COUNTY OF SAN MATEO, PLANNING AND BUILDING DEPARTMENT

NOTICE OF INTENT TO ADOPT
MITIGATED NEGATIVE DECLARATION

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

FILE NO.: PLN 2020-00291

OWNER: Gennadiy Agranov

APPLICANT: Paul Minor

NAME OF PERSON UNDERTAKING THE PROJECT OR RECEIVING THE PROJECT APPROVAL (IF DIFFERENT FROM APPLICANT): Gennadiy Agranov

ASSESSOR'S PARCEL NO.: 048-054-220

LOCATION: 345 Miramar Drive, Unincorporated Miramar area of San Mateo County

PROJECT DESCRIPTION

Coastal Development Permit and Design Review, to allow construction of a new 2,568 sq. ft., two-story, single-family residence, plus an attached 595 sq. ft. attached two-car garage, on an existing 8,787 sq. ft. legal parcel. This project is appealable to the California Coastal Commission.

FINDINGS AND BASIS FOR A NEGATIVE DECLARATION

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

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

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

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

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

5. In addition, the project will not:

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

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

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

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

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

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

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

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

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

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

d. All vehicle speeds on unpaved roads shall be limited to 15 mph.

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

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

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

Mitigation Measure 2: Prior to the start of project activities, a qualified biologist shall survey all project work areas for the presence of California red-legged frog and San Francisco garter snake.

Mitigation Measure 3: Prior to the start of project activities, construction personnel shall receive an environmental awareness training conducted by a qualified biologist. This training shall include an overview of the life history of the California red-legged from and San Francisco garter snake, information on "take" prohibitions, and associated avoidance and minimization measures and best management practices.

Mitigation Measure 4: Construction crewmembers shall check beneath all equipment and vehicles prior to moving equipment or vehicles to inspect for any potential special status wildlife species, including California red-legged frog and San Francisco garter snake. If any snake or frog species are observed, construction personnel shall contact the qualified biologist immediately. The biologist shall identify the species and determine next steps. Wildlife encountered on-site shall be allowed to leave the work area of their own accord and without harassment. Animals shall not be picked up or moved in any way.

Mitigation Measure 5: Open excavations greater than 0.6 meter (2 feet) deep (including fence post holes and trenches) shall be covered at the end of each workday to prevent wildlife entrapment. All trenches and excavations shall be inspected for wildlife each morning and prior to backfill. All entrapped animals shall be removed only by a qualified or authorized biologist.

Mitigation Measure 6: Disturbance to vegetation shall be kept to the minimum necessary to complete the Project activities, provided there is no feasible alternative.

Mitigation Measure 7: Any and all spoils (e.g., dirt, debris, construction-related materials) generated during Project activities shall be placed where they cannot enter a storm drain or culvert system.

Mitigation Measure 8: During Project activities, all trash that may attract predators shall be properly contained, removed, and disposed of regularly. Following construction, trash/construction debris shall be removed from work areas.

Mitigation Measure 9: The number of access routes, number and size of staging areas, and the total area of the activity shall be limited to the minimum necessary to complete the Project.

Mitigation Measure 10: All fueling, and maintenance of vehicles and other equipment and staging areas shall occur at least 50 feet from the Arroyo de en Medio coastal stream. The owner shall ensure that contamination of habitat does not occur during such operations. Prior to the onset of work, the owner shall ensure that there is a plan to allow a prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and the appropriate measures to take should a spill occur.

Mitigation Measure 11: Erosion and sediment control measures, such as wattles or washed gravel bags, shall be installed along the north side of the project area, above the downhill slope toward Arroyo de en Medio, to prevent trench materials from entering the coastal stream. Plastic monofilament netting on wattles shall not be used on-site due to the potential risk of entrapping wildlife. Burlap or coconut wattles (for example, Bio Wattle) are appropriate substitutes.

Mitigation Measure 12: If project activities are conducted during nesting bird season (February 15 through August 31), preconstruction nest surveys shall be conducted in and near the Project area (within 250 feet for large raptors and 50 feet for all other birds) by a qualified biologist no more than 14 days prior to construction start. If nesting is identified during the preconstruction survey, then the project shall be modified and/or delayed as necessary to avoid direct take of the identified nests, eggs, and/or young.

Mitigation Measure 13: Although there is low potential for California red-legged frog and San Francisco garter snake to occur within the work area, an exclusion fence shall be installed around the work area prior to the beginning of construction activities. Exclusion fencing shall be silt fence-type fencing or equivalent and shall not include poly mesh fencing or other similar fencing that could entrap or snag reptiles, amphibians, or other small animals. Exclusion fencing shall be installed with the fence stakes placed on the inside of the fencing (closest to the project boundary) to prevent frogs or snakes from using the stakes to maneuver over the fence. The fencing shall be maintained until all work has been completed.

Mitigation Measure 14: A biological monitor shall be present during initial grubbing/clearing and ground-disturbing activities (including wildlife exclusion fencing installation) to ensure that no listed or sensitive species are impacted by project activities.

Mitigation Measure 15: Ground-disturbing construction activities (e.g., grubbing or grading) should occur during the dry season (June 1 to October 15) to facilitate avoidance of California red-legged frog. Regardless of the season, no construction shall occur within 24 hours following a significant rain event (greater than 1/4 inch in a 24-hour period). Following a significant rain event and the 24-hour drying-out period, a qualified biologist shall conduct a preconstruction survey for California red-legged frog prior to the restart of any project activities.

Mitigation Measure 16: Any proposed construction or project related activities shall occur outside of the 30-foot buffer zone setback as required by the Local Coastal Program (LCP). Prior to the issuance of a building permit, the edge of the 30-feet buffer zone shall be surveyed in consultation with the biologist and added to the project survey and site plan for submittal and review by the Current Planning Section. Exclusion construction fencing shall be installed under supervision of the biologist which matches the established buffer zone to ensure construction related activities occur outside of the established buffer zone.

Mitigation Measure 17: In the event that unanticipated cultural resources are exposed during ground disturbance activities, work within 15 meters (50 feet) of the find must stop and a Secretary of the Interior qualified archaeologist, must be notified immediately. Work may not resume until a qualified archaeologist can evaluate the significance of the find. If the discovery proves significant, additional work such as archaeological testing, data recovery, or tribal consultation may be warranted.

Mitigation Measure 18: Although not anticipated, there remains the potential for the inadvertent discovery of human remains during ground-disturbing activities. State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. The San Mateo County coroner must be notified of the find immediately. If concentrations of prehistoric or historic-era materials are encountered during project activities, all work in the immediate vicinity shall cease until a qualified archaeologist can evaluate the finds and make recommendations.

Mitigation Measure 19: Prior to issuance of the building permit for the project, the applicant shall demonstrate compliance with the recommendations of the Geotechnical Study prepared by Sigma Prime Geosciences, Inc., dated July 23, 2020 (Geotechnical Study).

Mitigation Measure 20: Prior to commencement of the project, the applicant shall submit to the Planning Department for review and approval an erosion and sediment control plan that shows how the transport and discharge of soil and pollutants from and within the project site shall be minimized. The plan shall be designed to minimize potential sources of sediment, control the amount of runoff and its ability to carry sediment by diverting incoming flows and impeding internally generated flows, and retain sediment that is picked up on the project site through the use of sediment-capturing devices. The plan shall also limit application, generation, and migration of toxic substances, ensure the proper storage and disposal of toxic materials, and apply nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters. Said plan shall adhere to the San Mateo County Wide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including:

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

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

c. Clear only areas essential for project activities.

d. Within five days of clearing or inactivity, stabilize bare soils through either non-vegetative BMPs, such as mulching, or vegetative erosion control methods such as seeding. Vegetative erosion control shall be established within two weeks of seeding/planting.

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

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

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

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

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

j. Install storm drain inlet protection that traps sediment before it enters any adjacent storm sewer systems. This barrier shall consist of filter fabric, straw bales, gravel, or sandbags.

k. Install sediment traps/basins at outlets of diversions, channels, slope drains, or other runoff conveyances that discharge sediment-laden water. Sediment traps/ basins shall be cleaned out when 50 percent full (by volume).

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

m. Utilize coir fabric/netting on sloped graded areas to provide a reduction in water velocity, erosive areas, habitat protection, and topsoil stabilization.

n. Throughout the construction period, the applicant shall conduct regular inspections of the condition and operational status of all structural BMPs required by the approved Erosion Control Plan.

Mitigation Measure 21: The applicant shall implement the following basic construction measures at all times:

a. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxic Control Measure Title13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

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

c. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person, or his/her designee, shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Mitigation Measure 22: The applicant shall implement erosion control measures prior to the beginning of grading or construction operations. Such activities shall not commence until the associated building permit for the project has been issued.

Mitigation Measure 23: The project shall include water runoff prevention measures for the operation and maintenance of the project for the review and approval by the Community Development Director. The project shall identify best management practices (BMPs) appropriate to the uses conducted on-site to effectively prohibit the discharge of pollutants with stormwater runoff and other water runoff produced from the project.

RESPONSIBLE AGENCY CONSULTATION

None

INITIAL STUDY

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

REVIEW PERIOD: March 30, 2022- April 19, 2022

All comments regarding the correctness, completeness, or adequacy of this Negative Declaration must be received by the County Planning and Building Department, 455 County Center, Second Floor, Redwood City, no later than **5:00 p.m., April 19, 2022**.

CONTACT PERSON

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

Angela Chavez, Project Planner

ACC:cmc – ACCGG0089_WCH.DOCX

County of San Mateo
Planning and Building Department

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

1. **Project Title:** Agranov Single-Family Residence

2. **County File Number:** PLN 2020-00291

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

4. **Contact Person and Phone Number:** Angela Chavez, Project Planner 650/ 599-7217

5. **Project Location:** 345 Miramar Drive, Unincorporated Miramar area of San Mateo County

6. **Assessor's Parcel Number and Size of Parcel:** 048-054-220 and 8,787 sq. ft.

7. **Project Sponsor's Name and Address:** Gennadiy Agranov
1464 Padres Drive, San Jose, CA 95125

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

9. **General Plan Designation:** Medium High Density Residential

10. **Zoning:** R-1/S-17/DR/CD (Single-Family Residential District/S-17 Combining District with 5,000 sq. ft. minimum parcel size/Design Review/Coastal Development)

11. **Description of the Project:** Coastal Development Permit and Design Review, to allow construction of a new 2,568 sq. ft., two-story, single-family residence, plus an attached 595 sq. ft. attached two-car garage, on an existing 8,787 sq. ft. legal parcel. This project is appealable to the California Coastal Commission.

12. **Surrounding Land Uses and Setting:** The project site is a vacant lot located on Miramar Drive in the unincorporated Miramar area of San Mateo County, within a general area of developed parcels. The subject site is mildly sloped (approximately 10 percent) in topography with vegetation consisting of non-native invasive plant species, ruderal and disturbed vegetation, and areas of riparian vegetation. An intermittent stream, Arroyo de en Medio, runs along the norther boundary of the site. Parcels surrounding the subject parcel are developed with Single-Family Residential on all sides.

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

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

regarding confidentiality, etc.?: Yes, the Tamien Nation has requested notification of all County of San Mateo projects. This notification was mailed along with all other area California Native American tribes identified by Native American Heritage Council on November 10, 2020. *(NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process (see Public Resources Code Section 21080.3.2.). Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality).*

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

EVALUATION OF ENVIRONMENTAL IMPACTS

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

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

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than

significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.

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

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

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

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

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

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

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

1.	**AESTHETICS**. Except as provided in Public Resources Code Section 21099, would the project:				
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
1.a.	Have a substantial adverse effect on a scenic vista, views from existing residential areas, public lands, water bodies, or roads?				X
Discussion: The project site is located in a developed residential neighborhood. The subject site is generally flat (approximately 5%) in topography with vegetation consisting of non-native invasive plant species, and ruderal and disturbed vegetation. The project site was previously utilized as yard					

area for the adjacent home located at 355 Miramar Drive and has general yard planting improvements. An intermittent stream, Arroyo de en Medio, runs along the northern boundary of the site. The proposed single-family residence is located well outside of any required creek 30-foot buffer zone. The project is not located within a designated scenic corridor and is not visible from Cabrillo Highway due to the presence of existing mature vegetation and existing development.

Source: Project Location; Project Plans.

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

Discussion: The proposed project site is not located within a state scenic highway. While the project site is located in close proximity to Cabrillo Highway, a designated State Scenic Corridor, it is not visible from the roadway due to existing development and mature vegetation. The project site does not have any rock outcroppings or historic buildings. The project includes the removal of one 42-inch diameter pine tree located at the front of the property.

Source: Project Location; Project Plans.

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

Discussion: The project site is located in an urbanized residentially zoned area. The project complies with the development standards of the underlying zoning district. The project site is located in a Design Review zoning district and the project has been reviewed by the County's Coastside Design Review Committee. The Coastside Design Review Committee found the project to be consistent with the design review standards and recommended approval of the project.

Source: Project Location; Project Plans.

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

Discussion: The proposed project does not include colors or materials that would result in light or glare to affect day or nighttime views in the area. The project does include exterior lighting. However, as required by the design review standards, the proposed fixtures are downward directed and dark sky compliant. No significant impacts to daytime or nighttime views in the area are expected.

Source: Project Plans; Project Location; San Mateo County Zoning Regulations.

1.e.	Be adjacent to a designated Scenic Highway or within a State or County Scenic Corridor?			X	
Discussion: See discussion under 1.a., above. **Source:** Project Location; Project Plans.					
1.f.	If within a Design Review District, conflict with applicable General Plan or Zoning Ordinance provisions?			X	
Discussion: The subject parcel is zoned R-1/S-17/DR/CD (Single-Family Residential District/S-17 Combining District with 5,000 sq. ft. minimum parcel size/Design Review/Coastal Development). The project is subject to the approval of a Coastal Development Permit and Design Review Permit, pursuant to Sections 6328.4, and 6565.3 of the San Mateo County Zoning Regulations. The project, as proposed, is consistent with these regulations. The proposed development conforms to the use requirements of the R-1 Zoning District and the development standards of the S-17 Zoning District. **Source:** Project Plans; Project Location; San Mateo County Zoning Regulations.					
1.g.	Visually intrude into an area having natural scenic qualities?			X	
Discussion: The project site is a vacant parcel located amongst other developed parcels. The parcel was previously utilized as outdoor area for the adjacent property (355 Miramar Drive). Arroyo de en medio, an intermittent stream, runs through the rear of the property. The proposed development avoids the rear area of the site. The proposed development is consistent with the use, scale, and character of homes found within the neighborhood. **Source:** Project Plans; Project Location.					

2.	**AGRICULTURAL AND FOREST RESOURCES**. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

		Potentially Significant Impacts	*Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
2.a.	For lands outside the Coastal Zone, convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
Discussion: The project parcel is located within the Coastal Zone. **Source:** Project Location.					
2.b.	Conflict with existing zoning for agricultural use, an existing Open Space Easement, or a Williamson Act contract?				X
Discussion: The project site does not contain farmland and is not located in an agricultural zoning district, nor is it adjacent to such lands. The project site does not contain an open space easement and is not subject to a Williamson Act contract. **Source:** Project Location.					
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: See discussion under questions 2.a. and 2.b., above. **Source:** Project Location.					
2.d.	For lands within the Coastal Zone, convert or divide lands identified as Class I or Class II Agriculture Soils and Class III Soils rated good or very good for artichokes or Brussels sprouts?				X
Discussion: The project parcel is located within the Coastal Zone in an area zoned for residential development. The parcel has not been identified as having agricultural soils. **Source:** Project Location.					
2.e.	Result in damage to soil capability or loss of agricultural land?				X

Discussion: See discussion under 2.d., above.

Source: Project Location.

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

Discussion: The project site does not support forestland or timberlands and is not located in an area containing these types of resources. The project does not involve the rezoning of any lands.

Source: Project Location.

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

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

Discussion: The construction of the new residence may result in temporary generation of pollutants related to construction and minor earthwork (40 cubic yards). However, the proposed single family residential use would not result in the regular generation of air pollutants. Section 7 2-1-113 (Exemption, Sources and Operations) of the General Requirements of the Bay Area Air Quality Management District exempts sources of air pollution associated with construction of a single-family dwelling used solely for residential purposes. No mitigation measures are necessary.

Source: Bay Area Air Quality Management District (BAAQMD) Regulation 2, Rule 1: General Requirements.

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

Discussion: The San Francisco Bay Area is in non-attainment for ozone and particulate matter (PM), including PM 10 (state status) and PM 2.5 (state status), including the 24-hour PM 2.5 national standard. Given the proposed project is for the construction of a single-family residence, the project would only generate minor temporary pollutant emissions, which would be addressed

with the implementation of Mitigation Measure 1. Therefore, construction related emissions would not result in a cumulatively considerable increase of any criteria pollutant for which the project region is in non-attainment under an applicable Federal or State ambient air quality standard.

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

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

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

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

d. All vehicle speeds on unpaved roads shall be limited to 15 mph.

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

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

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

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

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

Discussion: While residential areas are considered sensitive receptors by BAAQMD, the project does not involve elements which would result in substantial pollutant concentrations. The San Francisco Bay Area is in non-attainment for ozone and particulate matter (PM), including PM 10 (state status) and PM 2.5 (state status), including the 24-hour PM 2.5 national standard. Given the project scope the project would only generate minor temporary criteria pollutant emissions, which would be addressed with the implementation of Mitigation Measure 1. Therefore, construction related emissions would not result in a cumulatively considerable increase of any criteria pollutant for which the project region is in non-attainment under an applicable Federal or State ambient air quality standard.

Source: Project Plans; Project Location.				
3.d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	
Discussion: The project would result in short-term grading related emissions, such as fugitive dust and exhaust from construction vehicles. However, compliance with Mitigation Measure 1 will ensure that these temporary impacts do not result in a significant impact. **Source:** Project Location; Project Plans.				

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

Discussion: A Biological Resources Evaluation (Biological Report), dated August 2020, was prepared by SWCA Environmental Consultants was submitted as part of the permit application and has been included as an attachment to this document. The Biological Report examines the project site to document the existing environmental setting and potential biological resources (covering approximately 0.17 acre) as well as an additional biological study area (BSA) comprised of a 200-foot buffer area which encircles the project site.

The Biological Report finds that the study area consists of a mix of ornamental plants, ruderal vegetation, and Arroyo de en Medio, an intermittent stream, located along the northern boundary of the project site.

While the Biological Report also indicates that the BSA does include arroyo willow scrub, which is considered riparian corridor, within the upper reaches of Arroyo de en Medio (outside of the project parcel). Arroyo de en Medio Creek located within the study area does not contain riparian vegetation. In these areas, the required 30-foot buffer zone has been established by measuring 30 feet from the midpoint of the creek.

The Biological report also evaluated the site for the presence of special status plants, amphibians, birds, mammals, fish, and invertebrates. The results of that evaluation concluded that the project site location does contain suitable habitat for nesting birds protected by the Migratory Bird Treaty Act and California Fish and Wildlife Code. The BSA was identified as potentially having suitable habitat to support one special status plant species, Choris' popcornflower (*Plagiobothrys chorisianus var.*

chorisianus) and six special-status wildlife species. The six special-status wildlife species identified were the California red legged frog (*Rana draytonii*), the San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), the saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*), San Francisco dusky-footed woodrat (*Neotoma Fuscipes annectens*), Monarch Butterfly (Danaus plexippus pop. 1), and the Western bumble bee (Bombus occidentalis). The report found that no rare, endangered, or unique species were observed during field survey. All but the San Francisco garter snake and the California red-legged frog were determined to be unlikely to occur due to a lack of suitable habitat. However, the biologist included the following mitigation measures, in an effort to ensure that potential impacts are mitigated to a less than significant level:

Mitigation Measure 2: Prior to the start of project activities, a qualified biologist shall survey all project work areas for the presence of California red-legged frog and San Francisco garter snake.

Mitigation Measure 3: Prior to the start of project activities, construction personnel shall receive an environmental awareness training conducted by a qualified biologist. This training shall include an overview of the life history of the California red-legged from and San Francisco garter snake, information on "take" prohibitions, and associated avoidance and minimization measures and best management practices.

Mitigation Measure 4: Construction crewmembers shall check beneath all equipment and vehicles prior to moving equipment or vehicles to inspect for any potential special status wildlife species, including California red-legged frog and San Francisco garter snake. If any snake or frog species are observed, construction personnel shall contact the qualified biologist immediately. bThe biologist shall identify the species and determine next steps. Wildlife encountered on-site shall be allowed to leave the work area of their own accord and without harassment. Animals shall not be picked up or moved in any way.

Mitigation Measure 5: Open excavations greater than 0.6 meter (2 feet) deep (including fence post holes and trenches) shall be covered at the end of each workday to prevent wildlife entrapment. All trenches and excavations shall be inspected for wildlife each morning and prior to backfill. All entrapped animals shall be removed only by a qualified or authorized biologist.

Mitigation Measure 6: Disturbance to vegetation shall be kept to the minimum necessary to complete the Project activities, provided there is no feasible alternative.

Mitigation Measure 7: Any and all spoils (e.g., dirt, debris, construction-related materials) generated during Project activities shall be placed where they cannot enter a storm drain or culvert system.

Mitigation Measure 8: During Project activities, all trash that may attract predators shall be properly contained, removed, and disposed of regularly. Following construction, trash/construction debris shall be removed from work areas.

Mitigation Measure 9: The number of access routes, number and size of staging areas, and the total area of the activity shall be limited to the minimum necessary to complete the Project.

Mitigation Measure 10: All fueling, and maintenance of vehicles and other equipment and staging areas shall occur at least 50 feet from the Arroyo de en Medio coastal stream. The owner shall ensure that contamination of habitat does not occur during such operations. Prior to the onset of work, the owner shall ensure that there is a plan to allow a prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and the appropriate measures to take should a spill occur.

Mitigation Measure 11: Erosion and sediment control measures, such as wattles or washed gravel bags, shall be installed along the north side of the project area, above the downhill slope toward Arroyo de en Medio, to prevent trench materials from entering the coastal stream. Plastic monofilament netting on wattles shall not be used on-site due to the potential risk of entrapping wildlife. Burlap or coconut wattles (for example, Bio Wattle) are appropriate substitutes.

Mitigation Measure 12: If project activities are conducted during nesting bird season (February 15 through August 31), preconstruction nest surveys shall be conducted in and near the Project area (within 250 feet for large raptors and 50 feet for all other birds) by a qualified biologist no more than 14 days prior to construction start. If nesting is identified during the preconstruction survey, then the project shall be modified and/or delayed as necessary to avoid direct take of the identified nests, eggs, and/or young.

Mitigation Measure 13: Although there is low potential for California red-legged frog and San Francisco garter snake to occur within the work area, an exclusion fence shall be installed around the work area prior to the beginning of construction activities. Exclusion fencing shall be silt fence-type fencing or equivalent and shall not include poly mesh fencing or other similar fencing that could entrap or snag reptiles, amphibians, or other small animals. Exclusion fencing shall be installed with the fence stakes placed on the inside of the fencing (closest to the project boundary) to prevent frogs or snakes from using the stakes to maneuver over the fence. The fencing shall be maintained until all work has been completed.

Mitigation Measure 14: A biological monitor shall be present during initial grubbing/clearing and ground-disturbing activities (including wildlife exclusion fencing installation) to ensure that no listed or sensitive species are impacted by project activities.

Mitigation Measure 15: Ground-disturbing construction activities (e.g., grubbing or grading) should occur during the dry season (June 1 to October 15) to facilitate avoidance of California red-legged frog. Regardless of the season, no construction shall occur within 24 hours following a significant rain event (greater than 1/4 inch in a 24-hour period). Following a significant rain event and the 24-hour drying-out period, a qualified biologist shall conduct a preconstruction survey for California red-legged frog prior to the restart of any project activities.

Mitigation Measure 16: Any proposed construction or project related activities shall occur outside of the 30-foot buffer zone setback as required by the Local Coastal Program (LCP). Prior to the issuance of a building permit, the edge of the 30-feet buffer zone shall be surveyed in consultation with the biologist and added to the project survey and site plan for submittal and review by the Current Planning Section. Exclusion construction fencing shall be installed under supervision of the biologist which matches the established buffer zone to ensure construction related activities occur outside of the established buffer zone.

Source: Biological Resources Evaluation (Biological Report), dated August 2020, by SWCA Environmental Consultants; San Mateo County General Plan Sensitive Habitats and GIS Resource Maps.

4.b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service or National Marine Fisheries Service?		X		
Discussion: See discussion provided under 4.a., above. **Source:** Biological Resources Evaluation (Biological Report), dated August 2020, by SWCA Environmental Consultants; San Mateo County General Plan Sensitive Habitats and GIS Resource Maps.					
4.c.	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
Discussion: The project site does not support any wetlands. The proposed project includes the required setback from the intermittent stream and does not propose to alter its pattern or flow. **Source:** Biological Resources Evaluation (Biological Report), dated August 2020, by SWCA Environmental Consultants; San Mateo County General Plan Sensitive Habitats and GIS Resource Maps.					
4.d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
Discussion: See discussion under 4.a., above. **Source:** Biological Resources Evaluation (Biological Report), dated August 2020, by SWCA Environmental Consultants; San Mateo County General Plan Sensitive Habitats and GIS Resource Maps.					
4.e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (including the County Heritage and Significant Tree Ordinances)?				X
Discussion: The project includes the removal of one 41.1-inch dbh (diameter at breast height) Monterey pine tree located at the front/left corner of the subject property. The applicant submitted an arborist report completed by certified arborist, Aaron Wang, of Precision Tree Care, Inc., dated May 28, 2020 as part of the permit application. The report notes that the subject Monterey pine tree has been repeatedly topped due to its interference with overhead utility lines resulting in large wounds and weakly attached branches. The arborist recommends removal of this tree noting that pruning will not address the risk of limb failure. The San Mateo County Significant Ordinance is					

applicable in this situation as the tree is at least 12-inches in diameter at breast height. The evaluation and recommendations of the arborist are consistent with this ordinance. The subject Monterey pine tree is not of a size and/or species that meets the definition of a tree by County ordinance standards. Adherence to Mitigation Measure 12 will ensure that the removal of the dead trees does not impact any birds that may be nesting in the trees.

Source: Arborist Report, dated May 28, 2020, by Precision Tree Care, Inc. (A.Wang); Project Plans; Project Location; San Mateo County Significant Tree Removal Ordinance.

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: As proposed and mitigated, the residence would be located well outside of the 30 feet buffer zone required from riparian vegetation and in areas of no riparian vegetation 30 feet from the centerline of the creek, as required by the Local Coastal Program. The project does not involve the removal of riparian vegetation or associated sensitive habitat and therefore would not conflict with any adopted Habitat Conservation Plan, Natural Conservation Community Plan, other approved local, regional, or State habitat conservation plan.

Source: San Mateo County General Plan Sensitive Habitats and GIS Resource Maps.

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

Discussion: The project site is located within a single-family residential neighborhood. The parcel is not located inside or within 200 feet of a marine or wildlife reserve.

Source: Project Location.

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

Discussion: The project parcel does not support oak woodland or other non-timber woodlands.

Source: Project Location; Project Plans.

5. CULTURAL RESOURCES. Would the project:

		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
5.a.	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?		X		

Discussion: A project referral was sent to California Historical Resources Information System (CHRIS), File No: NWIC 21-0790. The CHRIS responses noted that a previous cultural resources study had been conducted which covered the project area. However, CHRIS determined that due to the time passed since the previous studies (1970 and 1998) and the changes to archaeological

theory and method, that a new study be completed. In response, the applicant submitted a report completed by Kerry Boutte, Project Archaeologist, of SWCA Environmental Consultants, dated February 11, 2021. While the background research indicates sensitivity for prehistoric archeological resources within the Project Area, no evidence of archeological deposits was found during the intensive pedestrian survey.

The Archaeological Report states that there is a low possibility that unrecognized surficial resources or subsurface archeological deposits are present within the Project Area. The report did not identify the presence of any cultural resources on the project site and did not recommend that additional studies be conducted. The report indicates that the Native American Heritage Commission (NAHC) was contacted regarding traditional, cultural, and religious heritage values but that no response had been received.

County Staff completed the referral of the project to the NAHC and received a response that a Native American Heritage Commission Sacred Lands search was completed, and the results were positive. The Commission provided the contact information for several Native American tribes to contact who could have knowledge of cultural resources in the project area. Staff has reached out to these tribes but to date has received no response.

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

Mitigation Measure 17: In the event that unanticipated cultural resources are exposed during ground disturbance activities, work within 15 meters (50 feet) of the find must stop and a Secretary of the Interior qualified archaeologist, must be notified immediately. Work may not resume until a qualified archaeologist can evaluate the significance of the find. If the discovery proves significant, additional work such as archaeological testing, data recovery, or tribal consultation may be warranted.

Source: Project Location; California Historical Resource Information System (File No.: 21-0790); State of California Native American Heritage Commission; SWCA Environmental Consultants, Boutte (February 2022).

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

Discussion: See discussion under 5.b., above.

Source: Project Location; California Historical Resource Information System (File No.: 21-0790); State of California Native American Heritage Commission; SWCA Environmental Consultants, Boutte (February 2022).

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

Discussion: Although there have been no identified human remains found within the project area, the following mitigation measure has been recommended to ensure that potential impacts are mitigated to a less than significant level in the event that they are discovered:

Mitigation Measure 18: Although not anticipated, there remains the potential for the inadvertent discovery of human remains during ground-disturbing activities. State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. The San Mateo County coroner must be notified of the find immediately. If concentrations of prehistoric or historic-era materials are encountered during project activities, all work in the immediate vicinity shall cease until a qualified archaeologist can evaluate the finds and make recommendations.

Source: Project Location; California Historical Resource Information System (File No.: 21-0790); State of California Native American Heritage Commission; SWCA Environmental Consultants, Boutte (February 2022).

6. ENERGY. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
6.a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				X
Discussion: The project does not involve development which would consume or result in wasteful, inefficient, or unnecessary consumption of energy resources. **Source:** Project Plans.				
6.b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.				X
Discussion: Discussion: The project does not involve elements which would conflict or obstruct a state or local plan for renewable energy or energy efficiency. **Source:** Project Plans.				

7. GEOLOGY AND SOILS. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
7.a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving the following, or create a situation that results in:				

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? *Note: Refer to Division of Mines and Geology Special Publication 42 and the County Geotechnical Hazards Synthesis Map.*				X

Discussion: A Geotechnical Study was prepared and submitted for the proposed project. The study was prepared by Sigma Prime Geosciences, Inc., dated July 23, 2020 (Geotechnical Study). The study noted that the site is not located in the Alquist-Priolo special studies area or zone where fault rupture is considered likely (California Division of Mines and Geology, 1974). It was the opinion of the geotechnical engineer that active faults are not believed to exist beneath the site, and the potential for fault rupture to occur at the site is low.

To incorporate the full recommendations of the Geotechnical Study the following mitigation measure has been added:

Mitigation Measure 19: Prior to issuance of the building permit for the project, the applicant shall demonstrate compliance with the recommendations of the Geotechnical Study prepared by Sigma Prime Geosciences, Inc., dated July 23, 2020 (Geotechnical Study).

Source: San Mateo County Geotechnical Hazards Synthesis Map; California Geological Survey - Alquist-Priolo Earthquake Fault Zones; Project Location; County GIS Resource Maps, and Geotechnical Study prepared by Sigma Prime Geosciences, Inc., dated July 23, 2020.

ii. Strong seismic ground shaking?			X	

Discussion: The project site cited is located within an active seismic area. Given the location, moderate to large earthquakes are probable along several active faults in the greater Bay Area over a 30-to 50-year design life. Strong ground shaking should therefore be expected several times during the design life of the structure, as is typical for sites throughout the Bay Area. The project will be required to comply with all applicable building code requirements as they relate to current earthquake resistance standards.

Source: San Mateo County Geotechnical Hazards Synthesis Map; California Geological Survey- Alquist-Priolo Earthquake Fault Zones; Project Location; County GIS Resource Maps; Geotechnical Study prepared by Sigma Prime Geosciences, Inc., dated July 23, 2020.

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

Discussion: The submitted geotechnical report notes that differential compaction occurs during moderate and large earthquakes when soft or loose, natural or fill soils are densified and settle, often unevenly across a site. The report notes that the subsurface conditions at the site, based on the soil borings, consist of medium stiff to hard sandy clay to the maximum depth drilled of 12 feet. The clay has moderate plasticity, with plasticity indices from two soil samples of 12 and 17. Based on these findings the report found that the likelihood of significant structural damage to the structure from differential compaction is low.

The report also discussed the potential for liquefaction at the project site. The report notes that liquefaction occurs when loose, saturated sandy soils lose strength and flow like a liquid during earthquake shaking. Ground settlement often accompanies liquefaction. Soils most susceptible to liquefaction are saturated, loose, silty sands, and uniformly graded sands. At this location the report notes that loose sands were not found below the water table. The report finds that the likelihood of liquefaction occurring at this site is low.

Source: San Mateo County Geotechnical Hazards Synthesis Map, California Geological Survey-Alquist-Priolo Earthquake Fault Zones; Project Plans; Project Location; County GIS Resource Maps, and Geotechnical Study prepared by Sigma Prime Geosciences, Inc., dated July 23, 2020.

iv. Landslides?			X	

Discussion: The Geotechnical Report notes that there are no indications that landslide activity would adversely impact the project. While the creek bank could be subject to slope failure the proposed residence is adequately distanced to avoid any such impacts.

Source: San Mateo County Geotechnical Hazards Synthesis Map, California Geological Survey-Alquist-Priolo Earthquake Fault Zones; Project Plans; Project Location; County GIS Resource Maps, and Geotechnical Study prepared by Sigma Prime Geosciences, Inc., dated July 23, 2020.

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

Discussion: The project site is not located adjacent to a Coastal cliff/bluff.

Source: Project Location.

7.b. Result in substantial soil erosion or the loss of topsoil?		X		

Discussion: The project involves approximately 40 cubic yards of earthwork. While the proposed grading is relatively minor given the presence of sensitive habitats on the parcel, the following mitigation measure has been included to ensure that there are no significant impacts:

Mitigation Measure 20: Prior to commencement of the project, the applicant shall submit to the Planning Department for review and approval an erosion and sediment control plan that shows how the transport and discharge of soil and pollutants from and within the project site shall be minimized. The plan shall be designed to minimize potential sources of sediment, control the amount of runoff and its ability to carry sediment by diverting incoming flows and impeding internally generated flows, and retain sediment that is picked up on the project site through the use of sediment-capturing devices. The plan shall also limit application, generation, and migration of toxic substances, ensure the proper storage and disposal of toxic materials, and apply nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters. Said plan shall adhere to the San Mateo County Wide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including:

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

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

c. Clear only areas essential for project activities.

d. Within five days of clearing or inactivity, stabilize bare soils through either non-vegetative BMPs, such as mulching, or vegetative erosion control methods such as seeding. Vegetative erosion control shall be established within two weeks of seeding/planting.

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

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

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

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

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

j. Install storm drain inlet protection that traps sediment before it enters any adjacent storm sewer systems. This barrier shall consist of filter fabric, straw bales, gravel, or sandbags.

k. Install sediment traps/basins at outlets of diversions, channels, slope drains, or other runoff conveyances that discharge sediment-laden water. Sediment traps/ basins shall be cleaned out when 50 percent full (by volume).

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

m. Utilize coir fabric/netting on sloped graded areas to provide a reduction in water velocity, erosive areas, habitat protection, and topsoil stabilization.

n. Throughout the construction period, the applicant shall conduct regular inspections of the condition and operational status of all structural BMPs required by the approved Erosion Control Plan.

Source: Project Location; Project Plans.

7.c.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, severe erosion, liquefaction or collapse?			X	
Discussion: See discussion under 7.a. and 7.b., above. **Source:** Source: San Mateo County Geotechnical Hazards Synthesis Map, California Geological Survey-Alquist-Priolo Earthquake Fault Zones; Project Plans; Project Location; County GIS Resource Maps, and Geotechnical Study prepared by Sigma Prime Geosciences, Inc., dated July 23, 2020.					
7.d.	Be located on expansive soil, as defined in Table 18-1-B of Uniform Building Code, creating substantial direct or indirect risks to life or property?				X
Discussion: The Geotechnical Study does not identify expansive soils as a significant concern at the property. **Source:** San Mateo County Geotechnical Hazards Synthesis Map, California Geological Survey-Alquist-Priolo Earthquake Fault Zones; Project Plans; Project Location; County GIS Resource Maps, and Geotechnical Study prepared by Sigma Prime Geosciences, Inc., dated July 23, 2020.					
7.e.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
Discussion: The project site does not require a septic tank or alternative wastewater disposal system. The project site is served by a municipal sewer service provider and there is an available connection to service this property. **Source:** Project Location.					
7.f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
Discussion: See the discussion under Section 5 of this report. **Source:** Project Plans; Project Location.					

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

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

Mitigation Measure 21: The applicant shall implement the following basic construction measures at all times:

a. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxic Control Measure Title13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

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

c. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person, or his/her designee, shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

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

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

Discussion: The project does not conflict with the San Mateo County Energy Efficiency Climate Action Plan provided that the mitigation measure outlined in Section 8.a, above is implemented. At the building permit stage, the project is also required to comply with the California Green Building Standards Code, which includes requirements for energy saving measures.

Source: San Mateo County Energy Efficiency Climate Action Plan.

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

Discussion: The project site is not located in an area identified as forestland. **Source:** Project Location.					
8.d.	Expose new or existing structures and/or infrastructure (e.g., leach fields) to accelerated coastal cliff/bluff erosion due to rising sea levels?				X
Discussion: The project location is not located on a coastal cliff/bluff. The project site is located approximately 850 feet from the nearest coastal bluff. While the areas closest to the bluff are noted as being susceptible to erosion due to rising sea levels. The project site is located outside of these areas. **Source:** Project Location; County of San Mateo Office of Sustainability, Sea Change, Sea Level Rise Vulnerability Assessment.					
8.e.	Expose people or structures to a significant risk of loss, injury or death involving sea level rise?				X
Discussion: See discussion under question 8.d., above. **Source:** Project Location; County of San Mateo Office of Sustainability, Sea Change, Sea Level Rise Vulnerability Assessment.					
8.f.	Place structures within an anticipated 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				x
Discussion: The project site is located in Flood Zone X designated as an area of minimal flood hazard, usually depicted on FIRMS as above the 500-year flood level **Source:** FEMA Flood Insurance Rate Map (Community Panel No. 06081C 252F, map revised August 2, 2017).					
8.g.	Place within an anticipated 100-year flood hazard area structures that would impede or redirect flood flows?				X
Discussion: See discussion under question 8.f., above. **Source:** FEMA Flood Insurance Rate Map (Community Panel No. 06081C 252F, map revised August 2, 2017).					

9.	**HAZARDS AND HAZARDOUS MATERIALS**. Would the project:				
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
9.a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (e.g., pesticides, herbicides, other toxic substances, or radioactive material)?				X
Discussion: The project proposed is to construct a single-family residence. The proposed residence is consistent with the type and scope of development present in the surrounding neighborhood. The project does not involve elements that would result in a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials. **Source:** Project Location; Project Plans.					
9.b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
Discussion: The project is to construct a single-family residence on an undeveloped parcel. The proposed residence is consistent with the type and scope of development present in the surrounding neighborhood. The project does not involve elements that would result in a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. **Source:** Project Plans; Project Location.					
9.c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
Discussion: The project does not include elements which would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste. The project site is not located within one-quarter mile of an existing or proposed school.t located. **Source:** Project Plans; Project Location.					
9.d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X

Discussion: The project site is not included on a list of hazardous materials sites. **Source:** California Department of Toxic Substances Control, Hazardous Waste and Substances Site List.					
9.e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?			X	
Discussion: Based on the Half Moon Bay Airport Land Use Compatibility Plan, as adopted on October 9, 2014, the project site is located outside Zone 7 - Airport Influence Area (AIA). Aircraft accident level is considered to be low at the site. **Source:** Project Application/Plans, San Mateo County GIS Resource Maps; Half Moon Bay ALUCP.					
9.f.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
Discussion: The project will not physically interfere with an adopted emergency plan. The project site is located in a developed coastal area and is served by emergency response agencies such as the Coastside Fire Protection District and the San Mateo County Sheriff's Department. **Source:** Project Application/Plans and San Mateo County GIS Resource Maps.					
9.g.	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X
Discussion: The project site is not located within a wildland urban interface area nor is the project site within a designated moderate, high, or very high fire severity zone. **Source:** Project Application/Plans and San Mateo County GIS Resource Maps.					
9.h.	Place housing within an existing 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
Discussion: See discussion under Section 8.f., above. **Source:** FEMA Flood Insurance Rate Map (Community Panel No. 06081C 252F, map revised August 2, 2017).					
9.i.	Place within an existing 100-year flood hazard area structures that would impede or redirect flood flows?				X

Discussion: See discussion under Section 8.f., above. **Source:** FEMA Flood Insurance Rate Map (Community Panel No. 06081C 252F, map revised August 2, 2017).					
9.j.	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
Discussion: There is a known dam located 1.5 miles upstream from the project site. Review of previous projects in the area has resulted in an estimated potential runoff resulting from a dam break would result in a 3.6 percent increase in the runoff for this watershed area would. Based on this increase, the potential impact on the areas located downstream has been determined to be less than significant. FEMA does not designate the project site as being located in a flood plain. The proposed residence is adequately setback from Arroyo de en Medio at approximately 85 feet. **Source:** Project Location; FEMA Flood Insurance Rate Map.					
9.k.	Inundation by seiche, tsunami, or mudflow?				X
Discussion: The project site is not in a mapped hazard zone for seiche, tsunami, and/or mudflows. **Source:** Project Location.					

10.	**HYDROLOGY AND WATER QUALITY**. Would the project:	***Potentially Significant Impacts***	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
10.a.	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality (consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical stormwater pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash))?		X		
Discussion: The project is subject to the implementation and maintenance of an erosion control plan and Best Management Practices (BMPs), as noted in Mitigation Measure 20, as part of issuance of the required building permit. The project, as proposed and conditioned, would result in less than significant impacts. The following additional measures are included to clearly communicate timing and responsibility requirements:					

Mitigation Measure 22: The applicant shall implement erosion control measures prior to the beginning of grading or construction operations. Such activities shall not commence until the associated building permit for the project has been issued.

Mitigation Measure 23: The project shall include water runoff prevention measures for the operation and maintenance of the project for the review and approval by the Community Development Director. The project shall identify best management practices (BMPs) appropriate to the uses conducted on-site to effectively prohibit the discharge of pollutants with stormwater runoff and other water runoff produced from the project.

Source: Project Application/Plans.

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

Discussion: The project will not involve direct use of groundwater as a domestic water source as the project site is located in a developed residential zone already serviced by Coastside County Water District (CCWD). Coastside County Water District has verified the ability to provide domestic water service to this project.

Source: Project Location; Project Plans.

10.c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:				
i. Result in substantial erosion or siltation on- or off-site;				X

Discussion: The project involves only minor grading (approximately 40 cubic yards) and would not involve significant change in existing site topography. The project would not significantly alter site topography and would not impact the creek southeast of the parcel due to the distance between the proposed residence and the creek. The project's impervious areas will increase but proposed new drainage facilities (as shown on the civil plans) would capture and filter increased site runoff flow and volume to ensure the project's compliance with the County's Guidelines for Drainage Review.

Source: Project Location; Project Plans.

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

Discussion: The project proposes to introduce 3,296 sq. ft. of new impervious surface to the project site. The project is subject to compliance with the County's Drainage Policy and Provision C.3. of the San Francisco Bay Region Municipal Regional Permit which requires that the design of a project include measures to maintain the surface runoff at its current levels.

Source: Project Plans.

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				X
Discussion: See discussion under Question 10(c)(ii). **Source:** Project Plans.				
iv. Impede or redirect flood flows?				X
Discussion: The project site is not located within an area mapped for flooding. See additional discussion under Question 10(c)(ii). **Source:** Project Plans.				
10.d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
Discussion: The project parcel is not located in a mapped flood hazard, tsunami, or seiche zones. **Source:** Project Location; FEMA Flood Zone Maps; San Mateo County Hazard Maps (GIS).				
10.e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X
Discussion: The project site lies within the Half Moon Bay Terrace groundwater basin. This basin is in an unmanaged area which is defined as "a portion of a high- or medium-priority groundwater basin that is not within the management area of a groundwater sustainability agency (GSA), an adjudication, or an alternative sustainability plan". A groundwater extraction report with the State Water Board is required for anyone that extracts groundwater from an unmanaged area, with the exception of small domestic well users, must file a groundwater extraction report with the State Water Board each year and pay associated fees. unmanaged by has been designated by the State Department of Water Resources as a "very low" priority basin. As the project does not propose to include a well or other groundwater draw, no groundwater management plan is required under the State's Sustainable Groundwater Management Act. With regard to water quality control plans, the project site lies within the San Mateo Coastal SubBasin as identified within the San Francisco Bay Basin Water Quality Control Plan (Basin Plan). As such, any potential discharge from a site must comply with the Basin Plan, as was discussed under Question 10(a). Compliance with the SWRCB waste discharge permit requirements will ensure that the project will not conflict with the adopted Basin Plan. **Source:** San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan), California Regional Water Quality Control Board (San Francisco Bay Region); 2019 SGMA Basin Prioritization Map, California Department of Water Resources.				

10.f. Significantly degrade surface or ground-water water quality?				X
Discussion: See discussion under 10.a. and 10.b., above. **Source:** Project Plans; County of San Mateo Drainage Policy; Project Location.				
10.g. Result in increased impervious surfaces and associated increased runoff?				X
Discussion: See discussion under Question 10(c)(ii) **Source:** Project Plans.				

11. LAND USE AND PLANNING. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
11.a. Physically divide an established community?				X
Discussion: The project involves development of a vacant parcel, or infilling, of an existing developed residential neighborhood that will not divide the established community. **Source:** Project Location; Project Plans.				
11.b. Cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X
Discussion: The proposed project does not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The proposed project use is consistent with the applicable Zoning Regulations, Local Coastal Program, and General Plan Policies. **Source:** Project Plans; Project Location; San Mateo County Zoning Regulations; San Mateo County General Plan, San Mateo County Local Coastal Program.				
11.c. Serve to encourage off-site development of presently undeveloped areas or increase development intensity of already developed areas (examples include the introduction of new or expanded public utilities, new industry, commercial facilities or recreation activities)?				X
Discussion: The addition of a new residence on the vacant parcel designated for residential use will not encourage off-site development as the project, including proposed utilities, will result in development of only the subject parcel. The project would be served by water and sewer services				

already provided in the area. The project does not involve the establishment of new industry, commercial facilities, or recreation activities.

Source: Project Plans; San Mateo County GIS Resource Maps.

12. MINERAL RESOURCES. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
12.a. Result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State?				X
Discussion: The project site is not located in an area known for mineral resources nor does the project involve mineral extraction. **Source:** Project Location; San Mateo County General Plan; San Mateo County GIS Resource Maps.				
12.b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X
Discussion: See discussion under 12.a., above. **Source:** Project Location; San Mateo County General Plan; San Mateo County GIS Resource Maps.				

13. NOISE. Would the project result in:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
13.a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X
Discussion: During project construction, excessive noise could be generated, particularly during grading and excavation activities. However, the project is subject to the County's Noise Ordinance which limits the days and hours of construction related activities. Once construction is complete, the project site is not expected to generate noise which would violate the San Mateo County Noise Ordinance.				

Source: Project Plans, San Mateo County Noise Ordinance.					
13.b.	Generation of excessive ground-borne vibration or ground-borne noise levels?				X
Discussion: There are no aspects of the project that would include generation of excessive ground borne vibration or ground-borne noise levels. **Source:** Project Plans.					
13.c.	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, exposure to people residing or working in the project area to excessive noise levels?			X	
Discussion: The project site is located outside the Community Noise Equivalent Level (CNEL) airport noise exposure contours identified in the Half Moon Bay Airport Land Use Plan and is therefore not exposed to significant levels of aircraft noise. The project is not located in the vicinity of a private airstrip. **Source:** Project Application/Plans, San Mateo County Noise Ordinance and Airport Land Use Compatibility Plan (ALUCP).					

14.	**POPULATION AND HOUSING**. Would the project:	***Potentially Significant Impacts***	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
14.a.	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
Discussion: The project involves the construction of one new home on a vacant parcel and does not involve the establishment of a business. The project involves construction of a driveway to provide access from Miramar Drive but does not require or involve improvements or the extension of a road. **Source:** Project Application/Plans.					
14.b.	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Discussion: The project property is currently undeveloped. The development of this single parcel will not result in displacement of substantial numbers of existing people or housing.

Source: Project Location; Project Plans.

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

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

Discussion: The current level of public services will not be significantly affected by the addition of one new single-family residence in the neighborhood.

Source: Project Location; Project Plans.

16. RECREATION. Would the project:

		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
16.a.	Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X

Discussion: The proposed development of the single vacant parcel with a single-family residence will not generate an increase in the use of existing recreational facilities beyond the service levels anticipated for the area.

Source: Project Location; Project Plans.

16.b.	Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X
Discussion: The project does not include any recreational facilities. As described in Section 15.a., new or expanded recreational facilities will not be required by this project. **Source:** Project Location; Project Plans.					

17.	**TRANSPORTATION**. Would the project:				
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
17.a.	Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, and parking?				X
Discussion: The proposed single-family residence will not significantly increase the vehicular or pedestrian traffic in the area. Nor is there an expectation that the project will change patterns in the area beyond the current levels experienced in the area. **Source:** Project Plans; Project Location.					
17.b.	Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b) *Criteria for Analyzing Transportation Impacts*? *Note to reader: Section 15064.3 refers to land use and transportation projects, qualitative analysis, and methodology.*				X
Discussion: The project involves the development of a single vacant parcel with a single-family residence located in a residentially zoned neighborhood. The parcel is approximately 600 feet (as the crow flies) from Highway 1 (Cabrillo Highway) and is located within one-half mile of an existing bus stop. The proposed project is infill development and not of a scope/scale that would exceed a threshold of significance and/or result in significant impacts. **Source:** Project Plans; Project Location.					
17.c.	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X

Discussion: The project does not include any changes to the publicly used accessed roads. The property is directly accessed from Miramar Drive. While a driveway will be installed as part of the project construction there are no proposed alterations to Miramar Drive or any other adjacent streets. The area surrounding the parcel is a residential neighborhood and the proposed development is compliant in both its scope and use. **Source:** Project Location; Project Plans.				
17.d. Result in inadequate emergency access?				X
Discussion: The project does not impact existing emergency access. As mentioned previously, the project is accessed from an improved road and does not propose to alter the existing condition. **Source:** Project Plans; Project Location.				

18. TRIBAL CULTURAL RESOURCES. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
18.a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)				X
Discussion: See discussion under question 5.a., above. **Source:** Project Location.				

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Subdivision (c) of Public Resources Code Section 5024.1. (In applying the criteria set forth in Subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.)				X

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

Source: Project Location.

19. UTILITIES AND SERVICE SYSTEMS. Would the project:

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

Discussion: The project site will be serviced by Granada Community Services District (GCSD) for sanitary sewer service. GCSD has confirmed that it has the capacity to serve the project at the subject property. Any increase in the total wastewater treatment by GCSD would be minimal associated with one new single-family dwelling and associated residents.

The property is served by Coastside County Water District (CCWD), a municipal domestic water service district. CCWD has confirmed that it has the capacity to serve the project at the subject property.

Proposed new on-site drainage facilities as required by the County Drainage/Stormwater Policies are included in the project and would minimize the impacts of runoff to off-site areas and facilities.

The infrastructure exists to serve this property and where necessary involves only minor improvements to extend service.

Source: Project Plans; Project Location.

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

Discussion: Discussion: See discussion under 19.a., above. **Source:** Project Plans; Project Location.				
19.c. Result in a determination by the waste-water treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
Discussion: See discussion under 19.a., above. **Source:** Project Plans; Project Location.				
19.d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				X
Discussion: The project site is in a developed residential area already adequately serviced by GCSD, provides solid waste disposal service via an exclusive franchise agreement with Recology of the Coast. Any increase in the total solid waste would be minimal associated with one new single-family residence. **Source:** Project Application/Plans; GCSD website.				
19.e. Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?				X
Discussion: Reference response to Section 17.f., above. **Source:** Project Plans; Project Location.				

20. **WILDFIRE**. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
20.a. Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
Discussion: The project is not located in an area or lands classified as very high fire hazard severity zones. The area to the east of Highway 1 does have areas identified as moderate and high fire severity zones and are designated state responsibility areas. However, the project is infill				

development where all improvements are limited to the project site. The development of the project site will not impair or impact an adopted emergency response plan or emergency evacuation plan. **Source:** Project Location; CAL-Fire Fire Hazard Severity Zone Maps.				
20.b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			X	
Discussion: The project site is in an area which is not mapped for being at moderate risk for fire danger. As discussed, the project is infill development within a developed residential neighborhood, and the proposed project includes elements to improve fire safety. In the event there was a wildfire in the area the occupants would likely be exposed to pollutant concentrations and/or uncontrolled spread as would the other surrounding development. **Source:** Project Location.				
20.c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
Discussion: The project does not involve the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary on ongoing impacts to the environment. The project will be required to be fire sprinklered and constructed utilizing materials which are rated for the fire severity of the area, as required by the applicable building and fire codes. **Source:** Project Location; Project Plans.				
20.d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X
Discussion: The project location is relatively flat. However, the areas located on the east side of Highway 1 (opposite the project site) do have a moderate slope. These areas are not identified as areas which are at risk for landslides. Neither the project site nor the sloped portions to the east are in a mapped flood zone. **Source:** Project Location, San Mateo County Hazard Maps.				

21. MANDATORY FINDINGS OF SIGNIFICANCE.				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
21.a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
Discussion: While the project could result in significant impacts to sensitive habitats, mitigation measures have been included to reduce those impacts to less than significant levels. **Source:** Project Location; Project Plans.				
21.b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)				X
Discussion: There are at least two properties to the north-west of the project site (opposite side of Arroyo de en Medio) which have been either recently approved for construction of a single-family residence or are close to completion. There are no other pending nearby projects and nothing immediately adjacent to the project site. Therefore, the project would not have impacts that are individually limited, but cumulatively considerable. Also, reference response to 16.f., above. No cumulative effects have been identified for this project. **Source:** Project Application/Plans; Project Location.				
21.c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		
Discussion: See discussion of 21.a. and 21.b. **Source:** Project Plans; Project Location.				

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

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

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 a plan to the Planning and Building Department prior to the issuance of any building permit that, at a minimum, includes the "Basic Construction Mitigations Measures" as listed in Table 8-2 of the BAAQMD CEQA Guidelines (May 2017). These measures shall be implemented prior to beginning any ground disturbance and shall be maintained for the duration of the project activities:

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

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

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

d. All vehicle speeds on unpaved roads shall be limited to 15 mph.

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

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

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

Mitigation Measure 2: Prior to the start of project activities, a qualified biologist shall survey all project work areas for the presence of California red-legged frog and San Francisco garter snake.

Mitigation Measure 3: Prior to the start of project activities, construction personnel shall receive an environmental awareness training conducted by a qualified biologist. This training shall include an overview of the life history of the California red-legged from and San Francisco garter snake, information on "take" prohibitions, and associated avoidance and minimization measures and best management practices.

Mitigation Measure 4: Construction crewmembers shall check beneath all equipment and vehicles prior to moving equipment or vehicles to inspect for any potential special status wildlife species, including California red-legged frog and San Francisco garter snake. If any snake or frog species are observed, construction personnel shall contact the qualified biologist immediately. The biologist shall identify the species and determine next steps. Wildlife encountered on-site shall be allowed to leave the work area of their own accord and without harassment. Animals shall not be picked up or moved in any way.

Mitigation Measure 5: Open excavations greater than 0.6 meter (2 feet) deep (including fence post holes and trenches) shall be covered at the end of each workday to prevent wildlife entrapment. All trenches and excavations shall be inspected for wildlife each morning and prior to backfill. All entrapped animals shall be removed only by a qualified or authorized biologist.

Mitigation Measure 6: Disturbance to vegetation shall be kept to the minimum necessary to complete the Project activities, provided there is no feasible alternative.

Mitigation Measure 7: Any and all spoils (e.g., dirt, debris, construction-related materials) generated during Project activities shall be placed where they cannot enter a storm drain or culvert system.

Mitigation Measure 8: During Project activities, all trash that may attract predators shall be properly contained, removed, and disposed of regularly. Following construction, trash/construction debris shall be removed from work areas.

Mitigation Measure 9: The number of access routes, number and size of staging areas, and the total area of the activity shall be limited to the minimum necessary to complete the Project.

Mitigation Measure 10: All fueling, and maintenance of vehicles and other equipment and staging areas shall occur at least 50 feet from the Arroyo de en Medio coastal stream. The owner shall ensure that contamination of habitat does not occur during such operations. Prior to the onset of work, the owner shall ensure that there is a plan to allow a prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and the appropriate measures to take should a spill occur.

Mitigation Measure 11: Erosion and sediment control measures, such as wattles or washed gravel bags, shall be installed along the north side of the project area, above the downhill slope toward Arroyo de en Medio, to prevent trench materials from entering the coastal stream. Plastic monofilament netting on wattles shall not be used on-site due to the potential risk of entrapping wildlife. Burlap or coconut wattles (for example, Bio Wattle) are appropriate substitutes.

Mitigation Measure 12: If project activities are conducted during nesting bird season (February 15 through August 31), preconstruction nest surveys shall be conducted in and near the Project area (within 250 feet for large raptors and 50 feet for all other birds) by a qualified biologist no more than 14 days prior to construction start. If nesting is identified during the preconstruction survey, then the project shall be modified and/or delayed as necessary to avoid direct take of the identified nests, eggs, and/or young.

Mitigation Measure 13: Although there is low potential for California red-legged frog and San Francisco garter snake to occur within the work area, an exclusion fence shall be installed around the work area prior to the beginning of construction activities. Exclusion fencing shall be silt fence-type fencing or equivalent and shall not include poly mesh fencing or other similar fencing that could entrap or snag reptiles, amphibians, or other small animals. Exclusion fencing shall be installed with the fence stakes placed on the inside of the fencing (closest to the project boundary) to prevent frogs or snakes from using the stakes to maneuver over the fence. The fencing shall be maintained until all work has been completed.

Mitigation Measure 14: A biological monitor shall be present during initial grubbing/clearing and ground-disturbing activities (including wildlife exclusion fencing installation) to ensure that no listed or sensitive species are impacted by project activities.

Mitigation Measure 15: Ground-disturbing construction activities (e.g., grubbing or grading) should occur during the dry season (June 1 to October 15) to facilitate avoidance of California red-legged frog. Regardless of the season, no construction shall occur within 24 hours following a significant rain event (greater than 1/4 inch in a 24-hour period). Following a significant rain event and the 24-hour drying-out period, a qualified biologist shall conduct a preconstruction survey for California red-legged frog prior to the restart of any project activities.

Mitigation Measure 16: Any proposed construction or project related activities shall occur outside of the 30-foot buffer zone setback as required by the Local Coastal Program (LCP). Prior to the issuance of a building permit, the edge of the 30-feet buffer zone shall be surveyed in consultation with the biologist and added to the project survey and site plan for submittal and review by the Current Planning Section. Exclusion construction fencing shall be installed under supervision of the biologist which matches the established buffer zone to ensure construction related activities occur outside of the established buffer zone.

Mitigation Measure 17: In the event that unanticipated cultural resources are exposed during ground disturbance activities, work within 15 meters (50 feet) of the find must stop and a Secretary of the Interior qualified archaeologist, must be notified immediately. Work may not resume until a qualified archaeologist can evaluate the significance of the find. If the discovery proves significant, additional work such as archaeological testing, data recovery, or tribal consultation may be warranted.

Mitigation Measure 18: Although not anticipated, there remains the potential for the inadvertent discovery of human remains during ground-disturbing activities. State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. The San Mateo County coroner must be notified of the find immediately. If concentrations of prehistoric or historic-era materials are encountered during project activities, all work in the immediate vicinity shall cease until a qualified archaeologist can evaluate the finds and make recommendations.

Mitigation Measure 19: Prior to issuance of the building permit for the project, the applicant shall demonstrate compliance with the recommendations of the Geotechnical Study prepared by Sigma Prime Geosciences, Inc., dated July 23, 2020 (Geotechnical Study).

Mitigation Measure 20: Prior to commencement of the project, the applicant shall submit to the Planning Department for review and approval an erosion and sediment control plan that shows how the transport and discharge of soil and pollutants from and within the project site shall be minimized. The plan shall be designed to minimize potential sources of sediment, control the amount of runoff and its ability to carry sediment by diverting incoming flows and impeding internally generated flows, and retain sediment that is picked up on the project site through the use of sediment-capturing devices. The plan shall also limit application, generation, and migration of toxic substances, ensure the proper storage and disposal of toxic materials, and apply nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters. Said plan shall adhere to the San Mateo County Wide Stormwater Pollution Prevention Program “General Construction and Site Supervision Guidelines,” including:

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

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

c. Clear only areas essential for project activities.

d. Within five days of clearing or inactivity, stabilize bare soils through either non-vegetative BMPs, such as mulching, or vegetative erosion control methods such as seeding. Vegetative erosion control shall be established within two weeks of seeding/planting.

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

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

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

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

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

j. Install storm drain inlet protection that traps sediment before it enters any adjacent storm sewer systems. This barrier shall consist of filter fabric, straw bales, gravel, or sandbags.

k. Install sediment traps/basins at outlets of diversions, channels, slope drains, or other runoff conveyances that discharge sediment-laden water. Sediment traps/ basins shall be cleaned out when 50 percent full (by volume).

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

m. Utilize coir fabric/netting on sloped graded areas to provide a reduction in water velocity, erosive areas, habitat protection, and topsoil stabilization.

n. Throughout the construction period, the applicant shall conduct regular inspections of the condition and operational status of all structural BMPs required by the approved Erosion Control Plan.

Mitigation Measure 21: The applicant shall implement the following basic construction measures at all times:

a. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxic Control Measure Title13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

b. All construction equipment shall be maintained and properly tuned in accordance with

manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.

c. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person, or his/her designee, shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Mitigation Measure 22: The applicant shall implement erosion control measures prior to the beginning of grading or construction operations. Such activities shall not commence until the associated building permit for the project has been issued.

Mitigation Measure 23: The project shall include water runoff prevention measures for the operation and maintenance of the project for the review and approval by the Community Development Director. The project shall identify best management practices (BMPs) appropriate to the uses conducted on-site to effectively prohibit the discharge of pollutants with stormwater runoff and other water runoff produced from the project.

DETERMINATION (to be completed by the Lead Agency).

On the basis of this initial evaluation:

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

(Signature)

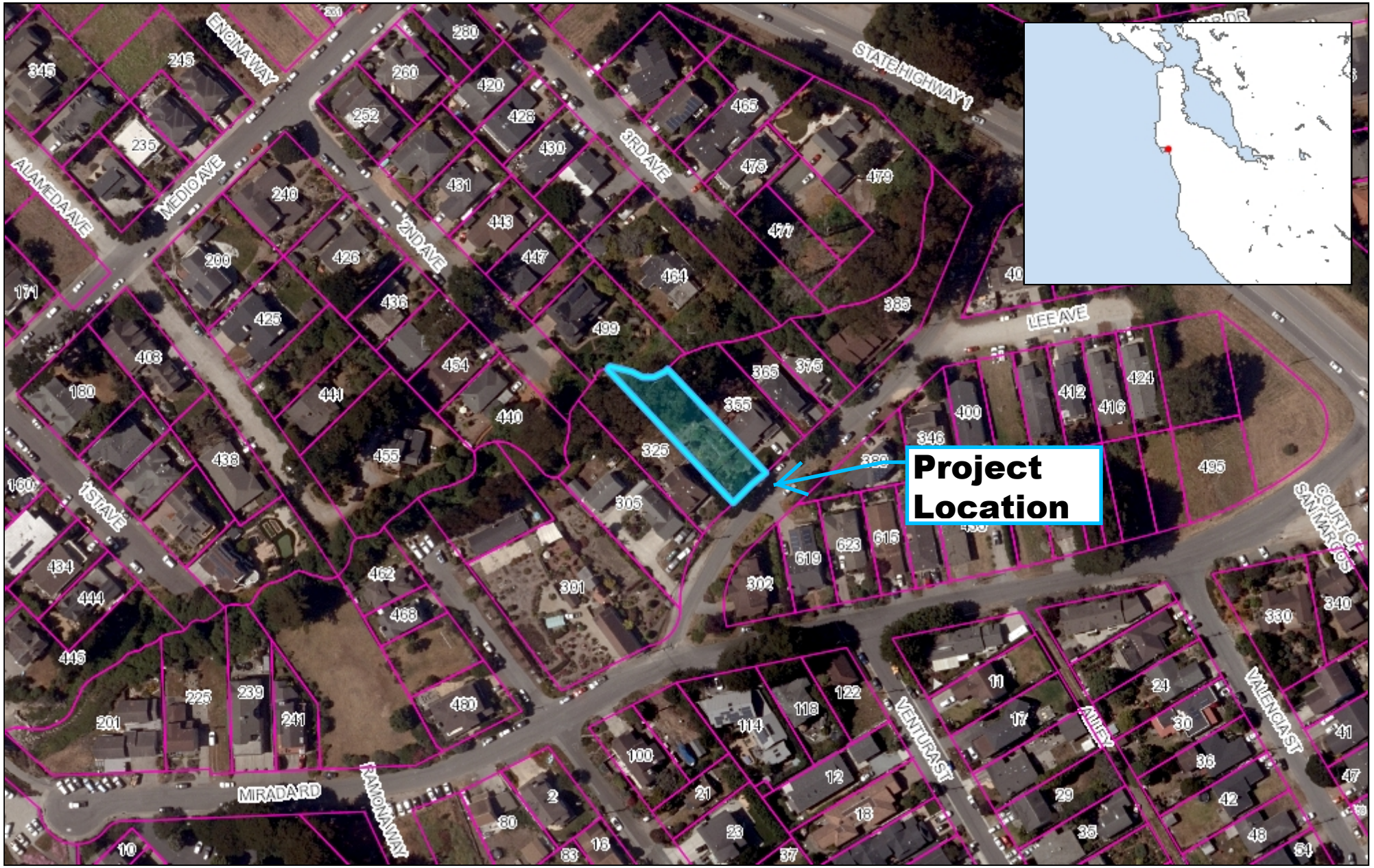
3/30/2022 — Date

Senior Planner — (Title)

ACC:cmc – ACCGG0088_WCH.DOCX

San Mateo County

County San Mateo, CA



0.07 0 0.04 0.07 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

1: 2,257

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

THIS MAP IS NOT TO BE USED FOR NAVIGATION

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AGRANOV RESIDENCE

NEW CUSTOM HOME

MIRAMAR DRIVE

HALF MOON BAY, CA 94019

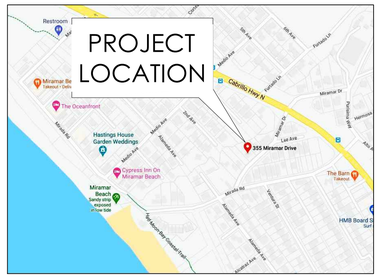
ASSESSOR'S PARCEL NUMBER

048054220

ZONING INFORMATION

- ZONING DESIGNATION: *R-1/S-17/DR/CD*
- BUILDING SITE WIDTH: *50.0'*
- MINIMUM LOT SIZE: *5,000 SQ. FT.*
- SETBACKS:
  - *FRONT: 20.0'*
  - *REAR: 20.0'*
  - *SIDES: MIN. 5' ONE SIDE, 15' TOTAL*
- MAXIMUM BUILDING HEIGHT: *28.0'*
- MAXIMUM LOT COVERAGE: *35%*

DRAWING INDEX



2 VICINITY MAP

NO SCALE

GENERAL SITE NOTES

1. (E) = EXISTING, (N) = NEW.
2. ALL EXTERIOR FLATWORK AND STEPS TO GRADE SHALL BE VERIFIED IN FIELD. SLOPE ALL CONCRETE PATIOS AWAY FROM HOUSE AT 1/4" PER FOOT.
3. DIMENSIONS SHOWN ARE TO EDGE OF FOUNDATION/FRAME, U.O.N.
4. AN OFF-STREET PARKING EXEMPTION SHALL APPLY TO THIS SITE.
5. GENERAL CONTRACTOR SHALL MANAGE SUB-CONTRACTOR PARKING, EQUIPMENT, STAFF PARKING, HAULING, AND EXCAVATION OF WORK TO MINIMIZE TRAFFIC IMPACTS DURING CONSTRUCTION.

AREA CALCULATIONS (SQ. FT.)

FIRST FLOOR LIVING AREA: *1,473*
FIRST FLOOR PORCH: *48*
FIRST FLOOR DECK: *224*
ATTACHED TWO-CAR GARAGE: *595*
SECOND FLOOR LIVING AREA: *823*
SECOND FLOOR FRONT BALCONY AREA: *231*
SECOND FLOOR REAR BALCONY AREA: *199*

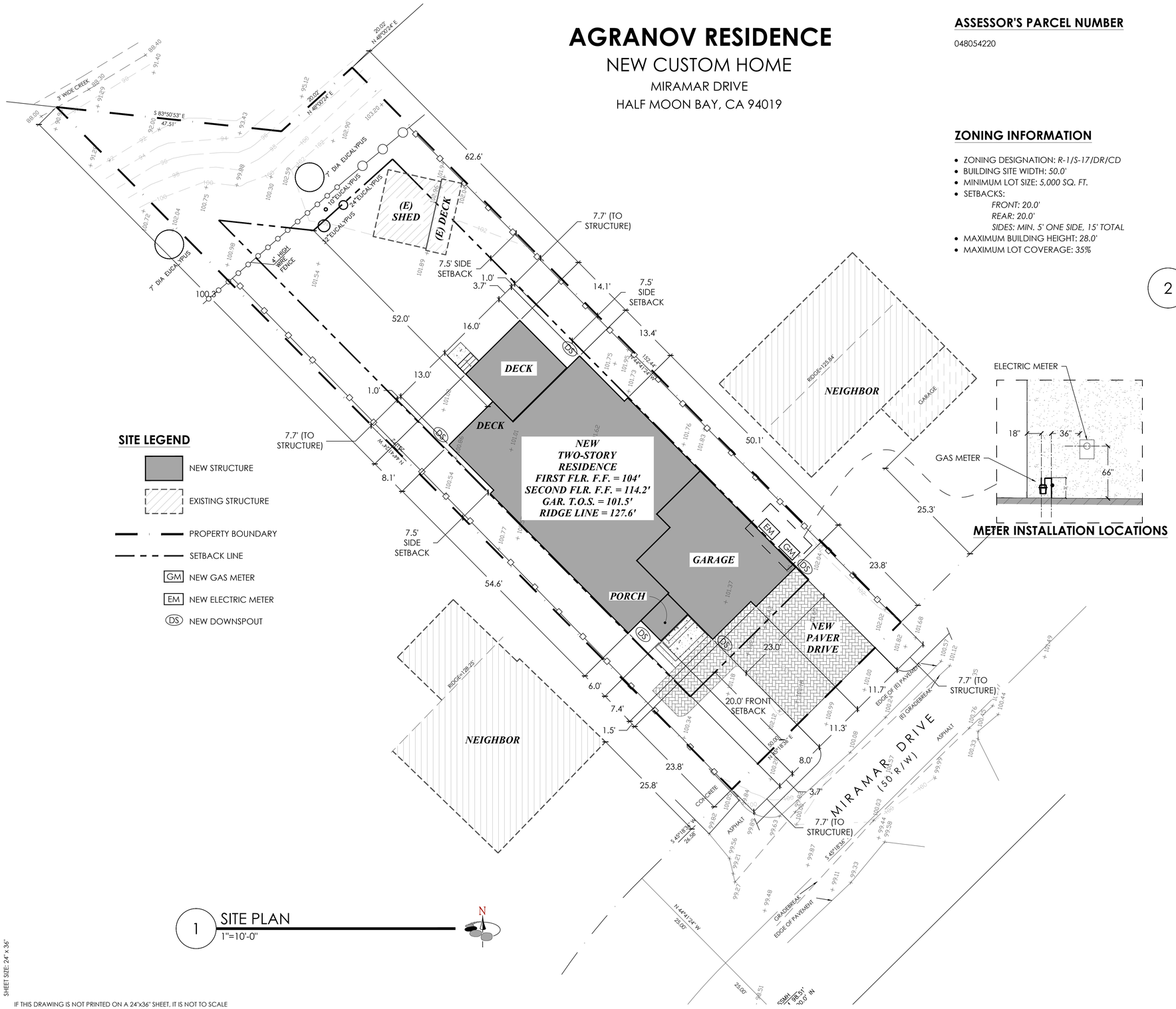
LOT COVERAGE CALCULATIONS (SQ. FT.)

EXISTING LOT: *8,787.3*

EXISTING SHED: *164*
FIRST FLOOR LIVING AREA: *1,473*
FIRST FLOOR PORCH: *48*
FIRST FLOOR DECK: *224*
ATTACHED GARAGE: *595*

LOT COVERAGE FOOTPRINT: *2,504*

NEW LOT COVERAGE: *2,504 ÷ 8787.3 = 28.5%*



1 SITE PLAN

1"=10'-0"

SITE LEGEND

- NEW STRUCTURE
- EXISTING STRUCTURE
- PROPERTY BOUNDARY
- SETBACK LINE
- GM NEW GAS METER
- EM NEW ELECTRIC METER
- DS NEW DOWNSPOUT

METER INSTALLATION LOCATIONS

BLACKSTONE DESIGN

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Arvada, Colorado 80007
720.222.5009

AGRANOV RESIDENCE
NEW CUSTOM HOME
MIRAMAR DRIVE
HALF MOON BAY, CA 94019

PROJECT #200527

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SITE PLAN & PROJECT DATA

SHEET NUMBER

A.001

SHEET SIZE: 24"x 36"

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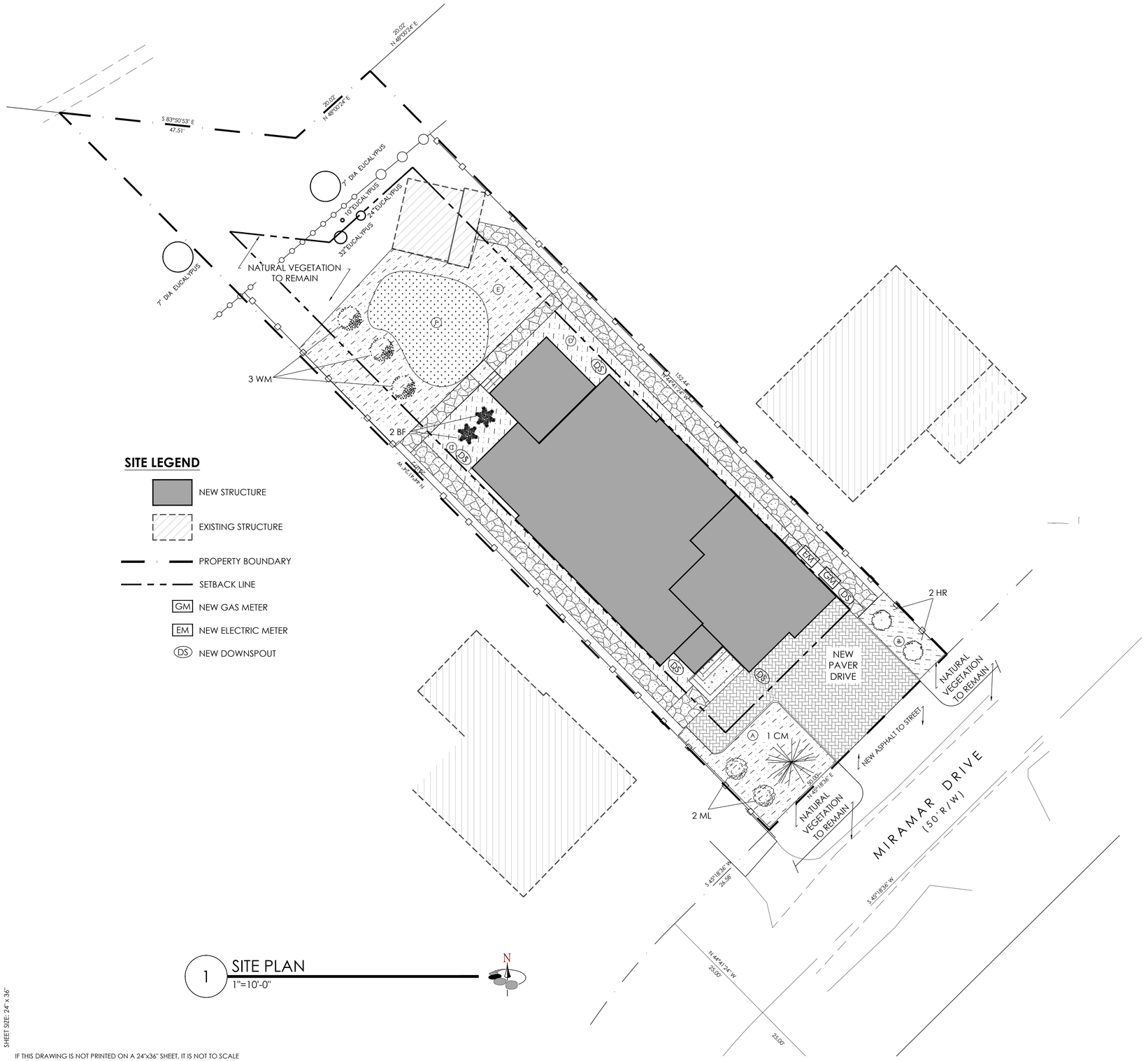
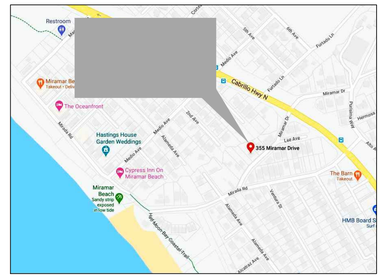


SITE LEGEND

- NEW STRUCTURE
- EXISTING STRUCTURE
- PROPERTY BOUNDARY
- SETBACK LINE
- GM NEW GAS METER
- EM NEW ELECTRIC METER
- DS NEW DOWNSPOUT

1 SITE PLAN
1"=10'-0"



2 VICINITY MAP
NO SCALE

LANDSCAPE NOTES

1. A MINIMUM 3-INCH LAYER OF MULCH SHALL BE APPLIED ON ALL EXPOSED SOIL SURFACES OF PLANTING AREAS EXCEPT TURF AREAS, CREEPING OR ROOTING GROUNDCOVERS, OR DIRECT SEEDING APPLICATIONS WHERE MULCH IS CONTRAINDICATED.
2. TURF IS PROHIBITED IN PARKWAYS LESS THAN 10 FEET WIDE.
3. TURF NOT PERMITTED ON SLOPES GREATER THAN 25%.
4. TURF SHALL NOT EXCEED 25% OF THE LANDSCAPE AREA IN RESIDENTIAL AREAS.
5. AUTOMATIC WEATHER-BASED OR SOIL-MOISTURE BASED IRRIGATION CONTROLLERS SHALL BE INSTALLED ON THE IRRIGATION SYSTEM.
6. PRESSURE REGULATORS SHALL BE INSTALLED ON THE IRRIGATION SYSTEM TO ENSURE DYNAMIC PRESSURE OF THE SYSTEM IS WITHIN THE MANUFACTURER'S RECOMMENDED PRESSURE RANGE.
7. MANUAL-SHUT-OFF VALVES SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THE POINT OF CONNECTION OF THE WATER SUPPLY.
8. AREAS LESS THAN 10-FEET IN WIDTH IN ANY DIRECTION SHALL BE IRRIGATED WITH SUBSURFACE IRRIGATION OR OTHER MEANS THAT PRODUCES NO RUNOFF OR OVERSPRAY.
9. AT THE TIME OF FINAL INSPECTION, THE PERMIT APPLICANT MUST PROVIDE THE OWNER OF THE PROPERTY WITH A CERTIFICATE OF COMPLETION, CERTIFICATE OF INSTALLATION, IRRIGATION SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE.
10. UNLESS CONTRADICTED BY A SOILS TEST, COMPOST AT A RATE OF A MINIMUM OF FOUR CUBIC YARDS PER 1,000 SQ. FT. OF PERMEABLE AREA SHALL BE INCORPORATED TO A DEPTH OF SIX INCHES INTO THE SOIL.
11. LANDSCAPING WITH DEEP ROOT SYSTEMS SHALL NOT BE PLACED ON STORMWATER IMPROVEMENTS.

PLANT MATERIAL SCHEDULE

KEY	BOTANIC NAME	COMMON NAME	SIZE	QTY.
ML	CITRUS X MYERI	DWARF MEYER LEMON	5 GALLON	2
HR	RHAMNUS ILICIFOLIA	HOLLYLEAF REDBERRY	5 GALLON	2
BF	MIMULUS AURANTIACUS	BUSH MONKEY FLOWER	5 GALLON	2
CM	LAGERSTROEMIA INDICA	CRAPE MYRTLE	24" BOX	1
WM	MAGNOLIA SALICIFOLIA	WHITE MAGNOLIA	8' (EXISTING, RELOCATED)	3

LANDSCAPE AREA SCHEDULE

KEY	AREA (SQ. FT.)	MATERIAL
A	344	CEDAR MULCH
B	126	CEDAR MULCH
C	325	CEDAR MULCH
D	266	CEDAR MULCH
E	674	CEDAR MULCH
F	394	ARTIFICIAL TURF
TOTAL	2,129	

LANDSCAPE LEGEND

- WOOD MULCH
- STONE WALK
- PERMEABLE PAVER DRIVEWAY
- ARTIFICIAL TURF

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720.222.5009

AGRANOV RESIDENCE
NEW CUSTOM HOME
MIRAMAR DRIVE
HALF MOON BAY, CA 94019

PROJECT #200527

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LANDSCAPE PLAN

SHEET NUMBER

L.001

SHEET SIZE: 24" x 36"

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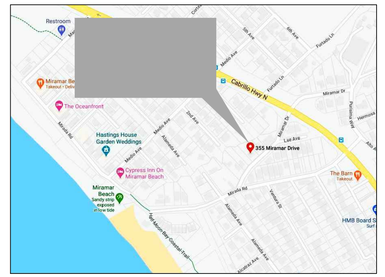
SITE LEGEND

- NEW STRUCTURE
- EXISTING STRUCTURE
- PROPERTY BOUNDARY
- SETBACK LINE
- GM NEW GAS METER
- EM NEW ELECTRIC METER
- DS NEW DOWNSPOUT
- E EXISTING ELECTRIC LINE (OVERHEAD)
- SS EXISTING SAN. SEWER LINE
- EXISTING TREE TO BE REMOVED

1 SITE PLAN
1"=10'-0"



2 VICINITY MAP
NO SCALE

N

SHEET SIZE: 24" x 36"

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TREE PLAN

SHEET NUMBER

L.002

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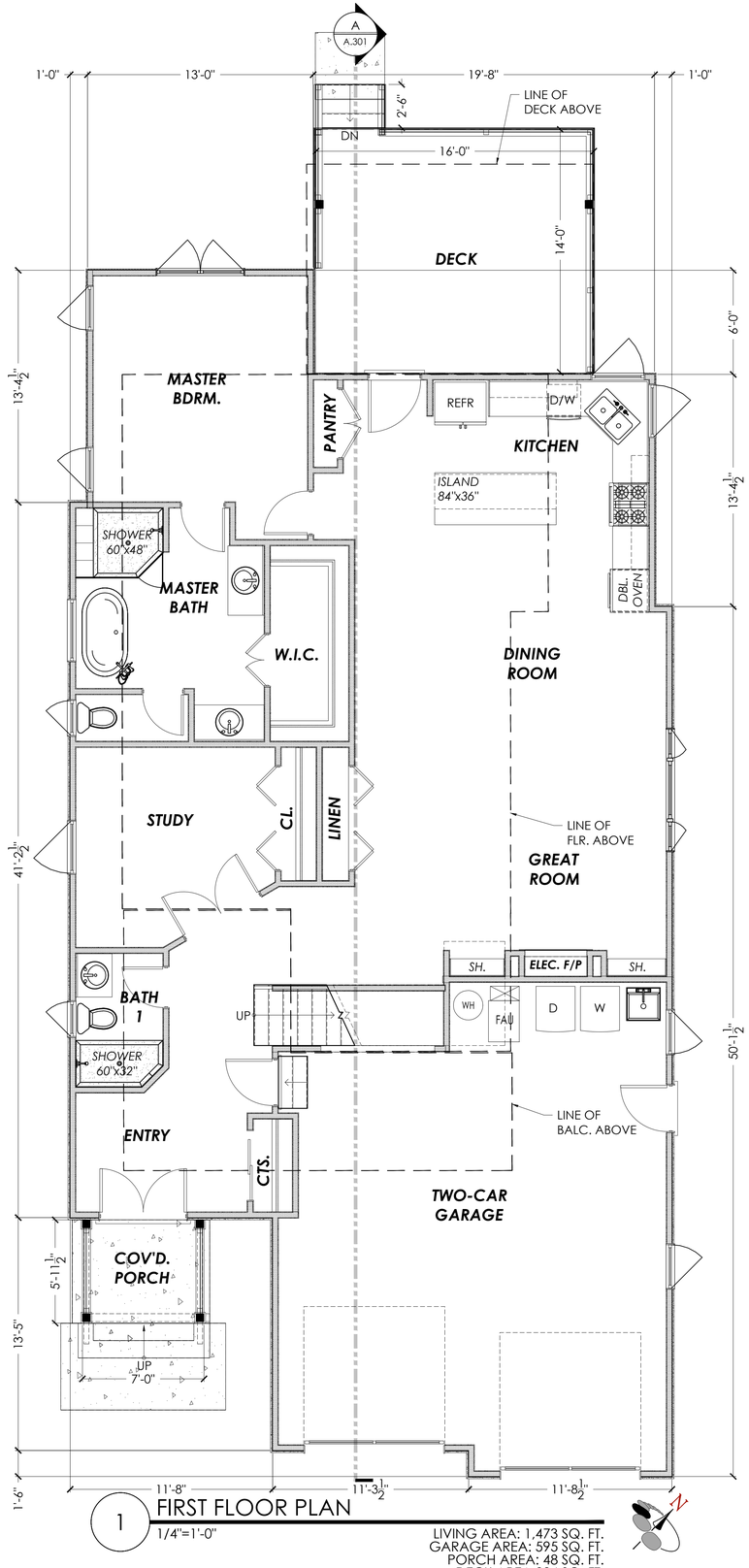
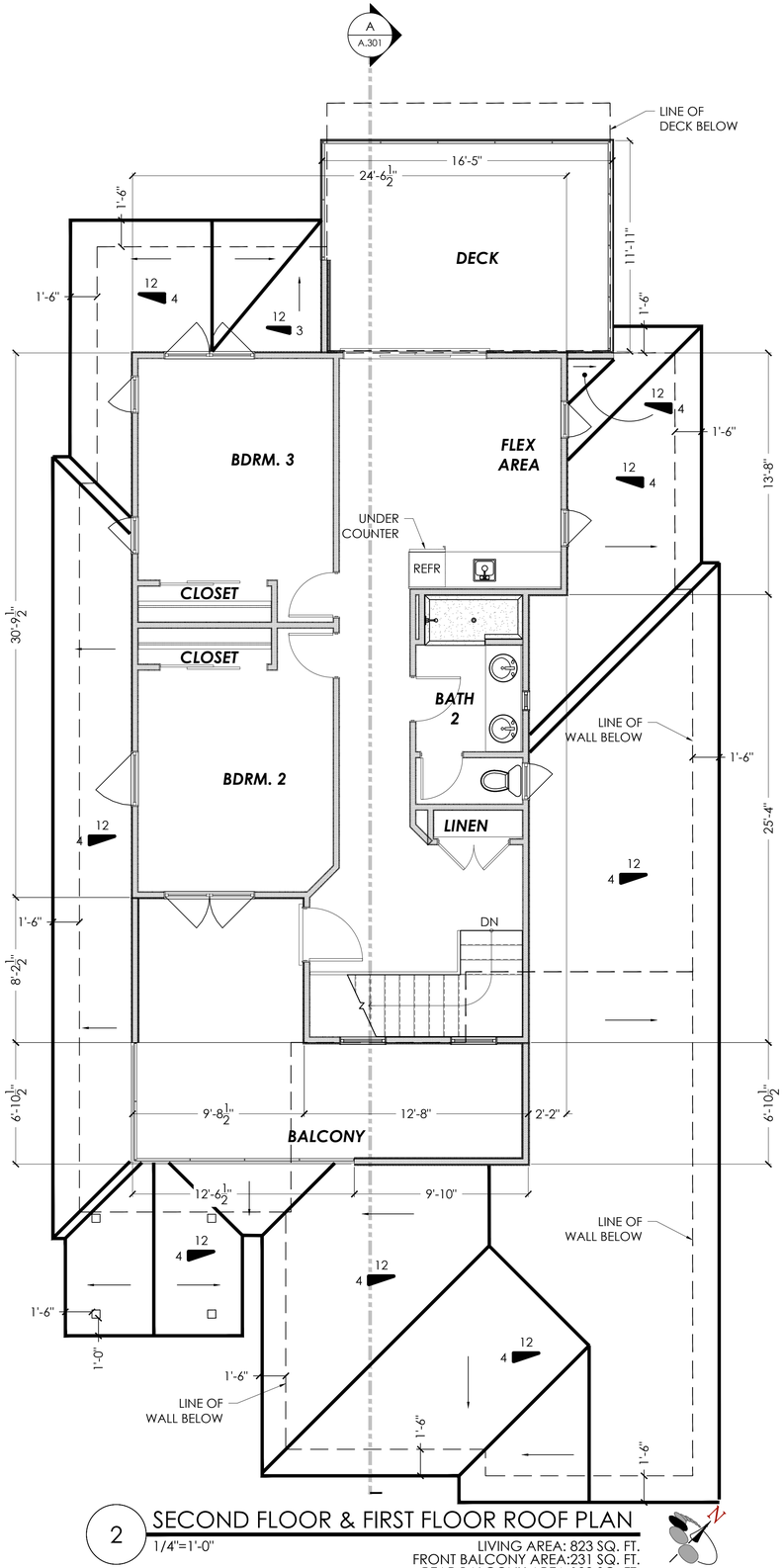


1 FIRST FLOOR PLAN

1/4"=1'-0"

LIVING AREA: 1,473 SQ. FT.
GARAGE AREA: 595 SQ. FT.
PORCH AREA: 48 SQ. FT.
DECK AREA:224 SQ. FT.



2 SECOND FLOOR & FIRST FLOOR ROOF PLAN

1/4"=1'-0"

LIVING AREA: 823 SQ. FT.
FRONT BALCONY AREA:231 SQ. FT.
REAR BALCONY AREA:199 SQ. FT.

SHEET SIZE: 24" x 36"

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FIRST & SECOND FLOOR PLANS

SHEET NUMBER

A.101

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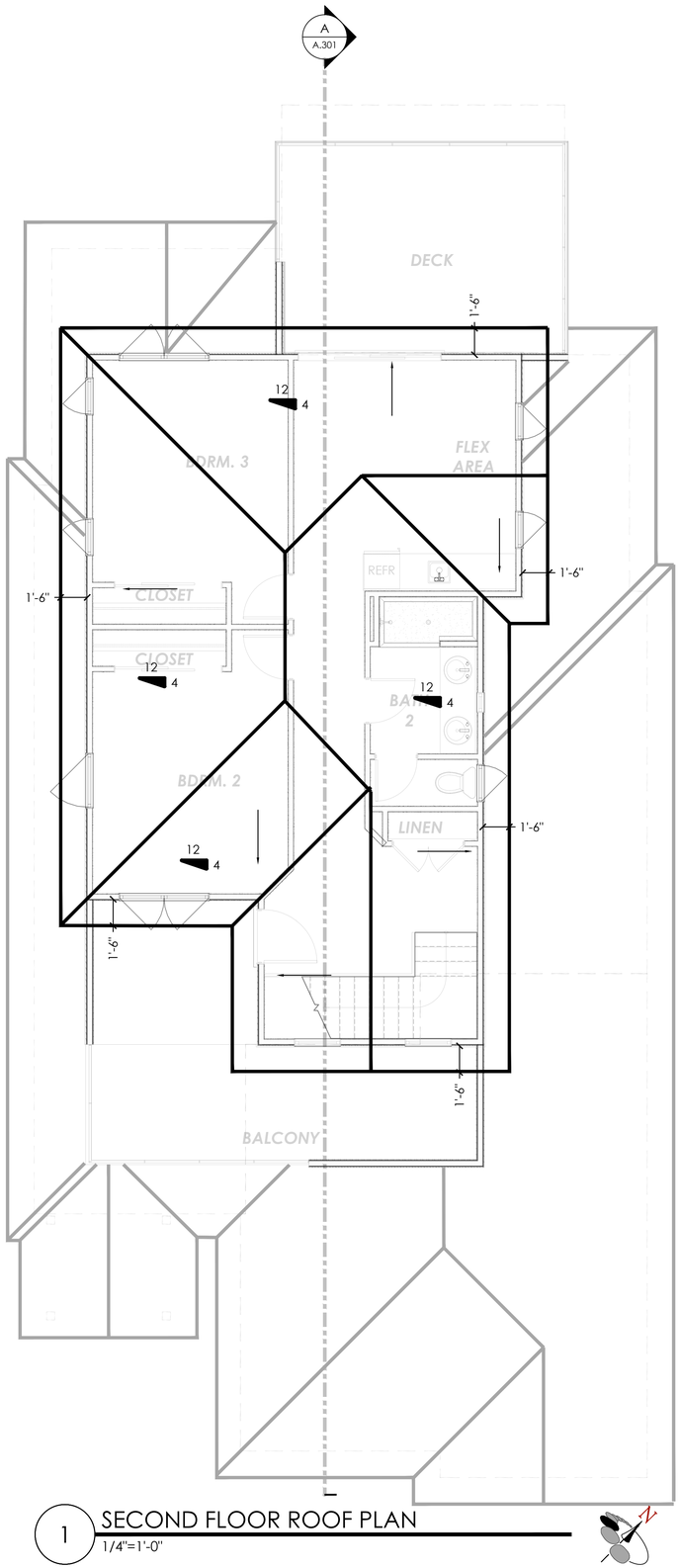

1 SECOND FLOOR ROOF PLAN
1/4"=1'-0"

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SECOND FLOOR
ROOF PLAN

SHEET NUMBER

A.102

SHEET SIZE: 24" X 36"

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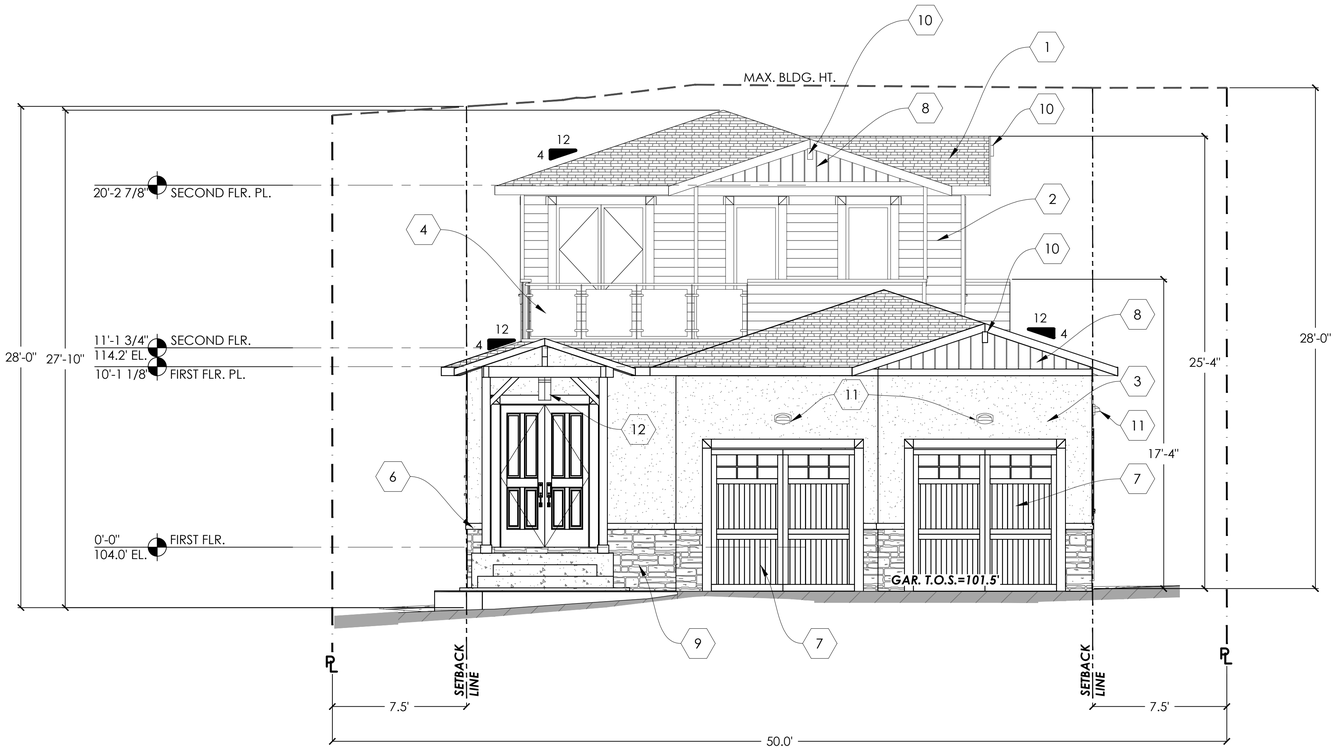

1 SOUTHEAST (FRONT) ELEVATION

1/4"=1'-0"

2 SOUTHWEST (LEFT SIDE) ELEVATION

1/4"=1'-0"

ELEVATION KEY NOTES

1. DIMENSIONAL COMPOSITION SHINGLES (TIMBERLINE "CHARCOAL").
2. 6" HORIZONTAL HARDIE LAP SIDING (BEHR N540-2 "GLITTER").
3. 3-COAT STUCCO (BEHR PPU18-06 "ULTRA PURE WHITE").
4. GLASS PANEL RAILING (WHITE RAILS).
5. COMPOSITE RAILING (BEHR PPU18-06 "ULTRA PURE WHITE").
6. 4" STUCCO BAND (BEHR PPU18-06 "ULTRA PURE WHITE").
7. METAL GARAGE DOOR (BEHR N540-2 "GLITTER").
8. 6" VERTICAL COMPOSITE LP SIDING (BEHR N540-2 "GLITTER").
9. STONE VENEER (CULTURED STONE CSV2025 "COBBLEFIELD GRAY").
10. 4x8 WOOD CORBEL (BEHR PPU18-06 "ULTRA PURE WHITE").
11. EXTERIOR WALL-MOUNT FIXTURE (POSSINI EURO XANE 11 IN., DARK SKY COMPLIANT).
12. EXTERIOR PENDANT LIGHT FIXTURE (CHAMBER 16 IN., DARK SKY COMPLIANT).

**ALL WINDOWS SHALL BE WHITE VINYL.*

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EXTERIOR ELEVATIONS

SHEET NUMBER

A.201

SHEET SIZE: 24" x 36"

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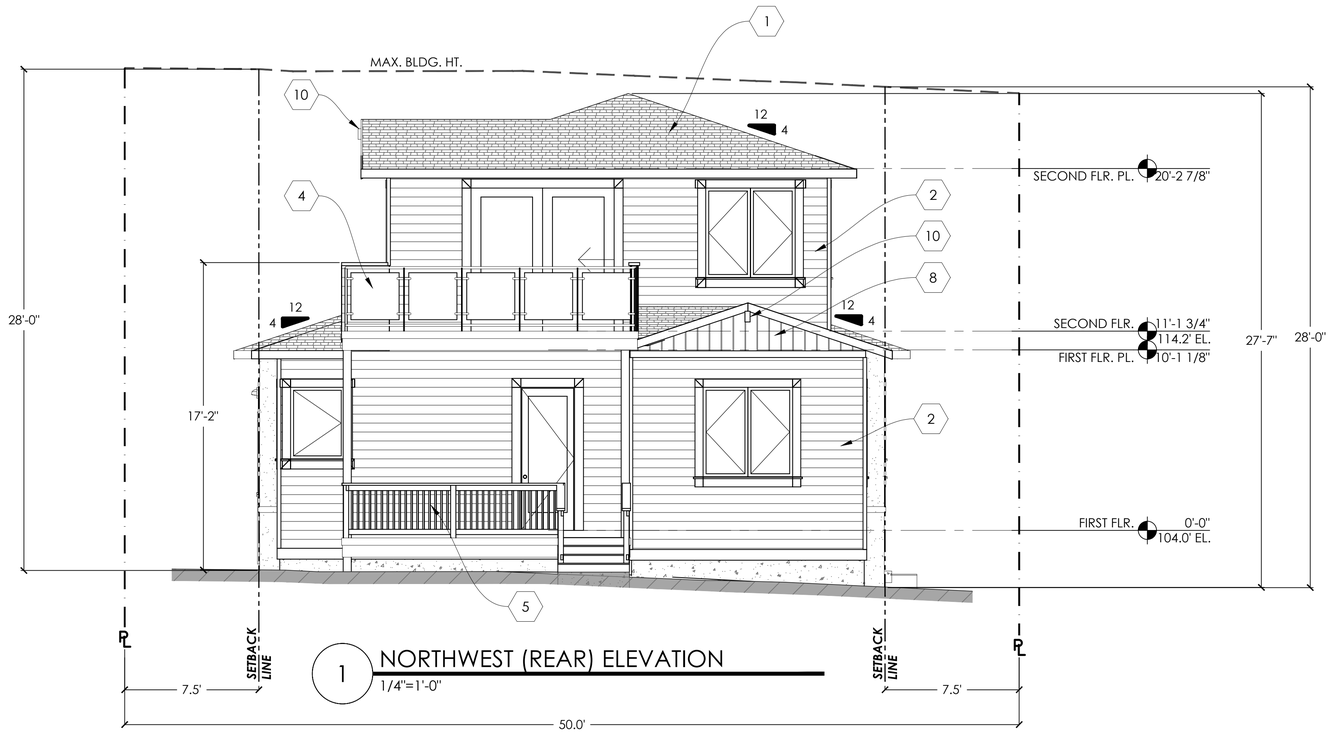
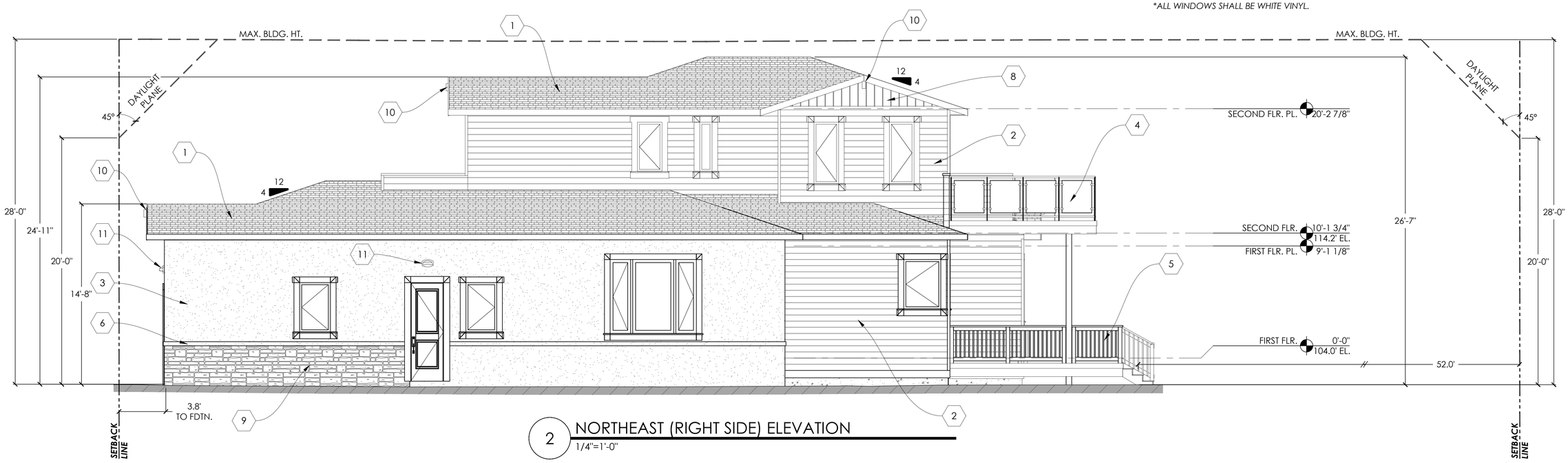


1 NORTHWEST (REAR) ELEVATION
1/4"=1'-0"



2 NORTHEAST (RIGHT SIDE) ELEVATION
1/4"=1'-0"

ELEVATION KEY NOTES

1. DIMENSIONAL COMPOSITION SHINGLES (TIMBERLINE "CHARCOAL").
2. 6" HORIZONTAL HARDIE LAP SIDING (BEHR N540-2 "GLITTER").
3. 3-COAT STUCCO (BEHR PPU18-06 "ULTRA PURE WHITE").
4. GLASS PANEL RAILING (WHITE RAILS).
5. COMPOSITE RAILING (BEHR PPU18-06 "ULTRA PURE WHITE").
6. 4" STUCCO BAND (BEHR PPU18-06 "ULTRA PURE WHITE").
7. METAL GARAGE DOOR (BEHR N540-2 "GLITTER").
8. 6" VERTICAL COMPOSITE LP SIDING (BEHR N540-2 "GLITTER").
9. STONE VENEER (CULTURED STONE CSV2025 "COBBLEFIELD GRAY").
10. 4x8 WOOD CORBEL (BEHR PPU18-06 "ULTRA PURE WHITE").
11. EXTERIOR WALL-MOUNT FIXTURE (POSSINI EURO XANE 11 IN., DARK SKY COMPLIANT).
12. EXTERIOR PENDANT LIGHT FIXTURE (CHAMBER 16 IN., DARK SKY COMPLIANT).

**ALL WINDOWS SHALL BE WHITE VINYL.*

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AGRANOV RESIDENCE
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PROJECT #200527

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EXTERIOR ELEVATIONS

SHEET NUMBER

A.202

SHEET SIZE: 24" x 36"

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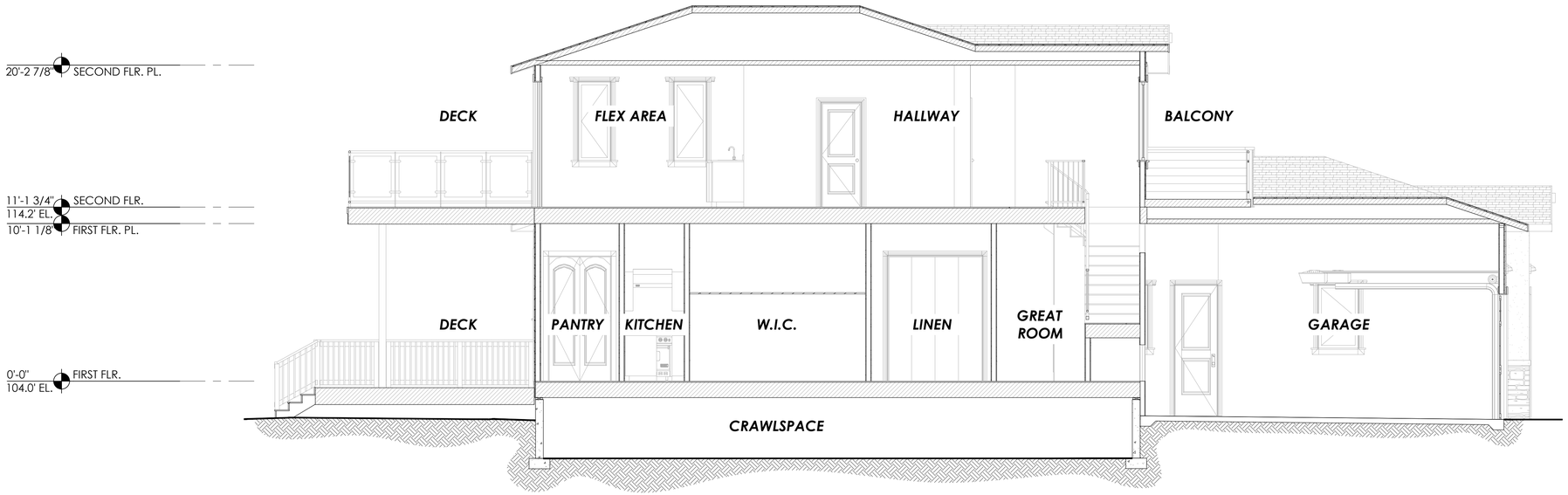

A CROSS-SECTION 'A'

1/4"=1'-0"

SHEET SIZE: 24" x 36"

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BLACKSTONE ARCHITECTURE

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AGRANOV RESIDENCE
NEW CUSTOM HOME

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BUILDING CROSS-SECTIONS

SHEET NUMBER

A.301

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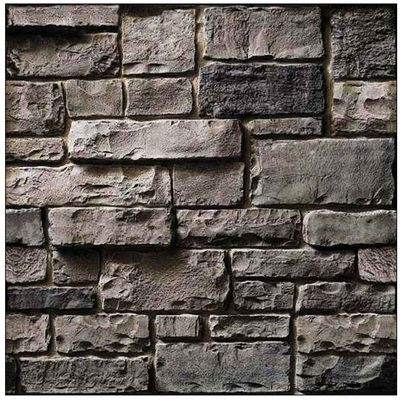
HORIZONTAL SIDING, VERTICAL SIDING, GARAGE DOORS

BEHR N540-2 "GLITTER"

STUCCO, TRIM, COMPOSITE DECKING/RAILING, WOOD CORBELS

BEHR PPU18-06 "ULTRA PURE WHITE"



STONE

CULTURED STONE CSV2025 "COBBLEFIELD GRAY"

ROOFING

TIMBERLINE "CHARCOAL"

SHEET SIZE: 24" x 36"

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BLACKSTONE ARCHITECTURE

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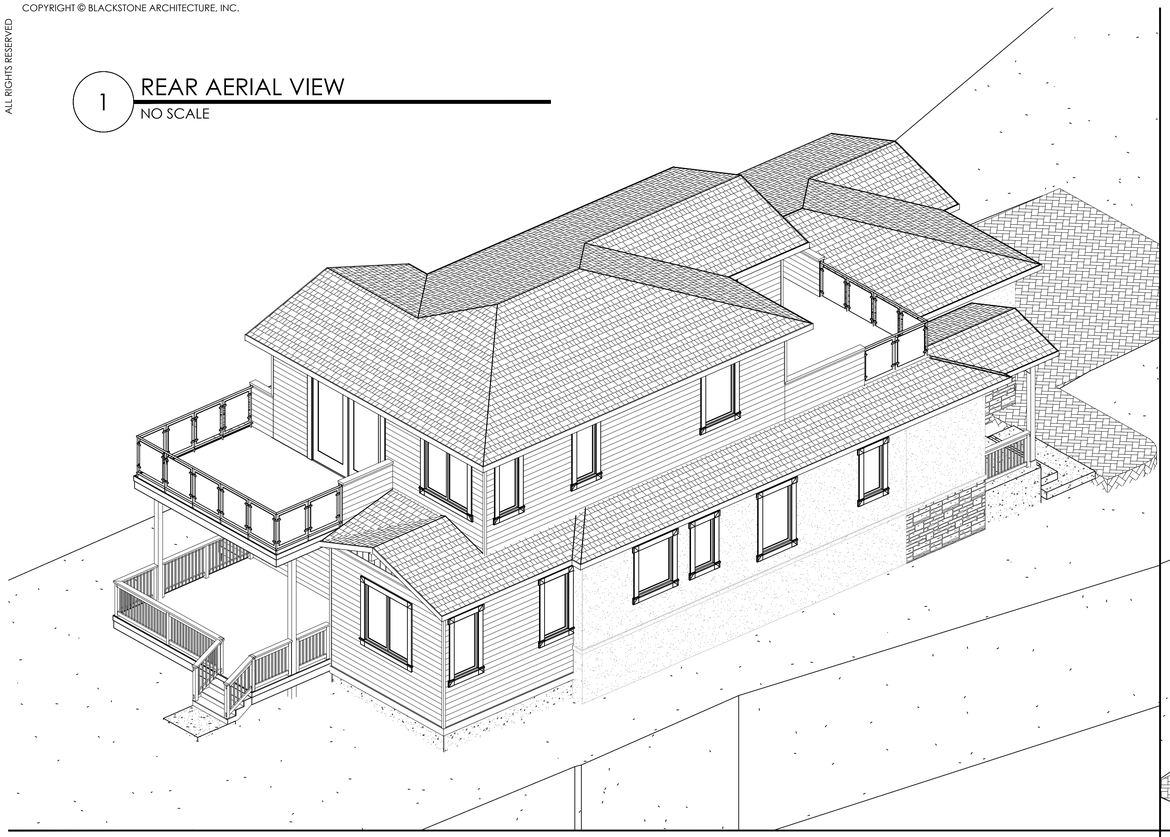
COLOR BOARD

SHEET NUMBER

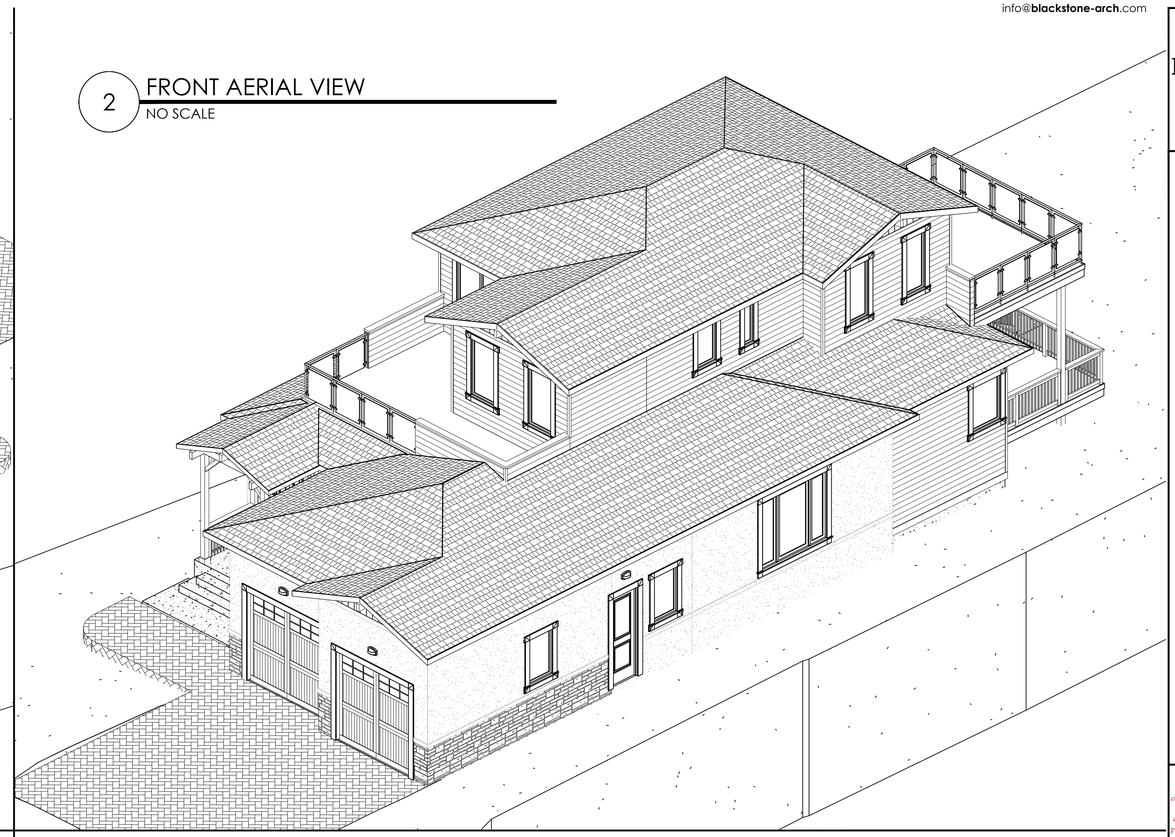
A.501

info@**blackstone-arch**.com

1 REAR AERIAL VIEW
NO SCALE



2 FRONT AERIAL VIEW
NO SCALE



3 REAR PERSPECTIVE VIEW
NO SCALE

4 FRONT PERSPECTIVE VIEW
NO SCALE

BLACKSTONE DESIGN

9331 Nile Court
Arvada, Colorado 80007
720.222.5009

AGRANOV RESIDENCE
NEW CUSTOM HOME

MIRAMAR DRIVE
HALF MOON BAY, CA 94019

DUTY OF COOPERATION

Release of these plans contemplates further cooperation among the owner, his contractor, and Blackstone Architecture ("BSA"). Design and construction are complex, and although BSA has performed its services with due care and diligence, perfection is not guaranteed. Communcation is imperfect, and every contingency cannot be anticipated. It is the responsibility of the builder, contractor, and owner of this project review these plans in full prior to construction in order to avoid discrepancies after construction has begun. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to BSA. Failure to notify BSA compounds misunderstanding and increases construction costs. A failure to cooperate by a simple notice to BSA shall relieve BSA from responsibility for all consequences. Changes made from the plans without the consent of BSA are unauthorized, and shall relieve the architect of responsibility for all consequences arising out of such changes.

PROJECT #200527

REV.	DATE	ISSUE	BY
	04.06.21	DESIGN REVIEW	PM
△			
△			
△			
△			
△			
△			

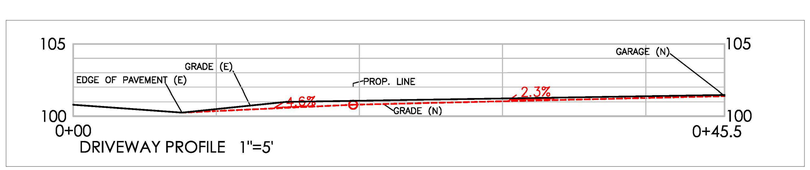
3-DIMENSIONAL VIEWS

SHEET NUMBER

A.901

SHEET SIZE: 24" x 36"

IF THIS DRAWING IS NOT PRINTED ON A 24"x36" SHEET, IT IS NOT TO SCALE



DRIVEWAY PROFILE 1"=5'

LEGEND

(E) CONTOUR

+102.04 EXISTING SPOT ELEVATION

101.4 PROPOSED SPOT ELEVATION

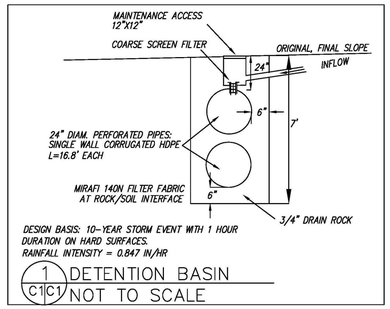
DS DOWNSPOUT

4" MIN SOLID DRAIN PIPE

SWALE

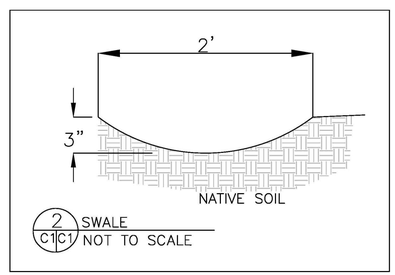
GENERAL NOTES

1. PLANS PREPARED AT THE REQUEST OF:
   GENNADIY AGRANOV, OWNER
2. TOPOGRAPHY BY S. MICALLEF, SURVEYED JUNE, 2020.
3. THIS IS NOT A BOUNDARY SURVEY.
4. ELEVATION DATUM ASSUMED.
5. THE GEOTECHNICAL REPORT:
GEOTECHNICAL REPORT FOR PROPOSED HOUSE, MIRAMAR DRIVE, MIRAMAR APN 048-054-220. DATE: JULY 23, 2020, BY SIGMA PRIME INC., PROJECT NO. 20-142 SHALL BE RETAINED ON THE CONSTRUCTION SITE. THE GEOTECHNICAL ENGINEER OF RECORD IS SIGMA PRIME GEOSCIENCES, INC., WITH THE CONTACT NUMBER (650)-728-3590 (SIGMAPRM@GMAIL.COM). THE CONTRACTOR MUST SHALL NOTIFY THE GEOTECHNICAL ENGINEER OF
RECORD AT LEAST 48 HOURS BEFORE CONSTRUCTION OF GEOTECHNICAL RELATED WORK. THE GEOTECHNICAL PART OF CONSTRUCTION WORK, INCLUDING BUT NOT LIMITED TO, ALL THE EARTHWORK AND FOUNDATION CONSTRUCTIONS, MUST SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER OF RECORD.
6. STORMWATER MANAGEMENT CONSTRUCTION INSPECTIONS SHALL BE SCHEDULED FOR APPLICABLE DRAINAGE INSPECTIONS, WHICH INCLUDE SITE CLEARANCE AND EROSION CONTROL MEASURES INSTALLATION AS WELL AS INSPECTION OF MAJOR DRAINAGE CONTAINMENT, TREATMENT, AND CONVEYANCE DEVICES BEFORE BEING BURIED (INCLUDING REQUIRED MATERIAL LABELS, E.G. PIPES, SUG-BGRADE MATERIALS, ETC.). PLEASE FOLLOW THE INSPECTION CARD INSTRUCTIONS AND PHONE NUMBER (650-295-3650) TO SCHEDULE COUNTY DRAINAGE INSPECTIONS ACCORDINGLY. THERE SHALL BE THREE INSPECTIONS: ONE FOR EROSION CONTROL INSTALLATION, ONE BEFORE DRAINAGE FACILITIES ARE BURIED, AND ONE FOR FINAL WALK AROUND.



DESIGN BASIS: 10-YEAR STORM EVENT WITH 1 HOUR DURATION ON HARD SURFACES.
RAINFALL INTENSITY = 0.847 IN/HR

1 C1C1 DETENTION BASIN
NOT TO SCALE



2 C1C1 SWALE
NOT TO SCALE

GRADING NOTES

CUT VOLUME : 40 CY (FOR FOUNDATION)
FILL VOLUME: 0 CY

VOLUMES ABOVE ARE APPROXIMATE.

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

ALL GRADING SHALL CONFORM TO LOCAL CODES AND ORDINANCES.

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

DRAINAGE NOTES

1. DRAINAGE INTENT: IT IS THE INTENT OF THE DRAINAGE SYSTEM TO CONVEY ROOF RUNOFF TO A SAFE LOCATION, AND TO MINIMIZE EXCESSIVE MOISTURE AROUND FOUNDATIONS. SLOPE ALL IMPERVIOUS SURFACES A MINIMUM OF 2% AWAY FROM BUILDING. DIRECT SLOPES SUCH THAT STORMWATER WILL NOT BE DIVERTED ONTO ADJACENT PROPERTIES.

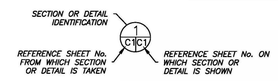
2. ALL DOWNSPOUT DRAIN LINES SHALL LEAD TO DETNETION BASIN, AS SHOWN.

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

4. RUNOFF SHALL NOT BE ALLOWED TO CROSS TO NEIGHBORING PROPERTIES. SWALES SHALL BE BUILT, AS SHOWN, TO PREVENT RUNOFF ACROSS PROPERTY LINES.

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

SECTION AND DETAIL CONVENTION



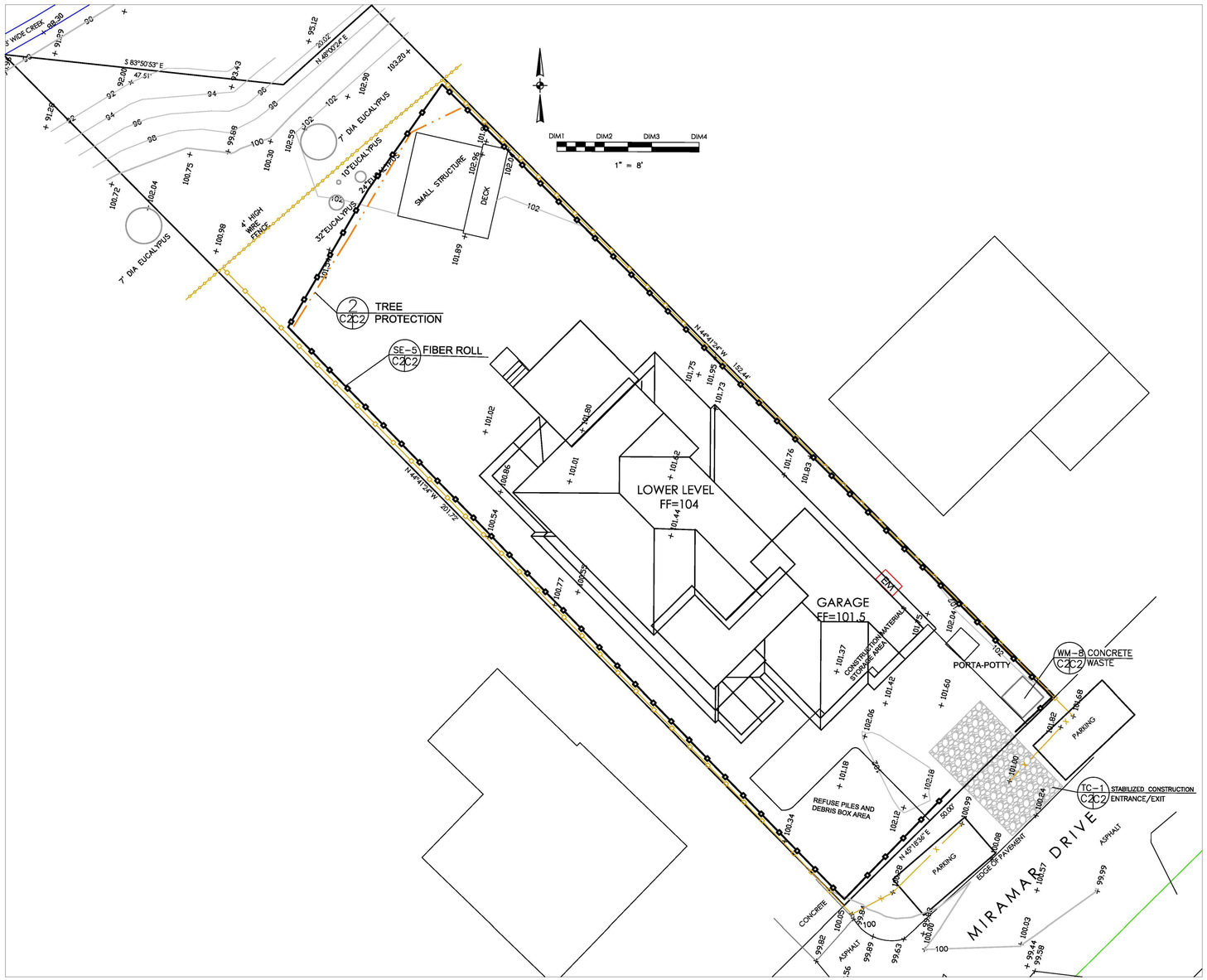
Sigma Prime Geosciences, Inc.
SIGMA PRIME GEOSCIENCES, INC.
332 PRINCETON AVENUE
HALF MOON BAY, CA 94019
(650) 728-3590
FAX 728-3593

DATE: 4-22-21
DRAWN BY: CMK
CHECKED BY: AZG
REV. DATE: 5-7-21
REV. DATE:
REV. DATE:

GRADING AND DRAINAGE PLAN

AGRANOV PROPERTY
MIRAMAR DRIVE
MIRAMAR
APN 048-054-220

SHEET
C-1

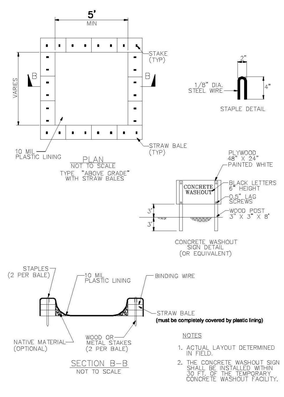


GENERAL EROSION AND SEDIMENT CONTROL NOTES

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

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

CONCRETE WASTE MANAGEMENT WM-8



EROSION CONTROL POINT OF CONTACT

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

NAME: GENNADIY AGRANOV

TITLE/QUALIFICATION: OWNER

PHONE: 408-674-0871

PHONE:

E-MAIL: AGRANOV@GMAIL.COM

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

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

DATE: 4-22-21
DRAWN BY: CMK
CHECKED BY: AZG
REV. DATE: 5-7-21
REV. DATE:
REV. DATE:

EROSION AND SEDIMENT CONTROL PLAN

AGRANOV PROPERTY
MIRAMAR DRIVE
MIRAMAR
APN 048-054-220

SHEET
C-2

TREE PROTECTION NOTES

1. TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO ANY GRADING AND REMAIN ON-SITE THROUGHOUT CONSRUCTION PROCESS.

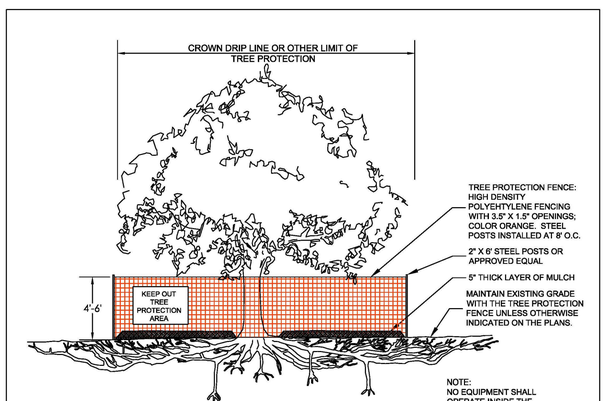
2. TREE PROTECTION FENCES SHALL BE INSTALLED AS CLOSE TO DRIP LINES AS POSSIBLE.

3. OWNER/BUILDER SHALL MAINTAIN TREE PROTECTION ZONES FREE OF EQUIPMENT AND MATERIALS STORAGE AND SHALL NOT CLEAN ANY EQUIPMENT WITHIN THESE AREAS.

4. ANY LARGE ROOTS THAT NEED TO BE CUT SHALL BE INSPECTED BY A CERTIFIED ARBORIST OR REGISTERED FORESTER PRIOR TO CUTTING, AND MONITORED AND DOCUMENTED.

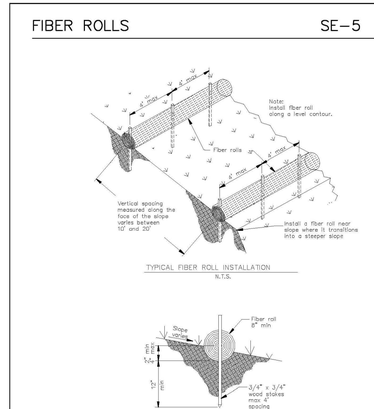
5. ROOTS TO BE CUT SHALL BE SEVERED WITH A SAW OR TOPPER.

6. PRE-CONSTRUCTION SITE INSPECTION WILL BE REQUIRED PRIOR TO ISSUANCE OF BUILDING PERMIT.



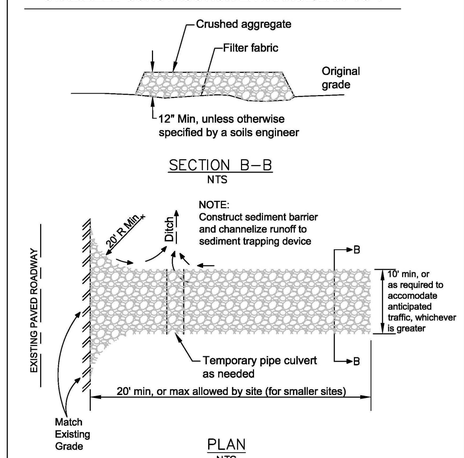
2 C2C2 TREE PROTECTION NOT TO SCALE

FIBER ROLLS SE-5



NOTES:
If more than one fiber roll is placed in a row, the rolls must be overlapped, not abutted.
Turn the ends of the fiber roll up-slope to prevent runoff from going around the roll.

STABILIZED CONSTRUCTION ENTRANCE/EXIT TC-1

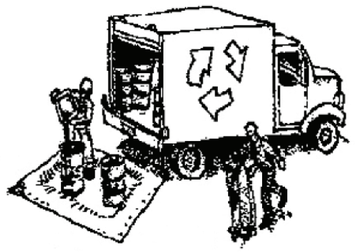


SAN MATEO COUNTYWIDE
Water Pollution Prevention Program
Clean Water. Healthy Community.

Construction Best Management Practices (BMPs)

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

Materials & Waste Management



Non-Hazardous Materials

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

Hazardous Materials

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

Waste Management

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

Construction Entrances and Perimeter

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

Equipment Management & Spill Control

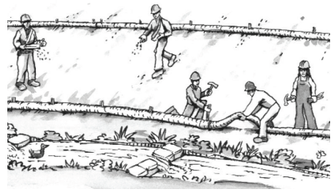
Maintenance and Parking

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

Spill Prevention and Control

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

Earthmoving



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

Contaminated Soils

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

Paving/Asphalt Work

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

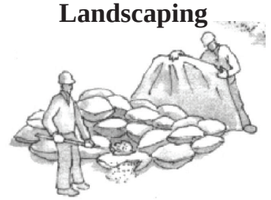
Sawcutting & Asphalt/Concrete Removal

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

Concrete, Grout & Mortar Application

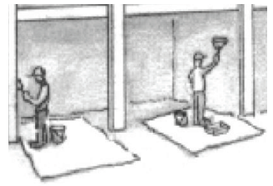
- ❑ Store concrete, grout, and mortar away from storm drains or waterways, and on pallets under cover to protect them from rain, runoff, and wind.
- ☒ Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and in a manner that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

Landscaping



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

Painting & Paint Removal



Painting Cleanup and Removal

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

Dewatering

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

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

Biological Resources Evaluation for APN 048-054-220, Half Moon Bay, San Mateo County, California

AUGUST 2020

PREPARED FOR

Gennadiy Agranove

PREPARED BY

SWCA Environmental Consultants

BIOLOGICAL RESOURCES EVALUATION FOR APN 048-054-220, HALF MOON BAY, SAN MATEO COUNTY, CALIFORNIA

Prepared for

Gennadiy Agranove
355 Miramar Dr.
Half Moon Bay, CA 94019

Prepared by

Chennie Castanon, Biologist and
Lincoln Allen, M.S., Senior Biologist

SWCA Environmental Consultants
60 Stone Pine Road Suite 100
Half Moon Bay, California 94019
(650) 440-4160
www.swca.com

SWCA Project No. 62496

August 2020

EXECUTIVE SUMMARY

SWCA Environmental Consultants (SWCA) has prepared this biological resource evaluation (BRE) report for Assessor's Parcel Number (APN) 048-054-220 in El Granada, San Mateo County, California (Project). The project site is located approximately 0.10 mile south of Highway 1, northeast of the intersection of Mirada Road and Miramar Drive in the residential community of El Granada. This report was prepared in accordance with Section 7.5 of the County of San Mateo (County) Local Coastal Program (LCP) Policies as well as the County's Biological Impact Form to support the County's development review process for potential residential development of the project site (Project). The purpose of this report is to document the existing environmental setting and potential biological resources within the project site (approximately 0.17 acre) as well as an additional biological study area (BSA) comprising a 200-foot buffer area encircling the project site.

The report includes identification and analysis of the Project's potential to affect sensitive biological resources, a description of recommended avoidance and mitigation measures, and review of the Project's consistency with applicable federal, state, and local environmental regulations and policies. For the purposes of this report the Project includes the construction of a single-family dwelling, accessory structures (i.e. porch, deck, 2-car garage) and driveway on the project site. The project will also include the removal of one mature Monterey pine (*Pinus radiata*; CNPS 1B.1) heritage tree (41.1 inches diameter at breast height [dbh]) that is located at the front of the lot (Precision Tree Care, Inc. 2020). The tree needs to be removed for reasons of public safety and constructability. The tree meets the definition of a "Protected Tree" as per Section 11,050. (h) and "Significant Tree" as per Section 12,012 under the San Mateo County Ordinance Code of the Planning and Building Division (County of San Mateo, 1977 and 2002). Although this tree needs to be removed for public safety concerns (i.e., it must be continuously trimmed to prevent it growing into overhead high voltage electrical lines), due to its potential status as a protected/significant tree, it may require a tree removal permit from the county planning department. The Project is within the California coastal zone, and would require a Coastal Development Permit (CDP).

Based on the results of the literature review and field survey, the project area and surrounding areas contain suitable habitat for nesting birds covered under the Migratory Bird Treaty Act and California Fish and Game Code. Arroyo de en Medio—an intermittent coastal stream is located within the BSA, and is likely jurisdictional under the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), California Department of Fish and Wildlife (CDFW), as well as the California Coastal Commission (CCC); furthermore, a riparian corridor located outside the project area would be considered "sensitive habitat" as defined by the County's LCP. The BSA, which includes a 200 foot area surrounding the project work area, has some potential to support one special-status plant species, Choris' popcornflower (*Plagiobothrys chorisianus var. chorisianus*), and this plant species was found to be unlikely to occur within the surrounding area. However, suitable habitat for this species does not occur within the project work area, and therefore this species would not occur onsite. Additionally, six special-status wildlife species, including two federally and state-listed wildlife species (California red-legged frog [*Rana aurora draytonii*] and San Francisco garter snake [*Thamnophis sirtalis tetrataenia*]) have some potential to occur within the BSA. No special-status plant or animal species were observed during the field survey. There are no U.S. Fish and Wildlife Service (USFWS)-designated critical habitats within the BSA.

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CONTENTS

Appendices

Figures

Tables

1 INTRODUCTION

1.1 Purpose of Biological Resource Evaluation

This Biological Resources Evaluation (BRE) has been prepared by SWCA Environmental Consultants (SWCA) to identify the existing environmental setting and sensitive biological resources, including Sensitive Habitats as defined by the County of San Mateo (County) Local Coastal Program (LCP) (County of San Mateo 2013), that may be impacted by the construction of a single-family residence on Assessor's Parcel Number (APN) 048-054-220, El Granada, San Mateo County, California (Project). This report was prepared in accordance with Section 7.5 of the County LCP Policies and the County's Biological Impact Form to support the County's development review process for potential residential development of the Project site.

Biological resources considered include sensitive and common plants and animals, habitats and sensitive natural communities, wildlife movement corridors, and water features potentially subject to federal or state jurisdiction. This BRE describes the methodologies used to assess the biological resources known to occur and with the potential to occur at the project site. This report includes the results from a desktop review, literature search, and a field survey of the project site, including areas within a 200-foot buffer, referred to hereafter as the biological study area (BSA).

1.2 Project Location and Description

The Project is located on a lot (APN 048-054-220) within the census-designated community of El Granada in San Mateo County, California (Figure 1). The lot is the result of subdividing the parcel on the neighboring residential property immediately east of the project. As such, the lot on which the project is planned was formerly part of the same property as 355 Miramar Drive, and contains landscaped areas that were previously associated with that residence (Figure 2). The community of El Granada is located approximately 3 miles north of the city of Half Moon Bay and 25 miles south of San Francisco. Situated on the Half Moon Bay, California U.S. Geological Survey (USGS) 7.5-minute quadrangle map, the Project is located within the California Coastal Zone in Section 18, Township 5 South, Range 5 West (see Figure 1).

The Project proposes the construction of a single family residence within an approximately 0.17-acre area, including accessory structures (i.e., porch, deck, and two-car garage) and a concrete driveway. Photographs of the project site are included in Appendix A. The project will also include the removal of one mature Monterey pine (*Pinus radiata*; California Native Plant Society (CNPS) Rare Plant Rank 1B.1) heritage tree (41.1 inches diameter at breast height [dbh]) that is located at the front of the lot (Precision Tree Care, Inc. 2020). The tree needs to be removed for reasons of public safety and constructability. The tree meets the definition of a "Protected Tree" as per Section 11,050. (h) and "Significant Tree" as per Section 12,012 under the San Mateo County Ordinance Code of the Planning and Building Division (County of San Mateo 1977, 2002). Although this tree needs to be removed for public safety concerns (e.g., it must be continuously trimmed to prevent it growing into overhead high voltage electrical lines), due to its potential status as a protected/significant tree, it may require a tree removal permit from the County Planning and Building Department. Eucalyptus (*Eucalyptus* spp.) trees at the back of the property may require some limb trimming where they overhang the work area. This trimming activity may require additional protection measures , as determined by the County Planning and Building Department. An Arborist Report, which includes the removal of the pine tree at the front of the property, has been prepared for the Project (Precision Tree Care, Inc., 2020).

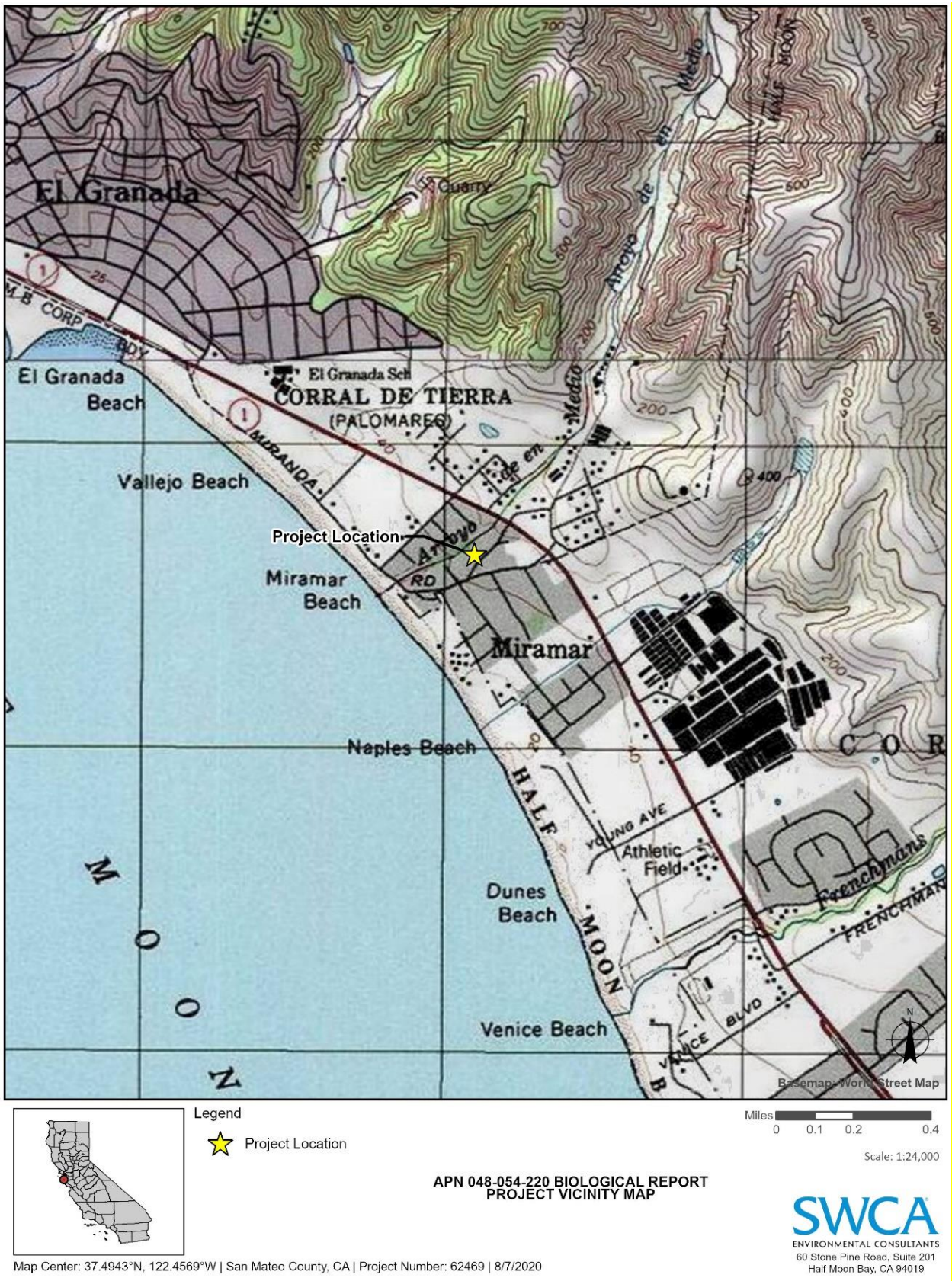

Figure 1. Project vicinity map.

Figure 2. Project location map.

2 REGULATORY SETTING

2.1 Federal

2.1.1 *Clean Water Act*

The purpose of the Clean Water Act (CWA) (33 United States Code [USC] 1251 et seq.) is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." The U.S. Army Corps of Engineers (USACE) has the authority to permit the discharge of dredged or fill material in "waters of the U.S." (WOTUS) under Section 404 of the CWA and to permit work and the placement of structures in navigable WOTUS under Sections 9 and 10 of the Rivers and Harbors Act (33 Code of Federal Regulations [CFR] 320–332). On June 22, 2015, the USACE and the U.S. Environmental Protection Agency (USEPA) published the Clean Water Rule: Definition of "Waters of the United States"; Final Rule (40 CFR Parts 110, 112, 116, 117, 122, 230, 232, 300, 302, and 401). This rule was intended to clarify which waters are considered WOTUS and are therefore subject to jurisdiction. In February 2019, the USEPA and USACE issued a new draft rule, now the Navigable Waters Protection Rule (NWPR), providing a revised definition of WOTUS. This final rule was published April 21, 2020 (*Federal Register* 85:22250), and became effective June 22, 2020 (USACE 2020). Accordingly, all approved jurisdictional determinations (AJDs) will be processed by the USACE using the NWPR criteria and guidelines. The most significant change in the new rule is the exclusion of all ephemeral waters, and a new set of criteria for which wetland and non-wetland waters are considered "adjacent" to other waters of the U.S. (and therefore jurisdictional).

The new NWPR defines four categories of federally regulated waters and wetlands (and 12 categories of exclusions that are not subject to regulation under the CWA). The four categories of WOTUS and wetlands are:

1. The territorial seas and traditional navigable waters;
2. Perennial and intermittent tributaries to those waters;
3. Certain lakes, ponds, and impoundments; and
4. Wetlands adjacent to jurisdictional waters.

The USACE delineates non-wetland waters in the Arid West Region based on the extent of the Ordinary High Water Mark (OHWM) in ephemeral and intermittent channels, following guidance published in *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008a).

Section 401 of the CWA requires all Section 404 permit actions to obtain a state Water Quality Certification or waiver. Section 401 Water Quality Certification is issued by the state's nine Regional Water Quality Control Boards (RWQCBs).

2.1.2 *Federal Endangered Species Act*

The Federal Endangered Species Act (FESA) of 1973 is administered by the U.S. Fish and Wildlife Service (USFWS) and prevents the unlawful "take" of listed fish, wildlife, and plant species. Section 9(a)(1)(B) specifically states take of species listed as threatened or endangered is unlawful. Take is defined as any action that would harass, harm, pursue, hunt, wound, shoot, kill, trap, capture, or collect any threatened or endangered species. Section 10 of the FESA allows the USFWS to issue incidental take

permits if take of a listed species may occur during otherwise lawful activities. Section 10(a)(1)(B) requires a Habitat Conservation Plan for an incidental take permit on non-federal lands.

2.1.3 *Migratory Bird Treaty Act*

The Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703–711) prohibits taking, killing, possessing, transporting, and importing of migratory birds, parts of migratory birds, and their eggs and nests, except when specifically authorized by the U.S. Department of the Interior. As used in the act, the term "take" is defined as meaning, "to pursue, hunt, capture, collect, kill or attempt to pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires."

2.2 State

2.2.1 *California Endangered Species Act*

The California Endangered Species Act (CESA) of 1984 and the Native Plant Protection Act (NPPA) of 1977 ensure legal protection for plants listed as rare or endangered and wildlife listed as threatened or endangered. The California Department of Fish and Wildlife (CDFW) regulates activities that may result in the "take" of such species. Take of state-listed species would require a Section 2081 incidental take permit from CDFW. This process requires submittal of a sensitive species study and permit application package to CDFW. If CDFW concurs that impacts to a state-listed species would likely occur as a result of a proposed project, alternatives and measures to avoid or reduce the impacts must be identified in a Section 2081 permit to allow for incidental take authorization. CDFW may also include compensatory mitigation (mitigation/conservation bank) requirements for impacts to habitat for listed plants and wildlife.

2.2.2 *California Fish and Game Code*

2.2.2.1 FULLY PROTECTED SPECIES

The California Fish and Game Code (CFGC) designates certain fish and wildlife species as "fully protected" under Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish). Fully protected species may not be taken or possessed at any time, and no permits may be issued for incidental take of these species.

2.2.2.2 PROTECTION FOR BIRDS

According to CFGC Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird (with limited exceptions). Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds of prey). Section 3513 essentially overlaps with the MBTA, prohibiting the take or possession of any migratory non-game bird. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by the CDFW.

2.2.2.3 PROTECTIONS FOR PLANTS

The NPPA of 1977 (CFGC Sections 1900–1913) includes provisions that prohibit the take of endangered or rare native plants. CDFW administers the NPPA and generally regards as rare many plant species with a California Rare Plant Rank (CRPR) of 1A, 1B, 2A, and 2B in the CNPS Inventory of Rare and Endangered Vascular Plants of California (CNPS 2020a). In addition, sometimes CRPR 3 and 4 plants are considered if the population has local significance in the area and is impacted by a project. CFGC Section

191(b) includes a specific provision to allow for the incidental removal of endangered or rare plant species, if not otherwise salvaged by CDFW, within a right-of-way to allow a public utility to fulfill its obligation to provide service to the public.

2.2.2.4 LAKE AND STREAMBED ALTERATION AGREEMENT

Section 1602 of the CFGC requires that a Lake and Streambed Alteration Application be submitted to CDFW for "An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake." Evaluation of CDFW jurisdiction followed guidance in the CFGC and *A Review of Stream Processes and Forms in Dryland Watersheds* (CDFW 2010). In general, under CFGC Section 1602, CDFW jurisdiction extends to the maximum extent or expression of a stream on the landscape (CDFW 2010).

2.2.3 *California Species of Special Concern*

Species of Special Concern (SSC) is a category conferred by CDFW to fish and wildlife species that meet the state definition of threatened or endangered, but have not been formally listed (e.g., federally or state-listed species), or are considered at risk of qualifying for threatened or endangered status in the future based on known threats. SSC is an administrative classification only, but these species are considered "special-status" for the purposes of this report (see Section 3.1.1 and 3.1.2 of this document).

2.2.4 *Porter-Cologne Water Control Act*

The RWQCB regulates activities pursuant to Section 401(a)(1) of the CWA. Section 401 specifies that certification from the state is required for any applicant requesting a federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities that may result in any discharge into navigable waters. Through the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), the RWQCB asserts jurisdiction over "waters of the State" (WOTS), which are generally identical in extent to WOTUS, but may also include waterbodies not currently under federal jurisdiction, such as isolated, intrastate waters. The Porter-Cologne Act defines WOTS as "surface water or ground water, including saline waters, within the boundaries of the state."

2.3 Local

2.3.1 *California Coastal Act and County of San Mateo Local Coastal Program*

The California Coastal Act (CCA) of 1976 governs the decisions made by the California Coastal Commission (CCC) regarding issues such as shoreline public access and recreation, terrestrial and marine habitat protection, water quality, commercial fisheries, and development within the California coastal zone. Development within the coastal zone would require either a Coastal Development Permit (CDP) or a CDP Exemption from the CCC or from a local government with a CCC-certified LCP.

The County LCP was developed and approved by the County Board of Supervisors and the CCC in 1980. In April 1981, the County assumed responsibility for implementing the CCA in the unincorporated areas of San Mateo County, including issuance of CDPs. For a permit to be issued, the development must comply with the policies of the LCP and those ordinances adopted to implement the LCP. Section 7 of the

LCP prohibits any land use or development which would have significant adverse impacts on Sensitive Habitats, which are defined as:

> . . . any area in which plant or animal life or their habitats are either rare or especially valuable and any area which meets one of the following criteria: (1) habitats containing or supporting "rare and endangered" species as defined by the State Fish and Game Commission, (2) all perennial and intermittent streams and their tributaries, (3) coastal tide lands and marshes, (4) coastal and offshore areas containing breeding or nesting sites and coastal areas used by migratory and resident water-associated birds for resting areas and feeding, (5) areas used for scientific study and research concerning fish and wildlife, (6) lakes and ponds and adjacent shore habitat, (7) existing game and wildlife refuges and reserves, and (8) sand dunes.
>
> Sensitive habitat areas include, but are not limited to, riparian corridors, wetlands, marine habitats, sand dunes, sea cliffs, and habitats supporting rare, endangered, and unique species.

3 METHODOLOGY

3.1 Literature and Records Review

SWCA performed an extensive literature review to gain familiarity with the Project and to identify potential sensitive biological features including Sensitive Habitat as defined by the County LCP, target flora and fauna species, and wetlands or other waters that have the potential to occur in the BSA (see Figure 2). The review consisted of a records search of current versions of the CDFW California Natural Diversity Database (CNDDB 2020) (Appendix B); the USFWS online Information for Planning and Consultation (IPaC) species list system (USFWS 2020b) (Appendix C); and the CNPS online Inventory of Rare and Endangered Plants (CNPS 2020a) within the Half Moon Bay, California USGS 7.5-minute quadrangle. The CNDDB search was further refined to a 2-mile search surrounding the Project. The USFWS Critical Habitat Mapper (USFWS 2020a) was queried to identify critical habitat for terrestrial and aquatic species near the BSA. All of the listed species and habitats found in the literature review were compiled (Tables 1 and 2) for use during the field survey as described in Section 3.2 below.

The U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) Soil Survey for San Mateo County (NRCS 2020a), National Wetlands Inventory (NWI) Database (USFWS 2020c), USGS National Hydrography Dataset (NHD) (USGS 2020), USGS topographic quadrangles, and aerial imagery were also reviewed to provide additional information for soils and potential wetland features known to occur in the BSA.

3.1.1 *Special-Status Plant Species*

For the purposes of this report, special-status plant species are defined as the following:

- Plants listed or proposed for listing as threatened or endangered under the FESA (50 CFR 17.12 for listed plants and various notices in the *Federal Register* for proposed species).
- Plants that are candidates for possible future listing as threatened or endangered under the FESA.
- Plants considered by the CNPS to be "rare, threatened, or endangered" in California (CRPR 1A, 1B, 2A, and 2B in CNPS 2020a).

- Plants listed by the CNPS as plants about which we need more information and plants of limited distribution (CRPR 3 and 4 in CNPS 2020a).
- Plants listed or proposed for listing by the State of California as threatened or endangered under the CESA (14 California Code of Regulations [CCR] Section 670.5).
- Plants listed under the NPPA (CFGC Section 1900 et seq.).
- Plants considered sensitive by other federal agencies (i.e., U.S. Forest Service [USFS], U.S. Bureau of Land Management), state and local agencies, or jurisdictions.

3.1.2 *Special-Status Animal Species*

For the purposes of this report, special-status animal species are defined as the following:

- Animals listed or proposed for listing as threatened or endangered under the FESA (50 CFR 17.11 for listed animals and various notices in the *Federal Register* for proposed species).
- Animals that are candidates for possible future listing as threatened or endangered under the FESA.
- Animals listed or proposed for listing by the State of California as threatened and endangered under the CESA (14 CCR 670.5).
- Animal species of special concern to CDFW.
- Animal species that are fully protected in California (CFGC Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

3.2 Field Survey

SWCA biologist Kathryn Allan conducted a field survey on July 22, 2020. The purpose of the field survey was to: (1) characterize the existing conditions on and adjacent to the project site; and (2) identify those biological resources that could potentially be impacted by development on the project site. The survey included walking transects that covered the property boundary as well as the surrounding 200-foot BSA (see Figure 2). Areas that were inaccessible due to private property and/or hazardous conditions were surveyed using binoculars. The biologist assessed the BSA for its potential to support special-status plant and wildlife species, potential wetland features, habitat types, wildlife movement corridors, and other Sensitive Habitats as defined by the County LCP. *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012) was referenced to identify plant species. A compendium of plant and animal species observed during the field survey within the BSA is included in Appendix D.

Table 1. Special-Status Plant Species Evaluated for Potential Occurrence[1]

Species Name	General Habitat Description[3]	Legal Status Federal/State/ CNPS Status[2]	Rationale for Potential Occurrence
coastal marsh milk-vetch (*Astragalus pycnostachyus* var. *pycnostachyus*)	Perennial herb that occurs in coastal marshes, seeps, and adjacent sand along the northern and central California coast. Elevation: 0–150 meters. Flower season: April–October.	--/--/1B.2	**Absent:** Suitable habitat does not exist in the BSA. One CNDDB occurrence recorded (2004) approximately 1.9 miles NW of the project in an unknown location along the coastline.
Choris' popcornflower (*Plagiobothrys chorisianus var. chorisianus*)	Annual herb that occurs in chaparral, coastal prairie, coastal scrub, and wetland-riparian communities. Elevation: 15–160 meters. Flower season: March–June.	--/--/1B.2	**Unlikely to occur:** Species not observed during the field survey, which was conducted outside the appropriate bloom period. While areas outside of the proposed work area may contain suitable habitat, the project area lacks suitable habit for this species, including but not limited to coastal scrub, native grassland, and/or mesic conditions. As such, this species would not occur onsite. No CNDDB occurrences recorded within 2 miles of the project.
Kellogg's horkelia (*Horkelia cuneata* var. *sericea*)	Perennial herb that occurs in closed-cone coniferous forest, chaparral, coastal dunes, and coastal scrub. Elevation: 10–200 meters. Flower season: April–September.	--/--/1B.1	**Absent:** Suitable habitat does not exist in the BSA. One CNDDB occurrence recorded (2000) approximately 1.8 miles SE of the Project along a ridgetop.
Oregon polemonium (*Polemonium carneum*)	Perennial herb that occurs in coastal prairie, coastal scrub, and lower montane coniferous forest. Elevation: 0–1830 meters. Flower season: April–September.	--/--/2B.2	**Absent:** Suitable habitat does not exist in the BSA. No CNDDB occurrences recorded within 2 miles of the Project.
perennial goldfields (*Lasthenia californica ssp. macranth*)	Annual herb that occurs in grassland and dunes along immediate coast and northern coastal scrub. Elevation: <500 meters. Flower season: January–November.	--/--/1B.2	**Absent:** Suitable habitat does not exist in the BSA. One CNDDB occurrence recorded (2015) approximately 2 miles SW of the Project along the edge of a marine terrace bluff top.
rose leptosiphon (*Leptosiphon rosaceus*)	Annual herb that occurs in coastal bluff scrub. Elevation: 0–100 meters. Flower season: April–July.	--/--/1B.1	**Absent:** Suitable habitat does not exist in the BSA. No CNDDB occurrences recorded within 2 miles of the Project.
San Mateo tree lupine (*Lupinus arboreus var. eximius*)	Annual herb that occurs in coastal bluff scrub. Elevation: 0–100 meters. Flower season: April–July.	--/--/3.2	**Absent:** Suitable habitat does not exist in the BSA. No CNDDB occurrences recorded within 2 miles of the Project.

[1] List of plant species based on CNPS and CNDDB results from searches of Half Moon Bay, California USGS 7.5-minute quadrangle.
[2] Listing status based on CNDDB and CNPS data (queried in July 2020).
[3] Habitat associations and blooming periods based on the Jepson Online Interchange for California Floristics (queried in July 2020).

Status Codes: -- = No status; FE = Federally listed endangered, FT = Federally listed threatened, FC = Federal candidate for listing; SE = California state-listed endangered; ST = California state-listed threatened; SCE = California candidate endangered

California Rare Plant Ranking: 1A = Plants presumed extirpated in California and either rare or extinct elsewhere; 1B = Plants rare, threatened, or endangered in California and elsewhere; 2A = Plants presumed extirpated in California, but common elsewhere; 2B = Plants rare, threatened, or endangered in California, but more common elsewhere

CRPR Threat Ranks: 0.1 = Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat); 0.2 = Moderately threatened in California (20-80% of occurrences threatened / moderate degree and immediacy of threat); 0.3 = Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat)

Potential for Occurrence Ratings:
Absent: Suitable habitat does not exist in the BSA, the species is restricted to or known to be present only within a specific area outside of the BSA.
Unlikely to occur: The species is not likely to occur in the BSA based on the following considerations: lack of suitable habitat and features that are required to satisfy the life history requirements of the species; presence of barriers to migration/dispersal; presence of predators or invasive species that inhibit survival or occupation; or lack of hibernacula, hibernation areas, or aestivation areas on site.
Potential to occur: There is a possibility that the species can be found in the BSA based on the following conditions: the BSA falls within the range of the species, suitable habitat is present, but no records of sighting are located within or near (2 miles) the BSA, or the records are old and unreliable and it is undetermined whether the habitat is currently occupied.
Likely to occur: The species has a strong likelihood to be found in the BSA on the following considerations: records of occurrence have been documented within or near (2 miles) the BSA, the BSA falls within

the range of the species, suitable habitat is present, but it is undetermined whether the habitat is currently occupied.
Present: Reconnaissance-level, focused, or protocol-level surveys documented the occurrence or observation of a species in the BSA.

Table 2. Special-Status Animal Species Evaluated for Potential Occurrence[1]

Species Name	General Habitat Associations	Legal Status Federal/State/ Other[2]	Rationale for Potential Occurrence
Amphibians			
California red-legged frog (*Rana draytonii*)	Inhabit permanent and temporary pools, streams, freshwater seeps, and marshes in lowlands and foothills occurring from sea level to 6,500 feet. Use adjacent upland habitat for foraging and refuge. Breed during the wet season from December to March. Lay between 300 and 4,000 eggs in a large cluster that are attached to plants near the water surface. Eggs hatch after about 4 weeks and undergo metamorphosis in 4 to 7 months.	FT/SSC	**Potential to occur:** Suitable non-breeding habitat (migration/dispersal) observed in the BSA, along the Arroyo de en Medio riparian corridor. Species not observed during the field survey. Three CNDDB occurrences (2001, 2007, and 2016) recorded within 2 miles of the BSA.
Reptiles			
green sea turtle (*Chelonia mydas*)	Globally distributed and generally found in tropical and subtropical waters along continental coasts and islands between 30 degrees north and 30 degrees south. Nesting occurs in over 80 countries throughout the year (though not throughout the year at each specific location). Thought to inhabit coastal areas of more than 140 countries.	FT/--/--	**Absent:** Suitable habitat does not exist in the BSA. No CNDDB occurrences recorded within 2 miles of the BSA
San Francisco garter snake (*Thamnophis sirtalis tetrataenia*)	Uses a wide range of habitats. Prefers grassland or wetland near ponds, marshes, and sloughs. May overwinter in upland areas away from water.	FE/SE, FP	**Potential to occur:** Suitable dispersal habitat observed in the BSA, along the Arroyo de en Medio riparian corridor. Species not observed during the field survey. No CNDDB occurrences recorded within 2 miles of the BSA.
Birds			
burrowing owl (*Athene cunicularia*)	Small diurnal owl with yellow eyes and long legs that lives in burrows in grasslands, rangelands, agricultural areas, deserts, and other open, dry areas with low vegetation. Often occupies small mammal burrows.	MBTA/SSC	**Absent:** Suitable habitat does not exist in the BSA. No CNDDB occurrences recorded within 2 miles of the Project.
California least tern (*Sternula antillarum browni* [recently changed from *Sterna antillarum browni*])	Feeds primarily in shallow estuaries or lagoons where small fish are abundant. Prefers undisturbed nest sites on open, sandy or gravelly shores near shallow-water feeding areas in estuaries.	FE, MBTA/SE, FP	**Absent:** Suitable habitat does not exist in the BSA. No CNDDB occurrences recorded within 2 miles of the Project.
marbled murrelet (*Brachyramphus marmoratus*)	Pacific seabird that winters and forages at sea and breeds in coniferous forests near coasts. Nests on large horizontal branches high up in trees that are generally greater than 200 years old.	FT/SE	**Absent:** Suitable habitat does not exist in the BSA. No CNDDB occurrences recorded within 2 miles of the Project.

Species Name	General Habitat Associations	Legal Status Federal/State/ Other[2]	Rationale for Potential Occurrence
short-tailed albatross (*Phoebastria albatrus*)	Large seabird, 33–36 inches in length with a 7-foot wingspan. It has light yellowish-brown feathers on its head and the back of its neck and a white chest and belly. Lives on the open ocean waters and islands.	FE; MBTA/SSC	**Absent:** Suitable habitat does not exist in the BSA. No CNDDB occurrences recorded within 2 miles of the Project.
saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*)	Frequents low, dense vegetation near water. Nests usually placed on or within 8 centimeters (3 inches) of ground. May be over water, in emergent aquatic vegetation, dense shrubs, or other dense growth.	MBTA/SSC	**Potential to occur:** Marginal foraging habitat within Arroyo de en Medio riparian corridor. Species not observed during the field survey. Two CNDDB occurrences (1990) recorded within 2 miles of the Project.
western snowy plover (*Charadrius alexandrinus nivosus*)	Found in shores, peninsulas, offshore islands, bays, estuaries, and rivers along the Pacific Coast. Breeding sites entail coastal beaches above the high tide line, sand spits, dune-backed beaches, and river bars.	FT, MBTA/SSC	**Absent:** Suitable habitat does not exist in the BSA. No CNDDB occurrences recorded within 2 miles of the Project.
Mammals			
American badger (*Taxidea taxus*)	Occurs in herbaceous, shrub, and open stages of most habitats with dry, friable soils. Uncommon, permanent resident found throughout most of California.	--/SSC	**Absent:** Suitable habitat does not exist in the BSA. No CNDDB occurrences recorded within 2 miles of the Project.
San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*)	Medium-sized rodents found in grasslands, scrub, and wooded areas throughout the San Francisco Bay area.	--/SSC	**Unlikely to occur:** Species and nest middens not observed during the field survey. No CNDDB occurrences recorded within 2 miles of the Project.
Fish			
delta smelt (*Hypomesus transpaci*)	Endemic to the upper San Francisco Estuary and can be found throughout the delta region. Typically found in the shallow (<3 meters) open waters of the delta, where they feed on plankton.	FT/SE	**Absent:** Suitable habitat does not exist in the BSA. No CNDDB occurrences recorded within 2 miles of the Project.
tidewater goby (*Eucyclogobius newberryi*)	Found primarily in waters of coastal lagoons, estuaries, and marshes. Primarily prefer brackish water in shallow lagoons where water is fairly still but not stagnant and will spend their entire life cycle in this environment.	FE/SSC	**Absent:** Suitable habitat does not exist in the BSA. No CNDDB occurrences recorded within 2 miles of the Project.
steelhead – Central California Coast Distinct Population Segment (DPS) (*Oncorhynchus mykiss irideus*)	Occurs in clear, cool water with abundant in-stream cover, well-vegetated stream margins, relatively stable water flow, and a 1:1 pool-to-riffle ratio.	FT/--/--	**Absent:** Suitable habitat does not exist in the BSA. No CNDDB occurrences recorded within 2 miles of the Project.
Invertebrates			
Monarch - California overwintering population (*Danaus plexippus* pop. 1)	Occurs along the coast from northern Mendocino to Baja California, Mexico. Winter roosts in wind-protected tree groves (eucalyptus, Monterey pine, and cypress), with nectar and water sources nearby.	--/--/S	**Unlikely to occur:** There are no wind-protected tree groves on-site or within vicinity of the BSA. Two CNDDB occurrences (1998) recorded within 2 miles of Project. This species was not observed during biological survey.

Species Name	General Habitat Associations	Legal Status Federal/State/ Other[2]	Rationale for Potential Occurrence
western bumble bee *(Bombus occidentalis)*	Historically found from the Pacific coast to the Colorado Rocky Mountains; severe population decline west of the Sierra Cascade Crest, but populations are known from the Great Basin, the Rocky Mountains, and Alaska. Several subspecies have been suggested. Select food plant genera: *Melilotus, Cirsium, Trifolium, Centaurea, Chrysothamnus, Eriogonum*	--/SCE/S	**Unlikely to occur:** Marginal dispersal habitat may occur within vicinity of the BSA. One historical CNDDB occurrence (1953) recorded within 2 miles of BSA. This species was not observed during biological survey.

[1] List of animal species based on CNDDB searches of USGS 7.5-minute quadrangle—Half Moon Bay.
[2] Listing status based on CDFW CNDDB State & Federally Listed Endangered & Threatened Animals of California List, August 2019; and CDFW Special Animal List, July 2020.

Status Codes: -- = No Status; FE = Federally Listed Endangered, FT = Federally Listed Threatened, FC = Federal Candidate for Listing; SE = California State-Listed Endangered, ST = California State-Listed Threatened, SCE = California Candidate Endangered, DL = Delisted, FP = CDFW Fully Protected, SSC = CDFW Species of Special Concern, SA= Not formally listed but included in CDFW "Special Animal" List; S = USFS - Sensitive

Potential for Occurrence Ratings:
Absent: Suitable habitat does not exist in the BSA, the species is restricted to or known to be present only within a specific area outside of the BSA.
Unlikely to occur: The species is not likely to occur in the BSA based on the following considerations: lack of suitable habitat and features that are required to satisfy the life history requirements of the species; presence of barriers to migration/dispersal; presence of predators or invasive species that inhibit survival or occupation; or lack of hibernacula, hibernation areas, or aestivation areas on site.
Potential to occur: There is a possibility that the species can be found in the BSA based on the following conditions: the BSA falls within the range of the species, suitable habitat is present, but no records of sighting are located within or near (2 miles) the BSA, or the records are old and unreliable and it is undetermined whether the habitat is currently occupied.
Likely to occur: The species has a strong likelihood to be found in the BSA on the following considerations: records of occurrence have been documented within or near (2 miles) the BSA, the BSA falls within the range of the species, suitable habitat is present, but it is undetermined whether the habitat is currently occupied.

4 RESULTS

4.1 Soils, Topography and Elevation

The topography within the BSA is nearly flat (approximately 5% grade) except where it slopes northeast toward Arroyo de en Medio, an intermittent stream located outside the Project boundary. The elevation is approximately 39 feet above mean sea level According to the NRCS Web Soil Survey, the primary soils in the BSA consist of Denison Loam (approximately 93.3% total area of the BSA) and Gullied Land (approximately 6.7% total area of the BSA), which is located to the northeast of the Project. Both soil types are typical of alluvial plains and terraces adjacent to the Pacific Ocean. Both soils mapped within the BSA do not meet the hydric criteria (NRCS 2020b).

4.2 Habitat Types

Descriptions of plant communities within the BSA use the naming conventions of the *Preliminary Description of Terrestrial Natural Communities of California* (Holland 1986) and include *A Manual of California Vegetation* (Sawyer et al. 2009; CNPS 2020b) for comparison. The plant community classifications were cross referenced with the CNDDB to determine what communities are recognized as "sensitive" by CDFW. No CDFW sensitive communities were observed in the BSA. Figure 3 illustrates the vegetation communities traversed by the Project.

The BSA encompasses a mixture of paved road, developed areas, ornamental plants, ruderal vegetation, and natural habitats. The project work area encompasses approximately 0.17 acre. The BSA, includes land composed of urban/developed areas (which includes the proposed work area) (approximately 2.12 acres), Central Coast Arroyo Willow Riparian Forest (approximately 0.35 acre) habitat, and eucalyptus woodland (0.38-acre) (see Figures 2 and 3).

4.2.1 *Urban/Developed*

Urban/developed habitat is found in regularly and highly disturbed areas, including areas that have been developed and/or include landscaping, such as trees, shrubs, ornamental plants, and lawns. Vegetation density, canopy cover, and species composition varies based on the structure and composition of the developed area. Vegetation may include native or exotic species, or a combination of both.

Developed or urban areas within the BSA include landscaping and residential areas along Miramar Drive within the adjacent residential community. Cypress and Monterey pine trees are located throughout the urban / residential community surrounding the site. One planted Monterey pine tree (Precision Tree Care, Inc., 2020) is located on the southwest corner of the project site and is planned for removal to prevent safety and constructability concerns. Urban habitats found within the BSA are not likely to support special-status species due to the high level of landscape alteration and human activity. The mosaic composition of planter boxes, invasive plant species and ornamental shrubs and trees observed within the project site as well as the existing fence line that surrounds the parcel creates obstructions for connectivity to any "sensitive habitats" as defined by the County's LCP. Additionally, because the lot on which the project is planned was formerly part of the same property as 355 Miramar Drive, it contains disturbed, landscaped ground cover, and does not contain sensitive habitat. As such, the project work areas do not contain habitats "supporting rare, endangered, and unique species." Furthermore, the Project and associated construction activities are not anticipated to result in adverse effects to adjacent sensitive habitats since: (1) these areas will be avoided by the Project; and (2) avoidance and minimization measures provided in Section 5 of this BRE will be implemented.

Figure 3. Biological resources map.

4.2.2 *Central Coast Arroyo Willow Riparian Forest*

Central Coast arroyo willow riparian forest is typically dense, low, closed-canopy broadleafed winter-deciduous riparian forests dominated by arroyo willow (*Salix lasiolepis*). This community is found in moist to saturated sandy or gravelly soil, especially on bottomlands or around dune slack ponds within the coastal fog incursion zone (Holland 1986).

Central Coast arroyo willow riparian forest is located primarily on the upper reaches of Arroyo de en Medio, an intermittent coastal stream located in the northern and eastern portions of the BSA (see Figure 3). The willow community continues along the north side of the drainage channel as it transverses downstream (i.e., westward), but the density is reduced to isolated pockets of willows, including isolated stands, as the habitat structure transitions into a eucalyptus woodland on the south side of the drainage channel. Although the vegetation structure changes from a willow riparian forest to a eucalyptus woodland within the BSA (see Figure 3), some single willow trees are present within the herbaceous understory of the eucalyptus woodland. The Arroyo De En Medio is identified as a coastal stream by the USFWS NWI program and is considered "sensitive habitat" as defined by the County's LCP, and the dominance of arroyo willow on the eastern and northern extent of the stream channel is likely sufficient to meet the criteria of a CCC one parameter wetland.

The Project and associated construction activities are not anticipated to result in adverse effects to Central Coast arroyo willow riparian forest areas since: (1) these areas occur outside the Project footprint and will be avoided by the Project; and (2) avoidance and minimization measures provided in Section 5 of this BRE will be implemented.

4.2.3 *Eucalyptus Woodland*

The eucalyptus woodland is comprised of introduced blue gum eucalyptus (*Eucalyptus globulus*) and occurs primarily along the upland areas of the southern bank of the intermittent stream located north of the project area. Some of the eucalyptus trees along the southern side of the stream have canopies that extend over the northern portion of the project site. As such, it is possible that some of these eucalyptus branches will need to be trimmed to allow for construction work. Dense garden nasturtium (*Tropaeolum majus*), California blackberry (*Rubus ursinus*), red elderberry (*Sambucus racemosa*), cape ivy (*Delairea odorata*), and escaped cultivated shrubs dominate the understory within the woodland and encroach upon the intermittent stream. A notable landscape disturbance within the streambed of the intermittent stream is an existing/makeshift dam approximately 3 feet high made of concrete cinderblocks and plywood. The location of this dam is approximately 50 feet north the Project boundary within the stream channel. This structure was likely placed to impede or control water flow. It is likely the artificial barrier impedes hydrological connectivity between upstream and downstream areas.

The eucalyptus woodland, and corresponding understory found within the BSA are not likely to support special-status species, specifically the California red-legged frog (CRLF) (*Rana draytonii*) and San Francisco garter snake (SFGS) (*Thamnophis sirtalis tetrataenia*) due to the lack of suitable breeding and foraging habitats. Moreover, the dense layer of ground-sprawling cultivars and other invasive plant species found within the streambed channel and the presence of significant barriers (e.g., roadways, fences, housing) surrounding the area may prohibit dispersal to upland habitats. While the eucalyptus woodland, and corresponding understory along the coastal stream is considered sensitive habitat, the Project and associated construction activities are not anticipated to result in adverse effects to any natural habitats, including the coastal stream since: (1) these areas will be avoided by the Project; and (2) avoidance and minimization measures provided in Section 5 will be implemented for the Project.

4.3 Critical Habitat

There is no federally designated critical habitat for FESA-listed species within or immediately adjacent to the BSA (USFWS 2020a). Nearby critical habitats include areas for the federally threatened CRLF, which occurs approximately 0.90 mile east of the BSA; the federally threatened steelhead central California coast distinct population segment (DPS) (*Oncorhynchus mykiss irideus*) that occurs along the upper reaches of Frenchman's Creek and Pilarcitos Creek, both coastal streams that are approximately 0.90 and 1.85 miles south, respectively, of the BSA; and the federally threatened western snowy plover (*Charadrius alexandrinus nivosus*), located approximately 0.85 mile south of the BSA (Appendix C).

4.4 Sensitive Species with Potential to Occur

4.4.1 *Special-Status Plants*

Based on the CNDDB query and a review of existing literature for the Project, seven special-status plant species have been documented to occur in the Half Moon Bay, California USGS 7.5-minute quadrangle (see Appendix B and Table 1). Because the plant list presented in Appendix B is considered regional, SWCA evaluated the species in the plant list to identify which special-status plant species have the potential to occur within the BSA. This analysis compared the known habitat requirements of the seven special-status plant species to the BSA's existing conditions, elevation, and soils. The evaluation also took into consideration which species occur within 2 miles of the BSA.

Based on site-specific habitat conditions, no special-status plant species were determined to be present, likely to occur, or have potential to occur within the BSA. One special-status plant species, Choris' popcornflower (*Plagiobothrys chorisianus* var. *chorisianus*; CRPR 1B.2), was determined to be unlikely to occur within the BSA (see Table 1). The remaining plants were determined to be absent from the BSA based on lack of suitable habitat in the BSA, or based on the fact that the species is restricted to or known to be present only within a specific area outside of the BSA.

As currently proposed, the Project work area will be limited to the urban/developed portions of the BSA. The landscaped/developed areas within and surrounding the Project area are regularly disturbed (e.g., mowed, landscaped, converted to urban gardens) and do not provide suitable habitat conditions for Choris' popcornflower. The intermittent stream located just north of the Project (i.e., Arroyo de en Medio) is the only area within the BSA that could potentially support Choris' popcornflower. However, this area occurs outside of the Project boundary and is separated from the Project by dense, invasive herbaceous overgrowth/ground cover, as well as a metal fence that runs along the north side of the Project area. The project area lacks suitable habit for this species, including but not limited to coastal scrub, native grassland, and/or mesic conditions. As such, this species would not occur onsite, and no impacts to this species are expected due to project activities. Additionally, no CNDDB records of this species have been documented within 2 miles of the BSA.

4.4.2 *Special-Status Animals*

Based on a CNDDB query and a review of existing literature, 16 special-status animal species have been documented in the Half Moon Bay, California USGS 7.5-minute quadrangle as having the potential to occur within the BSA (see Appendix B and Table 2). Because the animal list presented in Appendix B is considered regional, an analysis of the range and habitat preferences of those animal species was conducted to identify which special-status wildlife species have the potential to occur within the BSA. The evaluation also took into consideration which species occur within 2 miles of the BSA.

Based on site-specific conditions, it was determined that six special-status animal species have the potential to occur within the BSA, or are unlikely to occur within the BSA. Special-status species ecology descriptions and rationale for potential to occur in the BSA are provided in the paragraphs below and in Table 2. The remaining 10 animal species were determined to be absent from the BSA because either suitable habitat does not exist in the BSA, or the species is restricted to or known to be present only within a specific area outside of the BSA.

The following federal and/or state-listed animal species are considered to have potential to occur, or be unlikely to occur within the project area and BSA:

- California red-legged frog (*Rana draytonii*): federally threatened, CDFW SSC
- San Francisco garter snake (*Thamnophis sirtalis tetrataenia*): federally and state endangered, CDFW fully protected (FP)
- San Francisco dusky-footed woodrat *(Neotoma fuscipes annectens*): CDFW SSC
- Saltmarsh common yellowthroat (*Geothylpis trichas sinuosa*): CDFW SSC
- Monarch butterfly - California overwintering population (*Danaus plexippus* pop. 1): USFS Sensitive [S])
- Western bumble bee (*Bombus occidentalis*): State candidate for Listing as Endangered [SCE])

In accordance with San Mateo County's Biological Impact Form General Requirements Part D, invertebrates are not included in the discussion below, since 1) sensitive invertebrate species are not expected to be impacted by project activities, and 2) there are no special situations or circumstances pertaining to invertebrate species which would require additional discussion.

4.4.2.1 CALIFORNIA RED-LEGGED FROG (*RANA DRAYTONII*)

CRLF is a federally threatened species and CDFW SSC that occurs in various habitats during its life cycle. Breeding areas include aquatic habitats such as lagoons, streams, and natural and human-made ponds. The species prefers aquatic habitats with little or no flow, the presence of surface water to at least early June, surface water depths to at least 2.3 feet, and the presence of emergent vegetation (e.g., cattails and bulrush). During periods of wet weather, some individuals may make overland dispersals through adjacent upland habitats of distances up to 1 mile (USFWS 2002). Upland habitats including small mammal burrows and woody debris can also be used as refuge during the summer if water is scarce or unavailable (Jennings and Hayes 1994). CRLF typically travel between sites and are unaffected by topography and vegetation types during migration. Dispersal habitat makes it possible for CRLF to locate new breeding and non-breeding sites and is crucial for conservation of the species.

Three CRLF occurrences have been recorded within 2 miles of the BSA between 2001 and 2016 (CNDDB 2020). The nearest CNDDB record indicates a CRLF was observed along Frenchman's Creek in 2007, approximately 0.9 mile to the south (see Appendix B). Although the landscape within the BSA is primarily a residential community, Arroyo de en Medio is an intermittent coastal stream that may serve as a migration corridor between upland aquatic habitat and coastal bluff habitat. In addition, the eucalyptus forest and willow riparian community adjacent to the Project may provide suitable dispersal habitat for this species. Based on the life history for this species, known occurrences within 2 miles of the Project, and the presence of suitable non-breeding habitat within the vicinity of the BSA, it was determined that there is potential for CRLF to occur within the BSA, especially during or after rain events. However, the developed and disturbed nature within the project boundary diminishes habitat quality for foraging or aestivation for this species. As such, this species is not anticipated to occur within the project boundary.

With the implementation of avoidance and minimization measures provided in Section 5, no adverse effects to CRLF are anticipated to occur as a result of the Project.

4.4.2.2 SAN FRANCISCO GARTER SNAKE (*THAMNOPHIS SIRTALIS TETRATAENIA*)

The federally and state endangered SFGS historical range is entirely within San Mateo County. The two main components of SFGS habitat are: (1) wetlands supporting its prey species (e.g., CRLF and Pacific chorus frog [*Pseudacris regilla*]); and (2) surrounding uplands that support small mammal burrows used by the snakes for escape cover (USFWS 2006). SFGS inhabit various aquatic habitats, including reservoirs, freshwater marshes, creeks, drainage ditches, ponds, and lakes. Grasslands are also an important upland habitat for this species, as they provide areas for thermoregulation and cover. Prey items for this species include CRLF, Pacific chorus frogs, and earthworms. Small mammal burrows are used by SFGS during hibernation. During the warm days of summer, most activity occurs during the morning and afternoon. Preferred nocturnal retreats are thought to be holes, especially mammal burrows, crevices, and surface objects (USFWS 2007).

No CNDDB occurrences have been recorded within 2 miles of the BSA. While freshwater emergent wetlands and ponds associated with SFGS habitat are absent in the BSA, the intermittent stream (Arroyo de en Medio), may provide suitable dispersal habitat. Burrows could not be detected within the eucalyptus forest and the central coast willow riparian forest due to the thick layer of garden nasturtium, California blackberry, and cape ivy vegetative cover. Small burrows were observed in the disturbed areas of the project site but no SFGS were observed. Based on suitable dispersal habitat along the Arroyo de en Medio riparian corridor adjacent to the Project, it was determined that there is potential for SFGS to occur within the BSA. However, the lack of aquatic habitat that supports breeding populations of their primary prey and the disturbed nature within the project boundary diminishes habitat quality for foraging or aestivation for this species. Therefore, foraging or aestivation activities by this species are not anticipated to occur within the Project boundary. With the implementation of avoidance and minimization measures provided in Section 5, impacts to SFGS are not anticipated to occur as a result of the Project.

4.4.2.3 SAN FRANCISCO DUSKY-FOOTED WOODRAT (*NEOTOMA FUSCIPES ANNECTENS*)

The San Francisco dusky-footed woodrat is a CDFW SSC that lives in a variety of brushy and forested habitats in California and the Arid West. Woodrats build complex mounded stick houses ranging from 4 to 8 feet in diameter and up to 6 feet in height, with multiple chambers inside. Evergreen and other thick-leaved trees and shrubs are important habitat components for this species (California State University, Stanislaus 2006).

No CNDDB occurrences have been recorded within 2 miles of the BSA. The eucalyptus forest along Arroyo de en Medio may provide suitable habitat for this species; however, no woodrats or their middens (nests) were observed within the BSA during the field survey. As such, it was determined that this species is unlikely to occur within the Project boundary. Additionally, with implementation of the avoidance and minimization measures provided in Section 5, impacts to San Francisco dusky-footed woodrat are not anticipated during Project activities.

4.4.2.4 SALTMARSH COMMON YELLOWTHROAT (*GEOTHYLPIS TRICHAS SINUOSA*)

The saltmarsh common yellowthroat is a CDFW SSC that inhabits coastal riparian and wetland areas in San Mateo County and three areas along the Pacific Coast. In early spring, yellowthroats build open-cup nests typically low to the ground in grasses, herbaceous vegetation, cattails, tules, and some shrubs (e.g.,

coyote brush). Surrounding marshes, coastal swales, riparian thickets, and edges of disturbed weed fields that border soggy habitats are used for refuge and foraging for the species (Shuford and Gardali 2008).

Two CNDDB occurrences have been recorded within 2 miles of the BSA at the lower reaches of Frenchman's Creek and Pilarcitos Creek in 1990. Central Coast arroyo willow riparian forest located at the eastern edge of the BSA may provide suitable habitat for this species. This riparian forest is relatively isolated and surrounded by development with low-quality breeding and foraging habitat. However, it was determined that there is potential for saltmarsh common yellowthroat to occur within the Project boundary as it migrates between foraging areas. With implementation of the avoidance and minimization measures provided in Section 5, impacts to saltmarsh common yellowthroat are not expected to occur as a result of Project activities.

4.4.3 *Nesting Migratory Passerine Birds and Raptors*

Nesting habitat for migratory passerine birds and raptors protected by the MBTA and CFGC Section 3500 et seq. is present throughout the BSA and on-site, including trees and shrubs. There is potential for avian species to nest in the BSA during the typical nesting season (February 1–August 31). Nesting is unlikely outside of the typical nesting season, although some avian species may forage year-round near the Project work area.

During the July 22, 2020 field survey, a variety of avian species and foraging activities were observed. While no active nests or nesting behavior were observed, urban structures, ornamental trees and shrubs, and the Arroyo de en Medio riparian corridor provide nesting habitat. A list of all vertebrate species, including avian species observed during the survey, is included in Appendix D. With implementation of the avoidance and minimization measures provided in Section 5, impacts to nesting migratory birds and raptors are unlikely to occur.

4.4.4 *Wildlife Habitat and Movement Corridors*

Due to the fragmentation, development, and high level of disturbance and human activity, the Project will not adversely affect a wildlife movement corridor. While Arroyo de en Medio riparian corridor within the BSA may provide suitable habitat for the movement of amphibians, reptiles, and mammals, the Project will not have any impacts to this area, and will therefore not interfere with the movement of any native resident or migratory wildlife.

4.5 Jurisdictional Wetlands and Waters

During the July 22, 2020 field survey, SWCA surveyed the BSA for potentially jurisdictional wetlands and WOTUS, WOTS, and coastal wetlands; however, a formal jurisdictional delineation report has not been prepared at this time for this Project. No wetlands or waters were observed within the proposed Project area during the survey.

Arroyo de en Medio is an intermittent coastal stream located northeast of the Project boundary, and it flows east to west until it meets the Pacific Ocean, approximately 0.15 mile west of the BSA (see Figure 3). The stream channel is a mixed community of arroyo willow (Facultative wetland [FACW]) and blue-gum eucalyptus (no indicator status [NI]) woodland that occurs in upland areas of the streambanks, and is dominated by garden nasturtium (Upland [UPL]), California blackberry (Facultative [FAC]), red elderberry (*Sambucus racemose*; Facultative upland [FACU]), cape ivy (FAC), and escaped cultivated shrubs. The wetland indicator status used for identifying hydrophytic vegetation follows the National Wetland Plant List (USACE 2012). No water or indicators of recent flooding were observed in the channel during the survey period, but the OHWM indicators were observed along the channel. The

shallow channel is approximately 10 feet wide with signs of erosion along the banks. The narrow channel likely collects stormwater runoff from the surrounding residential community and irrigation water periodically from agricultural/nursery operations east of Highway 1. A makeshift stormwater conveyance/dam made of concrete cinderblocks and plywood within the stream channel was observed during the site visit (Appendix A). This may impede hydrological connectivity to downstream areas.

Arroyo de en Medio is identified as a Freshwater Forested/ Shrub Wetland by the USFWS NWI program (Appendix C) (Figure 4). Limits of potential USACE and RWQCB jurisdiction were observed by the presence of the OHWM within the streambed channel. Potential CDFW jurisdiction was evaluated by bank-to-bank limits or outer extent of riparian canopy and were present along the upland areas of the streambanks (Figure 3). Potential wetlands within the Coastal Zone regulated by the CCC likely include the outer extent of the arroyo willow riparian forest. Furthermore, the coastal stream corridor is considered "sensitive habitat" as defined by the County LCP (see below for details). Refer to Figure 3 for the location of potentially jurisdictional wetlands, riparian non-wetlands, and other waters in the BSA. Project and associated construction activities are not anticipated to result in adverse effects to the channel or Central Coast arroyo willow riparian forest since: (1) these areas occur outside the Project area and will be avoided by the Project; and (2) avoidance and minimization measures provided in Section 5 will be implemented during the project.

4.6 Sensitive Habitat

Based on literature review and field survey observations, *Sensitive Habitats*, as defined by San Mateo County LCP Policies Sections 7.1–7.14, occur within the BSA but do not occur within the Project boundary. Sensitive habitats as defined by the County LCP that occur adjacent to the Project include: (1) habitats containing or supporting "rare and endangered" species as defined by the California Fish and Game Commission; and (2) all perennial and intermittent streams and their tributaries.

As previously discussed in Sections 4.2.2, 4.2.3, and 4.5 of this report, Arroyo de en Medio is an intermittent coastal stream that occurs within the BSA but is outside the Project boundary. Habitat communities observed along the channel include Central Coast arroyo willow riparian forest and eucalyptus woodland with an understory of species with both wetland and upland indicator status ratings as described by the National Wetland Plant List (USACE 2012). While the stream channel itself is approximately 50 feet outside the Project boundary, the eucalyptus woodland that occurs along the upland areas of the southern stream bank results in the upper canopy of the eucalyptus extending over a portion of the northern section of the Project site. It was also determined that the coastal stream may serve as a migration corridor and provide suitable foraging or aestivation habitat for the CRLF and SFGS. With implementation of the avoidance and minimization measures listed below, biological impacts to sensitive habitats due to project activities—which are proposed within a previously disturbed and landscaped area—are not expected.

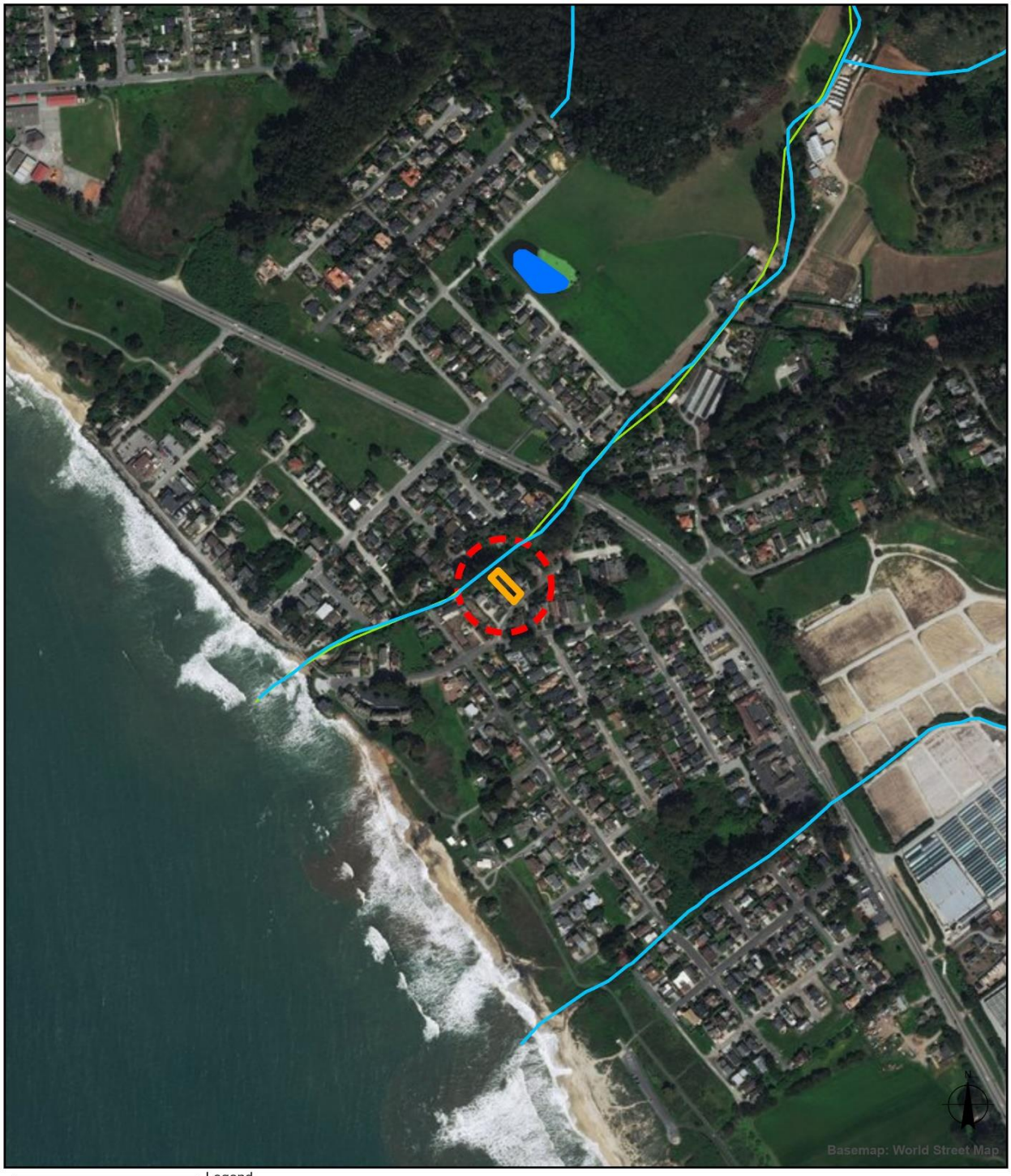

Figure 4. National Wetland Inventory / National Hydrography Dataset map.

5 AVOIDANCE AND MINIMIZATION MEASURES

The goal of this BRE is to identify sensitive biological resources in the BSA and to provide avoidance and minimization measures that will prevent the project from resulting in adverse effects on special-status species, riparian habitats or other sensitive communities, federally protected wetlands, or wildlife movement corridors. The following avoidance and minimization measures are designed to prevent biological impacts resulting from project activities.

1. Prior to the start of Project activities, a qualified biologist shall survey all Project work areas for California red-legged frog, and San Francisco garter snake.
2. Prior to the start of Project activities, construction personnel shall receive an environmental awareness training conducted by a qualified biologist. This training shall include an overview of the life history of the California red-legged frog and San Francisco garter snake, information on "take" prohibitions, and associated avoidance and minimization measures and best management practices.
3. Construction crewmembers shall check beneath all equipment and vehicles prior to moving equipment or vehicles to inspect for any potential special-status wildlife species, including California red-legged frog and San Francisco garter snake. If any snake or frog species are observed, construction personnel shall contact the qualified biologist immediately. The biologist will identify the species and determine the best course of action. Wildlife encountered on-site shall be allowed to leave the work area of their own accord and without harassment. Animals shall not be picked up or moved in any way.
4. Open excavations greater than 0.6 meter (2 feet) deep (including fence post holes and trenches) shall be covered at the end of each workday to prevent wildlife entrapment. All trenches and excavations shall be inspected for wildlife each morning and prior to backfill. All entrapped animals shall be removed only by a qualified or authorized biologist.
5. Disturbance to vegetation shall be kept to the minimum necessary to complete the Project activities, provided there is no feasible alternative.
6. Any and all spoils (e.g., dirt, debris, construction-related materials) generated during Project activities shall be placed where they cannot enter a storm drain or culvert system.
7. During Project activities, all trash that may attract predators shall be properly contained, removed, and disposed of regularly. Following construction, trash/construction debris shall be removed from work areas.
8. The number of access routes, number and size of staging areas, and the total area of the activity shall be limited to the minimum necessary to complete the Project.
9. All fueling and maintenance of vehicles and other equipment and staging areas shall occur at least 50 feet from the Arroyo de en Medio coastal stream. The owner shall ensure that contamination of habitat does not occur during such operations. Prior to the onset of work, the owner shall ensure that there is a plan to allow a prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and the appropriate measures to take should a spill occur.
10. Erosion and sediment control measures, such as wattles or washed gravel bags, shall be installed along the north side of the Project area, above the downhill slope toward Arroyo de en Medio, to prevent trench materials from entering the coastal stream. Plastic monofilament netting on wattles shall not be used on-site due to the potential risk of entrapping wildlife. Burlap or coconut wattles (for example, Bio Wattle) are appropriate substitutes.

11. If project activities are conducted during nesting bird season (February 15 through August 31), preconstruction nest surveys shall be conducted in and near the Project area (within 250 feet for large raptors and 50 feet for all other birds) by a qualified biologist no more than 14 days prior to construction start. If nesting is identified during the preconstruction survey, then the project shall be modified and/or delayed as necessary to avoid direct take of the identified nests, eggs, and/or young.
12. Although there is low potential for California red-legged frog and San Francisco garter snake to occur within the work area, an exclusion fence shall be installed around the work area prior to the beginning of construction activities. Exclusion fencing shall be silt fence-type fencing or equivalent, and shall not include poly mesh fencing or other similar fencing that could entrap or snag reptiles, amphibians, or other small animals. Exclusion fencing shall be installed with the fence stakes placed on the inside of the fencing (closest to the project boundary) to prevent frogs or snakes from using the stakes to maneuver over the fence. The fencing shall be maintained until all work has been completed.
13. A biological monitor shall be present during initial grubbing/clearing and ground-disturbing activities (including wildlife exclusion fencing installation) to ensure that no listed or sensitive species are impacted by project activities.
14. Ground-disturbing construction activities (e.g., grubbing or grading) should occur during the dry season (June 1 to October 15) to facilitate avoidance of California red-legged frog. Regardless of the season, no construction shall occur within 24 hours following a significant rain event (greater than 1/4 inch in a 24-hour period). Following a significant rain event and the 24-hour drying-out period, a qualified biologist shall conduct a preconstruction survey for California red-legged frog prior to the restart of any project activities.

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APPENDIX A

Photo Documentation

Photo A-1. View facing north showing Project location, and Monterey pine tree encroaching upon powerline (tree is planned for removal).

Photo A-2. View facing southeast showing Project location.

Photo A-3. View facing upstream showing Central Coast arroyo willow riparian forest (background) and existing water control devices/dam within Arroyo de en Medio coastal intermittent stream.

Photo A-4. View facing north showing Arroyo de en Medio riparian area located northeast of Project (note overgrowth of garden nasturtium and other invasive vegetation along the streambank).

APPENDIX B

CNDDB Occurrence Map and Special-Status Species List

Figure B-1. Map of CNDDB records results within a 2-mile radius.

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Half Moon Bay (3712244))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Astragalus pycnostachyus var. pycnostachyus coastal marsh milk-vetch	PDFAB0F7B2	None	None	G2T2	S2	1B.2
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Bombus occidentalis western bumble bee	IIHYM24250	None	Candidate Endangered	G2G3	S1	
Charadrius alexandrinus nivosus western snowy plover	ABNNB03031	Threatened	None	G3T3	S2S3	SSC
Danaus plexippus pop. 1 monarch - California overwintering population	IILEPP2012	None	None	G4T2T3	S2S3	
Eumetopias jubatus Steller (=northern) sea-lion	AMAJC03010	Delisted	None	G3	S2	
Geothlypis trichas sinuosa saltmarsh common yellowthroat	ABPBX1201A	None	None	G5T3	S3	SSC
Horkelia cuneata var. sericea Kellogg's horkelia	PDROS0W043	None	None	G4T1?	S1?	1B.1
Lasthenia californica ssp. macrantha perennial goldfields	PDAST5L0C5	None	None	G3T2	S2	1B.2
Leptosiphon rosaceus rose leptosiphon	PDPLM09180	None	None	G1	S1	1B.1
Neotoma fuscipes annectens San Francisco dusky-footed woodrat	AMAFF08082	None	None	G5T2T3	S2S3	SSC
Northern Coastal Salt Marsh Northern Coastal Salt Marsh	CTT52110CA	None	None	G3	S3.2	
Oncorhynchus mykiss irideus pop. 8 steelhead - central California coast DPS	AFCHA0209G	Threatened	None	G5T2T3Q	S2S3	
Plagiobothrys chorisianus var. chorisianus Choris' popcornflower	PDBOR0V061	None	None	G3T1Q	S1	1B.2
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Thamnophis sirtalis tetrataenia San Francisco gartersnake	ARADB3613B	Endangered	Endangered	G5T2Q	S2	FP

Record Count: 17

Commercial Version -- Dated July, 3 2020 -- Biogeographic Data Branch

Report Printed on Thursday, July 30, 2020

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Information Expires 1/3/2021

APPENDIX C

USFWS Critical Habitat Map and IPaC Records Results

Figure D-1. USFWS Critical Habitat map.

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

IPaC resource list

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

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

Location

San Mateo County, California

Local office

Sacramento Fish And Wildlife Office

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

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

Endangered species

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

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

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

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

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

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

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

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

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

Mammals

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

Birds

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

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

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

Reptiles

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

Amphibians

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

Fishes

NAME	STATUS
Delta Smelt Hypomesus transpacificus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/321	Threatened
Tidewater Goby Eucyclogobius newberryi There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/57	Endangered

Insects

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

Critical habitats

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

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

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

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

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

Additional information can be found using the following links:

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

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

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

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Ashy Storm-petrel Oceanodroma homochroa This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/7237	Breeds May 1 to Jan 15
Black Oystercatcher Haematopus bachmani This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9591	Breeds Apr 15 to Oct 31

Black Turnstone *Arenaria melanocephala* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Clark's Grebe *Aechmophorus clarkii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Dec 31
Common Yellowthroat *Geothlypis trichas sinuosa* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Long-billed Curlew *Numenius americanus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5511	Breeds elsewhere
Marbled Godwit *Limosa fedoa* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9481	Breeds elsewhere
Nuttall's Woodpecker *Picoides nuttallii* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Rufous Hummingbird *selasphorus rufus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8002	Breeds elsewhere
Short-billed Dowitcher *Limnodromus griseus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Song Sparrow *Melospiza melodia* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Feb 20 to Sep 5
Spotted Towhee *Pipilo maculatus clementae* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/4243	Breeds Apr 15 to Jul 20
Tricolored Blackbird *Agelaius tricolor* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3910	Breeds Mar 15 to Aug 10
Whimbrel *Numenius phaeopus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9483	Breeds elsewhere

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

Probability of Presence Summary

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

Probability of Presence (■)

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

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

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

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

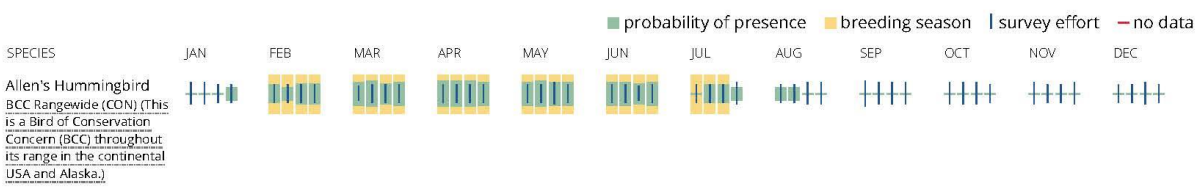
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

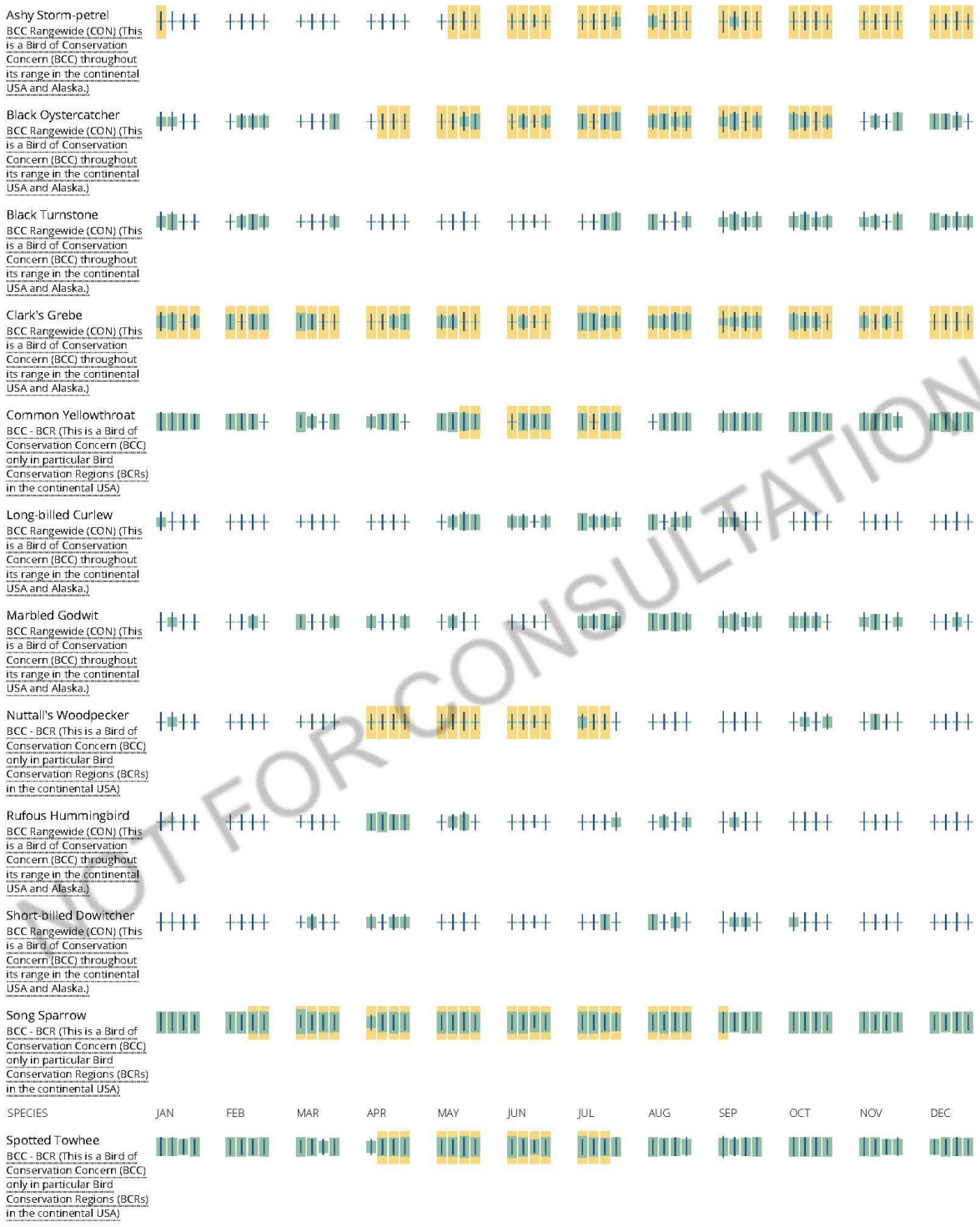
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

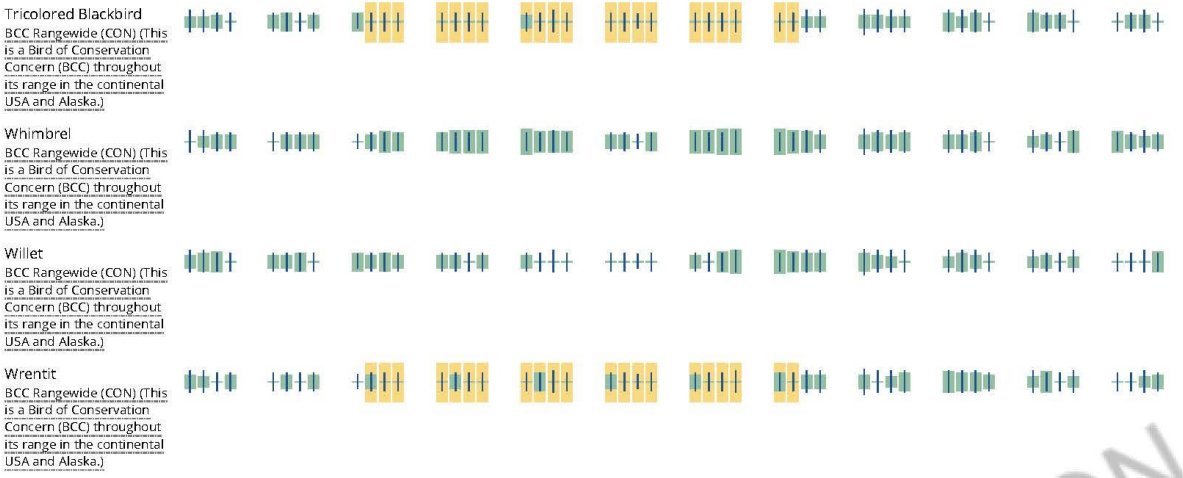
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.







Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and

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3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

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Marine mammals

Marine mammals are protected under the Marine Mammal Protection Act. Some are also protected under the Endangered Species Act[1] and the Convention on International Trade in Endangered Species of Wild Fauna and Flora[2].

The responsibilities for the protection, conservation, and management of marine mammals are shared by the U.S. Fish and Wildlife Service [responsible for otters, walruses, polar bears, manatees, and dugongs] and NOAA Fisheries[3] [responsible for seals, sea lions, whales, dolphins, and porpoises]. Marine mammals under the responsibility of NOAA Fisheries are **not** shown on this list; for additional information on those species please visit the Marine Mammals page of the NOAA Fisheries website.

The Marine Mammal Protection Act prohibits the take (to harass, hunt, capture, kill, or attempt to harass, hunt, capture or kill) of marine mammals and further coordination may be necessary for project evaluation. Please contact the U.S. Fish and Wildlife Service Field Office shown.

1. The Endangered Species Act (ESA) of 1973.
2. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is a treaty to ensure that international trade in plants and animals does not threaten their survival in the wild.
3. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following marine mammals under the responsibility of the U.S. Fish and Wildlife Service are potentially affected by activities in this location:

NAME

Southern Sea Otter Enhydra lutris nereis
https://ecos.fws.gov/ecp/species/8560

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER FORESTED/SHRUB WETLAND
PFOA

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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APPENDIX D

Species Observed in the Biological Study Area

Table D-1. Flora Compendium

Scientific Name*	Common Name	Native	Species Status
Gymnosperms			
Pinaceae	**Pine family**		
Pinus radiata	Monterey pine	Yes	1B.1
Angiosperms (Dicots)			
Apocynaceae	**Dogbane family**		
Vinca major	greater periwinkle	No	--
Asteraceae	**Sunflower family**		
Pseudognaphalium luteoalbum	Jersey cudweed	No	--
Brassicaceae	**Mustard family**		
Raphanus sativa	wild radish	No	--
Caprifoliaceae	**Honeysuckle family**		
Sambucus racemosa	red elderberry	Yes	--
Malvaceae	**Mallow family**		
Malva parviflora	cheeseweed	No	--
Myrtaceae	**Myrtle family**		
Eucalyptus globules	blue gum eucalyptus	No	--
Rosaceae	**Rose family**		
Rubus ursinus	California blackberry	Yes	--
Salicaceae	**Willow family**		
Salix lasiolepis	arroyo willow	Yes	--
Tropaeolaceae	**Nasturtium family**		
Tropaeolum majus	garden nasturtium	No	**--**
Urticaceae	**Nettle family**		
Urtica dioica	stinging nettle	Yes	--
Angiosperms (Monocots)			
Araceae	**Arum family**		
Arum italicum	Italian lords and ladies	No	--

*Vascular Plants nomenclature follows *The Jepson Manual* and http://ucjeps.berkeley.edu/interchange.html.

Table D-2. Fauna Compendium*

Scientific Name	Common Name
Birds	
Aegithalidae	
Psaltriparus minimus	bushtit
Corvidae	
Corvus brachyrhynchos	American crow
Emberizidae	
Melozone crissalis	California towhee
Fringillidae	
Haemorhous mexicanus	house finch
Troglodytidae	
Calypte anna	Anna's hummingbird
Selasphorus sasin	Allen’s hummingbird
Insects	
Papilionidae	
Papilio rutulus	western tiger swallowtail

*No introduced or special-status species observed