County of San Mateo
Planning and Building Department

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

1. **Project Title:** New Residence at Arbor Lane, Moss Beach

2. **County File Number:** PLN 2016-00444

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

4. **Contact Person and Phone Number:** Carmelisa Morales, 650/363-1873, cjmorales@smcgov.org

5. **Project Location:** Undeveloped Parcel, Arbor Lane, Moss Beach

6. **Assessor's Parcel Number and Size of Parcel:** 037-123-430; 14,320 sq. ft.

7. **Project Sponsor's Name and Address:** Carlos Zubieta, 1725A Abbot Kinney Boulevard, Venice, CA 90291

8. **General Plan Designation:** Medium Density Urban Residential

9. **Zoning:** R-1 Single-Family Residential District / S-17 Combining District / Design Review District / Coastal Development District (R-1/S-17/DR/CD)

10. **Description of the Project:** Construction of a new 3,338 sq. ft. two-story single-family residence with an attached 468 sq. ft. two-car garage on an undeveloped 14,320 sq. ft. parcel. Two significant-sized Monterey cypress trees are proposed for removal. Three hundred sixty-eight (368) cubic yards (c.y.) of grading (186 c.y. of excavation and 192 c.y. of fill) is proposed. A water well is located on the subject property and will be formally abandoned and capped prior to construction of the proposed single-family residence. The parcel is constrained by two scenic easements.

11. **Surrounding Land Uses and Setting:** The undeveloped parcel is zoned R-1/S-17/DR/CD and surrounded by single-family residential development with the same zoning to the north, south, and east. The Pacific Ocean is to the west (approximately 30 feet from the western property line of the parcel) with an undeveloped parcel located between the subject parcel and coastal bluffs. A wooden fence separates the adjacent parcel from the coastal bluffs. Dean Creek borders the parcel to the south with the top of the creek line encroaching up to approximately 50 feet into the southwestern corner of the parcel. A grove of mature Monterey cypress trees are located on the steep canyon upland slope separating the property from Dean Creek. Two Monterey cypress trees are also located in the middle and left side yard of the parcel.

    A Coastal Development Permit (CDP) (Case No. CDP 96-0045) was approved in 1997 to drill a domestic water well on the parcel, but failed to produce adequate water supply.

An amendment to the CDP was approved in 1998 to drill two additional test wells in an attempt to establish a single on-site potable domestic water source to serve a future single-family residence. There is currently one water well in the front left yard of the parcel.

12. **Other Public Agencies Whose Approval is Required:** None.

13. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?:** No.

## 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.

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

## 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 appro-

priate 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 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 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.** Would the project: | | | | |
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| | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 1.a. Have a significant adverse effect on a scenic vista, views from existing residential areas, public lands, water bodies, or roads? | | | X | |
| **Discussion:** The project parcel is constrained by the following two scenic easements:<br>1. A scenic easement included as part of the Cypress Cliffs Subdivision (Case No. X6D-448 approved on February 23, 1972 and recorded on May 4, 1972), the subdivision that resulted in the creation of the project parcel, bisects the southern section of the project parcel. The scenic easement requires a 20-ft. setback from the easement's edge and fully covers Lot 11, the adjacent parcel to the west of the project parcel. The subdivision | | | | |

map states that the "scenic easement as shown on Lots 11, 12, 13, 14, and 17 shall be kept open and free from buildings or structures of any kind except that sideline fencing may run to top of bank."

2. A 75-ft. wide scenic easement that starts at Wienke Way and runs west through Arbor Lane to the coastal bluffs bisects the northern section of the project parcel. This scenic easement was enacted by the California Coastal Commission (CCC) as part of Resolution No. 74-270 (approved on July 15, 1974 and recorded on November 24, 1975) in association with a Lot Line Adjustment (LLA) (Case No. X6E-122) affecting Lots 16 through 21 to ensure that future development does not intrude onto the scenic easement. Public access was also granted along this scenic easement at Lot 11.

Although the project parcel is not located within a designated State or County Scenic Corridor and is not visible from Highway 1 (Cabrillo Highway), the proposed 24'-3 7/8" high residence will be visible from the Pacific Ocean and bluff-top area to the west, and residential area to the north and east. A grove of mature Monterey cypress trees will partially screen the proposed residence from the residential area south of Dean Creek. The proposed residence may also be visible from residential areas upslope of the property. However, residential development fronting the bluff tops to the north and south are generally closer to the coastal bluffs than the proposed residence.

On November 9, 2017, as proposed and conditioned, the Coastside Design Review Committee (CDRC) recommended approval of the proposed residence to the San Mateo County (County) Planning Commission (PC), based on the findings that included compliance with all applicable Design Review (DR) standards. Specifically, the CDRC found that the proposed project complies with Section 6565.20(B) (*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 original design presented to the CDRC on July 13, 2017 was revised with the interest of preserving the views and ensuring compatibility with the surrounding neighborhood. The applicant responded to the CDRC's concerns from the July 13, 2017 meeting with improved massing, articulation, colors and materials, and a slightly reduced height. The second story of the proposed residence was reduced and the second story deck was relocated to the back of the property to preserve privacy and minimize visual impacts from many of the neighboring residences. As a result, the CDRC was able to make the findings to recommend approval of the design of the proposed residence as it complies with all applicable DR standards.

With the constraints of the two scenic easements and as demonstrated by the recommendation of approval by the CDRC, the visual impact of the proposed residence will not be significant.

**Source:** Project Plans, Project Location, County Geographic Information System (GIS) Maps, Field Observations, 1972 Cypress Cliffs Subdivision Map, CDRC Recommendation Letter (for November 9, 2017 meeting), County Midcoast DR Standards, California Coastal Commission Resolution No. 74-270.

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| 1.b. | Significantly 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 historic buildings within a state scenic highway. Two significant-sized Monterey cypress trees (trees with a diameter at breast height (dbh) of 12 inches or more) are located within the building footprint of the proposed residence and therefore require removal. These trees will be replaced with two Monterey cypress trees (15-gallon size stocks) and be located at the rear of the property to minimize visual impacts for residential areas in the north and east and to create an

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| opportunity for future vegetative screening of the proposed residence from residential areas south of Dean Creek.<br>**Source:** Project Plans, Project Location, Field Observations, County GIS Maps, County General Plan Scenic Corridors Map. | | | | |
| 1.c. Significantly degrade the existing visual character or quality of the site and its surroundings, including significant change in topography or ground surface relief features, and/or development on a ridgeline? | | | X | |
| **Discussion:** The proposed project will require 368 c.y. of grading (186 c.y. of excavation and 182 c.y. of fill) to accommodate the proposed residence, landscaping, and drainage features. The proposed grading will not represent a significant change in topography. Additionally, in accordance with the CDRC's recommendation of approval as discussed in Section 1.a. and 1.b., the proposed project will not significantly degrade the existing visual character or quality of the site.<br>**Source:** Project Plans, Project Location, Field Observations, County GIS Maps, CDRC Recommendation Letter (for November 9, 2017 Meeting), County Zoning Regulations. | | | | |
| 1.d. Create a new source of significant light or glare that would adversely affect day or nighttime views in the area? | | | X | |
| **Discussion:** The project plans recommended for approval by the CDRC include exterior lighting for the proposed residence. The CDRC's recommendation acknowledged the project's compliance with Section 6565.20(E)4 of 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 will not create a new source of significant light or glare that would adversely affect day or nighttime views in the area.<br>**Source:** Project Plans, Project Location, CDRC Recommendation Letter (for November 9, 2017 Meeting), 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 is not adjacent to a designated State or County Scenic Corridor. The closest County Scenic Corridor is the Cabrillo Highway (Highway 1) County Scenic Corridor which is over 400 feet away.<br>**Source:** Project Location, County GIS Maps, County General Plan Scenic Corridors Map. | | | | |

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| 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 R-1/S-17/DR/CD (R-1 Single-Family Residential District / S-17 Combining District / DR District / Coastal Development District). As discussed in Section 1.a., the CDRC determined that the proposed project is in compliance with all applicable DR standards.

The proposed single-family residence is an allowed use in the R-1 Zoning District. The project parcel meets the minimum parcel size and parcel width requirements. The proposed residence will have conforming setbacks (for both the zoning district and scenic easements) and a building height, building floor area, and parcel coverage that are under the maximum allowed. Further, the proposed residence complies with the S-17 Combining District daylight plane requirement.

The CD District overlay indicates that the project parcel is located within the Coastal Zone and therefore requires a Coastal Development Permit (CDP) for any proposed development. Approval of a CDP is conditional upon a project's compliance with all applicable San Mateo County Local Coastal Program (County LCP) policies. The proposed project complies with all applicable LCP policies, specifically regarding visual resources which is indicative of the project's recommendation for approval by the CDRC as discussed in Section 1.a.

Conclusively, the proposed project is not in conflict with provisions of the R-1 Zoning District, S-17 Combining District, DR District, or CD District.

**Source:** Project Plans, Project Location, CDRC Recommendation Letter (for November 9, 2017 Meeting), County Zoning Regulations, County Midcoast DR Standards, County Local Coastal Program.

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

**Discussion:** The project parcel is undeveloped and located at the western end of Arbor Lane in Moss Beach. As discussed in Section 1.a., the project parcel is restricted by two scenic easements. One of the easements, created through the 1972 Cypress Cliffs Subdivision (the subdivision that created the project parcel), bisects the southern section of the project parcel and covers all of Lot 11, the adjacent northwestern parcel. Lot 11 will declared to be not a building site and, instead, a lot for exclusive use by the neighborhood's homeowner's association and the property owners of the lots in the resulting subdivision. The subdivision map also states that the "scenic easement as shown on Lots 11, 12, 13, 14, and 17 shall be kept open and free from buildings or structures of any kind except that sideline fencing may run to top of bank." This scenic easement aims to preserve scenic views for the property owners of the lots in the resulting subdivision and for members of the public visiting the neighborhood and surrounding area. The other scenic easement that bisects the northern section of the project parcel runs west along Arbor Lane from Weinke Way. This scenic easement, recorded by the California Coastal Commission in 1975, affected the developments of Lots 16 through 21 to ensure that future development does not intrude onto the scenic easement. This easement also granted public access along the scenic easement on Lot 11. Both scenic easements created larger setbacks for any development proposed on the project parcel. As discussed in Sections 1.a. through 1.f., the proposed project is in compliance with the setback requirements of the scenic easements.

In addition to these restrictive scenic easements, the proposed project complies with all applicable zoning regulations, specifically Design Review standards. As discussed in Sections 1.a. through 1.f., the CDRC determined the proposed residence to be in compliance with Midcoast Design

Review standards and recommended approval to the San Mateo County Planning Commission. The proposed residence was revised from its original design (presented to the CDRC on July 13, 2017) with the interest of preserving the views 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, 1972 Cypress Cliffs Subdivision Map, CDRC Recommendation Letter (for November 9, 2017 Meeting), County Zoning Regulations, County Midcoast DR Standards, California Coastal Commission Resolution No. 74-270.

**2. AGRICULTURAL AND FOREST RESOURCES.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forestland, 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* |
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| 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 parcel is located within the Coastal Zone. The project 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.

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| 2.b. Conflict with existing zoning for agricultural use, an existing Open Space Easement, or a Williamson Act contract? | | | | X |

**Discussion:** The project parcel is zoned R-1 (Single-Family Residential District). Agricultural uses are not permitted in the R-1 Zoning District. There is also no Open Space Easement or Williamson Act contract associated with the project parcel.

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| **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 parcel is undeveloped and largely surrounded by single-family residential development. The project parcel does not contain, is not adjacent to, or is not near an area designated as Farmland or forestland (land that can support 10% 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 parcel will not convert Farmland to a non-agricultural use or forestland to non-forest use.<br>**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 parcel is located within the Coastal Zone, the project parcel does not contain Class I or Class II Agriculture Soils, or Class III Soils rated good or very good for artichokes or Brussels sprouts.<br>**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 (Typic Argiustolls, loamy-Urban land association 5 to 15 percent slopes). The proposed project will convert approximately 30 percent of the parcel to a non-agricultural use. However, as discussed in Section 2.b., agriculture is not an allowed use within the project parcel's zoning district (R-1 Single-Family Residential District). The project parcel is also located within a residential neighborhood with the surrounding area also composed of primarily residential uses. With the project parcel's location within the R-1 Zoning District and existing uses in the surrounding neighborhood, the project parcel is not suitable for a future agricultural use and, thus, the proposed project poses no impact.<br>**Source:** Project Location, Natural Resources Conservation Service Web Soil Survey - California Revised Storie Index, County Zoning Regulations. | | | | |

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| 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))?<br>*Note to reader: This question seeks to address the economic impact of converting forestland to a non-timber harvesting use.* | | | | X |

**Discussion:** The project parcel 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 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 proposed project does not include any conflict with or obstruct implementation of the Bay Area 2010 Clean Air Plan (CAP), an air quality plan created to improve the Bay Area's air quality and protect public health and the climate. Once constructed, ongoing use of the 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 (BAAQMD). During construction of the proposed residence, construction vehicles are also required to meet California Air Resources Board regulations to reduce air pollution (e.g., limits on idling). During construction activities, air emissions will be generated from construction equipment and construction worker vehicles. However, any such construction-related emissions would be temporary and localized.

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

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| 3.b. | Violate any air quality standard or contribute significantly to an existing or projected air quality violation? | | X | | |

**Discussion:** During project construction, air emissions will be generated from site grading, construction equipment, and construction worker vehicles. However, any such construction-related emissions will be temporary and localized.

The BAAQMD has established thresholds of significance for construction emissions and operational emissions. As defined in the BAAQMD's 1999 California Environmental Quality Act (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 control measures to minimize emissions from construction activities. The BAAQMD provides a list of construction-related control measures that, when fully implemented, would significantly reduce construction-related air emissions to a less than significant level. These control measures are included in the mitigation measure provided below.

Further, Section 2-1-113 (*Exemption, Sources, and Operations*) of the BAAQMD General Requirements exempts sources of air pollution, associated with the construction of a single-family residence, used solely for residential purposes, as well as road construction, from obtaining an Authority to Construct or Permit to Operate.

**Mitigation Measure 1:** The applicant shall submit an Air Quality Best Management Practices Plan to the Planning and Building Department prior to the issuance of any grading permit "hard card" or building permit that, at a minimum, includes the "Basic Construction Mitigation Measures" as listed in Table 8-1 of the BAAQMD California Environmental Quality Act (CEQA) Guidelines (May 2011). The following Bay Area Air Quality Management District Best Management Practices for mitigating construction-related criteria air pollutants and precursors shall be implemented prior to beginning any grading and/or construction activities and shall be maintained for the duration of the project grading and/or construction activities:

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

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

c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day.

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

e. 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 California Code of Regulations). Clear signage shall be provided for construction workers at all access points.

f. Roadways and building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

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

h. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications.

i. Minimize the idling time of diesel powered construction equipment to two minutes.

j. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

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

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| 3.c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | | X | | |

**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 re-designation is approved by the EPA. 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.b. will 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.

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| 3.d. Expose sensitive receptors to significant pollutant concentrations, as defined by BAAQMD? | | X | | |

**Discussion:** Any pollutant emissions generated from the proposed project will primarily be temporary in nature. The project site is in a medium density urban residential area with few sensitive receptors (i.e., single-family residences) located within the project vicinity. Additionally, the surrounding tree canopy and vegetation in the southern section of the parcel will help to insulate the project area from nearby sensitive receptors. Mitigation Measure 1 will also help in minimizing any potentially significant exposure to nearby sensitive receptors to a less than significant level.

**Source:** Project Plans, Project Location.

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| 3.e. Create objectionable odors affecting a significant number of people? | | | X | |

**Discussion:** The proposed project is to construct a single-family residence in an urban 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 will be temporary and are expected to be minimal.

**Source:** Project Plans.

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| 3.f. Generate pollutants (hydrocarbon, thermal odor, dust or smoke particulates, radiation, etc.) that will violate existing standards of air quality on-site or in the surrounding area? | | X | | |

**Discussion:** Construction of the single-family residence is expected to generate a temporary increase in dust, motor vehicle and diesel particulate matter in the project area, and minimal increase from vehicles of residents and visitors. This increase is not expected to violate existing standards of on-site air quality given the required vehicle emission standards required by the State of California for vehicle operations. The following mitigation measure is provided to ensure that these pollutants during project construction will be less than significant.

**Source:** Project Plans, California Department of Motor Vehicles.

**Mitigation Measure 2:** The applicant shall submit a dust control plan to the Planning Department for review and approval prior to the issuance of a building permit for the project. The approved plan shall be implemented for the duration of any grading, demolition, and construction activities that generate dust and other airborne particles. The plan shall include the following control measures:

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

b. Water or cover stockpiles of debris, soil, sand, or other materials that can be blown by the wind.

c. Cover all trucks hauling soil, sand, and other loose materials, or require all trucks to maintain at least 2 feet of freeboard.

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

e. Sweep daily (preferably with water sweepers) all paved access roads, parking, and staging areas at the construction sites.

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

g. Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).

h. Limit traffic speeds on unpaved roads within the project parcel to 15 miles per hour (mph).

i. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.

j. Replant vegetation in disturbed areas as quickly as possible.

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

| 4. BIOLOGICAL RESOURCES. Would the project: | | | | |
|---|---|---|---|---|
| | *Potentially Significant Impacts* | *Significant Unless Mitigated* | *Less Than Significant Impact* | *No Impact* |
| 4.a. Have a significant adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | | X | | |

**Discussion:** A biological resources assessment (Kopitov assessment) was prepared by Kopitov Environmental LLC (Kopitov), dated May 9, 2015, for a 1.04-acre biological study area (BSA) centered on the project parcel. An update to the Kopitov assessment (CRE assessment), dated October 2, 2017, was also prepared by Coast Ridge Ecology LLC (CRE) to include an updated California Natural Diversity Database (CNDDB) map, updated review of the potential presence of special-status species on the property, and a map of the riparian corridor associated with Dean Creek. The immediate surrounding area around the project site includes single-family residences, the Fitzgerald Marine Reserve, and a steep gully with an intermittent creek (Dean Creek).

**Special-Status Plant Species**

Kopitov identified 56 special-status plant species with a potential to occur within the BSA. No special-status species were observed during Kopitov's field visit of the project site. However, suitable habitat may be present for Hickman's potentilla (*Potentilla hickmanii*) and coastal marsh milk-vetch (*Astragalus pycnostachyus*) in the Dean Creek habitat located south of the project parcel. With field visits conducted during peak bloom season (two referenced populations located within 1 mile of the project site were visited to confirm this), Kopitov concluded that there is no potential for these species to occur in the project area and surrounding vicinity. Kopitov also did not find any United States Fish and Wildlife Service (USFWS) designated critical plant species within 5 miles of the project site.

CRE updated the CNDDB list in the Kopitov assessment and the resultant list identified 13 special-status plant species within a 3-mile radius of the project site (as shown in Figure 2 of the CRE assessment). More recent special-status plant observation data on Blasdale's bent grass (*Agrostis blasdalei*) and perennial goldfields (*Lasthenia californica ssp. macrantha*) was discovered by CRE. An occurrence of Blasdale's bent grass was observed approximately 0.2 miles north of the project site. Perennial goldfields were observed approximately 1.0 miles north of the project site at Montara State Beach. Both species are not expected to be present on the project parcel or surrounding area as these species were not detected during the field visits conducted by Kopitov during peak blooming season. No other additional special-status plant species were determined to have any potential for presence in the project area and surrounding vicinity other than those identified by Kopitov.

**Special-Status Wildlife Species**

Kopitov identified six special-status or unique wildlife species to have the potential to occur in the BSA (listed below). These species have the potential to occur in the BSA due to nearby occurrences and/or potential suitable habitat.

1. *Monarch Butterfly*: The nearest known roost site for the monarch buttery is located approximately 2 miles east of the project. Threats to monarch butterflies include loss of winter roost habitat. The Monterey cypress grove has the potential to provide winter roosting habitat. Although two Monterey cypress trees will be removed to accommodate the proposed residence, Kopitov determined that the tree removal would have a less than significant impact to potential winter roosting habitat as the majority of the Monterey cypress grove would not be affected by the project.

2. *California Red-Legged Frog (CRF)*: The CRF, a federally threatened species and a California species of special concern, was previously recorded as moving long distances (occurring mostly at night) over land between water sources during the winter season. CRFs can be threatened by a variety of human-caused actions such as urban development, wetland habitat loss, and habitat fragmentation. Federally designated critical habitat for the CRF is located approximately 0.5 miles east of the study area. CRFs were not observed during the field visit, but have been found to be approximately 1.5 miles south of the project parcel near ponds west of the Half Moon Bay Airport. A sighting was also reported during the construction of the nearby Fitzgerald Marine Reserve Dardenelle Trail in 2012. However, Kopitov did not observe any breeding habitat for the CRF in the project area.

3. *San Francisco Garter Snake (SFGS)*: Historically, the prime habitats of the SFGS, a federal and state listed endangered species and fully protected under Section 5050 of the California Fish and Game Code (CFGC), include aquatic habitats with dense vegetation with preference near open hillsides and habitats with shallow water edges. The SFGS's peak activity occurs during spring and early summer when they are typically found near ephemeral ponds hunting Pacific tree frogs (*Pseudacris regilla*) that use shallow ponds for breeding. As ephemeral ponds dry, SFGS move to more permanent aquatic habitats where CRF breed. The SFGS can also be found in upland habitat characterized as open grassy habitat, coyote bush (*Bachairs pilularis*), wild oat (*Avena fatua*), wild barley (*Hordeum spp.*), and various brome species (*Bromus spp.*). Shrub species likely provide sufficient cover from predators while grasses provide exposed surfaces for basking. The SFGS retreats to shelters for dormant periods which include upland habitats inhabited by fossorial mammals. Mating generally occurs during warm days in early spring as snakes emerge from hibernacula and disperse to nearby aquatic habitat. The SFGS are threatened by a variety of human-caused actions such as urban development, wetland habitat loss, and habitat fragmentation. The SFGS also fall prey to species such as domestic cats, raccoons, and bullfrogs. The historic range for SFGS includes the entirety of San Mateo County. The nearest occurrence was approximately 1.5 miles south of the BSA. Since the project area is within the SFGS dispersal range, there is potential for Dean Creek and the BSA to provide dispersal and upland habitat for this species.

4. *San Francisco Dusky-Footed Woodrat (SFDW)*: The SFDW is a CDFW species of special concern. This species typically inhabits brushy and forested habitats in California. The SFDW builds mounded, multi-chambered stick complexes (often referred to as lodges) ranging from 4 to 8 feet in diameter and up to 6 feet in height. The SFDW structures were not observed in the BSA. However, since the Dean Creek habitat was inaccessible during the field visit, it was not possible to eliminate the potential for this species to occur in the gully. The BSA provides the potential for the SFDW to use the poison oak and Monterey cypress habitat for forage and nesting. The potential threats include habitat loss and anthropogenic disturbance.

5. *Salt Marsh Common Yellowthroat (SMCY)*: The SMCY is a California species of special concern and a year-round resident of San Mateo County. Its primary habitat includes dense vegetation of wetlands, marshes, estuaries, prairies, and riparian areas that are used for nesting and foraging. The nearest recorded occurrence was approximately 1.8 miles south

of the project site in Princeton Marsh. This species was not detected during the field visit. However, Dean Creek has potential suitable habitat to support this species.

6. *Hoary Bat:* All bat species are given special consideration under the California Environmental Quality Act (CEQA). Bats can roost in nearby structures and Monterey cypress trees and may forage over the project site. Threats include loss of habitat and mortality due to human activities.

Kopitov concluded that construction activities could result in substantial adverse effects to CRF and SFGS. Construction activities, including, but not limited to, vegetation removal, grading, staging, and other construction-related activities, may result in mortality of these species or interference with dispersal. Both species have the potential for dispersal and movement from breeding ponds and creeks into the BSA during significant rain events. Additionally, Kopitov concluded that the proposed project may result in significant adverse effects to SFDW that may be nesting in the poison oak habitat and bats that may roost in the Monterey cypress trees.

CRE visited the project site in September 2017 and found no additional observations of SFGS. The only species not assessed in the Kopitov assessment that was not included in the CRE assessment was fogbelt bumblebee (*Bombus caliginoses*). The fogbelt bumblebee does not have federal or state-listing protection, but is ranked as an S1/S2 (State Critically Imperiled/State Imperiled) by the State of California. This species has not been seen in the region since the late 1920s when occurrences were recorded in the Moss Beach, Pacifica, and Hillsborough areas. CRE determined this species to not likely be present on the project site as it has likely been extirpated from the region for decades. No additional special-status wildlife species were determined to have any potential for presence in the project area and surrounding vicinity other than those identified in the Kopitov assessment.

Story poles were required to be installed 10 days prior to this proposed project being presented to the CDRC at their July 13, 2017 CDRC meeting. Some vegetation, primarily California blackberry, on the project parcel was mowed to accommodate the story poles installation on July 3, 2017. The CRE assessment states that there was no evidence of SFDW middens found within the mowed area during their site inspection on September 14, 2017. Additionally, no SFDW middens were observed on the remainder of the project parcel or within the Dean Creek corridor downslope of the parcel.

Kopitov (with no recommended changes from CRE) has provided the following mitigation measures to ensure that adverse effects to these species are less than significant:

**Mitigation Measure 3:** Within 48 hours prior to the onset of any project-related activities, a qualified biologist should conduct a pre-construction survey of the project area to ensure that no California red-legged frogs or San Francisco garter snakes are present. In addition, immediately prior to vegetation removal or other construction activities, a qualified biologist familiar with the habitat requirements of California red-legged frogs and San Francisco garter snakes shall conduct a pre-construction survey to determine whether any of these species is located within the project area.

**Mitigation Measure 4:** A minimum 3-ft. high exclusion fence shall be installed around the limits of construction, including clearing, grading, and staging, unless otherwise directed by San Mateo County, United States Fish and Wildlife Service, or California Department of Fish and Wildlife, to create a barrier to prevent the California red-legged frog and San Francisco garter snake from entering the project site. No polymesh or similar materials shall be used as fencing materials. The fencing should be removed only when all construction equipment is removed from the project site. Fencing shall be inspected and any opening shall be repaired immediately. If openings are found, the project area shall be inspected by a biological monitor to ensure that special-status species have not entered the project area. The designated biological monitor may be a construction team manager or supervisor trained in the identification of special-status species.

**Mitigation Measure 5:** Vegetation or other materials shall not be stockpiled at the project site as it

provides potential hiding areas for California red-legged frogs, San Francisco garter snakes, and other wildlife species. Vegetation shall be placed directly into a disposal container and removed from the construction area, as practicable. If vegetation is stockpiled on the ground, removal shall be conducted under the supervision of a qualified biologist.

**Mitigation Measure 6:** To avoid, minimize, and mitigate impacts to the California red-legged frogs, San Francisco garter snakes, and their respective habitats, a worker education program and/or education materials prepared by a qualified biologist shall be provided to all workers prior to onset of construction activities.

**Mitigation Measure 7:** If required by San Mateo County, California Department of Fish and Wildlife, or United States Fish and Wildlife Service, a biological monitor shall inspect the project area prior to the beginning of construction activities to ensure that the California red-legged frogs and San Francisco garter snakes have not entered the project area. The designated biological monitor may be a construction team manager or supervisor trained in the identification of special-status species.

**Mitigation Measure 8:** Under no circumstances should California red-legged frogs and San Francisco garter snakes be handled, relocated, or otherwise harmed or harassed at any time. San Mateo County, United Stated Fish and Wildlife Service, and California Department of Fish and Wildlife shall be notified immediately upon discovery of these species in the project site or surrounding area.

**Mitigation Measure 9:** Prior to the start of vegetation removal, a qualified biologist familiar with the San Francisco dusky-footed woodrat and its habitat requirements shall survey for their nests within or immediately adjacent to the potential habitat (i.e., poison oak scrub).

a. If no nests are observed, no further mitigation is required.

b. If nests are observed, but would not be directly impacted by construction activities, a qualified biologist shall establish a 10-ft. buffer around the nests using exclusion fencing to ensure that they are not accidentally destroyed by construction activities. Exclusion fencing shall remain in place until project completion.

c. If a nest is observed within the vegetation clearing area, a qualified biologist shall disassemble the nest by hand and relocate and reconstruct the nest away from the construction area.

**Mitigation Measure 10:** If trees are removed or pruned, a qualified biologist shall conduct a pre-construction bat roost survey to determine if bats are present in the trees on or near the project parcel. If bats are detected, suitable measures to avoid and/or exclude bats shall be determined by the California Department of Fish and Wildlife.

**Source:** Project Plans, Project Location, County GIS Maps, Kopitov Environmental LLC Biological Resources Assessment (dated May 9, 2015), Coastal Ridge Ecology LLC Update to Biological Resources Assessment (dated October 2, 2017).

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

**Discussion:** The Kopitov assessment identified four sensitive habitats in the BSA: habitats supporting rare and endangered species; Dean Creek; the Fitzgerald Marine Reserve, a State of California ecological reserve; and coastal bluffs. Potential impacts to habitats supporting rare and

endangered species are discussed in Section 4.a. and include mitigation measures to ensure that impacts are reduced. The proposed residence will also be located approximately 70 feet from the top of the coastal bluffs. In addition to the minimum required zoning setbacks and setback required for the 75-ft. scenic easement (as discussed in Section 1.a.) bisecting the northern half of the project parcel, Kopitov determined that the proposed project will not impact the coastal bluffs. Regarding the Fitzgerald Marine Reserve, a State of California designated ecological reserve to protect natural areas with use restricted to scientific research relating to the management and enhancement of marine resources, no disturbance or taking of marine life, archaeological resources, or geological formations are allowed, and no fishing or collecting is permitted unless authorization is approved by the CDFW for scientific research. The proposed project does not propose any of these unauthorized activities.

Dean Creek is an intermittent creek that flows adjacent to the project area at the bottom of a steep gully on the southern boundary. Historically, Dean Creek has intermittent flow, but during high rainfall years, such as 2016 and 2017, Dean Creek may have year-round flow. Residential uses in the surrounding area also contribute additional flow, especially during the dry season due to yard irrigation and runoff/seepage to the creek. A portion of Dean Creek flows through underground pipes while a portion flows through an open channel.

The gully along the southern boundary of the project parcel was too steep to safely traverse. However, Kopitov examined the mouth of Dean Creek that flows to Kelp Cove in the Fitzgerald Marine Reserve. An old, rusted, broken metal pipe was identified on the bed of the creek. Kopitov stated that this pipe likely runs the length of the creek until it is undergrounded. During the field visit, the creek bed was damp with no standing water observed in the accessible portion of the creek bed (approximately 60 to 100 feet from the mouth). A shallow amount of water (less than 1-inch deep) was observed inside the pipe at about 100 feet upstream of the mouth. Kopitov also observed hydrophytic plants on the creek bed and bank approximately 60 to 75 feet upstream of the creek mouth to include arroyo willow (*Salix lasiolepis*), *Typha species (sp.)*, hoary stinging nettle (*Urtica sarmentosa*), silver weed cinquefoil (*Potentilla anserine*), and curly dock (*Rumex crispus*). The hydrophytic plants were restricted to the creek bed around the pipe. Typha sp. was also observed further upstream covering a larger area which indicates a potential wetland or a wider stream bed. Other plant species observed at the toe of the gully and within the creek bed and bank included Italian stone pine (*Pinus pinea*), garden nasturtium (*Tropaeolum majus*), cape ivy (*Delairea odorata*), pampas grass (*Cortaderia selloana*), periwinkle (*Vince species*), wild radish (*Raphanus sp.*) and inceplant/hottentot fig (*Carpobrotus edulis*). Monterey cypress trees line the top of the gully and continue down slope. A portion of the gully adjacent to the southern project boundary was degraded by human use (i.e., rope swings on the cypress trees). There was no visible understory.

Pursuant to LCP Policy 7.7 (*Definition of Riparian Corridors*), a riparian corridor is defined by the "limit of riparian vegetation" which is a line determined by the association of the following plant and animal species normally found near streams, lakes, and other bodies of freshwater: red alder, jaumea, pickleweed, big leaf maple, narrow-leaf cattail, arroyo willow, broadleaf cattail, horsetail, creek dogwood, black cottonwood, and box elder. This corridor must contain at least a 50% cover of some combination of these plants to be considered a riparian corridor. During their field visit, over two years since Kopitov's field visit, CRE did not identify any of these plants within the corridor section of Dean Creek. CRE identified a combination of native and non-native plant species such as Bur Reed (*Sparganium sp.*), California blackberry (*Rubus ursinus*), stinging nettle (*Urtica dioica*), wild radish (*Raphanus sp.*), nasturtium (*Tropaeolum majus*), and cape ivy (*Delairea oderata*). The outside edge of the riparian wetland floodplain feature of the creek was used to delineate the outside edge of the riparian zone. The boundary between the floodplain and upland area was determined by a visible soil, slope, and vegetative change. The riparian buffer zone extends upslope from the floodplain area and encompasses a large section of the steep slope dominated by Monterey cypress trees. CRE observed very little understory vegetation with the exception of invasive plants such as

cape ivy. Based on these findings and the LCP definition of riparian corridor, Dean Creek does not have a riparian corridor.

Pursuant to LCP Policy 7.11 (*Establishment of Buffer Zones*), for intermittent streams where no riparian vegetation exists along both sides of riparian corridors, a 30-ft. buffer zone is required. The distance from the floodplain/corridor boundary to the project parcel's southern boundary line, a distance closer than from the midpoint of the stream, varies from approximately 50 to 70 feet. CRE determined that the proposed residence complies with this buffer zone requirement and concluded that there would be no impacts to Dean Creek.

The mitigation measures in Section 4.a., recommended by Kopitov, were included to avoid and reduce adverse effects to sensitive or special-status species that have potential suitable habitat in these sensitive habitat areas.

**Source:** Project Plans, Project Location, County GIS Maps, Kopitov Environmental LLC Biological Resources Assessment (dated May 9, 2015), Coastal Ridge Ecology LLC Update to Biological Resources Assessment (dated October 2, 2017), County Local Coastal Program.

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| 4.c. | Have a significant 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? | | X | | |

**Discussion:** The Pacific Ocean is located approximately 30 feet west from the western property line of the parcel. An undeveloped parcel owned by the neighborhood's homeowner's association is located between the subject parcel and coastal bluffs. Dean Creek borders the parcel to the south with the top of the creek line encroaching up to approximately 50 feet into the southwestern corner of the parcel. The Kopitov assessment discussed in Section 4.a. concluded that the proposed project would not result in substantial adverse effects to any County, State, or Federal-protected wetlands or streams through direct removal, filling, hydrological interruptions, or other means provided that appropriate buffer areas and construction Best Management Practices are implemented. However, construction activities may increase stormwater runoff to Dean Creek. Implementation of the following mitigation measure is included, as recommended by Koptiov, to reduce any potential effects to wetlands or streams to less than significant by controlling sediment and erosion:

**Mitigation Measure 11:** Where sediment and erosion control materials are installed, repaired, or removed (i.e., wattles, silt fences, etc.), a qualified biologist should check the work area to ensure that sensitive species are not present or entrapped. Polymesh and/or other similar materials should not be used as these can entrap or snag reptiles, amphibians, or other small animals.

**Source:** Project Location, County GIS Maps, Kopitov Environmental LLC Biological Resources Assessment (dated May 9, 2015).

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| 4.d. | Interfere significantly 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 Kopitov assessment discussed in Section 4.a. determined that the Monterey cypress and poison oak on the project site provide suitable nesting and foraging habitat for migratory nesting birds and raptors. Kopitov also stated that the project site would result in the loss of some habitat that could potentially be suitable for migration and travel corridors. However, the project site would likely result in less than significant adverse effects to the movement of native resident species or migratory wildlife species or corridors as the gully, coastal bluffs, and adjacent vacant parcel to the northwest (owned by the neighborhood's homeowner's association) would continue to provide connectivity to migration and travel corridors.

If construction activities coincide with the typical bird nesting season (February 1 to September 15), the project has the potential to result in substantial adverse effects to nesting birds as a result of nest abandonment or direct take of birds, young, nests, and eggs. Kopitov recommends that vegetation removal occur during the non-nesting season. The following mitigation measure was added, as recommended by Kopitov, to reduce impacts to less than significant so that nesting birds are protected from disturbance and harm:

**Mitigation Measure 12:** If the construction activities coincide with the nesting bird season (February 1 to September 15), pre-construction nesting bird surveys shall be conducted by a California Department of Fish and Wildlife-approved biologist no more than 10 days prior to planned construction activities in order to locate nests within and adjacent to the proposed construction area. For all migratory bird species, the survey will include nesting birds within a 100-ft. radius from the project site.

a. If no active nests are detected, construction activities may take place as scheduled.

b. If an active nest is observed, the project shall be modified as necessary to avoid direct take of identified nest, eggs, and/or young. Modifications may include establishment of protective buffer as determined by a qualified biologist. Typical protective buffer zones are 50 feet for passerine nests and 250 feet for raptors. If construction activities are significantly impacted by the buffer zones, California Department of Fish and Wildlife shall be contacted to request a reduced buffer that would still protect nesting birds.

**Source:** Project Location, County GIS Maps, Kopitov Environmental LLC Biological Resources Assessment (dated May 9, 2015).

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| 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:** A grove of mature Monterey cypress trees are located on the steep canyon upland slope separating the property from Dean Creek. Two Monterey cypress trees are also located in the middle and left side yard of the project parcel. All the trees on the project parcel are of significant size (12 inches or greater in diameter at breast height) as defined in Section 12,012 of the San Mateo County Significant Tree Ordinance. The two Monterey cypress trees located in the middle and left side yard of the project parcel will be removed to accommodate the proposed residence.

The ECR assessment states that the removal of these two trees would not impact Dean Creek as they are located on the flat bluff top within the proposed building envelope, approximately 21 feet and 55 feet from the top of the creek. ECR states the removal of these trees would cause no disturbance to the steep slope downward to Dean Creek. In response to public comments received during the 10-day commenting period prior to the November 9, 2017 CDRC meeting, a response letter (CRE response letter) was prepared by CRE, dated November 3, 2017, stating that the trees

can be easily removed without causing erosion to the edge of the coastal bluffs and Dean Creek. The other trees on the property will be preserved with proper tree protection measures (i.e., fiber rolls and tree protection fencing). Fencing will also be used to delineate the construction area, providing an adequate physical barrier and buffer zone between the trees and construction activities.

A 2:1 tree replacement is required for parcels within a Design Review District in the Coastside. Four trees of at least 15-gallon size each are required for the two trees proposed for removal. The applicant requested an exception to this requirement. The proposed landscape plan shows two Monterey cypress trees to be planted at the rear left corner of the project parcel and a combination of native grasses and shrubs in the open areas on the west and south sides of the proposed residence. The proposed landscaping aims to reduce further impacts to surrounding neighboring properties. Another reason for the requested exception is the constraint in feasible locations for additional trees due to the scenic easements along the west and south sides of the proposed residence. These easements do not permit development, including trees, within their boundaries. Additionally, the CDRC recommended approval of the proposed project which includes the proposed landscape plan.

Based on the discussion above, with the exception of tree replacement, the proposed project does not conflict with any local policies or ordinances protecting biological resources including the County Significant Tree Ordinance.

**Source:** Project Plans, Project Location, County GIS Maps, County Significant Tree Ordinance, Coastal Ridge Ecology LLC Update to Biological Resources Assessment (dated October 2, 2017), Coastal Ridge Ecology LLC Response to Comments on Update to Biological Resources Assessment (dated November 3, 2017).

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| 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 project site is located within the Fitzgerald Marine Reserve (Reserve), a 402-acre natural resource area extending along San Mateo County's north coast, 3 miles south from Point Montara (at the northern end of Vallemar Street) to the south end of Pillar Point and 1,000 feet west into the ocean from the mean high tide line. Part of the Monterey Bay National Marine Sanctuary, the Reserve covers 402 acres and includes 370 acres of intertidal and subtidal marine habitat below the high tide line and 32 acres of upland coastal bluffs. The Reserve is under joint custodianship of the County Parks Department and the California Department of Fish and Wildlife, and is operated pursuant to the policies and guidelines of the 2002 Final Fitzgerald Marine Reserve Master Plan. The Reserve is both a "Marine Life Refuge" and an "Area of Biological Significance (ASBS)", designated by the State of California.

The boundary of the Reserve includes coastal bluffs to the west of the project parcel and all of Arbor Lane which is designated as a "trail easement" in the Final Draft of the Fitzgerald Marine Reserve Master Plan. The western boundary of the project parcel is approximately 30 feet from the top of the coastal bluff. A vacant parcel is located between the coastal bluffs and project parcel. There is also a wooden fence located along the coastal bluff top. Activities within the Fitzgerald Marine Reserve are restricted to scientific research relating to the management and enhancement of marine resources, no disturbance or taking of marine life, archaeological resources or geological formations is allowed, and no fishing or collecting is permitted unless authorization is approved by the CDFW for scientific research. As discussed in Section 4.b., the proposed project does not propose any of these unauthorized activities. The mitigation measures in Sections 4.a., 4.c., and 4.d., recommended by Kopitov, were included to avoid and reduce adverse effects to sensitive or

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| special-status species with potential suitable habitat in the sensitive habitat areas discussed in Section 4.b., including the Fitzgerald Marine Reserve. With these mitigation measures, project impacts to the Reserve area will be less than significant.<br>**Source:** Project Plans, Project Location, 2002 Final Fitzgerald Marine Reserve Master Plan. | | | | | |
| 4.g. | Be located inside or within 200 feet of a marine or wildlife reserve? | | X | | |
| **Discussion:** The project parcel is located within the Fitzgerald Marine Reserve. As discussed in Sections 4.a. and 4.b., the proposed project does not propose any unauthorized activities and the mitigation measures in Section 4.a., 4.c, and 4.d. are included to ensure that any such impacts are less than significant.<br>**Source:** Project Location, County GIS Maps, Kopitov Environmental LLC Biological Resources Assessment (dated May 9, 2015). | | | | | |
| 4.h. | Result in loss of oak woodlands or other non-timber woodlands? | | | | X |
| **Discussion:** The project parcel includes no oak woodlands or other timber woodlands. Thus, the project poses no impact.<br>**Source:** Project Location, Kopitov Environmental LLC Biological Resources Assessment (dated May 9, 2015). | | | | | |

| 5. | **CULTURAL RESOURCES**. Would the project: | | | | |
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| | | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 5.a. | Cause a significant adverse change in the significance of a historical resource as defined in CEQA 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. Therefore, the project poses no impact.<br>**Source:** Project Location, County GIS Maps, California Register of Historical Resources. | | | | | |
| 5.b. | Cause a significant adverse change in the significance of an archaeological resource pursuant to CEQA Section 15064.5? | | X | | |
| **Discussion:** The project parcel is also surrounded by residential development and is the last of the undeveloped parcels on Arbor Lane with the exception of the adjacent parcel to the northwest of the project parcel which has been deemed a non-building site in the 1972 Cypress Cliffs Subdivision Map. Based on the project parcel's existing surrounding land uses, it is not likely that the project parcel and surrounding area would host any archaeological resources. However, the following | | | | | |

mitigation measure is provided in the event that any cultural, paleontological, or archeological resources are encountered during construction and excavation activities:

**Mitigation Measure 13:** In the event that should cultural, paleontological, or archaeological resources be 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, 1972 Cypress Cliffs Subdivision Map.

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| 5.c. | 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 13 in Section 5.b. is provided to ensure that the impact is less than significant if any resources are encountered.

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

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| 5.d. | 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 13 in Section 5.b. is recommended.

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

| 6. GEOLOGY AND SOILS. Would the project: | | | | |
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| | *Potentially Significant Impacts* | *Significant Unless Mitigated* | *Less Than Significant Impact* | *No Impact* |
| 6.a. Expose people or structures to potential significant 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 significant evidence of a known fault?<br>*Note: Refer to Division of Mines and Geology Special Publication 42 and the County Geotechnical Hazards Synthesis Map.* | | X | | |

**Discussion:** A geotechnical report (Michelucci report) was prepared by Michelucci & Associates, Inc. (Michelucci), dated July 6, 2016. A geotechnical update and review of structural plans and calculations (updated Michelucci reports) were also prepared by Michelucci, dated August 29, 2017 and November 22, 2017, respectively. Michelucci determined the closest mapped major active fault zone to the project site is Seal Cove Fault Zone with its main active trace located approximately 0.1 miles to the northeast of the project parcel. The Seal Cove Fault is at the northern extension of the San Gregorio Fault which extends south of Monterey Bay and northward into the Pacific Ocean, west of San Francisco. The major active trace of the San Andreas Fault is mapped approximately 9.0 miles northeast of the project parcel while the Hayward and Calaveras Faults are located further northeast. The Seal Cove, San Andreas, and Calaveras Faults are all part of the major active San Andreas Fault System and the sources of numerous earthquakes that have impacted the San Francisco Bay Area and throughout California. Although it is highly probable that the proposed project will experience very strong ground shaking during a moderate to large nearby earthquake, Michelucci states that the proposed project can be developed as planned, provided that the geotechnical recommendations from their report be implemented. Therefore, since the project location and its distance from the cited fault zones can result in strong seismic ground shaking in the event of an earthquake, the following mitigation measure is recommended to ensure that such impacts are less than significant:

**Mitigation Measure 14:** 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 and Geologic Investigation prepared by Michelucci & Associates, Inc. and its subsequent updates 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, Michelucci & Associates, Inc. Geotechnical and Geologic Investigation (dated July 6, 2016), Michelucci & Associates, Inc. Geotechnical and Geologic Investigation Update (dated August 29, 2017).

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| ii. Strong seismic ground shaking? | | X | | |

**Discussion:** Pursuant to the discussion in Section 6.a.i., strong seismic ground shaking may occur in the event of an earthquake. However, the mitigation measure provided in Section 6.a.i. will ensure that impacts are less than significant.

**Source:** Project Plans, Project Location, San Mateo County Hazards Maps, Michelucci & Associates, Inc. Geotechnical and Geologic Investigation (dated July 6, 2016), Michelucci & Associates, Inc. Geotechnical and Geologic Investigation Update (dated August 29, 2017).

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

**Discussion:** The project parcel is located within an area designated as "very low" potential for liquefaction. However, pursuant to the discussion in Section 6.a.i., its respective mitigation measure is provided to ensure that any impacts are less than significant.

**Source:** Project Location, San Mateo County Hazards Maps, Michelucci & Associates, Inc. Geotechnical and Geologic Investigation (dated July 6, 2016), Michelucci & Associates, Inc. Geotechnical and Geologic Investigation Update (dated August 29, 2017).

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| iv. Landslides? | | X | | |

**Discussion:** The project parcel is located within an area designated as "few existing landslides." Further, the Michelucci report determined that there are no indications of landsliding within or near the project parcel. However, pursuant to the discussions in Section 6.a.i. and 6.a.iii., the mitigation measure in Section 6.a.i. is provided to ensure that impacts from landslides are less than significant.

**Source:** Project Location, San Mateo County Hazards Maps, Michelucci & Associates, Inc. Geotechnical and Geologic Investigation (dated July 6, 2016), Michelucci & Associates, Inc. Geotechnical and Geologic Investigation Update (dated August 29, 2017).

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| v. Coastal cliff/bluff instability or erosion?<br>*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 Michelucci report includes an aerial photographic interpretation discussing sixteen sets of aerial photographic stereo pairs taken from 1941 and 2005. In 1941, the project site and surrounding area were row crops with a leveled ground surface and slight slope causing drainage discharge to flow northwest toward the coastal bluffs. Past bluff retreat appeared to be due to periodic sloughing of relatively loose soil. The creek bank of Dean Creek was exposed and sloped down to the creek channel with the slope exhibiting minor slumping and sloughing of soil, but no indication of landslides or active bluff retreat. Subsequent imagery through 2005 indicated periodic sloughing and falling of soil from the exposed ocean bluff face both directly west of the project site and to the north and south. By 1991, a retaining wall was present along the ocean bluff at the western boundary of the existing residence north of the project parcel which still exists today.

*Dean Creek*

The Michelucci report states that the sloping creek bluff to the south of the project parcel is subject to minor sloughing and erosion, and growth of dense vegetation, but that the top of the bluff does not

appear to retreat. Michelucci compared 1997 and 2016 site surveys and found that they indicated negligible, minor slope retreat, which, based on the general slope appearance in the historical aerial photographs, is applicable to a longer period of time. Michelucci determined that the creek bluff retreat does not appear to be a direct hazard to the proposed residence.

*Coastal Bluffs*

Michelucci observed indications of failure of the ocean bluffs during the winter of 2015-2016 with debris from the slope present at the base of the slope and a bare "scar" on the bluff face at the location of where the debris fell. The failure mechanism of the ocean bluff face appears to be undercutting of the relatively weak, unconsolidated bluff sediments by wave action at the beach level. Comparing the 1997 and 2016 site surveys, the bluff retreat at four representative locations from the north to the south were 8, 16, 12, and 6 feet, an average of 10.5 feet corresponding to an average retreat rate of 0.55 feet per year. The western property line of the project parcel is located approximately 30 feet at its closest point from the edge of the ocean bluffs. The Michelucci report states that the most conservative average bluff retreat rate of 1.25 feet per year (taken from a published calculation of average annual ocean bluff retreat prepared by Gary Griggs and Lauret Savoy in 1985) was used in their projection, resulting in approximately 24 years for the bluff to reach the western property line of the project parcel. At this rate, the ocean bluff would retreat an additional 30 feet to the western building setback line in approximately 48 years, and to the closest point of the proposed residence, approximately 17 feet further inland, in approximately 14 additional years. At the maximum rate of 1.25 feet per year, Michelucci estimated that the bluff would reach the proposed residence in approximately 62 years.

The Michelucci report acknowledges that the 62 year period is conservative and that their calculations (based on the same 1866 site survey used by Griggs and Savoy) resulted in a lower average rate of 0.73 feet per year. Further, additional calculations based on the historical aerial photographs and site surveys also resulted in lower average rates of retreat ranging from 0.40 to 0.78 feet per year. The Michelucci report concluded that the average retreat rate is likely slower and with a more reasonable rate of 0.78 feet per year, the ocean bluffs would reach the western property line, western building setback line, and closest point of the proposed residence in approximately 38, 76, and 99 years, respectively. Michelucci notes that these calculated rates of bluff retreat are based on an assumed constant retreat rate. Ocean bluff failures occur episodically and not uniformly through time. Therefore, the measured/calculated rates of retreat must be assumed to be indicative, but not strictly representative of long-term rates. An individual failure episode may involve several feet of bluff retreat followed by many years, even decades, of no retreat.

The Michelucci report also discusses a qualitative evaluation of ocean bluff seismic stability. Michelucci states that geologic literature suggests that ocean bluff failures have occurred along the San Mateo County coast during earthquakes, specifically during the 1905, 1957, and 1989 San Francisco, Daly City, and Loma Prieta events. The events appear to generally consist of "peeling" and "slumping" of bluff face material similar to undercutting by wave erosion, as opposed to circular or block glide-type failures. The Michelucci report concluded that earthquake-caused instability would be similar in scope to the periodic, primarily winter wave undercut failures, and would likely replace or occur at the location of an imminent undercutting failure. Thus, seismic bluff failure would be incorporated into as opposed to being additive to the long-term bluff retreat.

Based on these findings, the Michelucci report concludes that the project can be developed as planned, provided that the recommendations in their report are followed. Their primary geotechnical consideration involves the upper 2 to 4 feet of surface soil that is generally weak. This material is compressible and consideration should be given to supporting the planned slab on grade floor. Drilled reinforced concrete piers will gain support in the strong Marine Terrace Deposits that were encountered below the weak surface soils in the three test borings conducted by Michelucci. In order to fortify the foundation and make it resistant to bluff retreat, consideration should be given to

constructing deep drilled piers along the edge of the structure closest to the bluffs and utilizing the slab and more conventional interior and perimeter piers as "tie backs."

*Updates to Geotechnical Report*

The updated Michelucci reports, as mentioned in Section 6.a.i., found that the slope down from the project site to Dean Creek was visually unchanged with no indication of further erosion or retreat from the 2016-2017 winter season. Michelucci descended the slope of the cliff at one location from the adjacent flat parcel and also observed the slope from The Strand, a road along the bluff to the south, on the opposite side of the creek. There were no fresh indications of erosion or undercutting of the soil face, and the vegetation did not change. The top of the slope continues to be protected by trees with ground surface only minimally exposed to wind and direct rainfall.

Regarding the ocean bluff, Michelucci observed a retreat of approximately 6 feet closer to the existing fence on the adjacent parcel (specifically, the fence post at the southwest corner), and a maximum of 11 feet further north, approximately 60 feet from the corner post since the original report was prepared in 2016. The updated Michelucci reports state that their measurements are accurate to a distance on the order of 1 to 2 feet due to the possible differences in interpretation of the top of bluff location. Michelucci states that the 2016-2017 bluff retreat is representative of past episodic events (in occurrence, not necessarily in magnitude), and their previous estimates of average annual rates and anticipated time until the retreat reaches the proposed residence remain unchanged. Based on these findings, the updated Michelucci reports concluded that the proposed project continues to be feasible from a geologic and geotechnical viewpoint provided that the recommendations in the original Michelucci report are incorporated into the final building plans and followed during construction.

Mitigation Measure 14 in Section 6.a.i. has been included to ensure the recommendations from the Michelucci report and its subsequent updates are implemented, thus ensuring that impacts are less than significant.

**Source:** Project Plans, Project Location, San Mateo County Hazards Maps, Michelucci & Associates, Inc. Geotechnical and Geologic Investigation (dated July 6, 2016), Michelucci & Associates, Inc. Geotechnical and Geologic Investigation Update (dated August 29, 2017), Michelucci & Associates, Inc. Response to Steven R. King, Ph.D, October 22, 2017 Memo (dated November 22, 2017).

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| 6.b. | Result in significant soil erosion or the loss of topsoil? | | X | | |

**Discussion:** Pursuant to the discussion in Section 6.a.v. regarding the soil conditions of the project site, the mitigation measures in Sections 3.b., 3.f., and 4.a., and the following mitigation measure are included to control erosion during both project construction activities. With these mitigation measures, the project impact will be less than significant.

**Mitigation Measure 15:** Prior to the issuance of the building permit for the proposed project, the applicant shall submit to the Planning Department and the Department of Public Works, 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 also limit application, generation, and migration of toxic substances, ensure the proper storage and disposal of toxic materials, and apply nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters. Said plan shall adhere to the San Mateo 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 feet, 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 feet of fence. Silt fences shall be inspected regularly and sediment removed when it reaches 1/3 the fence height. Vegetated filter strips should have relatively flat slopes and be vegetated with erosion-resistant species.

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, Michelucci & Associates, Inc. Geotechnical and Geologic Investigation (dated July 6, 2016), Michelucci & Associates, Inc. Geotechnical and Geologic Investigation Update (dated August 29, 2017), Michelucci & Associates, Inc. Response to Steven R. King, Ph.D, October 22, 2017 Memo (dated November 22, 2017), San Mateo Countywide Stormwater Pollution Prevention Program.

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| 6.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 3.b., 4.a., and 6.a., their associated mitigation measures will assure that the proposed project does not result in on- or off-site landslide, lateral spreading, subsidence, severe erosion, liquefaction, or collapse. Therefore, these mitigation measures will assure that the project impact will be less than significant.

**Source:** Project Plans, Project Location, Michelucci & Associates, Inc. Geotechnical and Geologic Investigation (dated July 6, 2016), Michelucci & Associates, Inc. Geotechnical and Geologic Investigation Update (dated August 29, 2017), Michelucci & Associates, Inc. Response to Steven R. King, Ph.D, October 22, 2017 Memo (dated November 22, 2017).

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| 6.d. | Be located on expansive soil, as noted in the 2010 California Building Code, creating significant 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 Location, Michelucci & Associates, Inc. Geotechnical and Geologic Investigation (dated July 6, 2016).

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| 6.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 residence will have sanitary sewer service connections from the Montara Water and Sanitary District and therefore does not require or include any septic tanks or wastewater disposal systems. Thus, the project poses no impact.

**Source:** Project Plans, Project Location, County GIS Maps, Montara Water and Sanitary District.

| 7. CLIMATE CHANGE. Would the project: | | | | |
|---|---|---|---|---|
| | *Potentially Significant Impacts* | *Significant Unless Mitigated* | *Less Than Significant Impact* | *No Impact* |
| 7.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; $CO_2$) air emissions from vehicles and machines that are fueled by gasoline. Project-related grading and construction of the proposed residence will 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 is not likely to generate significant amounts of greenhouse gases, the mitigation measure is provided in Section 3.b. to ensure that any impacts are less than significant.<br>**Source:** Project Plans, Project Location. | | | | |
| 7.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).<br>**Source:** Project Plans, 2013 San Mateo County Energy Efficiency Climate Action Plan. | | | | |
| 7.c. Result in the loss of forestland or conversion of forestland to non-forest use, such that it would release significant amounts of GHG emissions, or significantly reduce GHG sequestering? | | | | X |
| **Discussion:** The project parcel is not considered forest land, nor does it host any such forest canopy. Therefore, the project poses no impact.<br>**Source:** Project Plans, Project Location, County GIS Maps. | | | | |
| 7.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 discussion in Section 6.a.v. acknowledges the conditions of the project parcel and surrounding area and potential impacts related to coastal bluff erosion. The Michelucci report and subsequent updated reports concluded that the most conservative average retreat rate of the | | | | |

adjacent coastal bluffs is 0.73 feet per year, resulting in 62 years before the bluffs reach the closest point of the proposed residence. Additional calculations, which Michelucci believes is more accurate, determined the average retreat rate to range from 0.40 to 0.78 feet per year, concluding that the ocean bluffs would reach the western property line, western building setback line, and closest point of the proposed residence in approximately 38, 76, and 99 years, respectively. Michelucci notes that these calculated rates of bluff retreat are based on an assumed constant retreat rate as ocean bluff failures occur episodically and not uniformly through time. Therefore, the measured/calculated rates of retreat must be assumed to be indicative and not strictly representative of long-term rates. Conclusively, Michelucci stated that the proposed project can be developed as planned provided that their recommendations are implemented. Mitigation Measure 12 in Section 6.a.i. was provided to ensure that these recommendations are implemented to ensure that impacts are less than significant.

Furthermore, the EECAP dedicates substantive discussion around the issues of rising sea levels. While the project parcel is located on the flat top of a coastal bluff, at an elevation of approximately 50 feet above sea level, projected rising sea levels would be expected to contribute to greater erosion to the non-hardened shoreline cliffs from higher wave activity. With the LCP's requirement that the integrity along coastal bluff sites meet a minimum of 50 years, the EECAP projects rising sea levels to increase (based on estimates from 2050 to 2100) an average of about 27 inches along the County's coastline. The project includes no leach fields or other new infrastructure within this area. Therefore, the projected sea rise and associated erosion occurring to the bluff face should not impact the project development in the cited 50-year time frame. Based on these findings and with Mitigation Measures 1, 14, and 15, potential impacts will be less than significant.

**Source:** Project Plans, Project Location, San Mateo County Hazards Maps, Michelucci & Associates, Inc. Geotechnical and Geologic Investigation (dated July 6, 2016), Michelucci & Associates, Inc. Geotechnical and Geologic Investigation Update (dated August 29, 2017), Michelucci & Associates, Inc. Response to Steven R. King, Ph.D, October 22, 2017 Memo (dated November 22, 2017), 2013 County Energy Efficiency Climate Action Plan, County Local Coastal Program.

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| 7.e. | Expose people or structures to a significant risk of loss, injury or death involving sea level rise? | | X | | |

**Discussion:** Pursuant to the discussion in Section 7.d., the projected sea rise along this portion of the County coastline will not pose a significant risk to the proposed residence and people (i.e., future residents and their guests) to a significant risk of loss, injury, or death that involves sea level rise. With the mitigation measures cited in that discussion, the project impact will be less than significant.

**Source:** Project Plans, Project Location, 2013 County Energy Efficiency Climate Action Plan.

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| 7.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 parcel is not located in an anticipated 100-year flood hazard area as mapped by the Federal Emergency Management Agency (FEMA). The project parcel is located in FEMA Flood Zone X, which is considered a minimal flood hazard (Panel No. 06081C0119F, effective August 2 2017). FEMA Flood Zone X areas have a 0.2% annual chance of flooding, with areas with 1% annual chance of flooding with average depths of less than 1 foot. The FEMA flood

Designation for the coast, just beyond the coastal bluffs, is Flood Zone VE which covers coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones. The Zone VE designated area west of the project parcel has a base flood elevation of 29 feet. The project parcel is at an elevation of approximately 50 feet above the mean sea level, with the closest point of the proposed residence set back approximately 70 feet from the bluff edge. Therefore, the project impact would be less than significant.

**Source:** Project Plans, Project Location, County GIS Maps, Federal Emergency Management Agency Flood Insurance Rate Map 06081C0119F, effective August 2 2017.

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| 7.g. | Place within an anticipated 100-year flood hazard area structures that would impede or redirect flood flows? | | | | X |

**Discussion:** The project parcel is not located in an anticipated 100-year flood hazard area as mapped by FEMA. Pursuant to the discussion in Section 7.f. and given the topography of the project parcel and surrounding area, the project poses no impact.

**Source:** Project Location, County GIS Maps, Federal Emergency Management Agency Flood Insurance Rate Map 06081C0119F, effective August 2 2017.

| 8. | **HAZARDS AND HAZARDOUS MATERIALS.** Would the project: | *Potentially Significant Impacts* | *Significant Unless Mitigated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|---|
| 8.a. | Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (e.g., pesticides, herbicides, other toxic substances, or radioactive material)? | | | | X |

**Discussion:** The project does not involve the use, transport, or disposal of hazardous materials.

**Source:** Project Plans.

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| 8.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 use of hazardous materials is not proposed for this project.

**Source:** Project Plans.

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| 8.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 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.<br>**Source:** Project Plans, Project Location. | | | | | |
| 8.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.<br>**Source:** Project Location, California Department of Toxic Substances Control. | | | | | |
| 8.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 for people residing or working in the project area? | | | | X |
| **Discussion:** The project parcel is located approximately 2,500 feet (0.47 miles) northwest 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.<br>The project site is located in the Airport Influence Area (Runway Safety Zone 2), the Inner Approach/Departure Zone (IADZ), where accident risk level is considered to be high encompassing approximately 10 percent of general aviation aircraft accidents. The IADZ Zone prohibits residential land uses except for very low residential and infill in developed areas. Pursuant to Section 4.2.2.3 of the ALUCP, the project parcel meets all the criteria for infill development, thus allowing the residential use to occur even if the land use is prohibited in the IADZ Zone. Additionally, the proposed residential use complies with the other IADZ Zone development conditions in the Safety Criteria Matrix of the ALUCP such as locating the structure a maximum distance from extended runway centerline and maintaining a less than 35-ft. building height. The proposed residence will | | | | | |

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| have a maximum height of 24"-3 7/8" and be located 21 feet from the front property line, the northern most location, while still being in compliance with the zoning setbacks and setbacks for the scenic easements.<br><br>Based on the discussion above, staff has determined that the proposed project complies with the safety compatibility criteria and poses no impact.<br><br>**Source:** Project Plans, Project Location, 2014 Final Half Moon Bay Airport Land Use Compatibility Plan. | | | | | |
| 8.f. | For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area? | | | | X |
| **Discussion:** Pursuant to the discussion in Section 8.e., the proposed project poses no impact.<br><br>**Source:** Project Plans, Project Location, 2014 Final Half Moon Bay Airport Land Use Compatibility Plan. | | | | | |
| 8.g. | Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | | X |
| **Discussion:** The proposed project will be located on a privately-owned parcel where all improvements will be located within the parcel boundaries. The proposed residence will have direct access from Arbor Lane, a public maintained street. The proposed project would not impede, change, or close any roadways that could be used for emergency purposes. All roads would remain unchanged. Therefore, the project poses no impact.<br><br>**Source:** Project Plans, Project Location, County GIS Maps. | | | | | |
| 8.h. | Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | | | | X |
| **Discussion:** The project site is not located within a Fire Hazard Severity Zone (State Responsibility Area). The project was reviewed by the Coastside Fire Protection District (CFPD) and received conditional approval subject to compliance with the California Building Code for hard wired smoke detectors, an automatic fire sprinkler system, and ignition resistant construction and materials, among other fire prevention requirements. No further mitigation, beyond compliance with the standards and requirements of the CFPD are necessary. Thus, the project poses no impact.<br><br>**Source:** Project Location, California State Fire Severity Zones Maps, Coastside Fire Protection District. | | | | | |

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| 8.i. | 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 parcel is not located in such an area.<br>**Source:** Project Plans, County GIS Maps, Federal Emergency Management Agency Flood Insurance Rate Map 06081C0119F, effective August 2 2017. | | | | | |
| 8.j. | Place within an existing 100-year flood hazard area structures that would impede or redirect flood flows? | | | | X |
| **Discussion:** As discussed in Section 7.f., the project site is located in Flood Zone X, an area of minimal flood hazard. The project would not place structures within a 100-year flood hazard area as the project site is not located within a flood hazard zone that will be inundated by a 100-year flood.<br>**Source:** Project Plans, County GIS Maps, Federal Emergency Management Agency Flood Insurance Rate Map 06081C0119F, effective August 2 2017. | | | | | |
| 8.k. | 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 parcel, therefore there is no risk of flooding onto this parcel due to failure of a dam or levee.<br>**Source:** Project Plans, Project Location, County GIS Maps, San Mateo County Hazards Maps. | | | | | |
| 8.l. | Inundation by seiche, tsunami, or mudflow? | | | X | |
| **Discussion:** The project parcel is not located within a San Mateo County General Plan tsunami and seiche innundation area. According to the California Office of Emergency Services Tsunami Inundation Map for Emergency Planning, the southwestern corner of the project parcel is located within a tsunami inundation area. However, this inundation map was prepared to assist cities and counties in identifying their tsunami hazard areas and only for local jurisdictional, coastal evacuation planning uses only. The inundation map represents the maximum considered tsunami run up from a number of extreme, yet realistic, tsunami sources (i.e., "worst-case" scenarios) and therefore cannot be used for making land-use decisions. The inundation map also does not reflect the abrupt shift in elevation at the top of the coastal bluff where the proposed residence will be located, approximately 50 feet above sea level. There are also no recorded tsunamis in the Half Moon Bay area since 1812 with a height greater than 14 feet. Further, in an email correspondence dated April 20, 2018, the project geologist, Dexter F. Hoexter, from Michelucci, provided a response stating the only scenario that may cause inundation would be if the proposed residence blocks a narrow flow channel which would result in adjacent tsunami flow being forced around the obstruction at a higher elevation than if the channel was not blocked. Hoexter stated that since the proposed residence will sit atop the coastal bluff on a flat, wide area, any postulated tsunami flow at this location would be minimal in volume and flow around the building. The height of the flow would not significantly increase due to | | | | | |

the proposed residence and there will be ample space available to accommodate the flow around the structure. Based on these findings, the project poses a less than significant impact.

**Source:** Project Plans, Project Location, San Mateo County General Plan Natural Hazards Map, California Emergency Management Agency Tsunami Inundation Map for Emergency Planning (dated June 15, 2009), 1812-2012 California Department of Conservation Historic Tsunamis in California Chart, Email Correspondence from David F. Hoexter of Michelucci & Associates, Inc. (dated April 20, 2018).

| 9. **HYDROLOGY AND WATER QUALITY.** Would the project: | | | | |
|---|---|---|---|---|
| | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 9.a. Violate any water quality standards or waste discharge requirements (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 permanent project will be required to comply with the County's Drainage Policy requiring post-construction stormwater flows to be at, or below, pre-construction flow rates. A drainage report was prepared by Berry & Associates, dated August 24, 2017, detailing the proposed drainage system. The proposed system will accommodate the proposed residence, driveway, and hardscape features, and ensure pre-construction runoff levels are maintained. The proposed tight-line system will collect roof and surrounding hardscape runoff which will connect to an on-site retention facility with an energy reduction box and cleanout and overflow pipe. The drainage report states that the system was designed to capture and store the increased runoff from the residence and allow infiltration into the subgrade. In the event of intense runoff (i.e., greater than a 100-year storm), the overflow will bubble out and dissipate within the flat area at the west side of the project site. The runoff will be further reduced with a pervious driveway that will allow direct infiltration into the soil. The proposed project, including the discussed drainage report and plans, were reviewed and approved by the Department of Public Works. Based on these findings, the project impact will be less than significant.

**Source:** Project Plans, Project Location, County GIS Maps, Berry & Associates Drainage Report (dated August 24, 2017).

| | | | | |
|---|---|---|---|---|
| 9.b. Significantly deplete groundwater supplies or interfere significantly with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a | | | X | |

| | | | | | |
|---|---|---|---|---|---|
| | level which would not support existing land uses or planned uses for which permits have been granted)? | | | | |

**Discussion:** In order to evaluate the geotechnical engineering characteristics of the soil layers underlying the project site, the Michelucci report (discussed in Section 6.a.i.) discussed the three borings drilled on the project parcel. Groundwater was encountered in Boring 1 at about 40.5 feet below grade and in Boring 2 at about 49 feet below grade at the time of the drilling. Michelucci also reviewed the available data on the previously excavated well and found that stabilized water in the well was measured at 38 feet after it was drilled. Michelucci notes that water levels tend to fluctuate seasonally and could rise to shallowed depths in the future. Although groundwater was encountered, the proposed project is not expected to deplete any groundwater supplies or interfere with groundwater recharge as the proposed residence will receive water and sanitary sewer services from the Montara Water and Sanitary District. The existing well will also be capped and formally abandoned as required by the County Environmental Health Division. Thus, the project will have a less than significant impact.

**Source:** Project Plans, Project Location, County GIS Maps, Michelucci & Associates, Inc. Geotechnical and Geologic Investigation (dated July 6, 2016).

| | | | | | |
|---|---|---|---|---|---|
| 9.c. | Significantly alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in significant 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. Dean Creek, an intermittent creek, is located at the bottom of a steep gully south of the project site. Water flows through Dean Creek from the east and deposits into Kelp Cove in the Fitzgerald Marine Reserve. The project parcel is at an elevation of approximately 50 feet above sea level while the survey flow line of Dean Creek is at 22 feet above sea level at the toe of the creek and 12 feet above sea level at the toe of the cliff. Furthermore, the proposed development on the project parcel will include drainage features that have been approved by the Department of Public Works. With Mitigation Measures 1, 2, and 15 to address potential impacts during construction activities, the project will have a less than significant impact.

**Source:** Project Plans, Project Location, County GIS Maps, Kopitov Environmental LLC Biological Resources Assessment (dated May 9, 2015), Department of Public Works.

| | | | | | |
|---|---|---|---|---|---|
| 9.d. | Significantly alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or significantly increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site? | | X | | |

**Discussion:** Pursuant to the discussion in Section 9.c. and the cited mitigation measure, the proposed project will have a less than significant impact.

**Source:** Project Plans, Project Location, County GIS Maps, Kopitov Environmental LLC Biological Resources Assessment (dated May 9, 2015), Department of Public Works.

| | | | | |
|---|---|---|---|---|
| 9.e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide significant additional sources of polluted runoff? | | | X | |
| **Discussion:** Pursuant to the discussion in Section 9.a., the proposed project will have a less than significant impact.<br>**Source:** Project Plans, Project Location, County GIS Maps, Kopitov Environmental LLC Biological Resources Assessment (dated May 9, 2015), Department of Public Works. | | | | |
| 9.f. Significantly degrade surface or ground-water water quality? | | | X | |
| **Discussion:** Pursuant to Section 9.b., no degradation of surface or groundwater water quality is expected. Thus, the project poses a less than significant impact.<br>**Source:** Project Plans, Project Location, County GIS Maps, Michelucci & Associates, Inc. Geotechnical and Geologic Investigation (dated July 6, 2016). | | | | |
| 9.g. Result in increased impervious surfaces and associated increased runoff? | | X | | |
| **Discussion:** Pursuant to the discussion in Section 9.c. and the cited mitigation measure, the proposed project will have a less than significant impact.<br>**Source:** Project Plans, Project Location, County GIS Maps, Kopitov Environmental LLC Biological Resources Assessment (dated May 9, 2015), Department of Public Works. | | | | |

| **10. LAND USE AND PLANNING.** Would the project: | | | | |
|---|---|---|---|---|
| | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 10.a. Physically divide an established community? | | | | X |
| **Discussion:** The proposed single-family residence will infill within an urban area surrounded by existing single-family residential uses. The project parcel is the last parcel left to be developed on Arbor Lane. The project does not include a proposal to divide lands or include development that would result in the division of an established community.<br>**Source:** Project Plans. | | | | |

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|---|---|---|---|---|
| 10.b. Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | | | | X |
| **Discussion:** The proposed project has been reviewed for conformance and is not in conflict with any applicable policies of the County Local Coastal Program and applicable R-1, S-17, and design review zoning regulations as discussed in Section 1.f. With the project proposed pursuant to the project plans recommended for approval by the CDRC, the project poses no impact.<br>**Source:** Project Plans, County General Plan, County Midcoast DR Standards, County Zoning Regulations. | | | | |
| 10.c. Conflict with any applicable habitat conservation plan or natural community conservation plan? | | X | | |
| **Discussion:** The project site is not located in an area with a habitat conservation or natural community conservation plan. As discussed in Section 4.f., the project site is located within the Fitzgerald Marine Reserve. However, the project, as proposed with the mitigation measures in Sections 4.a., 4.c., and 4.d., will not adversely affect the Reserve and therefore the impact will be less than significant.<br>**Source:** Project Plans, Project Location, 2002 Final Fitzgerald Marine Reserve Master Plan. | | | | |
| 10.d. Result in the congregating of more than 50 people on a regular basis? | | | | X |
| **Discussion:** With the project comprised of the construction of one single-family residence, it is not expected that their occupancy capacity would result in the congregating of over 50 people on a regular basis. Therefore, the project poses no impact.<br>**Source:** Project Plans, Project Location. | | | | |
| 10.e. Result in the introduction of activities not currently found within the community? | | | | X |
| **Discussion:** The proposed residence will not result in the introduction of activities not already found within the community. The project site is surrounded by similar single-family residential development to the north, east, and south. Therefore, the project poses no such impact.<br>**Source:** Project Plans, Project Location, County Zoning Regulations, County Midcoast DR Standards, Coastside Design Review Committee Recommendation Letter (dated November 9, 2017). | | | | |

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| 10.f. Serve to encourage off-site development of presently undeveloped areas or increase development intensity of already developed areas (examples include the introduction of new or expanded public utilities, new industry, commercial facilities or recreation activities)? | | | | X |

**Discussion:** The proposed project is to construct a new single-family residence completely within the parcel boundaries. The proposed residence will be infilling into an urban area surrounded by existing residential uses. Furthermore, the project parcel is the last parcel on Arbor Lane available to be developed as the adjacent vacant parcel is owned by the neighborhood's homeowner's association and was deemed "not a building site" in the 1972 Cypress Cliffs Subdivision, the subdivision that created the Arbor Lane neighborhood including the subject parcel. The proposed project will not serve to encourage off-site development of undeveloped areas or increase the development intensity of surrounding developed areas. Therefore, the project poses no impact.

**Source:** Project Plans, Project Location, County GIS Maps, 1972 Cypress Cliffs Subdivision Map.

| | | | | |
|---|---|---|---|---|
| 10.g. Create a significant new demand for housing? | | | | X |

**Discussion:** The proposed project does not create any new demand for housing and, thus, poses no impact.

**Source:** Project Plans, Project Location.

| **11. MINERAL RESOURCES.** Would the project: | | | | |
|---|---|---|---|---|
| | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 11.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 mineral resources. Therefore, the project poses no impact.

**Source:** Project Plans.

| | | | | |
|---|---|---|---|---|
| 11.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 will 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.

| **12. NOISE.** Would the project result in: | | | | |
|---|---|---|---|---|
| | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 12.a. Exposure of persons to or generation of noise levels 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 audible noise. However, the project will generate short-term noise associated with grading and construction activities. The short-term noise during grading and construction activities will be temporary, where volume and hours are regulated by Section 4.88.360 (*Exemptions*) of the San Mateo County Ordinance Code for Noise Control. While the proposed project is expected to produce minimal noise, the following mitigation measure is recommended to limit any potential impacts to a less than significant level:

**Mitigation Measure 16:** 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.

| | | | | |
|---|---|---|---|---|
| 12.b. Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels? | | X | | |

**Discussion:** Exposure of persons to or generation of excessive ground-borne vibration or noise levels is expected during construction activities. Mitigation Measure 16 in Section 12.a. is provided to ensure that the impact is less than significant.

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

| | | | | |
|---|---|---|---|---|
| 12.c. A significant permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | | | X | |
| **Discussion:** A temporary increase in ambient noise levels during construction activities is expected. Otherwise, increased permanent ambient noise levels will be minimal as it would be limited to the typical noise generated from a single-family residence. Therefore, the project poses a less than significant impact.<br>**Source:** Project Plans, Project Location. | | | | |
| 12.d. A significant temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | | | X | |
| **Discussion:** Pursuant to the discussion in Section 12.c., the project poses a less than significant impact.<br>**Source:** Project Plans, Project Location. | | | | |
| 12.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, exposure to people residing or working in the project area to excessive noise levels? | | | X | |
| **Discussion:** The project parcel is located approximately 0.47 miles northwest of the northerly boundary of the Half Moon Bay Airport, a public airport operated by the County Department of Public Works. The project parcel is not located within the airport's noise exposure contours designated as "Extremely noise-sensitive areas," an area where the airport-generated noise levels are less than 60 CNEL (Community Noise Equivalent Level; a weighted average of noise level over time). Thus, people residing or working in the project area will not be exposed to excessive noise levels. Therefore, the project poses a less than significant impact.<br>**Source:** Project Plans, Project Location, 2014 Final Half Moon Bay Airport Land Use Compatibility Plan. | | | | |
| 12.f. For a project within the vicinity of a private airstrip, exposure to people residing or working in the project area to excessive noise levels? | | | | X |
| **Discussion:** As discussed in Sections 8.e. and 12.e., the project parcel is located within the vicinity of the Half Moon Bay Airport, a public-operated airport. In addition, there are no known privately owned or operated airstrips within close proximity to the project site.<br>**Source:** Project Plans, Project Location, 2014 Final Half Moon Bay Airport Land Use Compatibility Plan. | | | | |

| 13. **POPULATION AND HOUSING**. Would the project: | | | | |
|---|---|---|---|---|
| | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 13.a. Induce significant 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:** The improvements associated with the proposed project are completely within the project parcel's boundaries and are only sufficient to serve the proposed single-family residence. The additional population of the future occupants of the proposed residence will not be significant, nor would the proposed development induce any significant population growth or necessitate any additional or expanded roads or other infrastructure.<br>**Source:** Project Plans, Project Location. | | | | |
| 13.b. Displace existing housing **(including low- or moderate-income housing)**, in an area that is substantially deficient in housing, necessitating the construction of replacement housing elsewhere? | | | | X |
| **Discussion:** The proposed residence will be located on an undeveloped parcel, therefore, no existing housing will be displaced. Additionally, the Midcoast area is not an area that has been designated as substantially deficient in housing. Therefore, the project poses no impact.<br>**Source:** Project Plans, Project Location, County General Plan. | | | | |

| 14. **PUBLIC SERVICES**. Would the project result in significant 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*** |
| 14.a. Fire protection? | | | | X |
| 14.b. Police protection? | | | | X |
| 14.c. Schools? | | | | X |
| 14.d. Parks? | | | | X |
| 14.e. Other public facilities or utilities (e.g., | | | | X |

| | | | | |
|---|---|---|---|---|
| hospitals, or electrical/natural gas supply systems)? | | | | |

**Discussion:** The proposed project is to construct a single-family residence in an area characterized by 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 will it generate a need for an increase in any such facilities. The project will not disrupt acceptable service ratios, response times or performance objectives of fire (Coastside Fire Protection District has reviewed the plans), police, schools, parks, or any other public facilities or energy supply systems. Therefore, the project poses no impact.

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

| **15. RECREATION**. Would the project: | | | | |
|---|---|---|---|---|
| | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 15.a. 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? | | | X | |

**Discussion:** The proposed single-family residence includes four bedrooms and four bathrooms, expected to serve the future occupants of the residence and their visitors. The impacts of this proposed project on the increase of use of neighborhood or regional parks or other recreational facilities would be less than significant, nor is significant physical deterioration of any such facilities expected to occur or be accelerated.

**Source:** Project Plans, Project Location.

| | | | | |
|---|---|---|---|---|
| 15.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 the construction or expansion of recreational facilities.

**Source:** Project Plans.

| 16. **TRANSPORTATION/TRAFFIC.** Would the project: | | | | |
|---|---|---|---|---|
| | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 16.a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | | | X | |
| **Discussion:** As discussed in previous sections, all proposed development will occur completely on the subject privately owned parcel. The proposed development will provide compliant standard and emergency access to the project parcel. Policy 2.52 (*Traffic Mitigation for all Development in the Urban Midcoast*) of the County LCP exempts the development of single-family dwellings from the development and implementation of a traffic impact analysis and mitigation plan. The future trips (comprised of both owners of and guests/visitors to) generated by a single-family residence will not introduce any significant increase in vehicles on affected streets (i.e., Arbor Lane, Wienke Way, Cabrillo Highway) and, thus, will pose no significant safety impact to other vehicles, pedestrians, or bicycles. Access from Arbor Lane has been reviewed by both the County Department of Public Works and the Coastside Fire Protection District, who have concluded that such access complies with their respective policies and requirements. Therefore, the project poses a less than significant impact.<br><br>**Source:** Project Plans, Project Location, County Department of Public Works, Coastside Fire Protection District, County Local Coastal Program. | | | | |
| 16.b. Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the County congestion management agency for designated roads or highways? | | | X | |
| **Discussion:** Pursuant to the discussion in Section 16.a., the project poses a less than significant impact.<br><br>**Source:** Project Plans, Project Location, County Local Coastal Program. | | | | |

| | | | | |
|---|---|---|---|---|
| 16.c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in significant safety risks? | | | | X |
| **Discussion:** The project does not include any element which would result in changes to air traffic patterns.<br>**Source:** Project Plans, Project Location. | | | | |
| 16.d. Significantly increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | | | X |
| **Discussion:** The proposed project does not include any incompatible uses or impacts related to a design feature. A private driveway will be installed and provide vehicular access from Arbor Lane to the proposed residence.<br>**Source:** Project Plans, Project Location. | | | | |
| 16.e. Result in inadequate emergency access? | | | | X |
| **Discussion:** Upon review of the proposed project, the Coastside Fire Protection District has conditionally approved the proposed access to the residence including adequate emergency access. Thus, the project poses no impact.<br>**Source:** Project Plans, Coastside Fire Protection District. | | | | |
| 16.f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? | | | X | |
| **Discussion:** Pursuant to the discussion in Section 16.a., the project poses a less than significant impact.<br>**Source:** Project Plans, Project Location, County Local Coastal Program. | | | | |
| 16.g. Cause noticeable increase in pedestrian traffic or a change in pedestrian patterns? | | | X | |
| **Discussion:** The project will not cause a significant increase in pedestrian traffic, nor will it generally change pedestrian patterns around the project site. Therefore, the project poses a less than significant impact.<br>**Source:** Project Plans, Project Location. | | | | |

| | | | | |
|---|---|---|---|---|
| 16.h. Result in inadequate parking capacity? | | | | X |

**Discussion:** Pursuant to Section 6119 (*Parking Spaces Required*) of the County Zoning Regulations, two covered parking spaces are required for dwelling units having two or more bedrooms. The proposed four-bedroom residence will include an attached two-car garage. Two uncovered tandem parking spaces are also available in the proposed driveway. The proposed project has compliant parking and thus poses no impact.

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

| **17. TRIBAL CULTURAL RESOURCES.** Would the project: | | | | |
|---|---|---|---|---|
| | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 17.a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | | | | |
| i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k) | | | | X |

**Discussion:** The project site is not listed or eligible for listing in the California Register of Historical Resources. Furthermore, the project is not listed in a local register of historical resources, pursuant to any local ordinance or resolution as defined in Public Resources Code Section 5020.1(k).

**Source:** Project Location, California Register of Historical Resources, 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:** The 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 Council (NAHC), but as of the date of preparation of this document, no response has been received. Therefore, 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 cultural resources:

**Mitigation Measure 17:** Should any traditionally or culturally affiliated Native American tribe respond to the County's issued notification for consultation, such process 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 18:** 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 19:** 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 Plans, Project Location, Native American Heritage Commission, State Assembly Bill 52.

| 18. **UTILITIES AND SERVICE SYSTEMS.** Would the project: | | | | |
|---|---|---|---|---|
| | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 18.a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | | | | X |
| **Discussion:** The proposed residence will connect to and receive sewage services from the Montara Water and Sanitary District. The proposed project does not involve or require any water or wastewater treatment facilitates that would exceed any requirements of the Regional Water Quality Control Board. Therefore, the project poses no impact.<br>**Source:** Project Plans, Project Location, Montara Water and Sanitary District. | | | | |
| 18.b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | | X |
| **Discussion:** Pursuant to the discussion in Section 18.a., the project poses no impact.<br>**Source:** Project Plans, Project Location, Montara Water and Sanitary District. | | | | |
| 18.c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | X | | |
| **Discussion:** As discussed in Section 9.a., the proposed project has the potential to generate polluted stormwater runoff during site grading and construction-related activities, and the permanent project will be required to comply with the County's Drainage Policy requiring post-construction stormwater flows to be at, or below, pre-construction flow rates. The proposed drainage system design, reviewed and approved by the Department of Public Works, will accommodate the proposed residence, driveway, and hardscape features, and ensure pre-construction runoff levels are maintained. Based on these findings and with the Mitigation Measures 1, 2, and 15, the project impact is expected to be less than significant.<br>**Source:** Project Plans, Project Location, County GIS Maps, Berry & Associates Drainage Report (dated August 24, 2017), Department of Public Works. | | | | |

| | | | | |
|---|---|---|---|---|
| 18.d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | | | | X |
| **Discussion:** The proposed residence will have adequate water service connections from the Montara Water and Sanitary District. Therefore, the project poses no impact.<br>**Source:** Project Plans, Project Location, Montara Water and Sanitary District. | | | | |
| 18.e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | | | | X |
| **Discussion:** The Montara Water and Sanitary District has indicated that they have adequate capacity to serve the project's sanitary sewerage demands. Therefore, the project poses no impact.<br>**Source:** Project Plans, Project Location, Montara Water and Sanitary District. | | | | |
| 18.f. Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs? | | | X | |
| **Discussion:** The construction of the proposed residence will 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 will 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.<br>**Source:** San Mateo County Environmental Health Division. | | | | |
| 18.g. Comply with Federal, State, and local 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 will 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 Division. Therefore, the project impact will be less than significant.<br>**Source:** San Mateo County Environmental Health Division. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 18.h. | Be sited, oriented, and/or designed to minimize energy consumption, including transportation energy; incorporate water conservation and solid waste reduction measures; and incorporate solar or other alternative energy sources? | | | X | |

**Discussion:** The proposed residence will utilize contemporary strategies for incorporating passive solar such as large south facing windows to provide passive solar heating within the house. The proposed two-car attached garage provides vehicular access directly onto Arbor Lane. Further, the proposed residence is required to comply with the California Building Code where building materials must meet minimum insulation and energy conservation requirements, and water conservation fixtures are required. Lastly, as discussed in Section 18.g., solid waste generation is expected to be minimal. Based on these findings, the project poses a less than significant impact.

**Source:** Project Plans.

| | | | | | |
|---|---|---|---|---|---|
| 18.i. | Generate any demands that will cause a public facility or utility to reach or exceed its capacity? | | | | X |

**Discussion:** Pursuant to the discussions throughout Section 18., the proposed project will not cause a public facility or utility to reach or exceed its capacity. Therefore, the project poses no impact.

**Source:** Project Plans, Project Location, San Mateo County Environmental Health Division, Montara Water and Sanitary District.

**19. MANDATORY FINDINGS OF SIGNIFICANCE.**

| | | *Potentially Significant Impacts* | *Significant Unless Mitigated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|---|
| 19.a. | Does the project have the potential to degrade the quality of the environment, significantly reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | | X | | |

| | | | | |
|---|---|---|---|---|
| **Discussion:** The project, as proposed with all the recommended mitigation measures discussed in the previous sections, will ensure that potential impacts to special-status plant and wildlife species with the potential to occur within the project site and surrounding area, as well as all sensitive habitats including Dean Creek and the coastal bluffs, are less than significant.<br>**Source:** All Applicable Sources Previously Cited In This Document. | | | | |
| 19.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:** Based on the discussions in the previous sections where the project impact was determined to be less than significant or required mitigation measures to ensure a less than significant impact, the proposed project would not have impacts that are cumulatively considerable. This project will have a less than significant cumulative impact upon the environment and no evidence has been found that the project would result in broader regional impacts. There are also no known approved projects or future projects expected for the project parcel. Conclusively, this project does not introduce any significant impacts that cannot be avoided through mitigation.<br>**Source:** All Applicable Sources Previously Cited In This Document. | | | | |
| 19.c. Does the project have environmental effects which will cause significant adverse effects on human beings, either directly or indirectly? | | X | | |
| **Discussion:** As discussed in the previous sections, the proposed project is to construct a new single-family residence. Based on the discussions in the previous sections where the project impact was determined to be less than significant or required mitigation measures to ensure a less than significant impact, the proposed project would not cause significant adverse effects on human beings, either directly or indirectly.<br>**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 |
|---|---|---|---|
| U.S. Army Corps of Engineers (CE) | | X | |
| State Water Resources Control Board | | X | |
| Regional Water Quality Control Board | | X | |
| State Department of Public Health | | X | |

| AGENCY | YES | NO | TYPE OF APPROVAL |
|---|---|---|---|
| San Francisco Bay Conservation and Development Commission (BCDC) | | X | |
| U.S. Environmental Protection Agency (EPA) | | X | |
| County Airport Land Use Commission (ALUC) | | X | |
| Caltrans | | X | |
| Bay Area Air Quality Management District | | X | |
| U.S. Fish and Wildlife Service | | X | |
| Coastal Commission | | X | |
| City | | X | |
| Sewer/Water District: | | X | |
| Other: California Coastal Commission | X | | Appeals jurisdiction |

**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 submit an Air Quality Best Management Practices Plan to the Planning and Building Department prior to the issuance of any grading permit "hard card" or building permit that, at a minimum, includes the "Basic Construction Mitigation Measures" as listed in Table 8-1 of the BAAQMD California Environmental Quality Act (CEQA) Guidelines (May 2011). The following Bay Area Air Quality Management District Best Management Practices for mitigating construction-related criteria air pollutants and precursors shall be implemented prior to beginning any grading and/or construction activities and shall be maintained for the duration of the project grading and/or construction activities:

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

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

c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day.

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

e. 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 California Code of Regulations). Clear signage shall be

provided for construction workers at all access points.

f. Roadways and building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

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

h. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications.

i. Minimize the idling time of diesel powered construction equipment to two minutes.

j. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

**Mitigation Measure 2:** The applicant shall submit a dust control plan to the Planning Department for review and approval prior to the issuance of a building permit for the project. The approved plan shall be implemented for the duration of any grading, demolition, and construction activities that generate dust and other airborne particles. The plan shall include the following control measures:

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

b. Water or cover stockpiles of debris, soil, sand, or other materials that can be blown by the wind.

c. Cover all trucks hauling soil, sand, and other loose materials, or require all trucks to maintain at least 2 feet of freeboard.

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

e. Sweep daily (preferably with water sweepers) all paved access roads, parking, and staging areas at the construction sites.

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

g. Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).

h. Limit traffic speeds on unpaved roads within the project parcel to 15 miles per hour (mph).

i. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.

j. Replant vegetation in disturbed areas as quickly as possible.

**Mitigation Measure 3:** Within 48 hours prior to the onset of any project-related activities, a qualified biologist should conduct a pre-construction survey of the project area to ensure that no California red-legged frogs or San Francisco garter snakes are present. In addition, immediately prior to vegetation removal or other construction activities, a qualified biologist familiar with the habitat requirements of California red-legged frogs and San Francisco garter snakes shall conduct a pre-construction survey to determine whether any of these species is located within the project area.

**Mitigation Measure 4:** A minimum 3-ft. high exclusion fence shall be installed around the limits of

construction, including clearing, grading, and staging, unless otherwise directed by San Mateo County, United States Fish and Wildlife Service, or California Department of Fish and Wildlife, to create a barrier to prevent the California red-legged frog and San Francisco garter snake from entering the project site. No polymesh or similar materials shall be used as fencing materials. The fencing should be removed only when all construction equipment is removed from the project site. Fencing shall be inspected and any opening shall be repaired immediately. If openings are found, the project area shall be inspected by a biological monitor to ensure that special-status species have not entered the project area. The designated biological monitor may be a construction team manager or supervisor trained in the identification of special-status species.

**Mitigation Measure 5:** Vegetation or other materials shall not be stockpiled at the project site as it provides potential hiding areas for California red-legged frogs, San Francisco garter snakes, and other wildlife species. Vegetation shall be placed directly into a disposal container and removed from the construction area, as practicable. If vegetation is stockpiled on the ground, removal shall be conducted under the supervision of a qualified biologist.

**Mitigation Measure 6:** To avoid, minimize, and mitigate impacts to the California red-legged frogs, San Francisco garter snakes, and their respective habitats, a worker education program and/or education materials prepared by a qualified biologist shall be provided to all workers prior to onset of construction activities.

**Mitigation Measure 7:** If required by San Mateo County, California Department of Fish and Wildlife, or United States Fish and Wildlife Service, a biological monitor shall inspect the project area prior to the beginning of construction activities to ensure that the California red-legged frogs and San Francisco garter snakes have not entered the project area. The designated biological monitor may be a construction team manager or supervisor trained in the identification of special-status species.

**Mitigation Measure 8:** Under no circumstances should California red-legged frogs and San Francisco garter snakes be handled, relocated, or otherwise harmed or harassed at any time. San Mateo County, United Stated Fish and Wildlife Service, and California Department of Fish and Wildlife shall be notified immediately upon discovery of these species in the project site or surrounding area.

**Mitigation Measure 9:** Prior to the start of vegetation removal, a qualified biologist familiar with the San Francisco dusky-footed woodrat and its habitat requirements shall survey for their nests within or immediately adjacent to the potential habitat (i.e., poison oak scrub).

a. If no nests are observed, no further mitigation is required.

b. If nests are observed, but would not be directly impacted by construction activities, a qualified biologist shall establish a 10-ft. buffer around the nests using exclusion fencing to ensure that they are not accidentally destroyed by construction activities. Exclusion fencing shall remain in place until project completion.

c. If a nest is observed within the vegetation clearing area, a qualified biologist shall disassemble the nest by hand and relocate and reconstruct the nest away from the construction area.

**Mitigation Measure 10:** If trees are removed or pruned, a qualified biologist shall conduct a pre-construction bat roost survey to determine if bats are present in the trees on or near the project parcel. If bats are detected, suitable measures to avoid and/or exclude bats shall be determined by the California Department of Fish and Wildlife.

**Mitigation Measure 11:** Where sediment and erosion control materials are installed, repaired, or removed (i.e., wattles, silt fences, etc.), a qualified biologist should check the work area to ensure that sensitive species are not present or entrapped. Polymesh and/or other similar materials should

not be used as these can entrap or snag reptiles, amphibians, or other small animals.

**Mitigation Measure 12:** If the construction activities coincide with the nesting bird season (February 1 to September 15), pre-construction nesting bird surveys shall be conducted by a California Department of Fish and Wildlife-approved biologist no more than 10 days prior to planned construction activities in order to locate nests within and adjacent to the proposed construction area. For all migratory bird species, the survey will include nesting birds within a 100-ft. radius from the project site.

a. If no active nests are detected, construction activities may take place as scheduled.

b. If an active nest is observed, the project shall be modified as necessary to avoid direct take of identified nest, eggs, and/or young. Modifications may include establishment of protective buffer as determined by a qualified biologist. Typical protective buffer zones are 50 feet for passerine nests and 250 feet for raptors. If construction activities are significantly impacted by the buffer zones, California Department of Fish and Wildlife shall be contacted to request a reduced buffer that would still protect nesting birds.

**Mitigation Measure 13:** In the event that should cultural, paleontological, or archaeological resources be 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 14:** 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 and Geologic Investigation prepared by Michelucci & Associates, Inc. and its subsequent updates 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 15:** Prior to the issuance of the building permit for the proposed project, the applicant shall submit to the Planning Department and the Department of Public Works, 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 also limit application, generation, and migration of toxic substances, ensure the proper storage and disposal of toxic materials, and apply nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters. Said plan shall adhere to the San Mateo 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 feet, 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 feet of fence. Silt fences shall be inspected regularly and sediment removed when it reaches 1/3 the fence height. Vegetated filter strips should have relatively flat slopes and be vegetated with erosion-resistant species.

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 16:** 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 17:** Should any traditionally or culturally affiliated Native American tribe respond to the County's issued notification for consultation, such process 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 18:** 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 19:** 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 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)

May 2, 2018 — Project Planner

Date — (Title)

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## ATTACHMENTS

A. Location Map
B. 1972 Cypress Cliffs Subdivision Map
C. Project Plans
D. Coastside Design Review Committee Letter for the November 9, 2017 Meeting
E. California Coastal Commission Resolution No. 74-270
F. Natural Resources Conservation Service Web Soil Survey- California Revised Storie Index
G. Kopitov Environmental LLC Biological Resources Assessment, dated 5/9/15
H. Coastal Ridge Ecology LLC Update to Biological Resources Assessment, dated October 2, 2017
I. Coastal Ridge Ecology LLC Response to Comments on Update to Biological Resources Assessment, dated November 3, 2017
J. San Mateo County General Plan Natural Hazards Map
K. California Emergency Management Agency Tsunami Inundation Map for Emergency Planning, dated June 15, 2009
L. 1812-2012 California Department of Conservation Historic Tsunamis in California Chart
M. Michelucci & Associates, Inc. Geotechnical and Geologic Investigation, dated July 6, 2016
N. Michelucci & Associates, Inc. Geotechnical and Geologic Investigation Update, dated August 29, 2017
O. Michelucci & Associates, Inc. Response to Steven R. King, Ph.D, October 22, 2017 Memo, dated November 21, 2017
P. Email Correspondence from David F. Hoexter of Michelucci & Associates, Inc. (dated April 20, 2018)
Q. Federal Emergency Management Agency Flood Insurance Rate Map 06081C0119F, effective August 2 2017
R. Berry & Associates Drainage Report, dated August 24, 2017

*_**Please Note:**_ *Some attachments will be missing from printed versions of this document due to size constraints. The complete version of this document can be viewed at the San Mateo County Planning and Building Department office and will be available to view online on the Planning and Building's website at: https://planning.smcgov.org/ceqa-docs.*