THE INSPECTION CARD INSTRUCTIONS AND PHONE NUMBER (650-306-8405 EXT 181) TO SCHEDULE COUNTY DRAINAGE INSPECTIONS ACCORDINGLY. THERE SHALL BE THREE INSPECTIONS: ONE FOR EROSION CONTROL INSTALLATION, ONE BEFORE DRAINAGE FACILITIES ARE BURIED, AND ONE FOR FINAL WALK AROUND.

SECTION AND DETAIL CONVENTION



Sigma Prime Geosciences, Inc.
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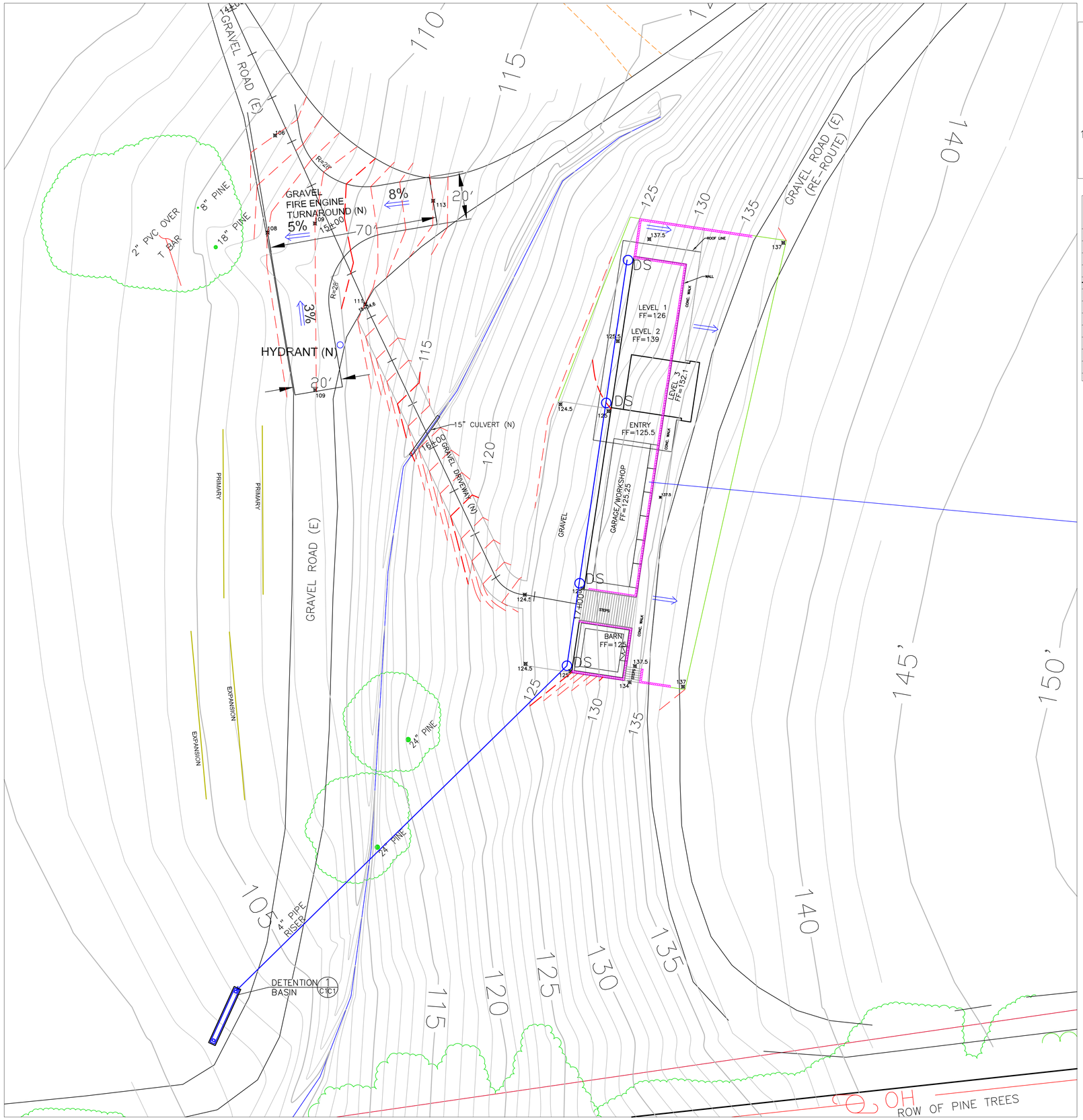
332 PRINCETON AVENUE
HALF MOON BAY, CA 94019
(650) 728-3590
FAX 726-3593

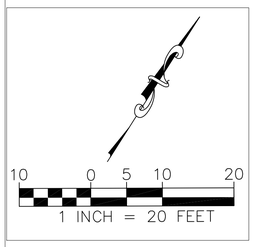
DATE: 12-15-20
DRAWN BY: CMK
CHECKED BY: AZG
REV DATE:
REV DATE:
REV DATE:
REV DATE:

SITE PLAN

LEE PROPERTY
CABRILLO HIGHWAY
PESCADERO, CALIFORNIA
APN: 086-191-100

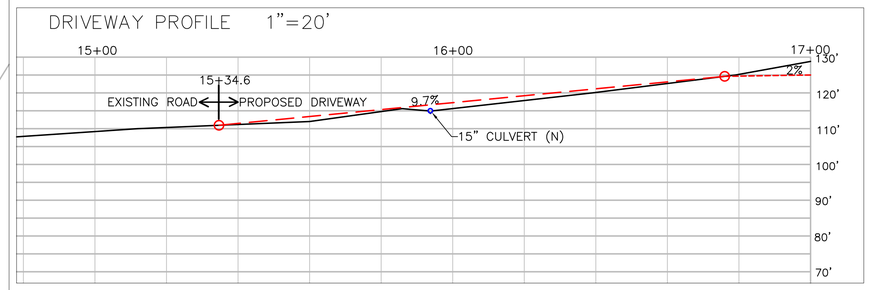
SHEET
C-1

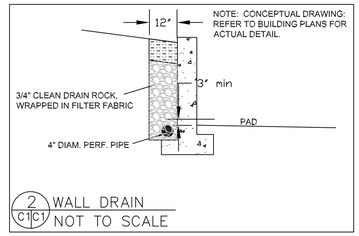




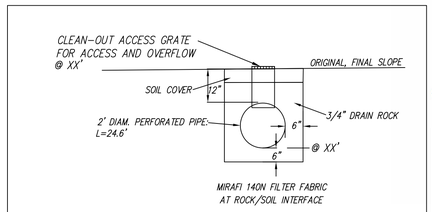
LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOURS
- 129.5 PROPOSED SPOT ELEVATION
- DS DOWNSPOUT
- 4" SOLID DRAIN PIPE
- DIRECTION OF SHEET FLOW
- RETAINING WALL





2 C1C1 WALL DRAIN
NOT TO SCALE



DESIGN BASIS: 10-YEAR STORM EVENT WITH 1 HOUR DURATION ON HARD SURFACES.
RAINFALL INTENSITY = 0.921 IN/HR

1 C1C1 DETENTION BASIN
NOT TO SCALE

DRAINAGE NOTES

1. DRAINAGE INTENT: IT IS THE INTENT OF THE DRAINAGE SYSTEM TO CONVEY ROOF RUNOFF TO A SAFE LOCATION, AND TO MINIMIZE EXCESSIVE MOISTURE AROUND FOUNDATIONS. DIRECT SLOPES SUCH THAT STORMWATER WILL NOT BE DIVERTED ONTO ADJACENT PROPERTIES.

2. ALL DOWNSPOUT DRAIN LINES SHALL LEAD TO DETENTION BASIN, AS SHOWN.

3. ALL ROOF DRAINAGE PIPES SHALL BE 4" DIAMETER MINIMUM SOLID PIPE, SLOPED AT 1% MINIMUM.

4. IT IS THE PROPERTY OWNER'S RESPONSIBILITY TO CHECK ON ALL STORMWATER FACILITIES SUCH AS ROOF GUTTERS, DOWNSPOUT LINES, AND THE DETENTION BASIN TO BE SURE THAT THEY ARE CLEAR OF EXCESSIVE DEBRIS AND OPERATING EFFICIENTLY. THE FACILITIES SHALL BE CHECKED EVERY FALL AND PERIODICALLY DURING THE RAINY SEASON.

GRADING NOTES

CUT VOLUME : 1200 CY
FILL VOLUME: 600 CY
TOTAL CUT+FILL = 1800 CY

VOLUMES ABOVE ARE APPROXIMATE.

THE SUBGRADE BELOW ALL PAVED AREAS SHALL BE BASEROCK COMPACTED TO 95%.

ALL GRADING SHALL CONFORM TO LOCAL CODES AND ORDINANCES.

ALL TRENCHES UNDER PROPOSED PAVED AREAS OR CONCRETE SHALL BE BACKFILLED TO SUBGRADE ELEVATION WITH COMPACTED APPROVED GRANULAR MATERIALS. IF TRENCHES ARE IN PROPOSED LANDSCAPE AREAS, THEY SHALL BE BACKFILLED WITH COMPACTED APPROVED GRANULAR MATERIAL TO WITHIN ONE FOOT OF FINISHED GRADE, AND THEN FILLED WITH HAND TAMPED SOILS.

REGISTERED PROFESSIONAL ENGINEER
CHARLES M. KISSICK
No. 62264
9-30-21
EXPIRES
CIVIL
STATE OF CALIFORNIA

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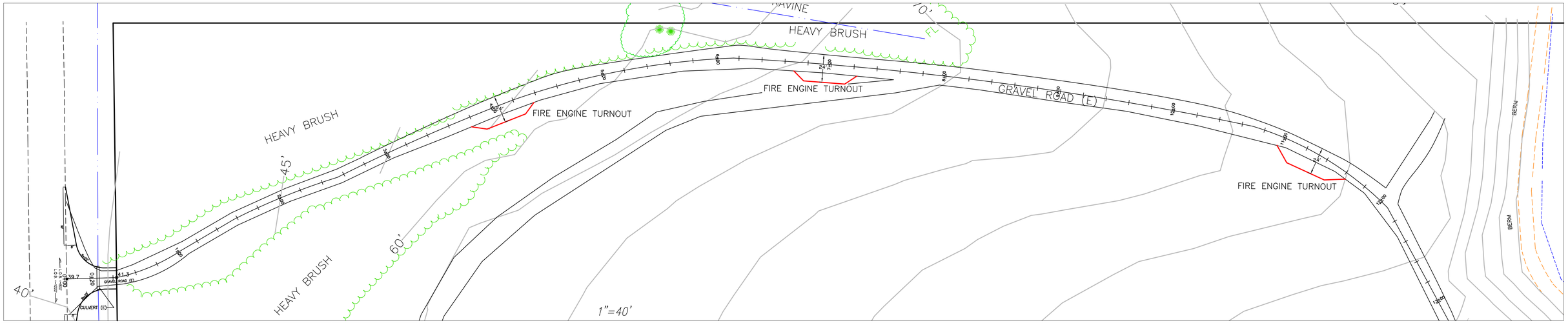
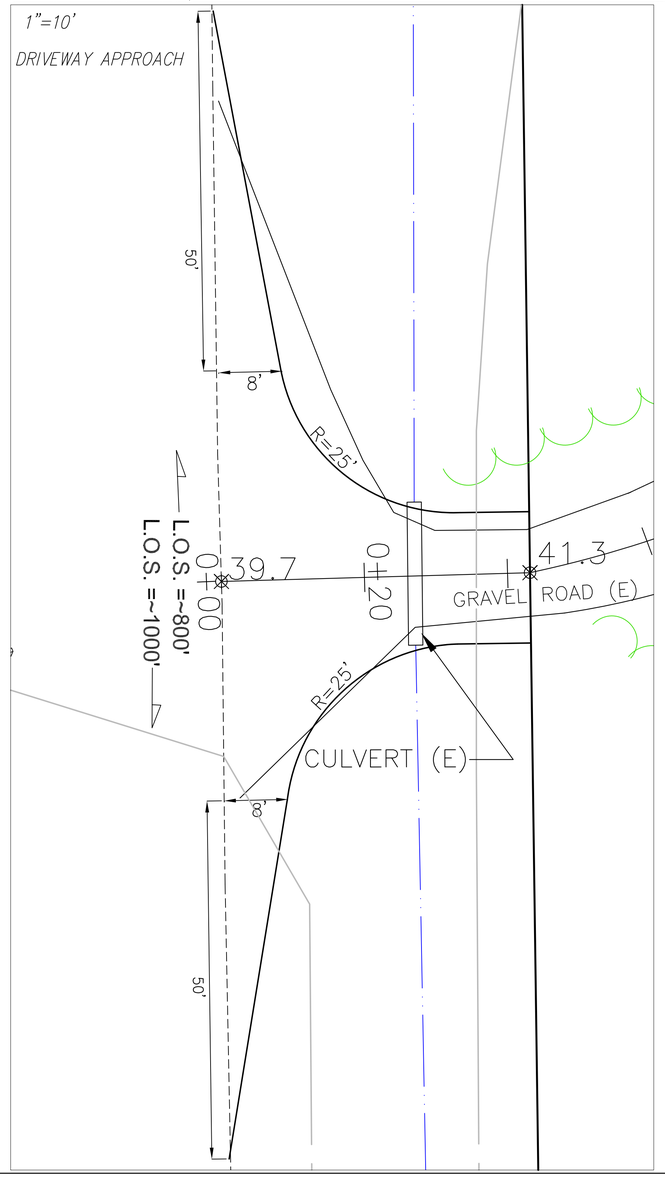
DATE: 12-15-20	DRAWN BY: CMK	CHECKED BY: AZG	
		REV. DATE:	
		REV. DATE:	
		REV. DATE:	

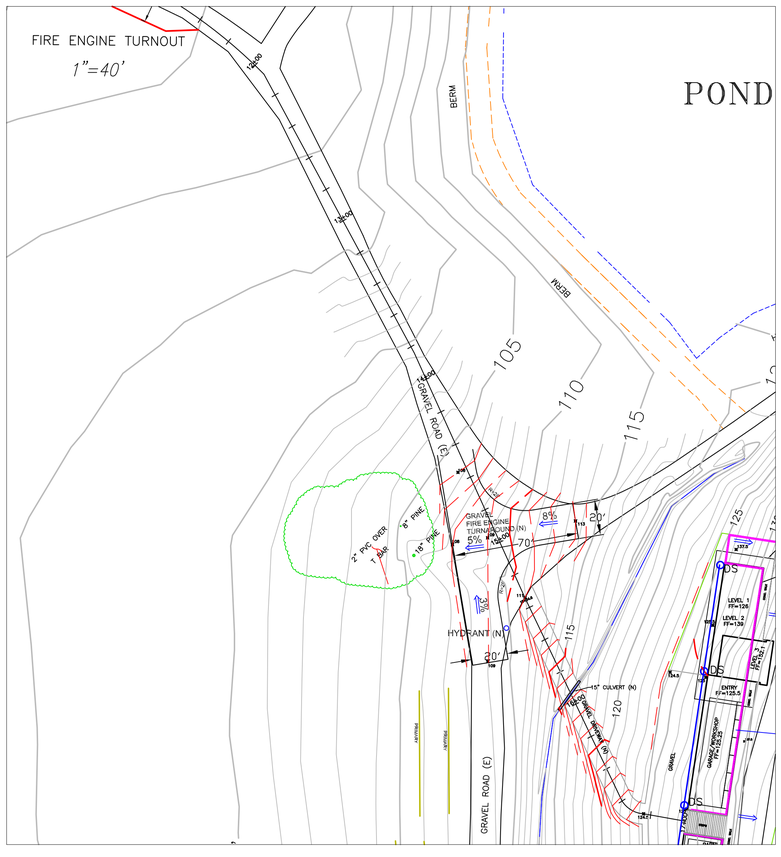
GRADING AND DRAINAGE PLAN

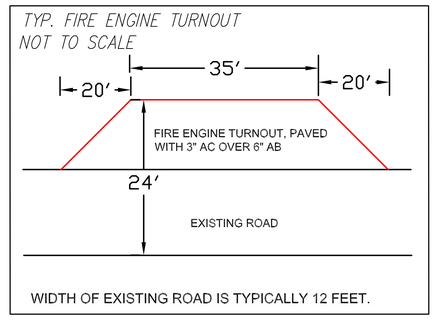
LEE PROPERTY
CABRILLO HIGHWAY
PESCADERO, CALIFORNIA
APN: 086-191-100

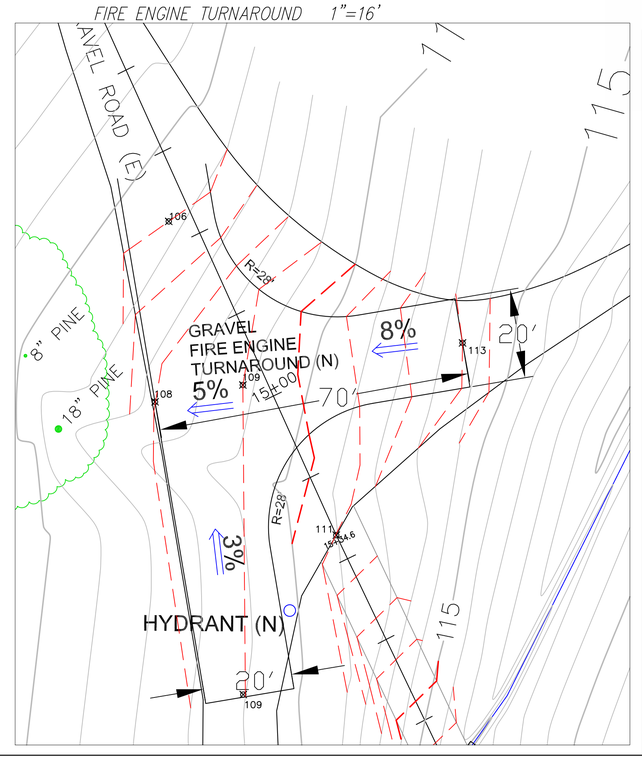
SHEET
C-2











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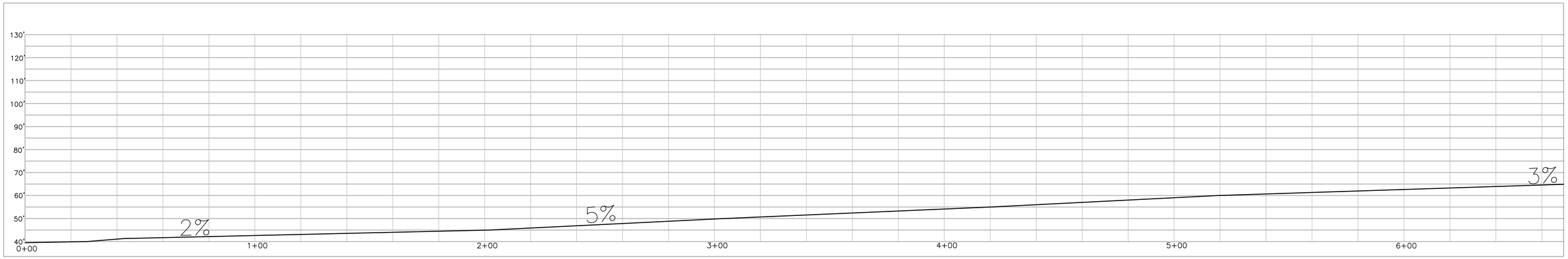
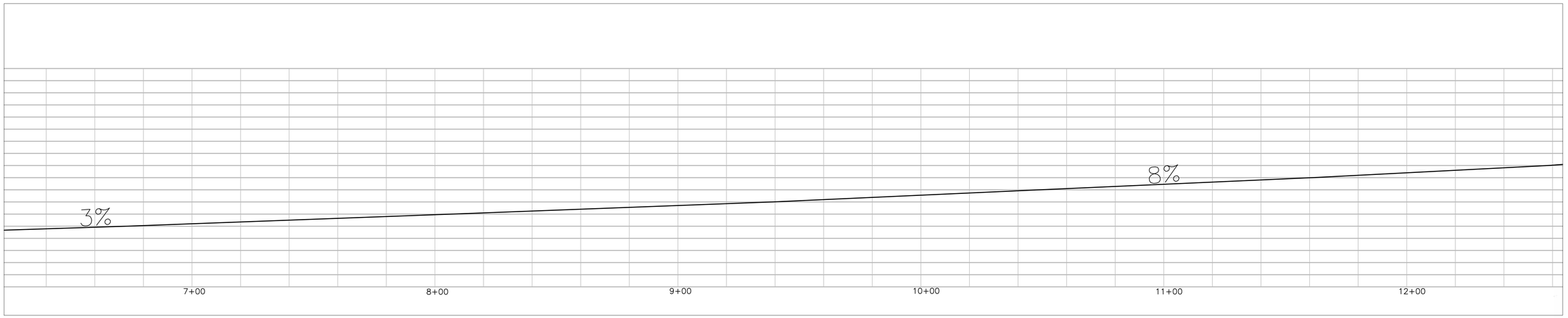
DRAWN BY: CMK
CHECKED BY: AZG
REV. DATE:
REV. DATE:
REV. DATE:

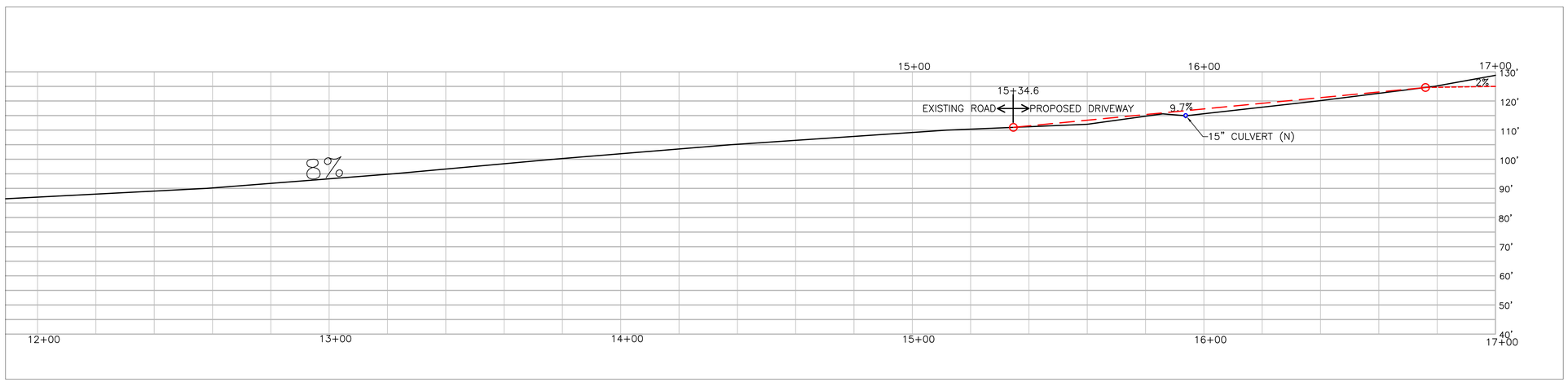
ROAD PLAN

LEE PROPERTY
CABRILLO HIGHWAY
PESCADERO, CALIFORNIA
APN: 086-191-100

SHEET
C-3







1"=20'

REGISTERED PROFESSIONAL ENGINEER
CHARLES M. KISSICK
No. 62264
9-30-21
EXPIRES
CIVIL
STATE OF CALIFORNIA

Sigma Prime Geosciences, Inc.

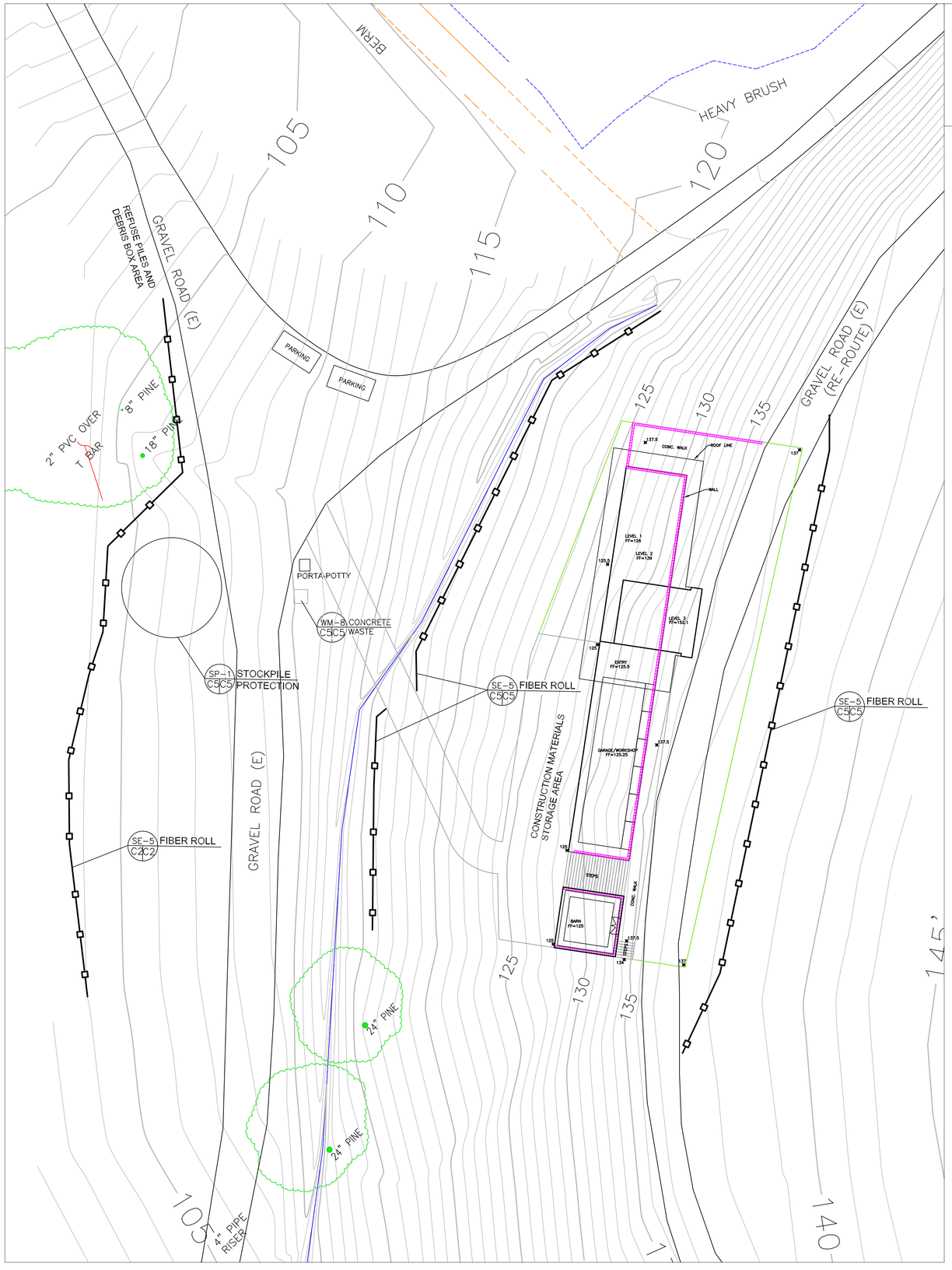
SIGMA PRIME GEOSCIENCES, INC.
332 PRINCETON AVENUE
HALF MOON BAY, CA 94019
(650) 728-3590
FAX 728-3593

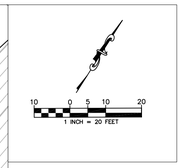
DATE: 12-15-20
DRAWN BY: CMK
CHECKED BY: AZG
REV. DATE:
REV. DATE:
REV. DATE:

ROAD PROFILE

LEE PROPERTY
CABRILLO HIGHWAY
PESCADERO, CALIFORNIA
APN: 086-191-100

SHEET
C-4





EROSION CONTROL POINT OF CONTACT

THIS PERSON WILL BE RESPONSIBLE FOR EROSION CONTROL AT THE SITE AND WILL BE THE COUNTY'S MAIN POINT OF CONTACT IF CORRECTIONS ARE REQUIRED.

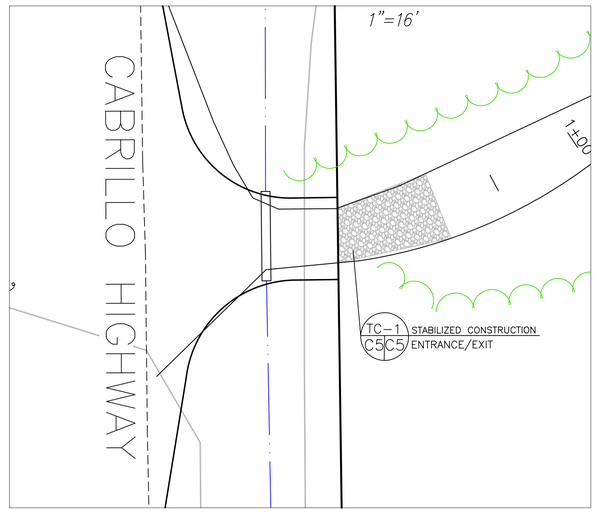
NAME: BRIAN LEE

TITLE/QUALIFICATION: OWNER

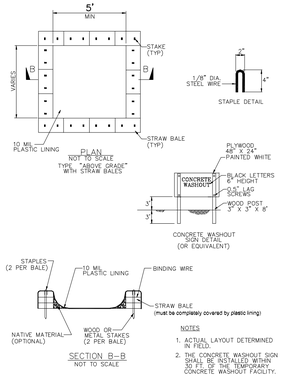
PHONE: 415-812-3294

PHONE:

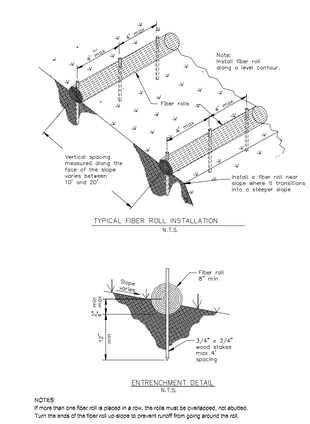
E-MAIL: brian.lee.faia@gmail.com



CONCRETE WASTE MANAGEMENT WM-8



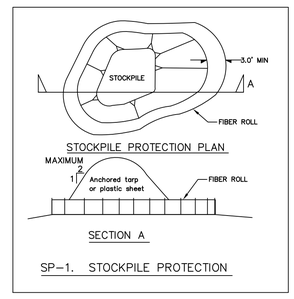
FIBER ROLLS SE-5



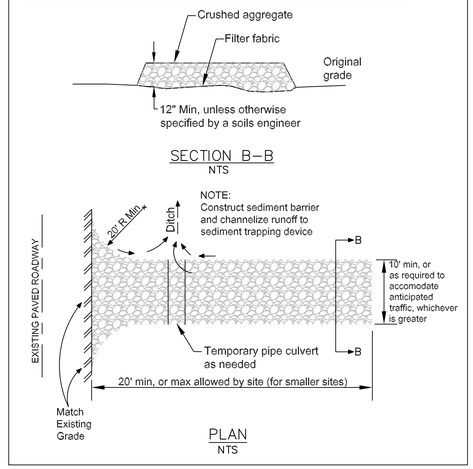
GENERAL EROSION AND SEDIMENT CONTROL NOTES

FIBER ROLE
INSTALL AT LOCATIONS SHOWN.
AFIX AS SHOWN IN DETAIL SE-5

- There will be no stockpiling of soil. All excavated soil will be hauled off-site as it is excavated.
- Perform clearing and earth-moving activities only during dry weather. Measures to ensure adequate erosion and sediment control shall be installed prior to earth-moving activities and construction.
- Erosion control materials to be on-site during off-season.
- Measures to ensure adequate erosion and sediment control are required year-round. Stabilize all denuded areas and maintain erosion control measures continuously between October 1 and April 30.
- Store, handle, and dispose of construction materials and wastes properly, so as to prevent their contact with stormwater.
- Control and prevent the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges to storm drains and watercourses.
- Avoid cleaning, fueling, or maintaining vehicles on-site, except in a designated area where wash water is contained and treated.
- Limit and time applications of pesticides and fertilizers to prevent polluted runoff.
- Limit construction access routes to stabilized, designated access points
- Avoid tracking dirt or other materials off-site; clean off-site paved areas and sidewalks using dry sweeping methods.
- Train and provide instruction to all employees and subcontractors regarding the Watershed Protection Maintenance Standards and construction Best Management Practices.
- Placement of erosion materials is required on weekends and during rain events.
- The areas delineated on the plans for parking, grubbing, storage etc., shall not be enlarged or "run over."
- Dust control is required year-round.
- Erosion control materials shall be stored on-site.



STABILIZED CONSTRUCTION ENTRANCE/EXIT TC-1



REGISTERED PROFESSIONAL ENGINEER CHARLES M. KISSICK No. 62264 9-30-21 EXPIRES CIVIL STATE OF CALIFORNIA

Sigma Prime Geosciences, Inc.

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(650) 728-3590
FAX 728-3593

DATE: 12-15-20
DRAWN BY: CMK
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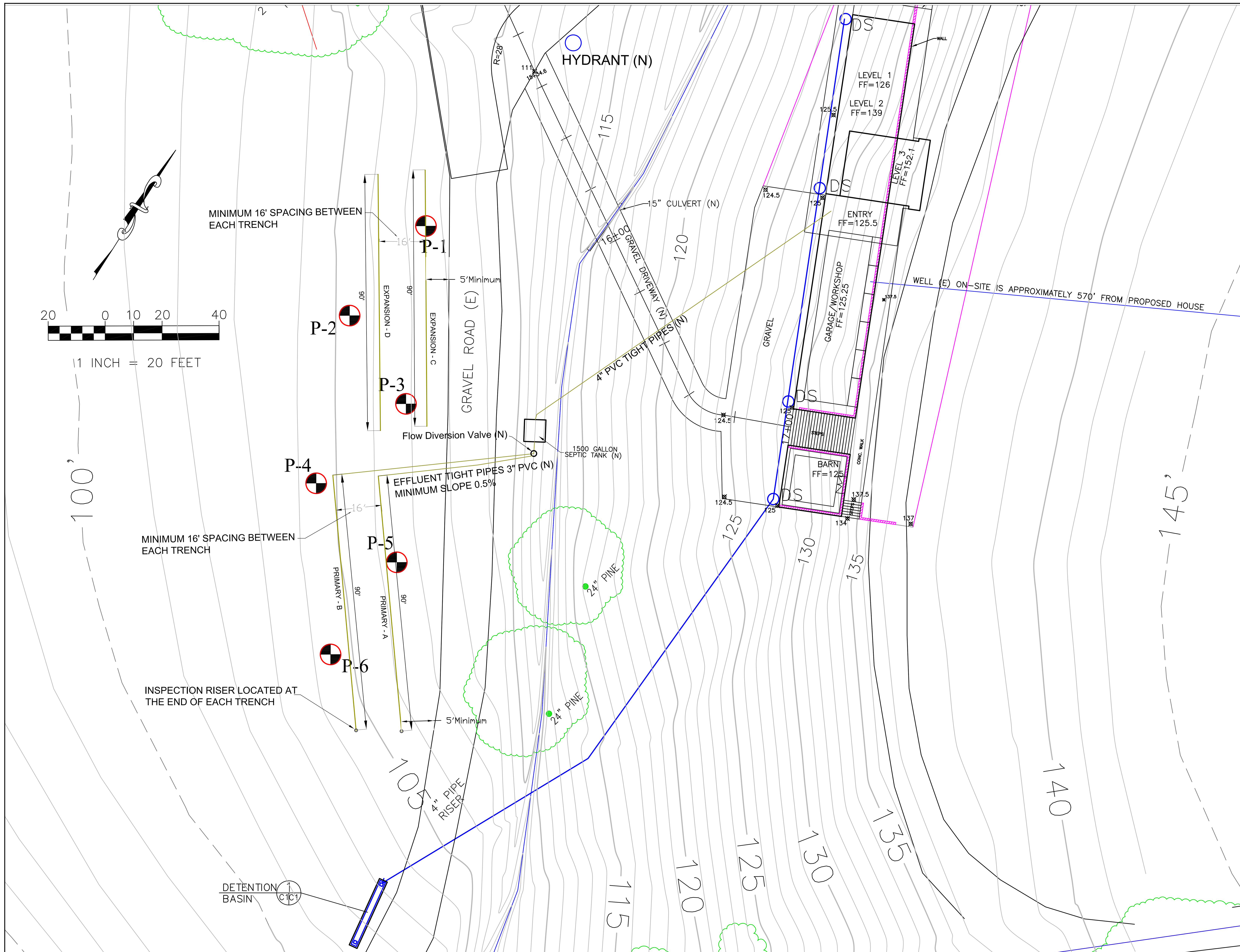
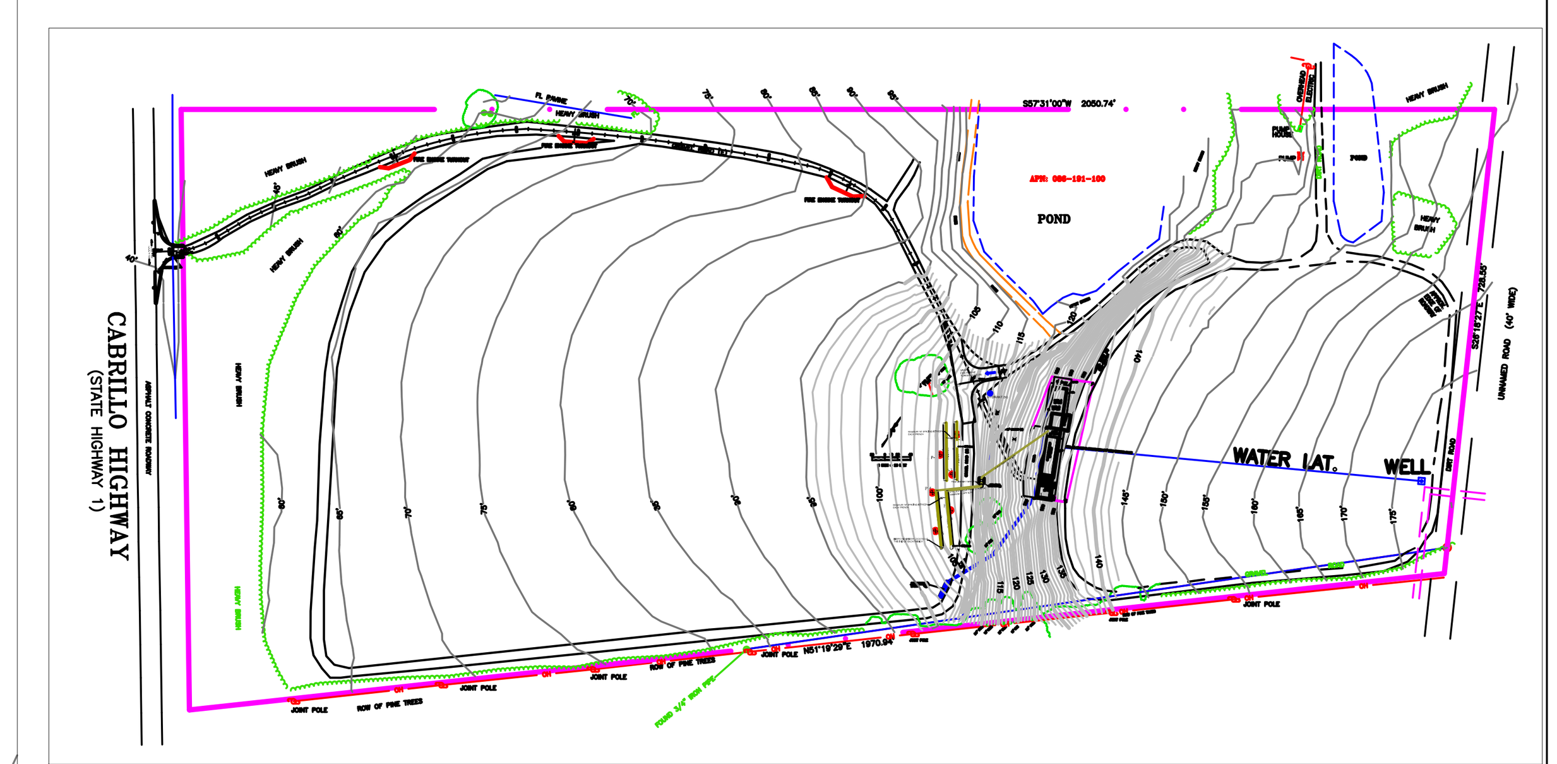
EROSION AND SEDIMENT CONTROL PLAN

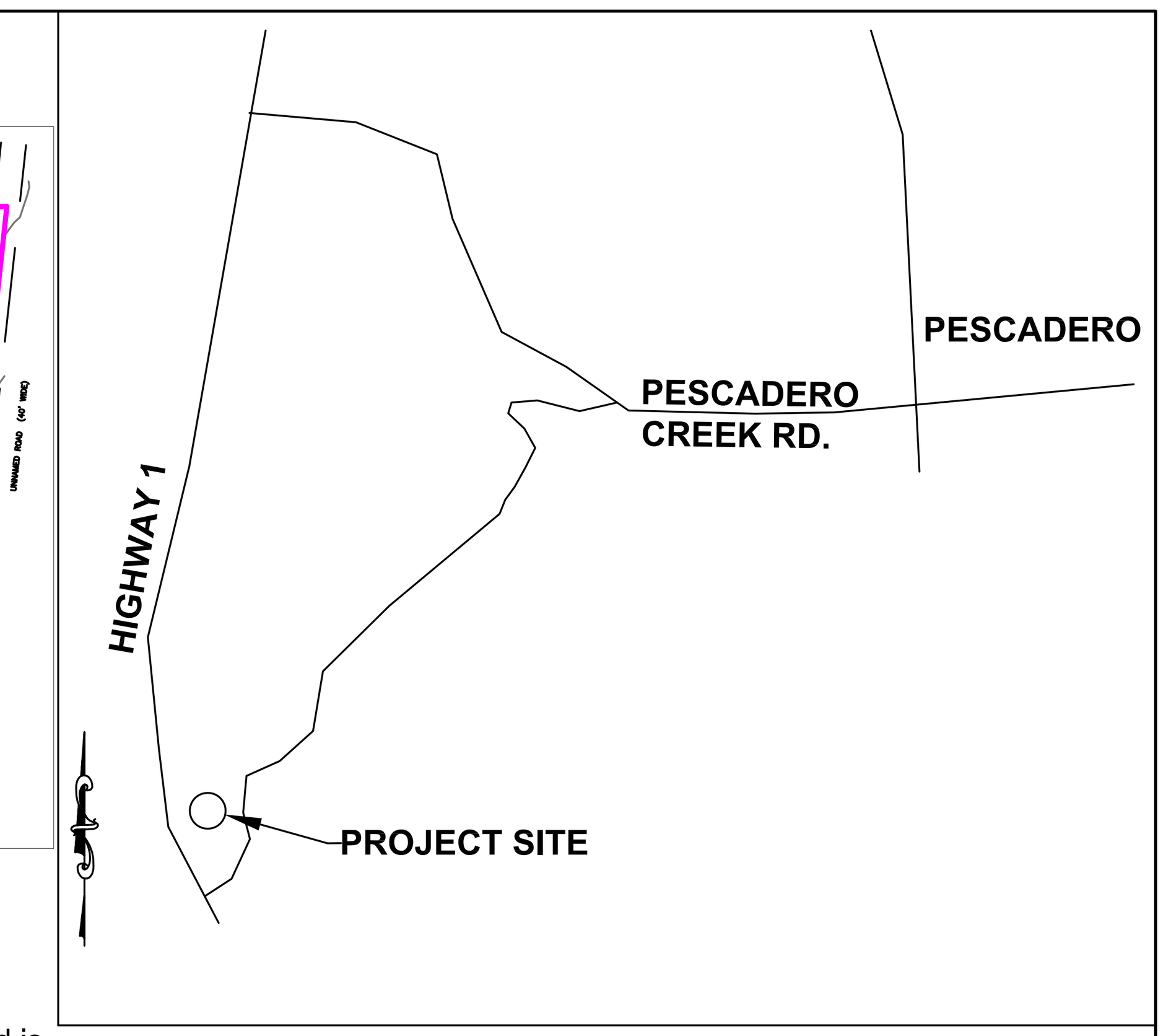
LEE PROPERTY
CABRILLO HIGHWAY
PESCADERO, CALIFORNIA
APN: 086-191-100

SHEET
C-5





SITE PLAN - 1" = 300'



SITE LOCATION MAP - not to scale

PROJECT DESCRIPTION

The proposed residence is a 3 bedroom single family dwelling. However, the design for the leach field is for a 4-bedroom home to account for the possibility of a future farm worker housing unit.

Percolation tests were performed on November 24, 2020 by Langley Hill Quarry.

Results show an "A" Percolation Rate.

180 linear feet of drain-field will be necessary for Primary and Expansion Fields with a 1,500 gallon septic tank. 4 leach fields are required, 2 leach fields "A" and "B" will be installed as the Primary leach fields. 2 leach fields "C" and "D" are shown on the plan as Expansion leach fields. This area must be protected and land in this area dedicated for future use when necessary.

Domestic water to be supplied by (e) on-site well to be converted to domestic water status.

SCOPE OF WORK

1. Install new 1,500 gallon Don Chapin Pre-Cast septic tank or equivalent as shown.
2. Install new primary leach trenches.
3. Install a new flow diversion valve and effluent filter.
4. Connect new septic tank to diversion valve and valve to tight lines and leach trenches as shown.
5. Connect new sewer lateral to inlet of new tank.

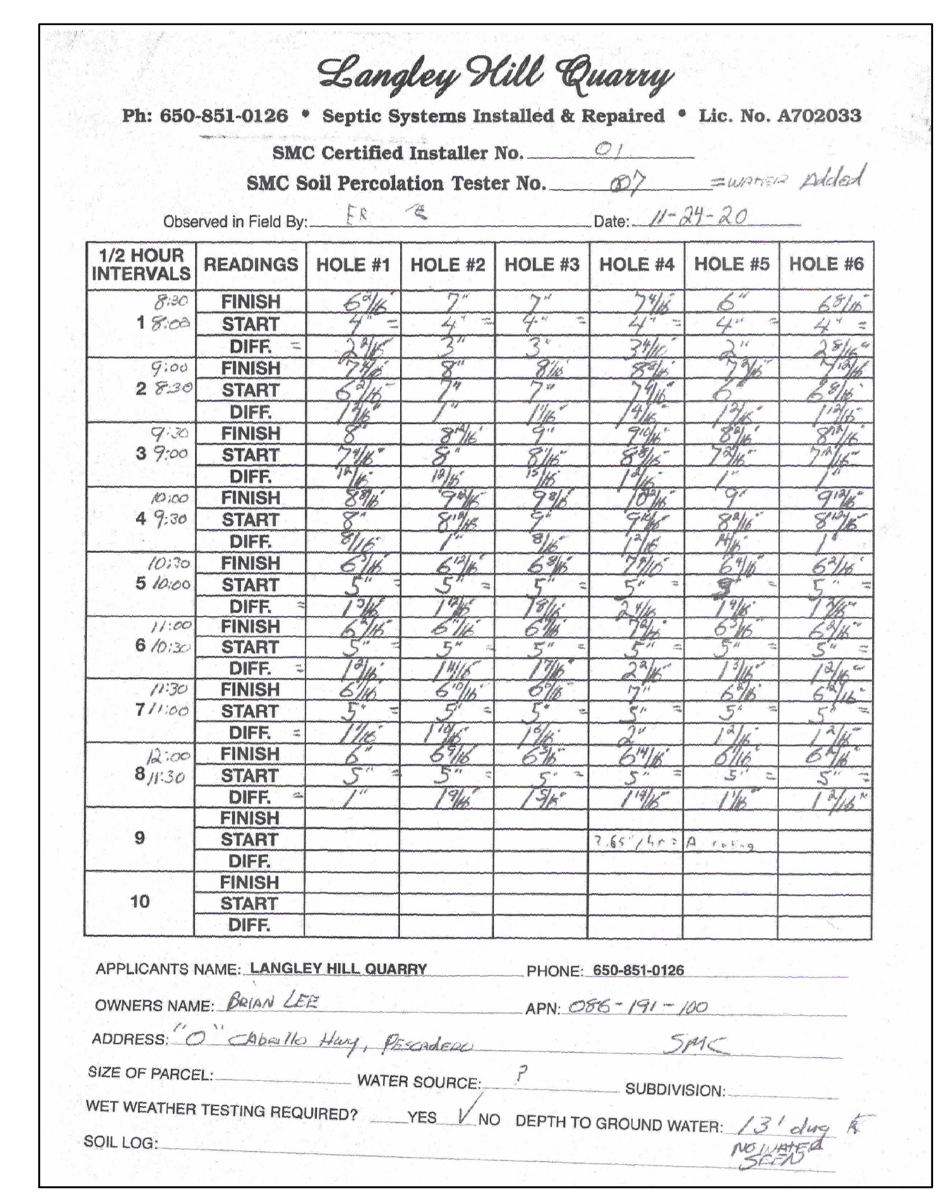
All material and methods shall comply with San Mateo County Environmental Health regulations, San Mateo County Building codes, and 2019 CBC. All work must be inspected and approved before back-filling.

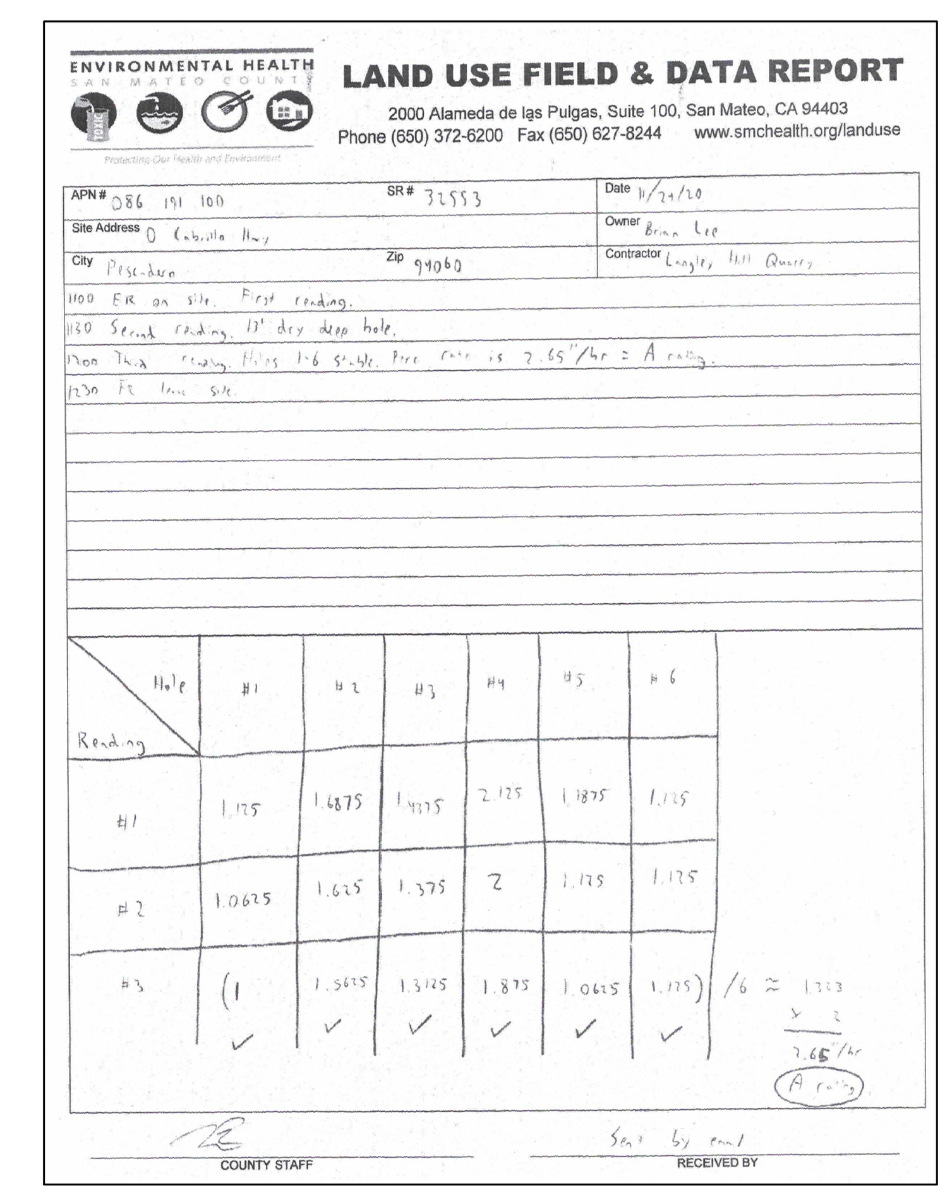
GENERAL NOTES

1. PLANS PREPARED AT THE REQUEST OF: BRIAN LEE, OWNER
2. SURVEY AND TOPOGRAPHY BY HUMANN COMPANY, INC. JULY, 2018
3. ELEVATION DATUM ASSUMED.
4. THIS IS NOT A BOUNDARY SURVEY.

LEGEND

- P-1 PERCOLATION TEST LOCATIONS
- E EXISTING
- N NEW OR PROPOSED
- 137 PROPOSED GRADE





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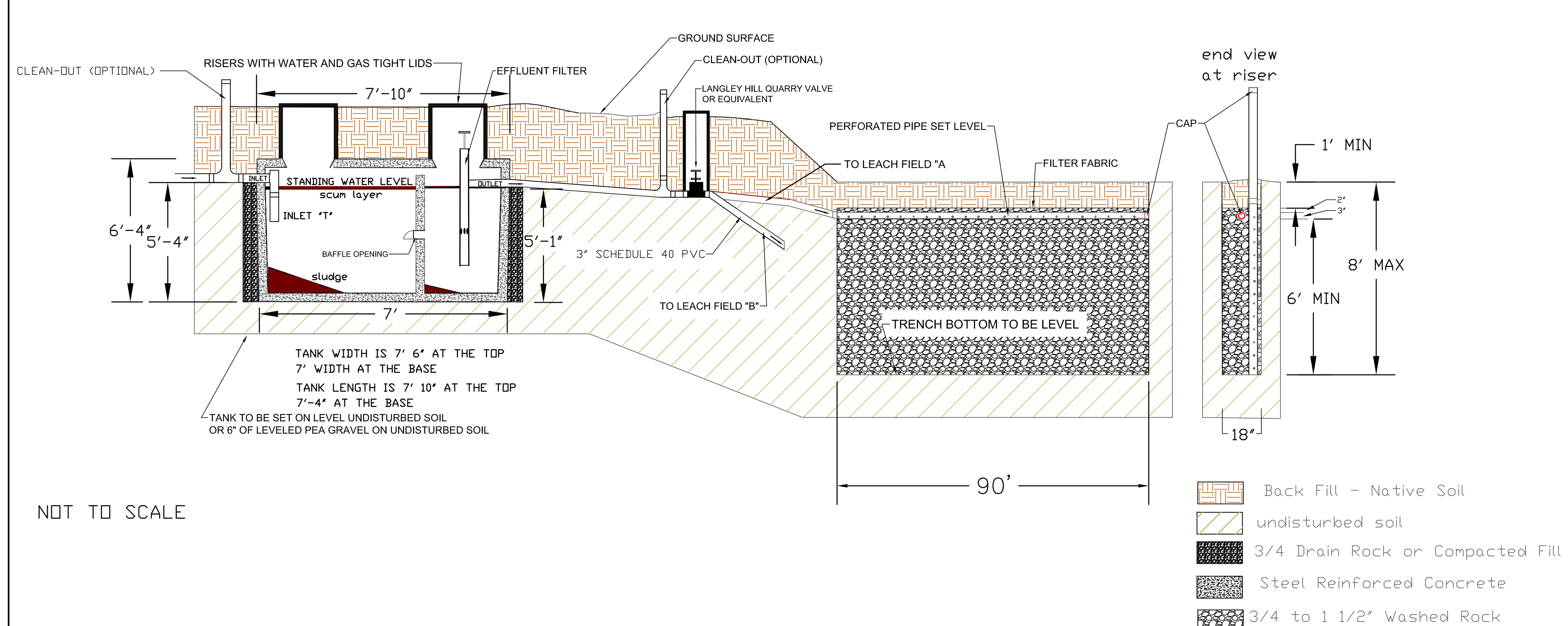
DATE: 12-23-2020
DRAWN BY: AZG
CHECKED BY: CMK
REV. DATE:
REV. DATE:

SEPTIC SYSTEM PLAN

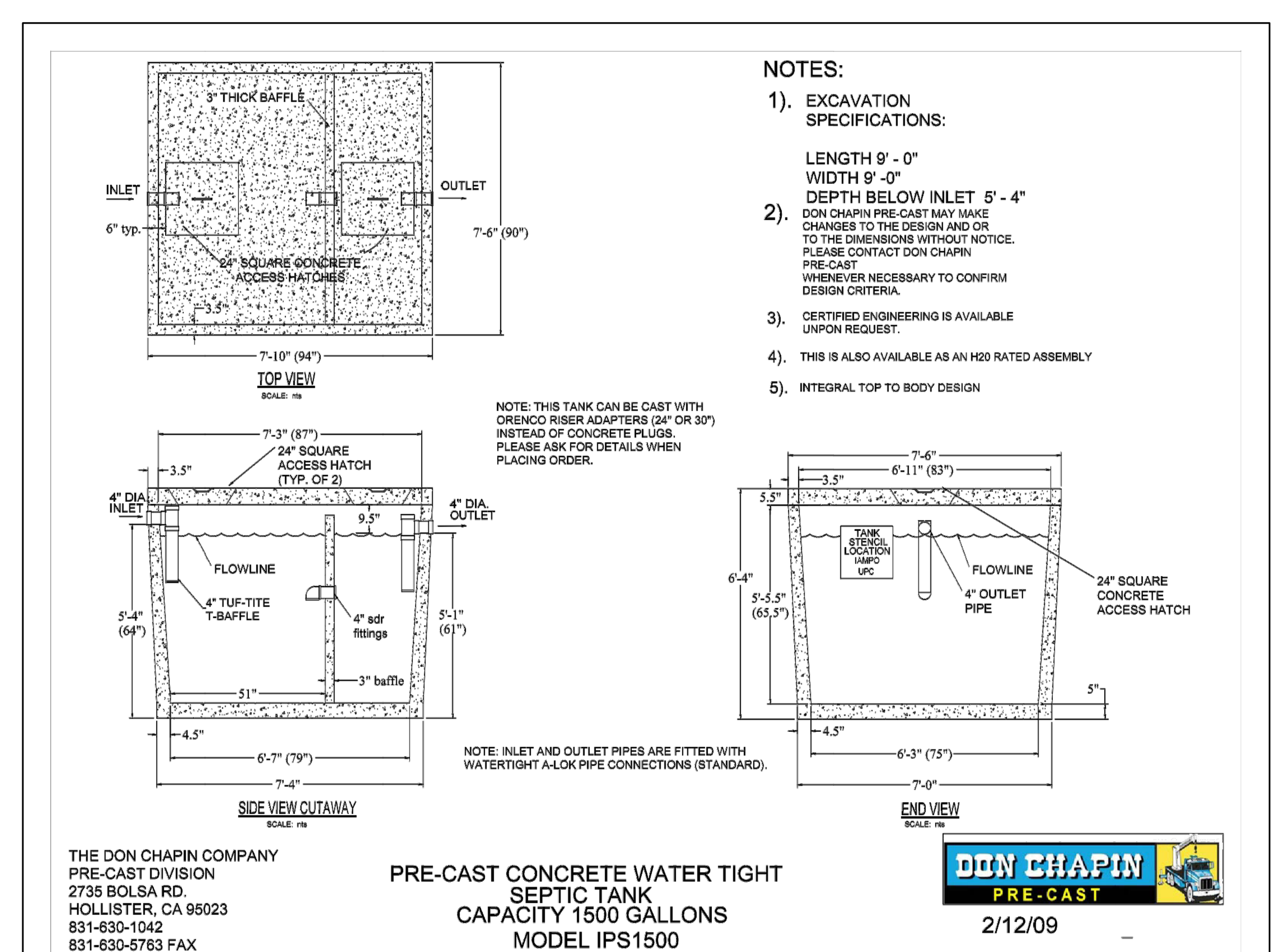
LEE PROPERTY
CABRILLO HIGHWAY
PESCADERO, CALIFORNIA
APN: 086-191-100

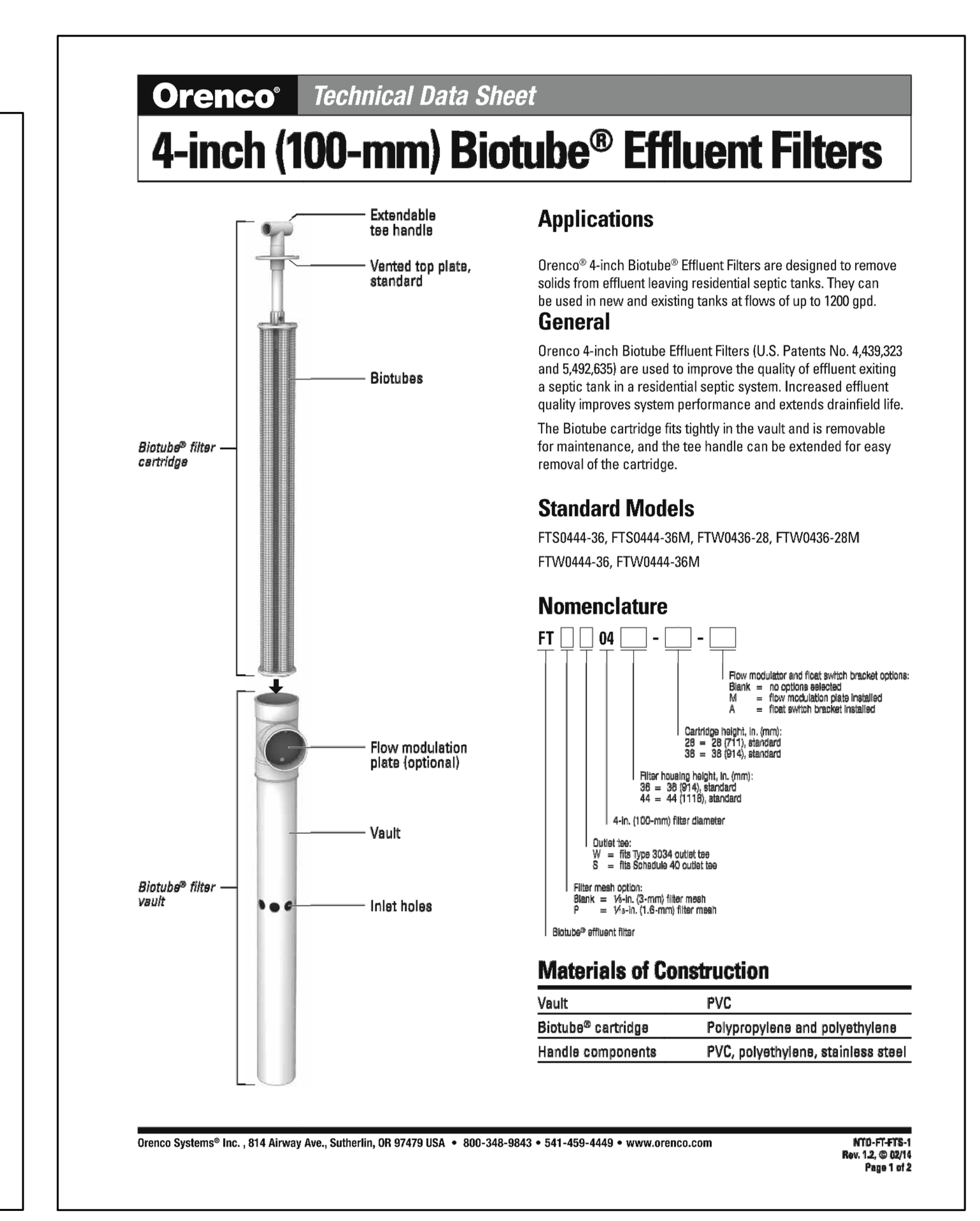
SHEET
OWTS-1

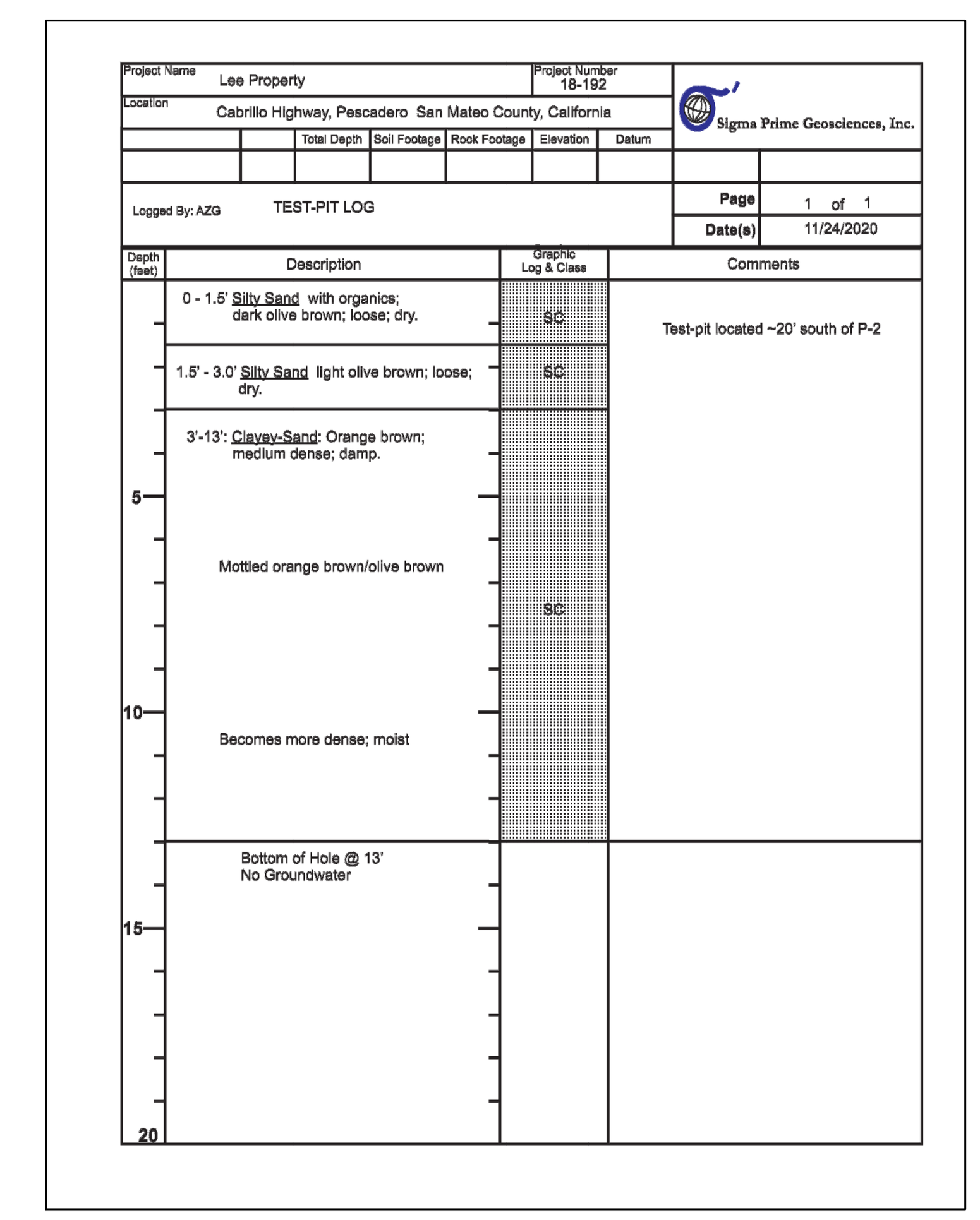
1500 GALLON SEPTIC TANK AND STANDARD LEACH FIELD DETAILS



NOT TO SCALE





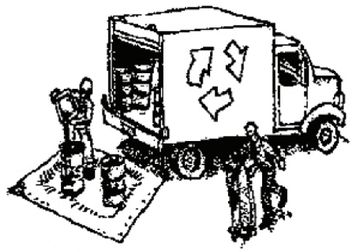


SAN MATEO COUNTYWIDE
Water Pollution Prevention Program
Clean Water. Healthy Community.

Construction Best Management Practices (BMPs)

Construction projects are required to implement the stormwater best management practices (BMP) on this page, as they apply to your project, all year long.

Materials & Waste Management



Non-Hazardous Materials

- ❑ Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days.
- ❑ Use (but don't overuse) reclaimed water for dust control.

Hazardous Materials

- ❑ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- ❑ Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- ❑ Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ☒ Arrange for appropriate disposal of all hazardous wastes.

Waste Management

- ☒ Cover waste disposal containers securely with tarps at the end of every work day and during wet weather.
- ☒ Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site.
- ☒ Clean or replace portable toilets, and inspect them frequently for leaks and spills.
- ☒ Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.)
- ☒ Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.

Construction Entrances and Perimeter

- ☒ Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ☒ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

Equipment Management & Spill Control

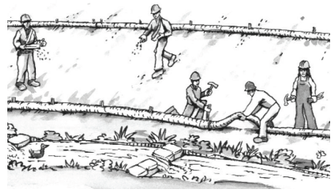
Maintenance and Parking

- ❑ Designate an area, fitted with appropriate BMPs, for vehicle and equipment parking and storage.
- ❑ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- ❑ If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan or drop cloths big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- ❑ If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- ❑ Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment.

Spill Prevention and Control

- ☒ Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- ❑ Inspect vehicles and equipment frequently for and repair leaks promptly. Use drip pans to catch leaks until repairs are made.
- ☒ Clean up spills or leaks immediately and dispose of cleanup materials properly.
- ☒ Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).
- ☒ Sweep up spilled dry materials immediately. Do not try to wash them away with water, or bury them.
- ❑ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ❑ Report significant spills immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

Earthmoving



- ☒ Schedule grading and excavation work during dry weather.
- ☒ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ☒ Remove existing vegetation only when absolutely necessary, and seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.
- ☒ Prevent sediment from migrating offsite and protect storm drain inlets, gutters, ditches, and drainage courses by installing and maintaining appropriate BMPs, such as fiber rolls, silt fences, sediment basins, gravel bags, berms, etc.
- ❑ Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

Contaminated Soils

- ❑ If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
  - Unusual soil conditions, discoloration, or odor.
  - Abandoned underground tanks.
  - Abandoned wells
  - Buried barrels, debris, or trash.

Paving/Asphalt Work

- ☒ Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- ❑ Cover storm drain inlets and manholes when applying seal coat, tack coat, slurry seal, fog seal, etc.
- ☒ Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.
- ☒ Do not use water to wash down fresh asphalt concrete pavement.

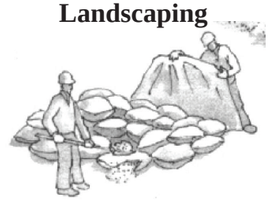
Sawcutting & Asphalt/Concrete Removal

- ❑ Protect nearby storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
- ❑ Shovel, abosorb, or vacuum saw-cut slurry and dispose of all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- ❑ If sawcut slurry enters a catch basin, clean it up immediately.

Concrete, Grout & Mortar Application

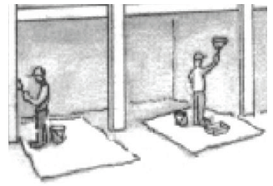
- ❑ Store concrete, grout, and mortar away from storm drains or waterways, and on pallets under cover to protect them from rain, runoff, and wind.
- ☒ Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and in a manner that will prevent leaching into the underlying soil or onto surrounding areas. Let concrete harden and dispose of as garbage.
- ❑ When washing exposed aggregate, prevent washwater from entering storm drains. Block any inlets and vacuum gutters, hose washwater onto dirt areas, or drain onto a bermed surface to be pumped and disposed of properly.

Landscaping



- ❑ Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- ❑ Stack bagged material on pallets and under cover.
- ☒ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

Painting & Paint Removal



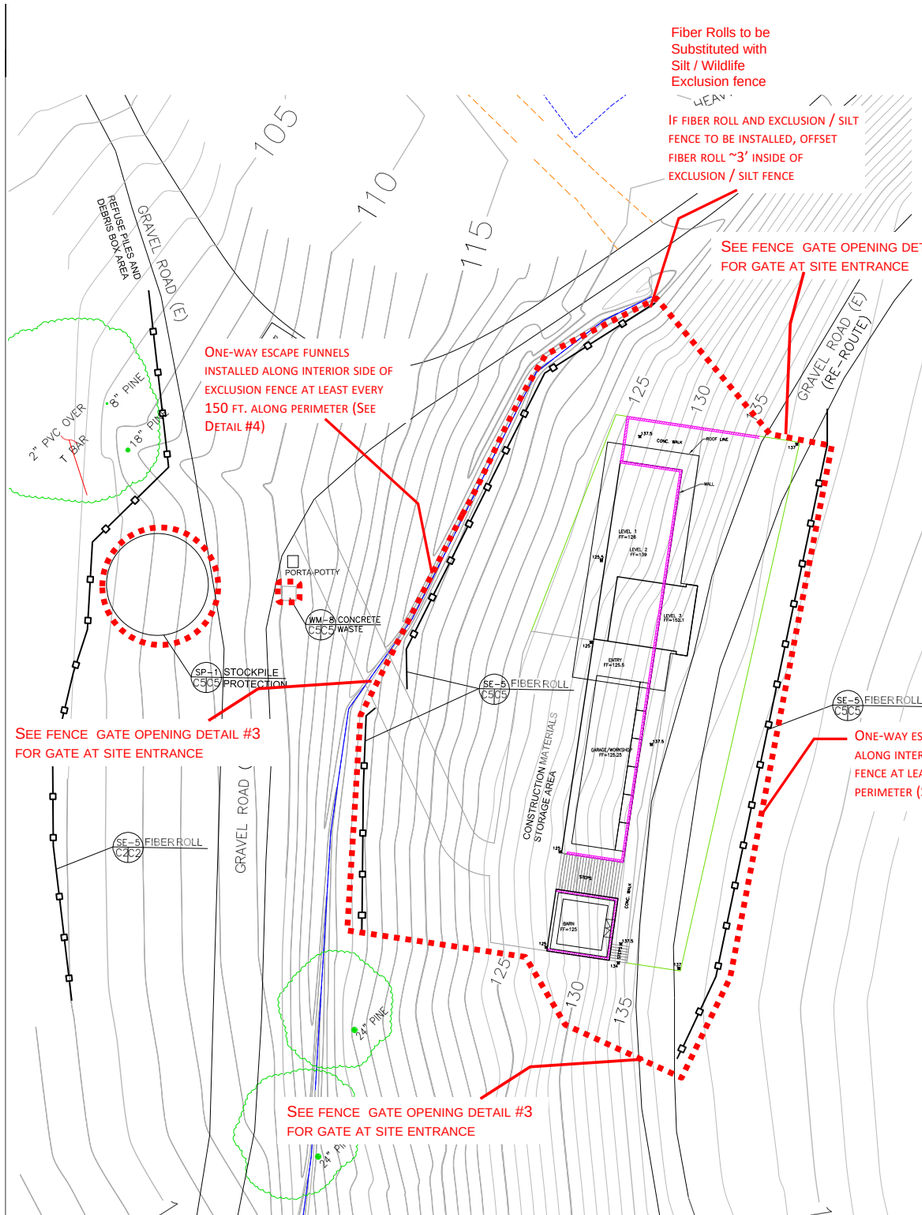
Painting Cleanup and Removal

- ☒ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- ☒ For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- ❑ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- ❑ Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
- ❑ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state-certified contractor.

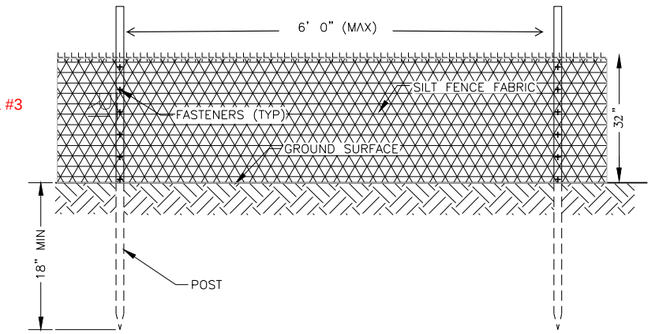
Dewatering

- ❑ Discharges of groundwater or captured runoff from dewatering operations must be properly managed and disposed. When possible send dewatering discharge to landscaped area or sanitary sewer. If discharging to the sanitary sewer call your local wastewater treatment plant.
- ❑ Divert run-on water from offsite away from all disturbed areas.
- ❑ When dewatering, notify and obtain approval from the local municipality before discharging water to a street gutter or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ❑ In areas of known or suspected contamination, call your local agency to determine whether the ground water must be tested. Pumped groundwater may need to be collected and hauled off-site for treatment and proper disposal.

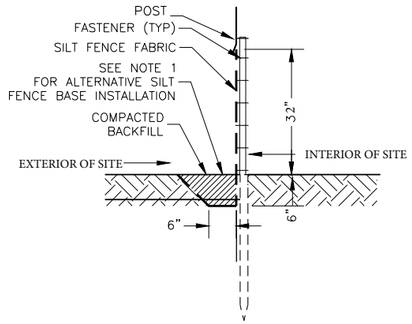
Storm drain polluters may be liable for fines of up to $10,000 per day!



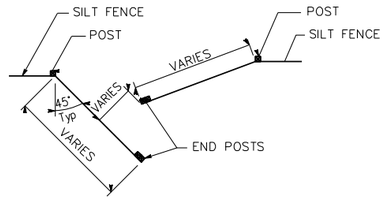
Wildlife Exclusionary Fence Detail



DETAIL #1



DETAIL #2



FENCE OPENING DETAIL

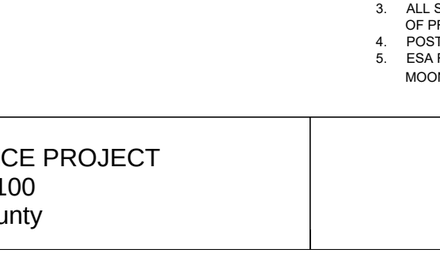
DETAIL #3

WILDLIFE EXCLUSIONARY FENCE

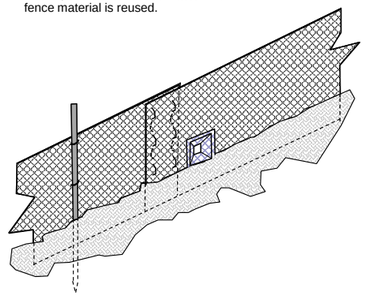
BIOLOGICAL RESOURCE AND EXCLUSION FENCE NOTES

1. THE WILDLIFE EXCLUSIONARY FENCE SHALL FUNCTION AS PERIMETER SEDIMENT CONTROL IN ACCORDANCE WITH MUNICIPAL AND CONSTRUCTION STORM WATER POLLUTION CONTROL MEASURES, ADDITIONAL FIBER ROLLS ARE LIKELY NOT NECESSARY UNLESS OTHERWISE DIRECTED BY THE CITY INSPECTOR.
2. PROJECT BIOLOGIST SHALL MONITOR AND INSPECT THE INSTALLATION OF THE WILDLIFE EXCLUSIONARY FENCING. ANY ADDITIONAL RECOMMENDATIONS FROM THE PROJECT BIOLOGIST SHALL BE IMPLEMENTED.
3. WILDLIFE EXCLUSIONARY FENCE SHALL BE INSTALLED PRIOR TO THE START OF PROJECT WORK TO PREVENT SPECIAL-STATUS SPECIES (E.G., CRLF, SFGS) FROM ENTERING THE ACTIVE WORK AREA AND STAGING AREA.
4. **PLASTIC MONO-FILAMENT NETTING OR SIMILAR MATERIAL THAT COULD CAUSE SPECIES ENTANGLEMENT SHALL NOT BE USED FOR WILDLIFE EXCLUSION FENCING OR ANY OTHER BMP INCLUDING FIBER ROLLS.**
5. THE BOTTOM OF THE FENCE SHALL BE BURIED AT LEAST FOUR (6) INCHES TO PREVENT ANIMALS FROM BURROWING UNDER FENCE. (DETAIL #1)
6. WILDLIFE ESCAPE FUNNELS SHALL BE INSTALLED A MINIMUM OF EVERY 150 FEET TO ALLOW ENTRAPPED WILDLIFE TO ESCAPE FROM THE ENCLOSED AREA.
7. FOR GROUND-DISTURBING DEMOLITION ACTIVITIES OCCURRING IN AREAS WHERE CALIFORNIA RED-LEGGED FROG (CRLF) OR SAN FRANCISCO GARTER SNAKE (SFGS) HAVE BEEN IDENTIFIED AS POTENTIALLY OCCURRING, A QUALIFIED BIOLOGIST SHALL CONDUCT PRE-CONSTRUCTION SURVEYS TO ASSESS HABITAT WITHIN AND AROUND THE PROPOSED GRADING AREA. INITIAL GROUND DISTURBING ACTIVITIES SHOULD BE MONITORED BY A QUALIFIED BIOLOGIST WITH EXPERTISE IN CRLF AND SFGS

Exclusionary Fence Accessories: One-Way Escape Funnel (Detail # 4)



Notes:
1. Install 1 Funnel every 150 feet or as otherwise specified by project biologist.
2. Install Funnel in direction as specified by project biologist. (The funnel is typically placed to allow animals to escape from the construction site into adjacent sensitive habitat).
3. Locate funnels near segment ends, where possible, to reduce waste when fence material is reused.



NOTES

1. ON HARDSCAPE SURFACE: AS ALTERNATIVE TO TRENCH KEY IN, SILT FENCE MAY BE SECURED VIA STAPLES & GRAVEL BAGS. A MINIMUM OF 1 FOOT SILT FABRIC TO BE STAPLED TO GROUND, AND MINIMUM SINGLE COURSE GRAVEL BAGS PLACED ON TOP OF STAPLED SILT FENCE.
2. FENCE OPENINGS SHALL BE CONSTRUCTED IN A MANNER TO ENSURE THAT SEDIMENT IS RETAINED BY THE TEMPORARY SILT FENCE.
3. ALL SILT FENCING SHALL BE REMOVED BY CONTRACTOR AT END OF PROJECT.
4. POSTS TO BE INSTALLED ON INSIDE ASPECT OF WORK SITE.
5. ESA FENCING MAY NOT BE REQUIRED, CHECK WITH CITY OF HALF MOON BAY

SOL ECOLOGY

APPROVED BY	DATE				
DESIGNED BY:	EDS				
DRAWN BY:	EDS				
CHECKED BY:	BLS	NO.	DATE	BY	REVISIONS

LEE RESIDENCE PROJECT
APN 086-191-100
San Mateo County

Sheet 1
Of
Scale: AS SHOWN

Sigma Prime Geosciences, Inc.
Effective Solutions

GEOTECHNICAL STUDY

LEE PROPERTY
CABRILLO HIGHWAY
PESCADERO, CALIFORNIA
APN 086-191-100

PREPARED FOR:
BRIAN LEE
340 EAST RANDOLPH STREET
CHICAGO, IL 60601

PREPARED BY:
SIGMA PRIME GEOSCIENCES, INC.
332 PRINCETON AVENUE
HALF MOON BAY, CALIFORNIA 94019

NOVEMBER 30, 2020

Sigma Prime Geosciences, Inc.
Effective Solutions

November 30, 2020

Brian Lee
340 East Randolph Street
Chicago, IL 60601

Re: Geotechnical Report: Cabrillo Highway, Pescadero, California
APN: 086-191-100
Sigma Prime Job No. 18-192

Dear Mr. Lee:

As per your request, we have performed a geotechnical study for your proposed residence on Cabrillo Highway in Pescadero, California. The accompanying report summarizes the results of our field study, laboratory testing, and engineering analyses, and presents geotechnical recommendations for the planned structure.

Thank you for the opportunity to work with you on this project. If you have any questions concerning our study, please call.

Yours,

Sigma Prime Geosciences, Inc.

Charles M. Kissick, P.E.

332 Princeton Avenue, Half Moon Bay, CA 94019 (650) 728-3590 sigmaprm@gmail.com

GEOTECHNICAL STUDY
LEE RESIDENCE
CABRILLO HIGHWAY
APN 086-191-100
PESCADERO, CALIFORNIA

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HALF MOON BAY, CALIFORNIA 94019

NOVEMBER 30, 2020

TABLE OF CONTENTS

1. INTRODUCTION

We are pleased to present this geotechnical study report for the proposed residence at Cabrillo Highway in Pescadero, California, at the location shown in Figure 1. The purpose of this investigation was to evaluate the subsurface conditions at the site, and to provide geotechnical design recommendations for the proposed construction.

1.1 PROJECT DESCRIPTION

We understand that you plan to construct a home on a 38.2 acre property on the Cabrillo Highway. The lot is on the east side of Cabrillo Highway. The 2-story structure is expected to be of wood frame construction. The property has two gently sloping areas with a steeper slope in between, as shown in Figure 2. The house will be located on the steeper slope between the gently sloping areas. Structural loads are expected to be relatively light as is typical for this type of construction.

1.2 SCOPE OF WORK

In order to complete this project we have performed the following tasks:

- Reviewed published information on the geologic and seismic conditions in the site vicinity;
- Geologic site reconnaissance;
- Subsurface study, including 2 soil borings at the site;
- Engineering analysis and evaluation of the subsurface data to develop geotechnical design criteria; and
- Preparation of this report presenting our recommendations for the proposed structure.

2. FINDINGS

2.1 GENERAL

The site reconnaissance and subsurface study were performed on October 6, 2020. The subsurface study consisted of advancing 2 soil borings with a flight auger bit. The soil borings were advanced to depths of 19.25 feet and 25.5 feet. The approximate locations of the borings, numbered B-1 and B-2, are shown in Figure 2, Site Plan. The boring logs and the results of the laboratory tests on soil samples are attached in Appendix A.

2.2 SITE CONDITIONS

At the time of our study, the property was undeveloped. Most of the property has been farmed, however the house site is on a slope that has a very dense growth natural vegetation. The average gradient of the slope is 20 percent.

2.3 REGIONAL AND LOCAL GEOLOGY

Based on Brabb et al (1998), the site vicinity is underlain by Pleistocene age marine terrace deposits and upper Cretaceous Pigeon Point formation, as shown in Figure 3. The marine terrace deposits are described as poorly consolidated and poorly indurated well to poorly sorted sand and gravel, and is less than 90 feet thick. The Pigeon Point formation is described as sandstone and conglomerate, interbedded with siltstone and mudstone and pebbly mudstone. The sandstone is fine to coarse grained, arkosic, and gray to greenish gray; the mudstone and siltstone are gray or black to buff. The conglomerate contains well−rounded pebbles, cobbles, and boulders of red and gray fine grained and porphyritic felsic volcanic rocks, granitic rocks, chert, quartzite, dark colored metamorphic rock, limestone, and clastic sedimentary rocks. Pigeon Point Formation is estimated to be more than 2600 m thick.

The contacts between the two different geologic units form a checkerboard pattern. This pattern is created by the flat marine terrace deposits and the sloping former sea bluffs that separate the marine terraces. The terraces have become separated in the easy-west direction by drainage channels that cut through the terrace deposits.

2.4 SITE SUBSURFACE CONDITIONS

Figure 4 shows the geologic conditions in cross section. Based on the soil borings, the subsurface conditions on the upper slope consist of about 14.5 feet of soft silty sand with minor sandy clay beds, over sandstone bedrock.

The soil under the lower bench consists of medium dense silty sand to the depth drilled of 25.5 feet. The nature of the silty sand is unusually consistent throughout the depth of the boring.

The slope where the house is proposed was too heavily vegetated to determine if the sandstone encountered in Boring B-1 outcrops. The upper contact of the sandstone is deeper than Boring B-2. Therefore, the contact begins to drop off somewhere under the slope. The contact shown in Figure 4 is inferred and very approximate. The slope likely is a buried former sea bluff separating the two marine terraces.

2.5 GROUNDWATER

A perched groundwater surface was encountered at a depth of 12 feet in Boring B-1, with about 2.5 feet of groundwater perched on the bedrock. There was no groundwater encountered in Boring B-2.

2.6 FAULTS AND SEISMICITY

The site is in an area of high seismicity, with active faults associated with the San Andreas fault system. The closest active fault to the site is the San Gregorio fault, located about 4 km to the east. Other faults most likely to produce significant seismic ground motions include the San Andreas, Hayward, Rodgers Creek, and Calaveras faults. Selected historical earthquakes in the area with an estimated magnitude greater than 6-1/4, are presented in Table 1 below.

TABLE 1
HISTORICAL EARTHQUAKES

Date	Magnitude	Fault	Locale
June 10, 1836	6.5[1]	San Andreas	San Juan Bautista
June 1838	7.0[2]	San Andreas	Peninsula
October 8, 1865	6.3[2]	San Andreas	Santa Cruz Mountains
October 21, 1868	7.0[2]	Hayward	Berkeley Hills, San Leandro
April 18, 1906	7.9[3]	San Andreas	Golden Gate
July 1, 1911	6.6[4]	Calaveras	Diablo Range, East of San Jose
October 17, 1989	7.1[5]	San Andreas	Loma Prieta, Santa Cruz Mountains

(1) Borchardt & Toppozada (1996)
(2) Toppozada et al (1981)
(3) Petersen (1996)
(4) Toppozada (1984)
(5) USGS (1989)

2.7 2019 CBC EARTHQUAKE DESIGN PARAMETERS

Based on the 2019 California Building Code (CBC) and our site evaluation, we recommend using Site Class Definition C (soft rock) for the site, as the majority of the upper 100 feet of the subsurface material under the house is weak sandstone. The other pertinent CBC seismic parameters are given in Table 2 below.

Table 2

CBC SEISMIC DESIGN PARAMETERS

S_S	S_1	S_{MS}	S_{M1}	S_{DS}	S_{D1}
1.697	0.676	2.036	0.947	1.357	0.631

Because the S_1 value is less than 0.75, Seismic Design Category D is recommended, per CBC Section 1613.5.6. The values in the table above were obtained from a USGS software program which provides the values based on the latitude and longitude of the site, and the Site Class Definition. The latitude and longitude were 37.2327 and –122.4086, respectively, and were accurately obtained from Google Earth™.

3. CONCLUSIONS AND RECOMMENDATIONS

3.1 GENERAL

It is our opinion that, from a geotechnical standpoint, the site is suitable for the proposed construction, provided the recommendations presented in this report are followed during design and construction. Detailed recommendations are presented in the following sections of this report.

Because subsurface conditions may vary from those encountered at the location of our borings, and to observe that our recommendations are properly implemented, we recommend that we be retained to 1) Review the project plans for conformance with our report recommendations and 2) Observe and test the earthwork and foundation installation phases of construction.

3.2 GEOLOGIC HAZARDS

We reviewed the potential for geologic hazards to impact the site, considering the geologic setting, and the soils encountered during our investigation.

Among the potential geologic hazards are potential differential settlement between the building and the ground. Therefore, we recommend flexible connections for the gas and water supply lines where they enter the building.

The results of our review are presented below:

- Fault Rupture - The site is not located in an Alquist-Priolo special studies area or zone where fault rupture is considered likely (California Division of Mines and Geology, 1974). Therefore, active faults are not believed to exist beneath the site, and the potential for fault rupture to occur at the site is low, in our opinion.

- Ground Shaking - The site is located in an active seismic area. Moderate to large earthquakes are probable along several active faults in the greater Bay Area over a 30 to 50 year design life. Strong ground shaking should therefore be expected several times during the design life of the structure, as is typical for sites throughout the Bay Area. The improvements should be designed and constructed in accordance with current earthquake resistance standards.

- Differential Compaction - Differential compaction occurs during moderate and large earthquakes when soft or loose, natural or fill soils are densified and settle, often unevenly across a site. Due to the upper

dry, loose sands, differential compaction is likely to occur during an earthquake, with about 1 to 2 inches of differential settlement estimated, based on Tokimatsu and Seed (1987). The above settlement estimate is based on the full depth of the sands in Boring B-1. The depth of loose sand under the proposed house is likely to be less. The likelihood of significant structural damage to the structure from differential compaction is low, however precautions should be made to prevent expensive cosmetic damage. Our foundation recommendations take this into account.

- Liquefaction - Liquefaction occurs when loose, saturated sandy soils lose strength and flow like a liquid during earthquake shaking. Ground settlement often accompanies liquefaction. Soils most susceptible to liquefaction are saturated, loose, silty sands, and uniformly graded sands. There may be a small amount of loose saturated sands beneath the house, resulting in minor settlement. Our foundation recommendations take this into account.

- Slope Stability – Based on the geologic map and our site reconnaissance, there are no indications that landslide activity will adversely impact the subject site during the design lifetime. The slope at the house site is inclined at about 20 percent and is underlain by silty sand over bedrock. The sandy soil has a friction angle greater than the gradient of the slope and is likely to remain stable.

3.3 EARTHWORK

3.3.1 Clearing & Subgrade Preparation

All deleterious materials, including topsoil, roots, vegetation, etc., should be cleared from building and driveway areas. The actual stripping depth required will depend on site usage prior to construction, and should be established by the Contractor during construction.

3.3.2 Fills

Fills are not recommended beneath the base of foundations. In landscaping areas, any fills greater than 3 feet in depth should be placed in loose lifts not exceeding 12 inches in height, and compacted to at least 90% of the maximum dry density, as determined by ASTM D1157-78.

3.3.3 Compaction

Scarified surface soils should be moisture conditioned to 3-5 percent above the optimum moisture content and compacted to at least 95 percent of the maximum dry density, as determined by ASTM D1157-78 in loose lifts not exceeding 6 inches. All trench fills should be placed in loose lifts not exceeding 6 to 8 inches in height, and compacted to at least 92% of the maximum dry density, as determined by ASTM D1157-78.

3.3.4 Surface Drainage

The finish grades should be designed to drain surface water away from foundations and slab areas to suitable discharge points. Slopes of at least 2 percent within 10 feet of the structures are recommended. Ponding of water should not be allowed adjacent to the structure.

3.4 FOUNDATIONS

Because of the potential for differential settlement of the upper sands, either a pier-and-grade-beam foundation or a mat slab foundation is recommended. It should be noted that groundwater may be encountered during pier drilling, resulting in some caving of the sands. The likelihood is low, but it cannot be discounted.

Pier and Grade Beam Foundation
Drilled piers may encounter bedrock before the final design depth is reached. However, for planning and budgeting purposes, the piers should be designed using the criteria below for the sandy soils.

Piers should be drilled and cast-in-place, and be a minimum of 16 inches in diameter, with the minimum depth determined by the structural engineer.

Per CBC 2016 Section 1705.8, a representative of Sigma Prime shall conform to the following special inspection requirements:

1. Inspect drilling operations and maintain complete and accurate records for each element.
2. Verify placement locations and plumbness, confirm element diameters, bell diameters (if applicable), lengths, embedment into bedrock (if applicable) and adequate end-bearing strata capacity. Record concrete or grout volumes.

The piers may gain support in skin friction acting along the sides of the piers within the site soils. A skin friction of 350 psf between the piers and the soil should be used in design, based on Reese and O'Neill (1988). The uplift capacity of the piers

may be based on a skin friction value of 350 pounds per square foot acting below a depth of 2 feet. The skin friction value may be increased by 1/3 for seismic loads and wind loads. Because of the difficulty in cleaning the bottoms of the pier holes, end bearing should be neglected, however the pier holes should be kept as clean as possible.

Drilled piers should have a center-to-center spacing of not less than three pier diameters. Our representative should be present during pier drilling operations to assure that piers holes are sufficiently deep and that pier holes are kept free of loose soil. Pier excavations should be poured as soon as practical after drilling. If there is water in the pier holes, it should be pumped out prior to pouring concrete, or the concrete should be tremied into the hole, thereby displacing the water. The concrete should not be allowed to free-fall more than 5 feet.

Mat Slab Foundation
A reinforced slab or mat foundation may be designed for allowable bearing pressures of 1,500 pounds per square foot for dead plus live loads, with a one-third increase allowed for total loads including wind or seismic forces. Thickened perimeters are recommended.

We recommend that the slabs be underlain by at least 6 inches of non-expansive granular fill. Where floor wetness would be detrimental, a vapor barrier, such Stego wrap or equivalent may be used.

3.4.1 Lateral Loads

Pier and Grade Beam Foundation

Resistance to lateral loads may be provided by passive pressure acting against the piers, neglecting the upper 2 feet of the pier, and acting across two pier diameters. We recommend that an equivalent fluid weight of 250 pcf be used to calculate the passive resistance against the upper 8 feet of the piers. No passive resistance should be considered in design below a depth of 8 feet.

Mat Slab Foundation
A passive pressure equivalent to that provided by a fluid weighing 250 pcf and a friction factor of 0.3 may be used to resist lateral forces and sliding against the foundations. These values include a safety factor of 1.5 and may be used in combination without reduction. Passive pressures should be disregarded for the uppermost 12 inches of foundation depth, measured below the lowest adjacent finished grade, unless confined by concrete slabs or pavements. However, the pressure distribution may be computed from the ground surface.

3.4.2 Slabs-on-Grade

Slabs-on-grade should be constructed as free-standing slabs, structurally isolated from surrounding grade beams, if a pier and grade beam foundation is used. We recommend that the slab-on-grade be underlain by at least 4 inches of non-expansive fill. Where floor wetness would be detrimental, a vapor barrier, such as Stego wrap or equivalent may be used.

3.5 RETAINING WALLS

Retaining walls should be designed to resist lateral earth pressure from the adjoining natural soils and/or backfill. We recommend that walls that are restrained from lateral movement be designed to resist an at-rest equivalent fluid pressure of 45 pounds per cubic foot (pcf). Retaining walls that are not restrained from lateral movement should be designed to resist an active equivalent fluid pressure of 35 pcf.

The building code calls for a geotechnical investigation that shall include "a determination of lateral pressures on basement and retaining walls due to earthquake motions." Some methods still being used, such as the Mononobe-Okabe or the Seed and Whitman methods, include either an inverted triangular distribution or a rectangular distribution for the seismic surcharge pressure. However, recent research indicates that there is no need to include a seismic surcharge pressure if (a) the walls are designed for the at-rest condition, and (b) the conventional factors of safety are applied to the wall design. Furthermore, extensive observations by international teams of seismic experts following recent large earthquakes have not resulted in any documented failures of retaining walls that could be attributed to seismic surcharge pressures.

Based on our current understanding of the state-of-the-practice regarding seismic surcharge pressures, we recommend that (a) no seismic surcharge pressure be used if the walls are designed for the higher at-rest earth pressures, and (b) a uniform (rectangular) seismic surcharge pressure of 10 H psf (where H is the "free" wall height in feet above the finished grade in front of the wall) be used if the walls are designed for the lower active earth pressures.

3.6 CONSTRUCTION OBSERVATION AND TESTING

The earthwork and foundation phases of construction should be observed and tested by us to 1) Establish that subsurface conditions are compatible with those used in the analysis and design; 2) Observe compliance with the design concepts, specifications and recommendations; and 3) Allow design changes in the event that subsurface conditions differ from those anticipated. The recommendations in this report are based on a limited number of borings. The nature and extent of

variation across the site may not become evident until construction. If variations are then exposed, it will be necessary to reevaluate our recommendations.

4. LIMITATIONS

This report has been prepared for the exclusive use of the owner for specific application in developing geotechnical design criteria, for the currently planned residence on Cabrillo Highway in Pescadero, California (APN 086-191-100). We make no warranty, expressed or implied, except that our services were performed in accordance with geotechnical engineering principles generally accepted at this time and location. The report was prepared to provide engineering opinions and recommendations only. In the event that there are any changes in the nature, design or location of the project, or if any future improvements are planned, the conclusions and recommendations contained in this report should not be considered valid unless 1) The project changes are reviewed by us, and 2) The conclusions and recommendations presented in this report are modified or verified in writing.

The analyses, conclusions and recommendations contained in this report are based on site conditions as they existed at the time of our investigation; the currently planned improvements; review of previous reports relevant to the site conditions; and laboratory results. In addition, it should be recognized that certain limitations are inherent in the evaluation of subsurface conditions, and that certain conditions may not be detected during an investigation of this type. Changes in the information or data gained from any of these sources could result in changes in our conclusions or recommendations. If such changes do occur, we should be advised so that we can review our report in light of those changes.

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N

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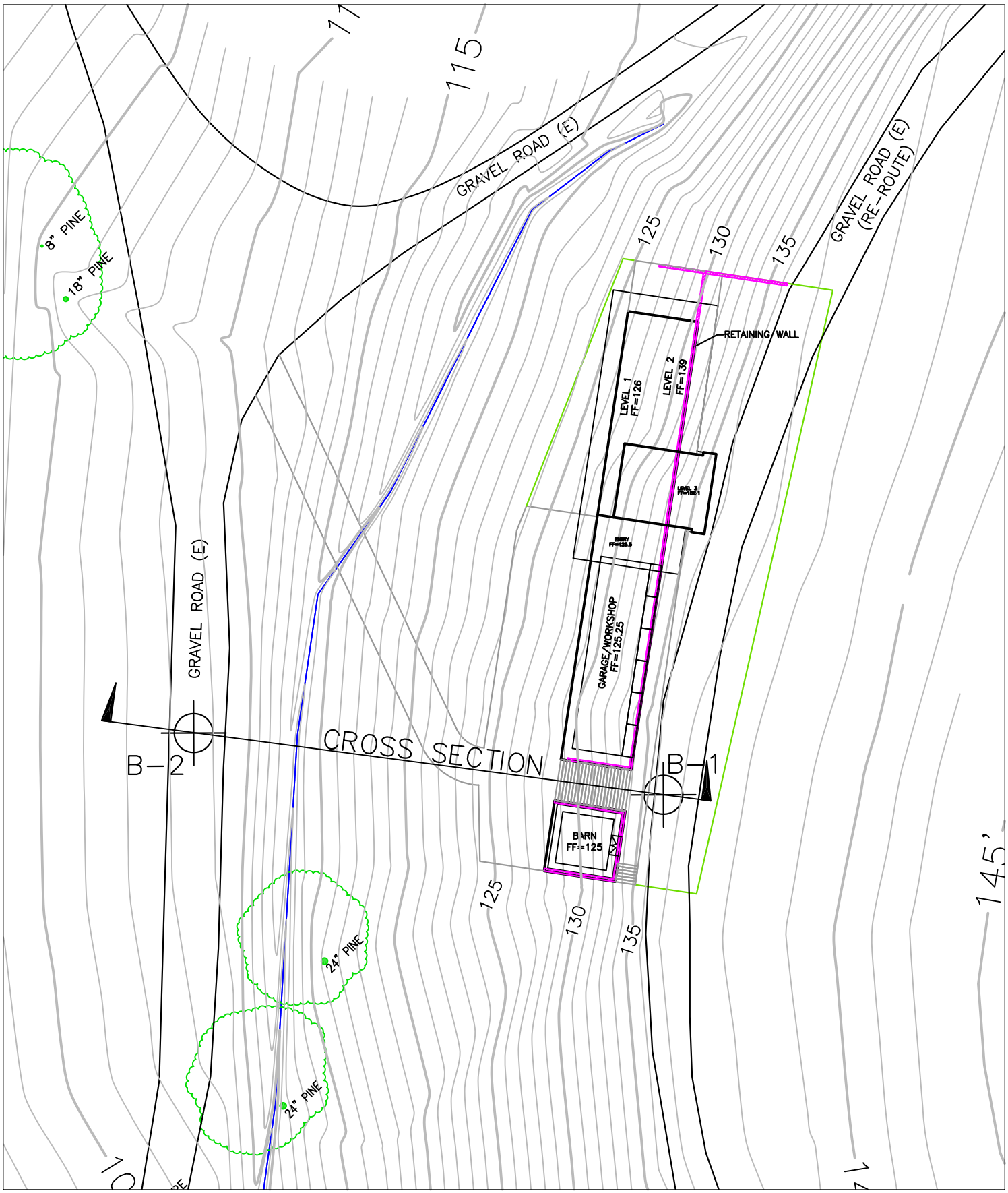
Figure	1
Date:	11/30/20
Job No.:	18-192

SITE LOCATION MAP

Lee Property, Cabrillo Hwy., Pescadero



1" = 40'

Explanation

B–1
Soil Boring Drilled 10-6-20

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Figure	2
Date:	11/30/20
Job No.:	18-192

Site Map
Lee Property, Cabrillo Hwy., Pescadero

Kpp: Pigeon Point Formation (Upper Cretaceous); sandstone and conglomerate, interbedded with siltstone and mudstone and pebbly mudstone.
Qmt: Marine Terrace Deposits (Pleistocene); Poorly consolidated and poorly indurated well to poorly sorted sand and gravel.

N

Ref.: Brabb at al, 1998

Sigma Prime Geosciences, Inc.

Figure	3
Date:	11/30/20
Job No.:	18-192

Geologic Map
Lee Property, Cabrillo Highway, Pescadero

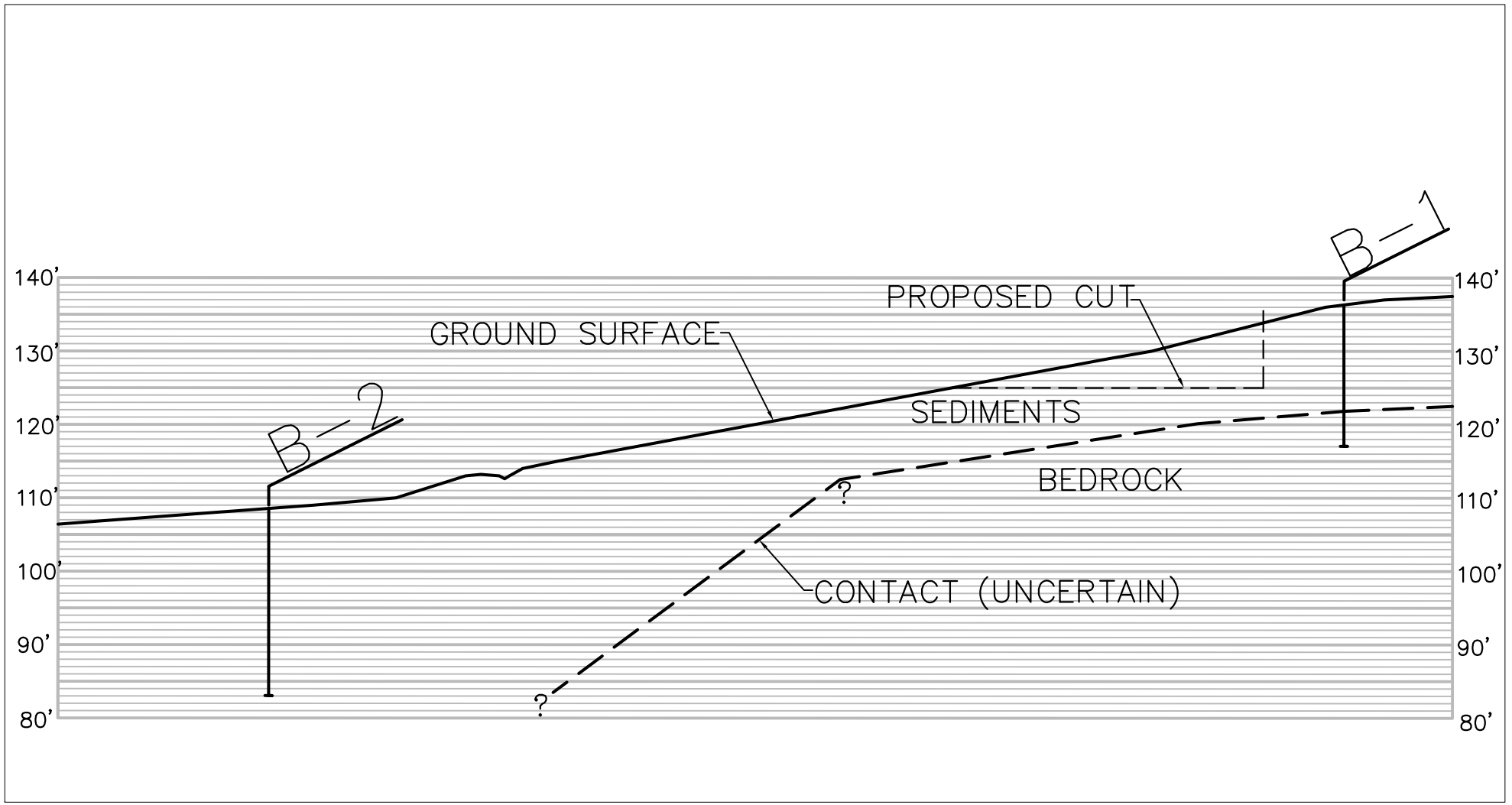

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Figure	4
Date:	11/30/20
Job No.:	18-192

Geologic Cross Section

Lee Property, Cabrillo Hwy., Pescadero

APPENDIX A

FIELD INVESTIGATION

The soils encountered during drilling were logged by our representative, and samples were obtained at depths appropriate to the investigation. The samples were taken to our laboratory where they were carefully observed and classified in accordance with the Unified Soil Classification System. The logs of our borings, as well as a summary of the soil classification system, are attached.

Several tests were performed in the field during drilling. The standard penetration resistance was determined by dropping a 140-pound hammer through a 30-inch free fall, and recording the blows required to drive the 2-inch (outside diameter) sampler 18 inches. The standard penetration resistance is the number of blows required to drive the sampler the last 12 inches of the 18-inch drive. The results of these field tests are presented on the boring logs.

The boring logs and related information depict our interpretation of subsurface conditions only at the specific location and time indicated. Subsurface conditions and ground water levels at other locations may differ from conditions at the locations where sampling was conducted. The passage of time may also result in changes in the subsurface conditions.

Project Name	Project Number
Lee	18-192

Location: See Figure 2

Sigma Prime Geosciences, Inc.

Drilling Method	Hole Size	Total Depth	Soil Footage	Rock Footage	Elevation	Datum
Flight Auger	5“	19.25’	14.5’	4.75’	136’	NAVD88

Boring No. B-1

Page 1 of 1

Date(s) 10/6/20

Drilling Company	Logged By:	Type of Drill Rig	Type of Sampler(s)	Hammer Weight and Fall
Cenozoic Drilling	C. Kissick	Simco 2400 SK-1	MC, SPT	140 lb, 30“

Depth (feet)	Description	Graphic Log	Class	Blow Count	Sample No.	Sample Type	Comments
	0’-6’: Silty Sand: yellowish brown; loose; moist. Fine sand.		SM	4 6 6	1	MC	Lab, Sample #1: Moisture%=12.4% Dry Density=111.9 pcf
5	6’-8’: Sandy Clay: yellowish-brown; medium stiff; moist. ~20% sand.		CL				
	8’-14.5’: Silty Sand: yellowish brown; loose; moist. Fine sand.		SM	4 5 5	2	SPT	
10							Groundwater at 12’.
				13 50/5	3	SPT	
15	14.5’-19.25’: Sandstone: orange-brown; highly weathered; extremely weak.						
				50/3	4	SPT	Refusal
20	Bottom at 19.25’. Groundwater at 12’.						

Project Name		Project Number	
Lee		18-192	
Location	See Figure 2		

Sigma Prime Geosciences, Inc.

Drilling Method	Hole Size	Total Depth	Soil Footage	Rock Footage	Elevation	Datum
Flight Auger	5“	25.5’	25.5’	0’	108.5’	NAVD88

Drilling Company	Logged By:	Boring No.	B-2
Cenozoic Drilling	C. Kissick	Page	1 of 2
Type of Drill Rig: Simco 2400 SK-1	Type of Sampler(s): SPT	Hammer Weight and Fall: 140 lb, 30“	Date(s): 10/6/20

Depth (feet)	Description	Graphic Log	Class	Blow Count	Sample No.	Sample Type	Comments
	0’-25.5’: Sand with Silt: yellowish brown; medium dense; moist. Fine to medium sand.		SP				
5				8 12 16	1	SPT	
10				7 10 11	2	SPT	
15				10 10 13	3	SPT	
20				10 12 13	4	SPT	Lab, Sample #4: Moisture%=11.8% 14.6% Passing #200

Project Name		Project Number	
Lee		18-192	
Location	See Figure 2		

Sigma Prime Geosciences, Inc.

Drilling Method	Hole Size	Total Depth	Soil Footage	Rock Footage	Elevation	Datum
Flight Auger	5“	25.5’	25.5’	0’	108.5’	NAVD88

Drilling Company	Logged By:	Boring No.	B-2
Cenozoic Drilling	C. Kissick	Page	2 of 2
Type of Drill Rig: Simco 2400 SK-1	Type of Sampler(s): SPT	Hammer Weight and Fall: 140 lb, 30“	Date(s): 10/6/20

Depth (feet)	Description	Graphic Log	Class	Blow Count	Sample No.	Sample Type	Comments
20	0’-25.5’: Sand with Silt: (cont.)		SP				
				10 13 17	4	SPT	
25	Bottom at 25.5’. No groundwater.						
30							
35							
40							

UNIFIED SOIL CLASSIFICATION (ASTM D-2487-85)

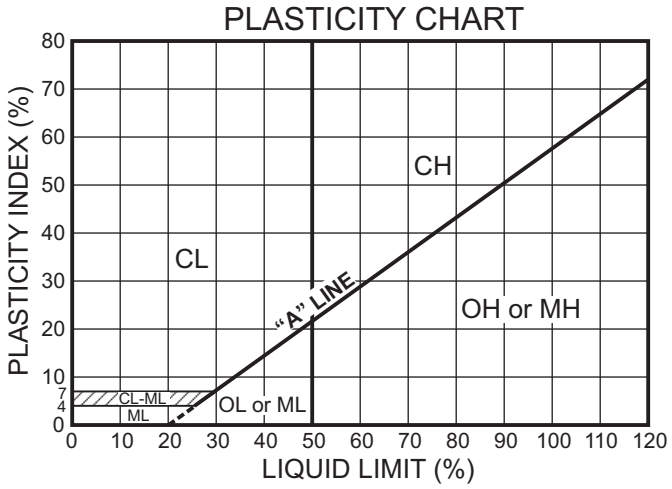
MATERIAL TYPES	CRITERIA FOR ASSIGNING SOIL GROUP NAMES			GROUP SYMBOL	SOIL GROUP NAMES & LEGEND
COARSE-GRAINED SOILS > 50% RETAINED ON NO. 4 SIEVE	GRAVELS > 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS < 5% FINES	Cu > 4 AND 1 < Cc < 3	GW	WELL-GRADED GRAVEL
			Cu < 4 AND/OR 1 > Cc > 3	GP	POORLY-GRADED GRAVEL
		GRAVELS WITH FINES > 12% FINES	FINES CLASSIFY AS ML OR CL	GM	SILTY GRAVEL
			FINES CLASSIFY AS CL OR CH	GC	CLAYEY GRAVEL
	SANDS > 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN SANDS < 5% FINES	Cu > 6 AND 1 < Cc < 3	SW	WELL-GRADED SAND
			Cu < 6 AND/OR 1 > Cc > 3	SP	POORLY-GRADED SAND
		SANDS WITH FINES > 12% FINES	FINES CLASSIFY AS ML OR CL	SM	SILTY SAND
			FINES CLASSIFY AS CL OR CH	SC	CLAYEY SAND
FINE-GRAINED SOILS > 50% PASSING NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT < 50	INORGANIC	PI > 7 AND PLOTS > "A" LINE	CL	LOW-PLASTICITY CLAY
			PI > 4 AND PLOTS < "A" LINE	ML	LOW-PLASTICITY SILT
		ORGANIC	LL (oven dried)/LL (not dried)<0.75	OL	ORGANIC CLAY OR SILT
	SILTS AND CLAYS LIQUID LIMIT > 50	INORGANIC	PI PLOTS > "A" LINE	CH	HIGH-PLASTICITY CLAY
			PI PLOTS < "A" LINE	MH	HIGH-PLASTICITY SILT
		ORGANIC	LL (oven dried)/LL (not dried)<0.75	OH	ORGANIC CLAY OR SILT
HIGHLY ORGANIC SOILS		PRIMARILY ORGANIC MATTER, DARK COLOR, ORGANIC ODOR		PT	PEAT

SAMPLE TYPES

B	BULK SAMPLE
ST	PUSHED SHELBY TUBE
SPT	STANDARD PENETRATION
MC	MODIFIED CALIFORNIA
P	PITCHER SAMPLE
C	ROCK CORE

ADDITIONAL TESTS

CA - CHEMICAL ANALYSIS
CN - CONSOLIDATION
CP - COMPACTION
DS - DIRECT SHEAR
PM - PERMEABILITY
PP - POCKET PENETROMETER
Cor. - CORROSIVITY
SA - GRAIN SIZE ANALYSIS
(20%) - (PERCENT PASSING #200 SIEVE
SW - SWELL TEST
TC - CYCLIC TRIAXIAL
TU - CONSOLIDATED UNDRAINED TRIAXIAL
TV - TORVANE SHEAR
UC - UNCONFINED COMPRESSION
WA - WASH ANALYSIS
▽ - WATER LEVEL AT TIME OF DRILLING AND DATE MEASURED
▼ - LATER WATER LEVEL AND DATE MEASURED



LEGEND TO SOIL DESCRIPTIONS

Sigma Prime Geosciences, Inc.

FIGURE A-1

APPENDIX B

LABORATORY TESTS

Samples from the subsurface study were selected for tests to establish some of the physical and engineering properties of the soils. The tests performed are briefly described below.

The natural moisture content and dry density were determined in accordance with ASTM D 2216 on selected samples recovered from the borings. This test determines the moisture content and density, representative of field conditions, at the time the samples were collected. The results are presented on the boring logs, at the appropriate sample depth.

The percentage of fines in one sample was determined in accordance with ASTM D 1140. The results are presented on the boring log, at the appropriate sample depth.

BIOLOGICAL RESOURCES REPORT

Lee Residence Project (APN 086-191-100) - San Mateo County, CA

Prepared For:

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August 8, 2020

SOL ECOLOGY

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LIST OF ACRONYMS AND ABBREVIATIONS

CDFG/CDFW	California Department of Fish and Game/Wildlife
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRLF	California red-legged frog
ESA	Federal Endangered Species Act
ESHA	Environmentally Sensitive Habitat Areas
LCP	San Mateo County Local Mid-Coast Coastal Plan
NRCS	Natural Resources Conservation Service
OHWM	ordinary high-water mark
RWQCB	Regional Water Quality Control Board
SFDW	San Francisco dusky-footed woodrat
SFGS	San Francisco garter snake
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
WPT	Western pond turtle

1.0 INTRODUCTION

On August 3, 2020 Sol Ecology, Inc. (Sol Ecology) performed a biological resources survey at the site on APN 086-191-100 located on Cabrillo Highway, north of Bean Hollow Road, in Pescadero, San Mateo County, California ("Project Study Area" or "study area", see Appendix A – Figure 1). Sol Ecology previously reviewed the site on February 24, 2018 to map sensitive communities for avoidance; the August 3rd visit was performed to verify and/or provide an update on site conditions since 2018.

The purpose of the Project Study Area visit was to gather information necessary to complete a review of potential biological resource impacts from development of the proposed Project, under the guidelines of the San Mateo County Local Mid-Coast Coastal Plan (LCP) for the San Mateo County Planning Department. This report describes the results of the biological resources survey of the study area for the presence of sensitive biological resources protected by local, state, and federal laws and regulations, including any Environmentally Sensitive Habitat Areas (ESHAs) and any required setbacks per the LCP if applicable. This report is based on information available at the time of the survey and on-site conditions that were observed on the date of the most recent site visit.

1.1 Project Setting

The Project Study Area is located east of Cabrillo Highway 1, south of Pescadero Point near Bean Hollow State Beach (Figure 1, Appendix A); Bean Hollow Road is located to the south. A gravel road runs along the northern boundary of the Project Study Area and there are several unmaintained dirt roads which circle two agricultural fields. The study area is relatively flat, generally sloping towards the west with elevations ranging from approximately 16 to 55 meters (55 to 180 feet) above sea level.

1.2 Project Description

The applicant is proposing to build a single-family residence including a house, garage, and barn within a small central portion of the study area (project footprint).

2.0 METHODS

On February 24, 2018 and August 3, 2020, the Project Study Area was traversed on foot to determine the presence of (1) wetland and non-wetland waters, (2) plant communities both sensitive and non-sensitive, (3) special status plant and wildlife species, and (4) presence of essential habitat elements for any special status plant or wildlife species.

2.1 Literature Review

To evaluate whether special status species or other sensitive biological resources (e.g., wetlands) could occur in the Project Study Area and vicinity, Sol Ecology biologists reviewed the following:

- California Native Plant Society's (CNPS's) Inventory of Rare and Endangered Plants of California search for U.S. Geological Survey (USGS) 7.5-minute Pigeon Point quadrangle and four adjacent quadrangles (CNPS 2020a);
- California Natural Diversity Database (CNDDB) records search for USGS 7.5-minute Pigeon Point quadrangle and four adjacent quadrangles (California Department of Fish and Wildlife [CDFW] 2020);
- U.S. Fish and Wildlife Service (USFWS) list of threatened and endangered species for the Project Study Area (USFWS 2020a);
- CDFG publication "California's Wildlife, Volumes I-III" (Zeiner et al. 1990);
- CDFG publication California Bird Species of Special Concern (Shuford and Gardali 2008);
- CDFW and University of California Press publication California Amphibian and Reptile Species of Special Concern (Thomson et al. 2016);
- USFWS National Wetlands Inventory, Wetlands Mapper (USFWS 2020b); and
- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Web Soil Survey (USDA 2019).

Based on information from the above sources, Sol Ecology developed lists of special status species and sensitive natural communities that could be present in the project vicinity (Appendix B). Figures 2 and 3 (Appendix A) present the results of a 5-mile CNDDB record search around the study area for special status plants and wildlife. All biological resources are evaluated for their potential to occur within the study area in Section 3.0 of this report.

2.2 Field Survey

Sol Ecology biologists conducted a wetland delineation and biological resources surveys on February 24, 2018 and August 3, 2020. Biologists walked through accessible portions of the Project Study Area identifying all plant and wildlife species encountered and mapping vegetation communities. Plant species were recorded and identified to a taxonomic level sufficient to determine rarity using the second edition of the *Jepson Manual* (Baldwin et al. 2012). All plant species observed in the study area are included in Appendix D – Observed Species Table. Vegetation communities were identified using the online version of *A Manual of California Vegetation* (CNPS 2020b). Dispersal habitat, foraging habitat, refugia or estivation habitat, and breeding (or nesting habitat) were noted for wildlife species.

In cases where little information is known about species occurrences and habitat requirements, the species evaluation was based on best professional judgment of Sol Ecology biologists with experience working with the species and habitats. If a special status species was observed during the site visit, its presence is recorded and discussed. For some threatened and endangered species, a site survey at the level conducted for this report may not be sufficient to determine presence or absence of a species to the specifications of regulatory agencies.

Concurrently with the botanical and wildlife surveys, biologists identified wetland and non-wetland waters potentially subject to regulation by the federal government (U.S. Army Corps of Engineers [USACE]) and the state of California (Regional Water Quality Control Board [RWQCB] and CDFW). The delineation of wetland boundaries was based on the presence/absence of indicators of hydrophytic vegetation, hydric soil, and wetland hydrology. The boundaries of non-wetland waters were identified by locating the ordinary high-water mark (OHWM).

The Project Study Area was also evaluated to determine if any coastal wetland (one-parameter rule) is present, or if riparian habitat or a riparian corridor is present. Coastal wetlands are defined as an area where the water table is at, near, or above the land surface long enough to bring about the formation of hydric soils or to support the growth of plants which normally are found to grow in water or wet ground (also known as hydrophytic); in either case, hydrology must be present also. Hydrophytic plants commonly found in wetlands in San Mateo County include cordgrass, pickleweed, jaumea, frankenia, marsh mint, tule, bulrush, narrow-leaf cattail, broadleaf cattail, pacific silverweed, salt rush, and bog rush. To qualify, a wetland must contain at least a 50 percent cover of some combination of these plants, unless it is a mudflat. The prescribed setback for wetlands is 100 feet.

Riparian corridors are identified as areas along streams or drainages that naturally support native vegetation and wetlands. These areas filter runoff, provide runoff protection, and facilitate groundwater recharge. Riparian corridors are defined by the “limit of riparian vegetation” (i.e., a line determined by the association of plant and animal species normally found near streams, lakes and other bodies of freshwater: red alder, jaumea, pickleweed, big leaf maple, narrow-leaf cattail, arroyo willow, broadleaf cattail, horsetail, creek dogwood, black cottonwood, and box elder). Such a corridor must contain at least a 50% cover of some combination of the plants listed. Setbacks for riparian corridors is 50 feet from the dripline for perennial streams and 30 feet for intermittent streams. No setback other than avoidance is prescribed for riparian habitat where present along an ephemeral stream or irrigation ditch unless it provides habitat for rare, endangered, or unique species. If supporting rare species, a setback may be needed to ensure development does not impact the functional capacity (e.g. breeding, foraging, sheltering, or migration) of the habitat for any rare species.

3.0 RESULTS

3.1 Existing Conditions and General Wildlife Use

The Project Study Area encompasses six soil map units identified by the USDA, NRCS (USDA 2019):

- **Elkhorn sandy loam, thick surface, sloping, eroded**: This soil is well drained and occurs in terraces. The parent material is alluvium. Elkhorn sandy loam is not listed as hydric. Minor components include Baywood (5%), Denison (5%), and Tierra (5%).
- **Elkhorn sandy loam, moderately steep, eroded**: Similar to Elkhorn sandy loam described above. Minor components include Baywood (5%), Denison (5%), Tierra (3%), and Unnamed (2%).
- **Elkhorn sandy loam, sloping, eroded**: Similar to Elkhorn sandy loam described above. Minor components include Baywood (5%), Denison (5%), and Tierra (5%).
- **Watsonville sandy loam, moderately steep, eroded**: This soil is moderately well drained and occurs in terraces. The parent material is alluvium. Watsonville sandy loam is not listed as hydric. Minor components include Baywood (5%), Elkhorn (5%), and Tierra (5%).
- **Watsonville sandy loam, sloping, eroded**: Similar to Watsonville sandy loam described above. Minor components include Elkhorn (10%), Tierra (4%), and Unnamed (1%).
- **Botella loam, sloping, seeped**: This soil is moderately well drained and occurs in terraces, benches, and alluvial fans. The parent material is alluvium. Botella loam is not listed as hydric. Minor components include Dublin (5%), Soquel (5%), and Unnamed (5%).

Vegetation communities present in the study area were classified using the online version of *A Manual of California Vegetation* (CNPS 2020b). However, in some cases it is necessary to identify variants of community types or to describe non-vegetated areas that are not described in the literature. Vegetation communities were classified as sensitive or non-sensitive as defined by the LCP and other applicable laws and regulations. Photographs of the study area are provided in Appendix C.

3.1.1 Non-Sensitive Natural Communities

Cultivated Land

The majority of the Project Study Area is cultivated land. There are two agricultural fields dominated by cultivated oat (*Avena sativa*) and Brussel sprouts in 2018, now dominated by yard knotweed (*Polygonum aviculare*) in 2020. Between the agricultural fields there is a steep mound densely vegetated with California blackberry (*Rubus ursinus*), coyote brush (*Baccharis pilularis*), and poison hemlock (*Conium maculatum*). Along the southern boundary of the Project Study Area outside the project footprint there are Monterey pine (*Pinus radiata*) and Monterey cypress (*Hesperocyparis macrocarpa*). Monterey pine in this location was likely planted as a windbreak and not natural; though it may provide suitable habitat for monarch butterfly winter roosting.

California Annual Grassland

California annual grassland is scattered throughout the site. Dominant grass species include ripgut grass (*Bromus diandrus*) and rye grass (*Festuca perennis*). Forb species include Bermuda buttercup (*Oxalis pes-caprae*), field mustard (*Brassica rapa*), and radish (*Raphanus sativus*).

3.1.2 Sensitive Natural Communities (ESHAs)

Ponds

Two ponds occur in the northeastern corner of the Project Study Area. Emergent wetland and riparian vegetation surround the ponds including arroyo willow (*Salix lasiolepis*), blue elderberry (*Sambucus nigra* subsp. *caerulea*), and southern bulrush (*Schoenoplectus californicus*. Duckweed (*Lemna* sp.) was observed on the ponds. The two ponds were man-made in the 1970s. According to the LCP, for ponds that are not being used for agricultural purposes, the buffer zones extends 100 feet from the high-water point or extent of wetland vegetation. While the two ponds remain in use they are due not qualify as ESHA. However, because they are surrounded by wetland and riparian vegetation and also provide suitable breeding and foraging habitat for two federal listed species, California red-legged frog and San Francisco garter snake, they require avoidance from proposed construction activities. Appendix A, Figure 1 shows the extent of both ponds and associated wetland habitat on the site.

Seasonal Wetlands

Seasonal wetlands occur in the northeastern corner of the site, in riparian areas surrounding the two ponds, within a drainage ditch and riparian area below the two ponds north of the gravel entrance road, and at the base of the southern field near the western site boundary. These seasonal wetlands support emergent wetland and riparian vegetation including annual blue grass (*Poa annua*), arroyo willow, brass-buttons (*Cotula coronopifolia*), broad-leaved cattail (*Typha latifolia*), California figwort (*Scrophularia californica*), fringed willowherb (*Epilobium ciliatum* subsp. *ciliatum*), hyssop loosestrife (*Lythrum hyssopifolia*), small fruited bulrush (*Scirpus microcarpus*), soft rush (*Juncus effusus*), spreading rush (*J. patens*), southern bulrush, and water parsley (*Oenanthe sarmentosa*). Seasonal wetlands are considered ESHA.

Riparian

A small area of riparian vegetation has formed along an agricultural ditch that connects the upper agricultural field to the lower field based on field observations (Appendix A, Figure 1). Vegetation within this ditch is mostly comprised of non-wetland plants such as poison hemlock and California blackberry, and shows evidence of die-back from absence of flows in the past year. A small area of riparian vegetation including arroyo willow, spreading rush (*J. patens*), and flatsedge (*Cyperus eragrostis*) was observed in this location at the base of the hill near to the lower pond as shown on Figure 1. Riparian vegetation is considered an ESHA, though no setbacks are prescribed given its ephemeral nature and location within an ephemeral irrigation ditch.

3.2 Special Status Plants

Special status species include those plants and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the Federal Endangered Species Act (ESA) or California Endangered Species Act (CESA). These acts afford protection to both listed species and those that are formal candidates for listing. Plant species on the California Native Plant Society (CNPS) Rare and Endangered Plant Inventory with California Rare Plant Ranks of 1 and 2 are also considered special status plant species.

Based upon a review of the resources and databases given in Section 2.1, thirty-five (35) special status plant species have been documented within a 9-quad search of the Project Study Area. Nine (9) special status plant species are documented within 5 miles, of which eight (8) and can be found in mesic grassland habitat on the Project Study Area (Table 1).

Other special status plant species documented in the area are unlikely or have no potential to occur on the Project Study Area for one or more of the following reasons:

- Hydrologic conditions (e.g. seeps) necessary to support the special status plants do not exist on site;
- Edaphic (soil) conditions (e.g. volcanic, rocky, or sand soils) necessary to support the special status plants do not exist on site;
- Unique pH conditions (e.g. serpentine) necessary to support the special status plant species are not present on the Project Study Area; and
- Associated vegetation communities (e.g. cismontane woodland, chaparral, broadleaved upland forest) necessary to support the special status plants do not exist on site.

Table 1. Special Status Plants with Potential to Occur in the Project Study Area.

Scientific Name/ Common Name	Status	Habitat	Blooming Period	Potential for Occurrence
Astragalus pycnostachyus var. *pycnostachyus* coastal marsh milkvetch	1B.2	Coastal dunes (mesic), coastal scrub, marshes and swamps (coastal salt, streamsides). 0-30m	(Apr) Jun-Oct	**Moderate:** May be present near pond habitats; not likely to be impacted by project.
Fritillaria liliacea fragrant fritillary	1B.2	Often serpentinite; cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland. 3-410m	Feb-Apr	**Low:** May be present in grassland habitats near access road. Not observed during February site visit.
Lasthenia californica subsp. *macrantha* perennial goldfields	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub; grassland, dunes along immediate coast. 5-520m	Jan-Nov	**Low:** May be present in grassland habitats near access road. Not observed during February site visit.
Leptosiphon croceus coast yellow (rose) leptosiphon	1B.1	Coastal bluff scrub, coastal prairie; local, open, grassy areas. 10-150m	Apr-Jun	**Moderate:** May be present in open grassland habitats near access road.
Limnanthes douglasii subsp. *sulphurea* Point Reyes meadowfoam	SE, 1B.2	Coastal prairie, meadows and seeps (mesic), marshes and swamps (freshwater), vernal pools. 0-140m	Mar-May	**Moderate:** May be present near pond habitats; not likely to be impacted by project.
Microseris paludosa marsh microseris	1B.2	Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland. 5-355m	Apr-Jun (Jul)	**Moderate:** May be present in open grassland habitats near access road.
Plagiobothrys chorisianus var. *chorisianus* Choris' popcornflower	1B.2	Mesic; chaparral, coastal prairie, coastal scrub. 3-160m	Mar-Jun	**Moderate:** May be present in open grassland habitats near access road.
Silene scouleri subsp. *scouleri* Scouler's catchfly	2B.2	Coastal bluff scrub, coastal prairie, valley and foothill grassland. 0-600m	Mar-Aug (Sep)	**Moderate:** May be present in open grassland habitats near access road.

[1] SE – State Endangered; California Rare Plant Rank

1B – Plants rare, threatened, or endangered in California and elsewhere.

2B – Plants rare, threatened, or endangered in California but more common elsewhere.

0.1 – Seriously threatened in California

0.2 – Moderately threatened in California

0.3 – Not very threatened in California

3.3 Special Status Wildlife

In addition to wildlife listed as federal or state endangered and/or threatened, federal and state candidate species, CDFW Species of Special Concern, CDFW California Fully Protected species, USFWS Birds of Conservation Concern, and CDFW Special status Invertebrates are all considered special status species. Although these species generally have no special legal status, they are given special consideration under CEQA. The federal Bald and Golden Eagle Protection Act also provides broad protections to both eagle species that are roughly analogous to those of listed species. Bat species are also evaluated for conservation status by the Western Bat Working Group (WBWG), a non-governmental entity; bats named as a "High Priority" or "Medium Priority" species for conservation by the WBWG are typically considered special status and also considered under CEQA; bat roosts are protected under CDFW Fish and Game Code. In addition to regulations for special status species, most native birds in the United States (including non-status species) are protected by the federal Migratory Bird Treaty Act of 1918 (MBTA) and the California Fish and Game Code (CFGC), i.e., sections 3503, 3503.5 and 3513. Under these laws, deliberately destroying active bird nests, eggs, and/or young is illegal.

A total of forty-six (46)special status wildlife species have been documented within a 9-quad search of the Project Study Area. Twenty-one (21) of these have been documented within five miles, and eight (8) may be present on the site (Table 2), including one species, San Francisco dusky-footed woodrat not found in the database search but commonly found in the region. The Project Study Area is located outside designated critical habitat.

Table 2. Special Status Wildlife with Potential to Occur in the Project Study Area.

Common Name /Scientific Name	Status	Habitat	Potential for Occurrence
San Francisco dusky-footed woodrat *Neotoma fuscipes annectens*	SSC	Forest habitats of moderate canopy and moderate to dense understory as well as chaparral and riparian scrub habitats. Constructs nests of shredded grass, leaves, and other material. May be limited by availability of nest-building materials.	**Moderate:** Suitable habitat is present around ponds and near existing access road; not likely in project footprint.
common yellowthroat *Geothlypis trichas sinuosa*	BCC	Resident of fresh and saltwater marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	**Moderate:** Suitable nesting habitat is present in willows surrounding ponds.
tricolored blackbird *Agelaius tricolor*	SCE, SSC, BCC	Most numerous in the Central Valley and vicinity. Highly colonial, nesting in dense aggregations over or near freshwater in emergent growth or riparian thickets or flooded agricultural fields.	**Moderate:** Suitable nesting & foraging habitat is present; not documented in region.
Allen's hummingbird *Selasphorus sasin*	BCC	Summer resident along the California coast, breeding in a variety of woodland and forest habitats. Nest in shrubs and trees with dense vegetation; commonly found nesting in Monterey pines.	**High:** Suitable nesting habitat is present.
California red-legged frog *Rana draytonii*	FT, SSC	Associated with quiet perennial to intermittent ponds, stream pools and wetlands with dense, shrubby, or emergent riparian vegetation. Prefers shorelines with extensive vegetation. Disperses through upland habitats after rains.	**Present:** Observed above lower pond near pumphouse on Feb. 24. Not likely to occur in onsite ditches.
San Francisco garter snake *Thamnophis sirtalis tetrataenia*	FE, SE, CFP	Vicinity of freshwater marshes, ponds, and slow-moving streams in San Mateo County. Prefers dense cover and water depths of at least one foot. Upland areas near water are also important.	**High:** Suitable pond habitat is present. Documented in Pescadero marsh.
western pond turtle *Actinemys marmorata*	SSC	Occurs in ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Require basking sites such as partially submerged logs, vegetation mats, or open mud banks, and suitable upland habitat for egg-laying.	**High:** Suitable pond habitat is present. Documented within one mile.
monarch butterfly *Danaus plexippus*	SSI	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, Monterey cypress), with nectar and water sources nearby.	**Moderate**: Documented in stand of pines just south of parcel; limited habitat on-site.

FE/SE – Federal/State Endangered FT/ST – Federal/State Threatened FC/SC – Federal/State Candidate
CFP – California Fully Protected SSC – Species of Special Concern BCC – Bird of Conservation Concern SSI – Special Status Invertebrate

The remaining species found in the review of background literature were determined to be unlikely to occur due to absence of suitable habitat elements in and immediately adjacent to the Project Study Area. Habitat elements that were evaluated but found to be absent from the immediate area of the Project Study Area or surrounding habitats subject to potential indirect impacts include the following:

- No suitable burrows on or adjacent to the Project Study Area (e.g. for burrowing owl or American badger).
- No suitable stream habitat on or immediately adjacent to the property (e.g. for steelhead, longfin smelt, tidewater goby, bank swallow, California giant salamander, Santa Cruz black salamander).
- No suitable roosting habitat such as barns, old buildings, or large snags (e.g. for Townsend's big-eared bat or pallid bat).
- Suitable vegetation community such as coniferous forest, coastal prairie, sand dunes, beaches) are not present (e.g. marbled murrelet, western snowy plover, western bumble bee).
- Suitable nesting substrate is not present (e.g. bald eagle, golden eagle, albatross, etc.).
- Species has been confirmed extirpated from the area (*Myrtle's silverspot butterfly*).

4.0 CONCLUSION AND RECOMMENDATIONS

Along the southern boundary of the Project Study Area there are unnaturalized Monterey pine (*Pinus radiata*) and Monterey cypress (*Hesperocyparis macrocarpa*). The LCP requires any development to minimize their impacts to the number of Monterey pine cut in their natural habitat and declares the Monterey cypress a Class I Heritage Tree. Limbing and cutting down Monterey pine and cypress will be avoided within the Project Study Area. This will also ensure removal of potential monarch butterfly roost habitat to is avoided.

Ponds, seasonal wetlands, and riparian habitat were observed on the northern side of the Project Study Area. These natural communities are considered ESHA and avoidance is required. The two ponds and their associated surrounding wetland habitat require a setback of 100 feet from the outermost line of wetland vegetation landward in accordance with the LCP. A minimum 100-foot setback is also required along the drainage swale located to the north of the access road. No setback is required along the irrigation ditch nor its associated riparian habitat due to the ephemeral nature of this feature and absence of a natural water source. Riparian habitat at this location is not likely to be sustained without source irrigation water being directed into it. Required setbacks are shown on Figure 1 (Appendix A). No other ESHAs were found on the site.

BIO-1: Minimum wetland and riparian setbacks are prescribed for perennial and intermittent wetland and riparian habitat present in the Study Area. The proposed development will completely avoid any ESHAs on the site. BMPs are prescribed for any work occurring near setback areas.

Eight (8) special status plant species have a moderate potential to occur on the Project Study Area (Table 1); two of these species were not observed during the February 2018 visit which coincided with the blooming window for the two species. The remaining six (6) special status plants are most likely to occur in mesic conditions surrounding the ponds and seasonal wetlands which will be protected by setbacks outlined in the LCP and shown on Figure 1 (Appendix A). It is unlikely that these plants would be observed between the cultivated fields where project activities will take place. A few species may potentially be present near the access road. A pre-construction survey is recommended prior to any activities that may occur in relationship to road improvements to ensure impacts are avoided.

BIO-2: Pre-construction surveys should be performed between April and June for rose leptosiphon, marsh microseris, Choris' popcornflower, and Scouler's catchfly. If found, the plant should be avoided to extent possible, or a translocation plan shall be prepared prior to the start of activities.

Eight (8) special status animals have a moderate or high potential to occur on the Project Study Area. Nearly all of these species are likely to occur in the pond and associated wetland habitats located to the north of the proposed project footprint including western pond turtle (WPT), San Francisco garter snake (SFGS), California red-legged frog (CRLF), common yellowthroat, tricolored blackbird, and San Francisco dusky-footed woodrat (SFDW). Allen's hummingbird and monarch

butterfly may be present in Monterey pines on the site, which will be largely avoided. None of these species are likely to be present in the proposed footprint. However, construction-related activities have the potential to impact nesting birds if present and may potentially indirectly impact CRLF, SFGS, and/or SFDW if present during staging of equipment, vehicular access, and/or grading or operation of machinery on-site. The following avoidance measures are prescribed to ensure impacts to listed species are completely avoided and/or to minimize potential impacts to other sensitive species that may be present.

BIO-3: An environmental training should be provided to all construction workers prior to the start of work. The training will educate workers on: (1) any sensitive resources or special-status species that may occur in the work area, (2) procedures to follow in the event a species is observed, and (3) other environmental BMPs for ensuring take is avoided.

BIO-4: Wildlife exclusion fencing should be placed around the perimeter of project footprint and any staging areas to prevent animals including CRLF and/or SFGS from entering the work area. Fencing should be a minimum of 36 inches high, with a minimum of 4 inches trenched into the ground. Fencing should be installed under the guidance of a qualified biologist and maintained throughout the duration of ground-disturbing activities.

BIO-5: If work is to be initiated during the nesting bird season between February 1 and August 31, a pre-construction nesting bird survey should be performed in all areas within 250 feet of proposed activities. If nests are found, an appropriately sized no-disturbance buffer should be placed around the nest at the direction of the qualified biologist conducting the survey. Generally, buffers for common songbird species is 25 to 50 feet, and between 100 up to 500 feet for special status birds and/or raptors depending on the species and status of the nest. Buffers should remain in place until all young have fledged, or the biologist has confirmed that the nest has been naturally predated.

BIO-6: A pre-construction survey for SFDW nests shall be performed prior to the start of work within 25 feet of proposed activities. If an active SFDW nest is found and cannot be avoided, the biologist shall supervise dismantling of the nest by hand. If young are found, material shall be set back on the house and the house avoided for a minimum of 3 weeks to allow young to wean and leave the nest. Following completion of the dismantling, nest material shall be placed in nearby habitat where it can be completely avoided.

BIO-7: A pre-construction survey for WPT, CRLF, and SFGS shall be conducted prior to initiation of project activities within 48 hours of the start of work. Surveys are to be conducted by approved qualified biologist with experience surveying for each species. If any species is found on the Project Site, it should be allowed to leave the area on its own. If the animal does not leave the area on its own, the USFWS and CDFW should be contacted.

BIO-8: No ground-disturbing work (e.g. vegetation removal, grading, or trenchwork) shall be performed if a 70 percent or greater chance of rainfall is predicted within 72 hours of project activity or within 24 hours of any rain event (greater than 0.5 inches) occurring between October

31 and April 31 when frogs are most likely to utilize disperse into upland habitats. No work shall occur within 30 minutes of sunrise or sunset.

BIO-9: Trenches and holes should be covered and inspected daily for stranded animals. Trenches and holes deeper than one foot should contain escape ramps at a maximum slope of 2:1 to allow trapped animals to escape.

BIO-10: Tightly woven fiber netting or similar material shall be used for erosion control or other purposes to ensure amphibian and reptile species do not get trapped. Plastic monofilament netting (erosion control matting), rolled erosion control products, or similar material should not be used. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.

BIO-11: All food and food-related trash must be enclosed in sealed trash containers at the end of each day and removed completely from the site every three days to avoid attracting wildlife that may prey on listed species in the area.

6.0 REFERENCES

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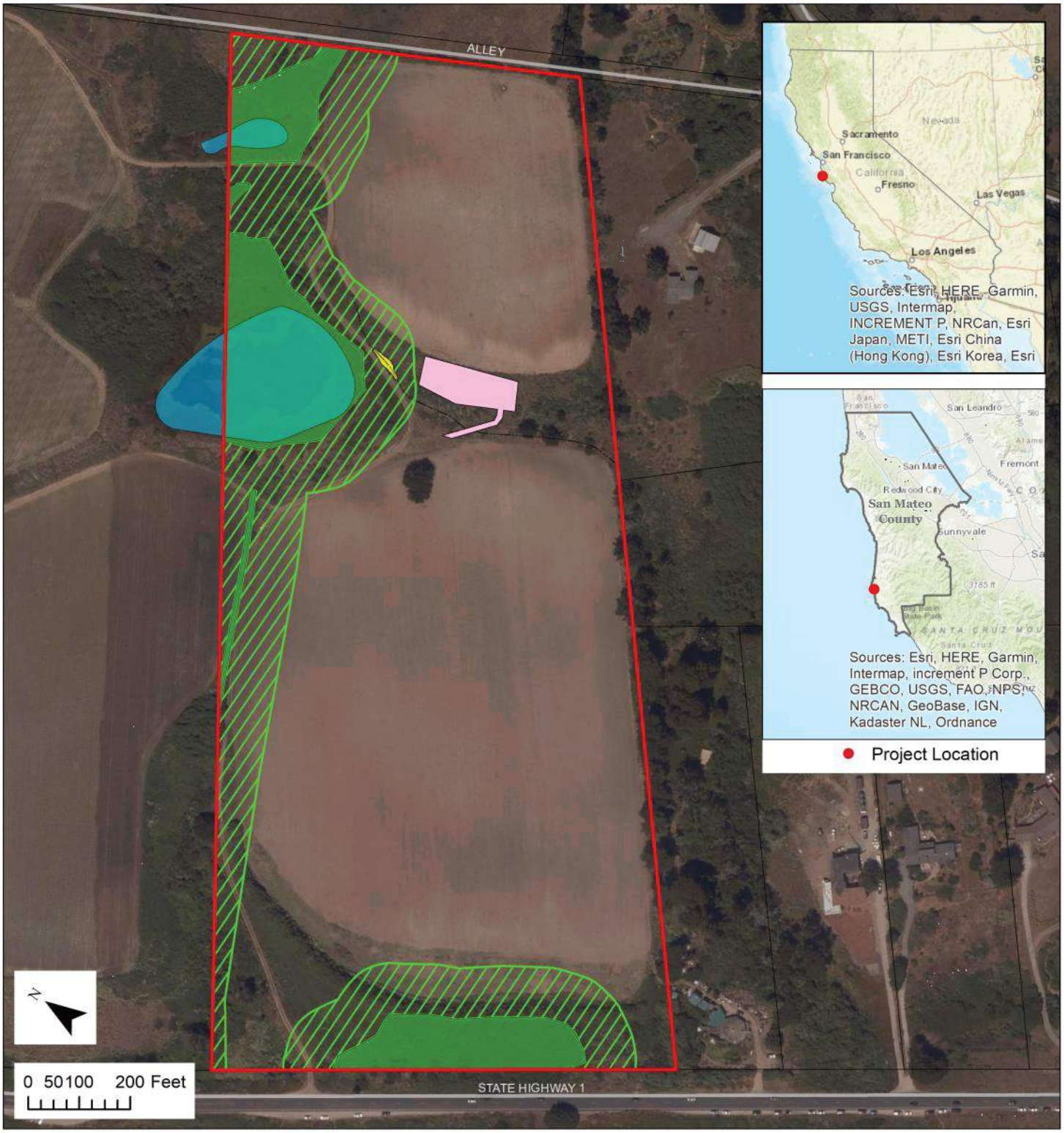
APPENDIX A

PROJECT FIGURES: PROJECT LOCATION AND CNDDB MAP RESULTS

Figure 1: Project Location

Lee Residence (APN# 086-191-100), San Mateo County, CA



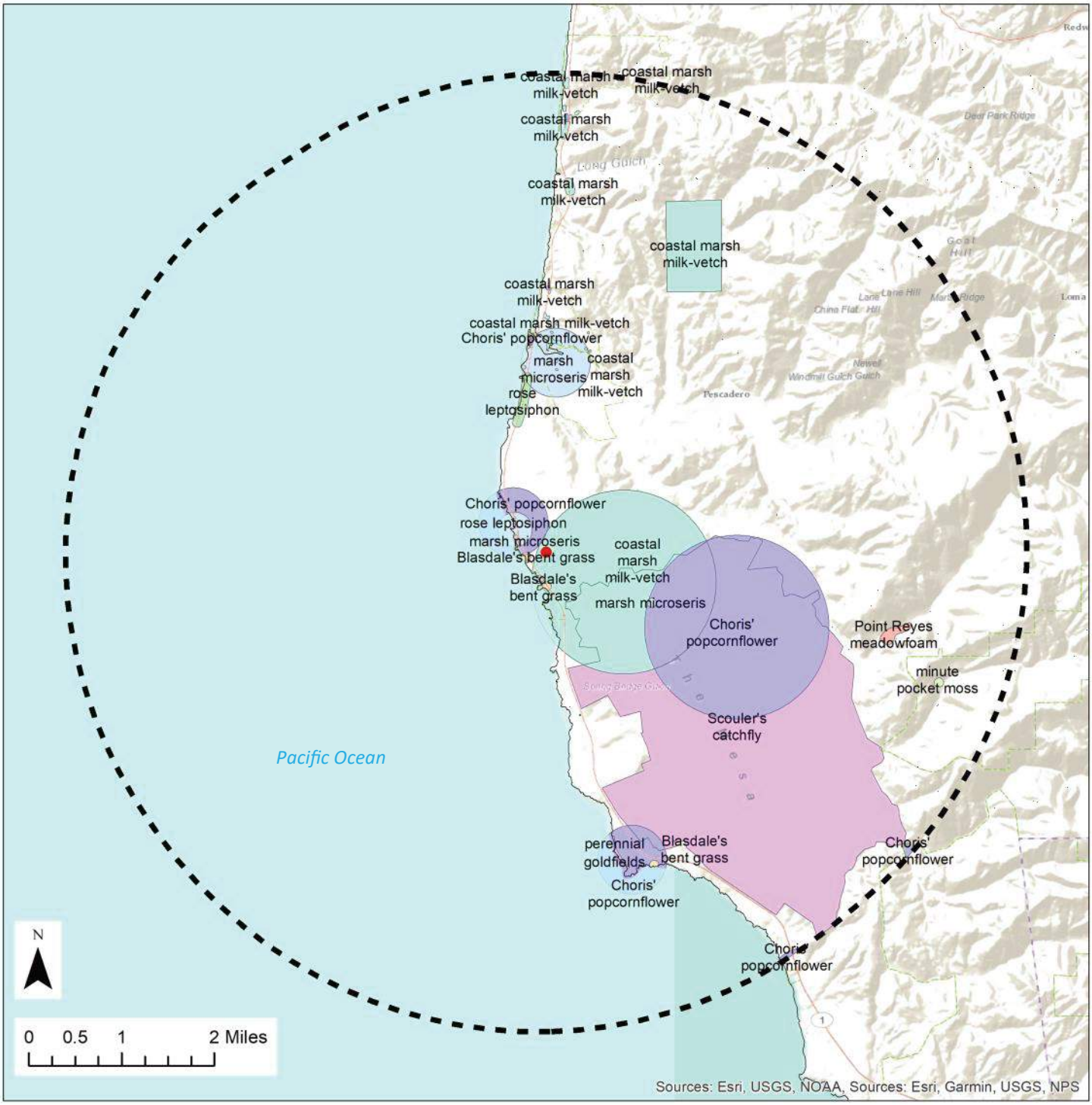
Project Study Area
Proposed Residence
Parcel Boundary
Roads and Streets
Ditch
Ponds
Riparian Vegetation
Wetland
100-Foot Buffer off Wetland Boundary

Date: 6-8-2020
Data: Sol Ecology Inc., San Mateo Co., USFWS/NWI

Base: San Mateo Co.
GIS: AJG1808

SOL ECOLOGY
solecology.com

Figure 2: Special Status Plant Species within 5 Miles of the Project Site
Lee Residence (APN# 086-191-100), San Mateo County, CA



Project Location
5 Mile Buffer
Blasdale's bent grass (3)
Choris' popcornflower (8)
Point Reyes meadowfoam (1)
Scouler's catchfly (1)
coastal marsh milk-vetch (6)
marsh microseris (3)
minute pocket moss (1)
perennial goldfields (4)
rose leptosiphon (2)

Date: 6-8-2020
Data: Sol Ecology Inc., San Mateo Co., CDFW

Base: San Mateo Co.
GIS: AJG1808

SOL ECOLOGY
solecology.com

Figure 3: Special Status Animal Species within 5 Miles of the Project Site
Lee Residence (APN# 086-191-100), San Mateo County, CA

- Project Location
- 5 Mile Buffer
- American badger (2)
- California giant salamander (2)
- California red-legged frog (24)
- Myrtle's silverspot butterfly (1)
- Santa Cruz black salamander (1)
- Townsend's big-eared bat (2)
- bank swallow (1)
- great blue heron (1)
- longfin smelt (1)
- marbled murrelet (7)
- mimic tryonia (=California brackishwater snail) (2)
- monarch - California overwintering population (4)
- obscure bumble bee (2)
- pallid bat (1)
- saltmarsh common yellowthroat (2)
- steelhead - central California coast DPS (2)
- tidewater goby (2)
- western bumble bee (2)
- western pond turtle (1)
- western snowy plover (1)

Date: 6-8-2020
Data: Sol Ecology Inc., San Mateo Co., CDFW

Base: San Mateo Co.
GIS: AJG1808

SOL ECOLOGY
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APPENDIX B

CNDDB AND USFWS IPAC RESULTS FOR THE PROJECT STUDY AREA

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Pigeon Point (3712224) OR San Gregorio (3712234) OR La Honda (3712233) OR Franklin Point (3712223) OR Ano Nuevo (3712213))
 AND Taxonomic Group IS (Dune OR Scrub OR Herbaceous OR Marsh OR Riparian OR Woodland OR Forest OR Alpine OR Inland Waters OR Marine OR Estuarine OR Riverine OR Palustrine OR Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes OR Fungi)

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Agrostis blasdalei Blasdale's bent grass	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCSC-UC Santa Cruz	25 400	62 S:5	0	1	0	0	0	4	2	3	5	0	0
Amsinckia lunaris bent-flowered fiddleneck	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCBG-UC Botanical Garden at Berkeley SB_UCSC-UC Santa Cruz	300 300	93 S:1	0	0	0	0	0	1	1	0	1	0	0
Arctostaphylos andersonii Anderson's manzanita	G2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz	950 1,700	64 S:4	0	1	0	1	0	2	1	3	4	0	0
Arctostaphylos glutinosa Schreiber's manzanita	G1 S1	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz SB_USDA-US Dept of Agriculture	1,100 1,100	7 S:1	0	1	0	0	0	0	1	0	1	0	0
Arctostaphylos regismontana Kings Mountain manzanita	G2 S2	None None	Rare Plant Rank - 1B.2	2,000 2,000	17 S:1	0	1	0	0	0	0	0	1	1	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Astragalus pycnostachyus var. pycnostachyus coastal marsh milk-vetch	G2T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley	10 500	25 S:8	0	5	1	0	1	1	2	6	7	1	0
Cirsium andrewsii Franciscan thistle	G3 S3	None None	Rare Plant Rank - 1B.2	80 80	31 S:1	0	0	0	0	1	0	1	0	0	1	0
Coastal Brackish Marsh Coastal Brackish Marsh	G2 S2.1	None None			30 S:1	0	0	0	0	0	1	1	0	1	0	0
Collinsia multicolor San Francisco collinsia	G2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz	50 300	36 S:5	0	1	0	0	0	4	3	2	5	0	0
Dirca occidentalis western leatherwood	G2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden	430 1,800	71 S:6	2	1	1	0	0	2	1	5	6	0	0
Eriophyllum latilobum San Mateo woolly sunflower	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden		8 S:1	0	0	0	0	1	0	1	0	0	1	0
Erysimum ammophilum sand-loving wallflower	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CRES-San Diego Zoo CRES Native Gene Seed Bank SB_SBBG-Santa Barbara Botanic Garden	100 100	58 S:1	0	0	0	0	0	1	1	0	1	0	0
Fissidens pauperculus minute pocket moss	G3? S2	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive	250 300	22 S:2	0	0	0	0	0	2	0	2	2	0	0
Fritillaria agrestis stinkbells	G3 S3	None None	Rare Plant Rank - 4.2	30 30	32 S:1	0	0	0	0	0	1	1	0	1	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Fritillaria liliacea fragrant fritillary	G2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive	33 33	82 S:1	0	1	0	0	0	0	0	1	1	0	0
Hesperocyparis abramsiana var. butanoensis Butano Ridge cypress	G1T1 S1	Threatened Endangered	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden	1,400 1,400	1 S:1	0	0	0	0	0	1	0	1	1	0	0
Horkelia cuneata var. sericea Kellogg's horkelia	G4T1? S1?	None None	Rare Plant Rank - 1B.1 SB_UCSC-UC Santa Cruz USFS_S-Sensitive	400 400	58 S:1	0	0	0	0	0	1	1	0	1	0	0
Horkelia marinensis Point Reyes horkelia	G2 S2	None None	Rare Plant Rank - 1B.2	400 400	36 S:1	0	0	0	0	0	1	1	0	1	0	0
Lasthenia californica ssp. macrantha perennial goldfields	G3T2 S2	None None	Rare Plant Rank - 1B.2	25 40	59 S:4	0	2	0	2	0	0	0	4	4	0	0
Leptosiphon rosaceus rose leptosiphon	G1 S1	None None	Rare Plant Rank - 1B.1		31 S:2	0	0	0	0	2	0	2	0	0	2	0
Limnanthes douglasii ssp. sulphurea Point Reyes meadowfoam	G4T1 S1	None Endangered	Rare Plant Rank - 1B.2	240 240	12 S:1	0	0	1	0	0	0	1	0	1	0	0
Malacothamnus arcuatus arcuate bush-mallow	G2Q S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden	450 450	30 S:1	0	0	0	0	0	1	1	0	1	0	0
Microseris paludosa marsh microseris	G2 S2	None None	Rare Plant Rank - 1B.2 SB_SBBG-Santa Barbara Botanic Garden SB_UCSC-UC Santa Cruz	40 520	38 S:4	1	0	0	0	2	1	3	1	2	1	1
Mielichhoferia elongata elongate copper moss	G5 S3S4	None None	Rare Plant Rank - 4.3 USFS_S-Sensitive	20 20	20 S:1	0	0	0	0	0	1	1	0	1	0	0
Monolopia gracilens woodland woollythreads	G3 S3	None None	Rare Plant Rank - 1B.2		68 S:1	0	0	0	0	0	1	1	0	1	0	0
Monterey Pine Forest Monterey Pine Forest	G1 S1.1	None None		400 400	11 S:2	0	0	0	0	0	2	2	0	2	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
N. Central Coast Calif. Roach/Stickleback/Steelhead Stream N. Central Coast Calif. Roach/Stickleback/Steelhead Stream	GNR SNR	None None		130 200	2 S:2	0	2	0	0	0	0	2	0	2	0	0
North Central Coast Short-Run Coho Stream North Central Coast Short-Run Coho Stream	GNR SNR	None None		40 50	2 S:2	0	0	2	0	0	0	2	0	2	0	0
North Central Coast Steelhead/Sculpin Stream North Central Coast Steelhead/Sculpin Stream	GNR SNR	None None		160 160	1 S:1	0	1	0	0	0	0	1	0	1	0	0
Northern Interior Cypress Forest Northern Interior Cypress Forest	G2 S2.2	None None		1,510 1,510	22 S:1	0	0	0	0	0	1	1	0	1	0	0
Pinus radiata Monterey pine	G1 S1	None None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz	400 400	5 S:1	1	0	0	0	0	0	0	1	1	0	0
Plagiobothrys chorisianus var. chorisianus Choris' popcornflower	G3T1Q S1	None None	Rare Plant Rank - 1B.2 SB_UCSC-UC Santa Cruz	25 600	42 S:19	1	5	2	0	0	11	9	10	19	0	0
Plagiobothrys diffusus San Francisco popcornflower	G1Q S1	None Endangered	Rare Plant Rank - 1B.1 SB_UCSC-UC Santa Cruz	160 480	17 S:2	1	0	1	0	0	0	2	0	2	0	0
Rosa pinetorum pine rose	G2 S2	None None	Rare Plant Rank - 1B.2		14 S:1	0	0	0	0	0	1	1	0	1	0	0
Sacramento-San Joaquin Coastal Lagoon Sacramento-San Joaquin Coastal Lagoon	GNR SNR	None None		10 10	2 S:2	0	2	0	0	0	0	2	0	2	0	0
Silene scouleri ssp. scouleri Scouler's catchfly	G5T4T5 S2S3	None None	Rare Plant Rank - 2B.2		23 S:1	0	0	0	0	0	1	0	1	1	0	0
Silene verecunda ssp. verecunda San Francisco campion	G5T1 S1	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz	100 400	20 S:5	0	0	0	1	0	4	3	2	5	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Stebbinsoseris decipiens	G2	None	Rare Plant Rank - 1B.2	300	19	0	0	1	0	0	6	5	2	7	0	0
Santa Cruz microseris	S2	None	SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz	875	S:7											
Stuckenia filiformis ssp. alpina	G5T5	None	Rare Plant Rank - 2B.2	50	21	0	0	0	0	0	1	1	0	1	0	0
slender-leaved pondweed	S2S3	None		50	S:1											
Trifolium buckwestiorum	G2	None	Rare Plant Rank - 1B.1	157	64	0	0	0	0	0	2	0	2	2	0	0
Santa Cruz clover	S2	None	BLM_S-Sensitive SB_SBBG-Santa Barbara Botanic Garden SB_UCSC-UC Santa Cruz SB_USDA-US Dept of Agriculture	334	S:2											
Valley Needlegrass Grassland	G3	None		400	45	0	0	0	0	0	1	1	0	1	0	0
Valley Needlegrass Grassland	S3.1	None		400	S:1											

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Pigeon Point (3712224) OR San Gregorio (3712234) OR La Honda (3712233) OR Franklin Point (3712223) OR Ano Nuevo (3712213))
 AND Taxonomic Group IS (Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects)

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Agelaius tricolor tricolored blackbird	G2G3 S1S2	None Threatened	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_EN-Endangered NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	600 600	955 S:1	0	0	0	0	0	1	0	1	1	0	0
Aneides niger Santa Cruz black salamander	G3 S3	None None	CDFW_SSC-Species of Special Concern	49 1,487	78 S:6	0	0	0	0	0	6	2	4	6	0	0
Antrozous pallidus pallid bat	G5 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	240 240	420 S:1	0	0	0	0	0	1	1	0	1	0	0
Ardea herodias great blue heron	G5 S4	None None	CDF_S-Sensitive IUCN_LC-Least Concern	5 5	155 S:1	0	0	0	0	0	1	1	0	1	0	0
Athene cunicularia burrowing owl	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	713 713	1989 S:1	0	0	0	0	0	1	0	1	1	0	0
Bombus caliginosus obscure bumble bee	G4? S1S2	None None	IUCN_VU-Vulnerable	40 500	181 S:3	0	0	0	0	0	3	3	0	3	0	0
Bombus occidentalis western bumble bee	G2G3 S1	None Candidate Endangered	USFS_S-Sensitive XERCES_IM-Imperiled	40 100	279 S:3	0	0	0	0	0	3	3	0	3	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Brachyramphus marmoratus marbled murrelet	G3G4 S1	Threatened Endangered	CDF_S-Sensitive IUCN_EN-Endangered NABCI_RWL-Red Watch List	200 1,800	110 S:23	0	0	0	0	0	23	14	9	23	0	0
Charadrius alexandrinus nivosus western snowy plover	G3T3 S2S3	Threatened None	CDFW_SSC-Species of Special Concern NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	10 10	138 S:4	0	0	0	0	1	3	4	0	3	0	1
Cicindela hirticollis gravida sandy beach tiger beetle	G5T2 S2	None None		50 50	34 S:1	0	0	0	0	1	0	1	0	0	0	1
Corynorhinus townsendii Townsend's big-eared bat	G3G4 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	30 1,040	635 S:5	0	0	0	0	0	5	2	3	5	0	0
Cypseloides niger black swift	G4 S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern NABCI_YWL-Yellow Watch List USFWS_BCC-Birds of Conservation Concern	20 540	46 S:5	0	3	0	0	0	2	5	0	5	0	0
Danaus plexippus pop. 1 monarch - California overwintering population	G4T2T3 S2S3	None None	USFS_S-Sensitive	40 200	383 S:6	0	3	1	0	0	2	5	1	6	0	0
Dicamptodon ensatus California giant salamander	G3 S2S3	None None	CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	80 1,845	234 S:9	0	0	0	0	0	9	3	6	9	0	0
Emys marmorata western pond turtle	G3G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	21 949	1385 S:4	1	2	0	0	0	1	0	4	4	0	0
Eucyclogobius newberryi tidewater goby	G3 S3	Endangered None	AFS_EN-Endangered CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	15 20	127 S:4	0	2	1	0	0	1	4	0	4	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Eumetopias jubatus Steller (=northern) sea-lion	G3 S2	Delisted None	IUCN_EN-Endangered MMC_SSC-Species of Special Concern	5 5	15 S:1	0	0	1	0	0	0	0	1	1	0	0
Geothlypis trichas sinuosa saltmarsh common yellowthroat	G5T3 S3	None None	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	10 40	112 S:4	1	0	1	0	0	2	4	0	4	0	0
Lasiurus cinereus hoary bat	G5 S4	None None	IUCN_LC-Least Concern WBWG_M-Medium Priority		238 S:1	0	0	0	0	0	1	1	0	1	0	0
Laterallus jamaicensis coturniculus California black rail	G3G4T1 S1	None Threatened	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_NT-Near Threatened NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	10 10	303 S:1	1	0	0	0	0	0	1	0	1	0	0
Margaritifera falcata western pearlshell	G4G5 S1S2	None None		50 50	78 S:1	0	0	0	0	0	1	1	0	1	0	0
Oncorhynchus kisutch pop. 4 coho salmon - central California coast ESU	G4 S2?	Endangered Endangered	AFS_EN-Endangered	40 40	23 S:2	0	1	1	0	0	0	2	0	2	0	0
Oncorhynchus mykiss irideus pop. 8 steelhead - central California coast DPS	G5T2T3Q S2S3	Threatened None	AFS_TH-Threatened	40 400	44 S:6	0	0	0	0	0	6	6	0	6	0	0
Rana boylii foothill yellow-legged frog	G3 S3	None Candidate Threatened	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened USFS_S-Sensitive	37 400	2468 S:7	0	1	0	0	1	5	7	0	6	1	0
Rana draytonii California red-legged frog	G2G3 S2S3	Threatened None	CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	30 726	1543 S:41	13	8	6	0	0	14	16	25	41	0	0
Riparia riparia bank swallow	G5 S2	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern	30 30	298 S:2	0	0	0	0	0	2	2	0	2	0	0
Speyeria zerene myrtleae Myrtle's silverspot butterfly	G5T1 S1	Endangered None	XERCES_CI-Critically Imperiled	28 28	17 S:1	0	0	0	0	1	0	1	0	0	0	1

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Spirinchus thaleichthys longfin smelt	G5 S1	Candidate Threatened		20 20	46 S:1	0	0	0	0	0	1	1	0	1	0	0
Taxidea taxus American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	30 1,599	592 S:8	0	0	0	0	0	8	1	7	8	0	0
Thamnophis sirtalis tetrataenia San Francisco gartersnake	G5T2Q S2	Endangered Endangered	CDFW_FP-Fully Protected	5 1,355	66 S:35	6	6	7	0	0	16	28	7	35	0	0
Tryonia imitator mimic tryonia (=California brackishwater snail)	G2 S2	None None	IUCN_DD-Data Deficient	3 40	39 S:2	0	1	0	0	0	1	1	1	2	0	0

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

San Mateo County, California

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS

Southern Sea Otter Enhydra lutris nereis — Threatened
Marine mammal
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/8560

Birds

NAME	STATUS

California Least Tern Sterna antillarum browni — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/8104

Marbled Murrelet Brachyramphus marmoratus — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/4467

Short-tailed Albatross Phoebastria (=Diomedea) albatrus — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/433

Western Snowy Plover Charadrius nivosus nivosus — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/8035

Reptiles

NAME	STATUS

Green Sea Turtle Chelonia mydas — Threatened
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/6199

San Francisco Garter Snake Thamnophis sirtalis tetrataenia — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/5956

Amphibians

NAME	STATUS

California Red-legged Frog Rana draytonii — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/2891

Fishes

NAME	STATUS
Tidewater Goby *Eucyclogobius newberryi* There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/57	Endangered

Insects

NAME	STATUS
San Bruno Elfin Butterfly *Callophrys mossii bayensis* There is **proposed** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/3394	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Black Oystercatcher Haematopus bachmani This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9591	Breeds Apr 15 to Oct 31

Black Skimmer Rynchops niger — Breeds May 20 to Sep 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/5234

Black Turnstone Arenaria melanocephala — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Black-vented Shearwater Puffinus opisthomelas — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Burrowing Owl Athene cunicularia — Breeds Mar 15 to Aug 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9737

Clark's Grebe Aechmophorus clarkii — Breeds Jan 1 to Dec 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Long-billed Curlew Numenius americanus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/5511

Marbled Godwit Limosa fedoa — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Pink-footed Shearwater Puffinus creatopus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Red-throated Loon Gavia stellata — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Rufous Hummingbird selasphorus rufus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8002

Scripps's Murrelet Synthliboramphus scrippsi — Breeds Feb 20 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Song Sparrow Melospiza melodia — Breeds Feb 20 to Sep 5
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Spotted Towhee Pipilo maculatus clementae — Breeds Apr 15 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/4243

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Whimbrel Numenius phaeopus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9483

Willet Tringa semipalmata — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

APPENDIX C

SITE PHOTOGRAPHS

Photo 1. One of the ponds and surrounding vegetation.

Photo 2. One of the ponds and surrounding vegetation.

Photo 3. Cultivated field within the Project Study Area.

Photo 4. Access road within Project Study Area.

APPENDIX D

OBSERVED SPECIES TABLE

Scientific Name	Common Name	Wetland Indicator Status*
PLANT SPECIES		
Achillea millefolium	yarrow	FACU
Avena sativa	cultivated oat	UPL
Baccharis pilularis	coyote brush	NL
Brassica rapa	field mustard	NL
Bromus diandrus	ripgut grass	NL
Carpobrotus chilensis	sea fig	FAC
Cirsium vulgare	bull thistle	FACU
Conium maculatum	poison hemlock	FAC
Cortaderia jubata	purple pampas grass	FACU
Cotula coronopifolia	brass-buttons	OBL
Cyperus eragrostis	flatsedge	FACW
Daucus carota	carrot	NL
Dipsacus sativus	Fuller's teasel	NL
Epilobium ciliatum subsp. *ciliatum*	fringed willowherb	FACW
Eriophyllum staechadifolium	seaside woolly sunflower	NL
Erythranthe guttata	common monkeyflower	NL
Festuca perennis (Lolium perenne)	rye grass	FAC
Fragaria chiloensis	beach strawberry	FACU
Frangula californica	California coffee berry	NL
Helminthotheca echioides	bristly ox-tongue	FAC
Hesperocyparis macrocarpa	Monterey cypress	NL
Hirschfeldia incana	summer mustard	NL
Holcus lanatus	common velvet grass	FAC
Hordeum murinum	wall barley	FAC
Juncus effusus	soft rush	FACW
Juncus patens	spreading rush	FACW
Lemna sp.	duckweed	OBL
Lysimachia arvensis	scarlet pimpernel	FAC
Lythrum hyssopifolia	hyssop loosestrife	OBL
Medicago polymorpha	California burclover	FACU
Morella californica	wax myrtle	NL
Myoporum laetum	myoporum	UPL
Oenanthe elata	evening primrose	FACW
Oenanthe sarmentosa	water parsley	NL
Oxalis pes-caprae	Bermuda buttercup	NL
Phalaris aquatica	harding grass	FACU
Pinus radiata	Monterey pine	NL
Plantago lanceolata	English plantain	FACU
Poa annua	annual blue grass	FAC

Polygonum aviculare	yard knotweed	FAC
Polystichum munitum	western sword fern	FACU
Potentilla anserina subsp. *pacifica*	Pacific silverweed	OBL
Raphanus sativus	radish	NL
Rubus armeniacus	Himalayan blackberry	FAC
Rubus ursinus	California blackberry	FACU
Rumex crispus	curly dock	FAC
Salix lasiolepis	arroyo willow	FACW
Sambucus nigra subsp. *caerulea*	blue elderberry	FAC
Schoenoplectus californicus	southern bulrush	OBL
Scirpus microcarpus	small fruited bulrush	OBL
Scrophularia californica	California figwort	FAC
Sequoia sempervirens	redwood	NL
Sonchus asper subsp. *asper*	prickly sow thistle	FACU
Stachys sp.	Hedge-nettle	--
Typha latifolia	broad-leaved cattail	OBL
Veronica americana	American brooklime	OBL
Vicia sp.	vetch	UPL
Zantedeschia aethiopica	calla-lily	OBL

*Wetland Indicator Status and expected frequency:

OBL	Obligate	Always found in wetlands	>99% frequency
FACW	Facultative Wetland	Usually found in wetlands	67-99%
FAC	Facultative	Equal in wetland or non-wetlands	34-66%
FACU	Facultative Upland	Usually found in non-wetlands	1-33%
UPL/NL	Upland	Upland/Not listed (upland)	<1%

WILDLIFE SPECIES		**Status**
	Amphibians and Reptiles	
Rana draytonii	California red-legged frog	Federal Threatened and CDFW Species of Concern
	Birds	
Bucephala albeola	Bufflehead	
Buteo jamaicensis	Red-tailed hawk	
Callipepla californica	California Quail	
Calypte anna	Anna's Hummingbird	
Cathartes aura	Turkey Vulture	
Corvus corax	Common Raven	
Elanus leucurus	White-tailed Kite	California Fully Protected
Fulica americana	American Coot	
Melospiza melodia	Song Sparrow	
Mergus merganser	Common Merganser	
Pipilo maculatus	Spotted Towhee	
Troglodytes pacificus	Pacific Wren	
Zonotrichia atricapilla	Golden-crowned sparrow	
	Mammals	
Odocoileus hemionus	Mule deer	

BH

BEAN HOLLOW FARMHOUSE
CABRILLO HWY APN 086191100
SAN MATEO COUNTY, CA

BRIAN LEE ARCHITECT
brian.lee.faia@gmail.com
1.415.812.3294

Parcel Boundary
100-Foot Buffer off Wetland Boundary
Wetland
Prime Agricultural Soils

Date: 03-01-2018
Data: Sol Ecology Inc., San Mateo Co., USFWS NWI

Base: ESRI
GIS: AJG

SOL ECOLOGY
solecology.com

Agricultural Land Management Plan
Bean Hollow Farm, Pescadero
Parcel # 086-191-100

4G Ranch Consulting
Chris Giannini
208-880-0081
Chris4granch@gmail.com

Agricultural Land Management Plan
Bean Hollow Farm, Pescadero
APN 086-191-100

Bean Hollow Farm is a 38-acre parcel naturally divided into 5 areas by topography, soil type, and vegetation that require distinct management protocols and that have different capabilities.

1. Lower Field - prime soils - cultivated
2. Upper Field – prime soils - largest portion cultivated – a pond and water trench bisects a small northern portion
3. Pond area – irrigation and habitat areas
4. Non-prime soils – undisturbed presently and proposed residential project area
5. Natural area / buffer areas. - These areas will be managed to enhance habitat values including areas adjacent to Highway One and along the perimeter of the property. This area includes the existing access roads on the property.

Crop History
The site was originally part of the approximately 220-acre Campinotti farm and has been farmed since the turn of the century. Historical crops have included: Brussels sprouts, leeks, artichokes, pumpkins, fava beans and hay. Most recently the property has been farmed by Marchi Central Farms for approximate 20 years with fava beans, leeks, and Brussels sprouts as being historically the most agriculturally and financially productive.

Soils
The soils at the project site are forming on old marine terraces. They are predominantly deep sandy loams. The Prime Farm Lands are located on two relatively flat benches noted as Lower and Upper Fields. The non – prime soils near the middle of the property has a significant slope and different soil characteristics than the flat cultivated fields. The attached plans include the Prime Soils information map prepared by the San Mateo County Planning Department.

Water
There are two irrigation ponds on the site connect by dedicated easements to Lake Lucerne, a dependable source of agricultural water that is managed and maintained by the Lake Lucerne Water Company. Bean Hollow Farm LLC has a prorated share of ownership of the water rights. The upper pond is fed by Lake Lucerne via a shared pipeline to a reservoir on the adjacent farmlands, then by a pipeline and open trenches to the property. The larger lower pond, that is shared with the POST parcel to the north, is a surface source and overflow pond for the upper pond. The ponds store approximately 25 acre-feet of water. Water can be supplied to the fields by an onsite electric pump and movable sprinkler pipe, drip irrigation or dry farmed.

There is an existing unused agricultural well at the southeast corner of the Upper Field that will be converted for domestic use with the approval of the home.

Natural Areas
The Agricultural Land Management Plan recognizes that specific areas are not suitable for agricultural and are better maintained as natural areas. Please see the Biological Assessment map prepared by Sol Ecology that indicates the buffer areas that will be left undisturbed except for existing roadways for access.

Current and Proposed Agricultural Uses

The Lower Field and a large portion of the Upper Field (due to presence of water pond and trench) is currently planted in a cover crop of bell beans by Peter Marchi.

Bean Hollow Farm is pursuing organic certification for the property and will be continuing soil improvements of having cover crops and pasture mix during the certification process. Soil testing of both the Upper and Lower Fields by Fruit Growers Lab is ongoing and will determine the actual soil suitability and limitations, as well as recommendations for crop and soil enhancement.

It is intended to move toward an organic, regenerative and sustainable farming practice, by repairing the soil health, cover cropping, crop rotation, retaining mulch, animal grazing, and integrated nutrient management.

It is anticipated to plant an organic grass mix in the spring of 2021. Small animal (sheep and goats) rotational grazing will be contracted with local farms and designated for the Lower Field. It is anticipated the grazing will be part of larger ranch operations and used as part of their rotation system. A new perimeter containment fencing is proposed for the Lower Field. See drawing FM1 for location.

The Upper Field will be reserved for organic farming of heritage beans, peas, and other specialty vegetables and fruits for local restaurants, CSA's, and Asian and farmer's markets. The Upper Field will either be self-farmed and or have leased arrangements with local organic farm operators. A deer fencing will be erected as needed on the Upper Field.

Bean Hollow Farm is discussing a collaborative relationship with POST regarding the neighboring POST parcels to the north. Bean Hollow Farm shares the ownership of the large pond with POST and have many common interest in creating a lease arrangement or agricultural easement to provide opportunities for future organic farmers.

Compliance with Planned Agricultural Ordinance – Section 6355*

6355.A.1 – The encroachment of development upon land that is suitable for agricultural use be minimized

All development is minimized on land suitable for agricultural use since the home will be located on non-prime soils that have not historically utilized for agricultural uses.

6355A.2 – All development permitted on a site shall be clustered.

The residential project that includes a barn is clustered on the non-prime, non-cultivated portion of the property served by an existing access road.

6355.A3. – Every project shall conform to the Development Review Criteria in Chapter 20A.2

The project has been designed in accordance with the 20A.2 Criteria employing natural materials and colors.

The design has utilized the existing slope to fit into natural topography of the site, present less exposed building mass, and minimize grading.

6355.B.1 – Existing availability of an adequate and potable well water source

There is an existing agricultural well to be converted into a domestic well to serve the proposed home.

6355.B.2 – Adequate water supplies and buffers for agricultural production and sensitive habitats
The existing ponds provide adequate water for the sensitive habitat protection, historic and proposed agricultural production.

6355.C – Criteria for division of prime soils
There will be no division of prime soils as part of this project.

6355.D – Criteria for Conversion of Prime Soils
The proposed residential site is proposed primarily on non-prime soils except for very minor encroachment on the eastern portion of the Lower Field for the onsite wastewater treatment drain field.

6355.F.1 – Unsuitable lands
The proposed residential project will be primarily located on the non-prime soils portion of the property and served by an existing road. Drawing FM! Shows prime soils with historically cultivated areas and the buffer areas that cannot be farmed. The project site is the only viable non-prime soils location that could support a home on this legal parcel.

6355.F.2 – Continued and renewed agricultural use of the soils
This parcel has been commercially farmed in the past. The sandy soils have provided diminishing yields in the past years due to crop depletion of the soil resources and drought conditions. It has been recommended that a nourishing cover crop be planted to restore the viability and production levels of the soils. Bean Hollow Farm is pursuing organic certification during this necessary soil restoration period.

6355.F.3 – Clearly defined buffer areas
Per the site plan, the house is on an area that has not been farmed and the remaining portion of the undisturbed non-prime soils creates a buffer to the prime soils.

6355.F.4 – Productivity of any adjacent agricultural land
There are agricultural parcels to the north and east of the subject parcel. There are smaller residential parcels to the south. The parcel is bound by Highway One to the west. The proposed house site is in the middle of the parcel and meets all required setbacks and is not a threat to surrounding properties. The proposed organic certification most likely to be considered a benefit to the surrounding agricultural and residential uses.

*** Non-applicable portions of Section 6533 not addressed due to lack of relevancy**

COUNTY OF SAN MATEO
PLANNING AND BUILDING

BH

BEAN HOLLOW FARMHOUSE
CABRILLO HWY APN 086191100
SAN MATEO COUNTY, CA

BRIAN LEE ARCHITECT
brian.lee.faia@gmail.com
1.415.812.3294

Prime Agricultural Lands: APN: 086-191-100

Parcel Fabric

Subject Parcel (APN: 086-191-100)

Area: 36.25 ac

Prime Agricultural Lands

Area within Subject Parcel: 22.37 ac

Soil Classifications and Uses

Irrigated Rowcrops and Soil Dependent Floriculture

Artichokes, Brussels Sprouts, Field Flowers

Land Capability Classification (Irrigated)

1

2

3

Feet

0 200 400 800

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

BH

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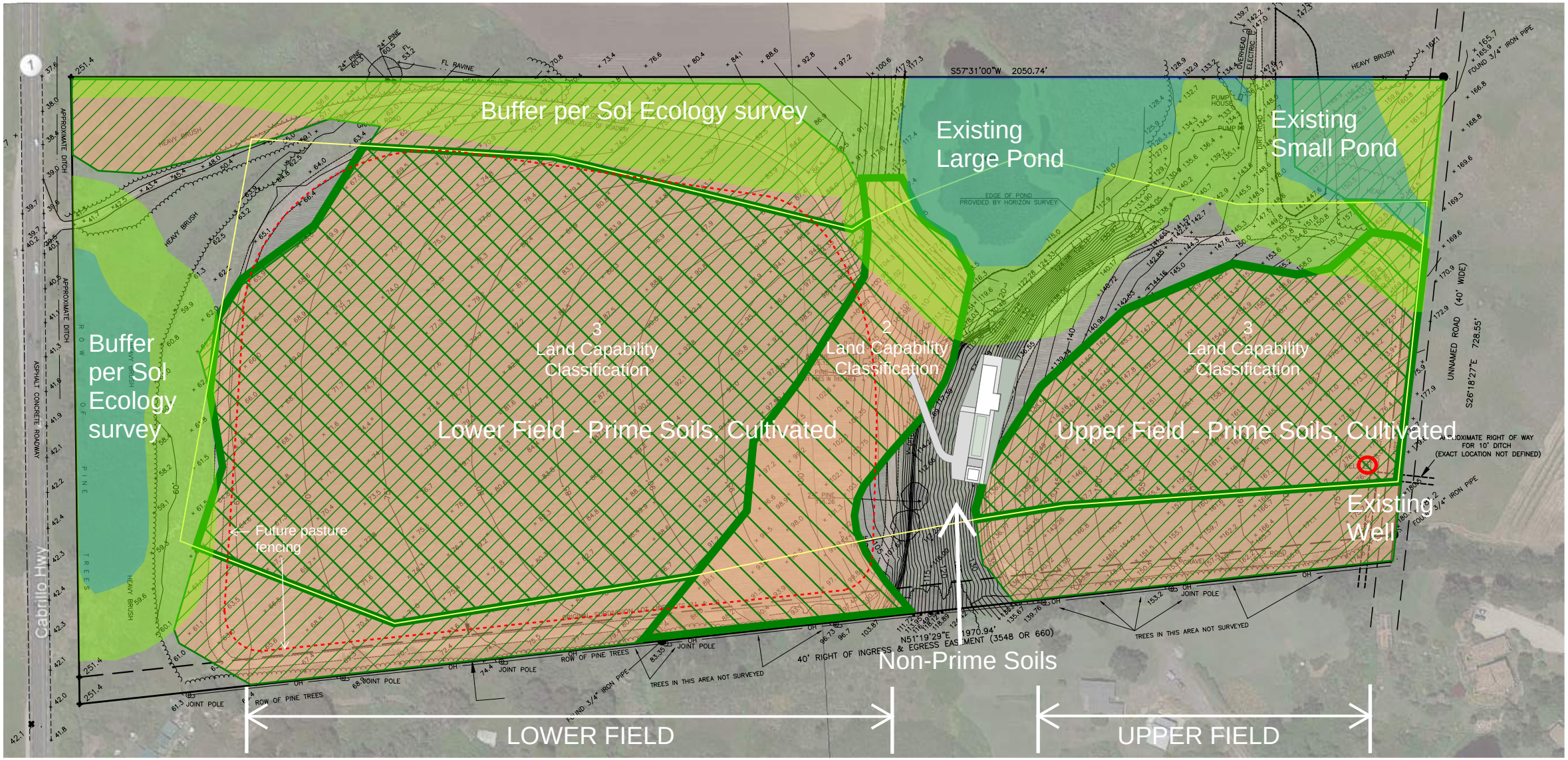
Parcel Boundary
100-Foot Buffer off Wetland Boundary
Wetland
Prime Agricultural Soils

Date: 03-01-2018
Data: Sol Ecology Inc., San Mateo Co., USFWS NWI

Base: ESRI
GIS: AJG

SOL ECOLOGY
solecology.com

Prime Agricultural Lands per San Mateo County Mapped on Survey



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2020.12.24 SMC

FM 1

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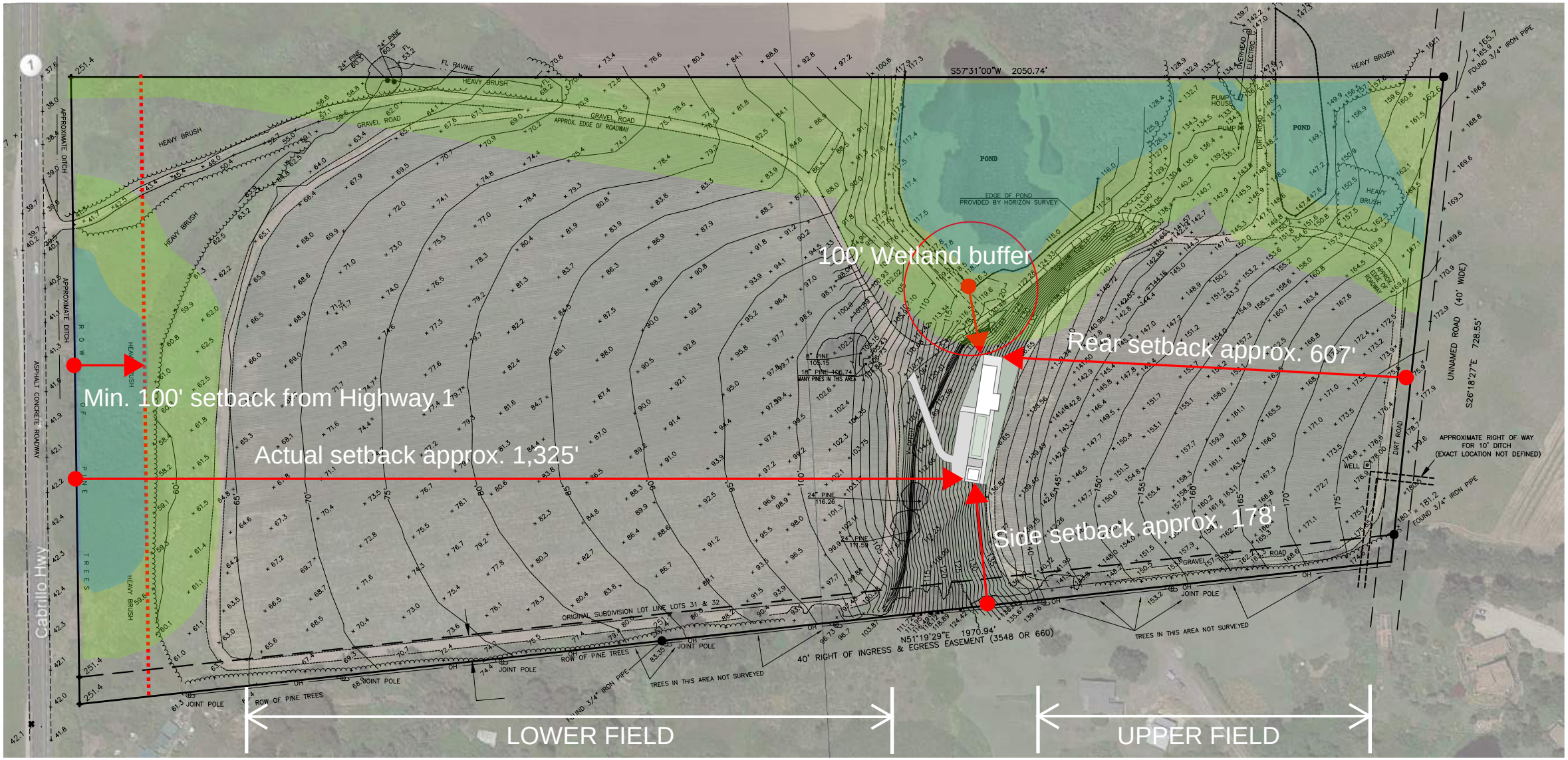

2020.12.24 SMC

FM 2