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: *McWherter New Single-Family Residence*, when adopted and implemented, will not have a significant impact on the environment.

FILE NO.: PLN 2018-00322

OWNER: Celina and Jordan McWherter

APPLICANT: Jordan McWherter

NAME OF PERSON UNDERTAKING THE PROJECT OR RECEIVING THE PROJECT APPROVAL (IF DIFFERENT FROM APPLICANT): N/A

ASSESSOR'S PARCEL NO.: 036-225-130

LOCATION: 1237 Grant Road, Montara

PROJECT DESCRIPTION

The applicant requests a Coastal Development Permit, Resource Management Permit, Design Review, and Grading Permits for the construction of a new two-story, 4,237 sq. ft. residence, plus a 433 sq. ft. garage, located on a legal 4.77-acre parcel. The project involves 530 cubic yards of cut and 175 cubic yards of fill and the removal of 9 protected trees. This project is not appealable to the California Coastal Commission.

FINDINGS AND BASIS FOR A NEGATIVE DECLARATION

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

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

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

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

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

5. In addition, the project will not:

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

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

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

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

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

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

Mitigation Measure 1: The applicant shall require construction contractors to implement all the Bay Area Air Quality Management District's Basic Construction Mitigation Measures, listed below, and include these measures on permit plans submitted to the Building Inspection Section:

a. Water all active construction areas at least twice daily.

b. Apply water two times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking, and staging areas at construction sites. Also, hydroseed or apply non-toxic soil stabilizers to inactive construction areas.

c. Sweep adjacent public streets daily (preferably with water sweepers) if visible soil material is carried onto them.

d. Limit traffic speeds on unpaved roads within the project parcel to 15 miles per hour.

e. All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne 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.

Mitigation Measure 2: Work shall only be performed during daylight hours at least 30 minutes after sunrise and ending at least 30 minutes before sunset when animals including CRLF are least active. Furthermore, no ground disturbance or foundation work shall be performed during or within 48 hours after any rain event (greater than 0.5 inches) between October 31 and April 31 when CRLF species are most likely to utilize upland habitats. Lastly, wildlife exclusion fencing shall be placed between the drainage ditch and proposed construction to prevent CRLF from entering the site during activities. This measure shall be included in permit plans submitted to the Building Inspection Section.

Mitigation Measure 3: Vegetation/tree removal shall be performed outside of the nesting season (between September 1 and January 31). If work must be performed during the nesting season, a pre-construction nesting bird survey shall be performed by a qualified biologist. 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 shall remain in place until all young have fledged, or the biologist has confirmed that the nest has been naturally predated. This measure shall be included in permit plans submitted to the Building Inspection Section.

Mitigation Measure 4: In the event that cultural, paleontological, or archaeological resources are encountered during site grading or other site work, such work shall immediately be halted in the area of discovery and the project sponsor shall immediately notify the Community Development Director of the discovery. The applicant shall be required to retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The cost of the qualified archaeologist and of any recording, protecting, or curating shall be borne solely by the project sponsor. The archaeologist shall be required to submit to the Community Development Director for review and approval a report of the findings and methods of curation or protection of the resources. No further grading or site work within the area of discovery shall be allowed until the preceding has occurred. Disposition of Native American remains shall comply with CEQA Guidelines Section 15064.5(e).

Mitigation Measure 5: The design of the proposed development (upon submittal of the Building Permit) on the subject parcel shall generally follow the recommendations cited in the geotechnical reports and letter prepared by Earth Investigation Consultants, Inc. and Geosphere Consultants, Inc. regarding seismic criteria, grading, drilled piers, slab-on grade construction, and surface drainage. Any such changes to the recommendations by the project geotechnical engineer cited in this report and subsequent updates shall be submitted for review and approval by the County's Geotechnical Engineer.

Mitigation Measure 6: At the time of building permit and encroachment permit application, the applicant shall submit for review and approval, erosion and drainage control plans that show how the transport and discharge of soil and pollutants from and within the project site will be minimized. The plans shall be designed to minimize potential sources of sediment, control the amount of runoff and its ability to carry sediment by diverting incoming flows and impeding internally generated flows, and retain sediment that is picked up on the project site through the use of sediment-capturing devices. The plans shall include measures that limit the application, generation, and migration of toxic substances, ensure the proper storage and disposal of toxic materials, and apply nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters. Said plan shall adhere to the San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including:

a. Sequence construction to install sediment-capturing devices first, followed by runoff control measures and runoff conveyances. No construction activities shall begin until after all proposed measures are in place.

b. Minimize the area of bare soil exposed at one time (phased grading).

c. Clear only areas essential for construction.

d. Within five (5) days of clearing or inactivity in construction, stabilize bare soils through either non-vegetative Best Management Practices (BMPs), such as mulching, or vegetative erosion control methods, such as seeding. Vegetative erosion control shall be established within two (2) weeks of seeding/planting.

e. Construction entrances shall be stabilized immediately after grading and frequently maintained to prevent erosion and to control dust.

f. Control wind-born dust through the installation of wind barriers such as hay bales and/or sprinkling.

g. Soil and/or other construction-related material stockpiled on-site shall be placed a minimum of 200 ft., or to the extent feasible, from all wetlands and drain courses. Stockpiled soils shall be covered with tarps at all times of the year.

h. Intercept runoff above disturbed slopes and convey it to a permanent channel or storm drains by using earth dikes, perimeter dikes or swales, or diversions. Use check dams where appropriate.

i. Provide protection for runoff conveyance outlets by reducing flow velocity and dissipating flow energy.

j. Use silt fence and/or vegetated filter strips to trap sediment contained in sheet flow. The maximum drainage area to the fence should be 0.5 acres or less per 100 ft. of fence. Silt fences shall be inspected regularly, and sediment removed when it reaches 1/3 of fence height. Vegetated filter strips should have relatively flat slopes and be vegetated with erosion-resistant species.

k. Throughout the construction period, the applicant shall conduct regular inspections of the condition and operational status of all structural BMPs required by the approved erosion control plan.

l. No erosion or sediment control measures will be placed in vegetated areas.

m. Environmentally-sensitive areas shall be delineated and protected to prevent construction impacts.

n. Control of fuels and other hazardous materials, spills, and litter during construction.

o. Preserve existing vegetation whenever feasible.

Mitigation Measure 7: Noise sources associated with demolition, construction, repair, remodeling, or grading of any real property shall be limited to the hours from 7:00 a.m. to 6:00 p.m., weekdays and 9:00 a.m. to 5:00 p.m., Saturdays. Said activities are prohibited on Sundays, Thanksgiving, and Christmas (San Mateo Ordinance Code Section 4.88.360). Noise levels produced by construction activities shall not exceed the 80-dBA level at any one moment.

Mitigation Measure 8: Should any traditionally or culturally affiliated Native American tribe respond to the County's issued notification for consultation, such process as required by State Assembly Bill 52 shall be completed and any resulting agreed upon measures for avoidance and preservation of identified resources be taken prior to implementation of the project.

Mitigation Measure 9: 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 10: Any inadvertently discovered tribal cultural resources shall be 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.

RESPONSIBLE AGENCY CONSULTATION

San Mateo County Planning and Building Department

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: March 3, 2020 to March 23, 2020

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., March 23, 2020**.

CONTACT PERSON

Ruemel Panglao
Project Planner, 650/363-4582
rpanglao@smcgov.org

Ruemel Panglao, Project Planner

RSP:cmc – RSPEE0070_WCH.DOCX

County of San Mateo
Planning and Building Department

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

1. **Project Title:** McWherter New Single-Family Residence

2. **County File Number:** PLN 2018-00322

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:** Ruemel Panglao, Project Planner, 650/363-4582

5. **Project Location:** 1237 Grant Road, Montara

6. **Assessor's Parcel Number and Size of Parcel:** 036-225-130 (4.77 acres)

7. **Project Sponsor's Name and Address:** Jordan McWherter, 759 Rockaway Beach Avenue, Pacifica, CA 94044

8. **Name of Person Undertaking the Project or Receiving the Project Approval (if different from Project Sponsor):** N/A

9. **General Plan Designation:** Very Low Density Residential (Rural)

10. **Zoning:** RM-CZ/DR/CD (Resource Management-Coastal Zone/Design Review/Coastal Development)

11. **Description of the Project:** The applicant requests a Coastal Development Permit, Resource Management Permit, Design Review, and Grading Permits for the construction of a new two-story, 4,237 sq. ft. residence, plus a 433 sq. ft. garage, located on a legal 4.77-acre parcel. The project involves 530 cubic yards of cut and 175 cubic yards of fill and the removal of nine (9) protected trees. This project is not appealable to the California Coastal Commission.

12. **Surrounding Land Uses and Setting:** The properties to the immediate north, west, east, and south contain single-family residential uses.

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.?:** *(NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process*

(see Public Resources Code Section 21080.3.2.). Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality).

This project is not subject to Assembly Bill 52, as the County of San Mateo has no records of requests for formal notification of proposed projects within the County from any traditionally or culturally affiliated California Native American Tribes. However, the County seeks to satisfy the Native American Heritage Commission's best practices and has referred this project to the Native American Tribes recommended for consultation by the Native American Heritage Commission. 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.

	Aesthetics		Energy		Public Services
	Agricultural and Forest Resources		Hazards and Hazardous Materials		Recreation
X	Air Quality	X	Hydrology/Water Quality		Transportation
X	Biological Resources		Land Use/Planning	X	Tribal Cultural Resources
X	Climate Change		Mineral Resources		Utilities/Service Systems
X	Cultural Resources	X	Noise		Wildfire
X	Geology/Soils		Population/Housing	X	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: On July 11, 2019, the Coastside Design Review Committee (CDRC) recommended *approval of the proposed residence, as proposed and conditioned, to the Community Development Director of San Mateo County (County), based on the findings that included compliance with all applicable Design* Review (DR) standards (Attachment C). Specifically, the CDRC found that the proposed residence complies with Section 6565.20(D) (Neighborhood Definition and Neighborhood Character) of the Standards for Design for One-Family and Two-Family Residential Development in the Midcoast (Midcoast DR Standards) as the structure is located and designed to blend with the natural vegetation and landforms of the site and the design is compatible with the neighborhood in terms of scale, mass, architectural style and design elements relative to surrounding structures. In addition, the CDRC found that the landscape design complements and enhances the design of the house and harmonizes with the natural character of the neighborhood. **Source:** Project Plans, Project Location, County Geographic Information System (GIS) Maps, Field Observations, Coastside Design Review Committee Recommendation Letter (dated December 26, 2019).					
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: The project parcel does not contain and is not located in close proximity to any rock outcroppings or any historic buildings within a state scenic highway. Nine (9) protected trees (trees with a diameter at breast height (DBH) of 17.5 inches or more in the RM-CZ Zoning District) are proposed to be removed. The subject parcel already has a heavy amount of tree cover which would screen the proposed structures from the surrounding public roads. **Source:** Project Plans, Project Location, Field Observations, Coastside Design Review Committee Recommendation Letter (dated December 26, 2019), County Zoning Regulations.					
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 is located in a non-urbanized area and is surrounded by rural single-family residences. The project site is not on a ridgeline. The project involves grading but would not create a significant change in topography. Grading has been minimized to accommodate the house, driveway, and septic. In terms of grading amounts, there will be 530 cubic yards of cut and 175 cubic yards of fill (320 cubic yards of cut for the house, 80 cubic yards of cut for the garage, 20 cubic yards of cut for the driveway, 110 cubic yards of cut for leach lines, and 175 cubic yards of fill in front of the house). As discussed in Section 1.a, the CDRC determined that the project, as proposed and conditioned, is in compliance with all applicable DR standards.

Source: Project Location, San Mateo County General Plan, Scenic Resources Map, Coastside Design Review Committee Recommendation Letter (dated December 26, 2019).

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

Discussion: The project plans includes downward directed (Dark Sky compliant) light fixtures, one at each exterior entry/exit as minimally required by California Building Standards Code. In its review, the CDRC acknowledged the project's compliance with the Midcoast DR Standards regarding exterior lighting which states: "All exterior, landscape, and site lighting shall be designed and located so that light and glare are directed away from neighbors and confined to the site," "Exterior lighting should be minimized and designed with a specific activity in mind so that outdoor areas will be illuminated no more than is necessary to support the activity designed for that area," and "Minimize light and glare as viewed from scenic corridors and other public view corridors." The proposed locations and design of all such lighting would not create a new source of significant light or glare that would adversely affect day or nighttime views in the area.

Source: Project Plans, Project Location, County Midcoast DR Standards.

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

Discussion: The project site is not adjacent to a designated Scenic Highway or within a State or County Scenic Corridor. The closest County Scenic Corridor is the Cabrillo Highway (Highway 1) County Scenic Corridor which is over a half mile away.

Source: Project Location, County GIS Maps, County General Plan Scenic Corridors Map.

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

Discussion: The project parcel is located within a Design Review (DR) District as it is zoned RM-CZ/DR/CD (Resource Management-Coastal Zone / Design Review / Coastal Development). As discussed in Section 1.a, the CDRC determined that the project, as proposed and conditioned, is in compliance with all applicable DR standards. The project meets all applicable General Plan and Zoning Ordinance provisions.

Single-family residences are an allowed use in the RM-CZ Zoning District. The proposed residence will have conforming setbacks, building height, and building floor area.

Source: Project Plans, Project Location, County Zoning Regulations, Coastside Design Review Committee Recommendation Letter (dated December 26, 2019).

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

Discussion: The proposed project complies with all applicable zoning regulations, specifically Design Review standards. As discussed in Section 1.b, the project site is screened from other residences and the street is screened by a large amount of existing mature trees and proposed landscaping. Also, in its review, the CDRC determined the proposed residence to be in compliance with Midcoast Design Review standards. The proposed residence was revised from its original design (presented to the CDRC on June 13, 2019) with the interest of preserving the views of neighboring houses and ensuring compatibility with the surrounding neighborhood.

Based on these findings, the proposed project will have a less than significant visual impact on natural scenic qualities.

Source: Project Plans, Project Location, County GIS Maps, Field Observations, Coastside Design Review Committee Recommendation Letter (dated December 26, 2019), County Zoning Regulations, County Midcoast DR Standards.

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 District 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 site is located within the Coastal Zone. The parcel is also not within an area that is mapped or designated as Prime or Unique Farmland or Farmland of Statewide Importance.

Source: Project Location, County GIS Maps, California Department of Conservation Farmland Mapping and Monitoring Program.

2.b.	Conflict with existing zoning for agricultural use, an existing Open Space				X

	Easement, or a Williamson Act contract?				
Discussion: The project site is zoned Resource Management-Coastal Zone (RM-CZ). The zoning allows for both agriculture and residential uses. The property is also not subject to an existing Open Space Easement or Williamson Act contract. **Source:** Project Location, County Zoning Regulations, County GIS Maps, County Williamson Act Contracts.					
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 site has an existing barn and is largely surrounded by single-family residential development. A previous project on the property included both a single-family residence and the existing barn; however, the residence was never built. The site is not currently being used for agricultural use. The project site does not contain Farmland or forestland (defined as land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits). Therefore, the project would not convert Farmland to a non-agricultural use or forestland to non-forest use. **Source:** Project Location, County GIS Maps, California Department of Conservation Farmland Mapping and Monitoring Program.					
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: Although the project site is located within the Coastal Zone, it does not contain Class I or Class II Agriculture Soils, or Class III Soils rated good or very good for artichokes or Brussels sprouts. **Source:** Project Location, Natural Resources Conservation Service Web Soil Survey - California Revised Storie Index.					
2.e.	Result in damage to soil capability or loss of agricultural land?			X	
Discussion: The project site is located on soils classified with a Storie Index of Grade 2 – Good and Grade 5 – Very Poor. The site is not currently being used for agricultural use. The proposed single-family residence on the subject parcel would be located in the Grade 5 area and would result in the development of approximately 1.3 percent of the subject parcel to a residential use. The Grade 2 area that makes up the area of the parcel south of the project site has heavy tree cover but could be potentially used for agricultural purposes in the future if it were to be cleared. As discussed in Section 2.b., residential and agricultural uses are allowed within the project parcel's zoning district (RM-CZ Resource Management – Coastal Zone). Once the subject parcel is developed, future					

property owners could use the remaining open land for agricultural purposes. With no current agricultural use of the site and the potential for future agricultural use of the property, the development of the road and associated parcels would not result in the significant loss of agricultural land.

Source: Project Location, Natural Resources Conservation Service Web Soil Survey - California Revised Storie Index, County Zoning Regulations.

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 project site has not been identified as forestland or timberland, therefore, there is no conflict with existing zoning or cause for rezoning.

Source: Project Location, County GIS Maps, 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 2017Clean Air Plan. During project implementation, 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, use of the development as a single-family residence would have minimal impacts to the air quality standards set forth for the region by the Bay Area Air Quality Management District.

The BAAQMD has established thresholds of significance for construction emissions and operational emissions. As defined in the BAAQMD's 2017 CEQA Guidelines, the BAAQMD does not require quantification of construction emissions due to the number of variables that can impact the

calculation of construction emissions. Instead, the BAAQMD emphasizes implementation of all feasible construction measures to minimize emissions from construction activities. The BAAQMD provides a list of construction-related control measures that they have determined, when fully implemented, would significantly reduce construction-related air emissions to a less than significant level. These control measures have been included in Mitigation Measure 1 below:

Mitigation Measure 1: The applicant shall require construction contractors to implement all the Bay Area Air Quality Management District's Basic Construction Mitigation Measures, listed below, and include these measures on permit plans submitted to the Building Inspection Section:

a. Water all active construction areas at least twice daily.

b. Apply water two times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking, and staging areas at construction sites. Also, hydroseed or apply non-toxic soil stabilizers to inactive construction areas.

c. Sweep adjacent public streets daily (preferably with water sweepers) if visible soil material is carried onto them.

d. Limit traffic speeds on unpaved roads within the project parcel to 15 miles per hour.

e. All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne 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.

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

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: As of December 2012, San Mateo County is a non-attainment area for PM-2.5. On January 9, 2013, the Environmental Protection Agency (EPA) issued a final rule to determine that the Bay Area attains the 24-hour PM-2.5 national standard. However, the Bay Area will continue to be designated as "non-attainment" for the national 24-hour PM-2.5 standard until the BAAQMD submits a "re-designation request" and a "maintenance plan" to EPA and the proposed redesignation is approved by the Environmental Protection Agency. A temporary increase in the project area is anticipated during construction since these PM-2.5 particles are a typical vehicle emission. The temporary nature of the proposed construction and California Air Resources Board vehicle regulations reduce the potential effects to a less than significant impact. Mitigation Measure 1 in Section 3.a. would minimize increases in non-attainment criteria pollutants generated from project construction to a less than significant level.

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

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 the proposed project would primarily be temporary in nature. The project site is in a very low density rural residential area with few sensitive receptors (i.e., single-family residences) located within the immediate project vicinity. Additionally, the surrounding tree canopy and vegetation on the project site would help to insulate the project area from nearby sensitive receptors. Implementation of Mitigation Measure 1 would also help in minimizing any potentially 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: The proposed project is to construct a single-family residence in a rural residential area of the Midcoast. Once constructed, the daily use of the residence would not create objectionable odors. The proposed project has the potential to generate odors associated with construction activities. However, any such odors would 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 local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service or National Marine Fisheries Service?		X		

Discussion: A biological resources report (Sol report) was prepared by Sol Ecology, Inc., dated August 13, 2019, which analyzed potential project impacts to biological resources on the subject parcel (Attachment D).

According to the Sol report, Sol Ecology principal biologist Dana Riggs conducted a biological resources survey and reconnaissance-level surveys for special status species on and adjacent to the subject parcel on July 12, 2019 to gather information necessary to complete a review of potential biological resources and potential for impacts from development of the proposed project.

The project site is bordered by single-family residential development to the north, west, and east and Grant Road to the south. The site consists of a driveway, existing building, several storage containers, a dirt pad, and an existing septic field. Vegetation on the project site consists primarily of Monterey pine forest (introduced) and disturbed ruderal vegetation. No sensitive biological

communities are present on the project site; a small roadside drainage ditch with willow habitat is present 200 ft. to the south of the house site.

No sensitive biological communities are present at the project site. No special status plants have potential to occur at the project site. Two special status species have potential to occur on the project site: California Red Legged Frog (CRLF) and Allen's hummingbird.

The roadside drainage ditch on the project parcel may provide aquatic non-breeding habitat to CRLF but given its lack of connectivity does not likely provide suitable dispersal habitat. The nearest documented occurrence record of CRLF is approximately 1,670 ft. (0.33 miles) to the west of the proposed project site in Montara Creek. However, it is unlikely a CRLF would migrate through the project site due to the availability of more suitable dispersal habitat in the surrounding area and the absence of potential breeding habitat to the north or east of the site. Additionally, the soils on the project site have been previously impacted and consist of mostly fill material with no burrows observed during the site visit. As such, CRLF has only a low potential to occur.

The Monterey pines on the project site provide suitable nesting habitat for Allen's Hummingbird.

Due to the potential for these species to occur within the project area, the Sol report, recommends that the following mitigation measures be implemented to avoid potential impacts to CRLF and Allen's Hummingbird:

Mitigation Measure 2: Work shall only be performed during daylight hours at least 30 minutes after sunrise and ending at least 30 minutes before sunset when animals including CRLF are least active. Furthermore, no ground disturbance or foundation work shall be performed during or within 48 hours after any rain event (greater than 0.5 inches) between October 31 and April 31 when CRLF species are most likely to utilize upland habitats. Lastly, wildlife exclusion fencing shall be placed between the drainage ditch and proposed construction to prevent CRLF from entering the site during activities. This measure shall be included in permit plans submitted to the Building Inspection Section.

Mitigation Measure 3: Vegetation/tree removal shall be performed outside of the nesting season (between September 1 and January 31). If work must be performed during the nesting season, a pre-construction nesting bird survey shall be performed by a qualified biologist. 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 shall remain in place until all young have fledged, or the biologist has confirmed that the nest has been naturally predated. This measure shall be included in permit plans submitted to the Building Inspection Section.

Source: Project Plans, Project Location, County GIS Maps, Sol Ecology, Inc. Biological Resources Report (dated August 13, 2019).

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

Discussion: The site does not contain, nor does it abut any perennial or intermittent stream. Per the Sol report, there are no areas of riparian habitat or sensitive natural communities 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, in the project area. The willows in the roadside drainage ditch are not considered riparian habitat because they are not associated with a perennial or intermittent

stream. **Source:** Project Plans, Project Location, County GIS Maps, Sol Ecology, Inc. Biological Resources Report (dated August 13, 2019).					
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: The Sol report found no wetlands in the entire study area, as defined either by Section 404 or in the County's LCP. As a result, the project poses no impact to these resources. **Source:** Project Plans, Project Location, County GIS Maps, County Local Coastal Program, Sol Ecology, Inc. Biological Resources Report (dated August 13, 2019).					
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: The site does not contain, nor does it abut any perennial or intermittent stream. The roadside drainage ditch on the project parcel may provide aquatic non-breeding habitat to CRLF but given its lack of connectivity does not likely provide suitable dispersal habitat. It is unlikely a CRLF would migrate through the project site due to the availability of more suitable dispersal habitat in the surrounding area and the absence of potential breeding habitat to the north or east of the site. Additionally, the soils on the project site have been previously impacted and consist of mostly fill material with no burrows observed during the site visit. As such, CRLF has only a low potential to occur. The Monterey pines on the project site provide suitable nesting habitat for Allen's Hummingbird. With the implementation of the Mitigation Measures in Section 4.a, impacts to wildlife corridors would be minimized. **Source:** Project Plans, Project Location, County GIS Maps, Sol Ecology, Inc. Biological Resources Report (dated August 13, 2019).					
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: The project site is host primarily to Monterey Pine trees, many of which are protected (17.5 inches diameter at breast height (DBH) or greater) trees as defined in the Development Review Criteria (Section 6912.2(j)) that are applicable to RM-CZ (Resource Management-Coastal Zone) zoned areas per Section 6903. The trees in and around of the proposed construction site were evaluated in an arborist report (Weatherill report) (Attachment E) prepared by licensed arborist Robert Weatherill (WE-1936A). The nine (9) protected Monterey Pine trees proposed for removal					

are either in poor condition and/or necessary to accommodate the proposed development, as these trees are within the footprint of the proposed development (including building and septic system).The application would be required by current County policies to provide a detailed tree protection plan at the building permit stage to ensure that the remaining trees are protected during construction. **Source:** Project Plans, Project Location, County GIS Maps, County Zoning Regulations, Advanced Tree Care Arborist Report (dated January 10, 2019).					
4.f.	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: The site is not located in an area with an adopted Habitat Conservation Plan or Natural Conservation Community Plan, other approved regional or State habitat conservation plan. **Source:** Project Plans, Project Location, County GIS 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:** Project Plans, Project Location, County GIS map, National Wildlife Refuge System Locator.					
4.h.	Result in loss of oak woodlands or other non-timber woodlands?				X
Discussion: The project site includes no oak woodlands or other timber woodlands. **Source:** Project Plans, 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: The State of California Office of Historic Preservation has not identified any known historical resources on the project parcel or surrounding area. In a review letter dated June 5, 2019, the California Historical Resources Information System also noted no record of historical resources at the project site (Attachment F). Therefore, the project poses no impact. **Source:** Project Location, County GIS Maps, California Register of Historical Resources, California Historical Resources Information System Review Letter (dated June 5, 2019).					

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

Discussion: The project site is immediately surrounded by residential development to the north, west, east and south. Based on the developed conditions of the surrounding properties, it is not likely that the project parcel and surrounding area would contain any archaeological resources. The California Historical Resources Information System's Northwest Information Center at Sonoma State University, in a letter dated June 5, 2019, notes that there is no record of any previous cultural resource studies for the project area and that the project area has a low possibility of containing unrecorded archaeological sites. However, the following mitigation measure is provided in the event that any cultural, paleontological, or archeological resources are encountered during project construction and excavation activities:

Mitigation Measure 4: In the event that cultural, paleontological, or archaeological resources are encountered during site grading or other site work, such work shall immediately be halted in the area of discovery and the project sponsor shall immediately notify the Community Development Director of the discovery. The applicant shall be required to retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The cost of the qualified archaeologist and of any recording, protecting, or curating shall be borne solely by the project sponsor. The archaeologist shall be required to submit to the Community Development Director for review and approval a report of the findings and methods of curation or protection of the resources. No further grading or site work within the area of discovery shall be allowed until the preceding has occurred. Disposition of Native American remains shall comply with CEQA Guidelines Section 15064.5(e).

Source: Project Location, County GIS Maps, California Historical Resources Information System Review Letter (dated June 5, 2019).

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

Discussion: No known human remains are located within the project area or surrounding vicinity. In case of accidental discovery, Mitigation Measure 4 in Section 5.b is recommended.

Source: Project Location, County GIS Maps.

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 of energy resources, during project construction or operation?			X	

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) 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 June 10, 2015, the California Energy Commission (CEC) adopted the 2016 Building Energy Efficiency Standards, which went into effect on January 1, 2017. Under the 2016 Standards, residential buildings are 28 percent more energy efficient and nonresidential buildings are 5 percent more energy efficient than under the 2013 Standards. Because the building permit application was submitted prior to the adoption of the most current standards, the proposed project would comply with the 2016 Building Energy Efficiency Standards which would be verified by the San Mateo County Building Inspection Section prior to the issuance of the building permit. The project would also be required adhere to the provisions of CALGreen and GreenPoints, 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 construction of the project 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 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 demolition and grading would be gas-powered or diesel powered, and the later construction phases would require electricity-powered equipment.

Operation

During operations, project energy consumption would be associated with resident and visitor vehicle trips and delivery trucks. The project is a residential development project served by existing road infrastructure. Pacific Gas and Electric (PG&E) provides electricity to the project area. Due to the proposed construction of a single-family residence, project implementation would result in a permanent increase in electricity over existing conditions. However, such an increase to serve a single-family residence 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. 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. Impacts are less than significant, and no mitigation is required.

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

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

Discussion: The project design and operation would comply with State Building Energy Efficiency Standards, appliance efficiency regulations, and green building standards. Therefore, the project does not conflict with or obstruct state or local renewable energy plans and would not have a significant impact. Furthermore, the development would not cause inefficient, wasteful and unnecessary energy consumption.

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 for the project by Earth Investigations Consultants, Inc. (Earth Investigations), dated September 30, 2016, included as Attachment G. A geotechnical letter was prepared by Geosphere Consultants, Inc. (Geosphere), dated October 3, 2018, which verified the findings and recommendations of the Earth Investigations report while adding additional recommendations, included as Attachment H. A geotechnical report that provided further analysis on the proposed leachfield was subsequently prepared by Geosphere, dated February 26, 2019, included as Attachment I.

The site is located in a seismically active region with the San Andreas fault mapped approximately 5 miles to the northeast, and the Seal Cove fault mapped approximately 1.5 miles to the southwest (Leighton & Associates, 1976; Pampeyan, 1994). There is a series of inferred, northwest trending faults mapped between the site and the Seal Cove fault. The closest is mapped approximately 800 ft. southwest of the site.

While it is not known to have produced a major earthquake in historic time, the Seal Cove fault is considered to be the potential seismic source for a major earthquake affecting the site in the future. The San Andreas fault has produced major Bay area earthquakes and ground rupture in the historic past.

In the event of a future major earthquake (M7.0 or greater) on a nearby segment of the San Andreas fault, it is expected that the site area will receive strong to very strong ground shaking (Petersen and others, 1999). Earth Investigations does not anticipate fault ground rupture across the site because of the distance between the nearest mapped active fault trace and the site.

According to Earth Investigations and Geosphere, the proposed development is feasible from a geotechnical standpoint. They note that this a stable bedrock site that is not constrained by landslides or active faults. It is anticipated that the site would be subjected to one or more major earthquakes over the projected life of the proposed improvements. Given the distance to the San Andreas fault, the risk is nil for occurrence of fault rupture across the site.

Since the project location and its distance from the cited fault zone can result in strong seismic ground shaking in the event of an earthquake, the following mitigation measure is recommended to minimize such impacts to a less than significant level:

Mitigation Measure 5: The design of the proposed development (upon submittal of the Building Permit) on the subject parcel shall generally follow the recommendations cited in the geotechnical reports and letter prepared by Earth Investigation Consultants, Inc. and Geosphere Consultants, Inc. regarding seismic criteria, grading, drilled piers, slab-on grade construction, and surface drainage. Any such changes to the recommendations by the project geotechnical engineer cited in this report and subsequent updates shall be submitted for review and approval by the County's Geotechnical Engineer.

Source: Project Plans, Project Location, San Mateo County Hazards Maps, Earth Investigation Consultants, Inc Geotechnical Investigation – Proposed Residential Development (dated September 30, 2016), Geosphere Consultants, Inc Geotechnical Update Letter (dated October 3, 2018), Geosphere Consultants, Inc Engineering Geologic Evaluation – Proposed Leachfield (dated February 26, 2019).

ii. Strong seismic ground shaking?		X		

Discussion: Pursuant to the discussion in Section 7.a.i, strong seismic ground shaking may occur in the event of an earthquake. However, the mitigation measure provided in Section 7.a.i would minimize impacts to a less than significant level.

Source: Project Plans, Project Location, County Hazards Maps, Earth Investigation Consultants, Inc Geotechnical Investigation – Proposed Residential Development (dated September 30, 2016), Geosphere Consultants, Inc Geotechnical Update letter (dated October 3, 2018), Geosphere Consultants, Inc Engineering Geologic Evaluation – Proposed Leachfield (dated February 26, 2019).

iii. Seismic-related ground failure, including liquefaction and differential settling?		X		

Discussion: Potential for liquefaction or seismically-induced deep-seated landsliding is low given the shallow depth to bedrock. The risk for erosion and shallow landsliding is low provided the recommendations of the report are included in project design and construction.

In addition to the discussion above, the mitigation measure provided in Section 7.a.i would minimize impacts to a less than significant level.

Source: Project Plans, Project Location, County Hazards Maps, Earth Investigation Consultants, Inc Geotechnical Investigation – Proposed Residential Development (dated September 30, 2016), Geosphere Consultants, Inc Geotechnical Update Letter (dated October 3, 2018), Geosphere Consultants, Inc Engineering Geologic Evaluation – Proposed Leachfield (dated February 26, 2019).				
iv. Landslides?		X		
Discussion: Pursuant to the discussion in Section 7.a.i with the associated mitigation measure, the project impacts would be less than significant. **Source:** Project Plans, Project Location, San Mateo County Hazards Maps, Earth Investigation Consultants, Inc Geotechnical Investigation – Proposed Residential Development (dated September 30, 2016), Geosphere Consultants, Inc Geotechnical Update Letter (dated October 3, 2018), Geosphere Consultants, Inc Engineering Geologic Evaluation – Proposed Leachfield (dated February 26, 2019).				
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 located about 1.5 miles from the coastline. Therefore, there would be no impact on coastal cliff or bluff instability or erosion. **Source:** Project Location.				
7.b. Result in substantial soil erosion or the loss of topsoil?		X		
Discussion: The construction of the residence involves 410 cubic yards of cut and 175 cubic yards of fill. Total land disturbance is 0.2-acre. The project is exempt from coverage under a State General Construction Permit. The mitigation measures in Section 3.a. and the following mitigation measure are included to control erosion during both project construction activities. With this mitigation measure, the project impact would be less than significant. **Mitigation Measure 6:** At the time of building permit and encroachment permit application, the applicant shall submit for review and approval, erosion and drainage control plans that show how the transport and discharge of soil and pollutants from and within the project site will be minimized. The plans shall be designed to minimize potential sources of sediment, control the amount of runoff and its ability to carry sediment by diverting incoming flows and impeding internally generated flows, and retain sediment that is picked up on the project site through the use of sediment-capturing devices. The plans shall include measures that limit the application, generation, and migration of toxic substances, ensure the proper storage and disposal of toxic materials, and apply nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters. Said plan shall adhere to the San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including: a. Sequence construction to install sediment-capturing devices first, followed by runoff control measures and runoff conveyances. No construction activities shall begin until after all proposed measures are in place.				

b. Minimize the area of bare soil exposed at one time (phased grading).

c. Clear only areas essential for construction.

d. Within five (5) days of clearing or inactivity in construction, stabilize bare soils through either non-vegetative Best Management Practices (BMPs), such as mulching, or vegetative erosion control methods, such as seeding. Vegetative erosion control shall be established within two (2) weeks of seeding/planting.

e. Construction entrances shall be stabilized immediately after grading and frequently maintained to prevent erosion and to control dust.

f. Control wind-born dust through the installation of wind barriers such as hay bales and/or sprinkling.

g. Soil and/or other construction-related material stockpiled on-site shall be placed a minimum of 200 ft., or to the extent feasible, from all wetlands and drain courses. Stockpiled soils shall be covered with tarps at all times of the year.

h. Intercept runoff above disturbed slopes and convey it to a permanent channel or storm drains by using earth dikes, perimeter dikes or swales, or diversions. Use check dams where appropriate.

i. Provide protection for runoff conveyance outlets by reducing flow velocity and dissipating flow energy.

j. Use silt fence and/or vegetated filter strips to trap sediment contained in sheet flow. The maximum drainage area to the fence should be 0.5 acres or less per 100 ft. of fence. Silt fences shall be inspected regularly, and sediment removed when it reaches 1/3 of fence height. Vegetated filter strips should have relatively flat slopes and be vegetated with erosion-resistant species.

k. Throughout the construction period, the applicant shall conduct regular inspections of the condition and operational status of all structural BMPs required by the approved erosion control plan.

l. No erosion or sediment control measures will be placed in vegetated areas.

m. Environmentally-sensitive areas shall be delineated and protected to prevent construction impacts.

n. Control of fuels and other hazardous materials, spills, and litter during construction.

o. Preserve existing vegetation whenever feasible.

Source: Project Plans, Project Location, County Hazards Maps, Earth Investigation Consultants, Inc Geotechnical Investigation – Proposed Residential Development (dated September 30, 2016), Geosphere Consultants, Inc Geotechnical Update Letter (dated October 3, 2018), Geosphere Consultants, Inc Engineering Geologic Evaluation – Proposed Leachfield (dated February 26, 2019), San Mateo Countywide 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: Pursuant to the discussions in Sections 7.a and 7.b, the associated Mitigation

Measures would minimize the potential for an on-site or off-site landslide, lateral spreading, subsidence, severe erosion, liquefaction or collapse. Therefore, the mitigation measures would minimize impacts to a less than significant level.

Source: Project Plans, Project Location, County Hazards Maps, Earth Investigation Consultants, Inc Geotechnical Investigation – Proposed Residential Development (dated September 30, 2016), Geosphere Consultants, Inc Geotechnical Update Letter (dated October 3, 2018), Geosphere Consultants, Inc Engineering Geologic Evaluation – Proposed Leachfield (dated February 26, 2019), San Mateo Countywide Stormwater Pollution Prevention Program.

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 project geotechnical report concludes that the project parcel is not located on expansive soils. Thus, the project poses no impact.

Source: Project Plans, Project Location, County Hazards Maps, Earth Investigation Consultants, Inc Geotechnical Investigation – Proposed Residential Development (dated September 30, 2016), Geosphere Consultants, Inc Geotechnical Update Letter (dated October 3, 2018), Geosphere Consultants, Inc Engineering Geologic Evaluation – Proposed Leachfield (dated February 26, 2019).

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 proposed project includes the installation of a septic system. San Mateo County Environmental Health Services, which is the agency that regulates septic systems, completed a preliminary review of the project and provided a conditional approval. The review completed by Environmental Health Services did not uncover any issue with the soils in the location which the septic wastewater system is to be located.

Source: Project Plans, Project Location, Earth Investigation Consultants, Inc Geotechnical Investigation – Proposed Residential Development (dated September 30, 2016), Geosphere Consultants, Inc Geotechnical Update Letter (dated October 3, 2018), Geosphere Consultants, Inc Engineering Geologic Evaluation – Proposed Leachfield (dated February 26, 2019).

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

Discussion: Based on the project parcel's existing surrounding land uses, it is not likely that the project parcel and surrounding area would host any paleontological resource or site or unique geologic feature. However, Mitigation Measure 11 in Section 5.b is provided to minimize impacts to a less than significant level if any resources are encountered.

Source: Project Location, County GIS Maps.

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: Greenhouse Gas Emissions (GHG) include hydrocarbon (carbon monoxide; CO2) air emissions from vehicles and machines that are fueled by gasoline. Project-related grading and construction of the proposed residence would result in the temporary generation of GHG emissions along travel routes and at the project site. In general, construction involves GHG emissions mainly from exhaust from vehicle trips (e.g., construction vehicles and personal vehicles of construction workers). Even assuming construction vehicles and workers are based in and traveling from urban areas, the potential project GHG emission levels from construction would be considered minimal. Although the project scope for the project is not likely to generate significant amounts of greenhouse gases, the mitigation measure provided in Section 3.a would ensure that any impacts are less than significant. **Source:** Project Plans, Project Location.					
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 proposed project does not conflict with the County of San Mateo Energy Efficiency Climate Action Plan (EECAP). The project complies with the applicable measures and criteria of the EECAP Development Checklist as exhibited in Attachment K. **Source:** Project Plans, 2013 San Mateo County Energy Efficiency Climate Action Plan, EECAP Checklist.					
8.c.	Result in the loss of forestland or conversion of forestland to non-forest use, such that it would release signifi-cant amounts of GHG emissions, or significantly reduce GHG sequestering?				X
Discussion: The project parcel and surrounding area are not considered forest land. Therefore, the project poses no impact. **Source:** Project Plans, Project Location, County GIS Maps.					
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 site is located about 1.5 miles from the coastline. Therefore, the project would not be impacted by coastal cliff/bluff erosion due to rising sea levels. **Source:** Project Location.					
8.e.	Expose people or structures to a significant risk of loss, injury or death involving sea level rise?				X
Discussion: As discussed in Section 8.d, the project site is located about 1.5 miles from the coastline. Therefore, the project would not be impacted by rising sea levels. **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 project site is not located in an anticipated 100-year flood hazard area as mapped by the Federal Emergency Management Agency (FEMA). The project site and associated parcels are located in FEMA Flood Zone X, which is considered a minimal flood hazard (Panel No. 06081C0136E, effective October 16, 2012). FEMA Flood Zone X areas have a 0.2 percent annual chance of flooding, with areas with one percent annual chance of flooding with average depths of less than 1-foot. Therefore, the project impact would be less than significant. **Source:** Project Location, County GIS Maps, Federal Emergency Management Agency Flood Insurance Rate Map 06081C0136E, effective October 16, 2012.					
8.g.	Place within an anticipated 100-year flood hazard area structures that would impede or redirect flood flows?				X
Discussion: The project site is not located in an anticipated 100-year flood hazard area as mapped by FEMA. Pursuant to the discussion in Section 8.f, the project poses no impact. **Source:** Project Location, County GIS Maps, Federal Emergency Management Agency Flood Insurance Rate Map 06081C0136E, effective October 16, 2012.					

9.	**HAZARDS AND HAZARDOUS MATERIALS**. Would the project:	***Potentially Significant Impacts***	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
9.a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (e.g., pesticides, herbicides, other toxic substances, or radioactive				X

	material)?				
Discussion: The project does not involve the routine use, transport, or disposal of hazardous materials. The project involves the construction and operation of a single-family residence. **Source:** Project Plans.					
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: The routine use of hazardous materials is not proposed for this project. The project involves the construction and operation of a single-family residence. **Source:** Project Plans.					
9.c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
Discussion: The emission or handling of hazardous materials, substances, or waste is not proposed for this project. The project parcel is also not located within one-quarter mile of an existing or proposed school. **Source:** Project Plans, Project Location.					
9.d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
Discussion: The project site is not included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and therefore would not result in the creation of a significant hazard to the public or the environment. **Source:** Project Location, California Department of Toxic Substances Control.					
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 project site is located approximately 1.5 miles northeast of the northerly boundary of the Half Moon Bay Airport, a public airport operated by the County Department of Public Works. Development within certain proximities of the airport are regulated by applicable policies and					

requirements of the Final Half Moon Bay Airport Land Use Compatibility Plan (ALUCP), as adopted by the City/County Association of Governments (C/CAG) on October 9, 2014. The overall objective of the ALUCP safety compatibility guidelines is to minimize the risks associated with potential aircraft accidents for people and property on the ground in the event of an aircraft accident near an airport and to enhance the chances of survival of the occupants of an aircraft involved in an accident that occurs beyond the runway environment. The ALUCP has safety zone land use compatibility standards that restrict land use development that could pose particular hazards to the public or to vulnerable populations in case of an aircraft accident.

The project site is located in the Airport Influence Area (Runway Safety Zone 7), where accident risk level is considered to be low. The AIA Zone does not prohibit residential land uses.

Based on the discussion above, staff has determined that the proposed project complies with the safety compatibility criteria and poses no impact.

Source: Project Plans, Project Location, 2014 Final 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 proposed single-family residence would be located on a privately owned parcel. This parcel receives access from Grant Road via an existing driveway. The proposed project would not impede, change, or close any roadways that could be used for emergency purposes and all existing roads would remain unchanged. There is no evidence to suggest that the project would interfere with any emergency response plan. Therefore, the project poses no impact.

Source: Project Plans, Project Location, County GIS Maps.

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 any local, state or federal fire risk zones. In addition, the project was reviewed by CFPD and received conditional approval subject to compliance with the California Building Code which requires provision of a fire truck turnaround, fire hydrant, and an automatic fire sprinkler system, among other fire service and prevention requirements, for this project. No further mitigation, beyond compliance with the standards and requirements of the CFPD, is necessary.

Source: Project Location, California State Fire Severity Zones Maps, Coastside Fire Protection District (CFPD).

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 project site is not located in such an area.

Source: Project Plans, Project Location, County GIS Maps, Federal Emergency Management

Agency Flood Insurance Rate Map 06081C0136E, effective October 16, 2012.					
9.i.	Place within an existing 100-year flood hazard area structures that would impede or redirect flood flows?				X
Discussion: As discussed in Section 8.f, the project site and remaining vacant parcels are located in Flood Zone X, an area of minimal flood hazard. The project and any future projects on the remaining vacant parcels would not place structures within a 100-year flood hazard area as the project site and remaining parcels are not located within a flood hazard zone that will be inundated by a 100-year flood. **Source:** Project Plans, Project Location, County GIS Maps, Federal Emergency Management Agency Flood Insurance Rate Map 06081C0136E, effective October 16, 2012.					
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: In addition to the discussion Section 8.j, no dam or levee is located in close proximity to the project site, therefore there is no risk of flooding due to failure of a dam or levee. **Source:** Project Plans, Project Location, County GIS Maps, San Mateo County Hazards Maps.					
9.k.	Inundation by seiche, tsunami, or mudflow?				X
Discussion: The project site is not located within a San Mateo County General Plan mapped tsunami and seiche inundation area. **Source:** Project Plans, Project Location, County GIS Maps, San Mateo County Hazards Maps.					

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

Discussion: The proposed project has the potential to generate polluted stormwater runoff during site grading and construction-related activities. The project would be required to comply with the County's Drainage Policy requiring post-construction stormwater flows to be at, or below, pre-construction flow rates. A drainage report was prepared by Sigma Prime Geosciences, Inc., dated June 20, 2019, detailing the proposed drainage system (Attachment J). The drainage report states that the proposed detention system is designed such that post-development runoff would be less than pre-development runoff, and no runoff would be diverted from one drainage area to another. The reports state that there would be no appreciable downstream impacts and that current drainage patterns indicate minimal runoff from adjacent impervious surfaces onto the subject property.

The proposed project, including the discussed drainage report and plans, were reviewed and conditionally approved by the Building Inspection Section's Drainage Section for compliance with County drainage standards. Based on the drainage report and review by the County's Drainage Section, the project is not expected to violate any water quality standards or waste discharge requirements. Based on these findings, the project impact would be less than significant.

Source: Project Plans, Project Location, County GIS Maps, Sigma Prime Geosciences, Inc. Drainage Report (dated June 26, 2019), County Drainage Section.

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: In order to evaluate the geotechnical engineering characteristics of the soil layers underlying the project site, the Earth Investigations and Geosphere reports (discussed in Section 7.a.i.) discussed the five borings drilled on the project parcel. According to the report, groundwater was not encountered.

The project parcel would receive water service from the Montara Water and Sanitary District and does not involve the well construction.

Source: Project Plans, Project Location, San Mateo County Hazards Maps, Earth Investigation Consultants, Inc Geotechnical Investigation – Proposed Residential Development (dated September 30, 2016), Geosphere Consultants, Inc Geotechnical Update Letter (dated October 3, 2018), Geosphere Consultants, Inc Engineering Geologic Evaluation – Proposed Leachfield (dated February 26, 2019).

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 proposed project does not involve the alteration of the course of a stream or river. The project involves the construction of 4,463 sq. ft. of impervious surface. The proposed development on the project parcel would include drainage features that have been approved by the Drainage Section. With Mitigation Measure 6 to address potential impacts during construction activities, the project would have a less than significant impact. **Source:** Project Plans, Project Location, County GIS Maps, Sol Ecology, Inc. Biological Resources Report (dated August 13, 2019), Sigma Prime Geosciences, Inc. Drainage Report (dated June 26, 2019), County Drainage Section.				
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;			X	
Discussion: Pursuant to the discussion in Sections 10.a and 10.c.ii, the proposed project would have a less than significant impact. **Source:** Project Plans, Project Location, County GIS Maps, Sigma Prime Geosciences, Inc. Drainage Report (dated June 26, 2019), County Drainage Section.				
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: Pursuant to the discussion in Sections 10.a and 10.c.ii, the proposed project would have a less than significant impact. **Source:** Project Plans, Project Location, County GIS Maps, Sigma Prime Geosciences, Inc. Drainage Report (dated June 26, 2019), County Drainage Section.				
iv. Impede or redirect flood flows?			X	
Discussion: Pursuant to the discussion in Sections 10.a and 10.c.ii, the proposed project would have a less than significant impact. **Source:** Project Plans, Project Location, County GIS Maps, Sigma Prime Geosciences, Inc. Drainage Report (dated June 26, 2019), County Drainage Section.				
10.d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
Discussion: Pursuant to the discussion in Section 9.k, the proposed project would have a less than significant impact. **Source:** Project Plans, Project Location, County GIS Maps, Federal Emergency Management Agency Flood Insurance Rate Map 06081C0136E, effective October 16, 2012.				

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

Discussion: The Sustainable Groundwater Management Act (SGMA) of 2015 requires local regions to create groundwater sustainability agencies (GSA's) and to adopt groundwater management plans for identified medium and high priority groundwater basins. San Mateo County has nine identified water basins. These basins have been identified as low-priority, are not subject to the SGMA, and there is no current groundwater management agency or plan that oversees these basins. Also, see discussion in Section 10.b.

The project includes an on-site drainage system that complies with the San Mateo County Water Pollution Prevention Program (SMCWPPP) which enforces the State requirements for stormwater quality control.

Source: Project Plans; San Mateo County Office of Sustainability, Groundwater Website https://www.smcsustainability.org/energy-water/groundwater/ .

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

Discussion: As discussed in Section 10.b, the project does not project involve any new wells and would have water service from the Montara Water and Sanitary District. Thus, the project would pose a less than significant impact.

Source: Project Plans, Montara Water and Sanitary District.

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

Discussion: Pursuant to the discussion in Section 10.c and the cited mitigation measures, the proposed project will have a less than significant impact.

Source: Project Plans, Project Location, County GIS Maps, Sigma Prime Geosciences, Inc. Drainage Report (dated June 26, 2019), County Drainage Section.

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: There is no development proposed that would result in the division of an established community. The proposed project is located on a vacant parcel and is surrounded by properties with rural residential development. The project, which includes the construction of a single-family residence, does not require the construction of new road infrastructure and would not result in the division of an established community.

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 has been reviewed for conformance and found to not conflict with applicable policies of the County's LCP and applicable RM-CZ Zoning Regulations as discussed in Section 1.f. The project site's RM-CZ zoning includes the Design Review (DR) District regulations. Based on the discussion provided to Sections 1.a, c, d, f, and g, the project is in compliance with all applicable Design Review standards. Additionally, the RM-CZ Zoning District requires that development comply with the County's Zoning Regulations, Chapter 36A.2. (Development Review Criteria). The project has been reviewed against and found to comply with those applicable criteria. Therefore, the project impact would be less than significant. **Source:** County Local Coastal Program; County Zoning Regulations, Coastside Design Review Committee Recommendation Letter (dated December 26, 2019).				
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: Development density in the RM-CZ zoning district is controlled through the allocation of Density Credits. The amount of density credits a parcel has is determined by the parcel's size, topography and the presence of mapped hazards. Every legal parcel in the RM-CZ Zoning District has at least one density credit. In this instance, because the subject parcel is under 40 acres in size, it has one density credit which allows for a maximum development of one single-family residential home. As all development in this area is controlled by the density credit program, the development of the proposed project would not increase the development density of the surrounding area. Located between two developed parcels, the construction and habitation of a single-family residence on the subject parcel is not expected to encourage off-site development. Though new utility lines will be installed to serve the proposed development these would be private lines/connections, would not be available (or permitted) for other parcels to use, and would be contained on the project parcel (e.g., will not cross parcel boundaries). **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: The proposed project neither involves nor results in any extraction or loss of known mineral resources. Therefore, the project poses no impact. **Source:** Project Plans.				
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 known mineral resources on the project parcel; therefore, the proposed project would not result in the loss of availability of a locally important mineral resource recovery site as delineated on a local general plan, specific plan, or other land use plan. **Source:** Project Plans.				

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: The proposed project would not produce any long-term significant noise source. However, the project would generate short-term noise associated with grading and construction activities. The short-term noise during grading and construction activities would be temporary, where volume and hours are regulated by Section 4.88.360 (*Exemptions*) of the San Mateo County Ordinance Code for Noise Control. The following mitigation measure is recommended to limit any potential impacts related to grading and construction to a less than significant level: **Mitigation Measure 7:** Noise sources associated with demolition, construction, repair, remodeling, or grading of any real property shall be limited to the hours from 7:00 a.m. to 6:00 p.m., weekdays and 9:00 a.m. to 5:00 p.m., Saturdays. Said activities are prohibited on Sundays, Thanksgiving, and				

Christmas (San Mateo Ordinance Code Section 4.88.360). Noise levels produced by construction activities shall not exceed the 80-dBA level at any one moment.

Source: Project Plans, Project Location, San Mateo County Ordinance.

13.b. Generation of excessive ground-borne vibration or ground-borne noise levels?		X		

Discussion: The habitation of the proposed single-family residence is not expected to generate excessive ground-borne vibration or noise levels. As the soils report recommends a drilled pier foundation, as opposed to a pile-driven pier foundation, exposure of persons to or generation of excessive ground-borne vibration (or noise levels) is not expected during construction activities. Mitigation Measure 7 would also ensure that the impact during construction are less than significant.

Source: Project Plans, Project Location, San Mateo County Ordinance.

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: There are no private airstrips in the vicinity of the project site. The project site is located approximately 1.3 miles northeast of the northerly boundary of the Half Moon Bay Airport, a public airport operated by the County Department of Public Works. The project site is not located within the airport's noise exposure contours. Thus, people residing or working in the project area would not be exposed to excessive noise levels. Therefore, the project poses a less than significant impact.

Source: Project Plans, Project Location, 2014 Final 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: As discussed in Section 11.c, intensity of development in this area of San Mateo County is controlled through the allocation of density credits and is parcel specific. It was determined that the project parcel has one available density credit which allows a maximum development of one main residence. The additional population created by those who would live in

the proposed single-family residence is not significant nor is the project expected to induce any significant population growth. The project is located between two developed parcels and would not require the construction of additional new road infrastructure or the expansion of public utilities. All improvements associated with the project are only sufficient to serve the proposed single-family residence, would not be available for use by other parcels, and would not extend beyond parcel boundaries.

Source: Project Plans, Project Location, County Zoning Regulations.

14.b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Discussion: The proposed residence would be located on a parcel that does not currently have a residence; therefore, no existing housing would be displaced. Therefore, the project poses no impact.

Source: Project Plans.

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

	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
15.a. Fire protection?				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 proposed project is to construct a single-family residence in an area which adjoins other single-family residential uses. The proposed project does not involve and is not associated with the provision of new or physically altered government facilities, nor would it generate a need for an increase in any such facilities. Per the review of the Coastside Fire Protection District, the project would not disrupt acceptable service ratios, response times or performance objectives of fire, police, schools, parks, or any other public facilities or energy supply systems. The payment of development fees, such as school fees, user fees, and additional property taxes generated, will allow the maintenances of the existing service levels. No park fees are required since the parcel was created via merger in 1980 and a new parcel is not being created as part of this project. Therefore, the

project poses no impact.

Source: Project Plans, Project Location, Coastside Fire Protection District.

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 project would not increase the use of existing neighborhood or regional parks or other recreational facilities such that significant physical deterioration of the facility would occur or be accelerated. No park fees are required since the parcel was created via merger in 1980 and a new parcel is not being created as part of this project. **Source:** Project Plans, Project Location.				
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 as proposed development is limited to a single-family residential use. **Source:** Project Plans, Project Location.				

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: The County LCP (Policy 2.52) exempts the development of singular single-family dwellings from the development and implementation of a traffic impact analysis and mitigation plan. The traffic trips (comprised of both owners of and guests/visitors to) generated by the new residence would not introduce any significant increase in vehicles on Grant Road, and thus will pose no significant safety impact to other vehicles, pedestrians or bicycles. The adequacy of access to and from the site has been reviewed by the Coastside Fire Protection District and the County Department of Public Works, who have concluded that such access complies with their respective policies and requirements. The proposed development would provide compliant standard and emergency access to the house site on the project parcel.

Per the Screening Thresholds for Land Use Projects section of the Technical Advisory on Evaluating Transportation Impacts in CEQA document published by the Governor's Office of Planning and Research, the proposed project "may be assumed to cause a less-than significant transportation impact" because it generates or attracts fewer than 110 trips per day. Due to the low number of traffic trips anticipated with a single-family residential use, the proposed project would remain well under the threshold.

Therefore, the project poses a less than significant impact.

Source: Project Plans, Project Location, Coastside Fire Protection District, County Local Coastal Program, Screening Thresholds for Land Use Projects Section of the Technical Advisory on Evaluating Transportation Impacts in CEQA.

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: Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. A project's effect on automobile delay does not constitute a significant environmental impact under CEQA. Per Section 15064.3, an analysis of vehicle miles traveled (VMT) attributable to a project is the most appropriate measure of transportation impacts. Other relevant considerations may include the effects of the project on transit and non-motorized travel. It should be noted that currently, the provisions of Section 15064.3 apply only prospectively; determination of impacts based on VMT is not required Statewide until July 1, 2020.

Per Section 15064.3(b)(3), a lead agency may analyze a project's VMT qualitatively based on the availability of transit, proximity to destinations, etc. The proposed project site is located in a rural unincorporated community halfway between Pacifica and Half Moon Bay. The project site is approximately a half-mile away from a public transit stop. The site's proximity to a transit stop would reduce VMT associated with the proposed single-family residence. In addition, given that the project includes only one single-family residence, traffic generated by the project would not have a substantial effect on the operation of local roadways and intersections, nor does the project include any modifications to the existing circulation system in the project vicinity that would result in a traffic safety hazard. The proposed residential use of the parcel would be compatible with the existing rural residential development in the project area. In addition, as discussed in Section 17.a., the project can be assumed to cause a less-than significant transportation impact because it would generate or attract fewer than 110 trips per day per the Technical Advisory on Evaluating Transportation Impacts in CEQA document published by the Governor's Office of Planning and

Research. Therefore, the project would result in a less-than-significant impact.

Source: Project Location, CEQA Guidelines Section 15064.3, Subdivision (c) Applicability, Screening Thresholds for Land Use Projects Section of the Technical Advisory on Evaluating Transportation Impacts in CEQA.

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 would be served by an existing driveway off of Grant Road. The project would not require the construction of road infrastructure nor does it propose to alter any existing roadway that would create a hazard due to sharp turns or dangerous intersections. Additionally, the construction and operation/habitation of the project does not propose the permanent utilization of equipment that would be incompatible with the existing vehicular traffic on Grant Road and any other connecting roads. No mitigation is necessary. Also see discussion in Section 17.a.

Source: Project Plans, Project Location.

17.d. Result in inadequate emergency access?				X

Discussion: The project proposes to construct a firetruck turnaround on the parcel to accommodate any required emergency access. Upon review of the proposed project and fire truck turnaround, CFPD has conditionally approved the project as having adequate existing (e.g., Grant Road) and proposed (e.g., turnaround) emergency access. Thus, the project poses no impact.

Source: Project Plans, Coastside Fire Protection District.

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				X

historical resources as defined in Public Resources Code section 5020.1(k)				

Discussion: Pursuant to discussion in Sections 5.a and 5.b and that 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), the project poses no impact.

Source: Project Location, County GIS Maps, California Register of Historical Resources, California Historical Resources Information System Review Letter (dated June 5, 2019), County General Plan.

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: This project is not subject to Assembly Bill 52 for California Native American Tribal Consultation requirements, as no traditionally or culturally affiliated tribe has requested, in writing, to the County to be informed of proposed projects in the geographic project area. However, a Sacred Lands File and Native American Contacts List Request was sent to the Native American Heritage Commission (NAHC) in December 2019. A Sacred Lands File search was completed by the NAHC and no sacred lands were found in the subject area. In following the NAHC's recommended Best Practices, the County has also contacted local Native American tribes who may have knowledge of cultural resources in the project area. As of the date of this report, no tribe has requested consultation. While the project is not expected to cause a substantial adverse change to any potential tribal cultural resources, the following mitigation measures are recommended to minimize any potential significant impacts to unknown tribal resources:

Mitigation Measure 8: Should any traditionally or culturally affiliated Native American tribe respond to the County's issued notification for consultation, such process as required by State Assembly Bill 52 shall be completed and any resulting agreed upon measures for avoidance and preservation of identified resources be taken prior to implementation of the project.

Mitigation Measure 9: 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 10: Any inadvertently discovered tribal cultural resources shall be 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 Location, County GIS Maps, Native American Heritage Commission, State Assembly Bill 52.

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 proposed project would rely on a private septic system because there is no municipal sewer service available in this area of unincorporated San Mateo County. Environmental Health Services reviewed the proposed septic system design, found it be in compliance with the prevailing standards and regulations, and conditionally approved the project. The proposed project would have water service from the Montara Water and Sewer District. The proposed project does not involve or require any water or wastewater treatment facilities that would exceed any requirements of the Regional Water Quality Control Board. In addition, the project would connect to PG&E infrastructure for electric power. Therefore, there is no impact and no mitigation is required. **Source:** Project Plans, San Mateo County Environmental Health Services, Montara Water and Sanitary District.					
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 proposed project would have adequate water service connections from the Montara Water and Sewer District. Therefore, the project poses no impact. **Source:** Project Plans, Montara Water and Sewer District.					
19.c.	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
Discussion: Pursuant to the discussion in Section 19.a, the project poses no impact. **Source:** Project Plans, Project Location, County GIS.					
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				X

waste reduction goals?				

Discussion: The construction of the project would generate some solid waste, both during construction and after completion (on an ongoing basis typical for that generated by residential uses). Similar to all other properties in the Midcoast area, the residence would receive municipal trash and recycling pick-up service by Recology. The County's local landfill facility is the Corinda Los Trancos (Ox Mountain) Landfill, located at 12310 San Mateo Road (State Highway 92), a few miles east of Half Moon Bay. This landfill facility has permitted capacity/service life until 2034. Therefore, the project impact is less than significant.

Source: San Mateo County Environmental Health Services.

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

Discussion: Solid waste generated by a new single-family residence is expected to be minimal. The project site would receive solid waste service by Recology. The landfill cited in Section 18.f. is licensed and operates pursuant to all Federal, State and local statutes and regulations as overseen by the San Mateo County Health System's Environmental Health Services. Therefore, the project impact will be less than significant.

Source: San Mateo County Environmental Health Services.

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: The project is located outside and adjacent to a High Fire State Responsibility Area as identified by the County's GIS maps.

No revisions to the adopted Emergency Operations Plan would be required as a result of the proposed Project. The nearest public service is the Coastside Fire Protection District - Station 44 located approximately 1.2 miles southwest of the site at 501 Stetson Street Moss Beach, CA 94038 and would not be impacted because primary access to all major roads would be maintained during construction. As discussed in Section 9 (Hazards and Hazardous Materials), the proposed project 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.

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				X

	the uncontrolled spread of a wildfire?				
Discussion: Pursuant to the discussion in Section 20.a, the proposed project would not exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. **Source:** Project Location, County GIS Maps.					
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 does not involve a new road, fuel break, emergency water source, or other associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Any new power lines would be installed underground. **Source:** Project Location, County GIS Maps.					
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: While the house site itself is generally level, the overall parcel moderately slopes downward toward the west. The proposed on-site drainage facilities have been sized and appropriately placed to retain the stormwater on-site and would allow it to percolate into the ground as determined by the review of 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 these structures to significant risk from flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. **Source:** Project Plans, San Mateo County Drainage Section.					

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,		X		

	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?				
Discussion: The project as proposed with all the recommended mitigation measures discussed in the previous sections would ensure that potential impacts are less than significant. **Source:** All Applicable Sources Previously Cited in This Document.					
21.b.	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)		X		
Discussion: The project as proposed with all the recommended mitigation measures discussed in the previous sections would minimize potential impacts to a less than significant level. **Source:** All Applicable Sources Previously Cited in This Document.					
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 as proposed with all the recommended mitigation measures discussed in the previous sections would minimize potential impacts to a less than significant level. **Source:** All Applicable Sources Previously Cited in This Document.					

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
National Marine Fisheries Service		X	
Regional Water Quality Control Board		X	
San Francisco Bay Conservation and Development Commission (BCDC)		X	
Sewer/Water District:		X	
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: The applicant shall require construction contractors to implement all the Bay Area Air Quality Management District's Basic Construction Mitigation Measures, listed below, and include these measures on permit plans submitted to the Building Inspection Section:

a. Water all active construction areas at least twice daily.

b. Apply water two times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking, and staging areas at construction sites. Also, hydroseed or apply non-toxic soil stabilizers to inactive construction areas.

c. Sweep adjacent public streets daily (preferably with water sweepers) if visible soil material is carried onto them.

d. Limit traffic speeds on unpaved roads within the project parcel to 15 miles per hour.

e. All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne 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.

Mitigation Measure 2: Work shall only be performed during daylight hours at least 30 minutes after sunrise and ending at least 30 minutes before sunset when animals including CRLF are least active. Furthermore, no ground disturbance or foundation work shall be performed during or within 48 hours after any rain event (greater than 0.5 inches) between October 31 and April 31 when CRLF species are most likely to utilize upland habitats. Lastly, wildlife exclusion fencing shall be placed between the drainage ditch and proposed construction to prevent CRLF from entering the site during activities. This measure shall be included in permit plans submitted to the Building Inspection Section.

Mitigation Measure 3: Vegetation/tree removal shall be performed outside of the nesting season (between September 1 and January 31). If work must be performed during the nesting season, a pre-construction nesting bird survey shall be performed by a qualified biologist. 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 shall remain in place until all young have fledged, or the biologist has confirmed that the nest has been naturally predated. This measure shall be included in permit plans submitted to the Building Inspection Section.

Mitigation Measure 4: In the event that cultural, paleontological, or archaeological resources are encountered during site grading or other site work, such work shall immediately be halted in the area of discovery and the project sponsor shall immediately notify the Community Development Director of the discovery. The applicant shall be required to retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The cost of the qualified archaeologist and of any recording, protecting, or curating shall be borne solely by the project sponsor. The archaeologist shall be required to submit to the Community Development Director for review and approval a report of the findings and methods of curation or protection of the resources. No further grading or site work within the area of discovery shall be allowed until the preceding has occurred. Disposition of Native American remains shall comply with CEQA Guidelines Section 15064.5(e).

Mitigation Measure 5: The design of the proposed development (upon submittal of the Building Permit) on the subject parcel shall generally follow the recommendations cited in the geotechnical reports and letter prepared by Earth Investigation Consultants, Inc. and Geosphere Consultants, Inc. regarding seismic criteria, grading, drilled piers, slab-on grade construction, and surface drainage. Any such changes to the recommendations by the project geotechnical engineer cited in this report and subsequent updates shall be submitted for review and approval by the County's Geotechnical Engineer.

Mitigation Measure 6: At the time of building permit and encroachment permit application, the applicant shall submit for review and approval, erosion and drainage control plans that show how the transport and discharge of soil and pollutants from and within the project site will be minimized. The plans shall be designed to minimize potential sources of sediment, control the amount of runoff and its ability to carry sediment by diverting incoming flows and impeding internally generated flows, and retain sediment that is picked up on the project site through the use of sediment-capturing devices. The plans shall include measures that limit the application, generation, and migration of toxic substances, ensure the proper storage and disposal of toxic materials, and apply nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters. Said plan shall adhere to the San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including:

a. Sequence construction to install sediment-capturing devices first, followed by runoff control measures and runoff conveyances. No construction activities shall begin until after all proposed measures are in place.

b. Minimize the area of bare soil exposed at one time (phased grading).

c. Clear only areas essential for construction.

d. Within five (5) days of clearing or inactivity in construction, stabilize bare soils through either non-vegetative Best Management Practices (BMPs), such as mulching, or vegetative erosion control methods, such as seeding. Vegetative erosion control shall be established within two (2) weeks of seeding/planting.

e. Construction entrances shall be stabilized immediately after grading and frequently maintained to prevent erosion and to control dust.

f. Control wind-born dust through the installation of wind barriers such as hay bales and/or sprinkling.

g. Soil and/or other construction-related material stockpiled on-site shall be placed a minimum of 200 ft., or to the extent feasible, from all wetlands and drain courses. Stockpiled soils shall be covered with tarps at all times of the year.

h. Intercept runoff above disturbed slopes and convey it to a permanent channel or storm drains by using earth dikes, perimeter dikes or swales, or diversions. Use check dams where appropriate.

i. Provide protection for runoff conveyance outlets by reducing flow velocity and dissipating flow energy.

j. Use silt fence and/or vegetated filter strips to trap sediment contained in sheet flow. The maximum drainage area to the fence should be 0.5 acres or less per 100 ft. of fence. Silt fences shall be inspected regularly, and sediment removed when it reaches 1/3 of fence height. Vegetated filter strips should have relatively flat slopes and be vegetated with erosion-resistant species.

k. Throughout the construction period, the applicant shall conduct regular inspections of the condition and operational status of all structural BMPs required by the approved erosion control plan.

l. No erosion or sediment control measures will be placed in vegetated areas.

m. Environmentally-sensitive areas shall be delineated and protected to prevent construction impacts.

n. Control of fuels and other hazardous materials, spills, and litter during construction.

o. Preserve existing vegetation whenever feasible.

Mitigation Measure 7: Noise sources associated with demolition, construction, repair, remodeling, or grading of any real property shall be limited to the hours from 7:00 a.m. to 6:00 p.m., weekdays and 9:00 a.m. to 5:00 p.m., Saturdays. Said activities are prohibited on Sundays, Thanksgiving, and Christmas (San Mateo Ordinance Code Section 4.88.360). Noise levels produced by construction activities shall not exceed the 80-dBA level at any one moment.

Mitigation Measure 8: Should any traditionally or culturally affiliated Native American tribe respond to the County's issued notification for consultation, such process as required by State Assembly Bill 52 shall be completed and any resulting agreed upon measures for avoidance and preservation of identified resources be taken prior to implementation of the project.

Mitigation Measure 9: 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 10: Any inadvertently discovered tribal cultural resources shall be 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)

March 3, 2020 — Ruemel Panglao, Planner III

Date — (Title)

ATTACHMENTS

A. Vicinity Map
B. Project Plans
C. Coastside Design Review Committee Recommendation Letter (dated December 26, 2019)
D. Sol Ecology, Inc. Biological Resources Report (dated August 13, 2019)
E. Advanced Tree Care Arborist Report (dated January 10, 2019)
F. California Historical Resources Information System Review Letter (dated June 5, 2019)
G. Earth Investigation Consultants, Inc Geotechnical Investigation – Proposed Residential Development (dated September 30, 2016)
H. Geosphere Consultants, Inc Geotechnical Update letter (dated October 3, 2018)

I. Geosphere Consultants, Inc Engineering Geologic Evaluation – Proposed Leachfield (dated February 26, 2019)

J. Sigma Prime Geosciences, Inc. Drainage Report (dated June 26, 2019)

K. EECAP Checklist

RSP:cmc – RSPEE0069_WCH.DOCX

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT A

San Mateo County

Vicinity Map - 1237 Grant Road, Montara

0.14 0 0.07 0.14 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

1: 4,514

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

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT B

NEW SINGLE FAMILY HOME
1237 GRANT ROAD, MONTARA, CA

PLN2018-00322

RECEIVED
JUN 21 2019
San Mateo County Planning Division

ABBREVIATIONS

@	AT
#	NUMBER
AB	ANCHOR BOLT
A/C	AIR CONDITIONER
AFF	ABOVE FINISHED FLOOR
APPROX	APPROXIMATE
ASF	ABOVE SUBFLOOR
AS	ABOVE SLAB
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BOT	BOTTOM
CAB	CABINET
CB	CATCH BASIN
CL	CENTERLINE
CLG	CEILING
CLST	CLOSET
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CONT	CONTINUOUS
D	DRYER
DBL	DOUBLE
DEPT	DEPARTMENT
DEG	DEGREES
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DR	DOOR
DS	DOWNSPOUT
DW	DISHWASHER
DWG	DRAWING
(E)	EXISTING
EA	EACH
ELEC	ELECTRICAL
ELEV	ELEVATION
ENG	ENGINEER
EQPT	EQUIPMENT
EXT	EXTERIOR
FAU	FORCED AIR UNIT
FAR	FLOOR AREA RATIO
FD	FLOOR DRAIN
FF	FINISHED FLOOR
FIN	FINISH
FL	FLOOR
FLUOR	FLUORESCENT
FOUND	FOUNDATION
FP	FIREPLACE
FT	FOOT OR FEET
FTG	FOOTING
FURN	FURNACE
G	GAS
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GD	GARBAGE DISPOSAL
GL	GLASS
GR	GRADE
GYP BD	GYPSUM BOARD
HC	HANDICAP
HDR	HEADER
HDWD	HARDWOOD
HT	HEIGHT
HORIZ	HORIZONTAL
HR	HOUR
INSUL	INSULATION
INT	INTERIOR
JT	JOINT OR JOINT TRENCH
LINEN	LINEN CLOSET
LAM	LAMINATE
LAV	LAVATORY
LT	LIGHT
MAX	MAXIMUM
MECH	MECHANICAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MLDG	MOULDING
MTD	MOUNTED
MTL	METAL
N	NORTH
(N)	NEW
N/A	NOT APPLICABLE
NA	NOT AVAILABLE
NIC	NOT IN CONTRACT
NOM	NOMINAL
NR	NON-RATED
NSF	NET SQUARE FEET
NTS	NOT TO SCALE
O	OVEN
OA	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER OR OVERFLOW DRAIN
OFF	OFFICE
OPNG	OPENING
OH	OVERHANG
O/H	OVERHEAD
OPP	OPPOSITE
PL	PLATE OR PROPERTY LINE
PLYWD	PLYWOOD
PR	PAIR
PT	POINT OR PRESSURE TREATED
R	RADIUS
RAG	RETURN AIR GRILLE
RD	ROOF DRAIN
REF	REFRIGERATOR
REINF	REINFORCED OR REINFORCEMENT
REQ'D	REQUIRED
REV	REVISION
RHB	RADIANT HEATING BOILER
RM	ROOM
RO	ROUGH OPENING
ROW	RIGHT-OF-WAY
S	SOUTH
SB	SETBACK
SCHED	SCHEDULE
SD	SMOKE DETECTOR/STORM DRAIN
SF	SQUARE FEET OR SQUARE FOOT
SH	SHOWER HEAD
SHT	SHEET
SHWR	SHOWER
SHTG	SHEATHING
SIM	SIMILAR
SL	SLIDING
SPEC	SPECIFICATION
SQ	SQUARE
SS	SANITARY SEWER
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUB	SUBCONTRACTOR
SUBFLR	SUBFLOOR
SW	SHEAR WALL
SYM	SYMMETRICAL
T	TILE, TREAD, TOP, OR TRANSFORMER
T & G	TONGUE AND GROOVE
TBD	TO BE DETERMINED
TEL	TELEPHONE
THK	THICK
TO	TOP OF
TOC	TOP OF CURB
TOP	TOP OF PLATE
TOS	TOP OF SUBFLOOR
TOW	TOP OF WALL
TP	TOP OF PAVEMENT
TV	TELEVISION
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W	WEST, WASHER, OR WATER
W/	WITH
WC	WATER CLOSET
WD	WOOD
WH	WATER HEATER
W x H	WIDTH BY HEIGHT
WNDW	WINDOW
W/O	WITHOUT
WP	WATERPROOF
WR	WATER RESISTANT
WT	WEIGHT

PROJECT SCOPE

NEW TWO-STORY, SINGLE-FAMILY HOME WITH 2-CAR ATTACHED GARAGE.

PLANNING DATA

PROJECT COMMON ADDRESS:
1237 GRANT RD
MONTARA, CA 94037

ASSESSOR'S PARCEL NUMBER: 036-225-130

ZONING: RM-CZ/DR/CD

BUILDING CODE DATA

TYPE OF OCCUPANCY: R3/U

CONSTRUCTION TYPE: VB

BEARING AND NON-BEARING WALLS (LESS THAN 5' FROM PROPERTY LINE): 1-HOUR

OPENINGS NOT PERMITTED LESS THAN 3' FROM PROPERTY LINE

NUMBER OF STORIES: 2

ALL WORK TO CONFORM TO 2016 CRC, CBC, CFC, CPC, CMC, CEC, 2016 CALIFORNIA ENERGY CODE, AND 2016 CGBC

PROJECT DIRECTORY

SERVICE	COMPANY	CONTACT	TELEPHONE
APPLICANT / OWNER	-	JORDAN MCWHERTER	(650) 888-9588
CIVIL ENGINEER	ROUND HOUSE INDUSTRIES	MIKE O'CONNELL	(650) 303-0495
DRAFTING/DESIGN	-	JORDAN MCWHERTER	(650) 888-9588
SURVEYOR	SAVIOR P. MICALLEFF LAND SURVEYING	SAVIOR MICALLEF	(805) 709-2423
SOILS ENGINEER	EARTH INVESTIGATIONS	JOEL BALDWIN	(650) 557-0262
TITLE 24	ENERGY DESIGN GROUP	MILES HANCOCK	

PROJECT NOTES

* FIRE SPRINKLERS ARE REQUIRED UNDER A SEPARATE PERMIT. THE FIRE SPRINKLER SYSTEM SHALL BE DESIGNED AND INSTALLED PER NFPA 13D STANDARDS.

CALGREEN CONSTRUCTION REQUIREMENTS

* CONTRACTOR SHALL PROVIDE, AT THE TIME OF FINAL INSPECTION, AN OPERATION AND MAINTENANCE MANUAL TO THE OWNER OR OCCUPANT, ADDRESSING ITEMS 1 THROUGH 10 IN CALGREEN SECTION 4.410.1
* PER CALGREEN SECTION 4.408.2, CONTRACTOR SHALL PROVIDE AND SUBMIT A CONSTRUCTION WASTE MANAGEMENT PLAN, DIVERTING A MINIMUM OF 65% OF WASTE GENERATED AT THE SITE TO RECYCLE OR SALVAGE, TO THE BUILDING DEPARTMENT. THE FOLLOWING INFORMATION SHALL BE PROVIDED IN THE PLAN:
  - IDENTIFY MATERIALS TO BE RECYCLED, REUSED, OR SALVAGED
  - SPECIFY IF MATERIALS WILL BE SORTED ON SITE OR MIXED FOR TRANSPORTATION
  - IDENTIFY THE DIVERSION FACILITY(IES) TO BE USED
  - IDENTIFY CONSTRUCTION METHODS TO BE USED TO LIMIT WASTE GENERATION
  - SPECIFY THAT THE AMOUNT OF MATERIALS DIVERTED ARE TO BE CALCULATED BY WEIGHT OR VOLUME
* AUTOMATIC IRRIGATION SYSTEMS CONTROLLERS INSTALLED AT THE TIME OF FINAL INSPECTION SHALL BE WEATHER-BASED.
* PROTECT ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, AND CONDUITS AT EXTERIOR WALLS AGAINST THE PASSAGE OF RODENTS.
* COVER DUCT OPENINGS AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS DURING CONSTRUCTION.
* ADHESIVES, SEALANTS, AND CAULKS SHALL BE COMPLIANT WITH VOC AND OTHER TOXIC COMPOUND LIMITS.
* PAINTS, STAINS, AND OTHER COATINGS SHALL BE COMPLIANT WITH VOC LIMITS.
* AEROSOL PAINTS AND COATINGS SHALL BE COMPLIANT WITH PRODUCT WEIGHTED MIR LIMITS FOR ROC AND OTHER TOXIC COMPOUNDS.

VERIFICATION OF COMPLIANCE SHALL BE PROVIDED.

* CARPET AND CARPET SYSTEMS SHALL BE COMPLIANT WITH VOC LIMITS.
* MINIMUM OF 80% OF FLOOR AREA RECEIVING RESILIENT FLOORING SHALL COMPLY WITH SECTION 4.504.4.
* PARTICLEBOARD, MEDIUM DENSITY FIBERBOARD, AND HARDWOOD PLYWOOD USED IN INTERIOR FINISH SYSTEMS SHALL COMPLY WITH LOW FORMALDEHYDE EMISSION STANDARDS.
* INSTALL CAPILLARY BREAK AND VAPOR RETARDER AT SLAB ON GRADE FOUNDATIONS.
* CHECK MOISTURE CONTENT OF BUILDING MATERIALS USED IN WALL AND FLOOR FRAMING BEFORE ENCLOSURE.
* EACH BATHROOM SHALL BE MECHANICALLY VENTILATED WITH AN ENERGY STAR EXHAUST FAN, AND FAN MUST BE CONTROLLED BY A HUMIDITY CONTROL.

SYMBOLS

- SECTION CUT DETAIL NUMBER / SHEET ON WHICH IT OCCURS
- DETAIL NUMBER / SHEET ON WHICH IT OCCURS
- REVISION CLOUD
- 1 REVISION NUMBER
- 1 GRIDLINE IDENTIFICATION
- 2% SLOPE — DOWNSLOPE INDICATION
- SHOWER HEAD

PROJECT INFORMATION

LOT SIZE	4.7 ACRES (204,732 SF)
LEVEL 1 LIVING AREA	1,842 SF (CONDITIONED)
LEVEL 2 LIVING AREA	1,653 SF (CONDITIONED)
(N) TOTAL LIVING AREA	3,495 SF (CONDITIONED)
(N) GARAGE	433 SF (UN-CONDITIONED)
(N) COVERED CONC DECK	356 SF (UN-CONDITIONED)
(N) WORK SHOP	383 SF (UN-CONDITIONED)
(N) UNCOVERED CONC DECK	? SF (UN-CONDITIONED)
(E) BARN (TO REMAIN)	754 SF (UN-CONDITIONED)
(N) TOTAL FLOOR AREA	3,495+433+356+383+754=5,421 SF
FLOOR AREA RATIO	5,421 SF/204,732 SF = 2.65%
NEW ALTERED LANDSCAPE AREA	2,480 SF
NEW HARDSCAPED AREAS	650 SF
NEW TOTAL IMPERVIOUS SURFACES	3,271 SF
AREA OF NATURAL VEGETATION TO REMAIN	198,981 SF

DRAWING INDEX

REV	DATE	DESCRIPTION
1	04/10/2018	PRE APPLICATION MEETING
2	08/15/2018	PLANNING SUBMITTAL
3	11/14/2018	PLANNING RESUBMITTAL
4	03/07/2019	2ND PLANNING RESUBMITTAL
5	06/20/2019	3RD PLANNING RESUBMITTAL

PROJECT NAME:
NEW SINGLE FAMILY HOME
MCWHERTER RESIDENCE

PROJECT ADDRESS:
1237 GRANT ROAD
MONTARA, CA 94037

PROJECT SCOPE:
(N) TWO STORY, SINGLE FAMILY HOME WITH (N) ATTACHED GARAGE

SHEET TITLE
TITLE SHEET/
PROJECT INFO

SHEET
A0.0

9/20/2019 10:18:10 PM

1 3D View 9

2 3D View 10

3 3D View 11

4 3D View 12

5 3D View 13

6 3D View 14

7 3D View 15

8 3D View 16

10 3D View 18

REV	DATE	DESCRIPTION
1	04/10/2018	PRE APPLICATION MEETING
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PROJECT NAME:
NEW SINGLE FAMILY HOME
MCWHERTER RESIDENCE

PROJECT ADDRESS:
1237 GRANT ROAD
MONTARA, CA 94037

PROJECT SCOPE:
(N) TWO STORY, SINGLE FAMILY HOME WITH (N) ATTACHED GARAGE

SHEET TITLE
EXTERIOR CAMERA VIEWS

SHEET
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1 DESIGN VIEW 1

3 DESIGN VIEW 2

2 APPROACH VIEW 2

4 DESIGN VIEW 3

REV	DATE	DESCRIPTION
1	04/10/2018	PRE APPLICATION MEETING
2	08/16/2018	PLANNING SUBMITTAL
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PROJECT NAME:
NEW SINGLE FAMILY HOME
MCWHERTER RESIDENCE

PROJECT ADDRESS:
1237 GRANT ROAD
MONTARA, CA 94037

PROJECT SCOPE:
(N) TWO STORY, SINGLE FAMILY HOME WITH (N) ATTACHED GARAGE

SHEET TITLE
3D VIEWS

SHEET
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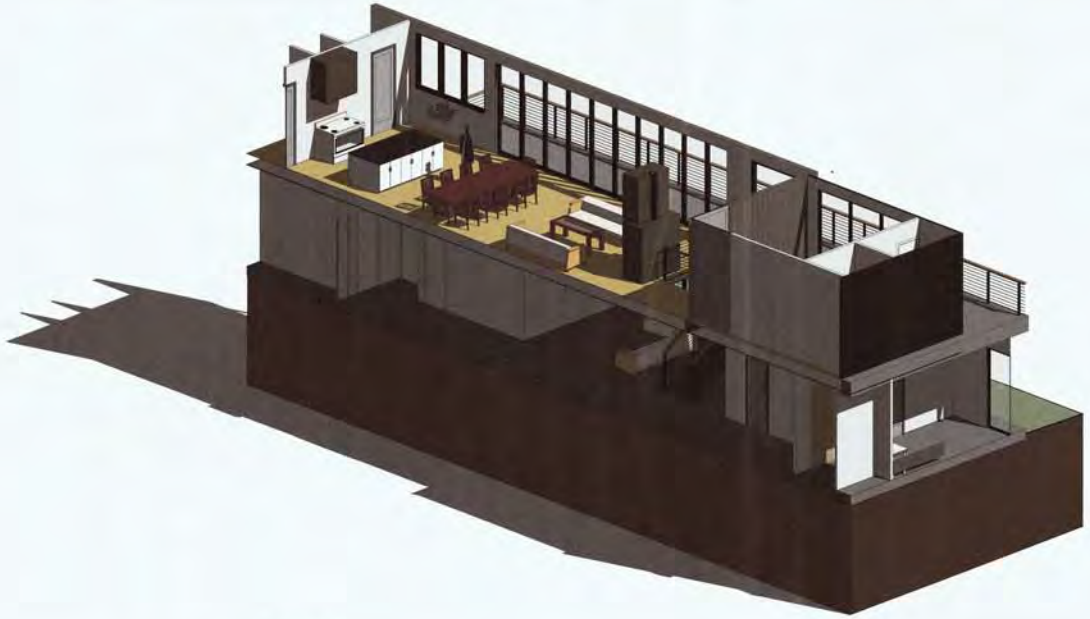

1 3D BOX VIEW

2 MATERIALS PERSPECTIVE

1 7/8" CORRUGATED METAL ROOFING COLOR TRUTEN A606 (TYP.)
2 PLATINUM STAINED SPRUCE CLADDING (TYP.)
3 BLACK STAINED SPRUCE CLADDING (TYP.)
4 ROOF FASCIA SAME MATERIAL AS SIDING (TYP.)
5 MIN 42" HIGH RAILING WITH 3"x3" STEEL POSTS WITH WOVEN 3/4" MESH AND WOOD CAP
6 TRIMLESS BLACK ALUMINUM DOORS AND WINDOWS BY ANDERSON.
7 CONCRETE DECKING
8 CERTAINTEED FLINTLASTIC SA BUILT UP, SELF-ADHERING, MODIFIED BITUMEN ROOFING SYSTEM, OR SIMILAR

REV	DATE	DESCRIPTION
1	04/10/2018	PRE APPLICATION MEETING
2	08/16/2016	PLANNING SUBMITTAL
3	11/14/2018	PLANNING RESUBMITTAL
4	03/07/2019	2ND PLANNING RESUBMITTAL
5	06/20/2019	3RD PLANNING RESUBMITTAL

PROJECT NAME
NEW SINGLE FAMILY HOME
MCWHERTER RESIDENCE

PROJECT ADDRESS
1237 GRANT ROAD
MONTARA, CA 94037

PROJECT SCOPE
(N) TWO STORY, SINGLE FAMILY HOME WITH (N) ATTACHED GARAGE

SHEET TITLE
3D CUTAWAY AND MATERIALS PERSPECTIVE

SHEET
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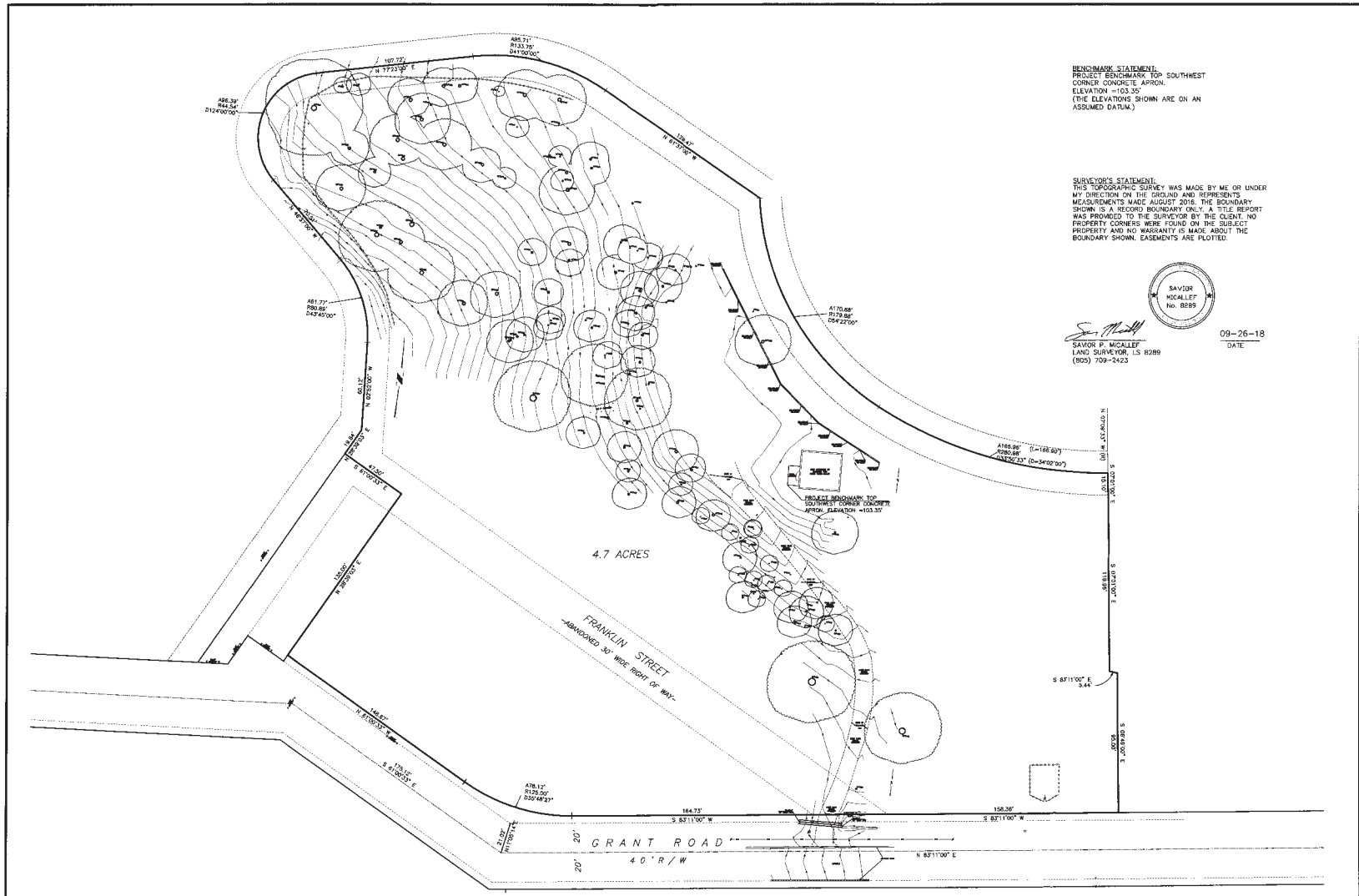


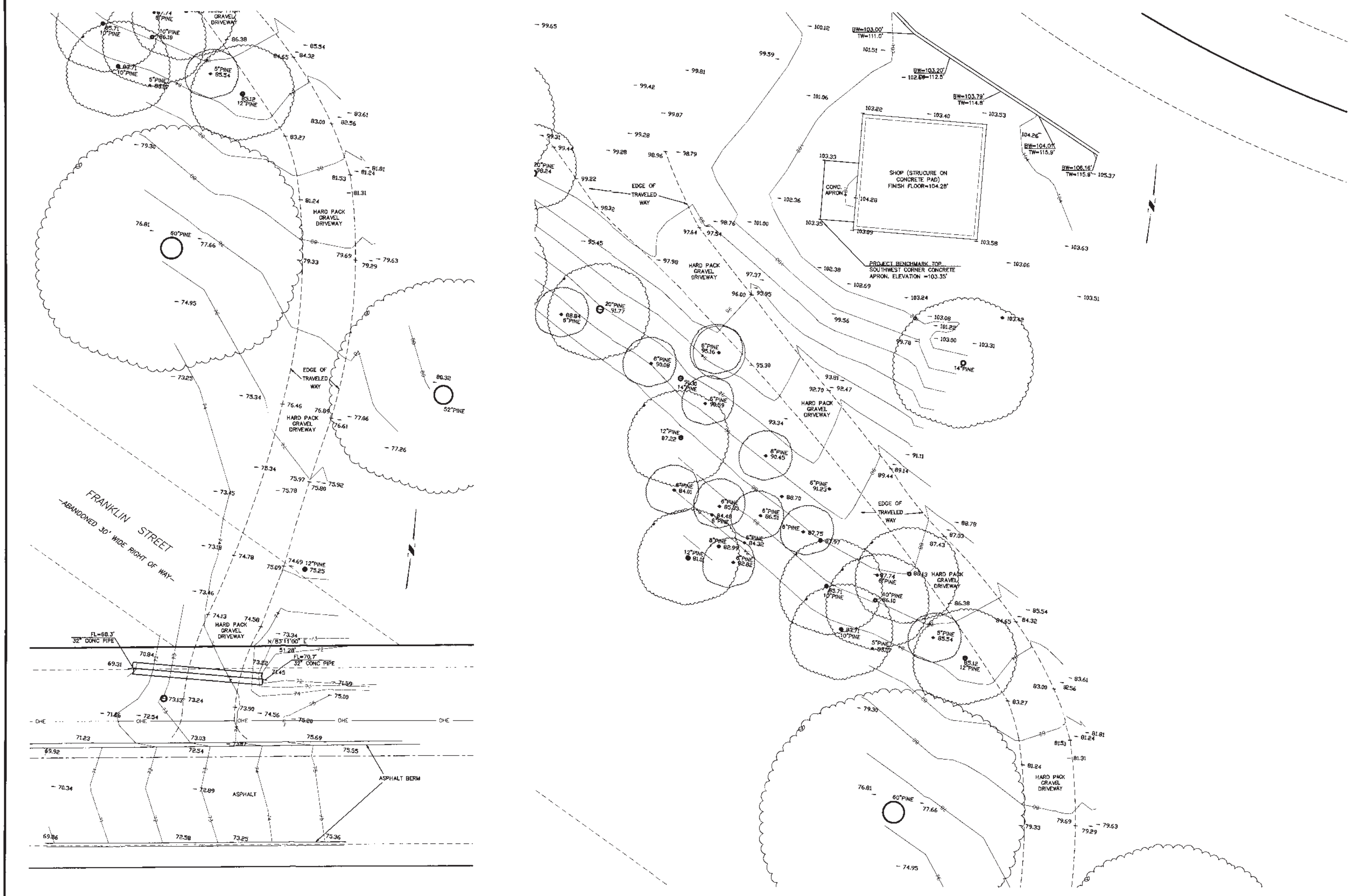
SAVIOR P. MCALLEF LAND SURVEYING
1237 MONTARA ROAD
SOUTH SAN FRANCISCO, CA 94080
805/709-2423

TOPOGRAPHIC SURVEY OF 1237 GRANT RD, MONTARA

(APN 036-225-130)

UNINCORPORATED SAN MATEO COUNTY CALIFORNIA

09-26-18	
1"=30'	
SPM	
SPM	

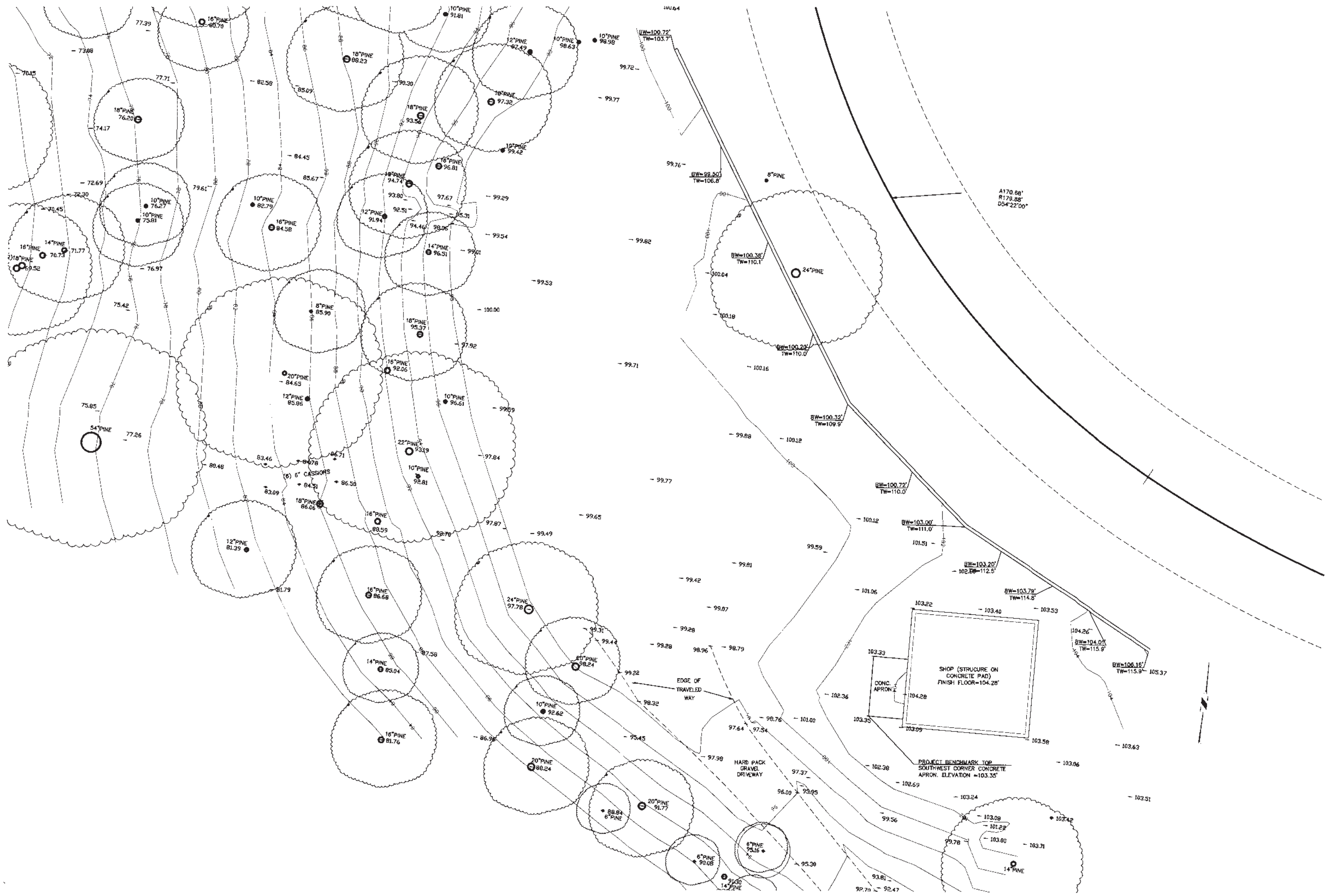


SAVIOR P. MICALLEF LAND SURVEYING
421 WILDWOOD DRIVE
SOUTH SAN FRANCISCO, CA 94080
805/709-2423

TOPOGRAPHIC SURVEY OF 1237 GRANT RD, MONTARA
(APN 036-225-130)

UNINCORPORATED SAN MATEO COUNTY
CALIFORNIA

2 6



SAVIOR P. MICALLEF LAND SURVEYING
421 WILDWOOD DRIVE
SOUTH SAN FRANCISCO, CA 94080
805/709-2423

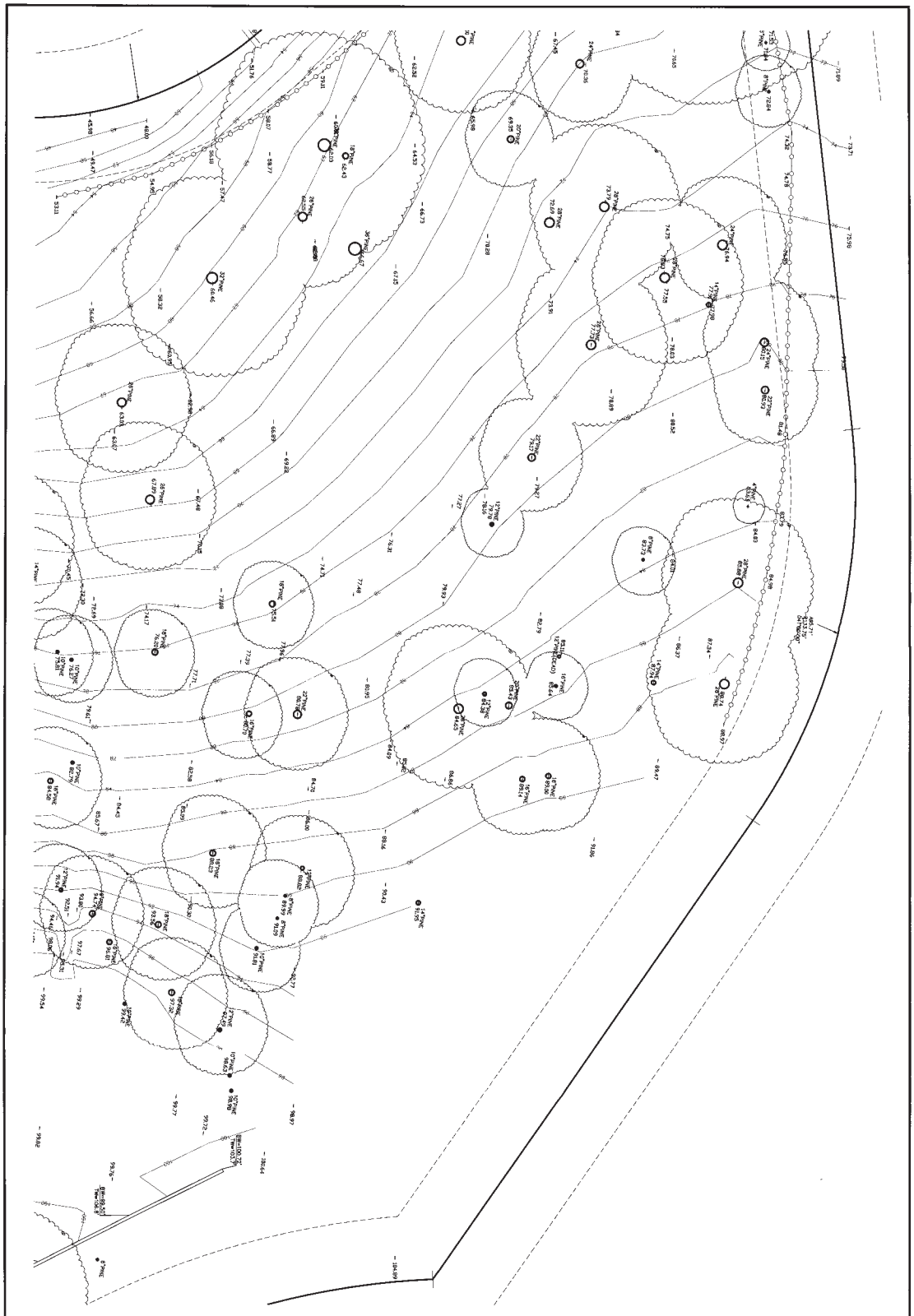
TOPOGRAPHIC SURVEY OF 1237 GRANT RD, MONTARA

(APN 036-225-130)

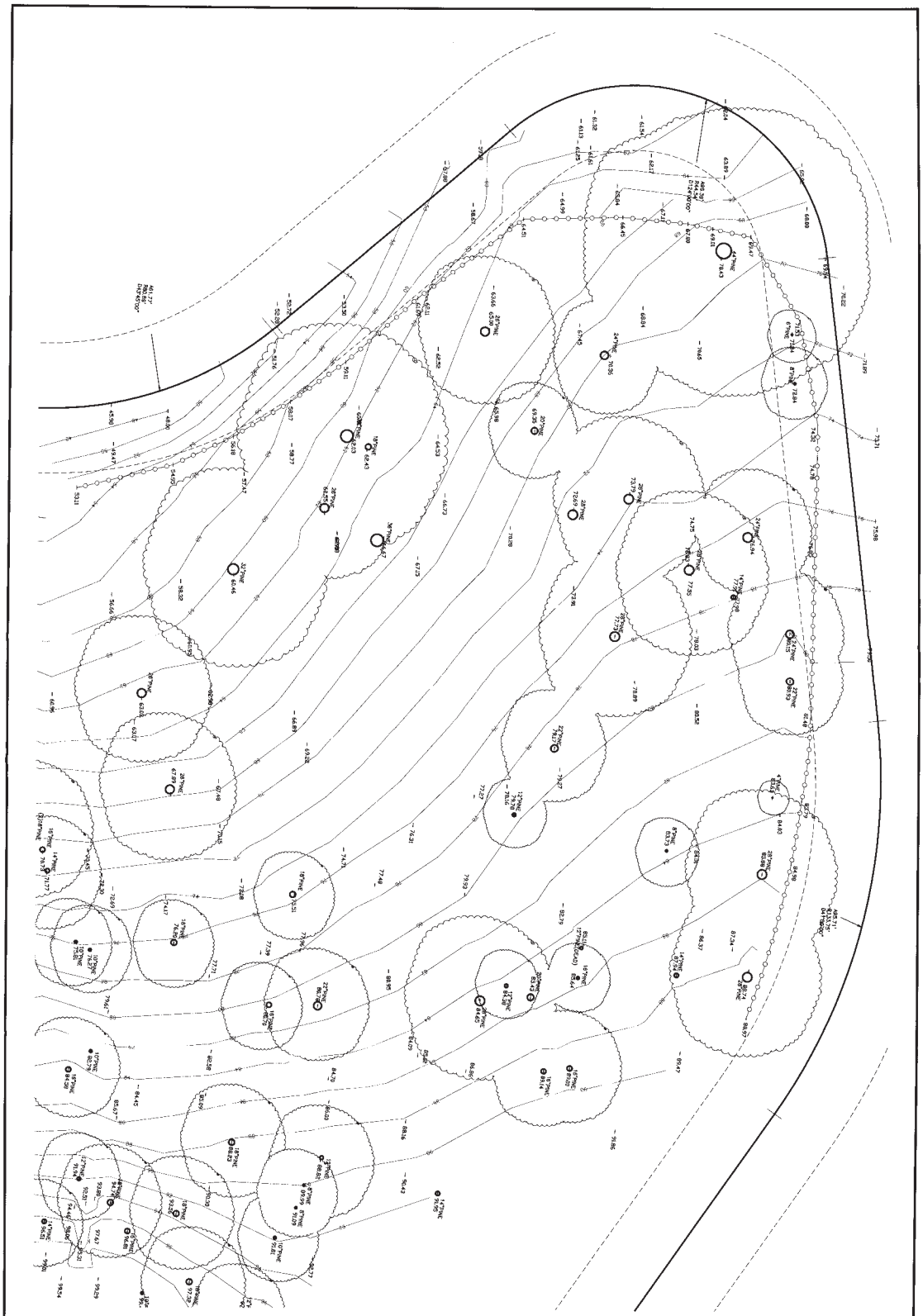
UNINCORPORATED SAN MATEO COUNTY CALIFORNIA

09-26-16
1"=10'
SPM
SPM

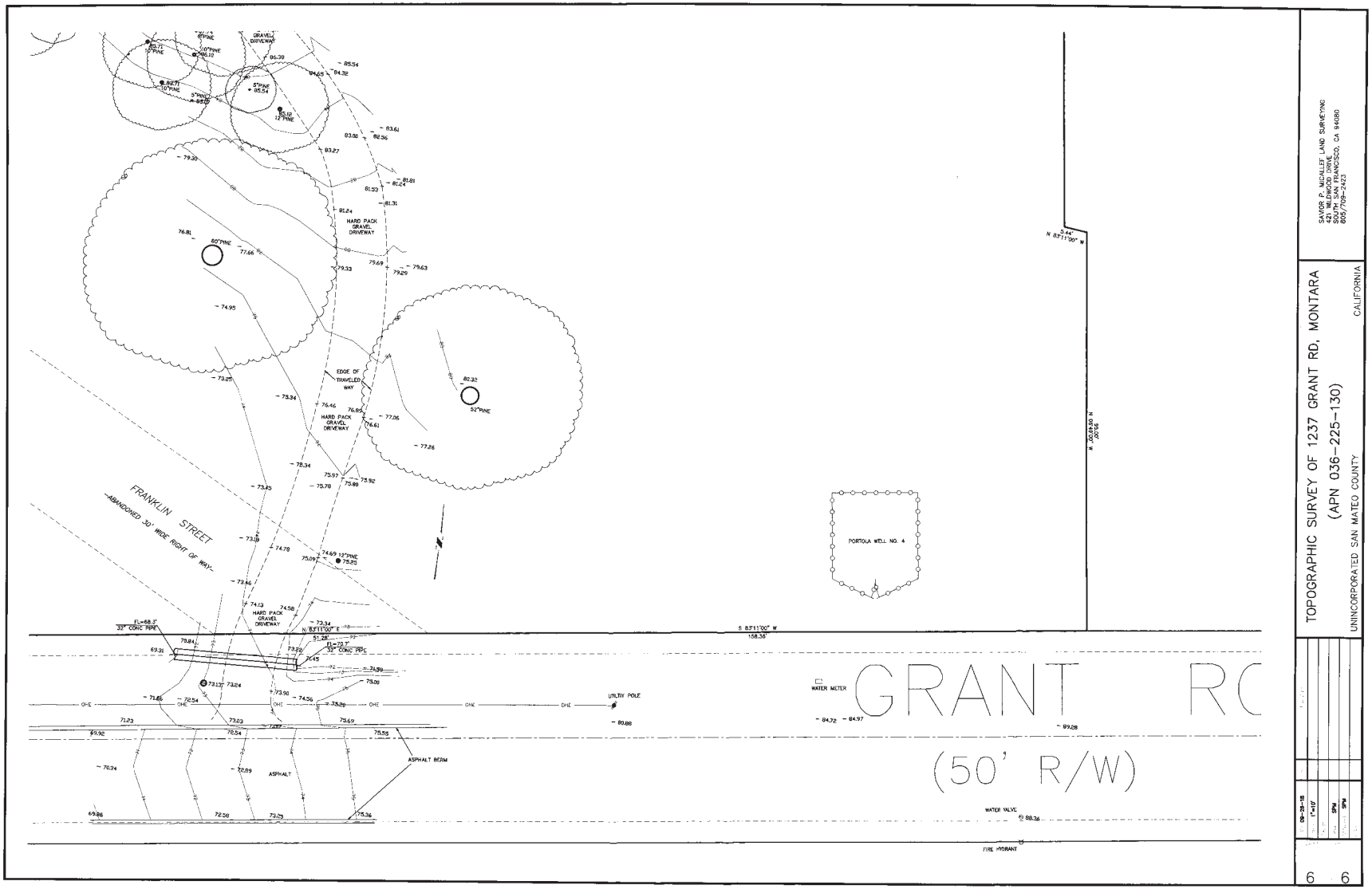
3 6



09-25-18		TOPOGRAPHIC SURVEY OF 1237 GRANT RD, MONTARA (APN 036-225-130) UNINCORPORATED SAN MATEO COUNTY CALIFORNIA	SAMOR P. MICALLEF LAND SURVEYING 421 WILDWOOD DRIVE SOUTH SAN FRANCISCO, CA 94080 805/709-2423
1"=10'			
SPM			
SPM			



5 of 6	09-28-18		TOPOGRAPHIC SURVEY OF 1237 GRANT RD, MONTARA (APN 036-225-130)	SAMOR P. MCALLEE LAND SURVEYING 421 WILDWOOD DRIVE SOUTH SAN FRANCISCO, CA 94080 805/709-2423
	1"=10'			
	SPM			
	SPM			
			UNINCORPORATED SAN MATEO COUNTY CALIFORNIA	



SAWYER P. MCALLIST LAND SURVEYING
421 WILDWOOD DRIVE
SOUTH SAN FRANCISCO, CA 94080
805/709-2423

TOPOGRAPHIC SURVEY OF 1237 GRANT RD, MONTARA
(APN 036-225-130)

UNINCORPORATED SAN MATEO COUNTY CALIFORNIA

08-25-16
1"=10'
SPW

6 6

GENERAL NOTES

1. PLANS PREPARED AT REQUEST OF: JORDAN McWHERTER, OWNER
2. ELEVATION DATUM: ASSUMED
3. CONTOUR INTERVAL IS 2 FEET.
4. SITE SURVEYED BY S. MICALLEF, AUGUST 2106.
5. THIS IS NOT A BOUNDARY SURVEY.

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.
2. ALL DOWNSPOUTS SHALL LEAD TO INFILTRATION TRENCH, AS SHOWN.
3. ALL PERFORATED DRAIN PIPES SHALL BE 3" MIN. DIAMETER 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 INFILTRATION TRENCH 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.
5. SIX PERCOLATION TESTS FOR THE SEPTIC SYSTEM YIELDED PERCALOATION RATED RANGING FROM 3 TO 9 INCHES/HOUR.

GRADING NOTES

CUT VOLUME : 410 CY
FILL VOLUME: 175 CY
CUT + FILL = 585 CY

1. ABOVE VOLUMES ARE APPROXIMATE AND ARE FOR VERY LITTLE WORK TO BUILD FOUNDATIONS, TO BUILD THE DRIVEWEAY, AND TO SLOPE GROUND FOR PROPER DRAINAGE.

2. EXISTING GRAVEL DRIVEWAY SHALL BE USED IN ITS CURRENT SIZE AND CONDITION.

3. ALL GRADING SHALL CONFORM TO LOCAL CODES AND ORDINANCES.

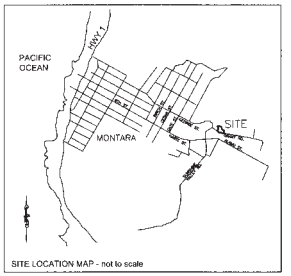
4. CUT SLOPES SHALL BE NO STEEPER THAN 2:1 (H:V).

5. ALL UTILITIES SHALL BE INSTALLED BASED ON COUNTY STANDARDS.

LEGEND

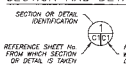
- EXISTING 5' CONTOUR
- EXISTING 1' CONTOUR
- PROPOSED CONTOUR
- 89.0 PROPOSED SPOT ELEVATION
- SURFACE DRAINAGE FLOW
- DS DOWNSPOUT W/ SPLASH BLOCK
- 3" PERFORATED PLASTIC DRAIN PIPE, SDR 35 @ 1% MINIMUM SLOPE.
- PROPOSED RETAINING WALL
- 10" PINE TREE TO BE REMOVED

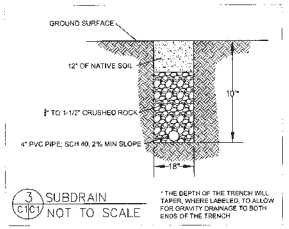
(E) = EXISTING
(N) = NEW, OR PROPOSED



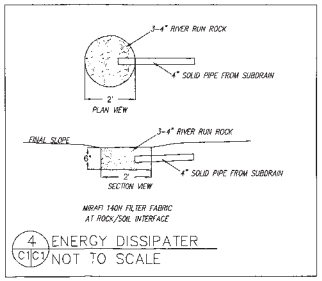
SITE LOCATION MAP - not to scale

SECTION AND DETAIL CONVENTION

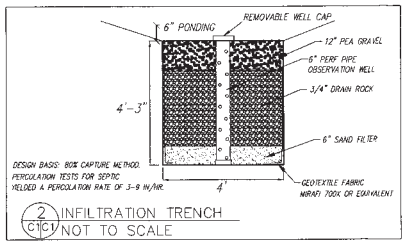




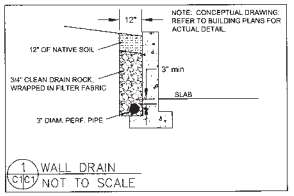
3 C1C1 SUBDRAIN NOT TO SCALE
* THE DEPTH OF THE TRENCH WILL TAPER, WHERE LABELED, TO ALLOW FOR GRAVITY DRAINAGE TO BOTH ENDS OF THE TRENCH



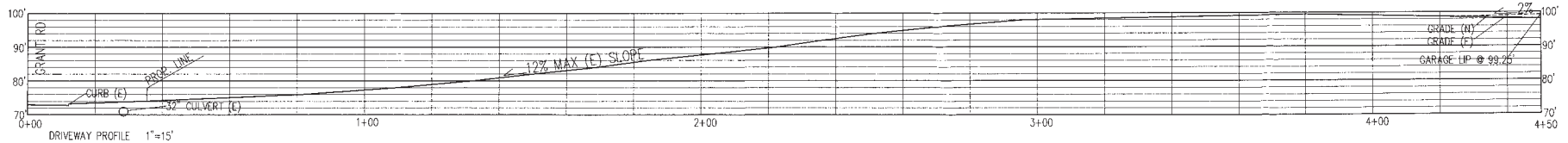
4 C1C1 ENERGY DISSIPATER NOT TO SCALE



2 C1C1 INFILTRATION TRENCH NOT TO SCALE



1 C1C1 WALL DRAIN NOT TO SCALE



DRIVEWAY PROFILE 1"=15'

REGISTERED PROFESSIONAL ENGINEER CHRIS M. MICALLEF No. 62264 9-30-19 EXPIRES CIVIL STATE OF CALIFORNIA

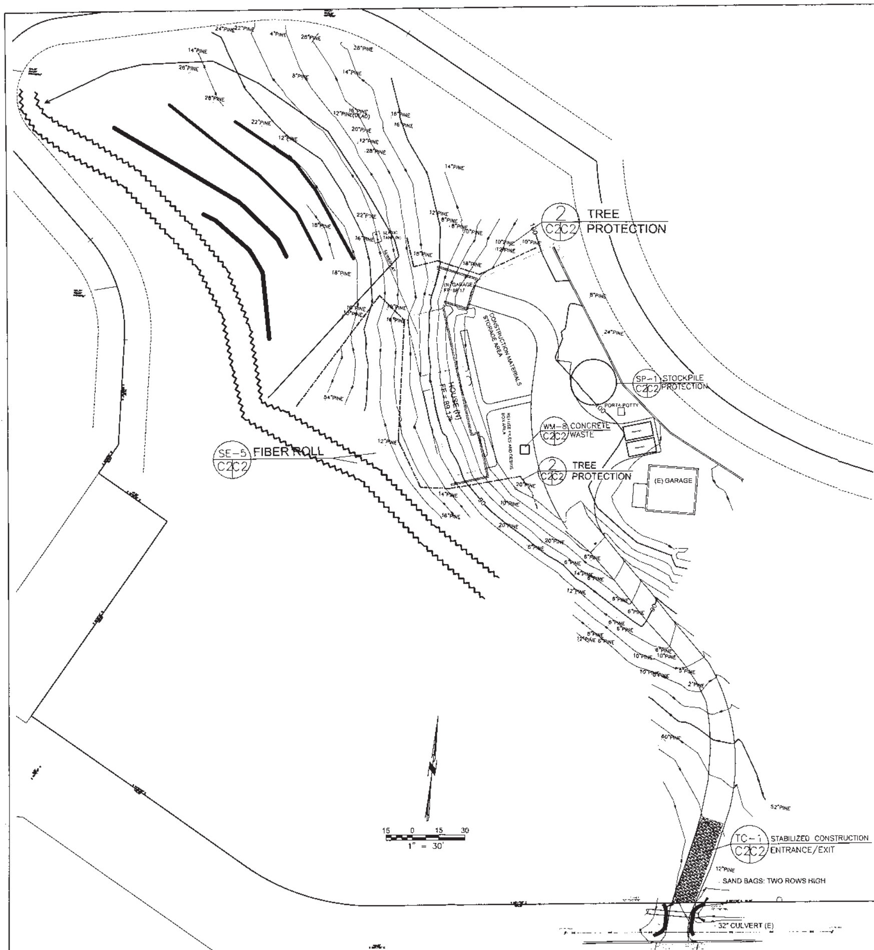
Sigma Prime Geosciences, Inc.
SIGMA PRIME GEOSCIENCES, INC.
332 PRINCETON AVENUE
HALF MOON BAY, CA 94019
(650) 728-3590
FAX 728-3593

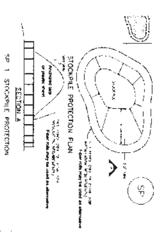
DATE: 8-10-18
DRAWN BY: CMK
CHECKED BY: AZG
REV. DATE: 11-5-18
REV. DATE: 1-16-19
REV. DATE: 3-12-19
REV. DATE: 8-20-19
REV. DATE:

GRADING AND DRAINAGE PLAN

McWHERTER PROPERTY,
1237 GRANT RD.
MOMTARA, CALIFORNIA
APN: 036-225-130

SHEET
C-1





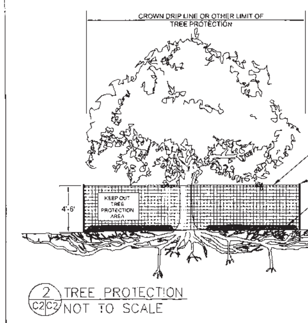
TREE PROTECTION NOTES

1. TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO ANY GRADING AND REMAIN ON-SITE THROUGHOUT CONSRUCTION PROCESS.
2. TREE PROTECTION FENCES SHALL BE INSTALLED AS CLOSE TO DRIP LINES AS POSSIBLE.
3. OWNER/BUILDER SHALL MAINTAIN TREE PROTECTION ZONES FREE OF EQUIPMENT AND MATERIALS STORAGE AND SHALL NOT CLEAN ANY EQUIPMENT WITHIN THESE AREAS.
4. ANY LARGE ROOTS THAT NEED TO BE CUT SHALL BE INSPECTED BY A CERTIFIED ARBORIST OR REGISTERED FORESTER PRIOR TO CUTTING, AND MONITORED AND DOCUMENTED.
5. ROOTS TO BE CUT SHALL BE SEVERED WITH A SAW OR TOPPER.
6. PRE-CONSTRUCTION SITE INSPECTION WILL BE REQUIRED PRIOR TO ISSUANCE OF BUILDING PERMIT.

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: JORDAN McWHERTER
TITLE/QUALIFICATION: OWNER
PHONE: 650-888-9588
PHONE:
E-MAIL: taylormakedevelopment@gmail.com



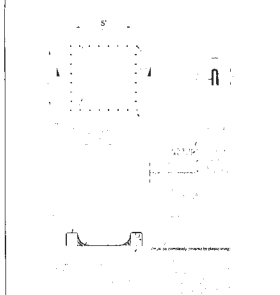
NOTES:
1. NO EQUIPMENT SHALL OPERATE INSIDE THE PROTECTIVE FENCING, INCLUDING DURING FENCE INSTALLATION AND REMOVAL.
2. TRUNKS SHALL BE PROTECTED AS PER TREE PRESERVATION REPORT BY MAGUIRE TREE CARE, INC. (6-26-18)

2 C2C2 TREE PROTECTION
NOT TO SCALE

GENERAL EROSION AND SEDIMENT CONTROL NOTES

- 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.
- 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.
- Use sediment controls or filtration to remove sediment when dewatering site and obtain Regional Water Quality Control Board (RWQCB) permit(s) as necessary.
- 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.
- Protect existing culvert at Grant Road with two rows of sand bags, as shown.

CONCRETE WASTE MANAGEMENT WM-8

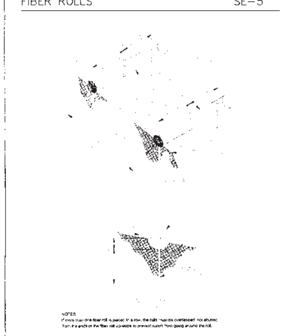


EROSION CONTROL NOTES

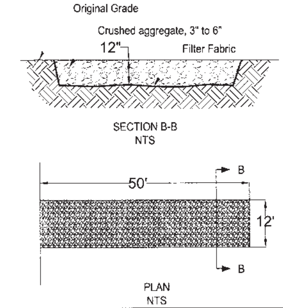
FIBER ROLE
INSTALL AT LOCATIONS SHOWN.
AFIX AS SHOWN IN DETAIL 1

1. GRADING MAY TAKE PLACE DURING WET WEATHER AFTER OCTOBER 1 PROVIDED THE FOLLOWING PROVISIONS ARE FOLLOWED.
2. NO GRADING SHALL TAKE PLACE DURING RAINY WEATHER OR FOR A PERIOD OF AT LEAST 24 HOURS FOLLOWING RAIN.
3. ALL EXPOSED SOIL SHALL BE TEMPORARILY PROTECTED FROM EROSION WITH JUTE NETTING.
4. ALL STOCKPILED SOIL SHALL BE COVERED AT ALL TIMES AND REMOVED FROM SITE AS SOON AS POSSIBLE, IF SCHEDULED FOR OFF-HAUL.
5. ALL EXPOSED SURFACES SHALL BE PERMANENTLY PROTECTED FROM EROSION WITH SEEDING AND/OR LANDSCAPING. SEED MIX SHALL BE 75 LB PER ACRE ANNUAL RYGRASS OR APPROVED SUBSTITUTE. SEED SHALL BE COVERED WITH STRAW MULCH AT A RATE OF 2 TONS/ACRE.
6. ROCKED CONSTRUCTION ENTRANCE SHALL BE 50 FEET LONG BY 12 FEET WIDE AND CONFORM TO THE FOLLOWING:
   A. THE MATERIAL FOR THE PAD SHALL BE 3 TO 6 INCH STONE.
   B. PAD SHALL BE NOT LESS THAN 12" THICK.
   C. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY SHALL BE REMOVED IMMEDIATELY.
   D. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA THAT DRAINS TO THE CONCRETE WASHOUT AREA.
7. CONCRETE WASHOUT AREA SHALL BE SURROUNDED BY A SINGLE LAYER OF SAND BAGS TO CONTAIN FLUIDS. CHANNEL INTO AREA SHALL BE CLEARED TO ALLOW TIRE DEBRIS (SEE NOTE 6.D. ABOVE)

FIBER ROLLS SE-5



STABILIZED CONSTRUCTION ENTRANCE/EXIT TC-1



REGISTERED PROFESSIONAL ENGINEER
CHARLES M. KISSICK
No. 62264
9-30-19
EXPIRES
CIVIL
STATE OF CALIFORNIA

Sigma Prime Geosciences, Inc.
SIGMA PRIME GEOSCIENCES, INC.
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(650) 728-3590
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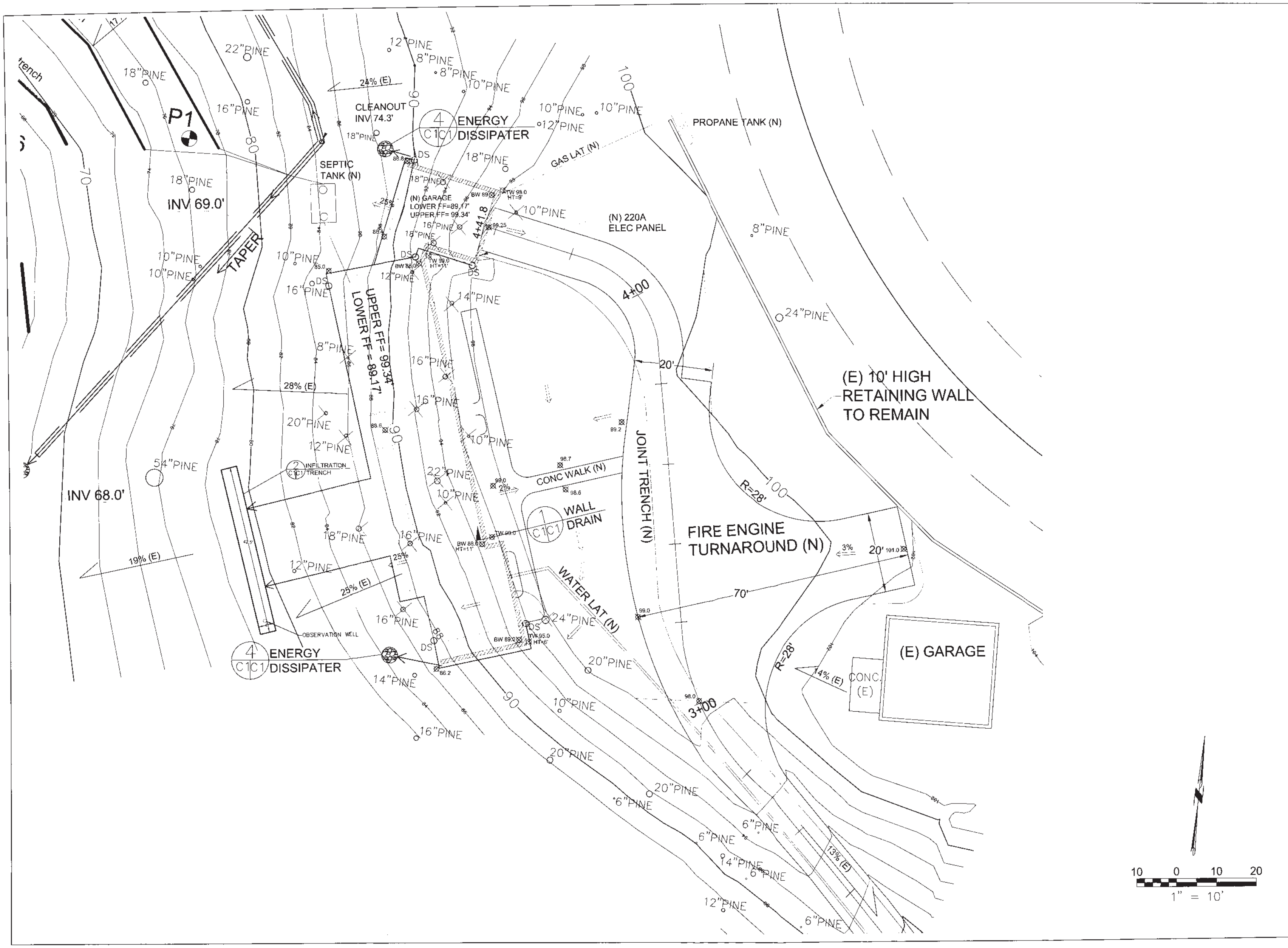
DATE: 6-10-18
DRAWN BY: CMK
CHECKED BY: AZG
REV. DATE: 11-5-18
REV. DATE: 6-20-19
REV. DATE:

EROSION, SEDIMENT CONTROL, AND TREE PROTECTION PLAN

McWHERTER PROPERTY,
1237 GRANT RD.
MOMTARA, CALIFORNIA
APN: 036-225-130

SHEET
C-2



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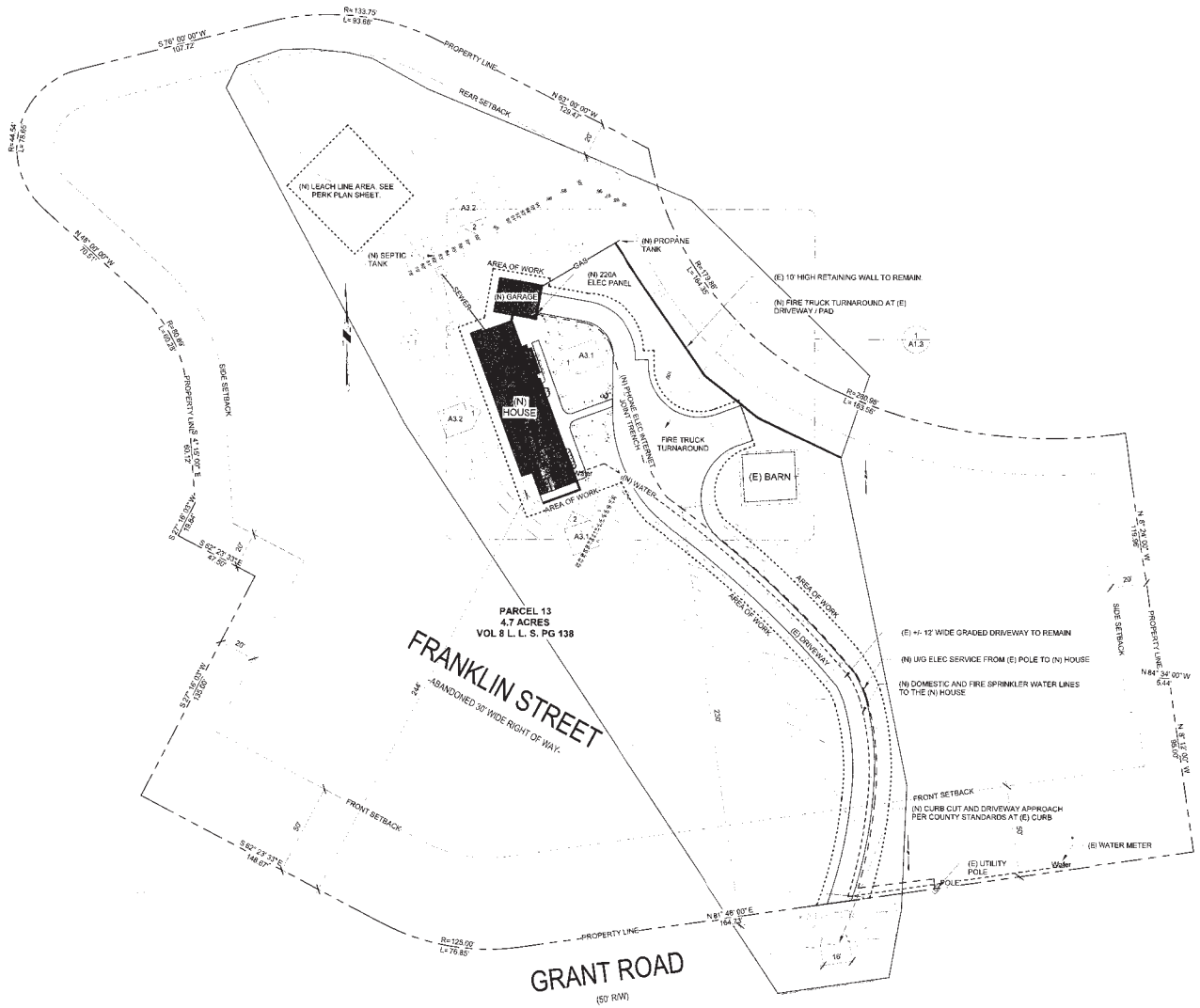
REV. DATE:
REV. DATE:
REV. DATE:
REV. DATE:

GRADING AND DRAINAGE, HOUSE SITE

McWHERTER PROPERTY,
1237 GRANT RD.
MOMTARA, CALIFORNIA
APN: 036-225-130

SHEET
C-3



1 OVERALL SITE PLAN
1" = 30'-0"

REV	DATE	DESCRIPTION
1	04/10/2018	PRE APPLICATION MEETING
2	08/16/2018	PLANNING SUBMITTAL
3	11/14/2018	PLANNING RESUBMITTAL
4	03/07/2019	2ND PLANNING RESUBMITTAL
5	06/20/2019	3RD PLANNING RESUBMITTAL

PROJECT NAME:
NEW SINGLE FAMILY HOME
MCWHERTER RESIDENCE

PROJECT ADDRESS:
1237 GRANT ROAD
MONTARA, CA 94037

PROJECT SCOPE:
(N) TWO STORY, SINGLE FAMILY HOME WITH (N) ATTACHED GARAGE

SHEET TITLE
OVERALL SITE PLAN

SHEET
A1.1

6/20/2019 10:19:01 PM

1 PARTIAL SITE PLAN
1" = 10'-0"

REV	DATE	DESCRIPTION
1	04/10/2018	PRE APPLICATION MEETING
2	08/16/2018	PLANNING SUBMITTAL
3	11/14/2018	PLANNING RESUBMITTAL
4	03/07/2019	2ND PLANNING RESUBMITTAL
5	06/20/2019	3RD PLANNING RESUBMITTAL

PROJECT NAME:
NEW SINGLE FAMILY HOME
MCWHERTER RESIDENCE

PROJECT SCOPE:
(N) TWO STORY, SINGLE FAMILY HOME WITH (N) ATTACHED GARAGE

PROJECT ADDRESS:
1237 GRANT ROAD
MONTARA, CA 94037

SHEET TITLE
PARTIAL SITE PLAN

SHEET
A1.2

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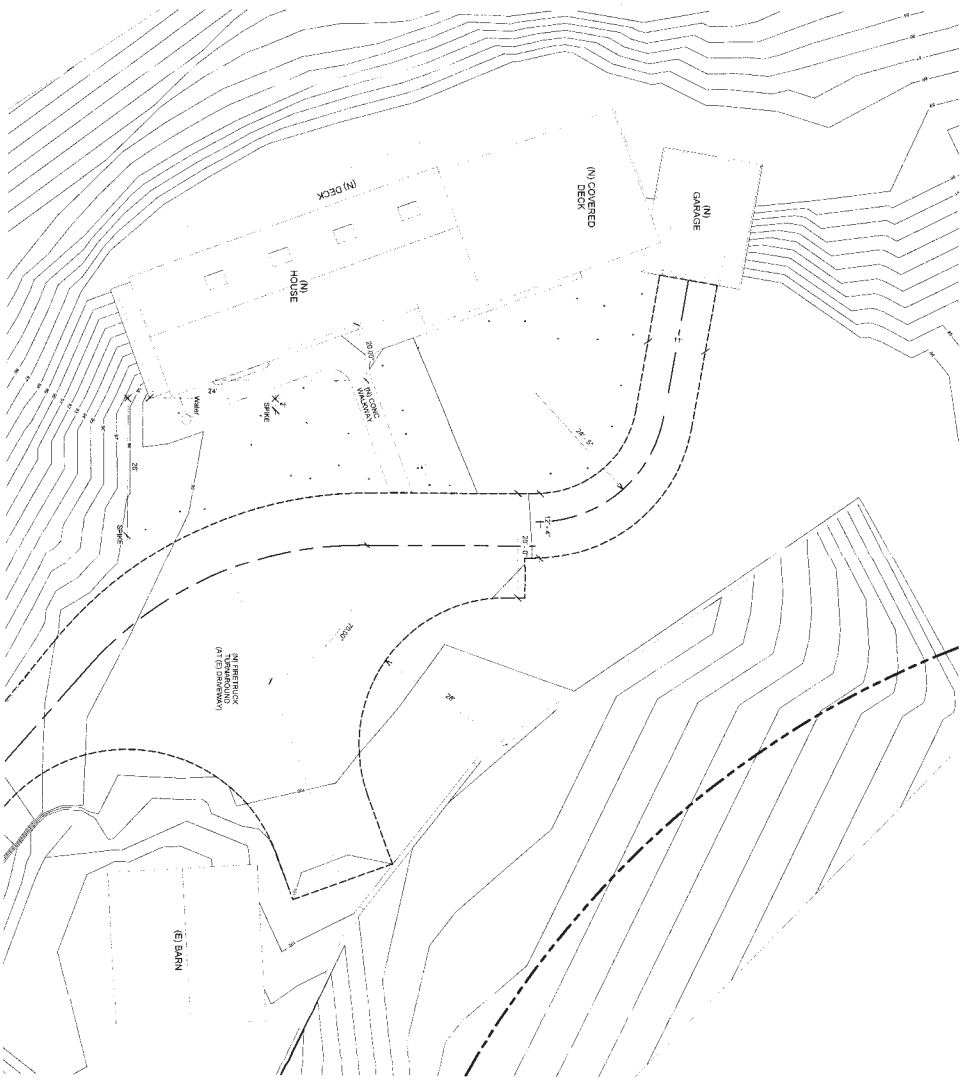
1 TURNAROUND PLAN
1" = 10'-0"



SHEET: A1.3	SHEET TITLE: TURNAROUND PLAN	PROJECT NAME: NEW SINGLE FAMILY HOME MCWHERTER RESIDENCE		REV	DATE	DESCRIPTION
				1	04/10/2018	PRE APPLICATION MEETING
				2	08/16/2018	PLANNING SUBMITTAL
		PROJECT ADDRESS: 1237 GRANT ROAD MONTARA, CA 94037	PROJECT SCOPE: (N) TWO STORY, SINGLE FAMILY HOME WITH (N) ATTACHED GARAGE	3	11/14/2018	PLANNING RESUBMITTAL
				4	03/07/2019	2ND PLANNING RESUBMITTAL
				5	06/20/2019	3RD PLANNING RESUBMITTAL

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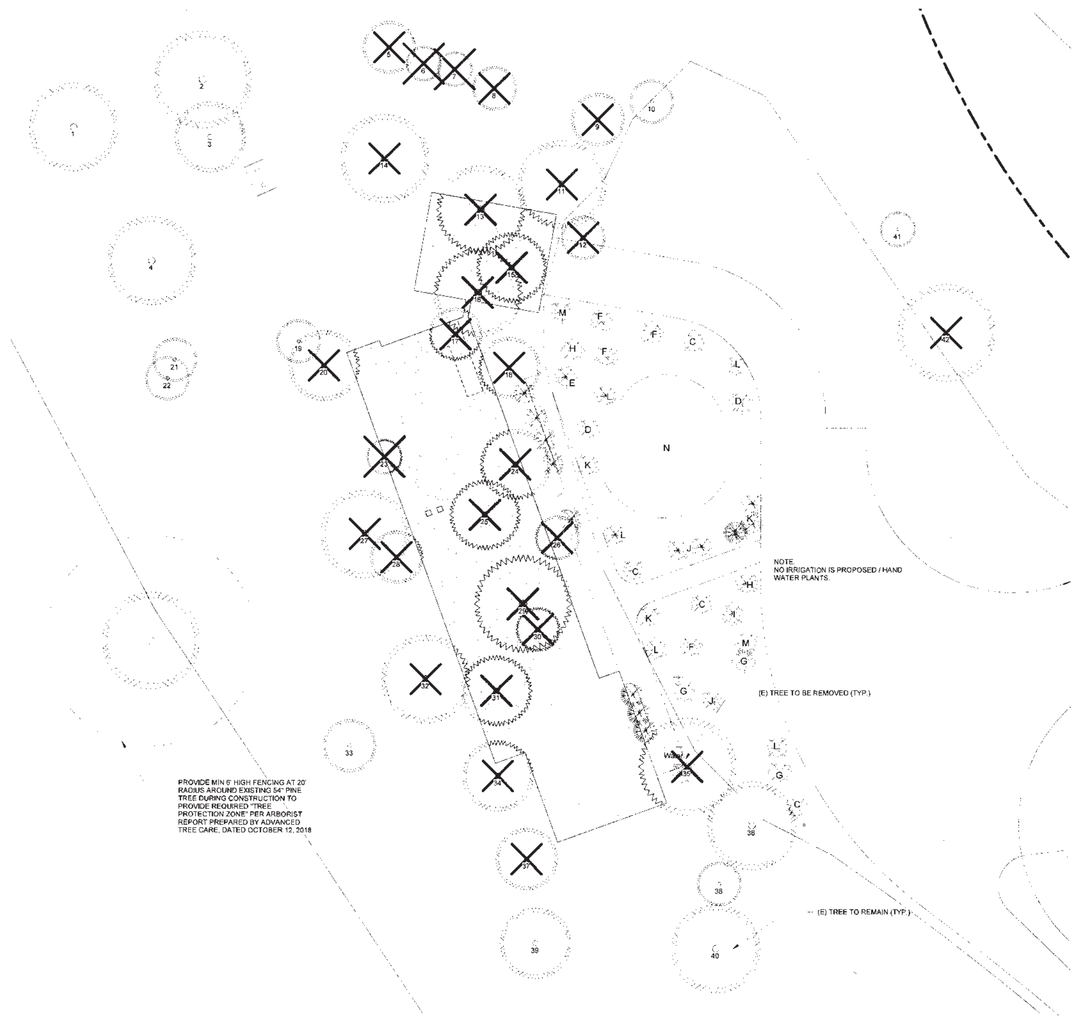

1 TREE AND LANDSCAPE PLAN
1" = 10'-0"

TREE SCHEDULE

Mark	Type	Phase Created	Phase Demolished
	22" Pine	Existing	None
1	18" Pine	Existing	None
2	22" Pine	Existing	None
3	16" Pine	Existing	None
4	18" Pine	Existing	None
5	12" Pine	Existing	New Construction
6	8" Pine	Existing	New Construction
7	8" Pine	Existing	New Construction
8	10" Pine	Existing	New Construction
9	12" Pine	Existing	New Construction
10	10" Pine	Existing	None
11	18" Pine	Existing	New Construction
12	10" Pine	Existing	New Construction
13	18" Pine	Existing	New Construction
14	18" Pine	Existing	New Construction
15	16" Pine	Existing	New Construction
16	18" Pine	Existing	New Construction
17	12" Pine	Existing	New Construction
18	14" Pine	Existing	New Construction
19	10" Pine	Existing	None
20	16" Pine	Existing	New Construction
21	10" Pine	Existing	None
22	10" Pine	Existing	None
23	8" Pine	Existing	New Construction
24	16" Pine	Existing	New Construction
25	16" Pine	Existing	New Construction
26	10" Pine	Existing	New Construction
27	20" Pine	Existing	New Construction
28	12" Pine	Existing	New Construction
29	22" Pine	Existing	New Construction
30	10" Pine	Existing	New Construction
31	16" Pine	Existing	New Construction
32	18" Pine	Existing	New Construction
33	12" Pine	Existing	None
34	16" Pine	Existing	New Construction
35	24" Pine	Existing	New Construction
36	20" Pine	Existing	None
37	14" Pine	Existing	New Construction
38	10" Pine	Existing	None
39	16" Pine	Existing	None
40	20" Pine	Existing	None
41	8" Pine	Existing	None
42	24" Pine	Existing	New Construction

PLANT LIST

SYMBOL	BOTANICAL NAME	COMMON NAME	PLANT TYPE	NATIVE?	DROUGHT TOLERANT?	SOURCE??	IRRIGATION METHOD
A	(not used)						
B	(not used)						
C	CEANOTHUS 'DARK STAR'	CALIFORNIA LILAC	SHRUB	X	X	BAY NATIVES	none
D	LUPINUS ALBIFRONS	SILVER BUSH LUPINE	SHRUB	X	X	SUNSET	none
E	ARCTOSTAPHYLOS DENSIFLORA 'SUNSET'	SUNSET MANZANITA	SHRUB	X	X	BAY NATIVES	none
F	ERICAMERIA ERICOIDES	CALIFORNIA GOLDENBUSH	SHRUB	X	X	SUNSET	none
G	GALVEZIA SPECIOSA	ISLAND BUSH SNAPDRAGON	SHRUB	X	X	SUNSET	none
H	SALVIA CLEVELANDII	CLEVELAND'S SAGE	SHRUB	X	X	BAY NATIVES	none
I	MISCANTHUS SINENSIS 'MORNING LIGHT'	MORNING LIGHT MAIDEN GRASS	GRASS		X	SAN MARCOS GROWERS	none
J	CHONDROPETALUM TECTORUM	SMALL CAPE RUSH	GRASS		X	SAN MARCOS GROWERS	none
K	SALVIA CHAMAEDRYOIDES	'BLUE'S BLISS' SAGE	PERENNIAL	X	X	SUNSET	none
L	IRIS DOUGLASIANA 'CANYON SNOW'	CANYON SNOW IRIS	PERENNIAL	X	X	SUNSET	none
M	ARABIS BLEPHAROPHYLLA	COAST ROCK CRESS	PERENNIAL	X	X	SUNSET	none
N	SOD, FESCUE BLEND	FESCUE BLEND SOD	SOD	X	X	BAY NATIVES	none

REV	DATE	DESCRIPTION
1	04/10/2018	PRE APPLICATION MEETING
2	08/16/2018	PLANNING SUBMITTAL
3	11/14/2018	PLANNING RESUBMITTAL
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5	06/20/2019	3RD PLANNING RESUBMITTAL

PROJECT NAME:
NEW SINGLE FAMILY HOME
MCWHERTER RESIDENCE

PROJECT ADDRESS:
1237 GRANT ROAD
MONTARA, CA 94037

PROJECT SCOPE:
(N) TWO STORY, SINGLE FAMILY HOME WITH (N) ATTACHED GARAGE

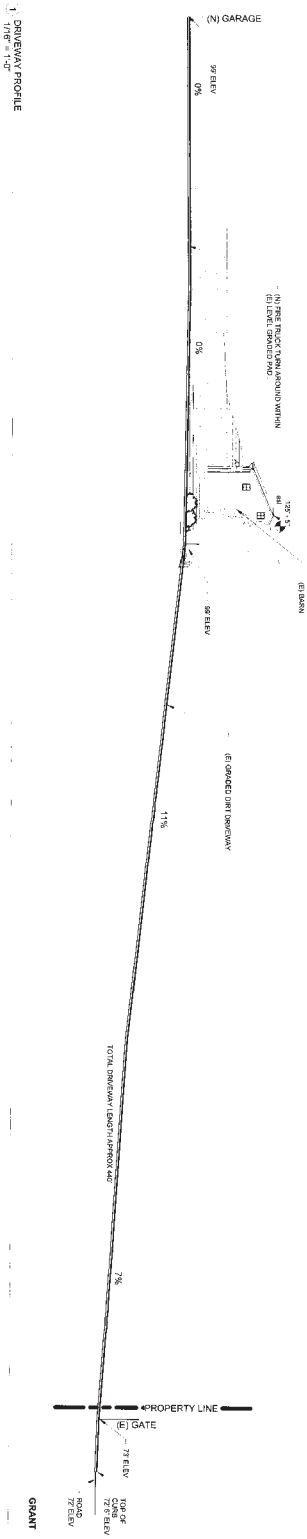
SHEET TITLE

TREE AND LANDSCAPE PLAN

SHEET

A1.4

6/20/2019 10:18:04 PM



SHEET
A1.5

SHEET TITLE
DRIVEWAY PROFILE

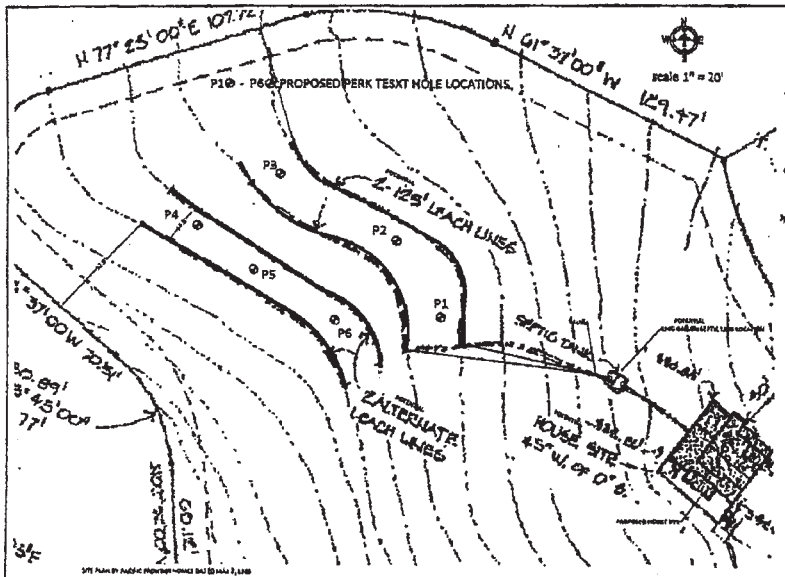
PROJECT NAME:
NEW SINGLE FAMILY HOME
MCWHERTER RESIDENCE

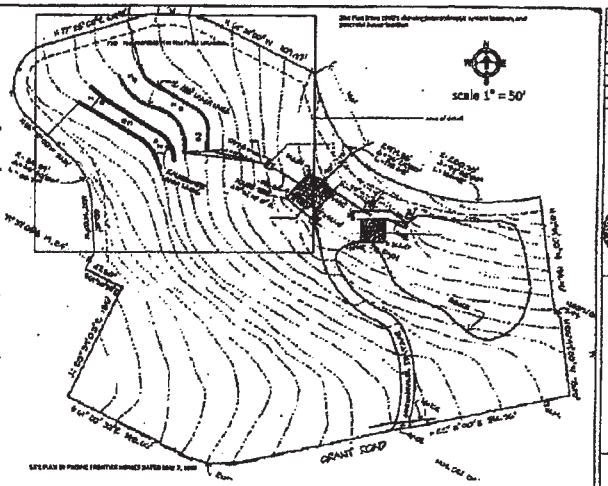
PROJECT ADDRESS:
1237 GRANT ROAD
MONTARA, CA 94037

PROJECT SCOPE:
(N) TWO STORY, SINGLE FAMILY HOME WITH (N) ATTACHED GARAGE

REV	DATE	DESCRIPTION
1	04/10/2018	PRE APPLICATION MEETING
2	08/16/2018	PLANNING SUBMITTAL
3	11/14/2018	PLANNING RESUBMITTAL
4	03/07/2019	2ND PLANNING RESUBMITTAL
5	06/20/2019	3RD PLANNING RESUBMITTAL

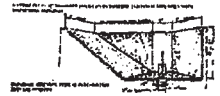
6/20/2019 10:19:04 PM





NOTE: THE HOUSE AND SEPTIC SYSTEM SHOWN HERE DO NOT EXIST AND ARE SHOWN FOR REFERENCE PURPOSES ONLY

Setbacks that Apply to Septic Systems

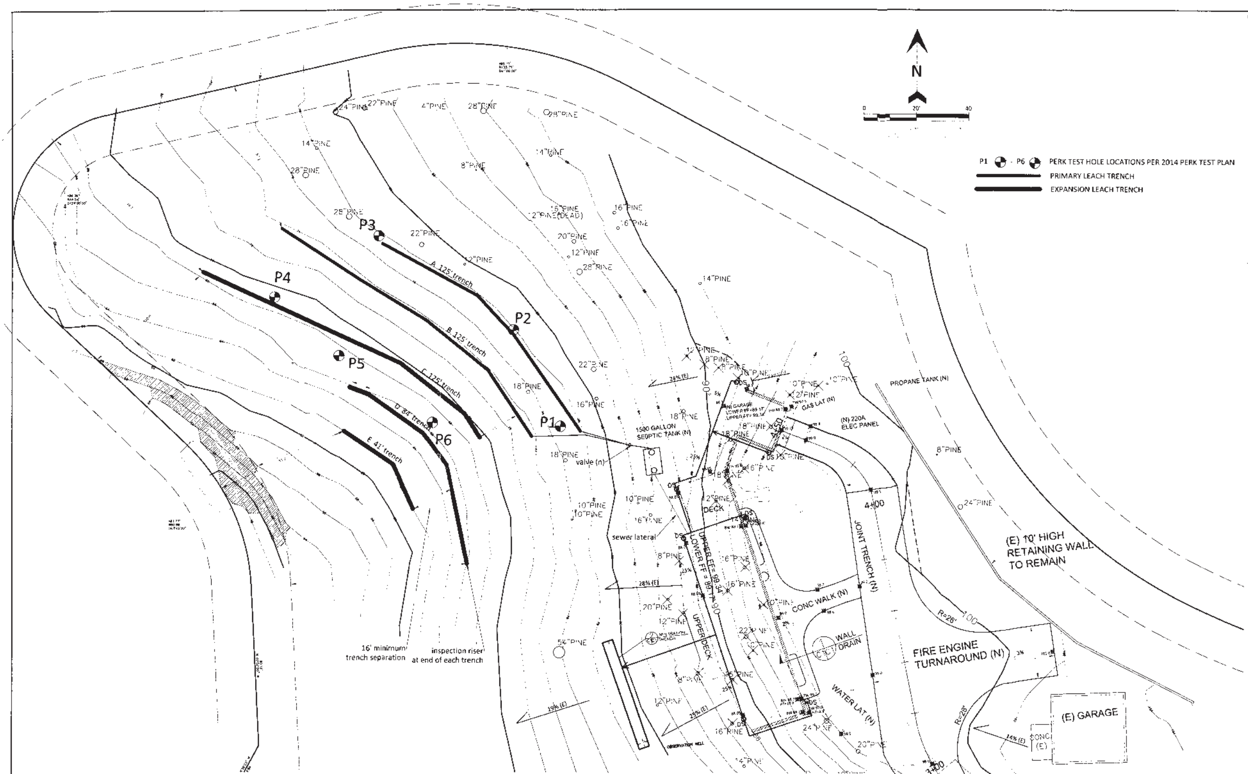


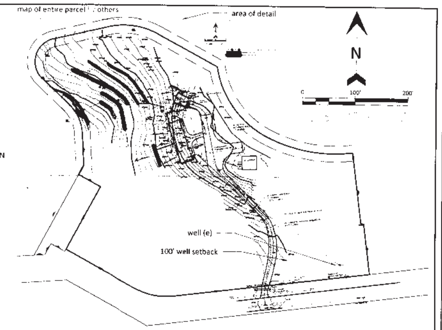
S.R. HARTSELL, R.E.H.S.
P.O. BOX 342
PACIFICA, CA 94044

PERCOLATION TEST PLAN

1237 Grant Road
Montara, Ca 94037
APN 036-225-130

PERK





Langley Hill Quarry

Ph: 650-851-0126 • Septic Systems Installed & Repaired • Lic. No. A702033

SMC Certified Installer No. 01

SMC Soil Percolation Tester No. 007

Observed in Field By: Stan [illegible] Date: 11-26-19

1/2 HOUR INTERVALS	READINGS	HOLE #1	HOLE #2	HOLE #3	HOLE #4	HOLE #5	HOLE #6
8:30 1 8:00	FINISH	[illegible]	8"	[illegible]	[illegible]	[illegible]	[illegible]
	START	4"	4"	4"	4"	4"	4"
	DIFF.	[illegible]	4"	[illegible]	[illegible]	[illegible]	[illegible]
9:00 2 8:30	FINISH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	START	6"	8"	[illegible]	[illegible]	[illegible]	[illegible]
	DIFF.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9:30 3 9:00	FINISH	[illegible]	9"	[illegible]	11"	[illegible]	[illegible]
	START	6"	6"	[illegible]	[illegible]	[illegible]	8"
	DIFF.	[illegible]	3"	[illegible]	[illegible]	[illegible]	[illegible]
10:00 4 9:30	FINISH	11"	[illegible]	11"	[illegible]	[illegible]	[illegible]
	START	6"	9"	[illegible]	6"	[illegible]	[illegible]
	DIFF.	5"	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10:30 5 10:00	FINISH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	START	6"	6"	6"	6"	6"	6"
	DIFF.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11:00 6 10:30	FINISH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	START	6"	6"	6"	6"	6"	6"
	DIFF.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11:30 7 11:00	FINISH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	START	6"	6"	6"	6"	6"	6"
	DIFF.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12:00 8 11:30	FINISH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	START	6"	6"	6"	6"	6"	6"
	DIFF.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	FINISH						
	START						
	DIFF.		"B" rate				
10	FINISH						
	START						
	DIFF.						

APPLICANTS NAME LANGLEY HILL QUARRY PHONE 650-851-0126

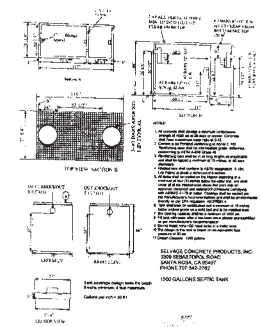
OWNERS NAME APN 036-225-130

ADDRESS: 1237 Grant Road Montara SMC

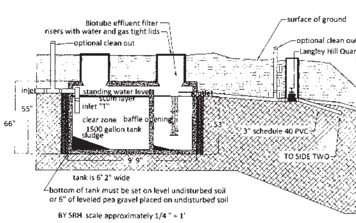
SIZE OF PARCEL: WATER SOURCE Public ? SUBDIVISION:

WET WEATHER TESTING REQUIRED? YES ✓ NO DEPTH TO GROUND WATER. 11' Dry

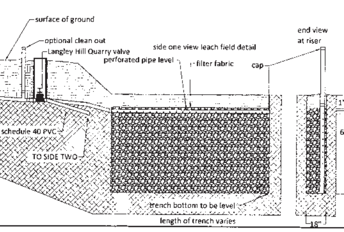
SOIL LOG Black Sandy Loam top soil - Redish Brown Decomposed Granite



SEPTIC TANK DETAIL



LEACH TRENCH DETAIL



back fill - native soil
undisturbed soil
3/4 drain rock or compacted fill
steel reinforced concrete
.75" to 1.5" washed rock

SCOPE OF WORK

The following is a brief summary of work to be done under a permit issued by the County of San Mateo.

1. Install new 1500-gallon Selvage Concrete Products septic tank as shown on plan.
2. Connect new Selvage septic tank to sewer lateral that meets County Building Department regulations.
3. Install a new two-way valve and connect it to the outlet of the new tank as shown.
4. Install new trenches and connect them to the valve and to each other as shown.

All material and methods shall comply with San Mateo County regulations and policies. All work must be inspected and approved before covering it. Nothing herein should be considered to be a warranty or guarantee of any kind and the designer liability is hereby limited to $500 or the fee paid for the design whichever is less.

PROJECT DISCUSSION

The property owner is in the process of building a new 3 bedroom home for his family on this site. This plan was prepared to show where and how a septic system will be installed to serve as the sanitary means of sewage treatment and disposal.

A fifteen hundred gallon septic tank is shown here which is large enough to serve up to 4 bedrooms.

A perk test was performed on this site that produced a "B" perk rate (copy above). At this rate four leach fields are required, two primary and two expansion. Each of these leach fields is required to have at lest 125 linear feet of leach trench. The primary leach trenches will be installed and the area where the expansion trenches are shown will be preserved so they can be installed iif ever needed.

S.R. HARTSELL, R.E.H.S.
202 WATERFORD DRIVE
VACAVILLE, CA 95688
srhartsell@gmail.com (650) 888-2419

SEPTIC SYSTEM PLAN

1237 GRANT ROAD
MONTARA, CA 94037
APN 036-225-130

JANUARY 16, 2019

SCALE AS NOTED

BY SRH

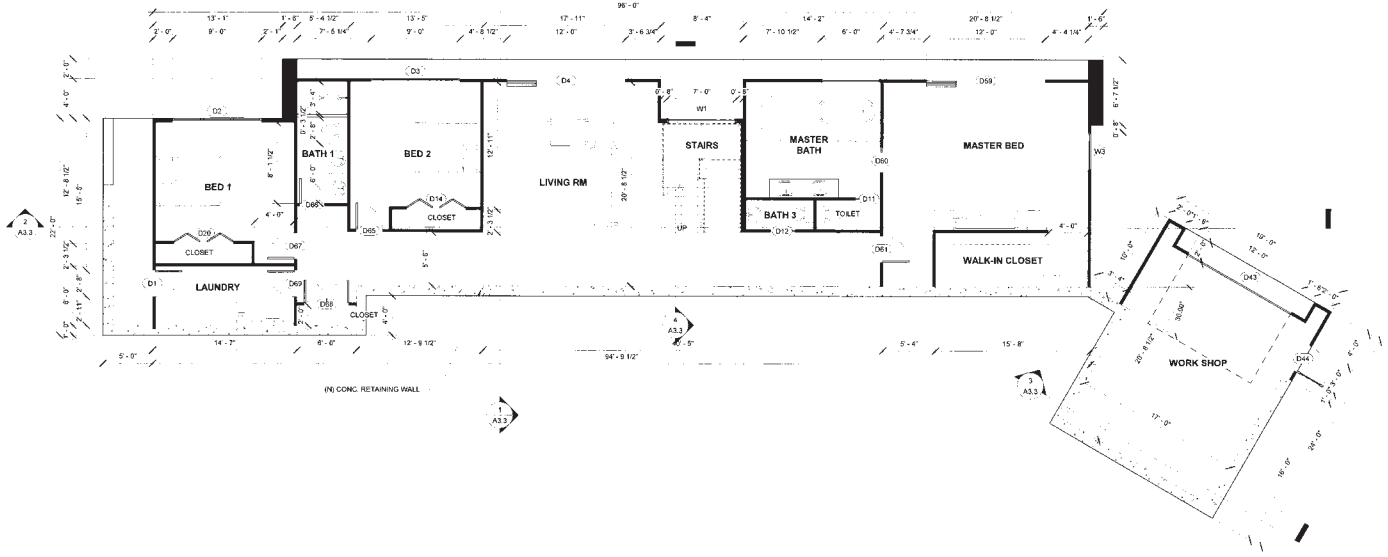
PAGE
SEPTIC SYSTEM PLAN

LEVEL 1 DOOR SCHEDULE

Mark	Count	Width	Height	Level	Operation	Comments
D1	1	2' - 8"	8' - 0"	LEVEL 1 F.F.	SINGLE	
D2	1	9' - 0"	8' - 0"	LEVEL 1 F.F.	SLIDING	
D3	1	9' - 0"	8' - 0"	LEVEL 1 F.F.	SLIDING	
D4	1	12' - 0"	8' - 0"	LEVEL 1 F.F.	SLIDING	
D11	1	2' - 6"	7' - 0"	LEVEL 1 F.F.	POCKET	
D12	1	2' - 6"	7' - 0"	LEVEL 1 F.F.	POCKET	
D14	1	6' - 0"	7' - 0"	LEVEL 1 F.F.	FOLDING	
D20	1	6' - 0"	6' - 8"	LEVEL 1 F.F.	FOLDING	
D43	1	12' - 0"	8' - 0"	LEVEL 1 F.F.	OVERHEAD	
D44	1	3' - 0"	8' - 0"	LEVEL 1 F.F.	SINGLE	
D59	1	12' - 0"	8' - 0"	LEVEL 1 F.F.	SLIDING	
D60	1	2' - 6"	7' - 0"	LEVEL 1 F.F.	POCKET	
D61	1	2' - 8"	8' - 0"	LEVEL 1 F.F.	SINGLE	
D65	1	2' - 8"	8' - 0"	LEVEL 1 F.F.	SINGLE	
D66	1	2' - 6"	7' - 0"	LEVEL 1 F.F.	SINGLE	
D67	1	2' - 8"	8' - 0"	LEVEL 1 F.F.	SINGLE	
D68	1	4' - 6"	7' - 0"	LEVEL 1 F.F.	DOUBLE	
D69	1	2' - 8"	8' - 0"	LEVEL 1 F.F.	SINGLE	

LEVEL 1 WINDOW SCHEDULE

Mark	Count	Width	Height	Sill Height	Head Height	Level	Operation	Comments
W1	1	7' - 0"	10' - 0"	0' - 0"	10' - 0"	LEVEL 1 F.F.	FIXED	
W3	1	4' - 0"	8' - 0"	0' - 0"	8' - 0"	LEVEL 1 F.F.	FIXED	
W14	1	6' - 0"	8' - 0"	0' - 0"	8' - 0"	LEVEL 1 F.F.	FIXED	
W16	1	3' - 0"	5' - 0"	1' - 10"	6' - 10"	ANNEX T.O. ROOF	FIXED	



1 LEVEL 1 FLOOR PLAN
3/16" = 1'-0"

REV	DATE	DESCRIPTION
1	04/10/2018	PRE APPLICATION MEETING
2	08/16/2018	PLANNING SUBMITTAL
3	11/14/2018	PLANNING RESUBMITTAL
4	03/07/2019	2ND PLANNING RESUBMITTAL
5	06/20/2019	3RD PLANNING RESUBMITTAL

PROJECT NAME
NEW SINGLE FAMILY HOME
MCWHERTER RESIDENCE

PROJECT ADDRESS:
1237 GRANT ROAD
MONTARA, CA 94037

PROJECT SCOPE:
(N) TWO STORY, SINGLE FAMILY HOME WITH (N) ATTACHED GARAGE

SHEET TITLE
LEVEL 1 FLOOR PLAN

SHEET
A2.1

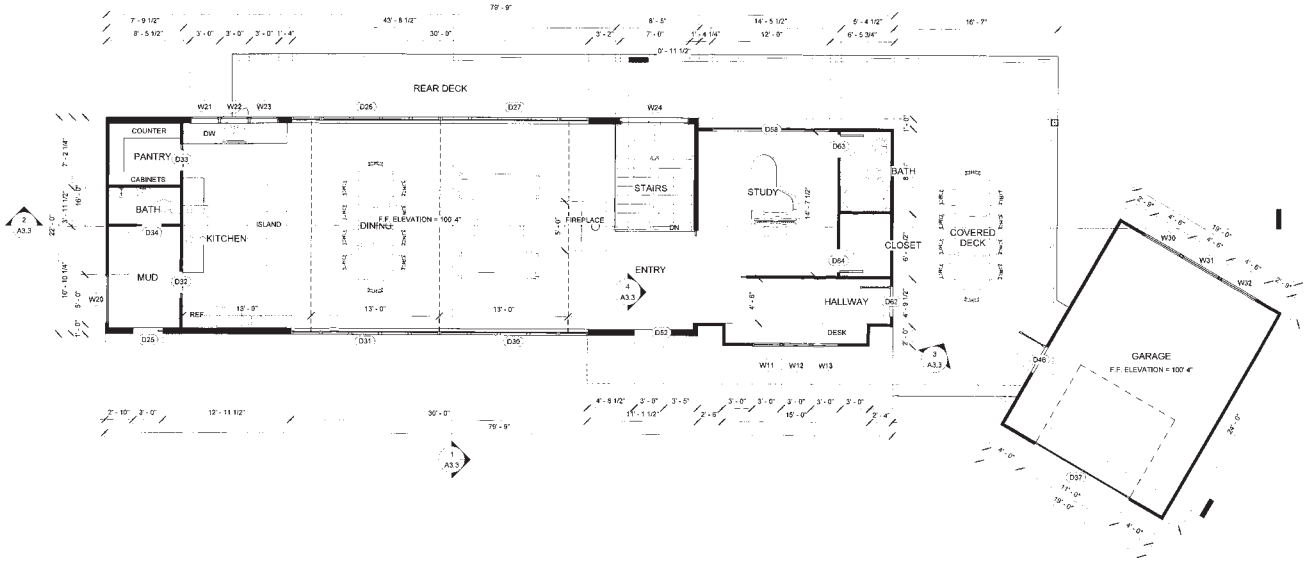
6/20/2019 10:19:05 PM

LEVEL 2 DOOR SCHEDULE

Mark	Count	Width	Height	Level	Operation	Comments
D25	1	3' - 0"	9' - 0"	LEVEL 2 F.F.	POCKET	
D26	1	15' - 0"	9' - 0"	LEVEL 2 F.F.	SLIDING	
D27	1	15' - 0"	9' - 0"	LEVEL 2 F.F.	SLIDING	
D30	1	15' - 0"	9' - 0"	LEVEL 2 F.F.	SLIDING	
D31	1	15' - 0"	9' - 0"	LEVEL 2 F.F.	SLIDING	
D32	1	2' - 8"	8' - 0"	LEVEL 2 F.F.	POCKET	
D33	1	2' - 8"	8' - 0"	LEVEL 2 F.F.	POCKET	
D34	1	2' - 6"	7' - 0"	LEVEL 2 F.F.	POCKET	
D37	1	11' - 0"	9' - 0"	LEVEL 2 F.F.	OVERHEAD	
D46	1	3' - 0"	8' - 0"	LEVEL 2 F.F.	SINGLE	
D52	1	3' - 0"	9' - 0"	LEVEL 2 F.F.	POCKET	
D56	1	5' - 0"	10' - 0"	LEVEL 2 F.F.	POCKET	
D57	1	5' - 0"	10' - 0"	LEVEL 2 F.F.	POCKET	
D58	1	12' - 0"	9' - 0"	LEVEL 2 F.F.	SLIDING	
D62	1	3' - 0"	9' - 0"	LEVEL 2 F.F.	SINGLE	
D63	1	2' - 4"	8' - 0"	LEVEL 2 F.F.	SINGLE	
D64	1	2' - 4"	8' - 0"	LEVEL 2 F.F.	SINGLE	

LEVEL 2 WINDOW SCHEDULE

Mark	Count	Width	Height	Sill Height	Head Height	Level	Operation	Comments
W11	1	3' - 0"	5' - 6"	3' - 0"	8' - 6"	LEVEL 2 F.F.	FIXED	
W12	1	3' - 0"	5' - 6"	3' - 0"	8' - 6"	LEVEL 2 F.F.	FIXED	
W13	1	3' - 0"	5' - 6"	3' - 0"	8' - 6"	LEVEL 2 F.F.	FIXED	
W15	1	3' - 0"	5' - 0"	1' - 10"	6' - 10"	ANNEX T.O. ROOF	FIXED	
W20	1	5' - 0"	9' - 0"	0' - 0"	9' - 0"	LEVEL 2 F.F.	FIXED	
W21	1	3' - 0"	5' - 6"	3' - 6"	9' - 0"	LEVEL 2 F.F.	FIXED	
W22	1	3' - 0"	5' - 6"	3' - 6"	9' - 0"	LEVEL 2 F.F.	CASEMENT	
W23	1	3' - 0"	5' - 6"	3' - 6"	9' - 0"	LEVEL 2 F.F.	FIXED	
W24	1	7' - 0"	9' - 0"	0' - 0"	9' - 0"	LEVEL 2 F.F.	FIXED	
W30	1	4' - 6"	4' - 6"	3' - 6"	8' - 0"	LEVEL 2 F.F.	FIXED	
W31	1	4' - 6"	4' - 6"	3' - 6"	8' - 0"	LEVEL 2 F.F.	FIXED	
W32	1	4' - 6"	4' - 6"	3' - 6"	8' - 0"	LEVEL 2 F.F.	FIXED	



1 LEVEL 2 FLOOR PLAN
3/16" = 1'-0"

REV	DATE	DESCRIPTION
1	04/10/2018	PRE APPLICATION MEETING
2	08/16/2018	PLANNING SUBMITTAL
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4	03/07/2019	2ND PLANNING RESUBMITTAL
5	05/20/2019	3RD PLANNING RESUBMITTAL

PROJECT NAME:
NEW SINGLE FAMILY HOME
MCWHERTER RESIDENCE

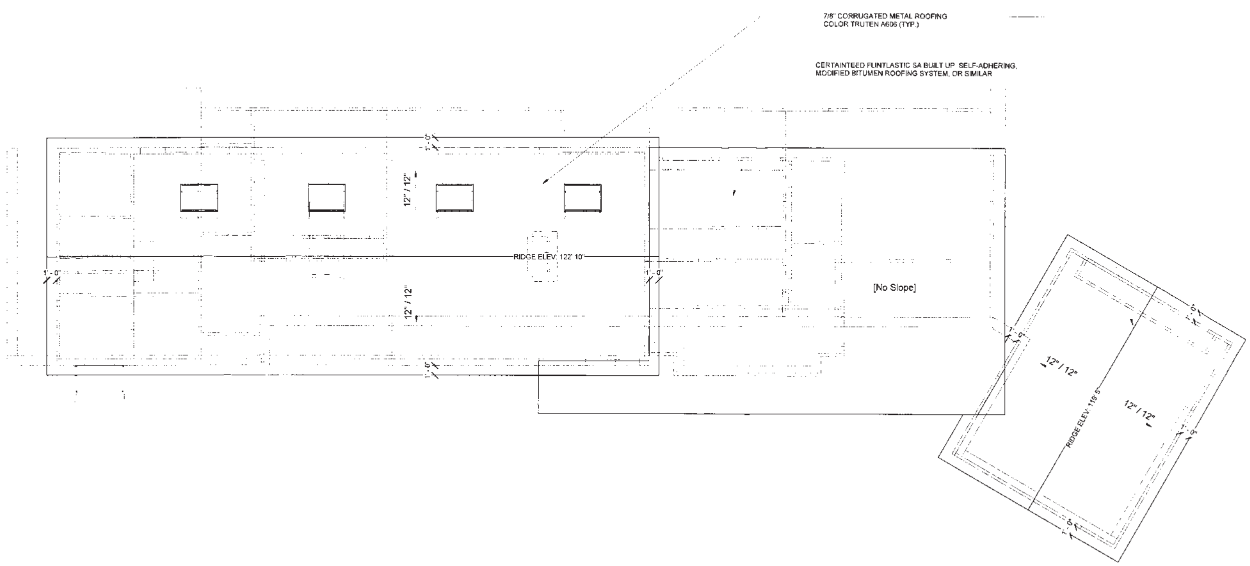
PROJECT ADDRESS:
1237 GRANT ROAD
MONTARA, CA 94037

PROJECT SCOPE:
(N) TWO STORY, SINGLE FAMILY HOME WITH (N) ATTACHED GARAGE

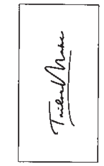
SHEET TITLE
LEVEL 2 FLOOR PLAN

SHEET
A2.2

5/20/2019 10:19:26 PM



1 ROOF PLAN
3/16" = 1'-0"



REV	DATE	DESCRIPTION
1	04/10/2018	PRE APPLICATION MEETING
2	08/16/2018	PLANNING SUBMITTAL
3	11/14/2018	PLANNING RESUBMITTAL
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5	06/20/2019	3RD PLANNING RESUBMITTAL

PROJECT NAME:
NEW SINGLE FAMILY HOME
MCWHERTER RESIDENCE

PROJECT SCOPE:
(N) TWO STORY, SINGLE FAMILY HOME WITH (N) ATTACHED GARAGE

PROJECT ADDRESS:
1237 GRANT ROAD
MONTARA, CA 94037

SHEET TITLE
ROOF PLAN

SHEET
A2.3

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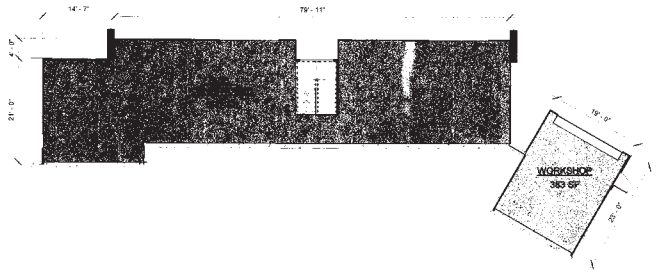
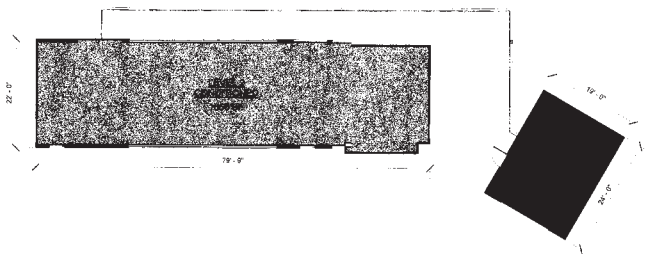


1 LEVEL 1 AREA PLAN
3/32" = 1'-0"

AREA SCHEDULE

Name	Area
LEVEL 2 CONDITIONED	1856 SF
LEVEL 1 CONDITIONED	1842 SF
WORKSHOP	383 SF
GARAGE	433 SF



2 LEVEL 2 AREA PLAN
3/32" = 1'-0"

REV	DATE	DESCRIPTION
1	04/10/2018	PRE APPLICATION MEETING
2	08/16/2018	PLANNING SUBMITTAL
3	11/14/2018	PLANNING RESUBMITTAL
4	03/07/2019	2ND PLANNING RESUBMITTAL
5	06/20/2019	3RD PLANNING RESUBMITTAL

PROJECT NAME
NEW SINGLE FAMILY HOME
MCWHERTER RESIDENCE

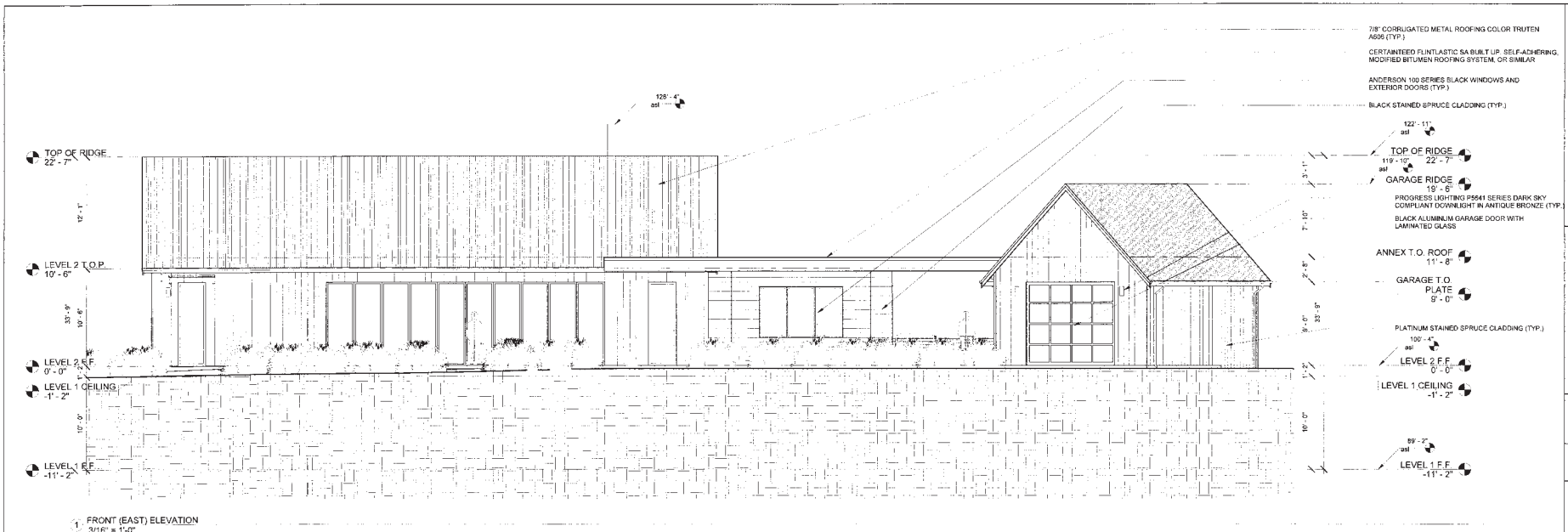
PROJECT ADDRESS
1237 GRANT ROAD
MONTARA, CA 94037

PROJECT SCOPE
ADU TWO STORY, SINGLE FAMILY HOME WITH (N) ATTACHED GARAGE

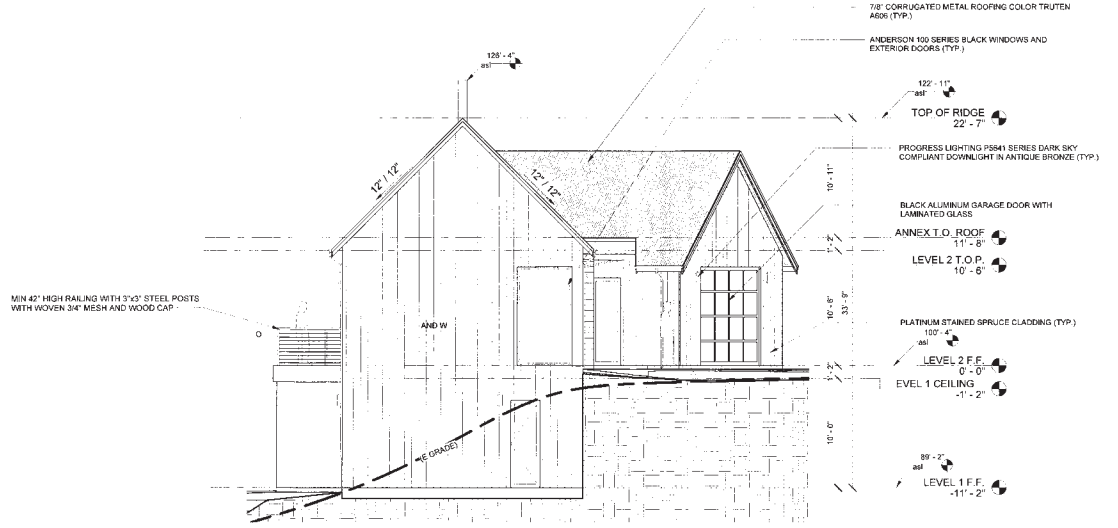
SHEET TITLE
FLOOR AREA CALCULATIONS

SHEET
A2.4

6/20/2019 10:16:06 PM



1 FRONT (EAST) ELEVATION
3/16" = 1'-0"



2 LEFT (SOUTH) ELEVATION
3/16" = 1'-0"

REV	DATE	DESCRIPTION
1	04/10/2018	PRE APPLICATION MEETING
2	06/16/2018	PLANNING SUBMITTAL
3	11/14/2018	PLANNING RESUBMITTAL
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5	06/20/2019	3RD PLANNING RESUBMITTAL

PROJECT NAME:
NEW SINGLE FAMILY HOME
MCWHERTER RESIDENCE

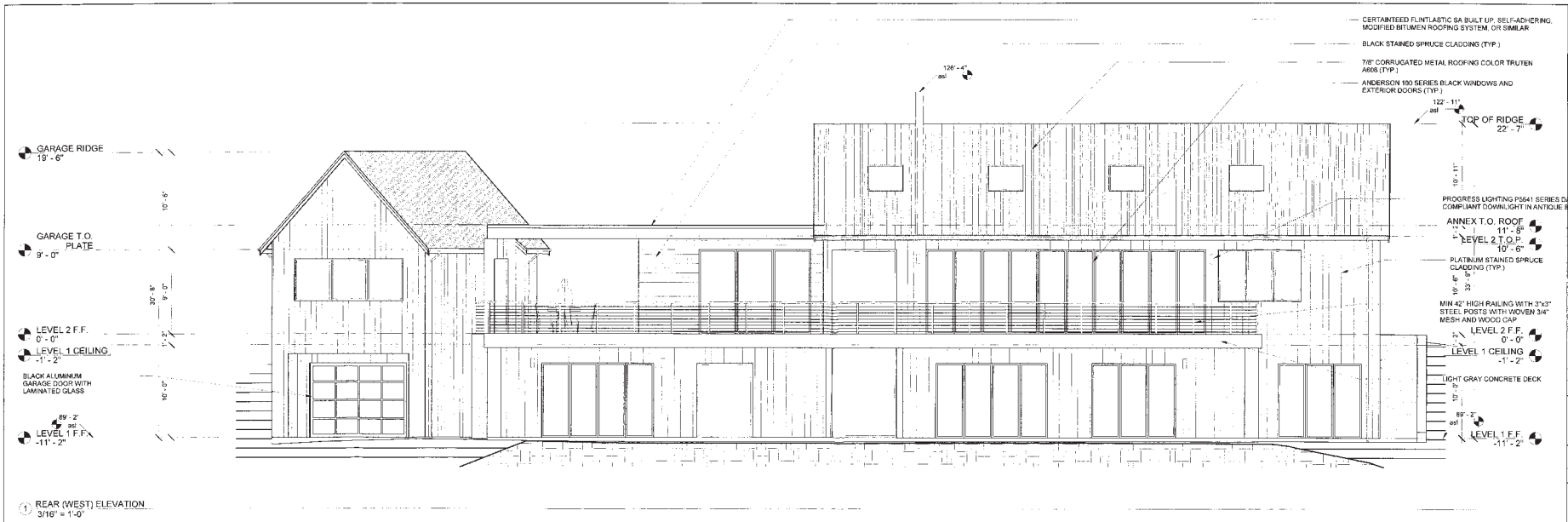
PROJECT ADDRESS:
1237 GRANT ROAD
MONTARA, CA 94037

PROJECT SCOPE:
(N) TWO STORY, SINGLE FAMILY HOME WITH (N) ATTACHED GARAGE

SHEET TITLE
FRONT AND LEFT ELEVATIONS

SHEET
A3.1

6/20/2019 10:19:07 PM



1 REAR (WEST) ELEVATION
3/16" = 1'-0"

2 RIGHT (NORTH) ELEVATION
3/16" = 1'-0"

REV	DATE	DESCRIPTION
1	04/10/2018	PRE APPLICATION MEETING
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5	06/20/2019	3RD PLANNING RESUBMITTAL

PROJECT NAME:
NEW SINGLE FAMILY HOME
MCWHERTER RESIDENCE

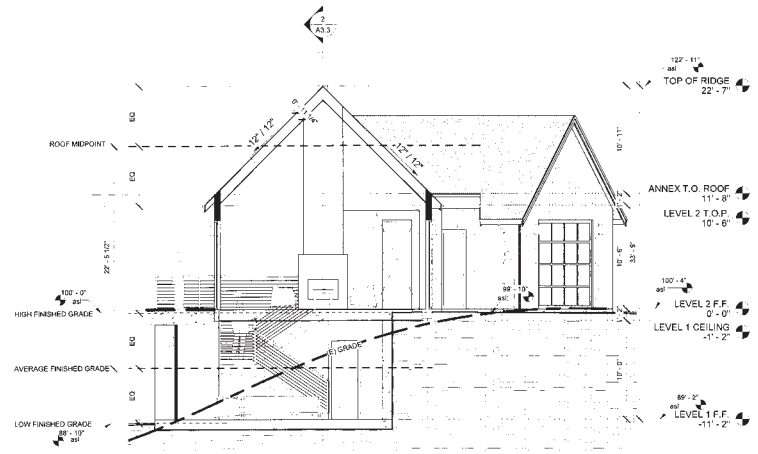
PROJECT ADDRESS:
1237 GRANT ROAD
MONTARA, CA 94037

PROJECT SCOPE:
(N) TWO STORY, SINGLE FAMILY HOME WITH (N) ATTACHED GARAGE

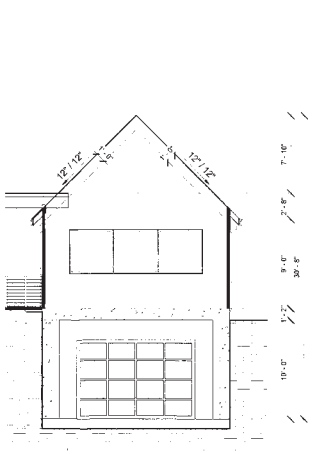
SHEET TITLE
REAR AND RIGHT ELEVATIONS

SHEET
A3.2

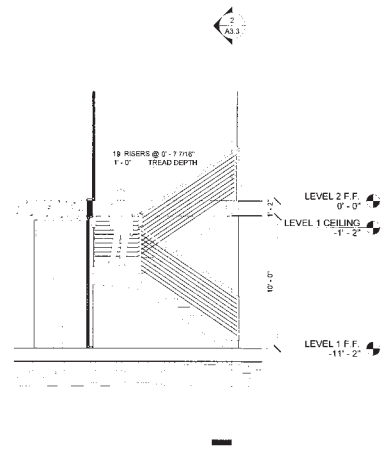
6/20/2019 10:19:06 PM



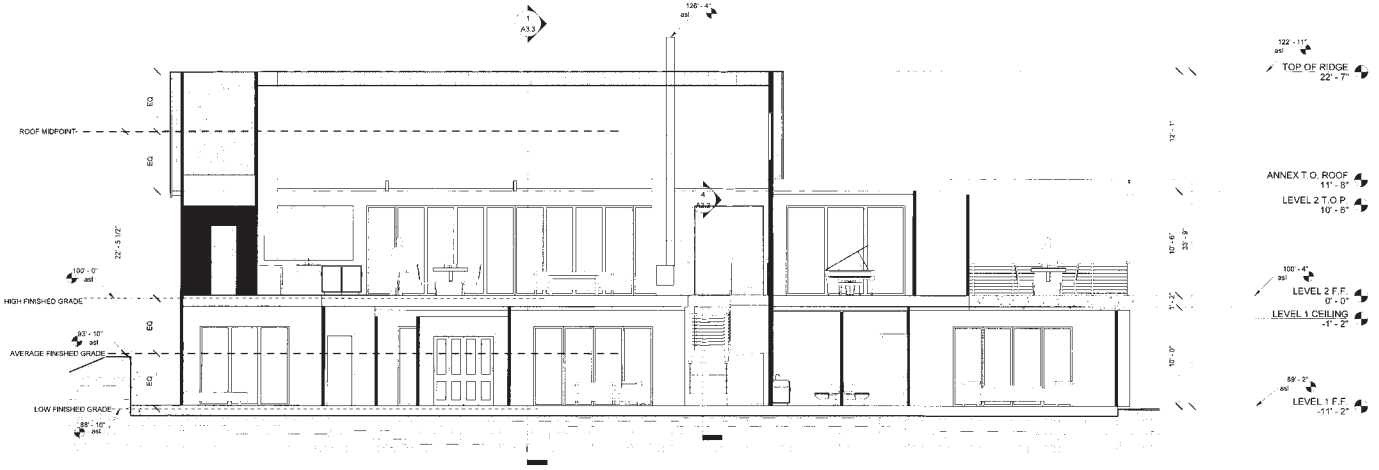
1 HOUSE TRANSVERSE SECTION
3/16" = 1'-0"



3 GARAGE SECTION
3/16" = 1'-0"



4 STAIR SECTION
1/4" = 1'-0"



2 HOUSE LONGITUDINAL SECTION
3/16" = 1'-0"

REV	DATE	DESCRIPTION
1	04/19/2018	PRE APPLICATION MEETING
2	08/16/2018	PLANNING SUBMITTAL
3	11/14/2018	PLANNING RESUBMITTAL
4	03/07/2019	2ND PLANNING RESUBMITTAL
5	06/20/2019	3RD PLANNING RESUBMITTAL

PROJECT NAME:
NEW SINGLE FAMILY HOME
MCWHERTER RESIDENCE

PROJECT ADDRESS:
1237 GRANT ROAD
MONTARA, CA 94037

PROJECT SCOPE:
(N) TWO STORY, SINGLE FAMILY HOME WITH (N) ATTACHED GARAGE

SHEET TITLE
BUILDING SECTIONS

SHEET
A3.3

6/26/2019 10:19:56 PM

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT C

COUNTY OF SAN MATEO
PLANNING AND BUILDING

County Government Center
455 County Center, 2nd Floor
Redwood City, CA 94063
650-363-4161 T
650-363-4849 F
www.planning.smcgov.org

December 26, 2019

Jordan McWherter
759 Rockaway Beach Avenue
Pacifica, CA 94044

Dear Mr. McWherter:

SUBJECT: Coastside Design Review Recommendation of Approval
1237 Grant Road, Montara
APN 036-225-130; County File No. PLN 2018-00322

At its meeting of July 11, 2019, the San Mateo County Coastside Design Review Committee (CDRC) considered your application for a design review recommendation to allow construction of a new two-story, 4,237 sq. ft. residence, plus a 433 sq. ft. garage, located on a legal 4.77-acre parcel (legality confirmed via subdivision, SMJ 80-6) associated with a staff-level Coastal Development Permit (CDP), Resource Management Permit, and Grading Permit. The project involves 410 cubic yards of cut and 175 cubic yards of fill and the removal of nine (9) significant trees. The associated CDP not is appealable to the California Coastal Commission. The circulation of an Initial Study and Negative Declaration (IS/ND) for public review and comment will be completed prior to a staff-level decision. The IS/ND may require compliance with mitigation measures in addition to conditions listed in this letter.

Based on the plans, application forms and accompanying materials submitted, the Coastside Design Review Committee recommended approval of your project based on and subject to the following findings and recommended conditions:

FINDINGS

The Coastside Design Review Committee found that:

2. For the Design Review

The project, as proposed and conditioned, has been reviewed and found to be in compliance with the Design Review Standards for One-Family and Two-Family Residential Development in the Midcoast, Section 6565.20 of the San Mateo County Zoning Regulations, specifically elaborated as follows:

a. *Section 6565.20 (C) SITE PLANNING AND STRUCTURE PLACEMENT; 1. Integrate Structures with the Natural Setting: The structure is located and designed to blend with the natural vegetation and landforms of the site.*

b. *Section 6565.20 (D) ELEMENTS OF DESIGN; 1. Building Mass, Shape and Scale: The design is compatible with the neighborhood in terms of scale and mass relative to surrounding structures.*

c. *Section 6565.20 (D) ELEMENTS OF DESIGN; 1. Architectural Styles and Features; a. Architectural Style: The architectural style and design elements are compatible with the neighborhood.*

d. *Section 6565.20 (F) LANDSCAPING, PAVED AREAS, FENCES, LIGHTING AND NOISE; 1. Landscaping: The landscape design complements and enhances the design of the house and harmonizes with the natural character of the neighborhood.*

RECOMMENDED CONDITIONS

Current Planning Section

1. The project shall be constructed in compliance with the plans once approved by the Community Development Director and as reviewed by the Coastside Design Review Committee on July 11, 2019. Any changes or revisions to the approved plans shall be submitted to the Design Review Officer for review and approval prior to implementation. Minor adjustments to the project may be approved by the Design Review Officer if they are consistent with the intent of and are in substantial conformance with this approval. Alternatively, the Design Review Officer may refer consideration of the revisions to the Coastside Design Review Committee, with applicable fees to be paid.

2. The applicant shall provide "finished floor elevation verification" to certify that the structure is actually constructed at the height shown on the submitted plans. The applicant shall have a licensed land surveyor or engineer establish a baseline elevation datum point in the vicinity of the construction site.

    a. The applicant shall maintain the datum point so that it will not be disturbed by the proposed construction activities until final approval of the building permit.

    b. This datum point and its elevation shall be shown on the submitted site plan. This datum point shall be used during construction to verify the elevation of the finished floors relative to the existing natural or to the grade of the site (finished grade).

    c. Prior to Planning approval of the building permit application, the applicant shall also have the licensed land surveyor or engineer indicate on the construction plans: (1) the natural grade elevations at the significant corners (at least four) of the footprint of the proposed structure on the submitted site plan, and (2) the elevations of proposed finished grades.

    d. In addition, (1) the natural grade elevations at the significant corners of the proposed structure, (2) the finished floor elevations, (3) the topmost elevation of

the roof, and (4) the garage slab elevation must be shown on the plan, elevations, and cross-section (if one is provided).

e. Once the building is under construction, prior to the below floor framing inspection or the pouring of the concrete slab (as the case may be) for the lowest floor(s), the applicant shall provide to the Building Inspection Section a letter from the licensed land surveyor or engineer certifying that the lowest floor height, as constructed, is equal to the elevation specified for that floor in the approved plans. Similarly, certifications on the garage slab and the topmost elevation of the roof are required.

f. If the actual floor height, garage slab, or roof height, as constructed, is different than the elevation specified in the plans, then the applicant shall cease all construction and no additional inspections shall be approved until a revised set of plans is submitted to and subsequently approved by both the Building Official and the Community Development Director.

3. The property owner shall adhere to the San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including, but not limited to, the following:

a. Delineation with field markers of clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses within the vicinity of areas to be disturbed by construction and/or grading.

b. Protection of adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.

c. Performing clearing and earth-moving activities only during dry weather.

d. Stabilization of all denuded areas and maintenance of erosion control measures continuously between October 1 and April 30.

e. Storage, handling, and disposal of construction materials and wastes properly, so as to prevent their contact with stormwater.

f. Control and prevention of 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.

g. Use of sediment controls or filtration to remove sediment when dewatering the site and obtain all necessary permits.

h. Avoiding cleaning, fueling, or maintaining vehicles on-site, except in a designated area where wash water is contained and treated.

i. Limiting and timing applications of pesticides and fertilizers to prevent polluted runoff.

j. Limiting construction access routes and stabilization of designated access points.

k. Avoiding tracking dirt or other materials off-site; cleaning off-site paved areas and sidewalks using dry sweeping methods.

l. Training and providing instruction to all employees and subcontractors regarding the Watershed Protection Maintenance Standards and construction Best Management Practices.

m. Additional Best Management Practices in addition to those shown on the plans may be required by the Building Inspector to maintain effective stormwater management during construction activities. Any water leaving the site shall be clear and running slowly at all times.

n. Failure to install or maintain these measures will result in stoppage of construction until the corrections have been made and fees paid for staff enforcement time.

4. The applicant shall include an erosion and sediment control plan to comply with the County's Erosion Control Guidelines on the plans submitted for the building permit. This plan shall identify the type and location of erosion control measures to be installed upon the commencement of construction in order to maintain the stability of the site and prevent erosion and sedimentation off-site.

5. The project site is located within the Fitzgerald Area of Special Biological Significance (ASBS) Watershed and is considered a Construction Stormwater Regulated Site Weekly construction inspections are required throughout the duration of land disturbance during the rainy season (October 1 through April 30) for sites within the ASBS Watershed, as required by the State Water Resource Control Board General Exceptions to the California Ocean Plan with Special Protections adopted on March 20, 2012

6. The project site is located within the Fitzgerald Area of Special Biological Significance (ASBS) watershed. Runoff and other polluted discharges from the site are prohibited. Development shall minimize erosion, treat stormwater from new/replaced impervious surfaces, and prevent polluted discharges into the ASBS or a County storm drain (e.g., car washing in a driveway or street, pesticide application on lawn).

7. All new power and telephone utility lines shall be placed underground.

8. The applicant shall apply for a building permit and shall adhere to all requirements from the Building Inspection Section, the Drainage Section, the Geotechnical Section, the Department of Public Works, Environmental Health Services, the Coastside Fire Protection District, and the Montara Water and Sanitary District.

9. No site disturbance shall occur, including any tree/vegetation removal or grading, until a building permit has been issued.

10. To reduce the impact of construction activities on neighboring properties, comply with the following:

    a. All debris shall be contained on-site; a dumpster or trash bin shall be provided on site during construction to prevent debris from blowing onto adjacent properties. The applicant shall monitor the site to ensure that trash is picked up and appropriately disposed of daily.

    b. The applicant shall remove all construction equipment from the site upon completion of the use and/or need of each piece of equipment which shall include but not be limited to tractors, back hoes, cement mixers, etc.

    c. The applicant shall ensure that no construction-related vehicles shall impede through traffic along the right-of-way on Grant Road. All construction vehicles shall be parked on-site outside the public right-of-way or in locations which do not impede safe access on Grant Road. There shall be no storage of construction vehicles in the public right-of-way.

11. The exterior colors and materials as conditioned by the CDRC are approved. Color verification shall occur in the field after the applicant has applied the approved materials and colors but before a final inspection has been scheduled.

12. Noise sources associated with demolition, construction, repair, remodeling, or grading of any real property shall be limited to the hours from 7:00 a.m. to 6:00 p.m., weekdays and 9:00 a.m. to 5:00 p.m., Saturdays. Said activities are prohibited on Sundays, Thanksgiving, and Christmas (San Mateo Ordinance Code Section 4.88.360).

13. Installation of the approved landscape plan is required prior to final inspection.

14. At the building permit application stage, the project shall demonstrate compliance with the Water Efficient Landscape Ordinance (WELO) and provide the required forms. WELO applies to new landscape projects equal to or greater than 500 sq. ft. and rehabilitated landscape projects equal to or greater than 2,500 square feet. A prescriptive checklist is available as a compliance option for projects under 2,500 square feet. The Performance approach is applicable to new and/or rehabilitated landscape projects over 2,500 square feet.

15. At the building permit application stage, the applicant shall submit a tree protection plan which protects on- and off-site trees within the proximity of grading and/or construction activities, including the following:

    a. Identify, establish, and maintain tree protection zones throughout the entire duration of the project.

b. Isolate tree protection zones using 5-foot tall orange plastic fencing supported by poles pounded into the ground, located at the driplines as described in the arborist's report.

c. Maintain tree protection zones free of equipment and materials storage; contractors shall not clean any tools, forms, or equipment within these areas.

d. If any large roots or large masses of roots need to be cut, the roots shall be inspected by a certified arborist or registered forester prior to cutting as required in the arborist's report. Any root cutting shall be undertaken by an arborist or forester and documented. Roots to be cut shall be severed cleanly with a saw or toppers. A tree protection verification letter from the certified arborist shall be submitted to the Planning Department within five (5) business days from site inspection following root cutting.

e. Normal irrigation shall be maintained, but oaks shall not need summer irrigation, unless the arborist's report directs specific watering measures to protect trees.

f. Street tree trunks and other trees not protected by dripline fencing shall be wrapped with straw wattles, orange fence, and 2 x 4 boards in concentric layers to a height of eight (8) feet.

g. Prior to issuance of a Building Permit or Demolition Permit, the Planning and Building Department shall complete a pre-construction site inspection, as necessary, to verify that all required tree protection and erosion control measures are in place.

16. The property owner(s) shall coordinate with the project planner to record the Notice of Determination and pay an environmental filing fee of $2,354.75 (or current fee), as required under Fish and Game Code Section 711.4(d), plus a $50 recording fee to the San Mateo County within four (4) working days of the final approval date of this project.

Grading Permit

17. Unless approved, in writing, by the Community Development Director, no grading shall be allowed during the winter season (October 1 to April 30) to avoid potential soil erosion.

18. No grading activities shall commence until the property owner has been issued a grading permit (issued as the "hard card" with all necessary information filled out and signatures obtained) by the Current Planning Section.

19. Prior to any land disturbance and throughout the grading operation, the property owner shall implement the erosion control plan, as prepared and signed by the engineer of record and approved by the decision maker. Revisions to the approved erosion control

plan shall be prepared and signed by the engineer and submitted to the Community Development Director for review and approval.

20. An Erosion Control and/or Tree Protection Inspection is required prior to the issuance of a building permit for grading, construction, and demolition purposes, as the project requires tree protection of significant tree(s) [insert grading permit if applicable]. Once all review agencies have approved your Building Permit, you will be notified that an approved job copy of the Erosion Control and/or Tree Protection Plan is ready for pick-up at the Planning counter of the Planning and Building Department. Once the Erosion Control and/or Tree Protection measures have been installed per the approved plans, please contact the Building Inspection Section at 650/363-7311 to schedule a pre-site inspection. A $144 inspection fee will be assessed to the Building Permit for the inspection. If the initial pre-site inspection is not approved, an additional inspection fee will be assessed for each required re-inspection until the job site passes the Pre-Site Inspection, or as determined by the Building Inspection Section.

21. Prior to issuance of the grading permit "hard card," the property owner shall submit a schedule of all grading operations to the Current Planning Section, subject to review and approval by the Current Planning Section. The submitted schedule shall include a schedule for winterizing the site. If the schedule of grading operations calls for the grading to be completed in one grading season, then the winterizing plan shall be considered a contingent plan to be implemented if work falls behind schedule. All submitted schedules shall represent the work in detail and shall project the grading operations through to completion.

22. It shall be the responsibility of the engineer of record to regularly inspect the erosion control measures for the duration of all grading remediation activities, especially after major storm events, and determine that they are functioning as designed and that proper maintenance is being performed. Deficiencies shall be immediately corrected, as determined by and implemented under the observation of the engineer of record.

23. For the final approval of the grading permit, the property owner shall ensure the performance of the following activities within 30 days of the completion of grading at the project site: (a) The engineer shall submit written certification that all grading has been completed in conformance with the approved plans, conditions of approval/mitigation measures, and the Grading Regulations, to the Department of Public Works and the Planning and Building Department's Geotechnical Engineer, and (b) the geotechnical consultant shall observe and approve all applicable work during construction and sign Section II of the Geotechnical Consultant Approval form, for submittal to the Planning and Building Department's Geotechnical Engineer and the Current Planning Section.

Building Inspection Section

24. Project is subject to a building permit from San Mateo County Planning and Building Department.

Drainage Section

25. The drainage analysis package (C3/C6 form and drainage report) is required at the building permit stage.

26. No infiltration system shall be allowed for drainage storage on the slope. Solid storage system shall be proposed.

27. Runoff collection from all hardscape is required, including but not limited to, concrete patio and pathways.

28. All erosion control measures properly presented on the erosion control plans shall be required at the building permit stage.

Geotechnical Section

29. A geotechnical report shall be required at the building permit stage.

Department of Public Works

30. An encroachment permit shall be required before any work in the public right-of-way.

Environmental Health Services

31. The "Engineering Geologic Evaluation" report (dated February 26, 2019) prepared by Geosphere Consultants, Inc. provides in their findings an apparent 6-to-8-foot-high cut slope exhibiting a gradient of 50 percent or greater near the toe of the slope approximately 35 feet below the proposed Expansion Leachfield on the "Septic System Plan" (dated January 16,2019). The geotechnical consultant shall provide a cross-section of the cut slope relative to the proposed expansion leachfield to demonstrate appropriate setback from steep slopes (50 percent) as required by the Onsite Wastewater Treatment Systems (OWTS) Ordinance and Section 2(D)(2) and Section 3(B) of the Onsite Systems Manual (OSM).

32. The applicant will be required to demonstrate appropriate depth-to-groundwater as required by the OWTS Ordinance and Section 2 of the OSM.

Coastside Fire Protection District

33. Fire Department access shall be to within 150 ft. of all exterior portions of the facility and all portions of the exterior walls of the first story of the buildings as measured by an approved access route around the exterior of the building or facility. Access shall be a minimum of 20 ft. wide, all weather capability, and able to support a fire apparatus weighing 75,000 lbs. Where a fire hydrant is located in the access, a minimum of 26 ft. is required for a minimum of 20 ft. on each side of the hydrant. This access shall be provided from a publicly maintained road to the property. Grades over 15 percent shall

be paved and no grade shall be over 20 percent. When gravel roads are used, it shall be class 2 base or equivalent compacted to 95 percent. Gravel road access shall be certified by an engineer as to the material thickness, compaction, all weather capability, and weight it will support.

34. All buildings that have a street address shall have the number of that address on the building, mailbox, or other type of sign at the driveway entrance in such a manner that the number is easily and clearly visible from either direction of travel from the street. New residential buildings shall have internally illuminated address numbers contrasting with the background so as to be seen from the public way fronting the building. Residential address numbers shall be at least six feet above the finished surface of the driveway. An address sign shall be placed at each break of the road where deemed applicable by the San Mateo County Fire Department. Numerals shall be contrasting in color to their back-ground and shall be no less than 4 inches in height and have a minimum 1/2-inch stroke. Remote signage shall be a 6" x 18" green reflective metal sign.

35. Contact the Fire Marshal's Office to schedule a Final Inspection prior to occupancy and Final Inspection by a Building Inspector. Allow for a minimum of 72 hours notice to the Fire Department at 650/573-3846.

36. A fire flow of 1000 gpm for 2 hours with a 20-psi residual operating pressure must be available as specified by additional project conditions to the project site. The applicant shall provide documentation including hydrant location, main size, and fire flow report at the building permit application stage. Inspection required prior to Fire's final approval of the building permit or before combustibles are brought on site.

37. Any chimney or woodstove outlet shall have installed onto the opening thereof an approved (galvanized) spark arrestor of a mesh with an opening no larger than 1/2 inch in size or an approved spark arresting device. Maintain around and adjacent to such buildings or structures a fuelbreak/firebreak made by removing and cleaning away flammable vegetation for a distance of not less than 30 feet and up to 100 feet around the perimeter of all structures or to the property line, if the property line is less than 30 feet from any structure. This is not a requirement nor an authorization for the removal of live trees. Remove that flammable portion of any tree which extends within 10 feet of the outlet of any chimney or stovepipe, or within 5 feet of any portion of any building or structures. Remove that dead or dying portion of any tree which extends over the roof line of any structure.

38. LP-gas equipment shall be installed in accordance with the California Fire and Mechanical Codes and NFPA 58.

39. Smoke alarms and carbon monoxide detectors shall be installed in accordance with the California Building and Residential Codes. This includes the requirement for hardwired, interconnected detectors equipped with battery backup and placement in each sleepingroom in addition to the corridors and on each level of the residence.

40. An approved Automatic Fire Sprinkler System meeting the requirements of NFPA-13D shall be required to be installed for your project. Plans shall be submitted to the San Mateo County Building Department for review and approval by the authority having jurisdiction.

41. A statement that the building will be equipped and protected by automatic fire sprinklers must appear on the title page of the building plans.

Montara Water and Sanitary District (District)

42. The parcel is located within close proximity of the District's domestic water production wells. Separation requirements for septic systems must be adhered to. A District hydrological investigation is required. Further conditions may apply.

43. The applicant is required to upgrade the existing domestic water connection in accordance with District standards. Fees for domestic water meter upgrade must be paid prior to the issuance of a permit. Proof of well abandonment to San Mateo County Health Department standards may be required.

44. Connection to the District's fire protection system is required. A certified fire protection contractor must certify adequate fire flow calculations. A connection fee for the fire protection system is required. The connection charge must be paid prior to the issuance of a private fire protection permit.

45. Applicants must first apply directly to the District for permits and not their contractor.

Please note that the decision of the Coastside Design Review Committee is a recommendation regarding the project's compliance with design review standards, not the final decision on this project, which requires a staff-level Coastal Development Permit, Resource Management Permit, and Grading Permit. For more information, please contact Ruemel Panglao, at 650/363-4582, or by email at rpanglao@smcgov.org.

To provide feedback, please visit the Department's Customer Survey at the following link: http://planning.smcgov.org/survey.

Sincerely,

Dennis P. Aguirre
Design Review Officer

DPA:RSP:cmc – RSPDD0496_WCN.DOCX

cc: Bruce Chan, Member Landscape Architect
Katie Kostiuk, Member Architect

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT D

BIOLOGICAL RESOURCES REPORT

1237 Grant Road, Montara, San Mateo County, CA

Prepared For:

John McWherter
Tailor-Make Development, Inc.
759 Rockaway Beach Ave.
Pacifica, CA 94044

Project No. 1932

Prepared By:

Dana Riggs
Principal Biologist
driggs@solecology.com
707-241-7718

August 13, 2019

SOL ECOLOGY

TABLE OF CONTENTS

LIST OF APPENDICES

LIST OF ACRONYMS AND ABBREVIATIONS

CDFG/CDFW	California Department of Fish and Game/Wildlife
CRDC	Coastside Design Review Committee
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
Corps	U.S. Army Corps of Engineers
CRLF	California Red-Legged Frog
CWHR	California Wildlife Habitat Relationships
ESA	Federal Endangered Species Act
Inventory	CNPS Inventory of Rare and Endangered Plants
Rank	California Rare Plant Rank
RWQCB	Regional Water Quality Control Board
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service

1.0 INTRODUCTION

On July 12, 2019 Sol Ecology, Inc. performed a biological resources survey at a 4.7-acre lot located at 1237 Grant Road, Montara, in San Mateo County, California (Project Site). The proposed project includes the construction of a 5,421 square foot single-family residence in a non-residential zoning district. The lot includes some existing development including an existing access road, garage, compacted dirt pad, and septic field (Appendix A – Figure 1).

The purpose of the assessment was to gather information necessary to complete a review of potential biological resources and potential for impacts from development of the proposed Project, under the guidelines of the Mid-Coast Local Coastal Plan (LCP) and California Environmental Quality Act (CEQA) for the County of San Mateo Coastside Design Review Committee (CDRC). This report describes the results of the site survey and assessment of the Project Site for the presence of sensitive biological resources protected by local, state, and federal laws and regulations. This report also contains an evaluation of potential impacts to sensitive biological resources that may occur from the proposed project and recommendations for avoiding or mitigating for any impacts as warranted. This assessment is based on information available at the time of the study and on-site conditions that were observed on the date of the site visit.

1.1 Project Setting

The Project Site is located on an existing disturbed lot located approximately 1.25 miles east from the coast, at 1237 Grant Road, in the city of Montara, San Mateo County, California (Appendix A, Figures 1). The site consists of a driveway, existing garage, several storage containers, a dirt pad, and an existing septic field. Historically the site consisted of annual grassland habitat with a few trees up until the early 2002 when the canopy began transitioning to Monterey pine. By 2010, evidence of a road and garage appear on aerials. Evidence of fill from construction of the road and dirt pad was visible in the proposed house footprint. A small roadside drainage ditch is located approximately 200 feet to the south of the Project Site, adjacent to Grant Road (Appendix A, Figure 1).

1.2 Project Description

The proposed project includes the construction of a 3-bedroom single family residence in a non-residential zoning district. The proposed construction will occur in areas previously impacted as a result of grading of the existing access road and accessory structures. Entry to the Project Site will be via an existing access road. The existing septic field will be upgraded as needed to support the new residence. A total of 2,480 square feet of newly altered landscape is proposed; the remaining acreage is within existing developed portions of the site.

2.0 METHODS

On July 12, 2019, the Project Site was traversed on foot to determine the presence of (1) plant communities both sensitive and non-sensitive, (2) special status plant and wildlife species, and (3) presence of essential habitat elements for any special-status plant or wildlife species.

2.1 Literature Review

Prior to the site visit, the Soil Survey of San Mateo County, California [U.S. Department of Agriculture (USDA) Web Soil Survey], Google Earth aerial images, USGS topographic quadrangle maps, and the San Mateo County Resource Conservation District watershed map for San Mateo Creek watershed were examined to determine if any unique soil types that could support sensitive plant communities and/or aquatic features were present in the Project Site. *A Manual of California Vegetation, Online Edition* (CNPS 2019a) were reviewed to assess the potential for sensitive biological communities to occur in the Project Site. All alliances within the Project Site with a ranking of 1 through 3 were considered sensitive biological communities and mapped if present. Additionally, those habitats listed as sensitive in the LCP were also evaluated.

Potential for occurrence of special-status species on or near the Project Site was determined based on a literature review and database search. Database searches for known occurrences of special-status species focused on the Montara Mountain 7.5-minute USGS quadrangle and the five surrounding USGS quadrangles. The following sources were reviewed to determine which special-status plant and wildlife species have been documented to occur in the surrounding vicinity of the Project Site. Additional resources are provided in Section 6.0.:

- California Natural Diversity Database (CNDDB) records (CDFW 2019; Appendix B)
- USFWS Information for Planning and Conservation Species Lists (USFWS 2019; Appendix B)
- CNPS Inventory records (CNPS 2019b)
- 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)
- *A Field Guide to Western Reptiles and Amphibians* (Stebbins 2003)

2.2 Field Survey

The Project Site was evaluated for the presence of sensitive biological communities, including riparian areas, sensitive plant communities recognized by CDFW or the LCP, County-mapped riparian corridors, and habitat connectivity corridors. Sensitive communities were identified following A Manual of California Vegetation, Online Edition and includes California Wildlife Habitat Relationships (CWHR) habitat classifications.

The Project Site was also surveyed to determine if any wetlands and waters potentially subject to jurisdiction by the U.S Army Corps of Engineers (Corps), Regional Water Quality Control Board (RWQCB), or CDFW are present. This preliminary assessment was based primarily on the presence of wetland plant indicators, hydrology or wetland soils. A preliminary waters assessment was based on the presence of unvegetated, ponded areas or flowing water, or evidence indicating their presence such as a high-water mark or a defined drainage course.

Sol Ecology biologists also performed reconnaissance-level surveys for special status species on and adjacent to the Project Site on July 12, 2019. The focus of the surveys was to identify whether suitable habitat elements for each of the special status species documented in the surrounding vicinity are present on the Project Site or not and whether the project would have the potential to result in impacts to any of these species and/or their habitats either on- or off-site. Habitat elements examined for the potential presence of sensitive plant species included: soil type, elevation, vegetation community, and dominant plant species. For wildlife species, habitat elements examined included the presence of dispersal habitat, foraging habitat, refugia or estivation habitat, and breeding (or nesting) habitat.

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.

3.0 RESULTS

3.1 Existing Conditions and General Wildlife Use

Biological communities present in the Project Site were classified based on existing plant community descriptions described in the California Native Plant Society Online Manual of California Vegetation (CNPS 2019). 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. Biological communities were classified as sensitive or non-sensitive as defined by CEQA, the LCP, CNDDB, and other applicable laws and regulations. CNDDB vegetation alliances are ranked 1 through 5 based on NatureServe's (2010) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive.

Soils at the site are mapped as Scarper-Miramar complex, 30 to 75 percent slopes and Typic Argiustolls, loamy-Urban land association, 5 to 15 percent slopes. The Scarper-Miramar and Typic Argiustolls series consist of moderately drained and well drained soils. These soil types are found on coastal hills and mountains with slopes between 5 to 75 percent, at elevations between 200 to 2,000 feet. Typical vegetation includes coastal shrubs such as monkey flower, sage, and poison oak. Elevations at the Project Site range from 270 feet to 360 feet (82 to 110 meters).

Vegetation on the Project Site consists primarily of Monterey pine forest (introduced) and disturbed ruderal vegetation. No sensitive biological communities are present on the Project Site; a small drainage ditch with willow habitat is present 200 feet to the south of the site but is not within the proposed footprint. The Project Site supports a number of common bird and raptor species; a red-tailed hawk was heard calling to the north of the site. Photographs of the Project Site are provided in Appendix C.

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 (Inventory) with California Rare Plant Ranks (Rank) of 1 and 2 are also considered special-status plant species and must be considered under CEQA.

Based upon a review of the resources and databases given in Section 2.1, 28 special-status plant species have been documented within a five-mile radius of the Project Site (Appendix A, Figure 2). Based on the presence of biological communities described above and soils at the site, as well as recent site disturbance the Project Site has the potential to support none of these species. Species documented in the area are unlikely or have no potential to occur on the Project Site for one or more of the following reasons:

- Hydrologic conditions (e.g. marsh habitat, seeps, pond habitat) necessary to support the special-status plants do not exist on site;
- Edaphic (soil) conditions (e.g. rocky or clay 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 Site;
- Associated vegetation communities (e.g. cismontane woodland, chaparral, broadleaved upland forest) necessary to support the special-status plants do not exist on site.

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 15 special-status wildlife species have been documented within five miles of the Project Site (Appendix A, Figure 3). Based on the presence of biological communities described above, the Project Site has the potential to support 2 of these species: California red-legged frog *(Rana draytonii)* and Allen's hummingbird (*Selasphorus sasin*). These species are described in more detail below.

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 Site. Habitat elements that were evaluated but found to be absent from the immediate area of the Project Site or surrounding habitats subject to potential indirect impacts include the following:

- No suitable burrows on or adjacent to the Project Site (e.g. for American badger);
- No suitable marine habitat (e.g. for southern sea otter or green sea turtle)
- No suitable stream habitat, wetland habitat, pond habitat, freshwater marshes, lakes, lagoons, bays, coastal swales, brackish marshes, and saltwater marshes on or immediately adjacent to the property (e.g. for California giant salamander, foothill yellow-legged frog, western pond turtle, San Francisco garter snake, saltmarsh common yellowthroat, or steelhead - central California coast DPS);
- No suitable open grassland or coastal prairies (for western bumble bee, obscure bumble bee, or special status butterflies);
- Host plant (broadleaf stonecrop, milkweed) is absent (e.g. San Bruno elfin butterfly).

Wildlife Species with Potential to Occur on the Project Site:

California Red-legged Frog (Rana draytonii), Federal Threatened Species, CDFW Species of Special Concern. The California red-legged frog (CRLF) is dependent on suitable aquatic, estivation, and upland habitat. During periods of wet weather, starting with the first rainfall in late fall, red-legged frogs disperse away from their estivation sites to seek suitable breeding habitat. Aquatic and breeding habitat are characterized by dense, shrubby, riparian vegetation and deep, still or slow-moving water. Breeding occurs between late November and late April. Following breeding during the wet season, adult frogs may disperse into upland habitats which include areas up to 300 feet from aquatic and associated riparian habitat and are comprised of grasslands, woodlands, and/or vegetation that provide shelter, forage, and predator avoidance.

Upland habitat can include structural features such as boulders, rocks and organic debris (e.g. downed trees, logs), as well as small mammal burrows and moist leaf litter (USFWS 2010). At the end of the wet season, CRLF may disperse up to one-mile overland from upland or breeding habitats (often via riparian corridors) to aquatic non-breeding habitats (Bulger 2003, Fellers and Kleeman 2007). Although CRLF is highly aquatic, this species has been documented to make overland movements of several hundred meters and up to one mile during a winter-spring wet season in Northern California between suitable aquatic habitats.

The roadside drainage ditch on the project parcel may provide aquatic non-breeding habitat to CRLF but given its lack of connectivity does not likely provide suitable dispersal habitat. The nearest documented occurrence record of CRLF is approximately 1,670 feet (0.33 miles) to the west of the proposed Project Site in Montara Creek. However, it is unlikely a CRLF would migrate through the Project Site due to the availability of more suitable dispersal habitat in the surrounding area and the absence of potential breeding habitat to the north or east of the site. Additionally, the soils on the Project Site have been previously impacted and consist of mostly fill material with no burrows observed during the site visit. As such, CRLF has only a low potential to occur.

Allen's Hummingbird (Selasphorus sasin). USFWS Bird of Conservation Concern. Allen's Hummingbird breed in a narrow strip of coastal forest, scrub, and chaparral from sea level to around 1,000 feet elevation along the West Coast. Males tend to hold territories in more open areas while females nest in areas with tree cover including eucalyptus, redwood, Monterey Pine and Douglas-fir. On the wintering grounds in Mexico, they use oak-pine forest, edges, and scrubby clearings with abundant flowers. Allen's Hummingbird will nest in trees or shrubs anywhere from 2–50 feet above the ground. They frequently build their nests near shady streams in blackberry, bracken fern, eucalyptus, cypress, Monterey Pine or Douglas-fir. Monterey pines on the Project Site provide suitable nesting habitat for this species.

4.0 POTENTIAL IMPACTS

The assessment of impacts under CEQA is based on the change caused by the Project relative to the existing conditions at the proposed Project Site. In applying CEQA Appendix G, the terms "substantial" and "substantially" are used as the basis for significance determinations in many of the thresholds but are not defined qualitatively or quantitatively in CEQA or in technical literature. In some cases, the determination requires application of best professional judgment based on knowledge of site conditions as well as the ecology and physiology of biological resources present in a given area. The CEQA and State CEQA Guidelines defines "significant effect on the environment" as "a substantial adverse change in the physical conditions which exist in the area affected by the proposed project." Pursuant to Appendix G, Section IV of the State CEQA Guidelines, the proposed Project would have a significant impact on biological resources if it would:

A. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

B. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service.

C. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

D. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

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

4.1 Potentially Significant Impacts

<u>Sensitive Biological Communities</u>

No sensitive biological communities are present at the Project Site. As such, no significant impacts are anticipated, and no mitigation is proposed. A roadside drainage ditch is located more than 200 feet from the Project Site and will not be impacted by the Project.

Special-Status Plant Species

No special status plants have potential to occur at the Project Site due to prior site disturbance. As such there is no potential for impacts and no further recommendations are provided.

Special-Status Wildlife Species

Two special status species have potential to occur on the Project Site. Impacts including direct mortality and/or disruption of breeding behaviors are considered potentially significant impacts under CEQA. Migratory nesting birds including Allen's hummingbird, may nest on site and may be potentially impacted by the proposed project if activities occur during the nesting season from February 1 through August 31. Impacts to nesting birds causing nest failure or abandonment is considered a significant impact under CEQA.

To avoid potential impacts to CRLF, it is recommended work should be performed during daylight hours at least 30 minutes after sunrise and ending at least 30 minutes before sunset when animals including CRLF are least active. Furthermore, it is recommended no ground disturbing or foundation work be performed during or within 48 hours of any rain event (greater than 0.5 inches) between October 31 and April 31 when CRLF species are most likely to utilize upland habitats. Lastly, wildlife exclusion fencing is recommended to be placed between the drainage ditch and proposed construction to prevent CRLF from entering the site during activities.

To avoid potential impacts to birds, vegetation/tree removal should be performed outside the nesting season (between September 1 and January 31). If work must be performed during the nesting season, a pre-construction nesting bird survey is recommended to be performed by a qualified biologist. 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. Buffers should remain in place until all young have fledged, or the biologist has confirmed that the nest has been naturally predated.

5.0 CONCLUSION

On July 12, 2019 Sol Ecology, Inc. performed a biological resources survey at 1237 Grant Road, Montara, in San Mateo County, California. The proposed project includes the construction of a 5,421 square foot single-family residence in a non-residential zoning district. The lot includes some existing development including an existing access road, garage, compacted dirt pad, and septic field. The site is dominated by introduced Monterey pine on a hillslope to the east of Montara Creek. No sensitive biological communities are present on the property, with the exception of a small roadside drainage located 200 feet from the project footprint and will be completely avoided. Additionally, no special status plants have potential to occur at the Project Site.

Two special status species have potential to occur on the Project Site: CRLF and Allen's hummingbird. CRLF may be present in the roadside drainage ditch while Allen's hummingbird may nest in Monterey pine trees on and adjacent to the Project Site. Recommendations include avoidance of ground-disturbing activities during the period when these species are more likely to be present. Additionally, placement of wildlife exclusion fencing will prevent CRLF from entering the work area.

6.0 REFERENCES

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APPENDIX A

PROJECT FIGURES: SITE LOCATION MAP AND CNDDB DATABASE RESULTS

Figure 1: Location of Project Area
1237 Grant Road, Montara, CA

Project Study Area
Building Envelope
Existing Driveway
Streets
Drainage Ditch

Date: 8-12-2019
Data: Sol Ecology Inc., San Mateo Co.
Base: ESRI
GIS: AJG

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Figure 2: Special Status Plant Species within 5 Miles of the Project Site
1237 Grant Road, Montara, CA

- Project Location
- 5-Mile Buffer
- Blasdale's bent grass (1)
- Choris' popcornflower (2)
- Franciscan onion (1)
- Franciscan thistle (2)
- Hickman's cinquefoil (2)
- Kellogg's horkelia (1)
- Kings Mountain manzanita (2)
- Montara manzanita (3)
- Oregon polemonium (1)
- Ornduff's meadowfoam (2)
- San Francisco campion (2)
- San Francisco collinsia (3)
- San Francisco gumplant (1)
- San Francisco owl's-clover (2)
- San Mateo woolly sunflower (1)
- Scouler's catchfly (4)
- arcuate bush-mallow (1)
- coast yellow leptosiphon (1)
- coastal marsh milk-vetch (1)
- coastal triquetrella (1)
- fragrant fritillary (1)
- island tube lichen (3)
- pappose tarplant (1)
- perennial goldfields (2)
- rose leptosiphon (2)
- western leatherwood (6)
- white-rayed pentachaeta (1)
- woodland woollythreads (1)

Date: 8-12-2019
Data: Sol Ecology Inc., San Mateo Co., CDFW
Base: ESRI
GIS: AJG

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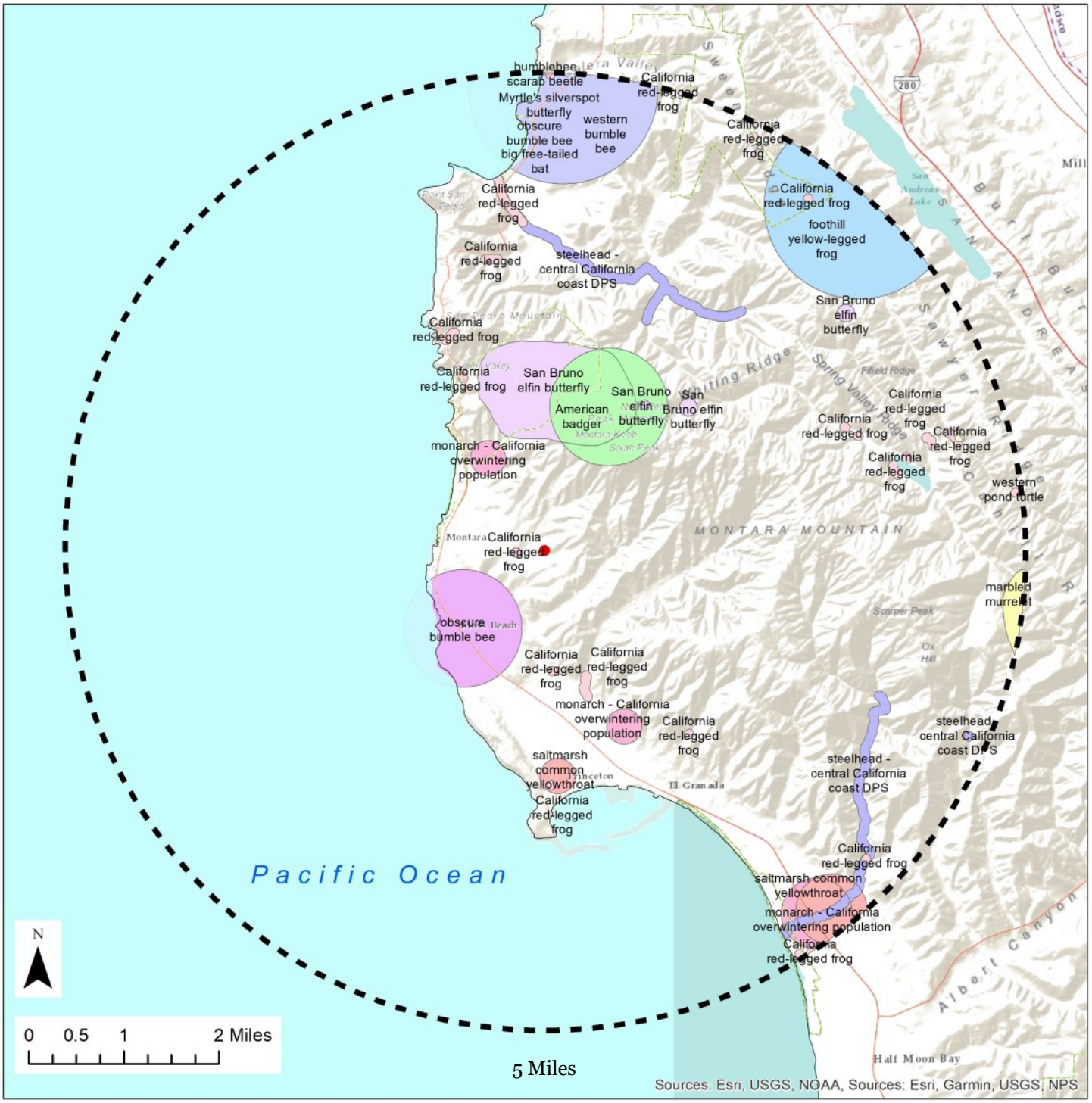
Figure 3: Special Status Animal Species within 5 Miles of the Project Site
1237 Grant Road, Montara, CA



- Project Location
- 5-Mile Buffer
- American badger (1)
- California giant salamander (1)
- California red-legged frog (19)
- Myrtle's silverspot butterfly (1)
- San Bruno elfin butterfly (4)
- big free-tailed bat (1)
- bumblebee scarab beetle (1)
- foothill yellow-legged frog (1)
- marbled murrelet (1)
- monarch - California overwintering population (3)
- obscure bumble bee (2)
- saltmarsh common yellowthroat (2)
- steelhead - central California coast DPS (3)
- western bumble bee (1)
- western pond turtle (1)

Date: 8-12-2019
Data: Sol Ecology Inc., San Mateo Co., CDFW
Base: ESRI
GIS: AJG

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APPENDIX B

CNDDB RESULTS AND USFWS IPAC WITHIN 5 MILES OF THE PROJECT SITE

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Montara Mountain (3712254) OR San Mateo (3712253) OR Half Moon Bay (3712244) OR Woodside (3712243) OR San Francisco South (3712264) OR Hunters Point (3712263))
 AND Taxonomic Group IS (Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects OR Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes)

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.
Acanthomintha duttonii San Mateo thorn-mint	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_UCBBG-UC Berkeley Botanical Garden	170 600	5 S:5	0	1	0	1	2	1	3	2	3	1	1
Adela oplerella Opler's longhorn moth	G2 S2	None None		100 100	14 S:1	0	0	0	0	0	1	1	0	1	0	0
Agrostis blasdalei Blasdale's bent grass	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	50 50	62 S:1	0	0	0	1	0	0	0	1	1	0	0
Allium peninsulare var. franciscanum Franciscan onion	G5T2 S2	None None	Rare Plant Rank - 1B.2	20 1,025	25 S:15	2	6	1	0	0	6	4	11	15	0	0
Ambystoma californiense California tiger salamander	G2G3 S2S3	Threatened Threatened	CDFW_WL-Watch List IUCN_VU-Vulnerable	400 400	1196 S:1	0	0	0	0	1	0	1	0	0	1	0
Amsinckia lunaris bent-flowered fiddleneck	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	220 475	93 S:5	0	2	1	0	0	2	2	3	5	0	0
Aneides flavipunctatus niger Santa Cruz black salamander	G3 S3	None None	CDFW_SSC-Species of Special Concern	1,300 1,300	78 S:1	0	0	0	0	0	1	1	0	1	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	40 420	419 S:3	0	0	0	0	0	3	3	0	3	0	0
Arctostaphylos andersonii Anderson's manzanita	G2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden		64 S:1	0	0	0	1	0	0	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.
Arctostaphylos franciscana Franciscan manzanita	G1 S1	Endangered None	Rare Plant Rank - 1B.1 SB_UCBBG-UC Berkeley Botanical Garden	700 700	4 S:1	0	0	0	0	1	0	1	0	0	0	1
Arctostaphylos imbricata San Bruno Mountain manzanita	G1 S1	None Endangered	Rare Plant Rank - 1B.1	900 1,000	2 S:2	1	0	0	0	0	1	1	1	2	0	0
Arctostaphylos montana ssp. ravenii Presidio manzanita	G3T1 S1	Endangered Endangered	Rare Plant Rank - 1B.1	700 700	7 S:1	0	0	0	0	1	0	1	0	0	0	1
Arctostaphylos montaraensis Montara manzanita	G1 S1	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture	900 1,500	4 S:4	2	0	1	1	0	0	1	3	4	0	0
Arctostaphylos pacifica Pacific manzanita	G1 S1	None Endangered	Rare Plant Rank - 1B.1	1,045 1,045	1 S:1	0	0	1	0	0	0	0	1	1	0	0
Arctostaphylos regismontana Kings Mountain manzanita	G2 S2	None None	Rare Plant Rank - 1B.2	586 2,100	17 S:15	1	3	3	3	0	5	3	12	15	0	0
Astragalus pycnostachyus var. pycnostachyus coastal marsh milk-vetch	G2T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_SBBG-Santa Barbara Botanic Garden		25 S:2	0	0	0	0	0	2	2	0	2	0	0
Astragalus tener var. tener alkali milk-vetch	G2T1 S1	None None	Rare Plant Rank - 1B.2	50 50	65 S:1	0	0	0	0	1	0	1	0	0	1	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	5 842	1984 S:2	0	1	0	0	0	1	0	2	2	0	0
Banksula incredula incredible harvestman	G1 S1	None None		1,110 1,110	1 S:1	0	0	0	0	0	1	1	0	1	0	0
Bombus caliginosus obscure bumble bee	G4? S1S2	None None	IUCN_VU-Vulnerable	30 400	181 S:6	0	0	0	0	0	6	5	1	6	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.
Bombus occidentalis western bumble bee	G2G3 S1	None None	USFS_S-Sensitive XERCES_IM-Imperiled	40 800	282 S:10	0	0	0	0	0	10	10	0	10	0	0
Brachyramphus marmoratus marbled murrelet	G3G4 S1	Threatened Endangered	CDF_S-Sensitive IUCN_EN-Endangered NABCI_RWL-Red Watch List	800 800	110 S:2	0	0	0	0	0	2	0	2	2	0	0
Caecidotea tomalensis Tomales isopod	G2 S2S3	None None		50 2,100	6 S:2	0	0	1	1	0	0	2	0	2	0	0
Calicina minor Edgewood blind harvestman	G1 S1	None None		400 560	2 S:2	0	0	0	0	0	2	2	0	2	0	0
Callophrys mossii bayensis San Bruno elfin butterfly	G4T1 S1	Endangered None	XERCES_CI-Critically Imperiled	600 1,882	6 S:6	2	1	0	0	0	3	0	6	6	0	0
Carex comosa bristly sedge	G5 S2	None None	Rare Plant Rank - 2B.1	0 0	29 S:1	0	0	0	0	1	0	1	0	0	1	0
Centromadia parryi ssp. parryi pappose tarplant	G3T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	10 23	39 S:2	0	0	0	1	0	1	1	1	2	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	5 17	138 S:3	1	0	0	0	0	2	2	1	3	0	0
Chloropyron maritimum ssp. palustre Point Reyes salty bird's-beak	G4?T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	5 5	68 S:1	0	0	0	0	1	0	1	0	0	1	0
Chorizanthe cuspidata var. cuspidata San Francisco Bay spineflower	G2T1 S1	None None	Rare Plant Rank - 1B.2	50 650	17 S:8	0	0	2	0	0	6	4	4	8	0	0
Chorizanthe robusta var. robusta robust spineflower	G2T1 S1	Endangered None	Rare Plant Rank - 1B.1 BLM_S-Sensitive	150 150	20 S:2	0	0	0	0	2	0	2	0	0	2	0
Cicindela hirticollis gravida sandy beach tiger beetle	G5T2 S2	None None		10 10	34 S:1	0	0	0	0	1	0	1	0	0	0	1
Cirsium andrewsii Franciscan thistle	G3 S3	None None	Rare Plant Rank - 1B.2	100 450	31 S:3	0	0	0	0	1	2	2	1	2	1	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.
Cirsium fontinale var. fontinale Crystal Springs fountain thistle	G2T1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	400 600	5 S:3	0	1	1	0	1	0	1	2	2	1	0
Cirsium occidentale var. compactum compact cobwebby thistle	G3G4T2 S2	None None	Rare Plant Rank - 1B.2	100 100	30 S:1	0	0	0	0	1	0	1	0	0	1	0
Collinsia corymbosa round-headed Chinese-houses	G1 S1	None None	Rare Plant Rank - 1B.2	25 25	13 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	100 700	36 S:18	0	6	0	0	0	12	9	9	18	0	0
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	320 2,170	629 S:4	0	0	0	1	0	3	1	3	4	0	0
Danaus plexippus pop. 1 monarch - California overwintering population	G4T2T3 S2S3	None None	USFS_S-Sensitive	40 150	383 S:5	0	1	1	0	2	1	5	0	3	2	0
Dicamptodon ensatus California giant salamander	G3 S2S3	None None	CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	300 1,400	234 S:9	1	2	0	0	0	6	6	3	9	0	0
Dipodomys venustus venustus Santa Cruz kangaroo rat	G4T1 S1	None None		42 42	29 S:1	0	0	0	0	1	0	1	0	0	1	0
Dirca occidentalis western leatherwood	G2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden	255 1,265	71 S:17	4	5	2	0	0	6	5	12	17	0	0
Dufourea stagei Stage's dufourine bee	G1G2 S1	None None		700 700	1 S:1	0	0	0	0	0	1	1	0	1	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	40 525	1369 S:12	1	9	2	0	0	0	0	12	12	0	0

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Erethizon dorsatum North American porcupine	G5 S3	None None	IUCN_LC-Least Concern	509 509	508 S:1	0	0	0	0	0	1	1	0	1	0	0
Eriophyllum latilobum San Mateo woolly sunflower	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	100 900	8 S:6	1	2	1	0	0	2	0	6	6	0	0
Eucyclogobius newberryi tidewater goby	G3 S3	Endangered None	AFS_EN-Endangered CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	20 20	127 S:1	0	0	0	0	1	0	1	0	0	0	1
Euphydryas editha bayensis Bay checkerspot butterfly	G5T1 S1	Threatened None	XERCES_CI-Critically Imperiled	100 1,000	30 S:7	0	1	0	0	6	0	6	1	1	2	4
Falco columbarius merlin	G5 S3S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	65 65	37 S:1	0	1	0	0	0	0	0	1	1	0	0
Falco peregrinus anatum American peregrine falcon	G4T4 S3S4	Delisted Delisted	CDF_S-Sensitive CDFW_FP-Fully Protected USFWS_BCC-Birds of Conservation Concern	5 10	56 S:2	0	1	0	0	0	1	0	2	2	0	0
Fritillaria biflora var. ineziana Hillsborough chocolate lily	G3G4T1 S1	None None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture	550 550	2 S:2	0	1	0	0	0	1	1	1	2	0	0
Fritillaria liliacea fragrant fritillary	G2 S2	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive	295 800	82 S:9	0	5	0	0	1	3	5	4	8	0	1
Geothlypis trichas sinuosa saltmarsh common yellowthroat	G5T3 S3	None None	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	10 480	112 S:10	0	2	2	0	0	6	9	1	10	0	0
Gilia capitata ssp. chamissonis blue coast gilia	G5T2 S2	None None	Rare Plant Rank - 1B.1	10 650	37 S:4	0	1	0	0	0	3	2	2	4	0	0
Gilia millefoliata dark-eyed gilia	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive		54 S:3	0	0	0	0	2	1	3	0	1	0	2
Grindelia hirsutula var. maritima San Francisco gumplant	G5T1Q S1	None None	Rare Plant Rank - 3.2	50 1,000	15 S:9	0	0	1	1	1	6	9	0	8	0	1

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Helianthella castanea Diablo helianthella	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	700 700	107 S:2	0	1	0	0	1	0	1	1	1	1	0
Hemizonia congesta ssp. congesta congested-headed hayfield tarplant	G5T2 S2	None None	Rare Plant Rank - 1B.2		52 S:2	0	0	0	0	1	1	2	0	1	1	0
Hesperevax sparsiflora var. brevifolia short-leaved evax	G4T3 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	400 500	56 S:2	0	0	0	0	1	1	2	0	1	1	0
Hesperolinon congestum Marin western flax	G1 S1	Threatened Threatened	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	200 700	27 S:9	0	5	2	0	2	0	2	7	7	2	0
Heteranthera dubia water star-grass	G5 S2	None None	Rare Plant Rank - 2B.2		9 S:1	0	0	0	0	0	1	1	0	1	0	0
Horkelia cuneata var. sericea Kellogg's horkelia	G4T1? S1?	None None	Rare Plant Rank - 1B.1 USFS_S-Sensitive	150 600	58 S:5	0	0	0	0	1	4	4	1	4	1	0
Horkelia marinensis Point Reyes horkelia	G2 S2	None None	Rare Plant Rank - 1B.2	300 300	36 S:2	0	0	0	0	0	2	2	0	2	0	0
Hydrochara rickseckeri Ricksecker's water scavenger beetle	G2? S2?	None None		35 280	13 S:2	0	0	0	0	0	2	2	0	2	0	0
Hydroporus leechi Leech's skyline diving beetle	G1? S1?	None None		680 680	13 S:1	0	0	0	0	0	1	1	0	0	1	0
Hypogymnia schizidiata island tube lichen	G2 S1	None None	Rare Plant Rank - 1B.3	1,290 1,780	10 S:3	2	0	0	0	0	1	0	3	3	0	0
Ischnura gemina San Francisco forktail damselfly	G2 S2	None None	IUCN_VU-Vulnerable	25 540	7 S:4	0	0	0	0	1	3	4	0	3	1	0
Lasiurus cinereus hoary bat	G5 S4	None None	IUCN_LC-Least Concern WBWG_M-Medium Priority	20 20	238 S:7	0	0	0	0	0	7	7	0	7	0	0
Lasthenia californica ssp. macrantha perennial goldfields	G3T2 S2	None None	Rare Plant Rank - 1B.2	40 350	59 S:3	0	1	1	0	0	1	0	3	3	0	0

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
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	5 25	303 S:2	0	0	0	1	0	1	2	0	2	0	0
Layia carnosa beach layia	G2 S2	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	40 40	25 S:1	0	0	0	0	1	0	1	0	0	0	1
Leptosiphon croceus coast yellow leptosiphon	G1 S1	None Endangered	Rare Plant Rank - 1B.1 SB_UCBBG-UC Berkeley Botanical Garden	50 50	1 S:1	0	0	0	1	0	0	0	1	1	0	0
Leptosiphon rosaceus rose leptosiphon	G1 S1	None None	Rare Plant Rank - 1B.1	70 70	31 S:4	0	1	0	0	2	1	2	2	2	2	0
Lessingia arachnoidea Crystal Springs lessingia	G2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden	300 550	11 S:8	2	2	1	0	0	3	0	8	8	0	0
Lessingia germanorum San Francisco lessingia	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1	150 500	5 S:2	0	0	1	0	1	0	2	0	1	1	0
Lichnanthe ursina bumblebee scarab beetle	G2 S2	None None		15 20	8 S:2	0	0	0	0	0	2	2	0	2	0	0
Limnanthes douglasii ssp. ornduffii Ornduff's meadowfoam	G4T1 S1	None None	Rare Plant Rank - 1B.1	30 50	2 S:2	0	0	0	0	1	1	0	2	1	1	0
Malacothamnus arcuatus arcuate bush-mallow	G2Q S2	None None	Rare Plant Rank - 1B.2	10 700	30 S:9	0	1	1	1	1	5	4	5	8	0	1
Melospiza melodia pusillula Alameda song sparrow	G5T2? S2S3	None None	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	10 42	38 S:5	0	0	0	0	0	5	5	0	5	0	0
Microcina edgewoodensis Edgewood Park micro-blind harvestman	G1 S1	None None		600 600	1 S:1	0	0	0	0	0	1	1	0	1	0	0

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Monardella sinuata ssp. nigrescens northern curly-leaved monardella	G3T2 S2	None None	Rare Plant Rank - 1B.2		25 S:1	0	0	0	0	1	0	1	0	0	1	0
Monolopia gracilens woodland woollythreads	G3 S3	None None	Rare Plant Rank - 1B.2	640 675	68 S:5	0	1	0	0	0	4	2	3	5	0	0
Mylopharodon conocephalus hardhead	G3 S3	None None	CDFW_SSC-Species of Special Concern USFS_S-Sensitive	20 20	33 S:1	0	0	0	0	0	1	1	0	1	0	0
Myotis thysanodes fringed myotis	G4 S3	None None	BLM_S-Sensitive IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	500 500	86 S:1	0	1	0	0	0	0	0	1	1	0	0
Neotoma fuscipes annectens San Francisco dusky-footed woodrat	G5T2T3 S2S3	None None	CDFW_SSC-Species of Special Concern	270 522	38 S:7	0	2	0	0	0	5	0	7	7	0	0
Nyctinomops macrotis big free-tailed bat	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern WBWG_MH-Medium-High Priority	150 150	32 S:1	0	0	0	0	0	1	1	0	1	0	0
Oncorhynchus mykiss irideus pop. 8 steelhead - central California coast DPS	G5T2T3Q S2S3	Threatened None	AFS_TH-Threatened	100 550	44 S:4	0	2	0	0	0	2	2	2	4	0	0
Pentachaeta bellidiflora white-rayed pentachaeta	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_UCBBG-UC Berkeley Botanical Garden	500 520	14 S:4	1	0	0	0	2	1	3	1	2	1	1
Phalacrocorax auritus double-crested cormorant	G5 S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	30 75	39 S:3	0	0	2	0	0	1	1	2	3	0	0
Plagiobothrys chorisianus var. chorisianus Choris' popcornflower	G3T1Q S1	None None	Rare Plant Rank - 1B.2	50 1,250	42 S:11	1	4	2	0	0	4	3	8	11	0	0
Plebejus icarioides missionensis Mission blue butterfly	G5T1 S1	Endangered None	XERCES_CI-Critically Imperiled	200 750	14 S:13	0	2	1	0	1	9	4	9	13	0	0
Polemonium carneum Oregon polemonium	G3G4 S2	None None	Rare Plant Rank - 2B.2		16 S:1	0	0	0	0	0	1	1	0	1	0	0

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Polygonum marinense Marin knotweed	G2Q S2	None None	Rare Plant Rank - 3.1		32 S:1	0	0	0	0	0	1	1	0	1	0	0
Potentilla hickmanii Hickman's cinquefoil	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1	25 300	5 S:2	0	1	0	0	1	0	1	1	1	0	1
Rallus obsoletus obsoletus California Ridgway's rail	G5T1 S1	Endangered Endangered	CDFW_FP-Fully Protected NABCI_RWL-Red Watch List	0 15	99 S:8	0	1	4	0	1	2	3	5	7	1	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	333 878	2381 S:2	0	0	0	0	2	0	2	0	0	0	2
Rana draytonii California red-legged frog	G2G3 S2S3	Threatened None	CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	5 4,005	1527 S:59	10	17	12	0	0	20	10	49	59	0	0
Reithrodontomys raviventris salt-marsh harvest mouse	G1G2 S1S2	Endangered Endangered	CDFW_FP-Fully Protected IUCN_EN-Endangered	2 2	144 S:1	0	0	0	0	0	1	1	0	1	0	0
Riparia riparia bank swallow	G5 S2	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern	10 40	298 S:3	0	1	0	0	0	2	2	1	3	0	0
Sanicula maritima adobe sanicle	G2 S2	None Rare	Rare Plant Rank - 1B.1 USFS_S-Sensitive	250 250	17 S:1	0	0	0	0	1	0	1	0	0	0	1
Senecio aphanactis chaparral ragwort	G3 S2	None None	Rare Plant Rank - 2B.2	640 640	82 S:2	0	0	0	0	0	2	2	0	2	0	0
Silene scouleri ssp. scouleri Scouler's catchfly	G5T4T5 S2S3	None None	Rare Plant Rank - 2B.2	780 1,025	23 S:11	0	0	0	0	0	11	6	5	11	0	0
Silene verecunda ssp. verecunda San Francisco campion	G5T1 S1	None None	Rare Plant Rank - 1B.2	25 1,500	20 S:8	0	1	0	0	3	4	4	4	5	3	0
Speyeria callippe callippe callippe silverspot butterfly	G5T1 S1	Endangered None	XERCES_CI-Critically Imperiled	250 900	12 S:6	0	1	1	0	0	4	3	3	6	0	0
Speyeria zerene myrtleae Myrtle's silverspot butterfly	G5T1 S1	Endangered None	XERCES_CI-Critically Imperiled	20 60	17 S:2	0	0	0	0	2	0	2	0	0	0	2

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Spirinchus thaleichthys longfin smelt	G5 S1	Candidate Threatened		0 0	46 S:2	0	0	0	0	0	2	1	1	2	0	0
Suaeda californica California seablite	G1 S1	Endangered None	Rare Plant Rank - 1B.1	5 5	18 S:3	0	0	1	0	0	2	0	3	3	0	0
Taxidea taxus American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	187 1,500	590 S:3	0	0	0	0	0	3	1	2	3	0	0
Thamnophis sirtalis tetrataenia San Francisco gartersnake	G5T2Q S2	Endangered Endangered	CDFW_FP-Fully Protected	10 1,000	67 S:27	3	8	4	0	4	8	11	16	23	0	4
Trachusa gummifera San Francisco Bay Area leaf-cutter bee	G1 S1	None None		200 200	2 S:1	0	0	0	0	0	1	1	0	1	0	0
Trifolium amoenum two-fork clover	G1 S1	Endangered None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture		26 S:1	0	0	0	0	0	1	1	0	1	0	0
Trifolium hydrophilum saline clover	G2 S2	None None	Rare Plant Rank - 1B.2		49 S:1	0	0	0	0	0	1	1	0	1	0	0
Triphysaria floribunda San Francisco owl's-clover	G2? S2?	None None	Rare Plant Rank - 1B.2	5 450	50 S:14	0	0	0	0	5	9	14	0	9	3	2
Triquetrella californica coastal triquetrella	G2 S2	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive	400 1,200	13 S:3	0	0	0	0	0	3	0	3	3	0	0
Tryonia imitator mimic tryonia (=California brackishwater snail)	G2 S2	None None	IUCN_DD-Data Deficient	0 0	39 S:1	0	0	0	0	1	0	1	0	0	0	1
Usnea longissima Methuselah's beard lichen	G4 S4	None None	Rare Plant Rank - 4.2 BLM_S-Sensitive	590 590	206 S:1	0	0	0	0	1	0	1	0	0	1	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
Salt Marsh Harvest Mouse Reithrodontomys raviventris No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/613	Endangered
Southern Sea Otter Enhydra lutris nereis No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8560	Threatened Marine mammal

Birds

NAME	STATUS
California Clapper Rail Rallus longirostris obsoletus No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4240	Endangered
California Least Tern Sterna antillarum browni No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8104	Endangered
Marbled Murrelet Brachyramphus marmoratus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/4467	Threatened

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 No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6199	Threatened
San Francisco Garter Snake Thamnophis sirtalis tetrataenia No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5956	Endangered

Amphibians

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

Fishes

NAME	STATUS

Delta Smelt Hypomesus transpacificus — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/321

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

Insects

NAME	STATUS

Mission Blue Butterfly Icaricia icarioides missionensis — Endangered
There is **proposed** critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/6928

Myrtle's Silverspot Butterfly Speyeria zerene myrtleae — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/6929

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

Flowering Plants

NAME	STATUS

Hickman's Potentilla Potentilla hickmanii — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/6343

San Mateo Woolly Sunflower Eriophyllum latilobum — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/7791

White-rayed Pentachaeta Pentachaeta bellidiflora — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/7782

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

Ashy Storm-petrel Oceanodroma homochroa — Breeds May 1 to Jan 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/7237

Bald Eagle Haliaeetus leucocephalus — 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/1626

Black Oystercatcher Haematopus bachmani — Breeds Apr 15 to Oct 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9591

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.

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

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

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

Proposed house site.

Proposed Project Site, Monterey pine (introduced) and bare dirt pad.

Existing garage and dirt pad at the end of the existing driveway.

Monterey pine forest and an existing drainage ditch (located 200 feet to the south of the Project site.

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT E

Advanced Tree Care
965 East San Carlos Ave, San Carlos, CA 94070

1237 Grant Rd, Montara
October 12, 2018

PLN2018-00322

Jordan McWherter
759 Rockaway Beach Ave
Pacifica, CA 94044

Site: 1237 Grant Rd, Montara

Dear Jordan,

At your request, I visited the above site for the purpose of inspecting and commenting on the trees around the property. A new residence is planned, prompting the need for this tree protection report.

Method:
The property is located in San Mateo County. San Mateo County regulates Significant Trees whereby a "SIGNIFICANT TREE" shall mean any live woody plant rising above the ground with a single stem or trunk of a circumference of 38" (Diameter 12.0") or more measured at 4 1/2' vertically above the ground or immediately below the lowest branch, whichever is lower, and having the inherent capacity of naturally producing one main axis continuing to grow more vigorously than the lateral axes. The location of the Significant Trees that will be impacted on this site can be found on the plan. Each tree is given an identification number. The trees are measured at 54 inches above ground level (DBH or Diameter at Breast Height). A condition rating of 1 to 100 is assigned to each tree representing form and vitality on the following scale:

1 to 29	Very Poor
30 to 49	Poor
50 to 69	Fair
70 to 89	Good
90 to 100	Excellent

The height and spread of each tree is estimated. A Comments section is provided for any significant observations affecting the condition rating of the tree.

A Summary and Tree Protection Plan are at the end the survey providing recommendations for maintaining the health and condition of the trees during and after construction.

If you have any questions, please don't hesitate to call.

Sincerely

Robert Weatherill
Certified Arborist WE 1936A

Advanced Tree Care
965 East San Carlos Ave, San Carlos, CA 94070

1237 Grant Rd, Montara
October 12, 2018

Tree Survey

Site
The proposed site for construction consists entirely of Monterey pines ranging from 8 inches in trunk diameter up to 54 inches in trunk diameter at standard height.

A photograph of the site can be seen below. Many of the smaller pines will be removed. There are 3 large pines that are **Significant Trees** that have been requested for removal and 1 large pine, which is also a **Significant Tree,** that will need to be protected during construction.

The location of the 4 trees of interest can be found on the attached plan and can be seen in the following photographs.

Location of proposed construction

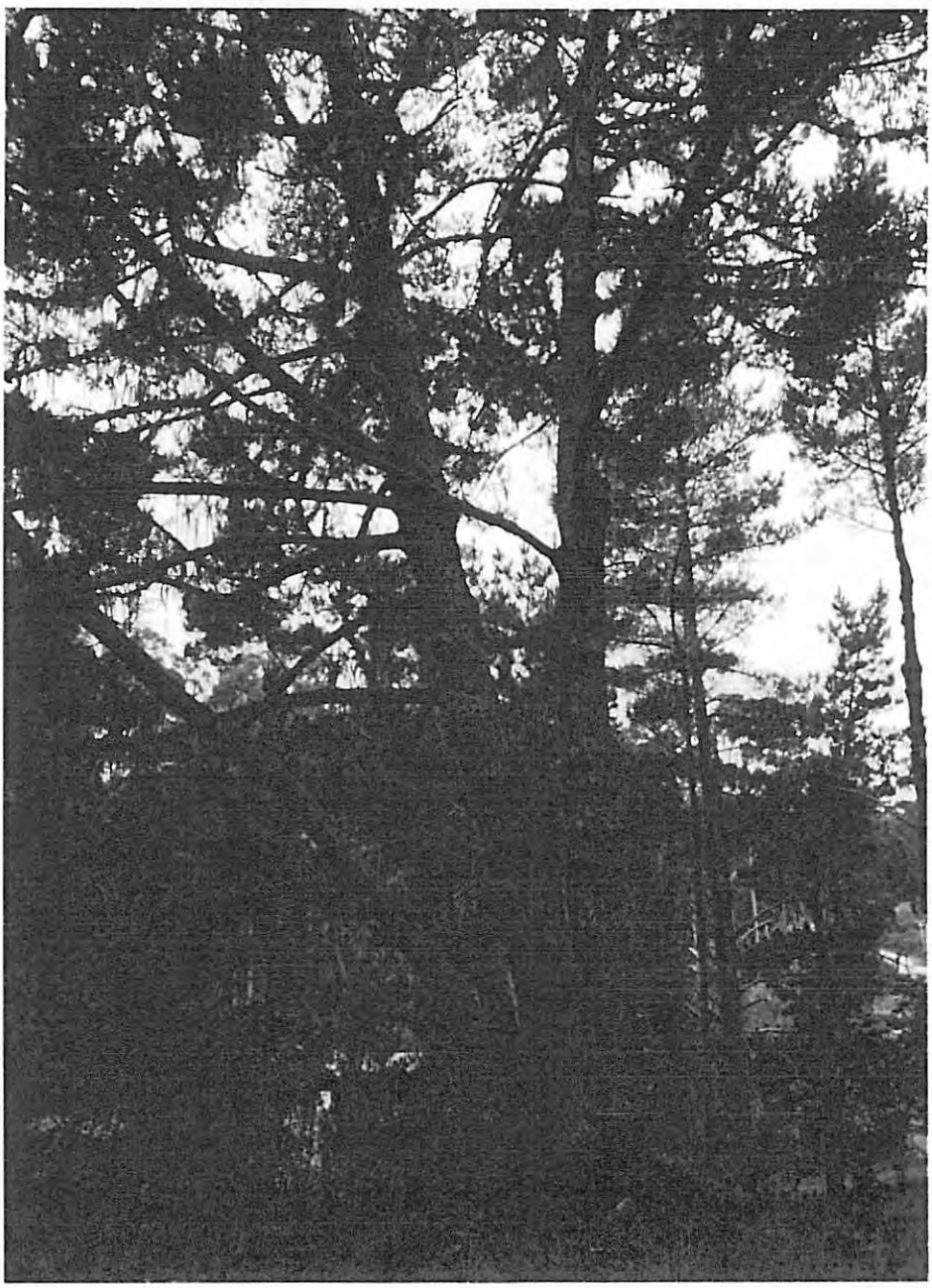
Advanced Tree Care

965 East San Carlos Ave, San Carlos, CA 94070

1237 Grant Rd, Montara

October 12, 2018

Tree#	Species	DBH	Ht/Sp	Con Rating	Comments
1	Monterey pine *Pinus radiata*	54.1"	70/60	60	Good health and condition. Large tree with co-dominant stems at 5 feet above grade. **Canopy** covered with Spanish moss. **Significant**. Protected for construction



Tree # 1 to be protected during construction

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965 East San Carlos Ave, San Carlos, CA 94070

1237 Grant Rd, Montara
October 12, 2018

Tree#	Species	DBH	Ht/Sp	Con Rating	Comments
2	Monterey pine *Pinus radiata*	25.3"	60/40	40	Fair health and poor condition. topped at 30" **Significant,** Requested removal
3	Monterey pine *Pinus radiata*	20.4"	60/30	50	Fair health and poor condition. one sided canopy **Significant,** Requested Removal

Tree #s 2 and 3 requested for removal

Advanced Tree Care

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1237 Grant Rd, Montara
October 12, 2018

Tree#	Species	DBH	Ht/Sp	Con Rating	Comments
4	Monterey pine *Pinus radiata*	25.9"	50/40	70	Good health and condition but poor location on top of a retaining wall **Significant** Requested removal.

Tree # 4 on top of retaining wall, requested for removal

Root system of Tree # 4 on top of retaining wall.

Summary:
The trees on the site are mostly Monterey pines in varying health and condition.
Three trees have been requested for removal, Tree #s 2, 3 and 4.
Tree # 1 should be protected during construction.

Advanced Tree Care
965 East San Carlos Ave, San Carlos, CA 94070

1237 Grant Rd, Montara
October 12, 2018

Tree Protection Plan

1. The Tree Protection Zone (TPZ) should be defined with protective fencing. This should be cyclone or chain link fencing on 11/2" or 2" posts driven at least 2 feet in to the ground standing at least 6 feet tall. Normally a TPZ is defined by the dripline of the tree. I recommend the TPZ's as follows:-

Tree # 1: TPZ should be at 20 feet radius from the trunk of the tree in accordance with Type I Tree Protection as outlined and illustrated in image 2.15-1 and 2 [6] .

IMAGE 2.15-1
Tree Protection Fence at the Dripline

IMAGE 2.15-2
Tree Protection Fence at the Dripline

• Type I Tree Protection
The fences shall enclose the entire area under the **canopy dripline or TPZ** of the tree(s) to be saved throughout the life of the project, or until final improvement work within the area is required, typically near the end of the project (*see Images 2.15-1 and 2.15-2*). Parking Areas: If the fencing must be located on paving or sidewalk that will not be demolished, the posts may be supported by an appropriate grade level concrete base.

2. Any pruning and maintenance of the trees shall be carried out before construction begins. This should allow for any clearance requirements for both the new structure and any construction machinery. This will eliminate the possibility of damage during construction. **The pruning should be carried out by an arborist, not by construction personnel**. No limbs greater than 4" in diameter shall be removed.

3. Any excavation in ground where there is a potential to damage roots of 1" or more in diameter should be carefully hand dug. Where possible, roots should be dug around rather than cut.[2]

4. If roots are broken, every effort should be made to remove the damaged area and cut it back to its closest lateral root. A clean cut should be made with a saw or pruners. This will prevent any infection from damaged roots spreading throughout the root system and into the tree.[2]

5. **Do Not:**.[4]

a. Allow run off or spillage of damaging materials into the area below any tree canopy.
b. Store materials, stockpile soil, park or drive vehicles within the TPZ of the tree.
c. Cut, break, skin or bruise roots, branches or trunk without first obtaining permission from the city arborist.
d. Allow fires under any adjacent trees.
e. Discharge exhaust into foliage.
f. Secure cable, chain or rope to trees or shrubs.
g. Apply soil sterilants under pavement near existing trees.

6. Where roots are exposed, they should be kept covered with the native soil or four layers of wetted, untreated burlap. Roots will dry out and die if left exposed to the air for too long.[4]87. Route pipes into alternate locations to avoid conflict with roots.[4]

7. Where it is not possible to reroute pipes or trenches, the contractor is to bore beneath the dripline of the tree. The boring shall take place no less than 3 feet below the surface of the soil in order to avoid encountering "feeder" roots.[4]

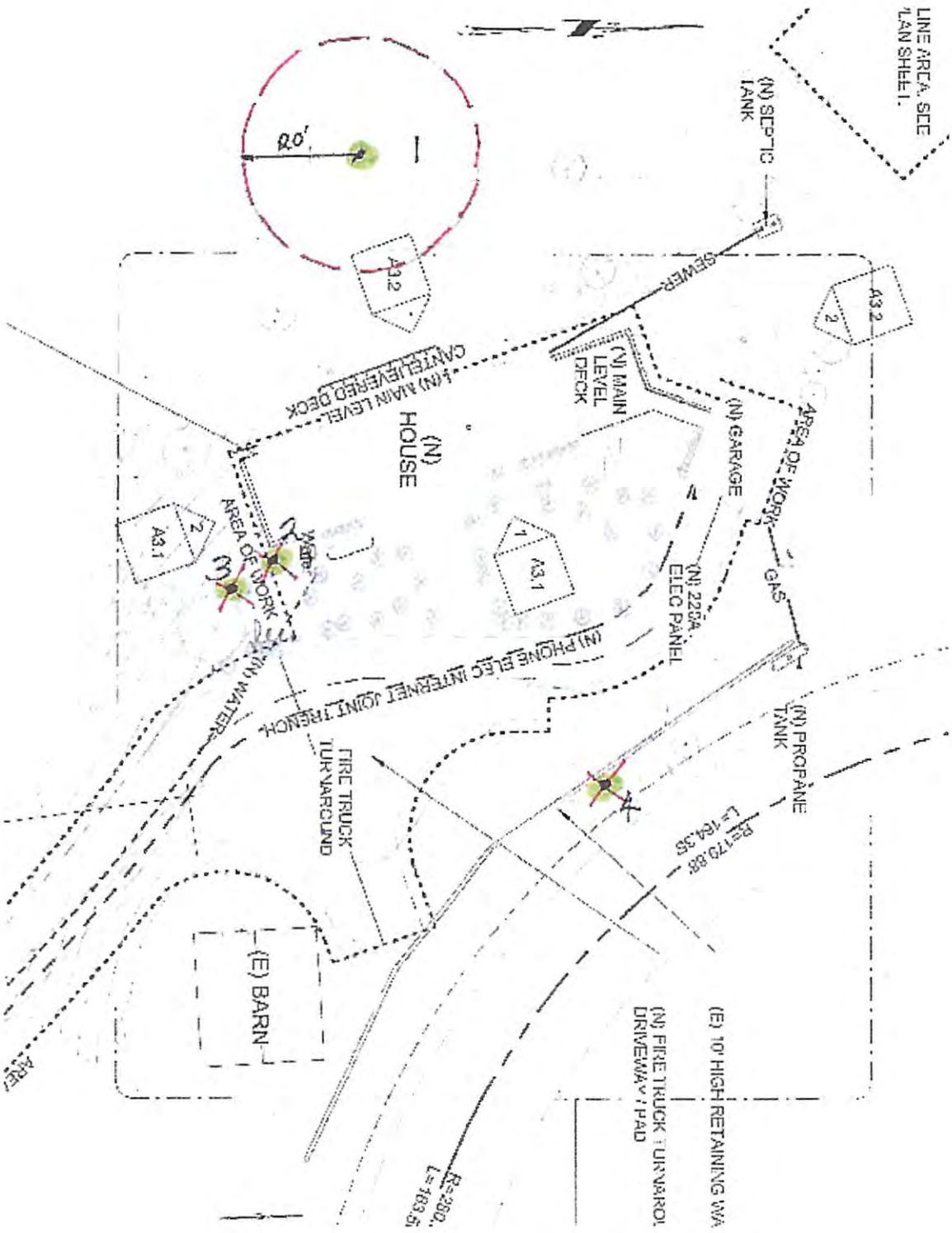
8. Compaction of the soil within the dripline shall be kept to a minimum.[2] If access is required to go through the TPZ of a protected tree, the area within the TPZ should be protected from compaction either with steel plates or with 4" of wood chip overlayed with plywood.

9. Any damage due to construction activities shall be reported to the project arborist or city arborist within 6 hours so that remedial action can be taken.

10. Ensure upon completion of the project that the original ground level is restored

Advanced Tree Care
965 East San Carlos Ave, San Carlos, CA 94070

1237 Grant Rd, Montara
October 12, 2018



Proposed new construction, tree removals and tree protection

Glossary

Canopy	The part of the crown composed of leaves and small twigs.[2]
Cavities	An open wound, characterized by the presence of extensive decay and resulting in a hollow.[1]
Dripline	The width of the crown as measured by the lateral extent of the foliage.[1]
Genus	A classification of plants showing similar characteristics.
Root crown	The point at which the trunk flares out at the base of the tree to become the root system.
Species	A Classification that identifies a particular plant.
Standard height	Height at which the girth of the tree is measured. Typically 4 1/2 feet above ground level

References

(1) Matheny, N.P., and Clark, J.P. Evaluation of Hazard Trees in Urban Areas. International Society of Arboriculture,1994.

(2) Harris, R.W., Matheny, N.P. and Clark, J.R.. Arboriculture: Integrated Management of Landscape Trees, Shrubs and Vines. Prentice Hall, 1999.

(3) Carlson, Russell E. Paulownia on The Green: An Assessment of Tree Health and Structural Condition. Tree Tech Consulting, 1998.

(4) Extracted from a copy of Tree Protection guidelines. Anon

(5) T. D. Sydnor, Arboricultural Glossary. School of Natural Resources, 2000

(6) D Dockter, Tree Technical Manual. City of Palo Alto, June, 2001

Advanced Tree Care
965 East San Carlos Ave, San Carlos, CA 94070

1237 Grant Rd, Montara
October 12, 2018

Certification of Performance[3]

I, Robert Weatherill certify:

* That I have personally inspected the tree(s) and/or the property referred to in this report, and have stated my findings accurately. The extent of the evaluation and appraisal is stated in the attached report and the Terms and Conditions;

* That I have no current or prospective interest in the vegetation or the property that is the subject of this report, and I have no personal interest or bias with respect to the parties involved;

* That the analysis, opinions and conclusions stated herein are my own, and are based on current scientific procedures and facts;

* That my compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party, nor upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events;

* That my analysis, opinions, and conclusions were developed and this report has been prepared according to commonly accepted Arboricultural practices;

* That no one provided significant professional assistance to the consultant, except as indicated within the report.

I further certify that I am a member of the International Society of Arboriculture and a Certified Arborist. I have been involved in the practice of arboriculture and the care and study of trees for over 15 years.

Signed

Robert Weatherill
Certified Arborist WE 1936a
Date: 10/12/18

Terms and Conditions(3)
The following terms and conditions apply to all oral and written reports and correspondence pertaining to consultations, inspections and activities of Advanced Tree Care :

1. All property lines and ownership of property, trees, and landscape plants and fixtures are assumed to be accurate and reliable as presented and described to the consultant, either verbally or in writing. The consultant assumes no responsibility for verification of ownership or locations of property lines, or for results of any actions or recommendations based on inaccurate information.
2. It is assumed that any property referred to in any report or in conjunction with any services performed by Advanced Tree Care, is not in violation of any applicable codes, ordinances, statutes, or other governmental regulations, and that any titles and ownership to any property are assumed to be good and marketable. Any existing liens and encumbrances have been disregarded.
3. All reports and other correspondence are confidential, and are the property of Advanced Tree Care and it's named clients and their assignees or agents. Possession of this report or a copy thereof does not imply any right of publication or use for any purpose, without the express permission of the consultant and the client to whom the report was issued. Loss, removal or alteration of any part of a report invalidates the entire appraisal/evaluation.
4. The scope of any report or other correspondence is limited to the trees and conditions specifically mentioned in those reports and correspondence. Advanced Tree Care and the consultant assume no liability for the failure of trees or parts of trees, either inspected or otherwise. The consultant assumes no responsibility to report on the condition of any tree or landscape feature not specifically requested by the named client.
5. All inspections are limited to visual examination of accessible parts, without dissection, excavation, probing, boring or other invasive procedures, unless otherwise noted in the report. No warrantee or guarantee is made, expressed or implied, that problems or deficiencies of the plants or the property will not occur in the future, from any cause. The consultant shall not be responsible for damages caused by any tree defects, and assumes no responsibility for the correction of defects or tree related problems.
6. The consultant shall not be required to provide further documentation, give testimony, be deposed, or attend court by reason of this appraisal/report unless subsequent contractual arrangements are made, including payment of additional fees for such services as described by the consultant or in the fee schedules or contract.
7. Advanced Tree Care has no warrantee, either expressed or implied, as to the suitability of the information contained in the reports for any purpose. It remains the responsibility of the client to determine applicability to his/her particular case.
8. Any report and the values, observations, and recommendations expressed therein represent the professional opinion of the consultants, and the fee for services is in no manner contingent upon the reporting of a specified value nor upon any particular finding to be reported.
9. Any photographs, diagrams, graphs, sketches, or other graphic material included in any report, being intended solely as visual aids, are not necessarily to scale and should not be construed as engineering reports or surveys, unless otherwise noted in the report. Any reproductions of graphs material or the work product of any other persons is intended solely for the purpose of clarification and ease of reference. Inclusion of said information does not constitute a representation by Advanced Tree Care or the consultant as to the sufficiency or accuracy of that information.

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT F

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE
HUMBOLDT
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO
SAN FRANCISCO
SAN MATEO
SANTA CLATA
SANTA CRUZ
SOLANO
SONOMA
YOLO

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

June 5, 2019 File No.: 18-2276

Ruemel Panglao, Project Planner
San Mateo County Planning and Building Division
455 County Center
Redwood City, CA 94063

re: PLN2018-00322 / 1237 Grant Road, APN 036-225-130 / Jordan McWherter

Dear Ruemel Panglao,

Records at this office were reviewed to determine if this project could adversely affect cultural resources. **Please note that use of the term cultural resources includes both archaeological sites and historical buildings and/or structures. The review for possible historic-era building/structures, however, was limited to references currently in our office and should not be considered comprehensive.**

Project Description: Proposed home at the edge of an existing building pad previously created

Previous Studies:

XX This office has no record of any previous cultural resource studies for the proposed project area *(see recommendation below)*.

Archaeological and Native American Resources Recommendations:

XX We recommend the lead agency contact the local Native American tribe(s) regarding traditional, cultural, and religious heritage values. For a complete listing of tribes in the vicinity of the project, please contact the Native American Heritage Commission at 916/373-3710.

XX The proposed project area has a low possibility of containing unrecorded archaeological site(s). Therefore, no further study for archaeological resources is recommended.

Built Environment Recommendations:

XX Since the Office of Historic Preservation has determined that any building or structure 45 years or older may be of historical value, if the project area contains such properties, it is recommended that prior to commencement of project activities, a qualified professional familiar with the architecture and history of San Mateo County conduct a formal CEQA evaluation.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical

resource management work in the search area. Additionally, Native American tribes have historical resource information not in the California Historical Resources Information System (CHRIS) Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

For your reference, a list of qualified professionals in California that meet the Secretary of the Interior's Standards can be found at http://www.chrisinfo.org. If archaeological resources are encountered during the project, work in the immediate vicinity of the finds should be halted until a qualified archaeologist has evaluated the situation. If you have any questions please give us a call (707) 588-8455.

Sincerely,

Cameron Felt
Researcher

cc: Jordan McWherter
tailormakedevelopment@gmail.com

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT G

GEOTECHNICAL INVESTIGATION

Proposed Residential Development
1237 Grant Road
Montara, California

Prepared for:
Tailor-Make Development, Inc.
759 Grant Road
Pacifica, California 94044

Attention: Jordan McWherter

September 30, 2016
Job 2607.03.00

Earth Investigations Consultants, Inc.
P.O. Box 795
Pacifica, California 94044
Phone 650-557-0262
earthinvestigations@comcast.net

Earth Investigations Consultants

September 30, 2016
Job 2607.03.00

Tailor-Make Development, Inc.
759 Rockaway Beach Avenue
Pacifica, California 94044

Attention: Mr. Jordan McWherter

RE: GEOTECHNICAL INVESTIGATION
Proposed Residential Development
1237 Grant Road
Montara, California

Dear Mr. McWherter:

INTRODUCTION

Location and Proposed Project

Pursuant to your authorization, we have completed the referenced project located off Grant Road, east of the intersection with Buena Vista Road in the Sunshine Valley area of Montara, California (Plate 1, Vicinity Map). We understand the proposed project will entail construction of a two-story, wood-frame structure with attached above grade deck on the west side of an existing graded pad in the east-central part of the approximately 5-acre parcel (Plate 2, Site Plan, Cross Section A-A' and Photos 1 & 2). We understand you plan to improve the existing dirt driveway leading to the house site from Grant Road. We anticipate the project will require moderate grading to improve the road, and drainage measures.

An individual, on-site sewage disposal system is planned, with a leachfield to be located on the slope in the northern part of the site.

Geologists & Engineers
P.O. Box 795 ● Pacifica, CA 94044 ● (650) 557-0262 ● Fax (650) 557-0264 ● earthinvestigations@comcast.net

Purpose and Scope of Services

The purpose of this investigation was to characterize the site soils and provide geotechnical parameters for the proposed improvements. The scope of services included:

- Review of pertinent geologic and geotechnical literature and maps. Plate 3 (Geologic Map) illustrates the regional geologic setting;
- Site observations and advancement of 2 borings on August 22, 2016 with tight-access, portable equipment. Boring 1 was continuously sampled by driving California, modified California and Standard Penetration (SPT) split-spoon samplers with a 140-pound hammer lifted to a height of 30 inches using a rope and cathead lift mechanism mounted to a tripod. The number of free-fall drops (blows) required to advance the respective samplers at 6-inch intervals for the final 12 inches of a total of 18 inches driven are tabulated on the Logs of Borings (Appendix A, Plates A1-A2). Blow counts from driving the modified California and California sampler were converted to SPT values using a multiplier of 0.76 and 0.93, respectively.

  Borings 2 and 3 were was continuously sampled by driving a 1½ -inch O.D., split spoon sampler to practical refusal with a gas-powered Wacker BHF 30S hammer that imparts 35 ft. lbs. of axial force on the sampler at a rate of 1270 blows per minute. The Logs of Borings are contained in Appendix A (Plates A1 – A2). Plates A3 – A5 contain descriptions of the terms and symbols used on the logs;
- Laboratory testing of selected samples from the borings. Tests included moisture content and dry density. The results of the lab tests are tabulated on the boring logs at the respective sample depths;
- Analysis of the findings from the site investigation and laboratory testing, and preparation of this report containing our findings, conclusions, and recommendations for the proposed project. Cross Section A-A' on Plate 2 represents an interpretation of the development area foundation soil profile constructed on the basis of published geologic mapping, site observations and the boring data.

FINDINGS

Previous Work

Michelucci & Associates, Inc. (1993) conducted a geotechnical investigation for the purpose of legalizing the existing improvements constructed in the proposed development area (driveway and pad grading, and construction of the concrete retaining wall and shed), apparently on the basis of a geotechnical report prepared in 1984 by JCP Engineers and Geologists. Michelucci & Associates, Inc. concluded the following:

- Site slopes were stable, but remedial grading would be necessary to mitigate undocumented fills;
- The retaining wall foundation and backdrainage was adequate;
- And, while the shed foundations were constructed shallower than recommended by JCP, the existing conditions were acceptable provided use of the structure be limited to storage.

The County Planning and Building Department finaled the retaining wall and shed in 2014 on the basis of the 1993 geotechnical report, and a 2014 follow-up geotechnical reconnaissance that revealed no change in conditions over the 11-year period, and a favorable 2014 structural engineering review by McEvoy Engineering.

Geologic Setting

The site, at an approximate elevation of 288 feet above mean sea level, is located on the southwestern flank of a spur ridge. It drains to a broad swale in the southwest part of the site and eventually to a perennial channel near the intersection of Grant and Buena Vista Roads (Plate 1). This region drains to Matadero Creek northeast of the site. Evidence of springs was not observed.

The site area is underlain Cretaceous granodiorite. This bedrock material is mantled by a variable thickness of surficial soil.

There are no mapped landslides on the property, nor were any observed during our site investigation.

The site is located in a seismically active region with the San Andreas fault mapped approximately 5 miles to the northeast, and the Seal Cove fault mapped approximately 1½ miles to the southwest (Leighton & Associates, 1976;

Pampeyan, 1994). There is a series of inferred, northwest trending faults mapped between the site and the Seal Cove fault. The closest is mapped approximately 800 feet southwest of the site.

While it is not known to have produced a major earthquake in historic time, the Seal Cove fault is considered to be the potential seismic source for a major earthquake affecting the site in the future. The San Andreas fault has produced major Bay area earthquakes and ground rupture in the historic past.

In the event of future major earthquake (M7.0 or greater) on a nearby segment of the San Andreas fault, it is expected that the site area will receive strong to very strong ground shaking (Petersen and others, 1999). We do not anticipate fault ground rupture across the site because of the distance between the nearest mapped active fault trace and the site.

Site Characteristics

Surface Features

The proposed development area is on a flat graded pad at the end of a dirt driveway leading from Grant Road. There is a concrete retaining wall up to 10 feet or more high along the eastern side of the pad. There is a steel shed on top of a cut pad.

Runoff would tend to pool and/or sheet across the graded pad to the adjoining descending slope inclined approximately 25 degrees in the upper part and 15 degrees or less in the lower part (Plate 2). The steeper upper part represents a fill slope from historic grading, while the gentler slope represents the native slope.

Gully erosion from uncontrolled runoff was observed at the top northern end of the pad. Evidence of slope instability, soil creep, or expansive soils was absent.

Explorations

The borings indicate the site is underlain by 1 to 7 feet of surficial soil (Appendix A, Plates A1 and A2; Cross Section A-A', Plate 2). Approximately 5 feet of dense, Silty SAND with Clay fill and approximately 2 feet of medium dense, colluvium mantled the granodiorite bedrock in Boring 1. The fill was dense Silty SAND with Clay grading to medium dense Clayey SAND at a depth of 3 feet. The colluvium was medium dense, Clayey SAND.

Approximately 6½ feet of fill mantled the bedrock in Boring 2. The fill in Boring 2 was medium dense Silty SAND. If colluvium was present, it was difficult to differentiate from the fill.

The fill mantling bedrock in Boring 3 was approximately ½ foot thick and consisted of medium dense, Silty SAND.

Expansive soil or ground water was not encountered to the depth drilled. The soils ranged from moist to locally damp.

CONCLUSIONS

The proposed development is feasible from a geotechnical standpoint. We consider this a stable bedrock site that is not constrained by landslides or active faults. You should anticipate the site would be subjected to one or more major earthquakes over the projected life of the proposed improvements. Given the distance to the San Andreas fault, the risk is nil for occurrence of fault rupture across the site.

Potential for liquefaction or seismically-induced deep-seated landsliding is low given the shallow depth to bedrock. The risk for erosion and shallow landsliding is low provided the recommendations in the following section of the report are included in project design and construction.

RECOMMENDATIONS

Seismic Design

The proposed structures should be designed for the following seismic design criteria derived from the subsurface exploration data and the 2013 California Building Code (2010 ASTM 7 with July 2013 errata):

- Site Location: Latitude = 37.539; Longitude = -122.497
- Site Soil Class: C
- Spectral Response Acceleration Values:
  Fv = 1.3; S_S = 2.415; S_1 = 1.030; S_{DS} = 1.610; S_{D1} = 0.892

Site Preparation, Grading and Compaction

Vegetation and construction debris should be removed from the proposed development area. Existing site soil is an acceptable source for engineered fill. Engineered fill is soil moisture conditioned to near optimum water content, placed in loose lifts no greater than 8 inches, and compacted to at least 90 percent relative to the maximum dry density of the material (MDD) as assessed by the ASTM D1557 laboratory compaction test. On sloping terrain up to 10 degrees, engineered fill can be placed on level benches cut into bedrock, as assessed by our Field Engineer during grading. A minimum toe key extending at least 3 feet into bedrock and benching into bedrock will be required for engineered fill placement on steeper slopes. Subdrainage requirements for fill greater than 5 feet in thickness will be assessed by the Field Engineer during grading. Fill underlying the proposed driveway alignment should be reworked as engineered fill, as described above. Cut and fill slopes should be constructed no steeper than 2H:1V. Steeper slopes will require support by engineered retaining walls.

Planned hardscape areas should be scarified to a minimum depth of 8 inches, moisture conditioned to near optimum, and compacted to at least 90 percent MDD.

Foundations

The proposed house and retaining walls should gain support from the underlying bedrock by drilled piers that are interconnected with grade beams. Isolated piers should be avoided.

Drilled, cast-in-place concrete piers should be at least 16 inches in diameter and extend at least 10 feet into bedrock. On this basis, we anticipate that pier depths will range from 12 to 18 feet.

The upper 2 feet of native soil should be ignored in pier design because of seasonal moisture variations, which could result in desiccation to that depth. We recommend that the pier foundation be designed for an allowable skin friction value of 500 pounds per square foot (psf) beginning at the bedrock surface. The skin friction value should be increased by ⅓ to account for wind and seismic loads. End bearing of piers should be neglected in design because of the difficulty in cleaning out small diameter holes.

The portion of the piers beginning at the bedrock surface should be designed for a passive equivalent fluid pressure of 500 pounds per cubic foot (pcf) acting over 1½ pier diameters.

Perimeter and interior piers should be interconnected by grade beams to avoid potential problems associated with isolated piers in seismically active areas.

Slabs-on-Grade & Other Hardscape Surfaces

We recommend that the living spaces be designed with raised wood floors. Slab and hardscape subgrades should be prepared as discussed in the *Grading* section above. Interior concrete slabs should be at least 5 inches thick, and constructed with a capillary moisture break consisting of at least 5 inches of clean, ¾- to 1½-inch free-draining, crushed rock. Where migration of moisture vapor through the slabs would be detrimental, an impermeable moisture vapor barrier of 15 mil Stego wrap should be provided between the crushed rock and the slab. If 2 inches of clean sand is placed over the membrane to protect it during construction, it is important that the concrete contractor maintain an even design spacing between the steel and sand layer.

Exterior slabs should be constructed on subgrade as recommended in the *Grading* section and at least 5 inches of Class 2 aggregate baserock that is moisture condition to near optimum and compacted to at least 95 percent MDD.

Slabs should be reinforced with at least No. 4 bars at 18-inch center-to-center spacing, in both directions to reduce cracking. The Structural Engineer should evaluate distribution of control joints to help control the distribution of cracking should it occur.

Driveway Pavement

The driveway alignment and parking areas should be prepared as discussed in the *Grading* section above. Final pavement design will be dependent upon the anticipated traffic and the materials exposed at the subgrade levels. For preliminary design purposes, driveway and parking area pavements should contain a section of 2½ inches of asphaltic concrete or 5 inches of reinforced concrete and 8 inches of Class II baserock compacted to at least 95 percent MDD.

Retaining Walls

Retaining walls should be supported on piers as specified above, and designed to resist an active equivalent fluid pressure of 45 pcf acting in a triangular pressure distribution for level backfill. Where back fill slopes up to 2H:1V, the walls should be designed for an active equivalent fluid pressure of 60 pcf. Intermediate values can be obtained by interpolation. Any wall that is restrained from rotation should be designed to resist a uniform pressure of 100 psf.

It is imperative that retaining walls be fully backdrained. We recommend that the backdrain be located at least 1 foot below the adjacent lowest grade to mitigate underseepage. The backdrains should consist of either a geosynthetic drainage mat (i.e., Miradrain 5000 or equivalent) and a 4-inch diameter, high crush strength perforated PVC pipe (SDR 35 or greater) sloped to drain by gravity to the street. A minimum 12-inch wide prism of clean (no fines), free draining crushed rock or gravel extending to within 1 foot of the surface is an acceptable complement and/or alternative to the drainage mat behind the wall. Drainrock should be separated from the soil by Mirafi 140N filter fabric. The upper foot of the backdrainage system should be backfilled with compacted soil to exclude surface water.

Retaining walls should be thoroughly waterproofed to prevent detrimental migration of moisture. Retaining walls will yield slightly during backfilling; therefore, walls should be backfilled prior to building on or adjacent to them.

We recommend that the ground surface behind retaining walls be sloped to drain in a positive manner so that ponding and erosion does not occur. Open, lined gutters should be placed on non-expansive, engineered backfill overlapping the sides of the gutter by at least 6 inches to conduct surface runoff to an approved discharge location. Under no circumstance should the surface water be diverted into wall backdrains or other subdrains.

Drainage

It will be important for the Civil Engineer to carefully evaluate site drainage requirements. The driveway and paved parking areas should drain positively away from pavement subgrades, building foundations, and slopes. It may be necessary to install properly sized area drains to achieve this.

We recommend that the house and garage roofs be provided with gutters and downspouts. The downspouts should be connected to solid PVC pipes, and these pipes should carry water to the street.

Where the upslope foundation segment is not a foundation wall, we recommend that you install a foundation drain to reduce seepage into the building pad. The foundation drain(s) should extend to a depth of at least 12 inches below the adjacent crawl space elevation, and where applicable, at least 8 inches below the pavement section. The trench should be faced with Mirafi 140N filter fabric. A minimum 4-inch diameter perforated SDR-35 PVC drainpipe should be laid holes down at the bottom of the trench with a minimum slope of 2 percent to drain by gravity to a solid outfall line discussed below. The trench should then be filled to within 6 inches of the surface with ¾- to 1½-inch clean crushed rock. Place filter fabric over the top of the drainrock and fill the balance of the trench compacted site soil provided the finished ground with a minimum slope of 3 percent away from the foundations.

The perforated pipe should be connected to an equivalent solid PVC pipe (SDR 35 or better), sloped at least 2 percent, to carry water to the street. Cleanouts should be provided at all bends greater than 45 degrees, and at distances not exceeding 50 feet.

Isolated areas where a perimeter foundation drain is not feasible should be provided with a well-developed surface drainage basin seated in a ground depression having positive slopes to the inlet. Surface inlets should be at least 12-inches square.

While we believe that these measures will greatly reduce soil moisture, it would be prudent to install wire-mesh reinforced, concrete ratproofing over the crawl space soils.

Landscaping and Erosion Control

Planting a relatively dense tree canopy where practical can moderate desiccation of the soil surfaces of the project area. However, to mitigate potential effects of root growth under foundations, any proposed new trees should be planted at a distance from the foundations equal to or greater than 1½ times the anticipated dripline of a mature tree. We suggest that you confirm this criterion with the landscape architect.

It is important to plan landscaping to reduce high-maintenance plantings adjacent to the foundations as they can promote infiltration and seepage of moisture into the foundation and crawl space soils. The landscape contractor should be made aware of the importance of these recommendations. Strict adherence is imperative.

Following construction, barren soil surface should be planted to reduce erosion and soil desiccation cracking.

MAINTENANCE

Periodic land maintenance will be required. Surface and subsurface drainage facilities should be checked frequently, and cleaned and maintained as necessary.

SUPPLEMENTAL SERVICES

We recommend that we review the final foundation, grading and drainage plans for conformance with the intent of our recommendations. During construction, we should observe the rough and finished grading operations, foundation excavations prior to steel placement, and the installation of all drainage facilities prior to burial to ascertain that our recommendations are followed. Upon completion of the project, we should perform a site observation and report the results of our work in a final report. These services are outside the present scope and will be billed on a time and expense basis, in accordance with the fee schedule current at that time. These services will be performed only if we are provided with sufficient notice to perform the work. We do not accept responsibility for items that we are not notified to observe. We recommend that the Owner be responsible for notification, no less than 48 hours before the requested site visit.

INVESTIGATION LIMITATIONS

This report has been prepared in accordance with generally accepted geotechnical engineering principles and practices, and is in accordance with the standards and practices set by the geotechnical consultants in the area. This acknowledgment is in lieu of any warranties, either expressed or implied. We offer no guarantees.

Subsurface conditions could vary between those indicated by the test borings and interpreted from surface features. A representative from this office should be present to provide construction observation services, to observe the exposed geotechnical conditions, to modify recommendations, if necessary, and to

ascertain that the project is constructed in accordance with the recommendations.

This report is submitted with the understanding that it is the responsibility of the Client (Owner) to ensure that the applicable provisions of the recommendations contained herein are made known to all design professionals involved with the project; that they are incorporated into the construction drawings; and that the necessary steps are taken to see that the contractor and subcontractors carry out such recommendations in the field.

If conditions different from those described in this report are encountered during construction, or if the project is revised, we should be notified immediately so that we may modify our recommendations, if warranted.

The practice of geotechnical engineering changes, and, therefore, we should be consulted to update this report if construction is not performed within 12 months.

REFERENCES

McEvoy Engineering, 1993, Preliminary investigation, retaining wall at 1237 Grant Road, Montara, California: Structural engineer's September 13 letter, Job 93041, 3 pgs.

Michelucci & Associates, Inc., 1993, Geotechnical investigation, 1237 Grant Road, Montara, San Mateo County, California: Geotechnical consultant's October 11 report, Mob 93-1646, 13 pgs. with illustrations.

_____, 2014, Supplemental geotechnical evaluation, 1237 Grant Road, Montara, California: Geotechnical consultant's September 17 letter report, Job 14-4401, 3 pgs with photos.

Pampeyan, E.H., 1994, Geologic map of the Montara Mountain and San Mateo 7 ½' Quadrangles, San Mateo County, California: U.S. Geological Survey Miscellaneous Investigations Map I-2390, scale 1:24,000.

Petersen, M., Beeby, D., Bryant, W, Cao, C., Cramer, C., Davis, J., Reichle, M., Saucedo, G., Tan, S., Taylor, G., Toppozada, T., Treiman, J. and Wills, C., 1999, Seismic shaking maps of California: California Division of Mines and Geology Map 48.

Working Group on California Earthquake Probabilities, 2008, The Uniform California Earthquake Rupture forecast, version 2 (UCERF 2): U.S. Geological Survey Open File Report 2007-1437.

AERIAL PHOTOGRAPHS

Google Earth, Interactive vertical and oblique images from 1993 to 2016

The following plates and appendix are attached and complete this report:

Plates
- Plate 1 – Vicinity Map
- Plate 2 – Site Plan, Cross Section A-A' and Photos 1 & 2
- Plate 3 – Geologic Map

Appendix A – Logs of Borings and Laboratory Test Results
- Plate A1 – Log of Boring 1
- Plate A2 – Logs of Borings 2 & 3
- Plate A3 – Key to Boring 1
- Plate A4 – Key to Borings 2 & 3
- Plate A5 – Rock Hardness Chart

We trust this report provides you with the information you require at this time. If you have any questions, please call.

Very truly yours,

Earth Investigations Consultants, Inc.

REGISTERED GEOLOGIST
JOEL E. BALDWIN, II
No. EG 1132
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

Joel E. Baldwin, II
Engineering Geologist 1132 (Renewal date 2/28/17)

David W. Buckley
Civil Engineer 34386 (Renewal date 9/30/17)

REGISTERED PROFESSIONAL ENGINEER
DAVID W. BUCKLEY
C 34386
Exp. 9/30/17
CIVIL
STATE OF CALIFORNIA

JEB:DWB:jb:gi
Distribution: 3 bound copies and electronic file to addressee

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT H

BLD2019-01790

Geosphere Consultants Inc
AN ETS COMPANY
Geotechnical Engineering · Engineering Geology
Environmental Management · Water Resources

October 3, 2018

Tailor-Make Development, Inc.
759 Rockaway Beach Avenue
Pacifica, California 94044

Attention: Mr. Jordan McWherter

RE: GEOTECHNICAL UPDATE
Proposed Residential Development
1237 Grant Road
Montara, California
Geo #91-04504-A (2607.03.00)

Dear Jordan:

INTRODUCTION

The Earth Investigations Consultants, Inc. (EIC) team has merged with Geosphere Consultants, Inc., who has taken over as Geotechnical Consultant of Record. This letter provides an update for the subject project.

GEOTECHNICAL UPDATE

We have reviewed the September 30, 2016 EIC report. With the exception of the Seismic Design recommendations, updated below, we find that the findings, conclusions, and recommendations remain valid for the project.

Supplemental Services

In accordance with the report recommendations, please submit the proposed project plans for review and approval. In addition, the County Geotechnical Division will submit a Geotechnical Consultant Approval (GCA, Section I) form for us to execute following our plan approval. Section II of the GCA will be executed following approval of the geotechnical aspects of construction, as outlined in the geotechnical report.

Seismic Parameters

The proposed structure should be designed for the following seismic design criteria derived from the subsurface exploration data and the 2016 California Building Code (2010 ASTM 7 with July 2013 errata). Project structures should be evaluated/designed in accordance with local design practice and the 2016 California Building Code (CBC) to resist the seismic forces generated by severe earthquake shaking.

It is our opinion that a Site Class C classification (Very Dense Soil and Soft Rock) is appropriate for characterizing potential earthquake ground shaking conditions and seismic design considerations for the Site, per ASCE/SEI 7-10 (Chapter 20).

Code-based spectral acceleration parameters were developed following the procedures of the 2016 CBC (Section 1613.3). The values of S_S, S_1, and F_V used to identify the site-adjusted maximum considered earthquake (MCE) parameters are listed below. The values were obtained from the USGS national seismic hazard mapping web site based on the ASCE/SEI 7-10 Standard as required by the 2016 CBC.

- Site Location: Latitude = 37.539; Longitude = -122.497
- Site Soil Class: C
- Spectral Response Acceleration Values:
  F_V = 1.3; S_S = 2.416; S_1 = 1.030; S_{DS} = 1.611; S_{D1} = 0.893

We trust this update provides you with the information you require at this time. If you have any questions, please call.

Very truly yours,

Geosphere Consultants, Inc.

(Renewal date 02/28/19)

Joel E. Baldwin, II, CEG
Principal Engineering Geologist

JEB:CTD:jb:gi
Distribution: efile to addressee

REFERENCE

Earth Investigations Consultants, Inc., 2016, Geotechnical Investigation, Proposed Residential Development, 1237 Grant Road, Montara, California: Geotechnical consultant's September 30 report, Job 2607.03.00, 12 pages with illustrations.

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT I

Geosphere Consultants, Inc.
AN ATLAS COMPANY
Geotechnical Engineering · Engineering Geology
Environmental Management · Water Resources

PLN2018-00322

ENGINEERING GEOLOGIC EVALUATION

Proposed Leachfield
1237 Grant Road
Montara, California

Prepared for:
Tailor-Make Development, Inc.
759 Rockaway Beach Avenue
Pacifica, California 94044
Attn: Mr. Jordan McWherter

February 26, 2019
GEO Project #91-04504-A
2607.03.00

2001 Crow Canyon Road, Suite 210 | San Ramon, CA 94583-5387 | Tel. (650) 557.0262

Geosphere Consultants, Inc.
AN ATLAS COMPANY
Geotechnical Engineering · Engineering Geology
Environmental Management · Water Resources

February 26, 2019

Tailor-Make Development, Inc.
759 Rockaway Beach Avenue
Pacifica, California 94044

Attention: Mr. Jordan McWherter

RE: ENGINEERING GEOLOGIC EVALUATION
Proposed Leachfield
1237 Grant Road
Montara, California
GEO #91-04504-A (2607.03)

Dear Jordan:

INTRODUCTION

Pursuant to your authorization, we have completed an engineering geologic evaluation of the Onsite Wastewater Treatment System (OWTS; a.k.a. leachfield) proposed for the northwest corner of your property in Montara, California (Plate 1, Site Plan, Cross Section A-A', Photo 1). The purpose of our evaluation was to characterize the surface and subsurface conditions of the leachfield relative to potential for surfacing of effluent and slope stability from operation of the OWTS as specified in Section 2 of the San Mateo County Environmental Health Division May 2016 Onsite Systems Manual.

The findings, conclusions, and recommendations presented in this report are based upon the following scope of services:

- Review of the September 30, 2016 project geotechnical report by Earth Investigations Consultants, Inc. (EIC), and our October 3, 2018 geotechnical update to the EIC report;
- Site reconnaissance observations and continuous sampling on February 6, 2018 at 2 selected areas within the leachfield to derive a representative soil profile for our site feasibility evaluation. Sampling was accomplished with portable, tight access equipment. The borings were supervised, logged and sampled by our Field Engineer;
- Analysis of collected data and preparation of this report.

FINDINGS

Surface Conditions

The site is located at an approximate elevation of 280 feet above mean sea level at the head of a swale below the proposed house site (Plate 1). The wooded native slope across the Primary Leachfield in the upper slope area is approximately 13 degrees (23%), and approximately 10 degrees (18%) across the Expansion Leachfield at the lower part of the slope. The average gradient across the proposed leachfield footprint is approximately 12 degrees (21%). The toe of the slope, approximately 35 feet below the propose Expansion Leachfield, is an apparent 6- to 8-foot high cut slope exhibiting a gradient of 50% or greater near the toe of the slope.

At the time of our site study there was no observed evidence of seepage (springs) constraining the leachfield area. Runoff during rainfall sheets positively to the base of the slope.

There was no observed evidence surface erosion or slope instability constraining the proposed leachfield footprint.

Subsurface Conditions

Subsurface exploration by EIC in the graded area above the proposed leachfield area where the proposed house site is planned encountered a variable thickness of soil, mainly Silty and Clayey SAND up to 7 feet thick mantling weathered granite bedrock without evidence of elevated ground water.

Leachfield Probe 1, located at the toe of the proposed Expansion Leachfield, encountered approximately 7 feet of very damp to wet, firm to stiff Sandy CLAY intercalated with medium dense Clayey SAND. Damp, stiff to hard Sandy CLAY was encountered to a depth of refusal at 9 feet. Perched ground water seepage was encountered in the upper soil horizon approximately 1 foot below the ground surface.

Leachfield Probe 2, at the top of the proposed Primary Leachfield, encountered approximately 3 feet of damp, firm Sandy CLAY, approximately 3 feet of Sandy CLAY intercalated with very damp to wet medium dense Clayey SAND. Damp, stiff to hard Sandy CLAY was encountered at the depth of refusal at 9 feet. Perched ground water seepage was encountered at the contact between soil units at a depth of approximately 3 feet.

CONCLUSIONS AND RECOMMENDATIONS

This evaluation indicates the proposed leachfield site is feasible from an engineering geologic standpoint. The subsurface exploration revealed that the upper 3 feet of the soil profile is susceptible to perched seepage during periods of prolonged rainfall, which could induce high moisture content on the upper 7 feet of the soil profile of the Primary Leachfield. The upper 3 feet of the soil profile is susceptible to the same influence from perched ground water during periods of rainfall.

It is our opinion potential for infiltration of perched seepage into the leachfield trenches to cause surfacing of effluent can be mitigated to a low risk by installing a cut-off subdrain and constructed to a depth of 10 feet no less than 25 feet from the uphill side of the leachfield (Plate 1, and Plate 2, Typical Subdrain Details). We judge the risk low for development of instability from operation of the leachfield over the project lifetime provided installation is in accordance with Environmental Health Department Guidelines and geotechnical report recommendations pertaining to grading and drainage are strictly adhered to.

We trust this provides you with the information you require at this time. If you have any questions, please call.

Very truly yours,

Geosphere Consultants, Inc.

(Renewal date 02/28/21)

Joel E. Baldwin, II, CEG
Principal Engineering Geologist

JEB:jb:ca
Distribution: efile and 2 bound copies to addressee

REFERENCES

Earth Investigations Consultants, Inc., 2016, Geotechnical investigation, proposed residential development, 1237 Grant Road, Montara, California: Geotechnical consultant's September 30 report, Job 2607.03.00, 12 pages with illustrations.

Geosphere Consultants, Inc., 2018, Geotechnical update, proposed residential development, 1237 Grant Road, Montara, California: Geotechnical consultant's October 3 report, GEO #91-04504-A (2607.03.00), 2 pages.

ILLUSTRATIONS

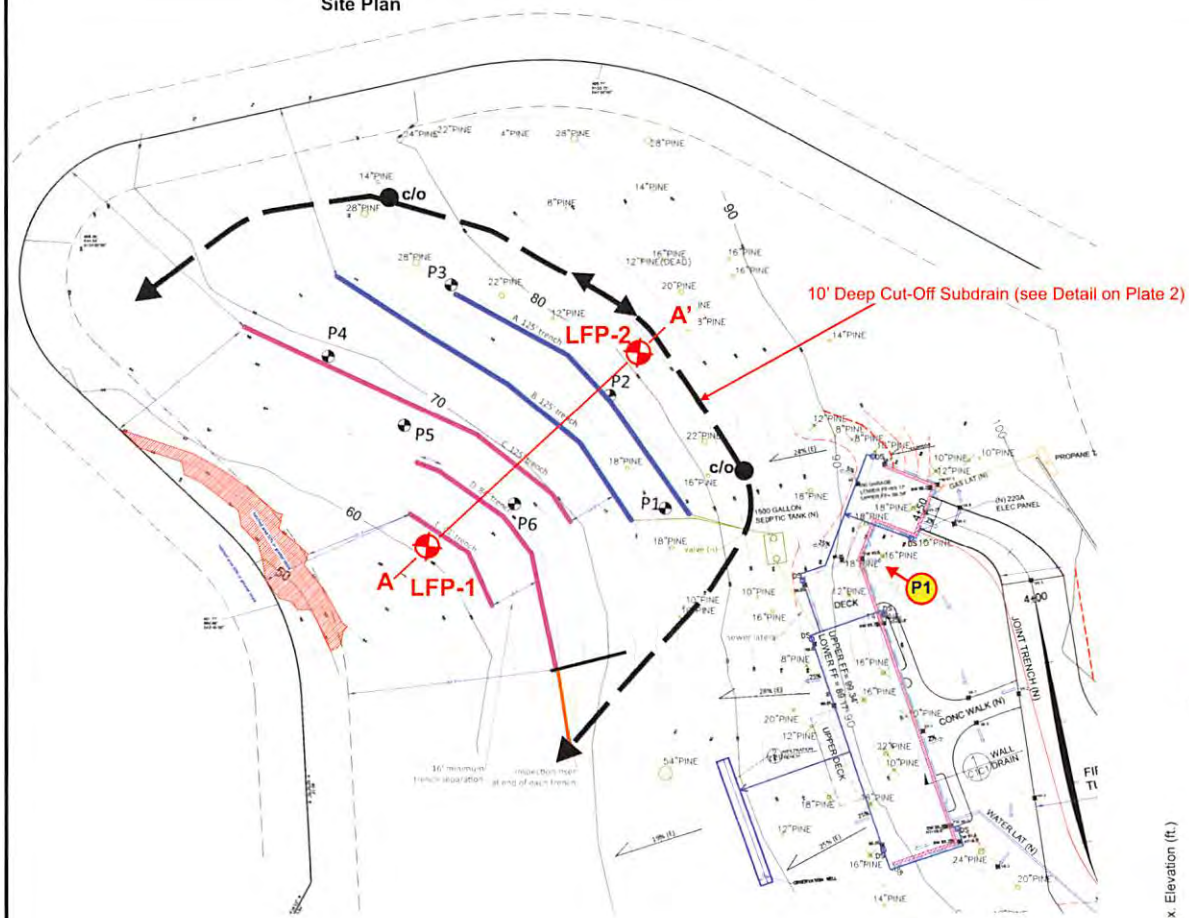
Plates

Plate 1 – Site Plan, Cross Section A-A' & Photo 1
Plate 2 – Typical Subdrain Detail

Appendix A

Plate A1 – Logs of Leachfield Probes 1 & 2
Plate A2 – Key to Leachfield Probes

Site Plan



EXPLANATION

- P1 — Approx. location of Perk Test Hole (2014 Perk Test)
- Primary Leach Trench (per Septic System Plan)
- Expansion Leach Trench (per Septic System Plan)
- LFP-1 — Approx. location of Leachfield Probe 1
- P1 — Photo 1 line of site
- A — A' — Line of Cross Section A-A'

N

40 ft.
Scale

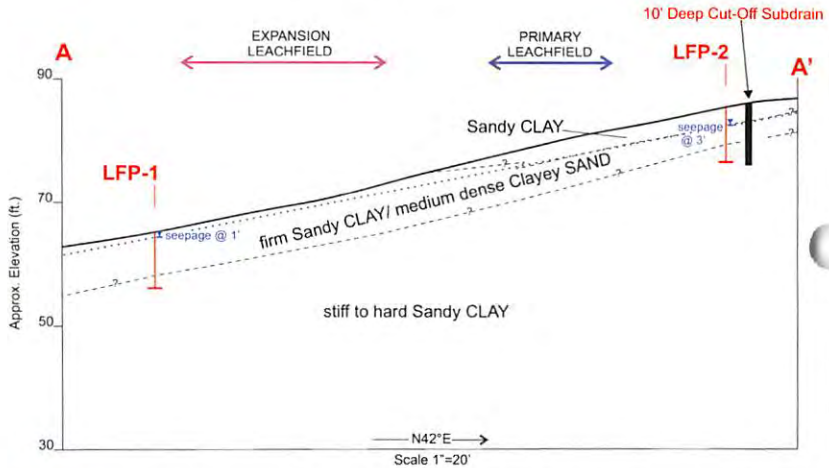
Contour Interval 2 ft.

Source: S.R. Hartsell, R.E.H.S
Septic System Plan (dated 01.16.19)

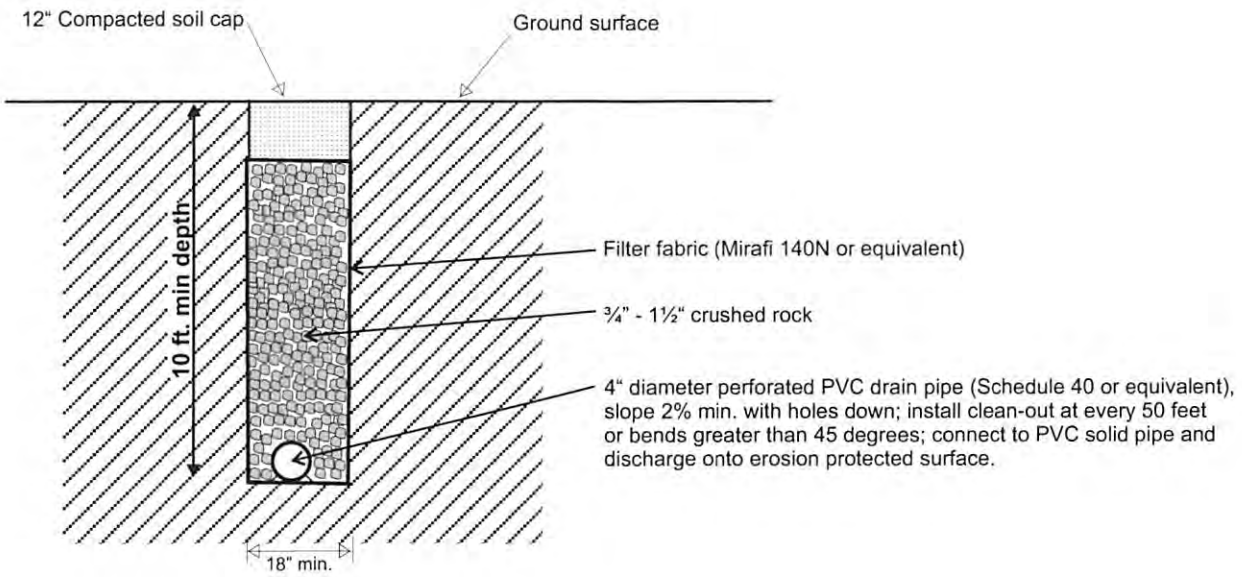
Photo 1

Photo 1. Northwesterly view across proposed leachfield footprint.

CROSS SECTION A-A'



Geosphere Consultants, Inc.	Job No.: 91-04504-A Approved: JEB Date: 02.11.19	SITE PLAN, CROSS SECTION A-A' & PHOTO 1 1237 Grant Road Montara, California	Plate 1



SUBDRAIN

NOT TO SCALE

Geosphere Consultants, Inc.	Job No.: 91-04504-A Approved: JEB Date: 02.25.19	**TYPICAL SUBDRAIN DETAILS** 1237 Grant Road Montara, California	Plate 2

APPENDIX A

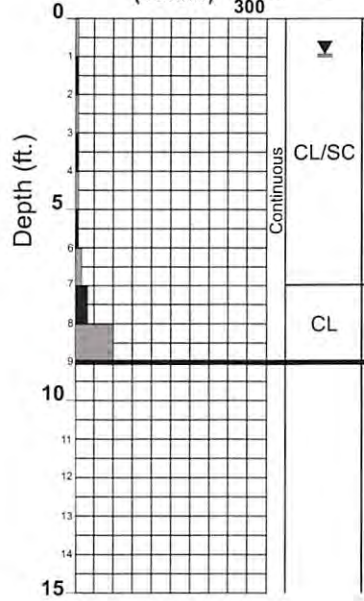
Logs of Soil Exploration and Laboratory Test Results

Plate A1 – Logs of Leachfield Probes 1 & 2
Plate A2 – Key to Leachfield Probes

LEACHFIELD PROBE 1

Equipment: Portable Equipment

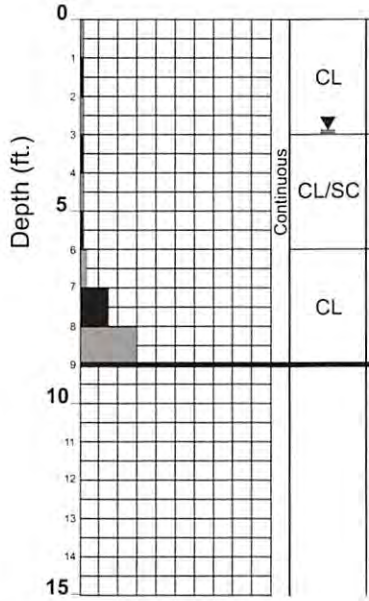
Elevation: ~61 ft.* Date: 02/06/19



Pocket Pen (tsf)	Torvane Pen (tsf)	
		Dark brown Sandy CLAY/Clayey SAND, very damp to wet, firm/medium dense seepage @ 1' during drilling
0.25		dark yellow brown @ 3½'
0.50		firm
		Dark yellow brown & gray Sandy CLAY, damp, stiff
>4.50		hard
		Refusal @ 9'

LEACHFIELD PROBE 2

Elevation: ~81 ft.* Date: 02/06/19



		Dark brown Sandy CLAY, damp, firm
0.5		seepage @ 3' during drilling
		Dark brown Sandy CLAY/Clayey SAND, very damp to wet, firm/medium dense
0.5		
		Dark yellow brown & gray Sandy CLAY, damp, stiff
>4.5		very stiff to hard
		Refusal @ 9'

*elevation per Site Plan, Plate 1

Geosphere Consultants, Inc	Job No.: 91-04504-A Approved: JEB Date: 02.11.19	LOGS OF LEACHFIELD PROBES 1 & 2 1237 Grant Road Montara, California	Plate A1

Primary Divisions			GROUP SYMBOL	Secondary Divisions
COARSE GRAINED SOILS — MORE THAN HALF OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVELS — MORE THAN HALF OF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS (LESS THAN 5% FINES)	GW	Well graded gravels, gravel-sand mixtures, little or no fines.
			GP	Poorly graded gravels or gravel-sand mixtures, little or no fines.
		GRAVEL WITH FINES	GM	Silty gravels, gravel-sand-silt mixtures, non-plastic fines.
			GC	Clayey gravels, gravel-sand-clay mixtures, plastic fines.
	SANDS — MORE THAN HALF OF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE	CLEAN SANDS (LESS THAN 5% FINES)	SW	Well graded sands, gravelly sands, little or no fines.
			SP	Poorly graded sands or gravelly sands, little or no fines.
		SANDS WITH FINES	SM	Silty sands, sand-silt mixtures, non-plastic fines.
			SC	Clayey sands, sand-clay mixtures, plastic fines.
FINE GRAINED SOILS — MORE THAN HALF OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS — LIQUID LIMIT IS LESS THAN 50%		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
			OL	Orangic silts and organic silty clays of low plasticity.
	SILTS AND CLAYS — LIQUID LIMIT IS GREATER THAN 50%		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic.
			CH	Inorganic clays of high plasticity, fat clays.
			OH	Organic clays of medium to high plasticity, organic silts.
HIGHLY ORGANIC SOILS			Pt	Peat and other highly organic soils.

Definition of Terms

	U.S. Standard Series Sieve				Clear Square Sieve Openings			
	200	40	10	4	3/4"	3"	12"	
SILTS AND CLAY	SAND				GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE		FINE	COARSE		

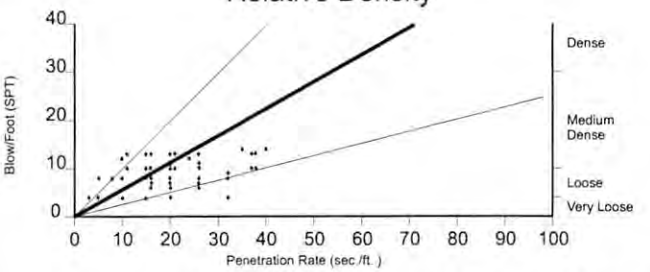
Grain Sizes

Unified Soil Classification System (ASTM D-2487)

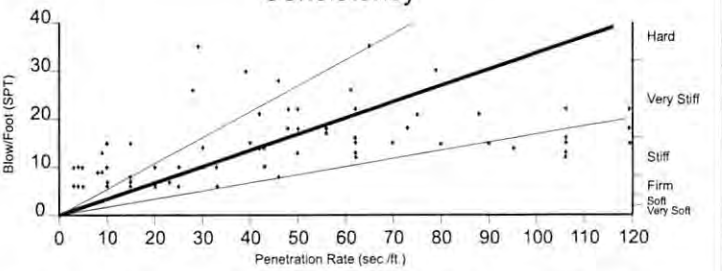
SAND AND GRAVELS	PENETRATION RATE*
VERY LOOSE	0 - 7
LOOSE	7 - 18
MEDIUM DENSE	18 - 53
DENSE	53 - 88
VERY DENSE	OVER 88

SILTS AND CLAYS	STRENGTH**	PENETRATION RATE*
VERY SOFT	0 - 1/4	0 - 6
SOFT	1/4 - 1/2	6 - 11
FIRM	1/2 - 1	11 - 23
STIFF	1 - 2	23 - 47
VERY STIFF	2 - 4	47 - 94
HARD	OVER 4	OVER 94

Relative Density



Consistency



* Seconds per foot, based on a portable percussion rig advancing a 1½-inch diameter split-spoon sampler with a force of 35 ft. lb. at a rate of 1270 blows per minute.

** Unconfined compressive strength in tons/sq. ft. as determined by laboratory testing or approximated by the standard penetration test (ASTM D-1586), pocket penetrometer, torvane, or visual observation.

Geosphere Consultants, Inc

Job No.: 91-04504-A
Approved: JEB
Date: 02.11.19

KEY TO LEACHFIELD PROBES

1237 Grant Road
Montara, California

Plate
A2

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT J

PLN2018-00322

Sigma Prime Geosciences, Inc.
Effective Solutions

332 PRINCETON AVENUE
HALF MOON BAY, CA 94019
650-728-3590
sigmaprm@gmail.com

RECEIVED
JUN 21 2019
San Mateo County
Planning Division

DRAINAGE REPORT

1237 Grant Road
Montara, CA
APN 036-225-130
Sigma Prime Job #: 18-169

June 20, 2019

TABLE OF CONTENTS

1.0 SITE SPECIFIC DATA

New Impervious Surface Areas:

Description	Area, SF
Roof of House	2930
Walkway (Concrete)	516
Total	3446

Slope of Development:

The average slope across the house site is about 25 percent. There are no changes of slope within the property or across property lines. The existing gravel driveway is adequate for the proposed house and will not be modified.

Watershed Information:

The property drains to the Montara Creek watershed to the northwest. The watershed covers an area of about 1100 acres, based on GoogleEarth. It extends up to the top of Montara Mountain at an elevation of 1901 feet and flows into the ocean between 14th and 16th Streets in Montara.

FEMA Designation:

The FEMA designation is X. This is an area that is outside the flood area with a 0.2% probability of occurring.

Floodway/Floodplain:

The site is in the hills in the back of Montara with no possibility of flooding.

Existing Drainage Courses:

The site is on the side of a ridge. There is a small drainage ditch alongside Grant Road, outside the property boundary. The driveway to the site crosses over a 32-inch culvert in the ditch.

2.0 Hydrologic Analysis

Proposed Calculation Method:

The Volume-Based Sizing, or 80% Capture Method, was used. Six percolation tests for the septic system yielded an estimated percolation rate of 3 to 9 inches/hour. One infiltration trench is proposed, as shown on Sheet C-1. The sizing was calculated using the County's worksheet, attached.

We expect infiltration to be sufficient to keep post-construction runoff volume and velocity less than or equal to pre-construction rates.

Existing and Proposed Surface Runoff Volumes:

The site is located on the side of a ridge with minimal flow onto or off of the property. There are no channels on the site. All runoff occurs are dispersed sheet flow.

Data Input and Output:

Given that the project will utilize downspouts with splash blocks distributed across the site, there was no input or output of data.

3.0 Hydraulic Analysis

Runoff will be across a heavily forested slope with a gradient of about 25 percent or less. The slope immediately below the proposed infiltration trench is inclined at about 19 percent. The gradient of the slope decreases as it approaches the property line. Runoff will occur as sheet flow with a velocity of about 1 foot/second. The project will not increase the velocity.

4.0 Provisions to Control Flow into Neighboring Lots

No special provisions are required. The site is on 4.7 forested acres on the side of a ridge with minimal runoff. Any overflow that occurs at the infiltration trench will flow across heavily forested areas for a distance of about 120 feet or more before crossing to neighboring properties.

5.0 Maintenance

The operation and maintenance of the drainage facilities is the responsibility of the home owner. The home owner should regularly maintain the facilities to ensure functionality throughout the lifetime of the residence. This maintenance should include:

- The clearing of debris and sediment build-up from the roof gutters, downspouts, and drainage lines
- Annual inspection of infiltration trench, looking for buildup or organic and soil matter on the surface.
- Continual refinement of surface grading, including clearing/re-finishing of slopes, to: minimize ponding, provide positive drainage away from structures, and protect against erosion.

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

Worksheet for Calculating the Water Quality Design Volume (80 percent capture method)

Instructions: After completing Section 1, make as many copies of this Excel file as needed to fill out the worksheet for each Drainage Management Area of the project. Enter information specific to the project and DMA in the cells shaded in yellow. Cells shaded in light blue contain formulas and values that will be automatically calculated.

1.0 Project Information

1-1	Project Name:	McWherter
1-2	City application ID:	Montara
1-3	Site Address or APN:	036-225-130
1-4	Tract or Parcel Map No:	
1-5	Rainfall Region	3
1-6	Region Mean Annual Precipitation (MAP)	25.90
1-7	SiteMean Annual Precipitation (MAP)	28

The calculations presented here are based on the 80% capture method of sizing **volume-based treatment measures** provided in the Countywide Program's C.3 Technical Guidance, v. 4.0. The steps presented below are explained in Section 5.1 of the Guidance, applicable portions of which are included in this file, in the sheet named "Guidance from Chapter 5".

Click here for map

1-8 ***MAP adjustment factor is automatically calculated as:*** **1.08**

(The "Site Mean Annual Precipitation (MAP)" is divided by the MAP for the applicable rain gauge, showin in Table 5-3, below.)
Refer to the map in Appendix C of the C.3 Technical Guidance to identify the Rainfall Region for the site.

2.0 Calculate Percentage of Impervious Surface for Drainage Management Area (DMA)

2-1 Name of DMA: **1**

For items 2-2 and 2-3, enter the areas in square feet for each type of surface within the DMA.

	Type of Surface	Area of surface type within DMA (Sq. Ft)	Adjust Pervious Surface	Effective Impervious Area
2-2	Impervious surface	3,446	1.0	3,446
2-3	Pervious service	0	0.1	0
	Total DMA Area (square feet) =	3,446		

2-4 ***Total Effective Impervious Area (EIA)*** **3,446** **Square feet**

3.0 Calculate Unit Basin Storage Volume in Inches

Table 5-3. Unit Basin Storage Volumes in Inches for 80 Percent Capture Using 48-Hour Drawdowns, based on runoff coefficient

Region	Station, and Mean Annual Precipitation (Inches)	Runoff Coefficient of 1.0
1	Boulder Creek, 55.9"	2.04"
2	La Honda, 24.4"	0.86"
3	Half Moon Bay, 25.92"	0.82"
4	Palo Alto, 14.6"	0.64"
5	San Francisco, 21.0"	0.73"
6	San Francisco airport, 20.1"	0.85"
7	San Francisco Oceanside, 19.3"	0.72"

3-1 ***Unit basin storage volume from Table 5.2:*** **0.82** **Inches**
(The coefficient for this method is 1.00, due to the conversion of any landscaping to effective impervious area)

3-2 ***Adjusted unit basin storage volume:*** **0.89** **Inches**
(The unit basin storage volume is adjusted by applying the MAP adjustment factor.)

3-3 ***Required Capture Volume (in cubic feet):*** **255** **Cubic feet**
(The adjusted unit basin sizing volume [inches] is multiplied by the size of the DMA and converted to feet)

3-4 ***To size an infiltration trench, enter the surface area available:*** **170** **Square feet**

3-5 ***Required depth of infiltration trench, given the surface area available (in 3-4):*** **4.28** **Feet**
(Assumes 35% void space in rectangular trench with vertical sides.)
(Note: Infiltration trench depths are typically between 3 and 8 feet.)

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT K

APPENDIX F: EECAP DEVELOPMENT CHECKLIST

To ensure new development projects are compliant with the County's Energy Efficiency Climate Action Plan (EECAP), the following checklist has been developed. This checklist should be filled out for each new project, addition, or remodel that is subject to discretionary review to allow projects to identify consistency with the EECAP. Demonstrating consistency with the EECAP shows project eligibility for CEQA tiering, as provided for by the California Environmental Quality Act (CEQA). Tiering from the environmental analysis prepared for this EECAP may allow projects to streamline project review, with the potential to use the EECAP to determine the project would have less than significant impact on greenhouse gas emissions.

The EECAP provides both mandatory and voluntary greenhouse gas reduction measures with varying applicability for different types of future projects. If a project desires to use the EECAP for CEQA streamlining provisions, the County will be responsible for applying voluntary and/or mandatory measures as mitigation measures, as appropriate. The County will work with applicants on a project-by-project basis to determine the appropriate use of the CEQA benefits of the EECAP, identifying appropriate mandatory and voluntary measures to integrate into project design or mitigation. For developments wishing to benefit from CEQA streamlining provisions, the County may require voluntary measures in this EECAP as mandatory conditions of approval or as mitigation in a mitigated negative declaration or an environmental impact report, as appropriate, on a project-by-project basis. This approach allows the County to ensure that new development can benefit from CEQA streamlining provisions while also ensuring that the County is on target to achieve the reduction targets outlined in this Plan. The checklist does not preclude the County's discretion to determine if substantial evidence indicates that a project complying with EECAP measures may still yield cumulatively considerable impacts on the environment. If the County finds that a project may still yield cumulatively considerable impacts despites compliance with the EECAP, an environmental impact report (EIR) must be prepared for the project.

Note that this checklist excludes supportive and non-quantifiable measures identified in the EECAP, or measures that are not universally applicable to all projects. In addition, the checklist provides the quantitative

APPENDIX F: EECAP DEVELOPMENT CHECKLIST

criteria as it would be applicable to a single project. This criteria is intended to provide clarity for implementation of the EECAP, in some instances providing additional information that is consistent with the assumptions identified in **Appendix C** of the EECAP. The actions identified in the checklist below show the level of project performance that would demonstrate consistency with the EECAP and support consistency with the findings of the EECAP's CEQA analysis. For projects that may comply with the intent of an EECAP action but not meet all identified performance criteria below, County staff has the flexibility to determine on a case-by-case basis when projects nonetheless demonstrate consistency with the overall intent of the EECAP.

Specifically, the checklist excludes the following:

- Measures that describe County efforts supportive of other measures, that will not be implemented project-by-project, including Measure 3.4 (Expedited Permitting), Measure 5.2 (County Impact Fees), Measure 10.2 (Alternative Fuel Outreach) and Measure 4.8 (Community Choice Aggregation). These measures describe the County's efforts to create an enabling framework for projects, and which projects will implement through the other actions described in the following checklist.

- Measures that are supportive, whose impacts on GHG emissions were not quantified and did not contribute to the environmental determination of the EECAP's EIR. These measures will be implemented through broad public-private partnerships and not on a project-by-project basis, including Measure 2.4 (Green Business Program), Measure 2.5 (Implement AB 1103), and Measure 11.1 (Energy-Efficient Agriculture).

- Large-scale measures that are specific to unique types of large projects, including Measure 4.6 (Commercial Wind Power) and Measure 4.10 (Waste to Energy). These measures describe large-scale projects not eligible for CEQA streamlining, whose impacts will be dependent upon project specifics that could not be anticipated through the EECAP's EIR. These projects cannot benefit from the CEQA streamlining provisions of this EECAP, and will require separate environmental analysis pursuant to CEQA.

EECAP DEVELOPMENT CHECKLIST

Measure		Description & Performance Criteria	Compliance			
			Complies	Does Not Comply	N/A	See Discussion
1.1	Energy Upgrade California	Participate in an energy retrofit rebate program, to achieve a minimum of 30% energy savings.			X	
1.2	Residential Energy Efficiency Financing	Participate in a residential energy efficiency financing program, to achieve 30% energy savings.		X		
1.3	Low-Income Weatherization	Complete weatherization, to achieve average energy savings of 25%.			X	
1.4	Tree Planting	Tree plantings to shade new or existing homes.	X			
1.5	Propane Switch	Switch from propane heater to more energy-efficient options, such as Energy Star furnaces or electric air-source pumps.			X	
2.1	Commercial and Industrial Efficiency	Complete energy efficiency upgrades through third-party programs.			X	
2.2	Commercial Financing	Participate in commercial energy efficiency financing programs, to achieve a minimum of 30% energy savings.			X	
2.3	Institutional Energy Efficiency	Complete energy efficiency retrofits at large institutional facilities.			X	
3.1	Green Building Ordinance	Comply with the Green Building Ordinance and achieve CALGreen Tier 1 energy efficiency standards, for all construction projects subject to the Green Building Ordinance.	X			

APPENDIX F: EECAP DEVELOPMENT CHECKLIST

Measure		Description & Performance Criteria	Compliance			
			Complies	Does Not Comply	N/A	See Discussion
3.2	Green Building Incentives	Comply with the Green Building Ordinance and achieve CALGreen Tier 1 energy efficiency standards, regardless of applicability of the Green Building Ordinance.	X			
3.3	Urban Heat Island	Install shading, "cool" surfaces design, and/or open-grid paving to reduce hardscape through strategies such as interlocking concrete pavement, stones, or blocks.		X		
3.6	Regional Energy Efficiency Efforts	Procure and install energy-efficient equipment, through programs such as bulk-purchasing, to achieve a minimum of 8% energy savings.			X	
4.1	Solar PV Incentives	Install a solar photovoltaic system, using private resources and/or local or state incentives, including County incentives, and state rebates through the California Solar Initiative.		X		
4.2	Solar Water Heater Incentives	Install solar water heaters, using private resources and/or local or state incentives, including County incentives and state rebates through the California Solar Initiative.		X		
4.3	Pre-Wired Solar Homes	Pre-wire and pre-plumb for solar thermal or PV systems.		X		
4.4	Pilot Solar Program	Install a solar photovoltaic system through a development project program.			X	
4.5	Renewable Financing	Install a solar photovoltaic system or solar water heater using financing programs such as power purchase agreements or Property Assessed Clean Energy.			X	

APPENDIX F: EECAP DEVELOPMENT CHECKLIST

Measure		Description & Performance Criteria	Compliance			
			Complies	Does Not Comply	N/A	See Discussion
4.7	Incentivize Wind Energy	Install small distributed generation wind power systems on existing development.			X	
4.9	Emissions Offset Programs	Participate in an energy offset program to purchase electricity generated from renewable sources off site.			X	
5.1	General Plan and Zoning Updates	Provide transit-oriented, mixed-use developments.			X	
5.3	Pedestrian Design	Incorporate pedestrian design elements to enhance walkability and connectivity, while balancing impacts on vehicle congestion.			X	
6.1	Neighborhood Retail	Provide neighborhood retail, daily service and commercial amenities in residential communities.			X	
6.2	Traffic Calming in New Construction	Incorporate appropriate traffic-calming features, such as marked crosswalks, countdown signal timers, planter strips with street trees, and curb extensions.			X	
6.4	Expand Transit	Enhance bus and safety shelter amenities to support public transit ridership.			X	
7.1	Parking Ordinance	Provide staggered parking demand, reduced parking, or parking based on demand levels that is lower than required in the code, if supported by parking study findings or proximity to mixed-use and public transit services.			X	
7.3	Unbundled Parking	Price parking separately from rentals or leases, using strategies such as metered parking or parking permits.			X	

APPENDIX F: EECAP DEVELOPMENT CHECKLIST

Measure		Description & Performance Criteria	Compliance			
			Complies	Does Not Comply	N/A	See Discussion
8.1	Employee Commute	Provide a Commute Trip Reduction program to discourage single-occupancy vehicle trips and encourage other modes of alternative transportation.			X	
8.2	Workplace Parking	Implement workplace parking pricing programs.			X	
8.3	Employer Transit Subsidies	Provide transit subsidies or transit passes to employees.			X	
8.4	Work Shuttles	Expand worker shuttle programs.			X	
10.1	Low Carbon Fuel Infrastructure	Install electric vehicle charging stations or provide neighborhood electric vehicle networks.		X		
13.1	Use of Recycled Materials	Incorporate a minimum of 15% recycled materials into construction.		X		
13.2	Zero Waste	Provide trash, recycling, and composting collection enclosures.	X			
14.1	Smart Water Meters	Install smart water meters.		X		
14.2	Water Reuse	Use grey, rain, and recycled water for landscaping or agricultural purposes.	X			
15.1	Construction Idling	Construction equipment for new development to comply with best management practices from Bay Area Air Quality Management District guidance.		X		
15.2	Electrification in New Homes	Provide outdoor electrical outlets for charging outdoor household equipment.	X			

APPENDIX F: EECAP DEVELOPMENT CHECKLIST

Discussion (please list policy #)

January 29, 2020

To: Planning Department
County of San Matoe

RE: 1237 Grant Road
Appendix F: EECAP Development Checklist – Description of Responses

The following is a description / reasoning for the response to each line item on the EECAP Development Checklist:

1.1 An energy retrofit program is not applicable as the proposed project is for new construction.

1.2 The project does not include the installation of a solar photovoltaic system (the house is not a prime candidate for solar due to the great tree coverage around the property, especially to the south), or other solar heating methods that would qualify for such a rebate.

1.3 The project applicant would not qualify for the Low-Income Weatherization Program, so this item is not applicable.

1.4 Many trees on site are being retained, with most being located to the east, south, and west of the proposed home's location, which will provide shade to the residence.

1.5 Switching of heat source is not applicable as the proposed project is for new construction.

2.1 The proposed project is for residential development, so commercial/industrial programs are not applicable.

2.2 The proposed project is for residential development, so commercial financing programs are not applicable.

2.3 The proposed project is for new residential development, so industrial retrofit

programs are not applicable.

3.1 The proposed project complies with current CalGreen requirements.

3.2 The proposed project complies with current CalGreen requirements.

3.3 The majority of the proposed project's paved area is asphalt driveway as required by the Fire Department. Cool surfaces / open-grid paving techniques are not proposed, but very little other hardscape is proposed.

3.6 As this is development of a single family home, bulk purchasing programs are not applicable.

4.1 The proposed home is not a prime candidate for a solar photovoltaic system, and is thus not a part of the proposed project.

4.2 The proposed home is not a prime candidate for a solar photovoltaic system, and as such, solar water heaters have not been incorporated into the proposed project.

4.3 The proposed home is not a prime candidate for a solar photovoltaic system, and as such, the home will not be pre-wired for such systems.

4.4 The proposed home is not a prime candidate for a solar photovoltaic system, and is thus not a part of the proposed project.

4.5 The proposed home is not a prime candidate for a solar photovoltaic system, and is thus not a part of the proposed project.

4.7 The proposed project is for new residential development, and therefore there is no existing development to retrofit with wind energy.

4.9

5.1 The proposed project is for development of a new single family home, so mixed-use development design elements are not applicable.

5.3 The proposed project is for development of a new single family home, so design elements related to pedestrian design vs. vehicle congestion impacts, are not applicable.

6.1 The proposed project is for development of a new single family home, not a new residential community, so this comment is not applicable.

6.2 The proposed project is for development of a new single family home, so design elements related to traffic calming are not applicable.

6.4 The proposed project is for development of a new single family home, so public transit

amenities are not a part of the project scope.

7.1 The proposed project is for development of a new single family home, so parking demand analysis is not applicable.

7.3 No pay-for-parking situation is proposed, so this comment is not applicable.

8.1 The proposed project is for development of a new single family home, so Commute Trip Reduction programs are not applicable.

8.2 There is no payment required for parking at (or near) the project site, so this comment is not applicable.

8.3 The homeowner will also be the general contractor on the project, and his few employees are all local, so transit passes/subsidies are not applicable.

8.4 The homeowner will also be the general contractor on the project, and his few employees are all local, so worker shuttle programs are not applicable.

10.1 A raceway for a future EV charging station will be installed in the garage, but the charging station will not be installed until a later time, if/when needed.

13.1 Although recycled materials are planned to be used during the construction and will be sought out when feasible, a minimum threshold to track and quantify will not be implemented.

13.2 Garbage, recycling, and compost bins will be stored in the covered area next to the garage.

14.1 A smart water meter is not proposed to be installed.

14.2 As no irrigation is proposed, rain will be the primary source of landscape watering (much of the natural vegetation will remain).

15.1 Existing construction equipment does not meet BAAQMD BMPs.

15.2 Exterior outdoor outlets are proposed around the house.

Sincerely,

Brian Brinkman