COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT

DATE: April 23, 2014

TO: Planning Commission

FROM: Planning Staff

SUBJECT: EXECUTIVE SUMMARY: Consideration of a Coastal Development Permit and a Mitigated Negative Declaration for the San Mateo County Department of Public Works' Moss Beach/Seal Cove Area Roads Improvement Project, which includes improvements to approximately 1,500 linear feet of existing dirt roads within the County's right-of-way and approximately 0.3 acres of bioretention facilities and pervious paving for runoff pollution treatment. This project is appealable to the California Coastal Commission.

County File Number: PLN 2014-00068
(San Mateo County Department of Public Works)

PROPOSAL

The applicant, San Mateo County (County) Department of Public Works, proposes to implement the Moss Beach/Seal Cove Area Roads Improvement Project. The project includes improvements to approximately 1,500 linear feet of existing dirt roads within the County's right-of-way (ROW). In addition, to satisfy the County's requirements under the California Regional Water Quality Control Board (RWQCB) San Francisco Bay Region Municipal Regional Stormwater Permit (MRSP), the County proposes to construct a total of approximately 0.3 acres of bioretention facilities and pervious paving to capture and treat stormwater. The project would be constructed in two locations, both of which occur within the community of Moss Beach.

At the Seal Cove site, the County proposes to improve San Ramon Avenue between San Lucas Road and Bernal Avenue, Del Mar Avenue between Madrone Avenue and Bernal Avenue, and Madrone Avenue between Decota Avenue and Del Mar Avenue. These road segments will consist of 16-foot wide asphalt pavement. Bioretention facilities separated by check dams will be on both sides of the roadway to capture and treat stormwater runoff. There is inadequate space to treat all runoff from these improvements in this area, so additional mitigation is proposed at the corner of Carlos Street and California Avenue.

At the Carlos Street mitigation site, the County proposes to replace an approximately 1,100 sq. ft. paved area of County ROW with a combination of vegetated biotreatment facility and pervious paving.

RECOMMENDATION

Approve the Coastal Development Permit, County File Number PLN 2014-00068, by certifying the Mitigated Negative Declaration and adopting the required findings and conditions of approval.

SUMMARY

As a County agency, the Department of Public Works is exempt from local building and zoning regulations (Government Code Section 53091); however, a Coastal Development Permit, in compliance with the County's Local Coastal Program (LCP), must be approved by the Planning Commission. For the purposes of compliance with the California Environmental Quality Act (CEQA), the County is the lead agency and the Department of Public Works has assumed the role of lead department. As such, they have prepared a Mitigated Negative Declaration to be certified by the Planning Commission, as required by the State Code.

Staff has reviewed the proposed project against the policies contained within the County's General Plan and LCP and has determined that the project complies with these plans. Specific portions of the General Plan applicable to the project include the chapters governing Vegetative, Water, Fish, and Wildlife Resources, Soil Resources, Visual Quality, Historical and Archaeological Resources, Transportation, Man-Made Hazards, and Air Quality. Specific portions of the Local Coastal Program applicable to the project include Locating and Planning New Development, Public Works, Sensitive Habitats, Visual Resources, and Hazards.

The proposed street paving project is a public safety improvement that will improve access to the area. The paving will improve access to the area by all road users, especially in wet weather when current dirt roads become mires. The improvements will improve drainage in both the Seal Cove primary project area and in the San Carlos Street treatment site. The project will improve air quality in the Seal Cove area by reducing airborne dust. The project will not impact water quality in the Fitzgerald Marine Reserve. For these reasons, staff believes this is a reasonable request that is consistent with the County's General Plan and Local Coastal Program.

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COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT

DATE: April 23, 2014

TO: Planning Commission

FROM: Planning Staff

SUBJECT: Consideration of a Coastal Development Permit, pursuant to Section 6328.4 of the County Zoning Regulations, and a Mitigated Negative Declaration, pursuant to the California Environmental Quality Act, for the San Mateo County Department of Public Works' Moss Beach/Seal Cove Area Roads Improvement Project, which includes improvements to approximately 1,500 linear feet of existing dirt roads within the County's right-of-way and approximately 0.3 acres of bioretention facilities and pervious paving for runoff pollution treatment. This project is appealable to the California Coastal Commission.

County File Number: PLN 2014-00068
(San Mateo County Department of Public Works)

PROPOSAL

The applicant, San Mateo County (County) Department of Public Works, proposes to implement the Moss Beach/Seal Cove Area Roads Improvement Project. The project includes improvements to approximately 1,500 linear feet of existing dirt roads within the County's right-of-way (ROW). In addition, to satisfy the County's requirements under the California Regional Water Quality Control Board (RWQCB) San Francisco Bay Region Municipal Regional Stormwater Permit (MRSP), the County proposes to construct a total of approximately 0.3 acres of bioretention facilities and pervious paving to capture and treat stormwater. The project would be constructed in two locations, both of which occur within the community of Moss Beach.

At the Seal Cove site, the County proposes approximately 1,500 linear feet of roadway improvements within the County's ROW. Specific road segments to be improved include: (1) San Ramon Avenue, between San Lucas Road and Bernal Avenue (737 linear feet); (2) Del Mar Avenue, between Madrone Avenue and Bernal Avenue (472 linear feet); and (3) Madrone Avenue, between Decota Avenue and Del Mar Avenue (275 linear feet). The above-described road segments would be improved by construction of 16-foot wide paved road sections comprised of approximately 3 inches of asphalt concrete and 9 inches of cement-treated base. Surface drainage features, consisting of bioretention facilities separated by check dams, would be constructed on either side of the roadway to capture and treat stormwater runoff. The biotreatment areas would measure approximately 5 feet wide and approximately 6 inches deep.

At the Carlos Street mitigation site, the County proposes to replace an approximately 1,100 sq. ft. paved area of County ROW with a combination of vegetated biotreatment facility (60 sq. ft.) and pervious paving (1,040 sq. ft.). This portion of the project is being built due to space limitations and potential conflicts with existing driveways at the street improvement project site. The MRSP allows this alternative arrangement because both sites are in the Fitzgerald Marine Reserve Area of Special Biological Significance.

Upon completion of construction, the County would assume maintenance responsibility for these road segments and treatment areas.

RECOMMENDATION

Approve the Coastal Development Permit, County File Number PLN 2014-00068, by certifying the Mitigated Negative Declaration and adopting the required findings and conditions of approval identified in Attachment A.

BACKGROUND

Report Prepared By: Steven Rosen, Project Planner, Telephone 650/363-1814

Applicant: San Mateo County Department of Public Works

Owner: San Mateo County

Location: Public ROW on San Ramon Avenue, Del Mar Avenue, Madrone Avenue, and Carlos Street

APNs: Public ROW adjacent to 037-141-010; 037-275-050, -060, and -210; 037-259-250, -270, and -290; 037-277-010, -130, -140, -150, and -160; 037-281-120, and -160; 037-283-070, -240, and -290; 037-284-010, -170, -180, -190, and -200; 037-285-010, -150, -160, and -190; 037-287-030, -130, and -150

Existing Zoning: C-1/S-3/DR/CD (Neighborhood Business Districts/Design Review District/Coastal Development District), R-1/S-17/DR/GH/CD (One-Family Residential District/Midcoast Combining District/Design Review District/Geologic Hazard District/Coastal Development District), and R-1/S-105/DR/GH/CD (One-Family Residential District/Midcoast Combining District/Design Review District/Geologic Hazard District/Coastal Development District)

General Plan Designation: Medium Density Residential, Low Density Residential and Neighborhood Commercial

Existing Land Use: Dirt/gravel roads and unimproved right-of-way

Flood Zone: The project sites are in minimal risk areas outside the 1 percent and 0.2 percent annual chance floodplains (Zone X), per FEMA Panel 060081C-0119E, effective date October 16, 2012.

Environmental Evaluation: The County is the lead agency and the Department of Public Works (DPW) has assumed the role of lead department, per the County CEQA Guidelines. DPW has prepared a Mitigated Negative Declaration (MND) pursuant to the California Environmental Quality Act.

Setting: The project is proposed for two locations, both of which are in Moss Beach. The first is located within the area of Seal Cove, approximately one-half mile west of Highway 1, between the Half Moon Bay Airport and the Pacific Ocean. The second is located on Carlos Street, approximately one-half mile north of the Half Moon Bay Airport, and landward (east) of Highway 1. The project would occur entirely within the State's Coastal Zone boundary, as defined under California Public Resources Code Section 30103, and therefore is subject to the provisions of the County of San Mateo Local Coastal Program (LCP).

Moss Beach is generally located at the northern terminus of Pillar Ridge. Natural communities in the project vicinity include grasslands, coastal scrub, and intermittent wetlands and occasional large native and ornamental trees. The Seal Cove site is located within the Dennison Creek watershed. However, due to its proximity to the Pacific Ocean, surface water runoff may drain to Pillar Point Marsh, north of Dennison Creek, or directly west to the ocean. The Carlos Street site is within the Dean Creek watershed, and is located just north of and drains into Dean Creek. The James V. Fitzgerald Marine Reserve is located along the shoreline and offshore areas between the community of Moss Beach, to the north of the project area, and Pillar Point to the south.

Seal Cove is a residential subdivision in Moss Beach. The Fitzgerald Marine Reserve's park area separates Seal Cove from the rest of Moss Beach. The Seal Cove site is bounded by development to the north and west, and open space – including Pillar Point Bluff County Park – to the east and south. Parcels adjacent to the project site have General Plan land use designations of Low and Medium Density Residential; zoning designations of Residential – R-1/S-105 (minimum parcel size of 20,000 sq. ft.) and R-1/S-17 (minimum parcel size of 5,000 sq. ft.), respectively.

The Carlos Street site is presently covered entirely in asphalt paving. The site is bounded to the north by the San Mateo County Sheriff's North Coast Substation, to the south by a grassy median and Highway 1, and to the east and west by the Coastside Market and Joy of Being Yoga studio, respectively. Dean Creek, part of which is underground and part of which is open channel, flows approximately 100 feet southeast of the Carlos Street site. Surface water runoff from Cabrillo Highway and Carlos Street flows into the grassy median, which is connected by a catch basin and culvert at its south end to the underground pipes of Dean Creek. Surface runoff at the Carlos Street site may also flow into a grated catch basin in the center of Virginia Avenue, which also discharges to Dean Creek. Lands adjacent to the alternative treatment site have General Plan land use designations of Neighborhood Commercial and Medium Density Residential, and zoning designations of Commercial (C-1) and R-1/S-17 (minimum parcel size of 5,000 sq. ft.), respectively.

DISCUSSION

A. KEY ISSUES

1. Conformance with the County General Plan and Zoning Regulations

Pursuant to Section 53091 of the California Government Code, projects undertaken by the Department of Public Works are exempt from review under the County's Zoning Regulations. However, the project is subject to the policies of the General Plan.

Vegetative, Water, Fish and Wildlife Resources Policies

Policy 1.24 – *Protect Vegetative Resources*. This policy directs the County to ensure that development will minimize the removal of vegetative resources. To this end, professional biologists surveyed the project sites during peak blooming season for special-status plants known to occur in the region. No protected species of plants were identified during the survey. The biologists did identify wild California strawberry plants, a species identified by the County's Local Coastal Program (LCP) as a "unique species." The MND includes mitigation measures to protect these plants.

Policy 1.26 – *Protect Fish and Wildlife Resources*. This policy requires development to minimize the disruption of fish and wildlife and their habitats. The biological study prepared for the environmental analysis identified several protected species of animals that might be found on the site. These species are the monarch butterfly, salt marsh common yellow-throat, California red-legged frog, the San Francisco garter snake, and the western pond turtle. It also identified three mitigation measures that will protect them. These measures are Protection of Nesting Birds; Survey, Flag, and Relocate Dusky-Footed Woodrat Nests; and Avoid, Minimize, and Mitigate for Impacts to California Red-Legged Frog, San Francisco Garter Snake, Western Pond Turtle, and their Habitat.

Soil Resources Policies

Policy 2.17 – *Regulate Development to Minimize Soil Erosion and Sedimentation*. This policy directs the County to regulate development to minimize erosion. The dirt roads currently exhibit erosion due to vehicle travel because the vehicles prevent the growth of stabilizing ground cover. This project will pave the right-of-way, stabilizing the roads. This project also includes a mitigation measure that will require the implementation of construction erosion and sediment control measures that will stabilize soil during the construction phase of the project.

Visual Quality Policies

Policy 4.43 – *Road Design and Construction*. This policy directs the County to require the design and construction of new roads to be sensitive to the visual quality and character of scenic corridors. The project would not include any vertical elements that would obstruct views to or within this scenic corridor. The proposed road improvements would be consistent with this policy. The Carlos Street work would not likely be noticeable from the scenic corridor. If noticed briefly by motorists passing the site, it is likely that the project would slightly improve the scenic character of the area by replacing existing asphalted areas with vegetation and pervious paving. The Seal Cove roads are not within the scenic corridor and would not be seen from the highway.

Historical and Archaeological Resources Policies

Policies 5.20 – *Site Survey* and 5.21 – *Site Treatment*. These policies direct the County to require that a mitigation plan, adequate to protect the resource and prepared by a qualified professional, be reviewed and implemented as a part of the project and that construction work be temporarily suspended when archaeological/paleontological sites are discovered in order to allow for the timely investigation and/or excavation of such sites by qualified professionals as may be appropriate. The MND includes mitigation measures that will protect any archaeological or paleontological resources that may be uncovered during work. There will be a Cultural Resources Monitoring Plan, and work will stop if any archaeological resources, paleontological resources, or human remains are found.

Transportation Policies

Policy 12.15 – *Local Circulation Policies*. This policy directs the County to plan for providing improved streets, sidewalks, and bikeways in developed areas and for access for emergency vehicles. This project will improve access within an area of Moss Beach that is developed and has a potential to become more developed. The present dirt roads restrict access for bicycles, pedestrians, and some automobiles, particularly during winter. The present dirt roads could impede emergency access, preventing the timely arrival of ambulances or fire apparatus. Improving the roads would improve emergency access.

Policy 12.50 – *Modification of Road Standards*. This policy directs the County to allow selective modification of County road standards to protect the natural environment, conserve natural resources, and preserve neighborhood quality. The San Mateo County General Plan specifies that public roadways should be 22 feet wide, but the Montara-Moss Beach-El Granada Area Plan, which has been incorporated as part of the LCP, also states that such roadway improvements should follow modified road

standards that allow for narrower road widths. With a proposed 16-foot travel way, the project would be consistent with these provisions in that the other streets in Seal Cove are improved to the same standard.

Hazardous Materials Policies

Policy 16.47 – *Strive to Protect Life, Property, and the Environment from Hazardous Material Exposure*. This policy directs the County to strive to protect public health and safety, environmental quality, and property from the adverse effects of hazardous materials through adequate and responsible management practices. This project includes mitigation measures that will protect the public and environment from exposure to hazardous materials by requiring the construction contractor to use certain best management practices, to assess existing hazardous materials within 1/4 mile of the construction site, and the implementation of a health and safety plan and a hazardous materials management plan.

Air Quality Policies

Policy 17.15 – *Reduce Air Pollutants, Odors and Dust from Stationary Sources by Regulating Land Use Development*. This policy directs the County to require that all demolition, grading (excluding agriculture) and construction projects conform with applicable dust control measures recommended by the Bay Area Air Quality Management District (BAAQMD), including, but not limited to, surface wetting and seeding. The project will reduce the amount of airborne dust by paving dirt roads. The MND requires the applicant to implement the Bay Area Air Quality Management District's Basic Construction Mitigation Measures, which will reduce construction air pollution impacts to a less than significant level.

2. Conformance with the San Mateo County Local Coastal Program (LCP)

A Coastal Development Permit is required pursuant to San Mateo County Local Coastal Program Policy 2.1, which mandates compliance with the California Coastal Act for all Public Works projects to be undertaken in the Coastal Zone. "Public Works" includes all public transportation facilities, including streets, roads, and other related facilities (Policy 2.2). Summarized below are the following sections of the LCP that are relevant to this project:

Locating and Planning New Development Component

Policy 1.35 – *All New Land Use Development and Activities Shall Protect Coastal Water Quality Among Other Ways By…*. This policy directs the County to require new development in the Coastal Zone to cause no increase in water pollution due to stormwater runoff and no increase in volume or velocity of stormwater runoff. This is accomplished through

design and the implementation of best management practices (BMPs). Mitigation Measure 14 and Conditions of Approval 3-9 require the implementation of BMPs adequate to control construction stormwater pollution. The project includes hydrologically engineered features, designed by the County Department of Public Works, to control water quality in the operational phases of this project. The proposed biotreatment measures have been designed and would be constructed to comply with the Municipal Regional Permit and guidelines set forth in the San Mateo Countywide Water Pollution Prevention Program, and therefore would have sufficient capacity to capture, contain, and allow for infiltration of such runoff. Conditions of Approval 10-11 regulate the construction of these features.

Public Works Component

Policy 2.6 – *Capacity Limits*. This policy directs the County to limit development or expansion of public works facilities to a capacity which does not exceed that needed to serve build-out of the Local Coastal Program. This project will serve areas designated for Low and Medium Density Residential Development on the General Plan Land Use Map. The proposed road profiles are no more than what is necessary to serve the planned density of the area and will not cause pressure to develop the area to higher densities than planned for in the General Plan and LCP.

Sensitive Habitats Component

Policy 7.1 – *Definition of Sensitive Habitats*. This policy defines sensitive habitats as any area in which plant or animal life or their habitats are either rare or especially valuable and includes habitats containing or supporting "rare and endangered" species as defined by the State Fish and Game Commission. The Initial Study identified coastal scrub that has the potential to host certain rare and endangered species, including salt marsh common yellow-throat, California red-legged frog, San Francisco garter snake, western pond turtle, and dusky-footed woodrat. It is also in the Area of Special Biological Significance (ASBS) protecting the Fitzgerald Marine Reserve.

Policy 7.3 – *Protection of Sensitive Habitats*. This policy requires that development in areas adjacent to sensitive habitats be sited and designed to prevent impacts that could significantly degrade these resources.

The Sensitive Habitats Map, prepared for the San Mateo County General Plan, depicts all special habitats mapped by the County. The project sites are not within any identified special habitats. The nearest areas of mapped sensitive habitat are the marine and estuarine habitats of the Fitzgerald Marine Reserve, located at the base of a coastal bluff approximately 500 feet west of the project area; and the riparian corridor along San Vicente Creek, located 0.75 mile north of the Seal Cove site and 0.5 mile south of

the Carlos Street site. The map also identifies the open space area south of the Seal Cove site as habitat for reptiles and amphibians.

The project is within the Fitzgerald Marine Reserve Area of Special Biological Significance (ASBS), the watershed in which all water flows directly into the marine reserve. The Seal Cove site also contains the coastal scrub discussed under Policy 7.1 above in small patches along both sides of San Ramon Avenue. While these are not on the Sensitive Habitats Map, they must be protected in order to prevent takings of special-status species.

Mitigation Measures 2 through 5 protect special-status species. Conditions of Approval 3 through 11 and Mitigation Measure 14 imposed by the Planning Department regarding construction and permanent erosion and sediment control protect the ASBS from runoff pollution during and after construction. Construction measures require weekly inspection, and the permanent runoff pollution controls are part of the Department of Public Works' project design. The mitigation measures required by the MND include Protection of Nesting Birds; Survey, Flag, and Relocate Dusky-Footed Woodrat Nests; and Avoid, Minimize, and Mitigate for Impacts to California Red-legged Frog, San Francisco Garter Snake, Western Pond Turtle, and their Habitat.

Policy 7.49 – *California Wild Strawberry*. This policy directs the County to require any development, within one-half mile of the coast, to mitigate against the destruction of any California wild strawberry. It requires one of the following mitigations:

a. Prevent any development, trampling, or other destructive activity which would destroy the plant, or

b. After determining specifically if the plants involved are of particular value, successfully transplant them or have them successfully transplanted to some other suitable site. Determination of the importance of the plants can only be made by a professional doing work in strawberry breeding.

The rare plants survey conducted by San Mateo County biologists in April and May of 2013 identified beach strawberry (*Fragaria chiloensis*) at five distinct locations within the Seal Cove site. Patches of beach strawberry were observed within the proposed work area at the intersection of San Ramon and Bernal Avenues, and in small patches along Del Mar Avenue. Other small patches of beach strawberry were observed within 25 feet of the work area in the vacant lot east of San Ramon Avenue and in residential yards along Del Mar Avenue and Madrone Avenue. Beach strawberry does not occur at the Carlos Street site.

California wild strawberry plants in the project area are presumed to be of value and require transplantation. Mitigation Measure 5 (Transplant California Wild Strawberry Plants) would ensure compliance with applicable LCP policies through the identification, avoidance, and/or transplanting of wild strawberry prior to commencement of construction at the Seal Cove site.

Visual Resources Component

Policy 8.30 – *Designation of County Scenic Corridors*. This policy designates the Coast Highway north of Half Moon Bay city limits as a County Scenic Corridor. As discussed above in the section reviewing conformity with General Plan Policy 4.43, the project would not include any vertical elements that would obstruct views to or within this scenic corridor. The Carlos Street portion of the project is the only part visible from the highway, and this work, if noticed at all, would likely be considered an improvement over the existing impervious, un-vegetated asphalt area.

Hazards Component

Policy 9.8 – *Regulation of Development on Coastal Bluff Tops*. This policy directs the County to permit bluff and cliff top development only if design and setback provisions are adequate to assure stability and structural integrity for the expected economic life span of the development and if the development will neither create nor contribute significantly to erosion problems or geologic instability of the site or surrounding area. The project is 300 feet landward of steep, highly erosive coastal bluffs. However, there are no steep slopes in the immediate vicinity of either project site. Landslides will likely continue to occur along the coastal bluffs, adjacent to the Pacific Ocean. However, due to their distance from the project sites, such geologic activity would not be expected to affect or be affected by the project. This project is not expected to cause an increase in the risk of landslide, coastal erosion, subsidence, or collapse.

3. Grading Regulations

The San Mateo County Grading Regulations do not apply to County agencies. This project is exempt from the requirement to obtain a grading permit and is not subject to inspections by the Planning and Building Department, but Conditions of Approval 3 and 4 require the applicant to obtain a grading "hard card" from the Planning and Building Department for the purposes of discharge permit compliance. The Department of Public Works will conduct weekly inspections of construction erosion and sediment control measures because the project is in the Fitzgerald Marine Reserve's Area of Special Biological Significance, defined by the California State Water Resources Board.

B. ENVIRONMENTAL REVIEW

The County is the lead agency and the Department of Public Works has assumed the role of lead department, per the County CEQA Guidelines. As such, DPW has filed a Notice of Intent to Adopt a Mitigated Negative Declaration pursuant to Article 6 of the California Environmental Quality Act. The Planning Department had a notice of intent (NOI) to adopt the Mitigated Negative Declaration published in the San Mateo Times and Half Moon Bay Review indicating a comment period from March 4, 2014 through April 4, 2014. The NOI prepared by the Department of Public Works indicates a comment period from February 25 through March 27, but the comment period remained open until April 4, 2014. Comments are addressed in Attachment E.

C. REVIEWING AGENCIES

California Department of Fish and Game
California Coastal Commission
U.S. Fish and Wildlife Service Task
Regional Water Quality Control Board

ATTACHMENTS

A. Recommended Findings and Conditions of Approval
B. Location Map
C. Site Photographs
D. Initial Study/Mitigated Negative Declaration
E. Response to Comments on the Mitigated Negative Declaration
F. Preliminary Improvement Plans

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County of San Mateo - Planning and Building Department

ATTACHMENT A

Attachment A

County of San Mateo
Planning and Building Department

RECOMMENDED FINDINGS AND CONDITIONS OF APPROVAL

Permit or Project File Number: PLN 2014-00068 Hearing Date: April 23, 2014

Prepared By: Steven Rosen
Project Planner

For Adoption By: Planning Commission

RECOMMENDED FINDINGS

Regarding the Environmental Review, Find:

1. That the Planning Commission does hereby find that this Mitigated Negative Declaration reflects the independent judgment of San Mateo County.

2. That the Mitigated Negative Declaration is complete, correct, and adequate and prepared in accordance with the California Environmental Quality Act (CEQA) and applicable State and County Guidelines.

3. That, on the basis of the Initial Study, comments received hereto, and testimony presented and considered at the public hearing, there is no substantial evidence that the project, as mitigated, will have a significant effect on the environment.

Regarding the Coastal Development Permit, Find:

4. That the project, as described in the application and accompanying materials required by Zoning Regulations Section 6328.7 and as conditioned in accordance with Section 6328.14, conforms with the plans, policies, requirements and standards of the San Mateo County Local Coastal Program as discussed in the staff report under Section A.2.

RECOMMENDED CONDITIONS OF APPROVAL

Current Planning Section

1. This approval applies only to the proposal as described in this report and plans as reviewed by the Planning Commission on April 23, 2014. Minor adjustments to the project may be approved by the Community Development Director if they are consistent with the intent of and in substantial conformance with this approval.

2. This permit shall be valid for one year. Any extension of this permit shall require submittal of an application for permit extension and payment of applicable permit extension fees 60 days prior to expiration.

3. Prior to the grading permit "hard card" issuance, the applicant must prepare a grading and construction schedule, including a schedule for the weekly construction inspections during the rainy season for sites within the ASBS Watershed, as required by the Special Protections. The submitted schedule shall also include a schedule for winterizing the site. If the schedule of grading operations calls for the grading to be completed in one grading season, then the winterizing plan shall be considered a contingent plan to be implemented if work falls behind schedule. All submitted schedules shall represent the work in detail and shall project the grading operations through to completion.

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

5. No grading shall be allowed during the winter season (October 1 to April 30) to avoid potential soil erosion. An applicant-completed and County-issued grading permit "hard card" is required prior to the start of any land disturbance/grading operations. Along with the "hard card" application, the applicant shall submit a letter to the Current Planning Section, at least two (2) weeks prior to commencement of grading, stating the date when grading operations will begin, anticipated end date of grading operations, including dates of revegetation and estimated date of establishment of newly planted vegetation.

6. Prior to any land disturbance and throughout the grading operation, the Department of Public Works shall implement the erosion control plan, as prepared and signed by the engineer of record and approved by the decision maker. Revisions to the approved erosion control plan shall be prepared and signed by the engineer and submitted to the Community Development Director for review and approval.

7. The Department of Public Works shall adhere to the San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including, but not limited to, the following:

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

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

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

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

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

f. Control and prevention of the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges to storm drains and watercourses.

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

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

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

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

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

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

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

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

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

9. For the final approval of the grading permit, the applicant shall ensure the performance of the following activities within thirty (30) days of the completion of grading at the project site:

   The engineer shall submit written certification that all grading has been completed in conformance with the approved plans, conditions of approval/mitigation measures, and the Grading Regulations, to the Department of Public Works and the Planning and Building Department's Geotechnical Engineer.

10. The applicant shall prepare a Stormwater Management Plan (SWMP) that includes, at a minimum, exhibit(s) showing drainage areas and locations of Low Impact Development (LID) treatment measures; project watershed; total project site area and total area of land disturbed; total new and/or replaced impervious area; treatment measures and hydraulic sizing calculations; a listing of source control and site design measures to be implemented at the site; hydromodification management measures and calculations, if applicable; NRCS soil type; saturated hydraulic conductivity rate(s) at relevant locations or hydrologic soil type (A, B, C or D) and source of information; elevation of high seasonal groundwater table; a brief summary of how the project is complying with Provision C.3 of the MRP; and detailed Maintenance Plan(s) for each site design, source control and treatment measure requiring maintenance.

11. Within one (1) week of the installation date of the approved facility, the project civil engineer shall notify Richard Lee, Associate Engineer, Department of Public Works, by email rlee@smcgov.org or fax at 650/363-4849. Notice shall include the installation date of the last component of the approved facility and the name of the project civil engineer. The County will perform a final inspection of the approved facility within 45 days of the date of installation.

12. The applicant shall comply with all mitigations as listed in the mitigation measures included in the Certified Mitigated Negative Declaration, as follows:

    Mitigation Measure 1: Construction contractors shall implement all the BAAQMD's Basic Construction Mitigation Measures, listed below:

    a. Dust control watering shall be implemented, as necessary, for all exposed surfaces (e.g., parking areas, soil piles, graded areas, and unpaved access roads) up to two times per day.

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

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

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

e. All roadways to be paved shall be completed as soon as possible following grading.

f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five 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.

g. 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.

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

Mitigation Measure 2: The project shall avoid implementation during the nesting bird season, if possible. The nesting bird season is generally described by CDFW as the period between February 1 and August 31. If seasonal avoidance is not feasible, then the following measures must be implemented:

a. No more than two weeks prior to commencement of construction activities, including but not limited to surveying, grading, tree trimming, and tree felling, a biologist shall conduct a nesting bird survey to determine whether nesting birds occur within 250 feet of the project area or nesting raptors occur within 500 feet of the project area. If nesting birds and raptors do not occur within 250 and 500 feet of the project area, respectively, then no further action is required.

b. Should any active nests be discovered in or near proposed construction zones, the surveying biologist shall, based upon site conditions and type of species, determine an appropriate construction buffer to be implemented. Buffers shall be 500 feet for raptors and 250 feet for non-raptors. However, these buffers may be decreased or increased, in consultation with CDFW and/or USFWS, based upon species-specific, site-specific, and activity-specific considerations, including the nesting species in question, baseline noise levels, type and decibel output of construction equipment to be used, and whether disturbance would occur within line of sight of the nest.

   If the nest in question belongs to a species listed under Federal or State Endangered Species Acts, a California Species of Special Concern or a California Fully-Protected Species, then CDFW and/or USFWS, as

appropriate, shall be consulted to establish nesting buffers and monitoring criteria.

If construction buffers are decreased to less than 500 feet for raptors or less than 250 feet for songbirds, a biologist familiar with the bird's nesting requirements and behavior shall monitor the nest full-time during construction activities until s/he determines that continued activities would not result in nest failure.

Mitigation Measure 3: Prior to the start of vegetation removal or any other construction activities that could impact coastal scrub habitat along San Ramon Avenue, a biologist familiar with the species and its habitat requirements shall survey for San Francisco dusky-footed woodrat nests within or immediately adjacent to the proposed disturbance area. If none are observed, then no further mitigation would be required. If nests are observed but would not be directly impacted by project activities, the biologist shall delineate the nests and establish a 10-foot buffer around the nests using exclusion fencing to ensure they are not accidentally destroyed by heavy equipment, worker vehicles, or construction foot traffic. The exclusion fencing shall remain in place for the duration of the project and fully removed from the project site upon project completion. If avoidance is not feasible because a nest is within the project footprint, a biologist shall disassemble the nest by hand and relocate/reconstruct it beyond the work area.

Mitigation Measure 4: The following measures shall be implemented to avoid or reduce impacts on California red-legged frog, San Francisco garter snake, and western (=Pacific) pond turtle:

a. Prior to project construction, the County shall seek technical guidance from the USFWS regarding the measures required to ensure take of California red-legged frog and San Francisco garter snake is avoided and to determine whether any further consultation would be required. The request for technical guidance shall be accompanied by a copy of the IS/MND and any maps, photographs, and habitat descriptions that may facilitate the USFWS analysis and guidance. The County shall incorporate into project plans and implement prior to, during, and following construction, as appropriate, any additional guidance provided by USFWS.

b. Immediately prior to vegetation removal or other construction activities, a biologist familiar with the habitat requirements of California red-legged frog, San Francisco garter snake, and western pond turtle shall conduct a pre-construction survey to determine whether any of these species is within the project area. If California red-legged frog or San Francisco garter snake is identified in the work area during pre-construction surveys or at any subsequent time during construction, construction activities in the immediate area shall halt until the species has left the area OR, if permitted, a USFWS-approved biologist shall relocate the species outside of the work area. Western pond turtle may be relocated without agency approval.

c. Ground disturbance and construction footprints shall be minimized to the greatest degree feasible.

d. Work activities within or adjacent to suitable habitat shall be completed between June 15 and October 31, when possible. Suitable habitat shall be separated from the active work area with amphibian exclusion fencing, unless otherwise directed by the USFWS and CDFW. The fence shall be installed under the direct supervision of a biologist. One-way exclusion doors may be installed at the direction of USFWS or CDFW.

e. A biological resource monitor shall conduct worker awareness training for construction personnel, addressing California red-legged frog, San Francisco garter snake, and western pond turtle basic biology and identifying characteristics, legal status, job-specific protection measures, and penalties for non-compliance.

f. A biologist shall act as a regular (i.e., weekly, unless otherwise instructed by USFWS and CDFW) construction monitor. If a full-time monitor is not required by the USFWS and CDFW, then an appropriate person (i.e., construction management team supervisor) shall be designated as the on-site biological monitor and shall be trained by the biologist to identify special-status species.

g. A pre-construction survey for California red-legged frog, San Francisco garter snake, and western (=Pacific) pond turtle shall be conducted each day by the on-site monitor immediately preceding construction activity that occurs within or adjacent to suitable habitat.

h. Suitable habitat for California red-legged frog or San Francisco garter snake that is temporarily impacted by project-related activities shall be restored to pre-project conditions.

i. Vegetated areas beyond the project site disturbed in the course of project construction shall be revegetated with native plant species suitable to coyote brush scrub habitats upon completion of construction.

Mitigation Measure 5: Prior to ground disturbance and with the guidance of survey markers to delineate the project footprint, a biologist familiar with the species and its habitat requirements shall identify and mark (e.g., with flagging or orange plastic fencing) California strawberry plants to establish an exclusionary zone. If any protected plant cannot be excluded from the area of impact, it shall be transplanted to a suitable location within the project site under the supervision of a biologist familiar with the habitat requirements of wild strawberry.

Mitigation Measure 6: Prior to authorization to proceed, or issuance of grading permits, the applicant shall prepare and submit a cultural resources monitoring plan to the County Planning and Building Department for review and approval.

Monitoring shall be required for all subsurface excavation work. A Secretary of the Interior qualified archaeologist shall prepare the plan. The plan shall include (but not be limited to) the following issues:

a. Training program for all construction and field workers involved in site disturbance.

b. Person(s) responsible for conducting monitoring activities, including Native American monitor(s).

c. Person(s) responsible for overseeing and directing the monitors.

d. How the monitoring shall be conducted and the required format and content of monitoring reports.

e. Schedule for submittal of monitoring reports and person(s) responsible for review and approval of monitoring reports.

f. Protocol for notifications in case of encountering cultural resources, as well as methods for evaluating significance, developing and implementing plan to avoid or mitigate significant resource impacts, Native American participation and consultation, collection and curation plan, and consistency with applicable laws including Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the Public Resources Code (PRC).

g. Methods to ensure security of cultural resources sites.

h. Protocol for notifying the County, Native Americans, and local authorities (i.e., Sheriff, Police) should site looting and other illegal activities occur during construction with reference to PRC 5097.99.

During the course of the monitoring, the archaeologist may adjust the frequency—from continuous to intermittent—of the monitoring based on the conditions and professional judgment regarding the potential to impact resources.

If archaeological materials are encountered, all soil-disturbing activities within 100 feet of the find shall cease until the resource is evaluated. The monitor(s) shall immediately notify the County of the encountered archaeological resource. The monitor(s) shall, after making a reasonable effort to assess the identity, integrity, and significance of the encountered archaeological resource, present the findings of this assessment to the County. In the event archaeological resources qualifying as either historical resources pursuant to CEQA Section 15064.5 or as unique archaeological resources as defined by Public Resources Code 21083.2 are encountered, preservation in place shall be the preferred manner of mitigation.

If preservation in place is not feasible, the applicant shall implement an Archaeological Research Design and Treatment Plan (ARDTP). The project

archaeologist, Native American representatives, and the County shall meet to determine the scope of the ARDTP. The ARDTP shall identify how the proposed data recovery program would preserve the significant information the archaeological resource contains. The ARDTP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The results of the investigation shall be documented in a technical report that provides a full artifact catalog, analysis of items collected, results of any special studies conducted, and interpretations of the resource within a regional and local context. All technical documents are to be placed on file at the Northwest Information Center of the California Historical Resources Information System.

Mitigation Measure 7: If prehistoric or historic-period archaeological resources are encountered, all construction activities within 100 feet shall halt and the County shall be notified. A Secretary of the Interior qualified archaeologist shall inspect the findings within 24 hours of discovery. If it is determined that the project could damage a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines), mitigation shall be implemented in accordance with Public Resources Code (PRC) Section 21083.2 and Section 15126.4 of the CEQA Guidelines, with a preference for preservation in place. Consistent with Section 15126.4(b)(3), preservation in place may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If avoidance is not feasible, a qualified archaeologist shall prepare and implement a detailed treatment plan in consultation with the County and the affiliated Native American tribe(s), if applicable. Treatment of unique archaeological resources shall follow the applicable requirements of PRC Section 21083.2. Treatment for most resources would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and State repositories, libraries, and interested professionals.

Mitigation Measure 8: If paleontological resources, such as fossilized bone, teeth, shell, tracks, trails, casts, molds, or impressions, are discovered during ground-disturbing activities, all ground-disturbing activities within 100 feet of the find shall be halted until a qualified paleontologist can assess the significance of the find and, if necessary, develop appropriate salvage measures in conformance with Society of Vertebrate Paleontology Guidelines (SVP, 1995; SVP, 1996).

Mitigation Measure 9: If human remains are encountered during ground-disturbing activities, State Health and Safety Code Section 7050.5 requires that no

further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission. The Native American Heritage Commission would then identify the person(s) thought to be the Most Likely Descendent of the deceased Native American, who shall make recommendations for the treatment of any human remains.

Mitigation Measure 10: The San Mateo County Department of Public Works shall require the construction contractor to use the following best management practices (BMPs) to minimize potential adverse effects of the project to groundwater and soils from chemicals used during construction activities:

a. Follow manufacturer's recommendations on use, storage and disposal of chemical products used in construction;

b. Avoid overtopping construction equipment fuel gas tanks;

c. Provide secondary containment for any hazardous materials temporarily stored on-site;

d. During routine maintenance of construction equipment, properly contain and remove grease and oils; and

e. Perform regular inspections of construction equipment and materials storage areas for leaks and maintain records documenting compliance.

Mitigation Measure 11: Within three months prior to construction, a qualified environmental professional shall be retained to conduct a regulatory agency database review to update and identify hazardous materials sites within 1/4 mile of the project sites and to review appropriate standard information sources to determine the potential for soil or groundwater contamination at the project sites. Should this review indicate a high likelihood of encountering contamination at the project sites, follow-up sampling shall be conducted to characterize soil and groundwater quality prior to construction to provide necessary data for the site health and safety plan (Mitigation Measure 12) and hazardous materials management plan (Mitigation Measure 13). If needed, site investigations or remedial activities shall be performed at the project site in accordance with applicable laws.

Mitigation Measure 12: The construction contractor shall, prior to construction, prepare a site-specific health and safety plan in accordance with Federal OSHA Regulations (29 CFR 1910.120) and Cal-OSHA Regulations (8 CCR Title 8, Section 5192) to address worker health and safety issues during construction. The health and safety plan shall identify the potentially present chemicals, health and safety hazards associated with those chemicals, all required measures to protect construction workers and the general public from exposure to harmful

levels of any chemicals identified at the site (including engineering controls, monitoring, and security measures to prevent unauthorized entry to the work area), appropriate personal protective equipment, and emergency response procedures. The health and safety plan shall designate qualified individuals responsible for implementing the plan and for directing subsequent procedures in the event that unanticipated contamination is encountered.

Mitigation Measure 13: The contractor shall, prior to construction, prepare a hazardous materials management plan that specifies the method for handling and disposal of contaminated soil and building debris, should any be encountered during construction. Contract specifications shall mandate full compliance with all applicable local, State, and Federal regulations related to identifying, transporting, and disposing of hazardous materials, including those encountered in excavated soil, and demolition debris. The contractor shall provide San Mateo County Department of Public Works with copies of hazardous waste manifests documenting that disposal of all hazardous materials has been performed in accordance with the law.

Mitigation Measure 14: The San Mateo County Department of Public Works (DPW), or its construction contractor, shall prepare and implement comprehensive stormwater pollution and erosion control best management practices (BMPs) to keep sediment or any other pollutants from moving off-site and into receiving waters. The County DPW or its contractor shall ensure the BMPs are in place prior to the start of construction-related activities and remain in place throughout all phases of project construction. A BMPs monitoring and maintenance schedule with clearly identified parties responsible for monitoring and maintenance of BMPs shall also be in place prior to the start of construction or decommissioning activities and remain in place throughout all phases of project construction. Stormwater pollution and erosion control BMPs at a minimum shall include, but not be limited to, the following:

a. Ensure that all stormwater, erosion, and sediment control BMPs utilized are consistent with measures approved by the California Stormwater Quality Association (CASQA).

b. Provide adequate erosion control training to all equipment operators, site superintendents, and managers to ensure that stormwater and erosion controls are maintained and remain effective.

c. Employ temporary erosion control measures (such as silt fences and staked straw wattles) for disturbed areas. No disturbed surfaces shall be left without erosion control measures in place so as to limit on-site and off-site erosion and to retain sediment on-site.

d. Stabilize inactive areas, such as temporary stockpiles, using an appropriate combination of BMPs to cover the exposed material, intercept runoff, and

provide a sediment control mechanism (such as silt fencing surrounding the stockpile perimeter or fiber rolls at the base and on side slopes).

e. Limit vegetation disturbance/removal to the maximum extent practicable and retain existing vegetation where possible.

f. Temporarily stabilize active, disturbed areas undergoing fill placement before and during rain events expected to produce site runoff. Stabilization methods include combined BMPs that protect materials from rain, manage runoff, and reduce erosion.

g. Restrict construction activities involving grading, hauling, and placement of backfill materials from occurring during periods of rain.

h. Inspect all stormwater and erosion controls regularly, especially before and following significant runoff-producing rain events and make any necessary correction before the next rain event, but no longer than ten (10) business days. During the rainy season (October 1 to April 30), stormwater and erosion controls shall be inspected weekly.

i. Develop a spill prevention and countermeasure plan that identifies proper storage, collection, and disposal measures for potential pollutants (such as fuel, fertilizers, pesticides, etc.) used on-site. The plan shall also require the proper storage, handling, use, and disposal of petroleum products.

j. Establish fuel and vehicle maintenance areas away from all drainage courses and design these areas to control runoff.

k. Manage waste and aggressively control litter.

l. Outside of the wet weather season (October 1 to April 30), limit street sweeping to dry sweeping only.

Mitigation Measure 15: Construction contractors are prohibited from using vibratory rollers within 25 feet from residences during project construction. Where construction work would occur within 25 feet from residences, the County shall require the contractors to use a static roller when operating in close proximity to these homes.

Mitigation Measure 16: Prior to construction activities, the San Mateo County Department of Public Works or its contractor(s) shall determine the locations of overhead and underground utility lines, such as natural gas, electricity, sewer, telephone, cable, fuel, and water that may be encountered during construction work. Pursuant to State law, the San Mateo County Department of Public Works or its contractor(s) shall notify Underground Service Alert of Northern California and Nevada (USA North) so that utility companies may be advised of the work and may field mark or otherwise protect and warn the contractor of their existing

utility lines. Information regarding the location of existing utilities shall be reviewed before construction activities begin. Utilities may be located by customary techniques such as geophysical methods and hand excavation. The San Mateo County Department of Public Works or its contractor(s) shall notify all affected utility service providers in advance of the project construction plans and schedule. The San Mateo County Department of Public Works or its contractor(s) shall make arrangements with these entities regarding the protection, relocation, or temporary disconnection of services prior to the start of construction, and prompt reconnection of services, as required.

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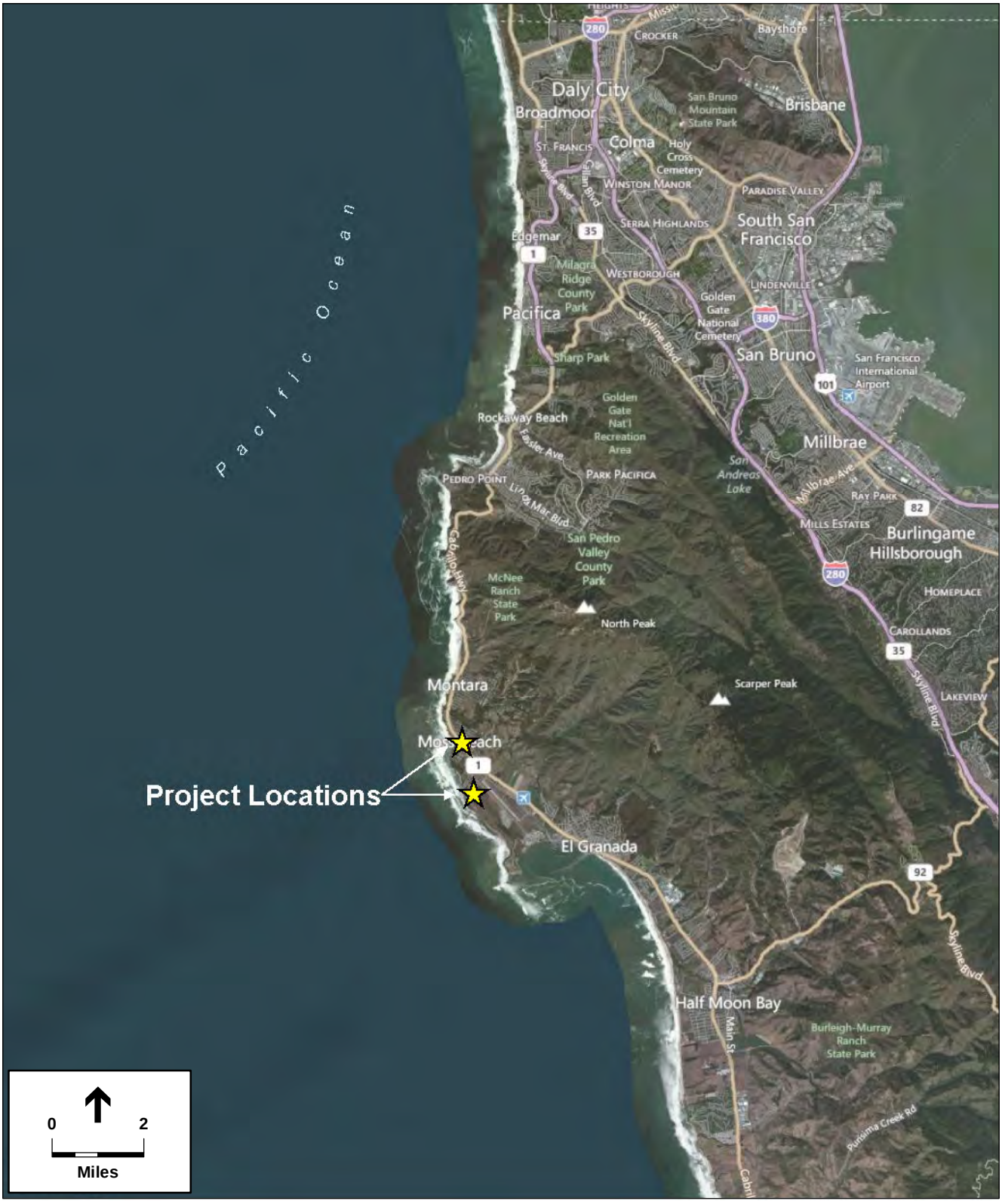
ATTACHMENT B



SOURCE: ESRI, 2013

Moss Beach/Seal Cove Road Improvements Project IS/MND . 2120603.02
Regional Overview Map

San Mateo County Planning Commission Meeting

Owner/Applicant: SAN MATEO COUNTY DPW Attachment: B

File Numbers: PLN2014-00068

SOURCE: ESRI, 2013

Moss Beach/Seal Cove Road Improvements Project IS/MND . 2120603.02

Project Area Map

San Mateo County Planning Commission Meeting

Owner/Applicant: SAN MATEO COUNTY DPW Attachment: B

File Numbers: PLN2014-00068

County of San Mateo - Planning and Building Department

ATTACHMENT C

Photo 1: View of San Ramon Avenue facing southeast from San Lucas Avenue (May 2013).

Photo 2: View of San Ramon Avenue facing northwest from Bernal Avenue (May 2013).

Photo 3: View of Madrone Avenue facing southwest from Del Mar Avenue (May 2013).

Photo 4: View of Del Mar Avenue facing northwest from Precita Avenue (May 2013).

Moss Beach/Seal Cove Area Roads Improvements Project 120603.02 ■

Source: ESA, 2013

Representative Photographs

County of San Mateo - Planning and Building Department

ATTACHMENT D

SEAL COVE/MOSS BEACH AREA ROADS IMPROVEMENT PROJECT

Draft Initial Study/Mitigated Negative Declaration

Prepared for
County of San Mateo Department of
Public Works

February 2014

SEAL COVE/MOSS BEACH AREA ROADS IMPROVEMENT PROJECT

Draft Initial Study/Mitigated Negative Declaration

Prepared for
County of San Mateo Department of
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February 2014

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SECTION 1
Project Description

1.1 Introduction

San Mateo County (County) Department of Public Works proposes to implement the Moss Beach/Seal Cove Area Roads Improvement Project (proposed project) within unincorporated San Mateo County, California. The proposed project includes improvements to approximately 1,500 linear feet of existing dirt roads within the County's right-of-way (ROW). In addition, to satisfy the County's requirements under the California Regional Water Quality Control Board (RWQCB) San Francisco Bay Region Municipal Regional Stormwater Permit (MRSP), the County proposes to construct a total of approximately 0.3 acres of bioretention facilities and pervious paving to capture and treat stormwater. The project would be constructed in two locations, both of which occur within the rural residential community of Moss Beach, between the communities of Montara and Princeton by the Sea (**Figure 1**).

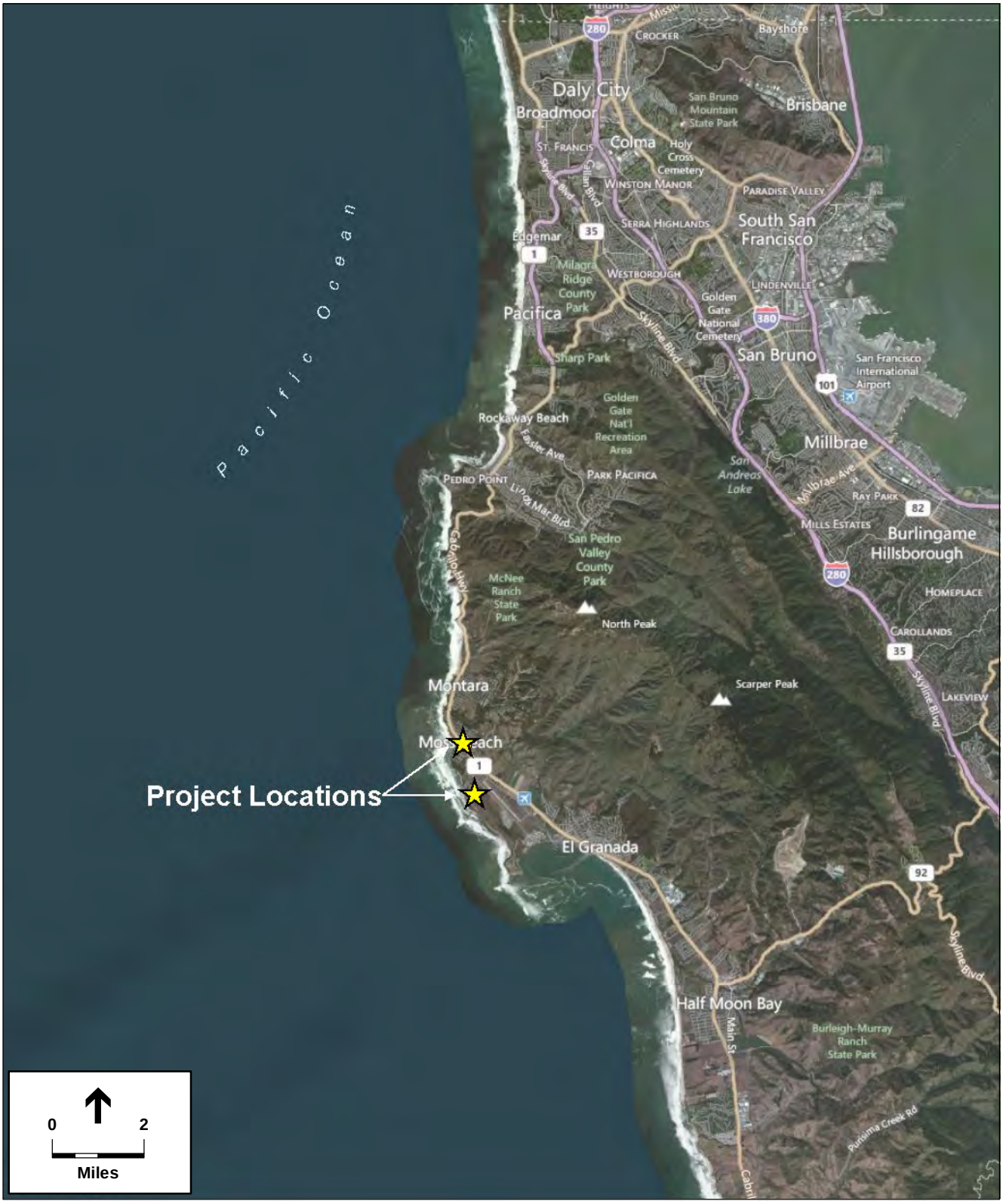
This document is an Initial Study/Mitigated Negative Declaration (IS/MND) that analyzes the potential environmental impacts of the road improvements and stormwater treatment measures. This IS/MND is prepared in compliance with Public Resources Code Section 21000 et seq., California Environmental Quality Act (CEQA) of 1970 (as amended), and Title 14, Chapter 3 of the California Administrative Code. In accordance with the CEQA Guidelines, California Code of Regulations Title 14, Chapter 3, Section 15070, a Mitigated Negative Declaration shall be prepared if the following criteria are met:

- There is no substantial evidence that the project may have a significant effect; or
- Where there may be a potentially significant effect, revisions to the project would avoid or mitigate the effects to a point where clearly no significant effects would occur.

In accordance with Section 15073 of the CEQA Guidelines, this document is being circulated to local, state and federal agencies and to interested organizations and individuals who may wish to review and comment on the report. Comments can be submitted as follows:

By email: SealCoveISMND@smcgov.org

By mail: Zack Azzari
County of San Mateo, Department of Public Works
555 County Center, 5th Floor
Redwood City, CA 94063-1665



SOURCE: ESRI, 2013

Moss Beach/Seal Cove Road Improvements Project IS/MND . 2120603.02

Figure 1

Regional Overview Map

1.2 Project Background

The San Mateo County Department of Public Works proposes improvement of three existing dirt roads in a rural residential area of Moss Beach, an unincorporated community within San Mateo County, California. The proposed project would provide community residents with an access alternative to Ocean Boulevard, which is presently the only paved road connecting San Lucas Avenue with Madrone, Precita, and Bernal Avenues. Ocean Boulevard, which runs adjacent to coastal bluffs south and west of the project area, is closed in some areas west of San Lucas Avenue due to bluff erosion. The existing alternative access routes, which include the road segments to be improved, are not designed to County road standards, and therefore are not maintained by the County. As such, they are presently in fair to poor condition, some with large potholes that impede direct passage.

The County's Municipal Regional Stormwater Permit (MRSP; Order No. R2-2009-0074, as amended by Order No. R2-2011-0083), Section C.3, requires the inclusion of source control, site design, and stormwater treatment measures in new development to address stormwater runoff pollutant discharges and increases in new flows from new development (RWQCB, 2009). The MRSP generally calls for the inclusion of such treatment measures on the same site as the proposed new development. However, in some cases the permittee may satisfy a portion of the treatment requirement at an alternative location within the same watershed as the new development site. Due to space limitations and potential conflicts with existing driveways, the County proposes to satisfy a portion of the treatment requirement onsite and a portion of the treatment requirement offsite.

1.3 Project Objectives

The primary project objectives are to provide residents of the Seal Cove/Moss Beach area with alternative paved access routes between San Lucas Road and Madrone, Precita, and Bernal Avenues, through improved travel surfaces and site drainage, within the County's existing ROW.

1.4 Proposed Project

1.4.1 Project Location

The project is proposed for two locations, both of which occur in the area of Moss Beach, San Mateo County, California. The first is located within the community of Seal Cove/Moss Beach, approximately one-half mile west of Highway 1, between the Half Moon Bay Airport and the Pacific Ocean (Figure 1). The second is located on Carlos Street, approximately one-half mile north of the Half Moon Bay Airport, and landward (east) of Highway 1. The project would occur entirely within the State's Coastal Zone boundary, as defined under California Public Resources Code Section 30103, and therefore is subject to the provisions of the County of San Mateo Local Coastal Program (LCP).

Moss Beach is generally located at the northern terminus of Pillar Ridge, in the Midcoast area of San Mateo County. Natural communities in the project vicinity include grasslands, coastal scrub, and intermittent wetlands and occasional large native and ornamental trees. The Seal Cove site is located within the Dennison Creek watershed. However, due to its proximity to the Pacific Ocean, surface water runoff may drain to Pillar Point Marsh, north of Dennison Creek, or directly west to the ocean. The Carlos Street site is within the Dean Creek watershed, and is located just north of and drains into Dean Creek. The James V. Fitzgerald Marine Reserve is located along the shoreline and offshore areas between the community of Moss Beach, to the north of the project area, and Pillar Point to the south.

Seal Cove is a rural residential subdivision of Moss Beach (**Figure 2**). The Seal Cove site is bounded by development to the north and west, and open space – including Pillar Point Bluff County Park – to the east and south. Parcels adjacent to the project site have General Plan land use designations of Low and Medium Density Residential; Zoning designations of Residential R-1/S-105 (minimum parcel size of 20,000 square feet) and R-1/S-17 (minimum parcel size of 5,000 square feet), respectively. The Carlos Street site (Figure 2) is presently covered entirely in asphalt paving. The site is bounded to the north by the San Mateo County Sheriff's North Coast Substation, to the south by a grassy median and Highway 1, and to the east and west by the Coastside Market and Joy of Being yoga studio, respectively. Dean Creek, part of which is underground and part of which is open channel, flows approximately 100 feet southeast of the Carlos Street site. Surface water runoff from Cabrillo Highway and Carlos Street flows into the grassy median, which is connected by a catch basin and culvert at its south end to the underground pipes of Dean Creek. Surface runoff at the Carlos Street site may also flow into a grated catchbasin in the center of Virginia Avenue, which also discharges to Dean Creek. Lands adjacent to the alternative treatment site have General Plan land use designations of Neighborhood Commercial and Medium Density Residential, and zoning designations of Commercial (C-1) and R-1/S-17 (minimum parcel size of 5,000 square feet), respectively.

1.4.2 Proposed Improvements

At the Seal Cove site, the County proposes approximately 1,500 linear feet of roadway improvements within the County's ROW. Specific road segments to be improved include: (1) San Ramon Avenue, between San Lucas Road and Bernal Avenue (737 linear feet); (2) Del Mar Avenue, between Madrone Avenue and Bernal Avenue (472 linear feet); and (3) Madrone Avenue, between Decota Avenue and Del Mar Avenue (275 linear feet). The above described road segments would be improved by construction of 16-foot-wide paved road sections comprised of approximately three inches of asphalt concrete and nine inches of cement-treated base. Surface drainage features, consisting of bioretention facilities separated by check dams, would be constructed on either side of the roadway to capture and treat stormwater runoff. The biotreatment areas would measure approximately five feet wide and approximately six inches deep. At the Carlos Street site, the County proposes to replace an approximately 1,100-square-foot paved area of County ROW with a combination of vegetated biotreatment facility (60 square feet) and pervious paving (1,040 square feet). Upon completion of construction, the County would assume maintenance responsibility for these road segments and treatment areas.

SOURCE: ESRI, 2013

Moss Beach/Seal Cove Road Improvements Project IS/MND . 2120603.02

Figure 2
Project Area Map

1.4.3 Project Construction

The project would require ground disturbance of an approximately 38,000 square-foot area, including all road grading, pervious paving, and biotreatment areas. Excavation of roadside areas, to an estimated depth of one to one and a half feet, would also be required for biotreatment facility construction. At the Seal Cove site, the proposed improvements would require removal of one tree (Monterey cypress) and trimming of up to two trees that have grown into the County ROW. The project may require temporary disconnection or relocation of utility lines. No relocation or construction of sidewalks, lighting, or other service improvements is anticipated.

Construction equipment required for work at the Seal Cove site would include the following: backhoe, blade (for grading), rollers, cement-treat machine, and several utility trucks (for water, asphaltic emulsion, etc.). Construction equipment and materials staging would occur on Los Banos Avenue, a paved road. All construction equipment to be used at the Seal Cove site would be stored in this area when not in use. Any necessary on-site maintenance or refueling would also occur within this area. Construction equipment required for work at the Carlos Street site would include the following: backhoe, blade (for grading), jackhammers, and utility trucks. Construction equipment and materials staging would occur on Carlos Street, a paved road. All construction equipment to be used at the Carlos Street site would be staged in this area when not in use. On-site maintenance and refueling would also occur in this area.

A workforce of up to 12 people is expected for the project – up to seven at the Seal Cove site and up to five at the Carlos Street site. The workforce would generally be comprised of a foreman, laborers, equipment operators, and resource monitors.

Project construction would require approximately five truck trips per day – three from the Seal Cove site and two from the Carlos Street site – up to a total of 75 (50 at the Seal Cove site and 25 at the Carlos Street site) round trips for both sites. These trips would be required for the import of asphalt and concrete for road improvements (approximately 400 cubic yards), and off-haul of asphalt waste and soil excavated for biotreatment facility construction (approximately 280 cubic yards). Any excavated materials that cannot be reused onsite would be deposited at either an approved sanitary landfill or private receiving site outside of the Coastal Zone.

Construction is expected to occur over a period of two months in Summer/Fall 2014. While the Carlos Street work may trail behind the Seal Cove work, and even occur in a subsequent year, this analysis conservatively assumes all work would be undertaken concurrently. Work at the Seal Cove site would require approximately 45 days; work at the Carlos Street site would require approximately 22 days. All construction activities would occur during the daytime, between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday. No work would occur on weekends or holidays.

1.4.4 Project Operation

Upon completion of improvements, road and bioretention facility maintenance, including periodic inspections and necessary repairs, would be conducted by the County Department of Public Works' Road Services Division, in a manner and schedule similar to that for other County-maintained roads.

1.5 Report Organization

This report is organized as follows:

Section 1, **Project Description**, provides an introduction to the project with project background, needs and objectives, and discusses the proposed facilities.

Section 2, **Environmental Checklist Form**, presents the CEQA Initial Study Environmental Checklist, and analyzes environmental impacts resulting from the project and describes the mitigation measures that would be incorporated into the project to avoid or reduce impacts to less-than-significant levels.

Section 3, **Mitigation Measures and Monitoring Program**, lists the mitigation measures that are recommended in Section 2.

1.6 Other Approvals

The proposed project would require local and state permits and approvals. Based on the current understanding of the project, the following is a list of the agencies and approvals likely to be required for the Seal Cove/Moss Beach Area Road Improvements Project:

- San Mateo County Planning Commission certification of the IS/MND and adoption of the Mitigation Monitoring and Reporting Program, and
- San Mateo County Planning Commission issuance of Coastal Development Permit for the roadway improvements.

The project may also require the following additional State approvals:

- Regional Water Quality Control Board (RWQCB) National Pollutant Discharge Elimination System (NPDES) permit coverage and compliance for storm- and non-stormwater waste discharges, and
- California Department of Fish and Wildlife (CDFW) compliance with Section 2080 of the California Fish and Game Code for project activities that could impact species listed by the State of California as threatened or endangered.

References

Regional Water Quality Control Board (RWQCB) San Francisco Bay Region, 2009. Municipal Regional Stormwater NPDES Permit Order R2-2009-0074 NPDES Permit No. CAS612008. Available online at: http://www.swrcb.ca.gov/rwqcb2/board_decisions/adopted_orders/2009/R2-2009-0074.pdf. Accessed March 2013.

San Mateo County, 2001. Priority Watersheds for Restoration of Habitat and Recovery of Coho Salmon and Steelhead Trout Populations. Environmental Services Agency, Planning and Building Division. Available online at: http://www.co.sanmateo.ca.us/vgn/images/portal/cit_611/16579688Salmon%20&%20Steelhead%20PDF%20Map.pdf. Accessed on December 4, 2013.

SECTION 2
Environmental Checklist

1.	**Project Title:**	Seal Cove/Moss Beach Area Road Improvements Project
2.	**Lead Agency Name and Address:**	Zack Azzari County of San Mateo Public Works Department 555 County Center, 5th Floor Redwood City, CA 94063
3.	**Contact Email:**	**SealCoveISMND@smcgov.org**
4.	**Project Location:**	Seal Cove/Moss Beach Area of Unincorporated San Mateo County
5.	**Project Sponsor's Name and Address:**	County of San Mateo Department of Public Works
6.	**General Plan Designation(s):**	Adjacent parcels are designated as Low/Medium Density Residential and Neighborhood Commercial
7.	**Zoning Designation(s):**	Adjacent parcels are zoned Residential (R-1/S-105, R-1/S-17) and Neighborhood Business (C-1)

8. **Description of Project:** The proposed project involves improvements to three existing dirt roads and installation of biotreatment facilities and pervious paving in rural residential and commercial areas of unincorporated San Mateo County, California (See Section 1, Project Description).

9. **Surrounding Land Uses and Setting:** Land uses surrounding the project site include residential, commercial, public, and open space area (See Section 1, Project Location).

10. **Other public agencies whose approval is required:** Required approvals include the County Planning Commission's certification of the IS/MND and adoption of the MMRP and the County Planning and Building Department's issuance of a CDP and grading permit. Other agencies whose approval may be required include: California Department of Fish and Wildlife, and Regional Water Quality Control Board.

Environmental Factors Potentially Affected

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☒ Geology, Soils and Seismicity
☐ Greenhouse Gas Emissions	☒ Hazards and Hazardous Materials	☒ Hydrology and Water Quality
☐ Land Use and Land Use Planning	☐ Mineral Resources	☒ Noise
☐ Population and Housing	☒ Public Services	☐ Recreation
☐ Transportation and Traffic	☐ Utilities and Service Systems	☒ Mandatory Findings of Significance

DETERMINATION: (To be completed by Lead Agency)

On the basis of this initial study:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.

Signature _____ Date 2/20/2014

ZACK AZZARI

Printed Name _____ For

Environmental Checklist

2.1 Aesthetics

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
1.	**AESTHETICS — Would the project:**				
a)	Have a significant adverse effect on a scenic vista, views from existing residential areas, public lands, water bodies, or roads?	☐	☐	☒	☐
b)	Significantly damage or destroy scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c)	Significantly degrade the existing visual character or quality of the site and its surroundings, including significant change in topography or ground surface relief features, and/or development on a ridgeline?	☐	☐	☒	☐
d)	Create a new source of significant light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☐	☒
e)	Be adjacent to a designated Scenic Highway or within a State or County Scenic Corridor?	☐	☐	☒	☐
f)	If within a Design Review District, conflict with applicable General Plan or Zoning Ordinance provisions?	☐	☐	☒	☐
g)	Visually intrude into an area having natural scenic qualities?	☐	☐	☒	☐

Discussion

a, b) There are no identified scenic vistas in the immediate vicinity of the Seal Cove project sites, which is shown in **Figure 3**. The Seal Cove project site is located adjacent to the western extent of the County-designated Highway 1 scenic corridor. The Carlos Street site (see Figure 3) is located within this scenic corridor (County of San Mateo, 2010). This segment is also identified as an eligible state scenic highway, but has not been designated as such at this time (Caltrans, 2007). The proposed work at the Seal Cove site would include approximately 0.85 acre of site disturbance, including grading of existing dirt roads and excavation of approximately 200 cubic yards of soil for bioretention facility construction. Work at the Carlos Street site would entail removal of approximately 1,100 square feet of asphalt surface and excavation of approximately 81 cubic yards of soil for bioretention facility construction and installation of pervious paving. Neither would include a significant change in site topography. No project components would occur on a ridgeline.

The proposed improvements at the Seal Cove site involve the paving of three segments of existing dirt road. Work at the Carlos Street site involves removal of existing asphalt surface. Because the project construction activities would be temporary, and would

	
Eastward view of Del Mar Avenue from Madrone Avenue	Westward view of Madrone Avenue from Del Mar Avenue
	
Northward view of San Ramon Avenue from Bernal Avenue	Southward view of Carlos Street from California Avenue

Figure 3
Site Photographs

include minimal grading and only short-term presence of construction equipment, construction activities would not substantially affect views from existing residential or public land areas. The project would be located within existing developed areas and among other paved roads. As such, the change in roadways from unimproved dirt roads to paved roads at the Seal Cove site, and removal of paving at the Carlos Street site, would not substantially change the quality of views from nearby public vantage points, including from the Highway 1 scenic corridor.

The visual character of the Seal Cove project site would be changed through the removal of one Monterey cypress tree and trimming of up to two other trees within the ROW. However, the project site is within a rural area that lies along a transition zone between coastal scrub and urban development, where the landscape is characterized by both low-lying scrub vegetation and intermittent native and ornamental trees. Removal of a tree and trimming of up to two other trees would not open views to areas or structures that are currently screened from public views. Therefore, the overall scenic quality of the area would not be affected by tree removal and trimming implemented as part of the project. For these reasons, the project's impacts on scenic vistas and views from existing residential and public vantage points would be **less than significant**.

c) As noted in 1a, above, removal of one Monterey cypress and trimming of trees within the ROW at the Seal Cove site would not be expected to significantly degrade the existing visual character or quality of the site. At both project locations, construction equipment would remain on site temporarily and stored within the Los Banos Avenue and Carlos Street staging areas when not in use. As such, the project's impact with respect to the visual character of the project sites would be **less than significant**.

d) There would be **no impact** as the project does not include nighttime construction that would require lighting, permanent lighting such as street lights, or include any material or surfaces that would constitute a new source of glare.

e) The project sites are situated approximately eight miles north of designated State Scenic Highway 1 segment that is within San Mateo County (Caltrans, 2007), and within a segment eligible for listing as a state scenic highway. A County scenic corridor extends along the Midcoast portion of Highway 1, generally from Junipero Serra Freeway to the northern limits of the City of Half Moon Bay (County of San Mateo, 1986). The Seal Cove project site is located to the west of the County-designated Highway 1 scenic corridor; the Carlos Street site is located within this corridor (County of San Mateo, 2010).

The project would not include any vertical elements that would obstruct views to or within this scenic corridor. General Plan Policy 4.43 calls for new road construction to be sensitive to the visual qualities and character of the scenic corridor, including through consideration of width, alignment, grade, slope, grading, and drainage facilities. The proposed road improvements would be consistent with this policy. First, none of the Seal Cove road improvements would be visible from a designated scenic roadway. The Carlos

Street work would not likely be noticeable from the scenic corridor. If noticed briefly by motorists passing the site, it is likely that the project would slightly improve the scenic character of the area by replacing existing asphalted areas with vegetation and pervious paving. The Seal Cove roads would be limited to 16 feet in width, smaller than the 22 foot standard for this area (County of San Mateo, 1985, 2004). The road alignments would generally follow existing dirt roadways, and not involve steep slopes or grades. Grading would be limited to that necessary for roadway and bioretention facility construction (approximately one to one and a half feet below ground surface). For these reasons, the project would have a **less-than-significant impact** on a scenic highway or within a state or county scenic corridor.

f) The Local Coastal Program (2013) calls for the application of the Design Review (DR) district standards to urbanized areas of the Coastal Zone (Policy 8.12.a). The project area is located within a designated urban area within the Coastal Zone. Design review requirements apply to all activities requiring a grading permit, unless otherwise determined exempt by the DR Administrator. While the design standards generally pertain to structures, they may be applicable to the portion of the project involving tree removal. According to the Zoning Regulations (1999), within a DR district, trees and other vegetative land cover may be removed only where necessary for the construction of structures or paved areas in order to reduce erosion and impacts on natural drainage channels and maintain surface runoff at acceptable levels (Section 6565.17.E).

However, pursuant to California Government Code sections 53090 and 53091, which exempt County government agencies from county zoning regulations, the proposed project would be exempt from the requirements of the DR district. Nevertheless, a primary purpose of the proposed project, as envisioned through the Montara-Moss Beach-El Granada Area Plan (1985), is to improve site drainage and the travel surface (Issue II.B.2). As such, even if the project were not exempt from the DR district regulations, removal from the Seal Cove site of the Monterey cypress for the purpose of improving site drainage and surface runoff would be consistent with the DR district standards. Further, the construction of bioretention facilities planted with native vegetation would provide a transition between the project and adjacent open areas, as also required by the DR district standards (Section 6565.17.F). For these reasons, the project's impacts on community design would be **less than significant**.

g) While rural in character, the project sites are located within a County-designated urban area, adjacent to an existing residential subdivision and commercial development. However, open space areas having natural scenic qualities do occur near the project sites. The paving of existing dirt roads at the Seal Cove site would not substantially change the natural scenic qualities of the adjacent open space lands. And, as noted above, the construction of bioretention facilities adjacent to the paved road segments would provide a transition to existing, adjacent open space areas. The resulting impact on the natural scenic quality of the area would be **less than significant**.

References

State of California Department of Transportation (Caltrans), 2007. California Scenic Highway Mapping System. San Mateo County. Available online at: http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm. Accessed on March 15, 2013.

County of San Mateo, 1985, Montara-Moss Beach-El Granada Area Plan.

County of San Mateo, 1986. General Plan Policies. Available online at: http://www.co.sanmateo.ca.us/vgn/images/portal/cit_609/10073472gp_polis.pdf. Accessed on December 5, 2013

County of San Mateo, 1999. Zoning Regulations. Available online at: http://www.co.sanmateo.ca.us/vgn/images/portal/cit_609/9441580Zregs-wp.pdf. Accessed March 2013.

County of San Mateo, 2004. Road Reconstruction Information Mid Coast Area of San Mateo County. Available online at: http://www.co.sanmateo.ca.us/vgn/images/portal/cit_609/3/63/219714597Q%20and%20A%20for%20MidCoast%20Areas.pdf. Accessed on December 5, 2013.

County of San Mateo, 2010. San Mateo County General Plan – Scenic Corridors [Map]. Available online at: http://www.co.sanmateo.ca.us/Attachments/planning/PDFs/Maps/GP%20Scenic%20Corridor%20(08-05-09).pdf. Accessed on December 4, 2013.

County of San Mateo, 2013. Local Coastal Program Policies (Amended through August 8, 2012). Available online at: http://www.co.sanmateo.ca.us/Attachments/planning/PDFs/LCP/SMC_Midcoast_LCP_2013.pdf. Accessed on December 5, 2013.

2.2 Agricultural and Forest Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
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:**				
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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, an existing Open Space Easement, or a Williamson Act contract?	☐	☐	☐	☒
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 forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒
e) Result in damage to soil capability or loss of agricultural land?	☐	☐	☐	☒
f) Conflict with existing zoning for, or cause rezoning of, forest land (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 forest land to a non-timber harvesting use.	☐	☐	☐	☒

Discussion

a) As the project area is located entirely within the Coastal Zone, there would be **no impact** related to land outside the Coastal Zone.

b) As the project is not located within an area designated or zoned for agriculture, an Open Space Easement, or a Williamson Act contract, there would be **no impact** on lands with any such characteristic.

c) The project would occur within areas of existing residential and commercial development, zoned for low to medium density residential and neighborhood commercial

land uses. Improvement of San Ramon Avenue may increase the development potential of vacant parcels adjacent to the project area. These parcels are also located within an area zoned for low-density residential development (County of San Mateo, 2013). Beyond the project area to the north and east, past Park Avenue and Bernal Avenue, the lands are zoned for agricultural use; however, they are not presently under agricultural production. The Seal Cove road improvements may increase development potential of lots in the immediate project vicinity. However, the adjacent lands to the north are steeply sloping and include large wetlands areas, while those to the south are owned by Peninsula Open Space Trust and serve as Pillar Point Bluff County Park. As such, increased development potential within the project area is not expected to result in a conversion of adjacent agriculturally zoned land to non-agricultural uses. For these reasons, there would be **no impact**.

d) Even though located within the Coastal Zone, the project sites do not include lands identified as Class I or Class II Agricultural Soils, or Class III soils rated good or very good for artichokes or Brussels sprouts. Therefore, the project would have **no impact** on lands with such designation.

e) For the reasons identified in response to criteria 2c), above, there would be **no impact**.

f) The project areas are not zoned as forest land, timberland, or Timberland Production. Therefore, there would be **no impact** on lands with such designations.

References

County of San Mateo, 1999. Zoning Regulations. Available online at: http://www.co.sanmateo.ca.us/vgn/images/portal/cit_609/9441580Zregs-wp.pdf. Accessed March 2013.

County of San Mateo, 1986. General Plan Background Issues and Maps. Available online at: http://www.co.sanmateo.ca.us/planning/genplan/index.html. Accessed March 2013.

County of San Mateo, 2013. Local Coastal Program Policies (Amended through August 8, 2012). Available online at: http://www.co.sanmateo.ca.us/Attachments/planning/PDFs/LCP/SMC_Midcoast_LCP_2013.pdf. Accessed on December 5, 2013.

2.3 Air Quality

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
3. AIR QUALITY — Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. **Would the project:**				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute significantly to an existing or projected air quality violation?	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to significant pollutant concentrations, as defined by the BAAQMD?	☐	☐	☒	☐
e) Create objectionable odors affecting a significant number of people?	☐	☐	☒	☐
f) Generate pollutants (hydrocarbon, thermal odor, dust or smoke particulates, radiation, etc.) that will violate existing standards of air quality on-site or in the surrounding area?	☐	☐	☒	☐

Discussion

The Bay Area Air Quality Management District (BAAQMD) adopted thresholds of significance (BAAQMD thresholds) on June 2, 2010, to assist lead agencies in determining when potential air quality impacts would be considered significant under CEQA. BAAQMD also released CEQA Guidelines in May 2011, which advise lead agencies on how to evaluate potential air quality impacts with the adopted new thresholds of significance. On March 5, 2012, the Alameda County Superior Court issued a judgment finding that BAAQMD had failed to comply with CEQA when it adopted its 2010 thresholds of significance. While the court did not determine whether or not the thresholds were valid, it did find that the adoption of the thresholds was a project under CEQA, and therefore that BAAQMD should have conducted environmental review. As a result, the court set aside the thresholds and ordered BAAQMD to cease dissemination of them until it had complied with CEQA. BAAQMD appealed the court's decision and the Court of Appeal of the State of California, First District, reversed the trial court's decision. The Court of Appeal's decision was appealed to the California Supreme Court, which granted limited review, and the matter is currently pending there.

In compliance with the trial court's order, which remains in place pending final resolution of the case, BAAQMD is no longer recommending that the thresholds be used as a generally applicable measure of a project's significant air quality impacts, and lead agencies are not required to use these thresholds in their environmental documents. However, nothing in the court's decision

prohibits an agency's use of the thresholds to assess the significance of a project's air quality impacts. Therefore, based on substantial evidence, the analysis herein uses the BAAQMD thresholds and methodologies in its *CEQA Air Quality Guidelines* (BAAQMD, 2011) to determine the significance of project-related impacts with respect to air pollutant emissions.

a) The project sites are within the San Francisco Bay Area Air Basin (Bay Area), which is currently designated as a nonattainment area for State and national ozone standards, State particulate matter (PM10 and PM2.5) standards, and federal PM2.5 (24-hour) standard. The BAAQMD's 2010 Clean Air Plan (BAAQMD, 2010) is the applicable Clean Air Plan (CAP) that has been prepared to address ozone nonattainment issues.

The BAAQMD CEQA Air Quality Guidelines (BAAQMD, 2011) identify a three-step methodology for determining a project's consistency with the current CAP. If the responses to these three questions can be concluded in the affirmative and those conclusions are supported by substantial evidence, then BAAQMD considers the project to be consistent with air quality plans prepared for the Bay Area.

The first question to be assessed in this methodology is "does the project support the goals of the Air Quality Plan (currently the 2010 CAP)?" The BAAQMD-recommended measure for determining project support for these goals is consistency with BAAQMD thresholds of significance. If a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation measures, the project would be consistent with the goals of the 2010 CAP. As indicated in the following discussion with regard to air quality impact questions 3b and 3c, both construction and operation of the project, with mitigation incorporated, would result in less than significant air quality impacts. Therefore, the project would be considered to support the primary goals of the 2010 CAP and, therefore, consistent with the 2010 CAP.

The second question to be assessed in this consistency methodology is "does the project include applicable control measures from the CAP?" The 2010 CAP contains 55 control measures aimed at reducing air pollution in the Bay Area. These measures have been developed primarily for projects that involve existing traffic or would generate new vehicle trips, and other projects involving transit and other non-automobile transportation options. However, the general focus of the CAP is to reduce emissions through, among other measures, improved efficiency of the transportation network. The proposed project would not be expected to generate new trips and, therefore, most of the TCMs identified in the 2010 CAP are not applicable to this project. However, the project would be a transportation improvement project and would improve circulation within the project area. At present, San Ramon Avenue is impassable to all but high clearance vehicles due to ruts and potholes. The proposed project would be consistent with the *Montara-Moss Beach-Granada Area Plan*, which notes that while the dirt roads contribute to the community's character, "they need to be paved in order to control drainage and provide an adequate all weather travel surface" (San Mateo County, 1985). Improving circulation

of the affected roadways would serve to improve the efficiency of the local transportation system, and therefore would be consistent with the CAP.

The third question to be assessed in this consistency methodology is "does the project disrupt or hinder implementation of any control measures from the CAP?" Examples of how a project may cause the disruption or delay of control measures include a project that precludes an extension of a transit line or bike path, or proposes excessive parking beyond parking requirements. The project would not create any barriers or impediments to planned or future improvements to transit or bicycle facilities and does not include additional parking areas, and therefore would not hinder implementation of CAP control measures. The responses to all three of the questions with regard to CAP consistency are affirmative and the project would not conflict with or obstruct implementation of the 2010 CAP, and thus would have a **less-than-significant** impact.

b) The project consists of improvement of approximately 1,500 linear feet of roadway along three public dirt roads that are not maintained by San Mateo County, along with construction of biotreatment measures to treat stormwater runoff. Construction would involve use of equipment and materials that would emit ozone precursor emissions (i.e., reactive organic gases or ROG, and nitrogen oxides, or NOx). Construction activities would also result in the emission of other criteria pollutants from equipment exhaust, construction-related vehicular activity, and construction worker automobile trips. Emission levels for these activities would vary depending on the number and type of equipment, duration of use, operation schedules, and the number of construction workers. Criteria pollutant emissions of ROG and NOx from these emission sources would incrementally add to the regional atmospheric loading of ozone precursors during project development. Emissions were estimated using the Roadway Construction Emissions Model (RoadMod), version 7.1.2 (Sacramento Metropolitan Air Quality Management District, 2012), which BAAQMD recommends for linear construction projects. Results of this modeling are depicted below in **Table 1**. Additional assumptions and information are included in **Appendix A**.

TABLE 1
PEAK DAY CONSTRUCTION-RELATED POLLUTANT EMISSIONS (Pounds/Day)[a]

Year	ROG	NOx	CO	Exhaust PM10[b]	Exhaust PM2.5[b]
2014 (Unmitigated Emissions)	4	48	22	2	2
BAAQMD Construction Threshold	54	54	None	82	54
Significant Impact?	No	No	No	No	No

[a] Emissions were modeled using RoadMod with default assumptions in most cases. It was assumed that construction would occur for 45 working days (about 2 months) in the year 2014 and that there would be a maximum of 15 daily workers and 5 daily haul trips needed for asphalt/concrete import and/or soil export. Additional information is included in Appendix A.

[b] BAAQMD's proposed construction-related significance thresholds for PM10 and PM2.5 apply to exhaust emissions only and not to fugitive dust.

Although the project would not generate emissions during the short-term construction phase that would exceed the BAAQMD thresholds, due to the non-attainment status of the air basin with respect to ozone, PM10, and PM2.5, the BAAQMD recommends that projects implement a set of Basic Construction Mitigation Measures as best management practices regardless of the significance determination. Implementation of **Mitigation Measure AIR-1, BAAQMD's Basic Construction Mitigation Measures,** would reduce impacts to a **less-than-significant** level.

In regards to long-term operations, the proposed project would improve circulation within the project area. The project would not be expected to generate new trips, except for occasional maintenance trips following project implementation. Operational impacts of the project would, therefore, be **less-than-significant** without mitigation.

Mitigation Measure AIR-1: BAAQMD's Basic Construction Mitigation Measures. The County shall require construction contractors to implement all the BAAQMD's Basic Construction Mitigation Measures, listed below:

- Dust control watering shall be implemented, as necessary, for all exposed surfaces (e.g., parking areas, soil piles, graded areas, and unpaved access roads) up to two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
- All roadways to be paved shall be completed as soon as possible following grading.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five 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.
- 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.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

c) According to the BAAQMD, no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. In addition, according to the BAAQMD *CEQA Air Quality Guidelines*, if a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions (BAAQMD, 2011). Alternatively, if a project does not exceed the identified significance thresholds, as would be the case with the proposed project, then the project would not be considered cumulatively considerable and would result in **less-than-significant** cumulative impacts on the air quality environment.

d) Land uses in the project vicinity consist of rural residential, neighborhood commercial, and public land uses. Construction of the project would result in short-term diesel exhaust emissions (DPM), which are toxic air contaminants (TACs), from on-site heavy-duty equipment. Project construction would generate DPM emissions from the use of off-road diesel equipment required for construction activities. Exposure of sensitive receptors is the primary factor used to determine health risk. Exposure is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. A longer exposure period would result in a higher exposure level. Thus, the risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of the proposed construction activities (approximately two months) would only constitute a small percentage of the total 70-year exposure period. Furthermore, the use of diesel powered construction equipment would be temporary and episodic, affecting only a few nearby receptors for a limited period of time. Due to the nature of the project, once the construction phase is completed, there would be no continued emissions of TACs associated with project operation.

   In conclusion, the proposed project would not expose sensitive receptors to substantial pollutant concentrations during construction or operations. Therefore, impacts related to exposure of sensitive receptors to substantial pollutant concentrations would be considered **less-than-significant**.

e) As a general matter, the types of land uses that pose potential odor problems include wastewater treatment plants, refineries, landfills, composting facilities, and transfer stations. No such uses would occupy the project sites. Although some odors may occur during construction due to the use of diesel-fueled engines and asphalt paving, construction activities would be temporary and would only affect a few nearby receptors for a limited period of time. Upon completion of the proposed project, objectionable odors would not occur. Therefore, the project would not create objectionable odors that

would affect a substantial number of people and this impact would be considered **less-than-significant**.

f) As discussed for criteria 3b, above, the project would not cause a violation of air quality standards. Also, as discussed for criteria 3d and 3e, above, the project would not expose sensitive receptors to substantial pollutant concentrations or objectionable odors. Thus, the project would not generate pollutants that would violate existing standards of air quality on-site or in the surrounding area. This impact would be considered **less-than-significant**.

References

Bay Area Air Quality Management District (BAAQMD), 2010. Bay Area 2010 Clean Air Plan, adopted September 15, 2010. Available online at http://www.baaqmd.gov. Accessed March 2013.

Bay Area Air Quality Management District (BAAQMD), 2011. CEQA Air Quality Guidelines, revised May 2011. Available online at: http://www.baaqmd.gov. Accessed March 2013.

Sacramento Metropolitan Air Quality Management District, 2012. Roadway Construction Emissions Model, Version 7.1.2. September 2012.

2.4 Biological Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4. BIOLOGICAL RESOURCES — Would the project:				
a) Have a significant adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a significant adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a significant adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere significantly with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
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)?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, other approved local, regional, or State habitat conservation plan?	☐	☐	☐	☒
g) Be located inside or within 200 feet of a marine or wildlife reserve?	☐	☐	☐	☒
h) Result in loss of oak woodlands or other non-timber woodlands?	☐	☐	☐	☒

Discussion

A site visit was conducted by ESA ecologist C. Rogers on February 28, 2013 to assess the potential biological resources in the project area, including special-status[1] species and their habitats; riparian habitats or other sensitive natural communities[2]; wetlands; wildlife corridors and nursery sites; and heritage and landmark trees.

1 Special-status species are plants and animals that are listed as endangered or threatened under Federal or California Endangered Species Acts; listed as rare under the California Native Plant Protection Act; birds protected under the Migratory Bird Treaty Act; are considered sensitive by the scientific community and included in the following CDFW Lists: Special Animals List; Special Vascular Plants, Bryophytes, and Lichens List; Fully Protected Animals List; Amphibian Species of Special Concern List; Reptile Species of Special Concern List; Bird Species of Special Concern List; and Mammal Species of Special Concern List.

2 Sensitive natural communities are those identified as high priority natural community element or vegetation type (designated as S1, S2, or S3) in CDFW's *Natural Communities List* (CDFW, 2010).

a) The following evaluation of the project's potential impacts on biological resources considers vegetation communities observed on or adjacent to the project site relative to general habitat requirements of special-status plants and animals that are known to reside in the project vicinity or that have the potential to seasonally or periodically occur in the project area.

The project has the potential to impact directly or indirectly through habitat modifications species identified as special-status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS). The CNDDB recognizes 74 special-status plant and wildlife species that occur along the coast from the Golden Gate Bridge south to Santa Cruz, California. The California Native Plant Society recognizes 33 plants that occur within the Montara Mountain USGS 7.5-minute quadrangle, which encompasses both project areas (CDFW, 2013). Many of these species are aquatic or marine species for which suitable habitat is absent from the project areas. The remaining species with potential to occur in the project areas are described below.

The project sites are located within one mile from known populations of the following special-status species: coastal marsh milk-vetch (*Astragalus pycnostachyus* var. *pycnostachyus*), rose leptosiphon (*Leptosiphon rosaceus),* coast yellow leptosiphon (*L. croceus*), Hickman's cinquefoil (*Potentilla hickmanii*), monarch butterfly (*Danaus plexippus*), salt marsh common yellow-throat (*Geothlypis trichas sinuosa*), California red-legged frog (*Rana draytonii*), and San Francisco garter snake (*Thamnophis sirtalis tetrataenia*).Western (=Pacific) pond turtle (*Actinemys marmorata*) may also occur in the area. San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*) is commonly found throughout coastal San Mateo County, including along nearby Denniston and San Vicente Creeks (Foster, 2013) and may be present in coastal scrub habitat near the project area. Coastal marsh milk-vetch, rose leptosiphon, and coast yellow leptosiphon are not listed under federal or state endangered species acts, but are jointly identified by the CDFW and the California Native Plant Society (CNPS) as Rare Plant Ranks[3] 1B.2, 1B.1, and 1B.1, respectively. Hickman's cinquefoil is listed as "endangered" under both the Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA); it is also identified by CDFW and CNPS as Rare Plant Rank 1B.1.

Overwintering sites of monarch butterflies are protected by CDFW, although monarchs themselves have no listing status. Salt marsh common yellowthroat is not listed under FESA or CESA, but is designated by CDFW as a California Species of Special Concern (SSC). California red-legged frog is listed as "threatened" under FESA and is a California SSC. San Francisco garter snake is listed as "endangered" under both FESA and CESA, and is a "fully-protected" species under California Department of Fish and Game Code

[3] Rare Plant Rank (RPR) 1B refers to species that are rare, threatened, or endangered in California or elsewhere. The .1 and .2 extensions further refer to species that are seriously endangered in California and fairly endangered in California, respectively.

Section 5050. San Francisco dusky-footed woodrat and western pond turtle are also California SSC.

Seal Cove Site

Based on the coastal scrub habitat found at the Seal Cove site and the proximity to known populations or occurrences, there is potential for coastal marsh milk-vetch, rose leptosiphon, coast yellow leptosiphon, Hickman's cinquefoil, California red-legged frog, San Francisco garter snake, western pond turtle, and San Francisco dusky-footed woodrat to occur in or pass through the project area, along with additional species of special-status plants that grow in coastal scrub and remnant coastal bluff habitat. The Seal Cove site is located approximately 500 feet from a 2005 reported occurrence of California red-legged frog (*Rana draytonii*). In 2005, during surveys performed for the Pillar Point Bluff Trail Project, a California red-legged frog was observed in abandoned agricultural ponds located approximately 500 feet northeast of San Ramon Avenue; in June 2012, San Mateo County Biologist Carole Foster observed two adult red-legged frogs in an outlet pool at the southwest end of the airport runway, approximately one mile from the Seal Cove site (County of San Mateo, 2007; Foster, 2013).

During the nesting bird season, there is potential for salt-marsh common yellow-throat to nest in coastal scrub habitat along San Ramon Avenue and for other species of nesting birds to occur in coastal scrub, trees, and ruderal vegetation throughout the project area. California red-legged frog may migrate through or forage anywhere within the Seal Cove project site, and San Francisco garter snake may migrate through or forage in coastal scrub habitat or bask along San Ramon Avenue. Like California red-legged frog and San Francisco garter snake, western pond turtle may be encountered in upland areas as they move among aquatic habitats in the region. San Francisco dusky-footed woodrat may nest in coastal scrub adjacent to San Ramon Road. Monarch butterfly overwintering sites are absent from the project areas. Monarch butterflies typically overwinter in one or more select trees within a grove of large trees, and groves of large trees do not occur within or adjacent to the project areas.

Aside from the monarch butterfly, these other species are generally associated with coastal scrub and have the potential to be encountered at the Seal Cove site, particularly along San Ramon Avenue. This road is presently a narrow dirt road with undeveloped, yet disturbed coyote bush scrub and non-native grassland habitat on both sides. Beyond the Seal Cove project site, lands to the north consist of undeveloped coastal scrub and wetlands. These open space lands have unimpeded habitat connectivity to areas where special status species are known to occur northwest and southeast of the project area. The lands adjacent to the Seal Cove project site could support the species, or could provide a movement corridor for terrestrial wildlife species.

The project could have a potentially significant impact with regard to these special-status species and their habitats. Widening and paving of San Ramon Avenue would occur from the end of existing pavement east to its intersection with Bernal Avenue, a distance of

approximately 737 linear feet. Within a 50-foot right-of-way the road would be paved with a 16-foot wide travel way. On each side of the road, vegetated biotreatment facilities measuring approximately five feet in width would be constructed or enhanced.

To better understand the potential for impacts on special-status plant species, San Mateo County Biologists Carole Foster and Adam Remmel surveyed the Seal Cove site for rare plants in April and May 2013. The surveys were conducted during the peak blooming periods for special-status plant species known to occur within one mile of the Seal Cove project site, including coastal marsh milk-vetch, coast yellow leptosiphon, Hickman's cinquefoil, and rose leptosiphon. The project site was surveyed extensively over a period of three days. None of these species was identified within the area of proposed disturbance, and the final report, included as **Appendix B**, concluded the project would have no impact with respect to these special-status plant species (County of San Mateo, 2013a). Discussed more fully in Impact 2.4(b), the surveys did identify patches of wild strawberry, which the County's LCP identifies as a "unique species."

However, grading activities and tree-felling could affect other special-status species. Migrating California red-legged frog, western pond turtle, and San Francisco garter snake could be injured or crushed by heavy equipment or the felling of large trees limbs. Construction disturbance could also cause these species to avoid the area, resulting in increased exposure to predators or decreased foraging opportunities. Tree-trimming, tree removal, and grading activities could result in destruction of an active bird nest. Noise and disturbance could cause nesting birds to abandon their nests or reduce the attention they give their young, resulting in insufficient incubation, feeding, or protection, possibly resulting in nest failure. Construction disturbance could increase the exposure of nesting birds and their young to predators. Potential clearing of coastal scrub during widening of San Ramon Avenue and the use of heavy equipment also has the potential to destroy woodrat nests, displacing individual nest occupants and exposing them to predators.

Implementation of **Mitigation Measures BIO-1, Protection of Nesting Birds, and BIO-2, Survey, Flag and Relocate Dusky-footed Woodrat Nests,** would determine whether any non-listed special-status birds or other animals occur within the project disturbance area prior to and during construction and, if so, the need for resource agency consultation and additional mitigation and/or compensation measures. Implementation of these measures would reduce potential impacts to these resources from project activities at the Seal Cove site to **less-than-significant** levels. **Mitigation Measure BIO-3**, **Avoid, Minimize, and Mitigate for Impacts to California Red-legged Frog, San Francisco Garter Snake, Western (=Pacific) Pond Turtle, and their Habitat**, including preconstruction surveys, the presence of biological monitors, work windows, exclusionary fencing, and seeking technical guidance from the U.S. Fish and Wildlife Service would ensure direct and indirect effects on these species is avoided and minimized. With implementation of **Mitigation Measure BIO-3**, the potential impact on California red-legged frog, San Francisco garter snake, and western pond turtle at the Seal Cove site would be reduced to a **less-than-significant** level.

Carlos Street Site

The Carlos Street project site is presently covered entirely in asphalt paving, and is bordered on all sides by developed or highly disturbed areas. However, construction activities at the Carlos Street site could still affect sensitive or special-status species. Trees within 250 feet of the site provide potential habitat for nesting birds. Stormwater occasionally ponds within the vegetated median between Highway 1 and Carlos Street, in the segment north of California Avenue. San Mateo County Public Works staffers have, on various occasions year-round, observed California red-legged frogs in this drainage area north of California Street (Chen 2013). Due to the project site's proximity to the grassy median along Highway 1 and other potential habitat areas within their dispersal range, including Dean Creek (100 feet to the south), California red-legged frog, San Francisco garter snake, and western pond turtle could pass through the project area. Due to the developed condition of the site, the likelihood of encountering one of these species is expected to be less than at the Seal Cove site. For this same reason, construction activities at the Carlos Street site would not be expected to affect any rare plants or any other vegetation.

While no trees occur within the latter project site, construction activities would still generate noise and disturbance that could adversely affect birds nesting in trees near the project site. With **Mitigation Measure BIO-1, Protection of Nesting Birds,** which calls for avoidance of the nesting season and, as necessary, a nesting bird survey and construction buffers, the potential for impacts on nesting birds would be reduced to a **less-than-significant** level.

While no habitat occurs within the Carlos Street site, California red-legged frogs, San Francisco garter snakes, and western pond turtles migrating through the area could be injured or destroyed by construction equipment during project implementation. Discussed above, **Mitigation Measure BIO-3, Avoid, Minimize, and Mitigate for Impacts to California Red-legged Frog, San Francisco Garter Snake, Western (=Pacific) Pond Turtle, and their Habitat,** would reduce the potential for such impacts through construction monitoring, timing of construction, and installation of exclusionary fencing, among other measures. With **Mitigation Measure BIO-3**, the potential for impacts on these special status species from project activities at the Carlos Street site would be reduced to a **less-than-significant** level.

In summary, project-related construction activities at the Seal Cove and Carlos Street sites could have a potentially significant impact on nesting birds, California red-legged frog, San Francisco garter snake, and western pond turtle through habitat modification or direct injury or death. Project activities at the Seal Cove site could also impact dusky-footed woodrat or its habitat. With **Mitigation Measures BIO-1** and **BIO-3**, as applicable, the potential for adverse impacts on these species would be reduced to a **less-than-significant** level.

> **Mitigation Measure BIO-1: Protection of Nesting Birds.** The project shall avoid implementation during the nesting bird season, if possible. The nesting bird season

is generally described by CDFW as the period between February 1 and August 31. If seasonal avoidance is not feasible, then the following measures would be implemented.

- No more than two weeks prior to commencement of construction activities, including but not limited to surveying, grading, tree-trimming, and tree-felling, a biologist shall conduct a nesting bird survey to determine whether nesting birds occur within 250 feet of the project area or nesting raptors occur within 500 feet of the project area. If nesting birds and raptors do not occur within 250 and 500 feet of the project area, respectively, then no further action is required.

  Should any active nests be discovered in or near proposed construction zones, the surveying biologist shall, based upon site conditions and type of species, determine an appropriate construction buffer to be implemented. Buffers shall be 500 feet for raptors and 250 feet for non-raptors. However, these buffers may be decreased or increased, in consultation with CDFW and/or USFWS, based upon species-specific, site-specific, and activity-specific considerations, including the nesting species in question, baseline noise levels, type and decibel output of construction equipment to be used, and whether disturbance would occur within line-of-sight of the nest.

  If the nest in question belongs to a species listed under federal or state Endangered Species Acts, a California Species of Special Concern or a California Fully-Protected Species, then CDFW and/or USFWS, as appropriate, shall be consulted to establish nesting buffers and monitoring criteria.

  If construction buffers are decreased to less than 500 feet for raptors or less than 250 feet for songbirds, a biologist familiar with the bird's nesting requirements and behavior shall monitor the nest full-time during construction activities until s/he determines that continued activities would not result in nest failure.

Mitigation Measure BIO-2 applies only to the Seal Cove site.

Mitigation Measure BIO-2: Survey, Flag and Relocate Dusky-footed Woodrat Nests. Prior to the start of vegetation removal or any other construction activities that could impact coastal scrub habitat along San Ramon Avenue, a biologist familiar with the species and its habitat requirements shall survey for San Francisco dusky-footed woodrat nests within or immediately adjacent to the proposed disturbance area. If none are observed, then no further mitigation would be required. If nests are observed but would not be directly impacted by project activities, the biologist shall delineate the nests and establish a 10-foot buffer around the nests using exclusion fencing to ensure they are not accidentally destroyed by heavy equipment, worker vehicles, or construction foot traffic. The exclusion fencing shall remain in place for the duration of the project and fully removed from the project site upon project completion. If avoidance is not feasible because a nest is within the project footprint, a biologist shall disassemble the nest by hand and relocate/reconstruct it beyond the work area.

Mitigation Measure BIO-3: Avoid, Minimize, and Mitigate for Impacts to California Red-legged Frog, San Francisco Garter Snake, Western (=Pacific) Pond Turtle, and their Habitat. The following measures shall be implemented to avoid or reduce impacts on California red-legged frog, San Francisco garter snake, and western (=Pacific) pond turtle:

- Prior to project construction, the County shall seek technical guidance from the USFWS regarding the measures required to ensure take of California red-legged frog and San Francisco garter snake is avoided and to determine whether any further consultation would be required. The request for technical guidance shall be accompanied by a copy of the IS/MND and any maps, photographs, and habitat descriptions that may facilitate the USFWS analysis and guidance. The County shall incorporate into project plans and implement prior to, during, and following construction, as appropriate, any additional guidance provided by USFWS.

- Immediately prior to vegetation removal or other construction activities, a biologist familiar with the habitat requirements of California red-legged frog, San Francisco garter snake, and western pond turtle shall conduct a preconstruction survey to determine whether any of these species is within the project area. If California red-legged frog or San Francisco garter snake is identified in the work area during preconstruction surveys or at any subsequent time during construction, construction activities in the immediate area shall halt until the species has left the area OR, if permitted, a USFWS-approved biologist shall relocate the species outside of the work area. Western pond turtle may be relocated without agency approval.

- Ground disturbance and construction footprints shall be minimized to the greatest degree feasible.

- Work activities within or adjacent to suitable habitat shall be completed between June 15 and October 31, when possible. Suitable habitat shall be separated from the active work area with amphibian exclusion fencing, unless otherwise directed by the USFWS and CDFW. The fence shall be installed under the direct supervision of a biologist. One-way exclusion doors may be installed at the direction of USFWS or CDFW.

- A biological resource monitor shall conduct worker awareness training for construction personnel, addressing California red-legged frog, San Francisco garter snake, and western pond turtle basic biology and identifying characteristics, legal status, job-specific protection measures, and penalties for noncompliance.

- A biologist shall act as a regular (i.e., weekly, unless otherwise instructed by USFWS and CDFW) construction monitor. If a full-time monitor is not required by the USFWS and CDFW, then an appropriate person (i.e., construction management team supervisor) shall be designated as the onsite biological monitor and shall be trained by the biologist to identify special-status species.

- A preconstruction survey for California red-legged frog, San Francisco garter snake, and western (=Pacific) pond turtle shall be conducted each day by the

onsite monitor immediately preceding construction activity that occurs within or adjacent to suitable habitat.

- Suitable habitat for California red-legged frog or San Francisco garter snake that is temporarily impacted by project-related activities shall be restored to pre-project conditions.

- Vegetated areas beyond the project site disturbed in the course of project construction shall be revegetated with native plant species suitable to coyote brush scrub habitats upon completion of construction.

b) The project area is within the Coastal Zone and is therefore subject to the provisions of San Mateo County's LCP. The LCP defines as environmentally sensitive habitat (ESHA) "any area in which plant or animal life or their habitats are either rare or especially valuable and contains or supports rare and endangered species as defined by the State Fish and Game Commission." An ESHA is considered a sensitive natural community for the purposes of this analysis. The Sensitive Habitats Map (1984), prepared for the San Mateo County General Plan, depicts ESHAs mapped by the County. The project sites are not within the identified ESHAs. The nearest areas of mapped ESHAs are the marine and estuarine habitats of the Fitzgerald Marine Reserve, located at the base of a coastal bluff approximately 500 feet west of the project area; and the riparian corridor along San Vicente Creek, located 0.75 mile north of the Seal Cove site and 0.5 mile south of the Carlos Street site. The map also identifies the open space area south of the Seal Cove site as habitat for reptiles and amphibians (San Mateo County, 1984).

The project would occur within or adjacent to areas of existing residential and commercial development. The Seal Cove project site is characterized by existing unpaved dirt roads, bounded by coastal scrub, non-native annual grassland, and landscape/ornamental habitats. To the east and south of the project area, along San Ramon Avenue, lies the 119-acre Pillar Point Bluff Park and adjacent undeveloped properties. These lands provide contiguous coastal scrub and freshwater wetlands habitats for a number of rare and special status plant and animal species, including California red-legged frog and San Francisco Garter Snake. Due to a history of disturbance, the areas to be improved at the Seal Cove site are of marginal habitat value, and therefore would not be considered ESHA.

However, because of its proximity to this contiguous open space area, which may be considered an ESHA, the portion of the Seal Cove site along San Ramon Avenue has the potential to be used by these sensitive species (see Impact 2.4(a), above). The potential effects of the project on these species would be minimized and/or avoided through implementation of **Mitigation Measures BIO-1 through BIO-3**. This would also ensure that indirect effects of the project on nearby ESHA are reduced or avoided. With implementation of these measures, the effects of project activities on ESHA at or near the Seal Cove site would be **less-than-significant**.

The Carlos Street site does not contain any ESHAs. The project would occur entirely within an area that is presently covered in asphalt paving. As a result, there would be no

direct impact to ESHA in association with project activities at the Carlos Street site. Trees containing active nests in the vicinity of the Carlos Street could be considered ESHA. As discussed in response to question 2.4a), potentially significant impacts on nesting birds could occur from project-related noise at the Carlos Street site. With **Mitigation Measure BIO-1**, which calls for work windows and, as necessary, a nesting bird survey and construction buffer, the potential for impacts on nesting bird habitat would be **less than significant**.

The LCP also provides special protections for unique species, including California wild strawberry (*Fragaria californica*). LCP Section 7.49 provides the following:

> Require any development, within one half mile of the coast, to mitigate against the destruction of any California wild strawberry in one of the following ways:
>
> a. Prevent any development, trampling, or other destructive activity which would destroy the plant, or
>
> b. After determining specifically if the plants involved are of particular value, successfully transplant them or have them successfully transplanted to some other suitable site. Determination of the importance of the plants can only be made by a professional doing work in strawberry breeding.

The rare plants survey conducted by San Mateo County biologists in April and May of 2013 identified beach strawberry (*Fragaria chiloensis*) at five distinct locations within the Seal Cove site. Patches of beach strawberry were observed within the proposed work area at the intersection of San Ramon and Bernal Avenues, and in small patches along Del Mar Avenue. Other small patches of beach strawberry were observed within 25 feet of the work area in the vacant lot east of San Ramon Avenue and in residential yards along Del Mar Avenue and Madrone Avenue (County of San Mateo, 2013a). Beach strawberry does not occur at the Carlos Street site.

California wild strawberry plants in the project area are presumed to be of value and require transplantation. **Mitigation Measure BIO-4, Transplant California Wild Strawberry Plants,** would ensure compliance with applicable LCP policies through the identification, avoidance, and or transplant of wild strawberry prior to commencement of construction at the Seal Cove site. With **Mitigation Measure BIO-4**, impacts on California wild strawberry would be reduced to a **less-than-significant** level.

Mitigation Measure BIO-4 applies only to the Seal Cove site.

> **Mitigation Measure BIO-4: Transplant California Wild Strawberry Plants.** Prior to ground disturbance and with the guidance of survey markers to delineate the project footprint, a biologist familiar with the species and its habitat requirements shall identify and mark (e.g., with flagging or orange plastic fencing) California strawberry plants to establish an exclusionary zone. If any protected plant cannot be excluded from the area of impact, it shall be transplanted to a suitable location within the project site under the supervision of a biologist familiar with the habitat requirements of wild strawberry.

c) A wetland study was conducted on May 29, 2013 (ESA, 2013) to determine whether any wetlands, as defined by the Corps, RWQCB, and/or the LCP, occur at the Seal Cove site; there are no potential wetlands at the Carlos Street site as the entire site is covered in asphalt paving.[4] The wetland study is included as **Appendix C**. The study was conducted as a follow-up to a wetlands assessment conducted during a March 2013 site visit, which identified standing water in tire ruts and other deep depressions within and adjacent to San Ramon Avenue and Del Mar Avenue, and *Juncus* and *Rubus* species in moist areas. The study identified none of the standard wetland indicators; no hydric soils were encountered and a low percentage of hydrophytic plants was observed. Based on the absence of these standard indicators, the wetland study concludes that there are no jurisdictional wetlands in the project area (ESA, 2013). Accordingly, the project would have **no impact** on wetlands and no mitigation would be required.

d) The project would not interfere significantly with the movement of any native resident or migratory species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites. The project area in its entirety is a potential movement corridor for California red-legged frog, and coastal scrub habitat along San Ramon Avenue provides protective cover for San Francisco garter snakes that could potentially move through the area. Western pond turtles occurring in coastal streams and wetlands could also pass through the project sites. However, there is abundant dispersal habitat available outside of the project area, and species' movements would not be significantly hindered by project construction. Therefore, the impact would be **less-than-significant** with respect to migratory corridors.

e) Project activities would require the removal of one large Monterey cypress (*Cupressus macrocarpa*) tree from the right-of-way of San Ramon Avenue at the Seal Cove site. The tree measures approximately 20 inches in diameter (63 inches in circumference) at 4.5 feet above the ground surface. The County's Significant Tree Ordinance generally requires a permit or equivalent authorization for removal of trees greater than 38 inches in circumference and sets forth the criteria for granting such authorization, including requiring replacement plantings. However, California Government Code sections 53090 and 53091 exempt county government agencies from county ordinances related to building and construction, including zoning. The Department of Public Works is a County agency. Therefore, the proposed project is exempt from such San Mateo County ordinances and regulations. Further, Significant Tree Ordinance Section 12023 stipulates that replacement plantings may not be required where special conditions exist. In the case of the proposed project, the right-of-way is not wide enough to accommodate both replacement trees and the requisite bioretention facilities. However, even if it were wide enough, replacement tree roots could jeopardize existing underground utilities (sewer and water lines) and the proposed biotreatment measures within the existing right-of-way. For

[4] The project description has evolved since preparation of the May 2013 wetlands study. As a result, the project, as described in that document, is slightly different from the one analyzed in this IS/MND. However, the project revisions have no bearing on the analysis relied upon in the study. Therefore, the findings of the wetland study remain valid.

these reasons, the tree removal would have a **no impact** with respect to conflict with a tree preservation policy or ordinance.

f) The proposed project area is located approximately 430 feet from the edge of coastal bluffs, at the bottom of which lies the James V. Fitzgerald Marine Reserve, within the Monterey Bay National Marine Sanctuary. The Reserve is an Area of Special Biological Significance as designated by California's Ocean Plan, and is jointly managed by CDFW and San Mateo County Department of Public Works. It is managed according to the direction of the Fitzgerald Marine Reserve Master Plan (Brady/LSA, 2002). Major threats to the biological resources of the reserve include urban run-off, which is discussed in Section 2 9, Hydrology and Water Quality. The proposed project would not conflict with the plans, policies, or objectives of the Fitzgerald Marine Reserve Master Plan or the Ocean Plan because the creation of biotreatment measures in accordance with the C.3 provisions (Post Construction Stormwater Controls) of the Municipal Regional Stormwater NPDES Permit Order R2-2009-0074 would prevent new, project-related sources of urban run-off from entering the marine reserve. For these reasons, the proposed project would have **no impact** with respect to local, regional, or state habitat conservation plans.

g) The proposed project is not located inside or within 200 feet of a marine or wildlife reserve. As described above, the project area is approximately 500 feet from the James V. Fitzgerald Marine Reserve, and is vertically separated by coastal bluffs. As described in (f) above, the creation of onsite biotreatment measures would prevent new sources of project-related urban run-off from entering the marine reserve. Therefore, there would be **no impact** with respect to a marine or wildlife reserve.

h) No oak woodlands or non-timber woodlands were identified in the project area during the February 28, 2013 site visit and therefore, the proposed project would have **no impact** on these types of resources.

References

Brady/LSA, 2002. Fitzgerald Marine Reserve Master Plan, Final Draft. May, 2002.

California Department of Fish and Wildlife (CDFW), 2013. California Natural Diversity Database. Biogeographic Data Branch. Available online at: http://www.dfg.ca.gov/biogeodata/cnddb/. Accessed in March 2013.

California Native Plant Society (CNPS), 2013. Online Inventory of Rare and Endangered Plants, version 7. March 14, 2013. Available online at: http://cnps.site.aplus.net/cgi-bin/inv/inventory.cgi. Accessed March 28, 2013.

County of San Mateo, 1986. General Plan Background Issues and Maps. Available online at: http://www.co.sanmateo.ca.us/planning/genplan/index.html. Accessed March 2013.

County of San Mateo, 1990. Significant Tree Ordinance. Adopted May 15, 1990. Available online at: http://www.co.sanmateo.ca.us/vgn/images/portal/cit_609/43/13/390508716significant%20tree%20ordinance.pdf. Accessed March 2013.

County of San Mateo, 1999. Zoning Regulations. Available online at: http://www.co.sanmateo.ca.us/vgn/images/portal/cit_609/9441580Zregs-wp.pdf. Accessed March 2013.

County of San Mateo, 2007. Initial Study Pursuant to CEQA, Project Narrative and Answers to Questions for the Negative Declaration, File Number PLN 2006-0026, Pillar Point Bluff Trail Project. Available online at: http://scc.ca.gov/webmaster/ftp/pdf/sccbb/2007/0705/0705Board04_Pillar_Point_Bluff_Ex3.pdf. Accessed February 13, 2014.

County of San Mateo, 2013a. The Seal Cove/Moss Beach Area Roads Improvement Project, San Mateo County, California. Special Status Plants Survey Report. Prepared by County of San Mateo Department of Public Works. June 2013.

County of San Mateo, 2013b. Local Coastal Program Policies (Amended through August 8, 2012). Available online at: http://www.co.sanmateo.ca.us/Attachments/planning/PDFs/LCP/SMC_Midcoast_LCP_2013.pdf. Accessed on December 5, 2013.

Environmental Science Associates (ESA), 2013. *Preliminary Delineation of Waters of the United States and Waters of the State, San Mateo County, California for the Moss Beach/Seal Cove Area Roads Improvement Project*. Prepared by ESA for San Mateo County. June 2013.

Chen, Eric, 2013. Telephone correspondence between San Mateo County Engineer Eric Chen and ESA Project Manager Eli Davidian regarding presence of California red-legged frog in proximity to the project area. December 2013.

Foster, Carole, 2013. Email communication from County of San Mateo biologist Carole Foster regarding the presence of special-status species in the project area. May 2013.

2.5 Cultural Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
5. CULTURAL RESOURCES — Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a significant adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Discussion

a) A significant impact would occur if the project could cause a substantial adverse change to a historical resource, herein referring to historic-period architectural resources or the built environment, including buildings, structures, and objects. A substantial adverse change includes the physical demolition, destruction, relocation, or alteration of the resource.

Records searches were conducted at the Northwest Information Center of the California Historical Resources Information System at Sonoma State University on March 20, 2013 (Seal Cove project site; File No. 12-1051) and December 9, 2013 (Carlos Street project site) (File No. 13-0898). The review included the project sites and a ½-mile radius. Previous surveys, studies, and site records were accessed. Records were also reviewed in the Historic Property Data File for San Mateo County that contains information on sites of recognized historical significance, including those evaluated for listing in the *National Register of Historic Places*, the *California Register of Historical Resources*, the *California Inventory of Historical Resources*, *California Historical Landmarks*, and *California Points of Historical Interest*.

Records at the NWIC indicate that no historic-period resources of the built environment have been previously recorded in the records search radii. There are no buildings or structures within the project sites. Therefore, the project would not affect any historic-period buildings or structures and the project would have **no impact** on historical resources.

b) A significant impact would occur if the project could cause a substantial adverse change to an archaeological resource through physical demolition, destruction, relocation, or alteration of the resource.

The project sites are within the traditional territory of the Ohlone people (Levy, 1978: 485–495). Collectively referred to by ethnographers as Costanoan, the Ohlone were

distinct sociopolitical groups that spoke at least eight different languages of the same Penutian language group. The Ohlone occupied a large territory from San Francisco Bay in the north to the Big Sur and Salinas Rivers in the south. The primary sociopolitical unit was the tribelet, or village community, which was overseen by one or more chiefs. The project area is in the greater *Chiguan* tribal area (Milliken et al., 2009). The nearest ethnographic village site in the vicinity is *Ssatumnumo*, located southwest of the project sites in the vicinity of Princeton-by-the-Sea.

Results of the records search at the NWIC indicate that several cultural resources studies have been completed within a ½-mile radius of the project sites and that eleven prehistoric archaeological sites have been identified within the ½-mile radius, including one archaeological site immediately adjacent to the Seal Cove project site (Clark, 2009). These sites primarily consist of large lithic debitage scatters and shell middens indicating heavy use of this area during the prehistoric period for resource procurement. No archaeological sites have been previously identified in the records search radius of the Carlos Street project site.

An ESA Registered Professional Archaeologist completed a surface survey of the Seal Cove project site on March 22, 2013. The survey consisted of walking the roadways and a buffer of approximately 10 meters (30 feet) in very narrow (less than 5-meter-wide) transects. Ground visibility along the dirt roads was good although imported fill covered much of the roadways. The adjacent areas contained some rodent holes where the native soil could be examined. Vegetation was also periodically scraped back to reveal ground surface. No cultural materials, including midden soils, shell, or lithic fragments, were identified. The Carlos Street project site has been surveyed twice by qualified archaeologists (Earthtouch, 2005; and Hastings, 1975). No cultural resources were identified at the Carlos Street project site during those survey efforts.

Despite the negative survey results, the archaeological sensitivity of the Seal Cove project site is very high. Varying visibility and disturbance may have obscured archaeological materials and the discovery of significant archaeological resources cannot be entirely discounted. The total area of disturbance would be approximately 0.85 acre and would include grading and excavation one to one and a half feet below ground surface for roadway and drainage improvements. The excavation for biotreatment measures at the Seal Cove project site would occur in undisturbed areas and could uncover previously undiscovered archaeological materials. No archaeological resources have been identified at the Carlos Street project site; based on site distribution, topography, and previous disturbance at this location the potential for the discovery of archaeological resources at the Carlos Street project site is low.

If present, damage to unique archaeological resources would be a potentially significant impact. **Mitigation Measure CUL-1, Cultural Resources Monitoring,** would reduce this potential impact by requiring a qualified archaeologist and a Native American representative to monitor ground disturbing activities during project implementation at

the Seal Cove project site so that in the event of an unintentional discovery of archaeological resources, the resources are thoroughly documented and appropriately treated. For the Carlos Street project site, **Mitigation Measure CUL-2, Inadvertent Discovery of Prehistoric Resources,** requires that the County Planning and Building Department be notified in the event of an accidental discovery during project implementation. With **Mitigation Measures CUL-1,** and **CUL-2,** the impact on archaeological resources would be reduced to a level **less than significant**.

Mitigation Measure CUL-1 applies only to the Seal Cove project site.

> **Mitigation Measure CUL-1: Cultural Resources Monitoring.** Prior to authorization to proceed, or issuance of grading permits, the applicant shall prepare and submit a cultural resources monitoring plan to the County Planning and Building Department for review and approval. Monitoring shall be required for all subsurface excavation work. A Secretary of the Interior-qualified archaeologist shall prepare the plan. The plan shall include (but not be limited to) the following issues:
>
> - Training program for all construction and field workers involved in site disturbance;
> - Person(s) responsible for conducting monitoring activities, including Native American monitor(s);
> - Person(s) responsible for overseeing and directing the monitors;
> - How the monitoring shall be conducted and the required format and content of monitoring reports;
> - Schedule for submittal of monitoring reports and person(s) responsible for review and approval of monitoring reports;
> - Protocol for notifications in case of encountering cultural resources, as well as methods for evaluating significance, developing and implementing plan to avoid or mitigate significant resource impacts, Native American participation and consultation, collection and curation plan, and consistency with applicable laws including Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the Public Resources Code (PRC);
> - Methods to ensure security of cultural resources sites;
> - Protocol for notifying the County, Native Americans, and local authorities (i.e. Sheriff, Police) should site looting and other illegal activities occur during construction with reference to PRC 5097.99.
>
> During the course of the monitoring, the archaeologist may adjust the frequency—from continuous to intermittent—of the monitoring based on the conditions and professional judgment regarding the potential to impact resources.

If archaeological materials are encountered, all soil disturbing activities within 100 feet of the find shall cease until the resource is evaluated. The monitor(s) shall immediately notify the County of the encountered archaeological resource. The monitor(s) shall, after making a reasonable effort to assess the identity, integrity, and significance of the encountered archaeological resource, present the findings of this assessment to the County. In the event archaeological resources qualifying as either historical resources pursuant to CEQA Section 15064.5 or as unique archaeological resources as defined by Public Resources Code 21083.2 are encountered, preservation in place shall be the preferred manner of mitigation.

If preservation in place is not feasible, the applicant shall implement an Archaeological Research Design and Treatment Plan (ARDTP). The project archaeologist, Native American representatives, and the County shall meet to determine the scope of the ARDTP. The ARDTP shall identify how the proposed data recovery program would preserve the significant information the archaeological resource contains. The ARDTP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The results of the investigation shall be documented in a technical report that provides a full artifact catalog, analysis of items collected, results of any special studies conducted, and interpretations of the resource within a regional and local context. All technical documents are to be placed on file at the Northwest Information Center of the California Historical Resources Information System.

Mitigation Measure CUL-2 applies only to the Carlos Street project site.

Mitigation Measure CUL-2: Inadvertent Discovery of Prehistoric Resources. If prehistoric or historic-period archaeological resources are encountered, all construction activities within 100 feet shall halt and the County shall be notified. A Secretary of the Interior-qualified archaeologist shall inspect the findings within 24 hours of discovery. If it is determined that the project could damage a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines), mitigation shall be implemented in accordance with Public Resources Code (PRC) Section 21083.2 and Section 15126.4 of the CEQA Guidelines, with a preference for preservation in place. Consistent with Section 15126.4(b)(3), preservation in place may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If avoidance is not feasible, a qualified archaeologist shall prepare and implement a detailed treatment plan in consultation with the County and the affiliated Native American tribe(s), if applicable. Treatment of unique archaeological resources shall follow the applicable requirements of PRC Section 21083.2. Treatment for most resources would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The treatment plan shall include

provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.

c) A significant impact would occur if the project would destroy a unique paleontological resource or site, or a unique geologic feature. Paleontological resources are the fossilized evidence of past life found in the geologic record. Despite the tremendous volume of sedimentary rock deposits preserved worldwide, and the enormous number of organisms that have lived through time, preservation of plant or animal remains as fossils is an extremely rare occurrence. Because of the infrequency of fossil preservation, fossils—particularly vertebrate fossils—are considered to be nonrenewable resources. Because of their rarity, and the scientific information they can provide, fossils are highly significant records of ancient life.

Rock formations that are considered of paleontological sensitivity are those rock units that have yielded significant vertebrate or invertebrate fossil remains. This includes, but is not limited to, sedimentary rock units that contain significant paleontological resources anywhere within its geographic extent. The project sites are underlain by Pleistocene Marine Terrace Deposits. According to the Society of Vertebrate Paleontology's standard assessment, this geologic unit has a high potential to contain significant paleontological resources – there have been 720 finds in San Mateo County, including at least 12 from the Moss Beach area and 3 from Princeton-by-the-Sea (SVP, 2005).

Ground disturbance associated with the proposed project would include grading and excavation of one to one and a half feet below ground surface and, therefore, would not affect depths at which paleontological resources could likely be encountered. While damage or destruction of unique paleontological resources for the project is unlikely, the possibility cannot be entirely dismissed. Thus, the potential impact to paleontological resources is considered potentially significant. Implementation of the following mitigation measure would reduce this potential impact by ensuring that if fossils are encountered, their significance is assessed by a qualified paleontologist, recorded, and salvaged if appropriate. With **Mitigation Measure CUL-3, Halt Work if Paleontological Resources are Identified During Construction,** the impact would be reduced to a level **less than significant**.

> **Mitigation Measure CUL-3: Halt Work if Paleontological Resources are Identified During Construction.** If paleontological resources, such as fossilized bone, teeth, shell, tracks, trails, casts, molds, or impressions are discovered during ground-disturbing activities, all ground disturbing activities within 100 feet of the find shall be halted until a qualified paleontologist can assess the significance of the find and, if necessary, develop appropriate salvage measures in conformance with Society of Vertebrate Paleontology Guidelines (SVP, 1995; SVP, 1996).

d) A significant impact would occur if the project would disturb any human remains, including those interred outside of formal cemeteries. There is no indication that the

project sites have been used for burial purposes in the recent or distant past. While it is unlikely that human remains would be encountered in the project area during project construction, given that the depth of excavation is expected to be no more than one and a half feet below ground surface, damage to human remains would be a potentially significant impact. Implementation of the following mitigation measure would reduce this potential impact by ensuring that if human remains are encountered and they are determined to be Native American in origin, the Native American Heritage Commission would be contacted and the remains would be treated appropriately. With **Mitigation Measure CUL-4: Inadvertent Discovery of Human Remains,** the potential impact would be reduced to a level **less than significant**.

> **Mitigation Measure CUL-4: Inadvertent Discovery of Human Remains.** If human remains are encountered during ground disturbing activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission. The Native American Heritage Commission would then identify the person(s) thought to be the Most Likely Descendent of the deceased Native American, who shall make recommendations for the treatment of any human remains.

References

Clark, Matthew, 2009. Site Record for CA-SMA-109. On file, Northwest Information Center of the California Historical Resources Information System, Sonoma State University, Rohnert Park California.

Earthtouch Inc.,2005. *New Tower Submission Packet FCC Form 620 – Moss Beach Sheriff Department, SF-15720A.* Prepared for Metro PCS, Inc. On file (S-31048), NWIC, December 2005.

Hastings, Richard, 1975, *Archaeological and Architectural Field Survey at Proposed Drainage Realignment Project.* Prepared by the California Department of Transportation. Prepared for W.H. LaMon. On file (S-3011), NWIC, July 1975.

Milliken, Randall, Laurence H. Shoup, and Beverly R. Ortiz, 2009. Ohlone/Costanoan Indians of the San Francisco Peninsula and their Neighbors, Yesterday and Today, Prepared for National Park Service Golden Gate National Recreation Area, San Francisco, California.

Society of Vertebrate Paleontology (SVP), 1995. Assessment and mitigation of adverse impacts to nonrenewable paleontologic resources: standard guidelines, Society of Vertebrate Paleontology News Bulletin, Vol. 163, p. 22-27.

Society of Vertebrate Paleontology (SVP), 1996. Conditions of receivership for paleontologic salvage collections: Society of Vertebrate Paleontology News Bulletin, vol. 166, p. 31-32.

2.6 Geology, Soils, and Seismicity

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
6. GEOLOGY, SOILS, AND SEISMICITY — Would the project:				
a) Expose people or structures to potential significant adverse effects, including the risk of loss, injury, or death involving the following, or create a situation that results in:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
v) Coastal cliff/bluff instability or erosion?[5]	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as noted in the 2010 California Building Code, creating significant risks to life or property?	☐	☐	☒	☐
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?	☐	☐	☐	☒

Discussion

a.i, ii) The San Francisco Bay Area generally experiences a high level of seismic activity due to its tectonic setting. Surface rupture occurs when the ground surface is broken due to fault movement during earthquakes. Such hazards are generally assumed to occur in the vicinity of an active fault trace. Active fault lines in San Mateo County include the San Andreas and the Seal Cove-San Gregorio faults. The latter occurs in the immediate vicinity of the project area (County of San Mateo, 1986). While fault rupture has not been frequent in San Mateo County, it remains a potentially serious hazard. Similarly, ground shaking could result from an earthquake along one of these faults, causing potentially serious hazards throughout the County, depending upon the location of the earthquake,

[5] This question is concerns instability under current conditions. Future, potential instability is addressed in Section 7 (Climate Change).

magnitude, and area geology. Risks of loss, injury, or death resulting from surface rupture or ground shaking are greatest in densely developed, high-population areas. The proposed project – paving of existing dirt roads and installation of biotreatment measures – does not include the development of any structures and would not be expected to cause an increase in area population. For these reasons, the project's impact with respect to surface fault rupture and ground shaking would be **less than significant**.

a.iii) Liquefaction occurs as a result of seismic activity, creating temporary transformations of a saturated granular soil layer to a liquefied state. According to the General Plan Background Issues and Maps (1986), there are very few unincorporated areas of the County where liquefaction could result in major structural damage. The project includes no new buildings or other vertical structures that would be subject to major structural damage or create a public health hazard as a result of liquefaction. Rather, the County proposes only grade-level physical changes, in existing developed areas. Therefore, the project would have a **less-than-significant impact** on people or structures related to seismic-related ground failure, including liquefaction.

a.iv, v) Soils underlying the project sites are Typic Arguistolls formation; sandy clay loam, interspersed with localized fill associated with the existing nearby development. Such soils are relatively uniform, moderately drained, have a moderate susceptibility to erosion, and have low to moderate expansivity (USDA, 2013). The topography of the improvement areas is generally level. The Seal Cove site is located approximately 300 feet landward of steep, highly erosive coastal bluffs. However, there are no steep slopes in the immediate vicinity of either project site. The General Plan Natural Hazards Map identifies the Seal Cove project site as occurring within an area susceptible to cliff instability and landslides; the Carlos Street site is inland of these areas. The map also delineates the Alquist-Priolo Special Studies zones for the Moss Beach-San Gregorio fault lines (County of San Mateo, 1986). Landslides would likely continue to occur along the coastal bluffs, adjacent to the Pacific Ocean. However, due to their distance from the project sites, such geologic activity would not be expected to affect or be affected by the proposed road improvements and stormwater treatment measures. Moreover, because the project proposes no structures and would not be expected to cause an increase in population within the project area, the risk of landslide, coastal erosion, subsidence, or collapse hazard would be **less than significant**.

b) The Seal Cove site presently consists of unpaved roads with no formal drainage. As such, the moderately erosive soils at the site, as evidenced by deep potholes along San Ramon Avenue, are presently susceptible to erosion from wind and rain (e.g., stormwater runoff) (USDA, 2013). The Carlos Street site is presently covered entirely by asphalt paving and is connected to an existing storm drain. However, the latter site is underlain by soils similar to those of the Seal Cove site.

Construction of the project, including ground-disturbing activities such as grading and paving, would temporarily increase soil exposure to the above noted erosion factors. As

discussed in Section 2.3, Air Quality, **Mitigation Measure AIR-1, BAAQMD's Basic Construction Mitigation Measures,** would reduce wind-related erosion through dust control watering of exposed surfaces up to two times daily during the construction period. Similarly, as discussed in Section 2.9, Hydrology and Water Quality, **Mitigation Measure HYD-1, Stormwater Best Management Practices (BMPs)** would reduce stormwater-runoff related erosion through the preparation and implementation of comprehensive stormwater pollution and erosion control measures.

Paving of road surfaces and planting of biotreatment measures would eliminate these sites' long-term exposure to wind and rain erosion. Construction of biotreatment measures and pervious paving adjacent to new and existing road segments would capture and allow for infiltration of stormwater runoff, thereby improving site hydrology and reducing the potential for offsite erosion due stormwater runoff associated with new and existing impervious surfaces. For these reasons, with **Mitigation Measures AIR-1 and HYD-1**, the project's impact with regard to erosion and loss of topsoil would be **less than significant**.

See Section 2.3, Air Quality, for a description of Mitigation Measure AIR-1. See Section 2.9, Hydrology and Water Quality, for a description of Mitigation Measure HYD-1.

c, d) As described in response to questions 2.6a.iv) and 2.6a.v), above, the project would occur at ground level and would not include any structures that would be susceptible to damage or put people at risk from landslide, lateral spreading, subsidence, liquefaction, or collapse. For these reasons, the impact would be **less than significant.**

e) The project would not include the use of septic tanks or alternative wastewater disposal systems. There would be **no impact** related to soils incapable of supporting wastewater systems.

References

County of San Mateo, 1986. General Plan Background Issues and Maps. Available online at: http://www.co.sanmateo.ca.us/planning/genplan/index.html. Accessed March 2013.

U.S. Department of Agriculture and Natural Resources Conservation Service, 2013, Custom Soil Resource Report for San Mateo Area, California; and San Mateo County, Eastern Part, and San Francisco County, California. Generated on December 6, 2013 from USDA's Web Soil Survey website at: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

2.7 Greenhouse Gas Emissions

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
7. GREENHOUSE GAS EMISSIONS — Would the project:				
a) Generate greenhouse gas (GHG) emissions (including methane), either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c) Result in the loss of forest land or conversion of forest land to non-forest use, such that it would release significant amounts of GHG emissions, or significantly reduce GHG sequestering?	☐	☐	☐	☒
d) Expose new or existing structures and/or infrastructure (e.g. – leach fields) to accelerated coastal cliff/bluff erosion due to rising sea levels?	☐	☐	☐	☒
e) Expose people or structures to a significant risk of loss, injury or death involving sea level rise?	☐	☐	☐	☒
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?	☐	☐	☐	☒
g) Place within an anticipated 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒

Discussion

a, b) Greenhouse gas (GHG) impacts are considered to be exclusively cumulative impacts; and there are no non-cumulative GHG emission impacts from a climate change perspective (CAPCOA, 2008). BAAQMD has provided guidance on detailed methods for modeling GHG emissions from proposed projects (BAAQMD, 2011). These BAAQMD guidance and thresholds are used here.

GHG emissions were estimated using the Roadway Construction Emissions Model (RoadMod), version 7.1.2 (Sacramento Metropolitan Air Quality Management District, 2012), which BAAQMD recommends for linear construction projects. Notably, there are no long-term sources of GHGs associated with project development. The project consists of improvement of approximately 1,500 linear feet of roadway along three public dirt roads that are not maintained by San Mateo County, along with construction of biotreatment facilities and installation of pervious paving. GHGs associated with construction would be generated by construction equipment, haul trucks, and worker vehicles. As shown in Appendix A, maximum annual GHGs of 77 metric tons of CO_2 (based on 85 short tons in RoadMod) would be emitted during the year 2014. Thus, the

proposed project would not exceed the BAAQMD's most stringent GHG threshold of 1,100 metric tons per year and would be considered **less-than-significant**.

San Mateo County is in the process of compiling an inventory of countywide GHG emissions. The inventory is in draft form at the time of this analysis (San Mateo County, 2012a). The County has also developed a Government Operations Climate Action Plan (San Mateo County, 2012b). The Climate Action Plan includes energy use reduction measures, transportation measures, and solid waste reduction measures to reduce the County Government GHGs. Since the project consists of roadway improvements and would not result in long-term sources of GHGs, these reduction strategies would not apply. Thus, the project would not conflict with any applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. This would be a **less-than-significant** impact.

c-g) The project consists of improving 1,500 linear feet along three public dirt roads, and construction of stormwater treatment measures. The project sites are located within mostly developed upland areas. The project component nearest the sea is located at the Seal Cove site, more than 300 feet landward of the closest coastal bluff, and approximately 100 feet above sea level. Neither site is within a flood hazard area (FEMA, 2012). For these reasons, would result in **no impact** regarding the loss of forestland or significantly reduced sequestering; exposure of infrastructure, structures, or people to negative effects of sea level rise; or result in structures that could be affected by 100-year floods or affect flood flows.

References

Bay Area Air Quality Management District (BAAQMD), 2011. CEQA Air Quality Guidelines, revised May 2011. Available at www.baaqmd.gov

California Air Pollution Control Officers Association (CAPCOA), 2008. CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act.

Federal Emergency Management Agency (FEMA), 2012. Flood Insurance Rate Map, San Mateo County and Unincorporated Areas, Panel 119 of 510 (Map ID 06081C0119E). U.S. Department of Homeland Security, National Flood Insurance Program. Available online at: https://msc.fema.gov/. Accessed on December 6, 2013.

San Mateo County, 2012a. County of San Mateo Greenhouse Gas Emission Inventory. Draft, March 2012. Available online at: www.co.sanmateo.ca.us/planning/rechargesmc/pdf/docs/SanMateoCo_%20Inventory&ReductionTargetMemo-3-5-12.pdf. Accessed March 19, 2013.

San Mateo County, 2012b. County of San Mateo Government Operations Climate Action Plan. September 2012.

2.8 Hazards and Hazardous Materials

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
8. HAZARDS AND HAZARDOUS MATERIALS — Would the project:				
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)?	☐	☒	☐	☐
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?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐
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?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒
i) Place housing within an existing 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
j) Place within an existing 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒
k) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
l) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion

a, b) Project construction would require the storage and use of certain hazardous materials such as fuels and oils. Inadvertent release of these materials into the environment could

adversely impact soil, surface waters, or groundwater quality. This could be a significant impact. The potential for such a release would be minimized thorough **Mitigation Measure HAZ-1**, **Hazardous Materials Handling, Storage, and Disposal,** which requires employment of best management practices for the safe handling, storage, and disposal of chemicals used during the construction process. With **Mitigation Measure HAZ-1,** the impact to the public or environment from use or accidental release of a hazardous material would be **less than significant**.

> **Mitigation Measure HAZ-1: Hazardous Materials Handling, Storage, and Disposal.** The San Mateo County DPW shall require the construction contractor to use the following best management practices (BMPs) to minimize potential adverse effects of the project to groundwater and soils from chemicals used during construction activities:
>
> - Follow manufacturer's recommendations on use, storage and disposal of chemical products used in construction;
> - Avoid overtopping construction equipment fuel gas tanks;
> - Provide secondary containment for any hazardous materials temporarily stored onsite;
> - During routine maintenance of construction equipment, properly contain and remove grease and oils; and
> - Perform regular inspections of construction equipment and materials storage areas for leaks and maintain records documenting compliance with the storage, handling and disposal of hazardous materials.

The potential to encounter hazardous materials in soil at the project sites resulting from migration of offsite contamination is considered low, based on the maximum depth of excavation during project construction and the types of development existent within project area. Although the potential to encounter hazardous materials in the project sites' soils is low, conditions could change prior to construction if new contaminated sites are identified in the project vicinity or if there are substantial changes in the extent of contamination at known release sites. However, this potential impact would be reduced to a **less-than-significant** level with implementation of **Mitigation Measures HAZ-2a through 2c**.

> **Mitigation Measure HAZ-2a: Preconstruction Hazardous Materials Assessment.** Within three months prior to construction, a qualified environmental professional shall be retained to conduct a regulatory agency database review to update and identify hazardous materials sites within ¼ mile of the project sites and to review appropriate standard information sources to determine the potential for soil or groundwater contamination at the project sites. Should this review indicate a high likelihood of encountering contamination at the project sites, follow-up sampling shall be conducted to characterize soil and groundwater quality prior to construction to provide necessary data for the site health and safety plan

(**Mitigation Measure HAZ-2b**) and hazardous materials management plan (**Mitigation Measure HAZ-2c**). If needed, site investigations or remedial activities shall be performed at the project site in accordance with applicable laws.

Mitigation Measure HAZ-2b: Health and Safety Plan. The construction contractor shall, prior to construction, prepare a site-specific health and safety plan in accordance with federal OSHA regulations (29 CFR 1910.120) and Cal-OSHA regulations (8 CCR Title 8, Section 5192) to address worker health and safety issues during construction. The health and safety plan shall identify the potentially present chemicals, health and safety hazards associated with those chemicals, all required measures to protect construction workers and the general public from exposure to harmful levels of any chemicals identified at the site (including engineering controls, monitoring, and security measures to prevent unauthorized entry to the work area), appropriate personal protective equipment, and emergency response procedures. The health and safety plan shall designate qualified individuals responsible for implementing the plan and for directing subsequent procedures in the event that unanticipated contamination is encountered.

Mitigation Measure HAZ-2c: Hazardous Materials Management Plan. The contractor shall, prior to construction, prepare a hazardous materials management plan that specifies the method for handling and disposal of contaminated soil and building debris, should any be encountered during construction. Contract specifications shall mandate full compliance with all applicable local, State, and federal regulations related to identifying, transporting, and disposing of hazardous materials, including those encountered in excavated soil, and demolition debris. The contractor shall provide San Mateo County Department of Public Works with copies of hazardous waste manifests documenting that disposal of all hazardous materials has been performed in accordance with the law.

c) Ms. Kitty's Harmony Road music school is located approximately 150 feet north of the Carlos Street site. Noted previously, the project would involve the handling of hazardous materials, such as fuels and oils, which could present a health hazard. However low the possibility, the potential also remains for encountering soil or groundwater contamination during construction activities. Emissions of such hazardous materials in close proximity to a school would be a potentially significant impact. The potential for such release would be reduced to a less-than-significant level through implementation of Mitigation **Measures HAZ-1 and HAZ-2a through HAZ-2c**.

d) There would be **no impact** as the project would not occur within or near any sites listed as hazardous materials sites pursuant to Government Code Section 65962.5 (DTSC, 2013).

e) The project site is located within the San Mateo County Comprehensive Airport Land Use Plan's Half Moon Bay Airport Traffic Overflight Zone Boundary (C/CAG, 1996). The proposed project would be consistent with the Airport Land Use Plan as it: (1) does not propose any use of land that is expressly prohibited in the plan; (2) includes no structures of any height; (3) would not increase the population density of the project area; (4) would not involve the use of steady flashing lights; (5) would not cause sunlight to be

reflected towards aircraft; (6) would not generate smoke or rising columns of air; (7) would not attract large numbers of birds; and (8) would not involve electronics or electrical signals that could interfere with radio communications. For these reasons, the project's impact with respect to airport compatibility would be **less than significant**.

f) The project would not occur within the vicinity of a private airstrip. Therefore, there would be **no impact** related to safety hazards associated with people residing or working in the vicinity of a private airstrip as a result of the project.

g) The project is proposed for lands outside (landward) of the mapped tsunami hazard zone and there are no other applicable emergency response or evacuation plans applicable to the project area. Therefore, there would be **no impact** associated with effects on emergency response or evacuation efforts (CDC, 2009).

h) The project site is not located in a fire hazard zone and the project would not involve construction of any structures or increase population densities adjacent to wildlands (County of San Mateo, 1986). There would be **no impact** associated with wildland fires.

i-l) The project site is not located within an area that is subject to flood hazards, inundation due to dam or levee failure, or seiche or tsunami (County of San Mateo, 1996; FEMA, 2012; CDC, 2009). In addition, the project does not include housing or structures that would be subject to the effects of flooding. There would be **no impact** associated with flood hazard or inundation.

References

California Department of Conservation (CDC), 2009. Tsunami Inundation Map for Emergency Planning, Montara Mountain Quadrangle. California Department of Conservation. Available online at: http://www.conservation.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/SanMateo/Pages/SanMateo.aspx. Accessed on December 6, 2013.

California Department of Toxic Substances Control (DTSC), 2013. EnviroStor Database. Available online at: http://www.envirostor.dtsc.ca.gov/public/. List queried December 6, 2013.

City/County Association of Governments of San Mateo County (C/CAG), 1996. The San Mateo County Comprehensive Airport Land Use Plan. December. Available online at: http://www.ccag.ca.gov/pdf/documents/2009/SMC_Airports_CLUP.pdf. Accessed March 2013.

County of San Mateo, 1986. General Plan Background Issues and Maps. Available online at: http://www.co.sanmateo.ca.us/planning/genplan/index.html. Accessed March 2013.

Federal Emergency Management Agency (FEMA), 2012. Flood Insurance Rate Map, San Mateo County and Unincorporated Areas, Panel 119 of 510 (Map ID 06081C0119E). U.S. Department of Homeland Security, National Flood Insurance Program. Available online at: https://msc.fema.gov/. Accessed on March 12, 2013.

2.9 Hydrology and Water Quality

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
9. HYDROLOGY AND WATER QUALITY — Would the project:				
a) Violate any water quality standards or waste discharge requirements (consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical stormwater pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash)?	☐	☒	☐	☐
b) Significantly deplete groundwater supplies or interfere significantly with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Significantly alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in significant erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Significantly alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or significantly increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide significant additional sources of polluted runoff?	☐	☐	☒	☐
f) Significantly degrade surface or groundwater water quality?	☐	☐	☒	☐
g) Result in increased impervious surfaces and associated increased runoff?	☐	☐	☒	☐

Discussion

a) The Seal Cove site is comprised of unpaved roads, some of which are bounded by shallow vegetated depressions, or informal vegetated swales. Some paved streets within the neighborhood have concrete valley gutters. However, the neighborhood is not connected to a storm sewer and there is no single point of discharge for area stormwater. The Carlos Street site is paved and equipped with a curb and gutter. Surface runoff at the Carlos Street site flows to the grassy median between Carlos Street and Highway 1, or to a grated catchbasin in the center of Virginia Avenue. A catchbasin at the southeast end of the grassy median and the catchbasin at Virginia Avenue are both connected to the underground pipes of Dean Creek.

The drainage areas for both sites ultimately discharge into the James V. Fitzgerald Marine Reserve (County of San Mateo, undated), which is a designated Area of Special

Biological Significance (ASBS) (SWRCB, 2003). Activities that would affect discharges into an ASBS are required to comply with the California Ocean Plan and State Water Resources Control Board (SWRCB) Resolution No. 2012-0012, which restrict point and nonpoint source waste discharges into these areas (SWRCB, 2005; 2012). More specifically, the SWRCB Resolution prohibits dry-weather discharges to ASBS and requires weekly inspection of construction site stormwater best management practices (BMPs) during the wet weather season (October 1 through April 30). The project would also have to comply with San Mateo County Stormwater Ordinance, Chapter 4.100 – Storm Water Management and Discharge Control, which requires the incorporation of BMPs into new developments.

The proposed project would involve activities and materials that could temporarily adversely impact water quality, including through accidental releases of chemicals and increased sedimentation of stormwater runoff during grading and construction. Heavy equipment would be required for grading, excavation, and paving. Potentially significant impacts on water quality could result from accidental releases of fuels, lubricants, hydraulic fluids, or other chemicals associated with heavy equipment operation. The project would require approximately 38,000 square feet of ground disturbance, but less than one acre. Exposure of disturbed areas and stockpiles during rain events could increase the turbidity, or suspended sediment levels, and chemical concentrations of stormwater runoff.

Groundwater seepage into work areas could occur during excavation activities and may require dewatering during project construction. Dewatering involves pumping the water out of areas to keep the construction area dry. Depending upon site conditions, groundwater seeping into work areas could contain contaminants or high sediment levels. Potentially significant water quality impacts could occur if such water were to flow or be flushed by stormwater offsite and into receiving waters. Non-stormwater such as the water resulting from dewatering operations, if any, would be required to comply with the local stormwater requirements prior to discharge (e.g., San Mateo County NPDES Permit CA0029921, as stated under Section 4.100.070 of the San Mateo County Municipal Code).

The proposed project would also involve the creation of new areas of impervious surfaces. In general, impervious surfaces such as roads can contribute to water quality degradation through the accumulation of sediment and chemicals during dry periods that flush into receiving waters during storm events. By reducing opportunities for rainwater infiltration into soils, impervious surfaces can also cause increases in the volume of stormwater runoff which, in turn, can contribute to bank erosion and scour of receiving waters.

The Municipal Regional Stormwater NPDES Permit Order R2-2009-0074 (MRSP) to which the County of San Mateo is party requires new development to incorporate appropriate source control, site design, and stormwater treatment measures to address

both pollutants and increases in runoff flows. The proposed project includes the construction of biotreatment measures to capture and treat stormwater from new and existing impervious surfaces at the project sites. These biotreatment measures have been designed and would be constructed in accordance with the C.3 provisions (Post Construction Stormwater Controls) of the MRSP (C/CAG 2012; SWRCB 2009). Specifically, the Carlos Street project's replacement of asphalt paving with pervious pavers and bioretention facility would improve infiltration and reduce stormwater flows to Dean Creek. The project does not require coverage under the State General Permit (Construction General Permit Order 2009-0009-DWQ) for discharges of stormwater associated with construction activity, as this project disturbs less than one acre of land.

As described in Section 1, Project Description, the proposed work would occur over an approximately two-month period during the summer or fall, outside of the rainy season (October 1 to April 30). During this time, the site is expected to be dry. However, if water is present, as described above water quality impacts could occur through accidental releases of chemicals and increased sedimentation of stormwater runoff. The potential for water quality impacts would be further reduced through **Mitigation Measure HYD-1**, **Stormwater Best Management Practices (BMPs),** which requires the development and implementation of measures designed to minimize erosion, contain site spills, and prevent stormwater pollution. Through compliance with applicable laws and regulations, including the California Ocean Plan, San Mateo County Stormwater Ordinance, and the MRSP, and with **Mitigation Measures HYD-1**, the project would have a **less-than-significant** impact with respect to violation of water quality standards or waste discharge requirements.

> **Mitigation Measure HYD-1: Stormwater Best Management Practices (BMPs).** The San Mateo County Department of Public Works (DPW), or its construction contractor, shall prepare and implement comprehensive stormwater pollution and erosion control best management practices (BMPs) to keep sediment or any other pollutants from moving offsite and into receiving waters. The County DPW or its contractor shall ensure the BMPs are in place prior to the start of construction related activities and remain in place throughout all phases of project construction. A BMP monitoring and maintenance schedule with clearly identified parties responsible for monitoring and maintenance of BMPs shall also be in place prior to the start of construction or decommissioning activities and remain in place throughout all phases of project construction. Stormwater pollution and erosion control BMPs at a minimum shall include, but not be limited to, the following:
>
> - Ensure that all stormwater, erosion, and sediment control BMPs utilized are consistent with measures approved by the California Stormwater Quality Association (CASQA).
>
> - Provide adequate erosion control training to all equipment operators, site superintendants, and managers to ensure that stormwater and erosion controls are maintained and remain effective.

- Employ temporary erosion control measures (such as silt fences and staked straw wattles) for disturbed areas. No disturbed surfaces shall be left without erosion control measures in place so as to limit onsite and offsite erosion and to retain sediment on-site.
- Stabilize inactive areas, such as temporary stockpiles, using an appropriate combination of BMPs to cover the exposed material, intercept runoff, and provide a sediment control mechanism (such as silt fencing surrounding the stockpile perimeter or fiber rolls at the base and on side slopes).
- Limit vegetation disturbance/removal to the maximum extent practicable and retain existing vegetation where possible.
- Temporarily stabilize active, disturbed areas undergoing fill placement before and during rain events expected to produce site runoff. Stabilization methods include combined BMPs that protect materials from rain, manage runoff, and reduce erosion.
- Restrict construction activities involving grading, hauling, and placement of backfill materials from occurring during periods of rain.
- Inspect all stormwater and erosion controls regularly, especially before and following significant run-off-producing rain events and make any necessary correction before the next rain event, but no longer than 10 business days. During the rainy season (October 1 to April 30), stormwater and erosion controls shall be inspected weekly.
- Develop a spill prevention and countermeasure plan that identifies proper storage, collection, and disposal measures for potential pollutants (such as fuel, fertilizers, pesticides, etc.) used on-site. The plan shall also require the proper storage, handling, use, and disposal of petroleum products.
- Establish fuel and vehicle maintenance areas away from all drainage courses and design these areas to control runoff.
- Manage waste and aggressively control litter.
- Outside of the wet weather season (October 1 to April 30), limit street sweeping to dry sweeping only.

b) The project would not require groundwater supplies for operation and would not increase demand for groundwater. As such, groundwater supplies would not be depleted. While the project would increase the area of impervious surfaces, the biotreatment measures proposed for areas adjacent to the improved road segments would capture stormwater runoff and provide for infiltration, allowing for groundwater recharge. The project's impact with respect to depletion of groundwater supplies or aquifer volumes would, therefore, be **less than significant**.

c-e) The proposed project involves disturbance to less than one acre of land. The sites for which the project is proposed are generally flat. No streams or rivers occur in the vicinity either project site, and none are expected to be affected by project activities.

Work at the Seal Cove site involves the paving of existing road segments and conversion of existing informal drainage ditches into biotreatment areas to capture stormwater runoff from the newly paved road segments. Work at the Carlos Street site involves the replacement of existing asphalt paving with a biotreatment facility and pervious paving. Paving of dirt roads would increase impervious surfaces, resulting in a slight increase in the rate and volume of stormwater runoff within the project area.

The project does not propose substantial grade changes, slopes, or other site modifications that would substantially alter the drainage pattern of the project area. The proposed biotreatment measures have been designed and would be constructed to comply with the Municipal Regional Permit and guidelines set forth in the San Mateo Countywide Water Pollution Prevention Program, and therefore would have sufficient capacity to capture, contain, and allow for infiltration of such runoff (C/CAG 2012; RWQCB 2009). For these reasons, the proposed project would have a **less-than-significant** impact with respect to site drainage and runoff.

f) For the reasons set forth in discussion 9a, impacts on surface or groundwater quality would be **less than significant**.

g) For the reasons set forth in discussion 9c, impact associated with increased impervious surfaces and associated increased runoff would be **less than significant**.

References

City/County Association of Governments (C/CAG) of San Mateo County, 2012. C.3 Stormwater Technical Guidance, version 3.1, San Mateo Countywide Stormwater Pollution Prevention Program. Available online at: http://www.flowstobay.org/bs_new_development.php#c3. Accessed March 2013.

County of San Mateo, undated. ASBS Map. Available online at: http://www.co.sanmateo.ca.us/Attachments/planning/PDFs/ASBS/ASBS%20Map.pdf. Accessed on December 15, 2013.

Regional Water Quality Control Board (RWQCB) San Francisco Bay Region, 2009. Municipal Regional Stormwater NPDES Permit Order R2-2009-0074 NPDES Permit No. CAS612008. Available online at: http://www.swrcb.ca.gov/rwqcb2/board_decisions/adopted_orders/2009/R2-2009-0074.pdf. Accessed March 2013.

State Water Resources Control Board (SWRCB), 2009. National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ, NPDES NO. CAS000002. Available online at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/constpermits/wqo2009_0009_dwq.pdf. Accessed March 2013.

State Water Resources Control Board (SWRCB), 2012. Resolution 2012-0012, Approving Exception to the California Ocean Plan for Selected Discharges into Areas of Special Biological Significance, Including Special Protections for Beneficial Uses and Certifying a Program Environmental Impact Report. Available online at: http://www.co.sanmateo.ca.us/Attachments/planning/PDFs/ASBS/Resolution%202012-0012.pdf. Accessed March 2013.

2.10 Land Use and Land Use Planning

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
10.	**LAND USE AND LAND USE PLANNING — Would the project:**				
a)	Physically divide an established community?	☐	☐	☐	☒
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☒	☐
d)	Result in the congregating of more than 50 people on a regular basis?	☐	☐	☐	☒
e)	Result in the introduction of activities not currently found within the community?	☐	☐	☐	☒
f)	Serve to encourage off-site development of presently undeveloped areas or increase development intensity of already developed areas (examples include the introduction of new or expanded public utilities, new industry, commercial facilities or recreation activities)?	☐	☐	☒	☐
g)	Create a significant new demand for housing?	☐	☐	☐	☒

Discussion

a) The project includes improvement of existing roads and would not expand the roadway network or otherwise change circulation through an established residential community. There would be **no impact** associated with division of an established community.

b) The San Mateo County General Plan specifies that public roadways should be 22 feet wide. However, it also encourages the selective modification of County road standards, in order to protect the natural environment, cultural resources, and community character (Policy 12.50) (County of San Mateo, 1986). The Montara-Moss Beach-El Granada Area Plan, which has been incorporated as part of the LCP, also states that such roadway improvements should follow modified road standards that allow for narrower road widths. With a proposed 16-foot travelway, the project would be consistent with these provisions. Thus, the proposed project's impact with respect to plans and policies adopted for the purpose of avoiding or mitigating an environmental effect would be **less than significant**. Impacts associated with the County's ESHA policies and Significant Tree Ordinance and are addressed in Section 2.4, Biological Resources, above.

c) As discussed in Section 2.9, Hydrology and Water Quality, Impact 2.9(a), the project drainage area discharges into the Fitzgerald Marine Reserve, a State-designated Area of Special Biological Significance (ASBS) (SWRCB, 2003). In 2011, the County launched the Fitzgerald ASBS Pollution Reduction Program ("Program"). The Program involves

implementation of targeted stormwater BMPs, water quality studies and BMP effectiveness monitoring, and education and outreach. The goal of the program is to improve water quality and protect beneficial uses of the Fitzgerald ASBS and additionally assist in the County's compliance with the ASBS stormwater regulations (County of San Mateo, 2012). Through the design and construction of biotreatment measures in accordance with the C.3 provisions of the MRSP, and through compliance with applicable stormwater and ASBS regulations, the proposed project would have a **less-than-significant** impact with respect to conflicts with an applicable habitat or natural community conservation plan.

d) The project does not include structures or facilities that would allow people to congregate on a regular basis. There would be **no impact** associated with congregation of 50 or more people on a regular basis.

e) There would be **no impact** as the proposed project would not cause a change in the type of use or activities that presently occur within the project area.

f) The proposed project involves the paving of existing dirt roads within an existing residential subdivision. Parcels adjacent to two of the three road segments to be paved are already developed with houses. Parcels adjacent to the remaining road segment, San Ramon Avenue, remain undeveloped. The paving of San Ramon Avenue could increase the development potential of approximately 10 to 15 lots adjacent to this road segment by increasing the ease of vehicle access. The rate of development within the Moss Beach community, however, is regulated by the provisions of the LCP, General Plan, and Zoning Regulations. Key factors affecting development potential include availability of water and sewer/septic, among other basic services. As evidenced by existing development adjacent to unimproved roads within the community of Moss Beach, whether a road is paved is not a key factor limiting development. As a result, implementation of the proposed project would have a **less-than-significant** impact on off-site development.

g) There would be **no impact** as the proposed project does not include the provision of new services or employment that would attract new residents or otherwise increase demand for housing within the area.

References

County of San Mateo, 1985. Montara-Moss Beach-El Granada Area Plan.

County of San Mateo, 1986. General Plan Policies. Available online at: http://www.co.sanmateo.ca.us/vgn/images/portal/cit_609/10073472gp_polis.pdf. Accessed March 2013.

County of San Mateo, 1999. Zoning Regulations. Available online at: http://www.co.sanmateo.ca.us/vgn/images/portal/cit_609/9441580Zregs-wp.pdf. Accessed March 2013.

County of San Mateo, 2012. James V. Fitzgerald ASBS Pollution Prevention Reduction Program. Available online at: http://smchealth.org/asbs. Accessed on December 17, 2013.

County of San Mateo, 2013. Local Coastal Program Policies (Amended through August 8, 2012). Available online at: http://www.co.sanmateo.ca.us/Attachments/planning/PDFs/LCP/SMC_Midcoast_LCP_2013.pdf. Accessed on December 5, 2013.

State Water Resources Control Board (SWRCB), 2003. State Water Quality Protection Areas – Areas of Special Biological Significance, Accessed on March 13, 2013 at: http://www.waterboards.ca.gov/water_issues/programs/ocean/docs/asbs/asbs_areas/asbs_swqpa_publication03.pdf

State Water Resources Control Board, 2005. California Ocean Plan – Water Quality Control Plan, Ocean Waters of California. Available online at: http://www.waterboards.ca.gov/water_issues/programs/ocean/docs/oplans/oceanplan2005.pdf. Accessed on March 15, 2013.

2.11 Mineral Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
11. MINERAL RESOURCES — Would the project:				
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Discussion

a, b) No known mineral resource that would be of value or import locally or regionally, or to the residents of the State, occurs within the project area (County of San Mateo, 1986). As a result, the project would have **no impact** with respect to mineral resources.

References

County of San Mateo, 1986. General Plan Background Issues and Maps. Available online at: http://www.co.sanmateo.ca.us/planning/genplan/index.html. Accessed March 2013.

2.12 Noise

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
12. NOISE — Would the project:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☒	☐	☐
c) A significant permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A significant temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion

a) The project would involve the use of heavy equipment for roadway improvements and installation of biotreatment measures and pervious paving. At the Seal Cove site, sensitive receptors in the work area include residences along the roadways to be improved, the closest of which are approximately 20 feet from the roadway boundary. At the Carlos Street site, the closest sensitive receptor is a single-family residence, located on the east side of California Avenue, approximately 150 feet north of the project site.

The San Mateo County Municipal Code, section 4.88.360, states that project activities are exempt from the provisions of the County Code if: "noise sources associated with demolition, construction, repair, remodeling, or grading of any real property, provided said activities do not take place between the hours of 6:00 p.m. and 7:00 a.m. weekdays, 5:00 p.m. and 9:00 a.m. on Saturdays or at any time on Sundays, Thanksgiving and Christmas". None of the proposed project activities would occur during the above periods. As a result, the project would have a **less-than-significant** impact with respect to local noise standards.

b) As shown in **Table 2**, below, use of heavy equipment for project construction could generate vibration levels up to 0.210 peak particle velocity (PPV) or 94 root mean square (RMS) at a distance of 25 feet. Assuming a vibratory roller would be used at the Seal Cove site, vibration levels at the nearest sensitive receptor on Madrone Avenue

TABLE 2
VIBRATION VELOCITIES FOR CONSTRUCTION EQUIPMENT

Equipment/Activity	PPV at 25 ft (inches/second)[a]	PPV at nearest receptor to the Project (20 feet)	RMS at 25 ft (Vdb)[b]	RMS at nearest receptor to the Project (20 feet)
Large Bulldozer	0.089	0.12	87	90
Loaded Trucks	0.076	0.11	86	89
Vibratory Roller	0.210	0.29	94	97

[a] Buildings can be exposed to ground-borne vibration levels of 0.2 PPV without experiencing structural damage.
[b] The human annoyance response level is 80 RMS.

SOURCE: ESA, 2013; Federal Transit Administration, 2006.

(approximately 20 feet) would be about 94 RMS and 0.210 PPV from the vibratory roller. Use of the vibratory roller could exceed the structural damage threshold of 0.2 PPV, whereas other likely equipment would result in ground-borne vibration levels below this threshold. Other sensitive receptors in the project vicinity (i.e., further from the construction activity) would be exposed to vibration levels at incrementally lower levels. This impact would be significant unless mitigated. **Mitigation Measure NOI-1, Restricted Use of Vibratory Rollers,** prohibits the use of alternatives to vibratory rollers within 25 feet of residences. For work within 25 feet of residences, the measure calls for the use of a static roller. This would reduce ground-borne vibration to approximately 0.003PPV at 25 feet, 58 RMS (VdB) at 25 feet, well below the damage threshold. With **Mitigation Measure NOI-1**, this impact would be **less-than-significant**.

> **Mitigation Measure NOI-1: Restricted Use of Vibratory Rollers**. The County shall prohibit construction contractors from using vibratory rollers within 25 feet from residences during project construction. Where construction work would occur within 25 feet from residences, the County shall require the contractors to use a static roller when operating in close proximity to these homes.

c) As discussed for criteria 12a) above, once construction is completed, noise levels would return to levels similar to the existing noise environment. Operational noise impacts of the project would be **less-than-significant**.

d) Construction activity noise levels at and near the project construction sites would fluctuate depending on the particular type, number, and duration of uses of various pieces of construction equipment. Construction-related material haul trips would raise ambient noise levels along haul routes, depending on the number of haul trips made and types of vehicles used. **Table 3** shows typical noise levels during different construction stages. **Table 4** shows typical noise levels produced by various types of construction equipment.

Noise from construction activities generally attenuates at a rate of 6 to 7.5 dBA per doubling distance. Based on the project site layout and terrain, an attenuation of 6 dBA is

TABLE 3
TYPICAL CONSTRUCTION NOISE LEVELS

Construction Phase	Noise Level (dBA, Leq)[a]
Ground Clearing	84
Excavation	89
Foundations	78
Erection	85
Finishing	89

[a] Average noise levels correspond to a distance of 50 feet from the noisiest piece of equipment associated with a given phase of construction and 200 feet from the rest of the equipment associated with that phase.

SOURCE: U.S. Environmental Protection Agency, 1971.

TABLE 4
TYPICAL NOISE LEVELS FROM DEMOLITION/
CONSTRUCTION EQUIPMENT OPERATIONS

Construction Equipment	Noise Exposure Level, dBA @ 50 Feet
Air Compressor	81
Backhoe	80
Ballast Equalizer	82
Ballast Tamper	83
Compactor	82
Concrete Mixer (Truck)	85
Concrete Pump (Truck)	82
Concrete Vibrator	76
Crane-Derrick	88
Crane-Mobile	83
Dozer	85
Generator	81
Grader	85
Impact Wrench	85
Jack Hammer	88
Loader	85
Paver	89
Pneumatic Tool	85
Pump	76
Roller	74
Saw	76
Scarifier	83
Scraper	89
Shovel	82
Spike Driver	77
Tie Cutter	84
Tie Handler	80
Tie Inserter	85
Heavy Diesel Truck	88

SOURCES: Federal Transit Administration, 2006.

assumed. The closest receptor is about 20 feet from excavation and paving activities, the loudest activities associated with the project. These receptors would experience maximum noise levels at about 97 dBA. Construction noise at these levels would be substantially greater than existing noise levels at nearby sensitive receptor locations. However, construction would be short-term (approximately two months) and intermittent. The use of diesel powered construction equipment would be temporary and episodic, affecting only a few nearby receptors for a limited period of time. For these reasons, and because such work would not violate the County's noise standards (section 4.88.360), the temporary increases in ambient noise levels would be **less-than-significant.**

In regards to long-term operations, once construction is completed, noise levels would return to levels similar to the existing noise environment. The proposed project would improve circulation within the project area. The project would not be expected to generate new trips, except for temporary construction-related trips during project implementation. Operational noise impacts of the project would, therefore, be **less-than-significant**.

e) The Seal Cove site is located within the San Mateo County Comprehensive Airport Land Use Plan's Half Moon Bay Airport Traffic Overflight Zone Boundary. The Carlos Street site is located within two miles of the airport. Project activities proposed for these areas consist of roadway improvements and installation of biotreatment measures. This work would be temporary and not expose individuals residing or working within the project area to excessive noise levels from airport operations. This would be a **less-than-significant** impact.

f) There are no private airstrips within two miles of the project. There would be **no impact** from private airstrips upon workers of the project.

References

Federal Transit Administration. 2006. Transit Noise and Vibration Impact Assessment, May 2006.

U.S. Environmental Protection Agency, Noise from Construction Equipment and Building Operations, Building Equipment, and Home Appliances, December 1971.

2.13 Population and Housing

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
13. POPULATION AND HOUSING — Would the project:				
a) Induce significant population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace existing housing **(including low- or moderate-income housing)**, in an area that is substantially deficient in housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

a) The project involves the paving of existing dirt roads and installation of stormwater treatment measures within areas of existing residential and commercial development. At the Seal Cove site, both San Ramon Avenue and Del Mar Avenue segments would begin and end at existing paved road. With the exception of the 737 linear-foot stretch of San Ramon Avenue, all road sections to be improved are bounded on both sides by existing homes. No new paving is proposed at the Carlos Street site.

The paving of San Ramon Avenue would improve access to property adjacent to this road, which would facilitate development of these parcels by making them easier to access by automobile. However, as evidenced by the presence of development adjacent to other unpaved roads within the subdivision, development within these areas has not been precluded by the absence of a paved road. Moreover, the growth in the region is generally governed by the provisions of the LCP, while the overall development potential of the project area is limited by the General Plan and existing zoning designations.

The project would require a workforce of up to 10 people for a period of 45 days. Due to its proximity to large urban centers, the project would be expected to draw from the local workforce. As such, project workers would not require additional housing.

For the above reasons, significant growth would not be expected to result from the proposed project, and its contribution to population growth within the area would be **less than significant**.

b) Because the project would be limited to improvement of existing roadways, displacement of existing housing would not occur. Accordingly there would be **no impact** associated with displacement of existing housing resulting in construction of replacement housing.

References

County of San Mateo, 1999. Zoning Regulations. Available online at: http://www.co.sanmateo.ca.us/vgn/images/portal/cit_609/9441580Zregs-wp.pdf. Accessed March 2013.

County of San Mateo, 2013. Local Coastal Program Policies (Amended through August 8, 2012). Available online at: http://www.co.sanmateo.ca.us/Attachments/planning/PDFs/LCP/SMC_Midcoast_LCP_2013.pdf. Accessed on December 5, 2013.

2.14 Public Services

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
14. PUBLIC SERVICES — Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of, or 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 following public services:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities (e.g. – hospitals, or electrical/natural gas supply systems)?	☐	☒	☐	☐

Discussion

a.i, ii) The project area is served by Coastside Fire Protection District. The District serves 50 square miles, a population of 30,000 residents, and responds to approximately 2,200 calls for service each year. Station 44 is located one and a half miles to the north of the Seal Cove site and one-half mile north of the Carlos Street site. The Fire District has 23 volunteer firefighter positions along with 20 paid positions. All stations are staffed with one fire captain and two fire apparatus engineers (CFPD, 2013).

The project area is also served by the San Mateo County Sheriff's Office. Its Moss Beach Substation offers the largest law enforcement facility on the coast. The Moss Beach Substation is located one mile from the Seal Cove site and adjacent to the Carlos Street site. The substation is staffed with 27 full time deputy sheriffs, four sergeants and one lieutenant (SMCSO, 2013).

Because construction activities would be temporary, involve a workforce of up to 10 people, and would not substantially change site land uses, the project would not be expected to significantly impact the CFPD or SMCSO's ability to maintain acceptable service ratios, response times, or other performance objectives. For these reasons, the project's impact with respect to police and fire protection would be **less than significant**.

a.iii, iv) The proposed project would neither directly nor indirectly increase the demand for public services, such as schools or nearby parks, because the project would not cause an increase in area population or population densities. As such, the project would have **no impact** with respect to schools or parks.

a.v) Construction activities for the proposed project could result in damage to or interference with existing water, sewer, storm drain, natural gas, electricity, and/or telecommunication lines. The project is proposed entirely for areas within transportation rights-of-way, which frequently serve as utility corridors. Existing sanitary sewer and electrical lines are known to occur in the vicinity of the Seal Cove site. Potholes for telecommunications and water lines exist within the Carlos Street work area. The exact locations of all underground utilities at the project sites are not known at this time; additional utility lines could be located within proposed work areas. The proposed project would involve excavation to depths of one to one and a half feet below ground surface. Accidental rupture of or damage to these utility lines during project construction could temporarily disrupt utility services and, in the case of high-priority utilities, could result in significant safety hazards for construction workers and the public. For the above reasons, potential impacts on existing utilities and utility services during project construction could be significant. **Mitigation Measure PUB-1**, **Preconstruction Utility Identification and Coordination**, would reduce the potential for such impacts through preconstruction identification of underground utilities occurring within or adjacent to work areas. With **Mitigation Measure PUB-1**, the potential for disruption to utility service systems would be reduced to a **less-than-significant** level.

> **Mitigation Measure PUB-1: Preconstruction Utility Identification and Coordination.** Prior to construction activities, the San Mateo County DPW or its contractor(s) shall determine the locations of overhead and underground utility lines, such as natural gas, electricity, sewer, telephone, cable, fuel, and water that may be encountered during construction work. Pursuant to State law, the San Mateo County DPW or its contractor(s) shall notify Underground Service Alert of Northern California and Nevada (USA North) so that utility companies may be advised of the work and may field-mark or otherwise protect and warn the contractor of their existing utility lines. Information regarding the location of existing utilities shall be reviewed before construction activities begin. Utilities may be located by customary techniques such as geophysical methods and hand excavation. The San Mateo County DPW or its contractor(s) shall notify all affected utility service providers in advance of the project construction plans and schedule. The San Mateo County DPW or its contractor(s) shall make arrangements with these entities regarding the protection, relocation, or temporary disconnection of services prior to the start of construction, and prompt reconnection of services, as required.

References

Coastside Fire Protection District (CFPD), 2013. Available online at: http://www.coastsidefire.org/home. Accessed March 2013.

San Mateo County Sherriff's Office (SMCSO), 2013. North Coast Substation. Available online at: http://www.smcsheriff.com/divisions/operations-division/area-office-emergency-services/homeland-security/north-coast-substatio. Accessed March 2013.

2.15 Recreation

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
15. RECREATION — Would the project:				
a) Increase the use of existing neighborhood or regional parks or other recreational facilities such that significant physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion

a-b) The project does not include any recreational facilities, is not in the vicinity of existing recreational facilities, and would not cause an increase in population or population densities or any other change that would result in an increase in the use of nearby parks, including Pillar Point Bluff County Park. Therefore, the project would have **no impact** on recreation or recreational facilities.

2.16 Transportation and Traffic

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
16. TRANSPORTATION AND TRAFFIC — Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the County congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in significant safety risks?	☐	☐	☐	☒
d) Significantly increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒
g) Cause noticeable increase in pedestrian traffic or a change in pedestrian patterns?	☐	☐	☐	☒
h) Result in inadequate parking capacity?	☐	☐	☒	☐

Discussion

a-b) The proposed project would occur in the community of Moss Beach. Both project sites are accessible from Highway 1. The Seal Cove site is approximately three-quarters of a mile west of Highway 1. Primary site access is via Cypress Avenue, Airport Street, and Los Banos Avenue. The Carlos Street site is located approximately 100 feet east of Highway 1. Primary site access is via Highway 1. The most recent data published by California Department of Transportation (Caltrans) indicates that the Annual Average Daily Traffic (AADT) on Highway 1 in Moss Beach is about 15,100 vehicles (Caltrans, 2012a). The San Mateo County Transit District (SamTrans) operates two bus lines along this route – the 17 Community Route and the 294 Route to Caltrain. There are no bicycle lanes along this reach of Highway 1.

Project construction would temporarily increase traffic volumes on Highway 1, Carlos Street, Cypress Avenue, Airport Street, and Los Banos Avenue. Traffic would primarily increase from construction worker trips and the delivery of construction equipment and

materials to and from the project sites. The expected increase in traffic would take place between the hours of 7:00 a.m. to 6:00 p.m., Monday through Friday, and 9:00 a.m. to 5:00 p.m. on Saturday, for approximately 45 days. Conservatively assuming concurrent construction of road improvement at both project sites, the estimated increase in trips along these roads would be approximately 20 round trips per day, based upon an estimated 12 construction workers and resource monitors[6] (seven at the Seal Cove site and five at the Carlos Street site) and up to five daily materials delivery or off-haul trips, three to the Seal Cove site and two to the Carlos Street site. This increase in daily traffic during project construction represents a 0.1 percent change over 2012 AADT. Project operation would require an estimated two round trips per week for three weeks immediately following construction, and up to two round-trips per month thereafter.

Based on these estimates, the project would not result in a substantial increase in traffic during construction and operational activities and would not cause an exceedance of any level of service standard or cause inadequate emergency access. Local residents and business owners would likely notice an increase in neighborhood traffic during project construction. However, this increase would be limited to the construction period, after which traffic volumes would return to pre-construction levels. For these reasons, the project would not be expected to disrupt automobile traffic, local or regional mass transit, or non-motorized travel and relevant components of the circulation system. The project would, therefore, be consistent with the C/CAG's Congestion Management Program (2011). For these reasons, the proposed project would have a **less-than-significant** impact with respect to conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, or congestion management program.

c) The proposed project would occur within an existing community. The road improvements and stormwater treatment measures would not cause a change in area population, such that air traffic levels would change, or otherwise create safety risks that would require a change in air traffic patterns. As such, the project would have **no impact** on air traffic patterns.

d, e) The project would improve intersection function, access, and circulation within the small Seal Cove neighborhood community. No sharp curves are proposed and the project would not contribute to intersection dangers. In contrast, the project would eliminate potholes, formalize drainage, and improve intersection function. Through the paving of San Ramon Avenue, emergency response personnel would have more direct access to the residents along Bernal Avenue. The impact on safety and emergency access would, therefore, be **less than significant**. Proposed activities at the Carlos Street site would have no impact with respect to hazardous design and emergency access. The entrance to the Moss Beach Substation is along California Street, to the immediate north of the project site. However, the proposed construction activities would not require intrusion

6 Worker trips include total round trips per day (number of trips) x 1.25, to account for miscellaneous midday trips.

into the California Street intersection and access to and from the Substation would not be affected by project construction activities.

f, g) The proposed project involves paving three existing dirt roads and installation of stormwater treatment facilities within rural residential and commercial areas. The project would improve circulation within the Seal Cove neighborhood. However, it would not be expected to generate new or affect existing public transit, bicycle, or pedestrian traffic or facilities. As a result, the project would have **no impact** with respect to conflict with these activities or the plans, policies, or programs governing the use and safety of these activities and facilities. Similarly, the project would have **no impact** with respect to increases in pedestrian traffic or alterations to pedestrian traffic patterns.

h) The project would create a temporary parking demand for construction workers and construction vehicles at the Seal Cove and Carlos Street sites. Seal Cove construction staging and overnight storage of vehicles would occur along Los Banos Avenue, between Airport Street and Park Avenue. Equipment staging for the Carlos Street project would occur on Carlos Street. As stated in response to question 2.16a,b), above, the project could require up to 12 construction workers and resource monitors at a given time (up to seven at the Seal Cove site and five at the Carlos Street site). Assuming all personnel drive alone to each day's work location, project construction would generate a parking demand of up seven parking spaces at the Seal Cove site and five spaces at the Carlos Street site. Construction workers at the Carlos Street site would be expected to park along Carlos Street, where there is ample space for construction worker vehicle parking. Construction workers at the Seal Cove site would be expected to park at the Los Banos staging area and/or along Seal Cove neighborhood streets near the day's work area. Due to the availability of parking in the vicinity of the Carlos Street site, equipment staging and construction worker parking at this site is not expected to substantially affect parking capacity. Due to the availability of parking at the Los Banos staging area and along neighborhood streets, and considering that construction activities would mainly occur during the daytime when demand for residential neighborhood parking tends to be lower, construction worker parking at this site is not expected to substantially affect parking capacity. For these reasons, the project would have a **less than significant impact** with respect to adequate parking capacity.

References

California Department of Transportation (Caltrans), 2012a. 2011 Traffic Volumes on

California State Highways. 2012. Available online at: traffic-counts.dot.ca.gov/2012TrafficVolumes.pdf. Accessed on December 16, 2013.

City/County Association of Governments (C/CAG) of San Mateo County, 2011, Congestion Management Program. Available online at: http://www.ccag.ca.gov/pdf/Studies/Final%202011%20CMP_Nov11.pdf. Accessed March 2013.

County of San Mateo, 1985. Montara-Moss Beach-El Granada Area Plan.

County of San Mateo, 1986. General Plan Background Issues and Maps. Available online at: http://www.co.sanmateo.ca.us/planning/genplan/index.html. Accessed March 2013.

County of San Mateo, 1999. Zoning Regulations. Available online at: http://www.co.sanmateo.ca.us/vgn/images/portal/cit_609/9441580Zregs-wp.pdf. Accessed March 2013.

County of San Mateo, 2013. Local Coastal Program Policies (Amended through August 8, 2012). Available online at: http://www.co.sanmateo.ca.us/Attachments/planning/PDFs/LCP/SMC_Midcoast_LCP_2013.pdf. Accessed on December 5, 2013.

2.17 Utilities and Service Systems

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
17. UTILITIES AND SERVICE SYSTEMS — Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environ-mental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with Federal, State, and local statutes and regulations related to solid waste?	☐	☐	☒	☐
h) Be sited, oriented, and/or designed to minimize energy consumption, including transportation energy; incorporate water conservation and solid waste reduction measures; and incorporate solar or other alternative energy sources?	☐	☐	☒	☐
i) Generate any demands that will cause a public facility or utility to reach or exceed its capacity?	☐	☐	☐	☒

Discussion

a, b, e) There would be **no impact** as the project would not contribute to wastewater production or otherwise affect existing systems of wastewater or water delivery

c) Existing drainage at the Seal Cove project site is informal, consisting of vegetated roadside depressions and no storm drain connection. As the project would include the construction of more than 10,000 square feet of new impervious surfaces, it would be subject to the C.3 provisions of the Municipal Regional Stormwater Permit. To comply with the C.3 provisions, the project would include the construction of biotreatment facilities and pervious paving, to capture and treat stormwater the volume of stormwater runoff expected to run off of this new area of impervious surface. As such, the project would have a **less-than-significant** impact with regard to the need for additional stormwater drainage facilities. Additional discussion of potentially significant

environmental effects associated with construction of these treatment measures is presented in the applicable topical sections of this IS/MND.

d) The project would have no water requirements with the exception of limited water supplies required during project construction. Therefore, the project would have **no impact** on water supply entitlements.

f, g) The project would require excavation of approximately 900 cubic yards of soil and asphalt waste. Excavated soils would either be used onsite, transported to a private receiving site outside of the Coastal Zone, or deposited in a sanitary landfill along with the asphalt waste. If the latter, the excavated soils would be taken to the Ox Mountain facility in Half Moon Bay. The landfill has a maximum capacity of 48.3 million cubic yards and is not expected to reach capacity until 2027 (RWQCB, 2008). As such, the contribution of 900 cubic yards of soil would not result in insufficient landfill capacity. The project would conform to all applicable local, state, and federal regulations concerning solid waste. Consequently, the impact would be **less than significant**.

h) The project involves the paving of existing dirt roads and construction of stormwater treatment measures. To the extent possible, excavated soils would be reused onsite. However, the project's construction and operation would not substantially affect area energy consumption, water demand, or waste generation. As such, the impact would be **less than significant**.

i) There would be **no impact** as the project would not cause an increase in population or population densities, or otherwise affect demands for public facilities or utilities.

References

Regional Water Quality Control Board (RWQCB), 2008. Updated Waste Discharge Requirements and Order No. R l-2006-0040. Browning, Ferris Industries, Inc. Ox Mountain Sanitary Landfill, Class III Waste Management Facility, Half Moon Bay, San Mateo County. Available online at: http://www.swrcb.ca.gov/rwqcb2/board_decisions/adopted_orders/2006/R2-2006-0040.pdf. Accessed March 2013.

2.18 Mandatory Findings of Significance

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
18. MANDATORY FINDINGS OF SIGNIFICANCE — Would the project:				
a) Does the project have the potential to degrade the quality of the environment, significantly reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
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.)	☐	☒	☐	☐
c) Does the project have environmental effects which will cause significant adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion

a) Potentially significant impacts identified for biological resources (birds, amphibians, and reptiles) can be mitigated (using **Mitigation Measures BIO-1 through BIO-4**) to a less-than-significant level and are not expected to degrade environmental quality, or substantially reduce the habitat or affect populations of any wildlife, fish, or plant species. It has been determined that construction of the proposed project would not have an impact on any examples of the major periods of California history or prehistory. **Mitigation Measure CUL-1 through CUL-4** would be implemented to ensure that any impacts resulting from the incidental discovery of cultural or paleontological resources during construction would be **less than significant**.

b, c) Consideration of past, present, and reasonably foreseeable projects in the project area and vicinity indicate that implementation of the proposed road and drainage improvements would have a less-than-significant impact. According to County Department of Public Works staff, there are no ongoing projects in the immediate project vicinity and only one – installation of biotreatment facilities and pervious paving along Carlos Street from California Avenue to Etheldore Street – is anticipated in the foreseeable future (Chen, 2013). The biotreatment facilities and pervious paving of Carlos Street from California Avenue to Etheldore Street, a project proposed for an area one block north of and separate from the "Carlos Street" site that is the subject of this IS/MND, would be subject to separate environmental review. However, it is likely that the project would have similar impacts as the proposed project and would be subject to similar mitigation measures as the proposed project. While construction of the cumulative project and the

proposed project's Carlos Street element would include a small area of construction and a relatively short timeframe, the cumulative project and the proposed project could result in cumulative impacts in the areas of biological resources, public services, and air quality in particular. The proposed project's contribution to cumulative effects would be less than significant with implementation of the mitigation measures described above.

The project would not have impacts to agriculture or forestry resources, mineral resources, or recreational resources that would combine with other projects. The proposed activities could have potential impacts with respect to aesthetics, biological and cultural resources, geology, and hazards and hazardous materials, hydrology and water quality, land use and planning, population and housing, public services, transportation and traffic, and utilities and service systems. However, such impacts would be limited to the project site and, where necessary, mitigated such that they would not substantially combine with other off-site impacts.

The project's potential impacts with respect to air quality and greenhouse gas emissions, however, could extend beyond the site to combine with impacts from other projects. As described in Sections 2.3 and 2.7, Air Quality and Greenhouse Gasses, respectively, the BAAQMD considered the emission levels at which a project's individual emissions would be cumulatively considerable in developing its CEQA significance thresholds. The BAAQMD considers projects that result in emissions that exceed its CEQA significance thresholds to result in individual impacts that are cumulatively considerable and significant. As discussed in the above sections, the proposed project's emissions would be limited to the construction period and would be below the BAAQMD cumulatively considerable threshold.

For the reasons presented above, the proposed project would not be expected to result in adverse impacts to human beings, either directly or indirectly. All impacts identified in this document would be less-than-significant, or reduced to less-than-significant levels with implementation of mitigation measures, and the project's incremental contribution to potential cumulative impacts would not be cumulatively considerable. Therefore, the project's impact would be considered **less than significant with mitigation**.

References

Chen, Eric, 2013. Telephone correspondence between San Mateo County Engineer Eric Chen and ESA Project Manager Eli Davidian regarding other projects in the vicinity of the proposed project area. March 29, 2013.

SECTION 3
Mitigation Monitoring and Reporting Plan

Mitigation Monitoring and Reporting Plan

Mitigation No.	Mitigation Measure	Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule
Aesthetics					
	None.				
Agricultural and Forest Resources					
	None.				
Air Quality					
AIR-1	**Mitigation Measure AIR-1: BAAQMD's Basic Construction Mitigation Measures.** The County shall require construction contractors to implement all the BAAQMD's Basic Construction Mitigation Measures, listed below: • Dust control watering shall be implemented, as necessary, for all exposed surfaces (e.g., parking areas, soil piles, graded areas, and unpaved access roads) up to two times per day. • All haul trucks transporting soil, sand, or other loose material off-site shall be covered. • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads shall be limited to 15 miles per hour. • All roadways to be paved shall be completed as soon as possible following grading. • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five 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. • 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. • Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.	1. Require BAAQMD's Basic Construction Measures be implemented. 2. Contractor implements measures in the program.	1. County reviews contractor bid documents. 2. County documents that measures are being implemented.	1. County 2. County	1. Prior to construction. 2. During construction.

Mitigation Monitoring and Reporting Plan

Mitigation No.	Mitigation Measure	Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule
Biological Resources					
BIO-1	**Mitigation Measure BIO-1: Protection of Nesting Birds.** The project shall avoid implementation during the nesting bird season, if possible. The nesting bird season is generally described by CDFW as the period between February 1 and August 31. If seasonal avoidance is not feasible, then the following measures would be implemented. • No more than two weeks prior to commencement of construction activities, including but not limited to surveying, grading, tree-trimming, and tree-felling, a biologist shall conduct a nesting bird survey to determine whether nesting birds occur within 250 feet of the project area or nesting raptors occur within 500 feet of the project area. If nesting birds and raptors do not occur within 250 and 500 feet of the project area, respectively, then no further action is required. • Should any active nests be discovered in or near proposed construction zones, the surveying biologist shall, based upon site conditions and type of species, determine an appropriate construction buffer to be implemented. Buffers shall be 500 feet for raptors and 250 feet for non-raptors. However, these buffers may be decreased or increased, in consultation with CDFW and/or USFWS, based upon species-specific, site-specific, and activity-specific considerations, including the nesting species in question, baseline noise levels, type and decibel output of construction equipment to be used, and whether disturbance would occur within line-of-sight of the nest. If the nest in question belongs to a species listed under federal or state Endangered Species Acts, a California Species of Special Concern or a California Fully-Protected Species, then CDFW and/or USFWS, as appropriate, shall be consulted to establish nesting buffers and monitoring criteria. If construction buffers are decreased to less than 500 feet for raptors or less than 250 feet for songbirds, a biologist familiar with the bird's nesting requirements and behavior shall monitor the nest full-time during construction activities until s/he determines that continued activities would not result in nest failure.	1. Avoid construction during nesting bird season. 2. Conduct pre-construction surveys for nesting raptors and special status species birds, if construction or vegetation removal occurs between February 1st and August 31st. County-approved biologist shall conduct worker awareness training. 3. Biologist shall establish buffer zones, if active nests are observed. 4. County shall include in its contractor specifications that, if necessary, buffer zones will be avoided during construction.	1. County reviews contractor bid specifications. 2. Conduct surveys. 3. Incorporate survey results and recommendations into construction specifications. 4. County consults with agency, if required. 5. County reviews construction specifications and documents that measures are being implemented.	1. County. 2. Biologist. 3. County/Construction contractor. 4. County. 5. County.	1. Prior to construction. 2. No more than 2 weeks prior to construction, and prior to vegetation removal. 3. Prior to/during construction. 4. Prior to/during construction. 5. Prior to/During construction.

Mitigation Monitoring and Reporting Plan

Mitigation No.	Mitigation Measure	Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule
Biological Resources (cont.)					
BIO-2	**Mitigation Measure BIO-2: Survey, Flag and Relocate Dusky-footed Woodrat Nests.** Prior to the start of vegetation removal or any other construction activities that could impact coastal scrub habitat along San Ramon Avenue, a biologist familiar with the species and its habitat requirements shall survey for San Francisco dusky-footed woodrat nests within or immediately adjacent to the proposed disturbance area. If none are observed, then no further mitigation would be required. If nests are observed but would not be directly impacted by project activities, the biologist shall delineate the nests and establish a 10-foot buffer around the nests using exclusion fencing to ensure they are not accidentally destroyed by heavy equipment, worker vehicles, or construction foot traffic. The exclusion fencing shall remain in place for the duration of the project and fully removed from the project site upon project completion. If avoidance is not feasible because a nest is within the project footprint, a biologist shall disassemble the nest by hand and relocate/reconstruct it beyond the work area.	1. Conduct pre-construction surveys for dusky-footed woodrat nests. 2. Biologist shall establish buffer zones, if active nests are observed. 3. County shall include in its contractor specifications that, if necessary, buffer zones will be avoided during construction.	1. Conduct surveys. 2. Incorporate survey results and recommendations into construction specifications. 3. County reviews construction specifications and documents that measures are being implemented.	1. Biologist. 2. County, construction contractor. 3. County.	1. Prior to construction, and prior to vegetation removal. 2. Prior to construction. 3. Prior to/during construction.
BIO-3	**Mitigation Measure BIO-3: Avoid, Minimize, and Mitigate for Impacts to California Red-legged Frog, San Francisco Garter Snake, Western (=Pacific) Pond Turtle, and their Habitat.** The following measures shall be implemented to avoid or reduce impacts on California red-legged frog, San Francisco garter snake, and western (=Pacific) pond turtle: • Prior to project construction, the County shall seek technical guidance from the USFWS regarding the measures required to ensure take of California red-legged frog and San Francisco garter snake is avoided and to determine whether any further consultation would be required. The request for technical guidance shall be accompanied by a copy of the IS/MND and any maps, photographs, and habitat descriptions that may facilitate the USFWS analysis and guidance. The County shall incorporate into project plans and implement prior to, during, and following construction, as appropriate, any additional guidance provided by USFWS. • Immediately prior to vegetation removal or other construction activities, a biologist familiar with the habitat requirements of California red-legged frog, San Francisco garter snake, and western pond turtle shall conduct a preconstruction survey to determine whether any of these species is within the project area. If California red-legged frog or San Francisco garter snake	1. Include in the contractor specifications requirements for work windows and fencing of sensitive areas, if appropriate. 2. Contract with a qualified biologist to conduct a worker education program. 3. Contract with a USFWS-approved monitor to identify special-status species during construction activities. 4. Prepare a revegetation plan to address temporary impacts to habitat, the measures of which shall be included in the contractor specifications. 5. Provide compensatory mitigation in the appropriate mitigation ratios for temporary and permanent impacts to sensitive habitats.	1. Review contractor bid specifications. 2. Conduct worker awareness training. 3. Monitor construction activity. 4. Prepare or review revegetation plan and document its implementation. 5. Prepare or review mitigation plan and document its implementation.	1. County 2. County-approved biologist. 3. County/USFWS approved-biological monitor. 4. County. 5. County, County-approved biologist.	1. Prior to and during construction 2. No more than 2 weeks prior to construction, and prior to the removal of any vegetation. 3. Prior to and during construction. 4. After construction. 5. Prior to construction.

Mitigation Monitoring and Reporting Plan

Mitigation No.	Mitigation Measure	Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule
Biological Resources (cont.)					
BIO-3 (cont.)	is identified in the work area during preconstruction surveys or at any subsequent time during construction, construction activities in the immediate area shall halt until the species has left the area OR, if permitted, a USFWS-approved biologist shall relocate the species outside of the work area. Western pond turtle may be relocated without agency approval. • Ground disturbance and construction footprints shall be minimized to the greatest degree feasible. • Work activities within or adjacent to suitable habitat shall be completed between June 15 and October 31, when possible. Suitable habitat shall be separated from the active work area with amphibian exclusion fencing, unless otherwise directed by the USFWS and CDFW. The fence shall be installed under the direct supervision of a biologist. One-way exclusion doors may be installed at the direction of USFWS or CDFW. • A biological resource monitor shall conduct worker awareness training for construction personnel, addressing California red-legged frog, San Francisco garter snake, and western pond turtle basic biology and identifying characteristics, legal status, job-specific protection measures, and penalties for noncompliance. • A biologist shall act as a regular (i.e., weekly, unless otherwise instructed by USFWS and CDFW) construction monitor. If a full-time monitor is not required by the USFWS and CDFW, then an appropriate person (i.e., construction management team supervisor) shall be designated as the onsite biological monitor and shall be trained by the biologist to identify special-status species. • A preconstruction survey for California red-legged frog, San Francisco garter snake, and western (=Pacific) pond turtle shall be conducted each day by the onsite monitor immediately preceding construction activity that occurs within or adjacent to suitable habitat. • Suitable habitat for California red-legged frog or San Francisco garter snake that is temporarily impacted by project-related activities shall be restored to pre-project conditions. • Vegetated areas beyond the project site disturbed in the course of project construction shall be revegetated with native plant species suitable to coyote brush scrub habitats upon completion of construction.				

Mitigation Monitoring and Reporting Plan

Mitigation No.	Mitigation Measure	Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule
Biological Resources (cont.)					
BIO-4	**Mitigation Measure BIO-4: Transplant California Wild Strawberry Plants.** Prior to ground disturbance and with the guidance of survey markers to delineate the project footprint, a biologist familiar with the species and its habitat requirements shall identify and mark (e.g., with flagging or orange plastic fencing) California strawberry plants to establish an exclusionary zone. If any protected plant cannot be excluded from the area of impact, it shall be transplanted to a suitable location within the project site under the supervision of a biologist familiar with the habitat requirements of wild strawberry.	1. Conduct preconstruction surveys. 2. Incorporate survey results and recommendations into construction specifications. 3. Avoid buffer zones during construction and transplant wild strawberry, as necessary.	1. County-approved biologist conducts survey and documents findings. 2. County reviews construction specifications for inclusion of recommendations. 3. County documents that measures are being implemented	1. County-approved biologist. 2. County. 3. County.	1. Prior to construction. 2. Prior to construction. 3. During construction.
Cultural Resources					
CUL-1	**Mitigation Measure CUL-1: Cultural Resources Monitoring.** Prior to authorization to proceed, or issuance of grading permits, the applicant shall prepare and submit a cultural resources monitoring plan to the County Planning and Building Department for review and approval. Monitoring shall be required for all subsurface excavation work. A Secretary of the Interior-qualified archaeologist shall prepare the plan. The plan shall include (but not be limited to) the following issues: • Training program for all construction and field workers involved in site disturbance; • Person(s) responsible for conducting monitoring activities, including Native American monitor(s); • Person(s) responsible for overseeing and directing the monitors; • How the monitoring shall be conducted and the required format and content of monitoring reports; • Schedule for submittal of monitoring reports and person(s) responsible for review and approval of monitoring reports; • Protocol for notifications in case of encountering cultural resources, as well as methods for evaluating significance, developing and implementing plan to avoid or mitigate significant resource impacts, Native American participation and consultation, collection and curation plan, and consistency with applicable laws including Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the Public Resources Code (PRC);	1. County shall contract with an archaeologist who meets the Secretary of the Interior's Standards for professional archaeology to monitor ground-disturbing activities. 2. In the event subsurface cultural resources are discovered, construction within 100 feet of the find shall be halted and the archeologist shall notify the County. 3. The archaeologist shall prepare an ARDTP.	1. County executes contract. 2. Archaeological monitor shall notify the County of the discovery. 3. Archaeologist prepares ARDTP, County reviews	1. County, qualified archaeologist. 2. Archaeological monitor, County. 3. Qualified archaeologist, County.	1. Prior to and during construction 2. During construction 3. Following construction

Mitigation Monitoring and Reporting Plan

Mitigation No.	Mitigation Measure	Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule
Cultural Resources (cont.)					
CUL-1 (cont.)	• Methods to ensure security of cultural resources sites; • Protocol for notifying the County, Native Americans, and local authorities (i.e. Sheriff, Police) should site looting and other illegal activities occur during construction with reference to PRC 5097.99. During the course of the monitoring, the archaeologist may adjust the frequency—from continuous to intermittent—of the monitoring based on the conditions and professional judgment regarding the potential to impact resources. If archaeological materials are encountered, all soil disturbing activities within 100 feet of the find shall cease until the resource is evaluated. The monitor(s) shall immediately notify the County of the encountered archaeological resource. The monitor(s) shall, after making a reasonable effort to assess the identity, integrity, and significance of the encountered archaeological resource, present the findings of this assessment to the County. In the event archaeological resources qualifying as either historical resources pursuant to CEQA Section 15064.5 or as unique archaeological resources as defined by Public Resources Code 21083.2 are encountered, preservation in place shall be the preferred manner of mitigation. If preservation in place is not feasible, the applicant shall implement an Archaeological Research Design and Treatment Plan (ARDTP). The project archaeologist, Native American representatives, and the County shall meet to determine the scope of the ARDTP. The ARDTP shall identify how the proposed data recovery program would preserve the significant information the archaeological resource contains. The ARDTP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The results of the investigation shall be documented in a technical report that provides a full artifact catalog, analysis of items collected, results of any special studies conducted, and interpretations of the resource within a regional and local context. All technical documents are to be placed on file at the Northwest Information Center of the California Historical Resources Information System.				

Mitigation Monitoring and Reporting Plan

Mitigation No.	Mitigation Measure	Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule
Cultural Resources (cont.)					
CUL-2	**Mitigation Measure CUL-2: Inadvertent Discovery of Prehistoric Resources.** If prehistoric or historic-period archaeological resources are encountered, all construction activities within 100 feet shall halt and the County shall be notified. A Secretary of the Interior-qualified archaeologist shall inspect the findings within 24 hours of discovery. If it is determined that the project could damage a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines), mitigation shall be implemented in accordance with Public Resources Code (PRC) Section 21083.2 and Section 15126.4 of the CEQA Guidelines, with a preference for preservation in place. Consistent with Section 15126.4(b)(3), preservation in place may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If avoidance is not feasible, a qualified archaeologist shall prepare and implement a detailed treatment plan in consultation with the County and the affiliated Native American tribe(s), if applicable. Treatment of unique archaeological resources shall follow the applicable requirements of PRC Section 21083.2. Treatment for most resources would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.	1. County shall review construction specifications to ensure procedures for inadvertent discovery of cultural resources are included. 2. In the event of a historic-period archaeological resource discovery, construction in the area shall be halted and the contractor shall notify the County. 3. Qualified archaeologist shall be contacted and inspect the findings to determine appropriate mitigation and feasibility of preservation.	1. County review construction specifications. 2. The contractor shall notify the County of the discovery. 3. Qualified archaeologist shall inspect the findings and determine appropriate next steps, consistent with PRC Section 21083.2 and Section 15126.4 of the CEQA Guidelines.	1. County 2. County 3. County and qualified archaeologist.	1. Prior to construction. 2. During construction. 3. During construction.
CUL-3	**Mitigation Measure CUL-3: Halt Work if Paleontological Resources are Identified During Construction.** If paleontological resources, such as fossilized bone, teeth, shell, tracks, trails, casts, molds, or impressions are discovered during ground-disturbing activities, all ground disturbing activities within 100 feet of the find shall be halted until a qualified paleontologist can assess the significance of the find and, if necessary, develop appropriate salvage measures in conformance with Society of Vertebrate Paleontology Guidelines (SVP, 1995; SVP, 1996).	1. County shall review construction specifications to ensure procedures for discovery of paleontological resources are included. 2. In the event paleontological resources are discovered, construction in the area shall be halted and County shall consult a qualified paleontologist.	1. County review construction specifications. 2. Contractor shall notify the County of the discovery.	1. County 2. County	1. Prior to construction. 2. During construction.

Mitigation Monitoring and Reporting Plan

Mitigation No.	Mitigation Measure	Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule
Cultural Resources (cont.)					
CUL-4	**Mitigation Measure CUL-4: Inadvertent Discovery of Human Remains.** If human remains are encountered during ground disturbing activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission. The Native American Heritage Commission would then identify the person(s) thought to be the Most Likely Descendent of the deceased Native American, who shall make recommendations for the treatment of any human remains.	1. County shall review construction specifications to ensure procedures for human remains discovery are included. 2. In the event human remains are discovered, construction in the area shall be halted and the contractor shall notify the County Coroner.	1. County review construction specifications. 2. The contractor shall notify County of the discovery.	1. County 2. County	1. Prior to construction. 2. During construction.
Geology and Soils					
	None.				
Climate Change					
	None.				
Hazards and Hazardous Materials					
HAZ-1	**Mitigation Measure HAZ-1: Hazardous Materials Handling, Storage, and Disposal.** The San Mateo County DPW shall require the construction contractor to use the following best management practices (BMPs) to minimize potential adverse effects of the project to groundwater and soils from chemicals used during construction activities: • Follow manufacturer's recommendations on use, storage and disposal of chemical products used in construction; • Avoid overtopping construction equipment fuel gas tanks; • Provide secondary containment for any hazardous materials temporarily stored onsite; • During routine maintenance of construction equipment, properly contain and remove grease and oils; and • Perform regular inspections of construction equipment and materials storage areas for leaks and maintain records documenting compliance with the storage, handling and disposal of hazardous materials.	1. County shall require contractor specifications include BMPs for handling hazardous materials. 2. Contractor implements required BMPs.	1. County reviews contractor specifications. 2. County documents that measures are being implemented.	1. County 2. County	1. Prior to construction. 2. During construction.

Mitigation Monitoring and Reporting Plan

Mitigation No.	Mitigation Measure	Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule
Hazards and Hazardous Materials (cont.)					
HAZ-2a	**Mitigation Measure HAZ-2a: Preconstruction Hazardous Materials Assessment.** Within three months prior to construction, a qualified environmental professional shall be retained to conduct a regulatory agency database review to update and identify hazardous materials sites within ¼ mile of the project sites and to review appropriate standard information sources to determine the potential for soil or groundwater contamination at the project sites. Should this review indicate a high likelihood of encountering contamination at the project sites, follow-up sampling shall be conducted to characterize soil and groundwater quality prior to construction to provide necessary data for the site health and safety plan (Mitigation Measure HAZ-2b) and hazardous materials management plan (Mitigation Measure HAZ-2c). If needed, site investigations or remedial activities shall be performed at the project site in accordance with applicable laws.	1. County shall contract with a qualified environmental professional to conduct a hazardous materials assessment. 2. County shall contract with a qualified environmental professional to conduct follow-up sampling, if necessary, based on the results of the hazardous materials assessment.	1. County executes contract. 2. County executes contract.	1. Qualified environmental professional, County. 2. Qualified environmental professional, County.	1. Prior to construction. 2. During construction.
HAZ-2b	**Mitigation Measure HAZ-2b: Health and Safety Plan.** The construction contractor shall, prior to construction, prepare a site-specific health and safety plan in accordance with federal OSHA regulations (29 CFR 1910.120) and Cal-OSHA regulations (8 CCR Title 8, Section 5192) to address worker health and safety issues during construction. The health and safety plan shall identify the potentially present chemicals, health and safety hazards associated with those chemicals, all required measures to protect construction workers and the general public from exposure to harmful levels of any chemicals identified at the site (including engineering controls, monitoring, and security measures to prevent unauthorized entry to the work area), appropriate personal protective equipment, and emergency response procedures. The health and safety plan shall designate qualified individuals responsible for implementing the plan and for directing subsequent procedures in the event that unanticipated contamination is encountered.	1. Construction contractor shall prepare a health and safety plan. 2. Contractor implements health and safety plan.	1. County reviews health and safety plan. 2. County documents that measures are being implemented.	1. Construction contractor, County 2. County	1. Prior to construction. 2. During construction.
HAZ-2c	**Mitigation Measure HAZ-2c: Hazardous Materials Management Plan.** The contractor shall, prior to construction, prepare a hazardous materials management plan that specifies the method for handling and disposal of contaminated soil and building debris, should any be encountered during construction. Contract specifications shall mandate full compliance with all applicable local, State, and federal regulations related to identifying, transporting, and disposing of hazardous materials, including those encountered in excavated soil, and demolition debris. The contractor shall provide San Mateo County Department of Public Works with copies of hazardous waste manifests documenting that disposal of all hazardous materials has been performed in accordance with the law.	1. Construction contractor shall prepare a hazardous materials management plan. 2. Contractor implements hazardous materials management plan.	1. County reviews hazardous materials management plan. 2. County documents that measures are being implemented.	1. Construction contractor, County. 2. County	1. Prior to construction 2. During construction

Mitigation Monitoring and Reporting Plan

Mitigation No.	Mitigation Measure	Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule
Hydrology and Water Quality					
HYD-1	**Mitigation Measure HYD-1: Stormwater Best Management Practices (BMPs).** The San Mateo County Department of Public Works (DPW), or its construction contractor, shall prepare and implement comprehensive stormwater pollution and erosion control best management practices (BMPs) to keep sediment or any other pollutants from moving offsite and into receiving waters. The County DPW or its contractor shall ensure the BMPs are in place prior to the start of construction related activities and remain in place throughout all phases of project construction. A BMP monitoring and maintenance schedule with clearly identified parties responsible for monitoring and maintenance of BMPs shall also be in place prior to the start of construction or decommissioning activities and remain in place throughout all phases of project construction. Stormwater pollution and erosion control BMPs at a minimum shall include, but not be limited to, the following: • Ensure that all stormwater, erosion, and sediment control BMPs utilized are consistent with measures approved by the California Stormwater Quality Association (CASQA). • Provide adequate erosion control training to all equipment operators, site superintendants, and managers to ensure that stormwater and erosion controls are maintained and remain effective. • Employ temporary erosion control measures (such as silt fences and staked straw wattles) for disturbed areas. No disturbed surfaces shall be left without erosion control measures in place so as to limit onsite and offsite erosion and to retain sediment on-site. • Stabilize inactive areas, such as temporary stockpiles, using an appropriate combination of BMPs to cover the exposed material, intercept runoff, and provide a sediment control mechanism (such as silt fencing surrounding the stockpile perimeter or fiber rolls at the base and on side slopes). • Limit vegetation disturbance/removal to the maximum extent practicable and retain existing vegetation where possible. • Temporarily stabilize active, disturbed areas undergoing fill placement before and during rain events expected to produce site runoff. Stabilization methods include combined BMPs that protect materials from rain, manage runoff, and reduce erosion. • Restrict construction activities involving grading, hauling, and placement of backfill materials from occurring during periods of rain.	1. County shall require construction specifications include requirements regarding preparation and implementation of a comprehensive stormwater pollution and erosion control measures. 2. Contractor implements BMPs.	1. County reviews construction specifications. 2. County documents that BMPs are being implemented.	1. County 2. County	1. Prior to construction. 2. During construction.

Mitigation Monitoring and Reporting Plan

Mitigation No.	Mitigation Measure	Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule
Hydrology and Water Quality (cont.)					
HYD-1 (cont.)	• Inspect all stormwater and erosion controls regularly, especially before and following significant run-off-producing rain events and make any necessary correction before the next rain event, but no longer than 10 business days. During the rainy season (October 1 to April 30), stormwater and erosion controls shall be inspected weekly. • Develop a spill prevention and countermeasure plan that identifies proper storage, collection, and disposal measures for potential pollutants (such as fuel, fertilizers, pesticides, etc.) used on-site. The plan shall also require the proper storage, handling, use, and disposal of petroleum products. • Establish fuel and vehicle maintenance areas away from all drainage courses and design these areas to control runoff. • Manage waste and aggressively control litter. • Outside of the wet weather season (October 1 to April 30), limit street sweeping to dry sweeping only.				
Land Use and Planning					
	None.				
Mineral Resources					
	None.				
Noise					
NOI-1	**Mitigation Measure NOI-1: Restricted Use of Vibratory Rollers**. The County shall prohibit construction contractors from using vibratory rollers within 25 feet from residences during project construction. Where construction work would occur within 25 feet from residences, the County shall require the contractors to use a static roller when operating in close proximity to these homes.	1. County shall require contractor specifications include restrictions on use of vibratory rollers. 2. Contractor observes required restrictions.	1. County reviews contractor specifications. 2. County documents that measures are being implemented.	1. County 2. County	1. Prior to construction 2. During construction
Population and Housing					
	None.				

Mitigation Monitoring and Reporting Plan

Mitigation No.	Mitigation Measure	Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule
Public Services					
PUB-1	**Mitigation Measure PUB-1: Preconstruction Utility Identification and Coordination.** Prior to construction activities, the San Mateo County DPW or its contractor(s) shall determine the locations of overhead and underground utility lines, such as natural gas, electricity, sewer, telephone, cable, fuel, and water that may be encountered during construction work. Pursuant to State law, the San Mateo County DPW or its contractor(s) shall notify Underground Service Alert of Northern California and Nevada (USA North) so that utility companies may be advised of the work and may field-mark or otherwise protect and warn the contractor of their existing utility lines. Information regarding the location of existing utilities shall be reviewed before construction activities begin. Utilities may be located by customary techniques such as geophysical methods and hand excavation. The San Mateo County DPW or its contractor(s) shall notify all affected utility service providers in advance of the project construction plans and schedule. The San Mateo County DPW or its contractor(s) shall make arrangements with these entities regarding the protection, relocation, or temporary disconnection of services prior to the start of construction, and prompt reconnection of services, as required.	1. Locate utilities within the project area. 2. Prepare detailed specifications regarding existing utilities as part of design plans. 3. Notify USA North of location of underground utilities. 4. Notify utility services of construction plans and schedule; arrange for protection, relocation, or temporary disconnection of services. 5. Contact utility owner if any damage occurs and promptly reconnect cables/lines with owner approval. 6. Coordinate final construction plans and specifications with affected utilities. 7. Notify residents and businesses two to four days in advance of planned utility disruption	1. County or construction contractor. 2. County or construction contractor. 3. County or construction contractor. 4. County or construction contractor. 5. County or construction contractor. 6. County or construction contractor. 7. County or construction contractor.	1. County 2. County 3. County 4. County 5. County 6. County 7. County	1. Prior to construction 2. Prior to construction 3. Prior to construction 4. Prior to construction 5. Prior to construction/ During construction 6. Prior to construction 7. Prior to construction
Recreation					
	None.				
Transportation/Traffic					
	None.				
Utilities and Service Systems					
	None.				

APPENDIX A

Criteria Pollutants and Greenhouse Gas Emissions Estimates

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Road Construction Emissions Model, Version 7.1.2

Emission Estimates for -> Seal Cove Roadways Project Phases (English Units)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	CO2 (lbs/day)
Grubbing/Land Clearing	3.5	16.2	35.6	1.9	1.6	0.3	1.5	1.4	0.1	3,393.6
Grading/Excavation	4.3	21.6	47.8	2.4	2.1	0.3	2.0	1.9	0.1	4,924.5
Drainage/Utilities/Sub-Grade	3.9	17.6	37.6	2.3	2.0	0.3	1.8	1.8	0.1	3,532.4
Paving	1.8	11.5	14.1	0.9	0.9	-	0.8	0.8	-	1,875.1
Maximum (pounds/day)	4.3	21.6	47.8	2.4	2.1	0.3	2.0	1.9	0.1	4,924.5
Total (tons/construction project)	0.1	0.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0	85.2

Notes:

Project Start Year ->	2014
Project Length (months) ->	2
Total Project Area (acres) ->	0.85
Maximum Area Disturbed/Day (acres) ->	0
Total Soil Imported/Exported (yd^3/day)->	45

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Emission Estimates for -> Seal Cove Roadways Project Phases (Metric Units)	ROG (kgs/day)	CO (kgs/day)	NOx (kgs/day)	Total PM10 (kgs/day)	Exhaust PM10 (kgs/day)	Fugitive Dust PM10 (kgs/day)	Total PM2.5 (kgs/day)	Exhaust PM2.5 (kgs/day)	Fugitive Dust PM2.5 (kgs/day)	CO2 (kgs/day)
Grubbing/Land Clearing	1.6	7.4	16.2	0.9	0.7	0.1	0.7	0.6	0.0	1,542.5
Grading/Excavation	2.0	9.8	21.7	1.1	1.0	0.1	0.9	0.9	0.0	2,238.4
Drainage/Utilities/Sub-Grade	1.8	8.0	17.1	1.0	0.9	0.1	0.8	0.8	0.0	1,605.7
Paving	0.8	5.2	6.4	0.4	0.4	-	0.3	0.3	-	852.3
Maximum (kilograms/day)	2.0	9.8	21.7	1.1	1.0	0.1	0.9	0.9	0.0	2,238.4
Total (megagrams/construction project)	0.1	0.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0	77.3

Notes:

Project Start Year ->	2014
Project Length (months) ->	2
Total Project Area (hectares) ->	0
Maximum Area Disturbed/Day (hectares) ->	0
Total Soil Imported/Exported ($meters^3$/day)->	34

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sume of exhaust and fugitive dust emissions shown in columns K and L.

Road Construction Emissions Model
Data Entry Worksheet

Version 7.1.2

Note: Required data input sections have a yellow background.
Optional data input sections have a blue background. Only areas with a
yellow or blue background can be modified. Program defaults have a white background.
The user is required to enter information in cells C10 through C25.

Input Type		
Project Name	Seal Cove Roadways	
Construction Start Year	2014	Enter a Year between 2009 and 2025 (inclusive)
Project Type	1	1 New Road Construction 2 Road Widening 3 Bridge/Overpass Construction
Project Construction Time	2.0	months
Predominant Soil/Site Type: Enter 1, 2, or 3	1	1. Sand Gravel 2. Weathered Rock-Earth 3. Blasted Rock
Project Length	0.2841	miles
Total Project Area	0.85	acres
Maximum Area Disturbed/Day	0.0	acres
Water Trucks Used?	1	1. Yes 2. No
Soil Imported	15.0	yd^3/day
Soil Exported	30.0	yd^3/day
Average Truck Capacity	15.0	yd^3 (assume 20 if unknown)

To begin a new project, click this button to clear data previously entered. This button will only work if you opted not to disable macros when loading this spreadsheet.

The remaining sections of this sheet contain areas that can be modified by the user, although those modifications are optional.

Note: The program's estimates of construction period phase length can be overridden in cells C34 through C37.

Construction Periods	User Override of Construction Months	Program Calculated Months
Grubbing/Land Clearing		0.20
Grading/Excavation		0.80
Drainage/Utilities/Sub-Grade		0.70
Paving		0.30
Totals	0.00	2.00

2005	%	2006	%	2007	%
0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00

Hauling emission default values can be overridden in cells C45 through C46.

Soil Hauling Emissions	User Override of Soil Hauling Defaults	Default Values
User Input		
Miles/round trip		30
Round trips/day	5.00	3
Vehicle miles traveled/day (calculated)		150

Hauling Emissions	**ROG**	**NOx**	**CO**	**PM10**	**PM2.5**	**CO2**
Emission rate (grams/mile)	0.28	10.43	1.26	0.25	0.18	1713.35
Emission rate (grams/trip)	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day	0.1	3.4	0.4	0.1	0.1	566.1
Tons per contruction period	0.00	0.03	0.00	0.00	0.00	4.98

Worker commute default values can be overridden in cells C60 through C65.

Worker Commute Emissions	User Override of Worker Commute Default Values	Default Values
Miles/ one-way trip		20
One-way trips/day		2
No. of employees: Grubbing/Land Clearing	15.00	3
No. of employees: Grading/Excavation	15.00	6
No. of employees: Drainage/Utilities/Sub-Grade	15.00	6
No. of employees: Paving	15.00	4

	ROG	**NOx**	**CO**	**PM10**	**PM2.5**	**CO2**
Emission rate - Grubbing/Land Clearing (grams/mile)	0.182	0.249	2.208	0.047	0.020	443.370
Emission rate - Grading/Excavation (grams/mile)	0.182	0.249	2.208	0.047	0.020	443.370
Emission rate - Draining/Utilities/Sub-Grade (gr/mile)	0.182	0.249	2.208	0.047	0.020	443.370
Emission rate - Paving (grams/mile)	0.182	0.249	2.208	0.047	0.020	443.370
Emission rate - Grubbing/Land Clearing (grams/trip)	0.616	0.407	5.187	0.004	0.003	95.481
Emission rate - Grading/Excavation (grams/trip)	0.616	0.407	5.187	0.004	0.003	95.481
Emission rate - Draining/Utilities/Sub-Grade (gr/trip)	0.616	0.407	5.187	0.004	0.003	95.481
Emission rate - Paving (grams/trip)	0.616	0.407	5.187	0.004	0.003	95.481
Pounds per day - Grubbing/Land Clearing	0.322	0.383	3.603	0.063	0.027	598.570
Tons per const. Period - Grub/Land Clear	0.001	0.001	0.008	0.000	0.000	1.317
Pounds per day - Grading/Excavation	0.322	0.383	3.603	0.063	0.027	598.570
Tons per const. Period - Grading/Excavation	0.003	0.003	0.032	0.001	0.000	5.267
Pounds per day - Drainage/Utilities/Sub-Grade	0.322	0.383	3.603	0.063	0.027	598.570
Tons per const. Period - Drain/Util/Sub-Grade	0.002	0.003	0.028	0.000	0.000	4.609
Pounds per day - Paving	0.322	0.383	3.603	0.063	0.027	598.570
Tons per const. Period - Paving	0.001	0.001	0.012	0.000	0.000	1.975
tons per construction period	0.007	0.008	0.079	0.001	0.001	13.169

Water truck default values can be overriden in cells C91 through C93 and E91 through E93.

Water Truck Emissions	User Override of Default # Water Trucks	Program Estimate of Number of Water Trucks	User Override of Truck Miles Traveled/Day	Default Values Miles Traveled/Day
Grubbing/Land Clearing - Exhaust		1		40
Grading/Excavation - Exhaust		1		40
Drainage/Utilities/Subgrade		1		40

	ROG	NOx	CO	PM10	PM2.5	CO2
Emission rate - Grubbing/Land Clearing (grams/mile)	0.28	10.43	1.26	0.25	0.18	1713.35
Emission rate - Grading/Excavation (grams/mile)	0.28	10.43	1.26	0.25	0.18	1713.35
Emission rate - Draining/Utilities/Sub-Grade (gr/mile)	0.28	10.43	1.26	0.25	0.18	1713.35
Pounds per day - Grubbing/Land Clearing	0.03	0.92	0.11	0.02	0.02	150.96
Tons per const. Period - Grub/Land Clear	0.00	0.01	0.00	0.00	0.00	1.33
Pound per day - Grading/Excavation	0.03	0.92	0.11	0.02	0.02	150.96
Tons per const. Period - Grading/Excavation	0.00	0.01	0.00	0.00	0.00	1.33
Pound per day - Drainage/Utilities/Subgrade	0.03	0.92	0.11	0.02	0.02	150.96
Tons per const. Period - Drainage/Utilities/Subgrade	0.00	0.01	0.00	0.00	0.00	1.16

Fugitive dust default values can be overridden in cells C110 through C112.

Fugitive Dust	User Override of Max Acreage Disturbed/Day	Default Maximum Acreage/Day	PM10 pounds/day	PM10 tons/per period	PM2.5 pounds/day	PM2.5 tons/per period
Fugitive Dust - Grubbing/Land Clearing		0.03	0.3	0.0	0.1	0.0
Fugitive Dust - Grading/Excavation		0.03	0.3	0.0	0.1	0.0
Fugitive Dust - Drainage/Utilities/Subgrade		0.03	0.3	0.0	0.1	0.0

Off-Road Equipment Emissions

Grubbing/Land Clearing Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	CO2 pounds/day
		Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00
		Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00
		Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00
		Cranes	0.00	0.00	0.00	0.00	0.00	0.00
		Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Excavators	0.00	0.00	0.00	0.00	0.00	0.00
		Forklifts	0.00	0.00	0.00	0.00	0.00	0.00
		Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00
		Graders	0.00	0.00	0.00	0.00	0.00	0.00
		Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00
		Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Pavers	0.00	0.00	0.00	0.00	0.00	0.00
		Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00
		Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00
		Pumps	0.00	0.00	0.00	0.00	0.00	0.00
		Rollers	0.00	0.00	0.00	0.00	0.00	0.00
		Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00
	1	Rubber Tired Dozers	1.32	4.42	14.34	0.67	0.62	945.00
		Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00
	1	Scrapers	1.54	7.26	19.16	0.77	0.71	1609.63
	1	Signal Boards	0.26	0.82	0.81	0.07	0.06	89.45
		Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00
		Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00
		Trenchers	0.00	0.00	0.00	0.00	0.00	0.00
		Welders	0.00	0.00	0.00	0.00	0.00	0.00
	Grubbing/Land Clearing	pounds per day	3.1	12.5	34.3	1.5	1.4	2644.1
	Grubbing/Land Clearing	tons per phase	0.0	0.0	0.1	0.0	0.0	5.8

Grading/Excavation	Default Number of Vehicles		ROG	CO	NOx	PM10	PM2.5	CO2
Override of Default Number of Vehicles	*Program-estimate*	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
		Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00
		Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00
		Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00
	0	Cranes	0.00	0.00	0.00	0.00	0.00	0.00
		Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00
	1	Excavators	0.45	2.79	5.10	0.25	0.23	572.77
		Forklifts	0.00	0.00	0.00	0.00	0.00	0.00
		Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00
	1	Graders	1.12	3.49	10.95	0.61	0.57	672.31
		Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00
	0	Other Construction Equipment	0.00	0.01	0.02	0.00	0.00	1.96
		Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Pavers	0.00	0.00	0.00	0.00	0.00	0.00
		Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00
		Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00
		Pumps	0.00	0.00	0.00	0.00	0.00	0.00
		Rollers	0.00	0.00	0.00	0.00	0.00	0.00
		Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00
	1	Rubber Tired Loaders	0.54	3.12	7.00	0.24	0.22	662.78
	1	Scrapers	1.54	7.26	19.16	0.77	0.71	1609.63
	1	Signal Boards	0.26	0.82	0.81	0.07	0.06	89.45
		Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00
		Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00
		Trenchers	0.00	0.00	0.00	0.00	0.00	0.00
		Welders	0.00	0.00	0.00	0.00	0.00	0.00
	Grading/Excavation	pounds per day	3.9	17.5	43.0	1.9	1.8	3608.9
	Grading	tons per phase	0.0	0.2	0.4	0.0	0.0	31.8

Drainage/Utilities/Subgrade Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	CO2 pounds/day
		Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00
		Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00
		Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00
		Cranes	0.00	0.00	0.00	0.00	0.00	0.00
		Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Excavators	0.00	0.00	0.00	0.00	0.00	0.00
		Forklifts	0.00	0.00	0.00	0.00	0.00	0.00
		Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00
	1	Graders	1.12	3.49	10.95	0.61	0.57	672.31
		Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00
		Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Pavers	0.00	0.00	0.00	0.00	0.00	0.00
		Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00
	1	Plate Compactors	0.04	0.21	0.25	0.01	0.01	34.45
		Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00
		Pumps	0.00	0.00	0.00	0.00	0.00	0.00
		Rollers	0.00	0.00	0.00	0.00	0.00	0.00
		Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00
	1	Scrapers	1.54	7.26	19.16	0.77	0.71	1609.63
	1	Signal Boards	0.26	0.82	0.81	0.07	0.06	89.45
		Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00
		Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00
	1	Trenchers	0.61	2.10	5.16	0.40	0.37	377.07
		Welders	0.00	0.00	0.00	0.00	0.00	0.00
	Drainage	pounds per day	3.6	13.9	36.3	1.9	1.7	2782.9
	Drainage	tons per phase	0.0	0.1	0.3	0.0	0.0	21.4

Paving	Default Number of Vehicles		ROG	CO	NOx	PM10	PM2.5	CO2
Override of Default Number of Vehicles	*Program-estimate*	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
		Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00
		Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00
		Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00
		Cranes	0.00	0.00	0.00	0.00	0.00	0.00
		Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Excavators	0.00	0.00	0.00	0.00	0.00	0.00
		Forklifts	0.00	0.00	0.00	0.00	0.00	0.00
		Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00
		Graders	0.00	0.00	0.00	0.00	0.00	0.00
		Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00
		Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00
	1	Pavers	0.48	2.84	5.28	0.26	0.24	481.40
	1	Paving Equipment	0.36	2.69	4.26	0.20	0.19	426.10
		Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00
		Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00
		Pumps	0.00	0.00	0.00	0.00	0.00	0.00
	1	Rollers	0.39	1.51	3.40	0.25	0.23	279.56
		Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00
		Scrapers	0.00	0.00	0.00	0.00	0.00	0.00
	1	Signal Boards	0.26	0.82	0.81	0.07	0.06	89.45
		Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00
		Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00
		Trenchers	0.00	0.00	0.00	0.00	0.00	0.00
		Welders	0.00	0.00	0.00	0.00	0.00	0.00
	Paving	pounds per day	1.5	7.9	13.8	0.8	0.7	1276.5
	Paving	tons per phase	0.0	0.0	0.0	0.0	0.0	4.2
Total Emissions all Phases (tons per construction period) =>			0.1	0.3	0.8	0.0	0.0	63.2

Equipment default values for horsepower and hours/day can be overridden in cells C289 through C322 and E289 through E322.

Equipment		Default Values Horsepower		Default Values Hours/day
Aerial Lifts		63		8
Air Compressors		106		8
Bore/Drill Rigs		206		8
Cement and Mortar Mixers		10		8
Concrete/Industrial Saws		64		8
Cranes		226		8
Crawler Tractors		208		8
Crushing/Proc. Equipment		142		8
Excavators		163		8
Forklifts		89		8
Generator Sets		66		8
Graders		175		8
Off-Highway Tractors		123		8
Off-Highway Trucks		400		8
Other Construction Equipment		172		8
Other General Industrial Equipment		88		8
Other Material Handling Equipment		167		8
Pavers		126		8
Paving Equipment		131		8
Plate Compactors		8		8
Pressure Washers		26		8
Pumps		53		8
Rollers		81		8
Rough Terrain Forklifts		100		8
Rubber Tired Dozers		255		8
Rubber Tired Loaders		200		8
Scrapers		362		8
Signal Boards		20		8
Skid Steer Loaders		65		8
Surfacing Equipment		254		8
Sweepers/Scrubbers		64		8
Tractors/Loaders/Backhoes		98		8
Trenchers		81		8
Welders		45		8

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APPENDIX B

Special Status Plants Survey Report

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THE SEAL COVE/MOSS BEACH AREA ROADS IMPROVEMENT PROJECT, SAN MATEO COUNTY, CALIFORNIA.

SPECIAL STATUS PLANTS SURVEY REPORT

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June 2013

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I. INTRODUCTION

This report presents the results of focused plant surveys conducted for the Moss Beach/Seal Cove Area Roads Improvement Project (Project), consisting of the improvement of three existing dirt roads in the unincorporated Moss Beach/Seal Cove area of San Mateo County, California (Appendix A – Figures 1 and 2). The surveys were conducted on April 26, April 30, and May 29, 2013 and consisted of approximately 11 person-hours of focused surveys within and adjacent to the proposed Project impact areas (Study Area). Surveys were conducted following the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW, 2009). Beach strawberry (*Fragaria chiloensis*), protected within ½ mile of the coast under County of San Mateo Local Coastal Program (LCP) Policy 7.49, was observed to occur in small patches within the proposed work area. A small stand of California blackberry (*Rubus ursinus*), a community designated as rare by the California Department of Fish and Wildlife (CDFW), was observed within the proposed work area. No other special status plant species or natural communities were observed within the Study Area.

A. Project Description

The County of San Mateo Department of Public Works (County) is proposing to implement the Moss Beach/Seal Cove Area Roads Improvement Project (Project), consisting of improvements to approximately 1,500 linear feet (lf) of existing dirt roads within the County's right-of-way (ROW), and construction of approximately 0.3 acres of vegetated swales parallel and adjacent to the constructed roads, in the unincorporated Moss Beach/Seal Cove area of San Mateo County. The following lists the segments of the existing dirt roads to be improved:

1) San Ramon Avenue between San Lucas Road and Bernal Avenue (737 lf)
2) Del Mar Avenue between Madrone Avenue and Bernal Avenue (505 lf)
3) Madrone Avenue between Dacota Avenue and Del Mar Avenue (242 lf)

The Project footprint totals an approximate 52,300 square-foot area. See Appendix A, Figure 2 for more details.

B. Purpose

The purpose of this report is to describe the findings of focused plant surveys that were conducted at

the Project site. Focused surveys were conducted to determine whether any special status plant species or natural communities are present on the site, which may pose development constraints to the proposed Project.

Special status plants include species that are state- or federally-listed as Rare, Threatened, or Endangered, species proposed for state or federal listing as Threatened or Endangered, federal Candidate species for listing, state and/or federal Species of Concern, species considered by the California Native Plant Society (CNPS) to be rare or endangered (Lists 1A, 1B, and 2), and locally important species. The CDFW additionally designates certain natural communities as special status if they have a limited distribution statewide or within a county or region and are vulnerable to environmental effects of projects (CDFW, 2009).

II. STUDY AREA DESCRIPTION

The Study Area consisted of all areas that would be directly or indirectly impacted by the proposed Project. Specifically, the Study Area included the road segments proposed for improvement and areas within 50 feet of the centerline of each proposed road (25 feet beyond the road ROW), and encompassed a total of 2.9 acres. Where residential fencing existed at or near the boundary of the road ROW, surveys only extended to the existing fence line (Appendix A – Figure 2). The proposed Project is not anticipated to impact areas within enclosed residential yards.

A. General Site Characteristics

The Project area is located on a relatively flat, coastal bluff in the rural residential community of Seal Cove/Moss Beach, adjacent to open space. The project area is characterized by coastal scrub, non-native annual grassland, seasonal freshwater wetland, and landscape/ornamental habitats (Appendix A – Figure 3).

B. Plant Communities

Coastal Scrub

Coastal scrub is a plant community dominated by low shrubs intermixed with herbaceous perennials and annuals. Within the Study Area, two shrub alliances were identified; coyote brush scrub and coastal brambles (CDFW, 2010). The coyote brush scrub alliance consisted primarily of dense stands

of coyote brush (*Baccharis pilularis*) mixed with California coffeeberry (*Frangula californica*), California blackberry (*Rubus ursinus*), California bee-plant (*Scrophularia californica*), Pacific sanicle (*Sanicula crassicaulis*), and mustard (*Brassica* sp.). Coyote brush scrub occurs in non-continuous stands along San Ramon Avenue. A small patch (less than 1,000 square-feet) of coastal bramble alliance, consisting primarily of California blackberry, was located in the vacant lot immediately southeast of the residence at 885 San Ramon Avenue. The California blackberry (*Rubus ursinus*) alliance is designated as a high priority community by CDFW (CDFW, 2010).

Non-native Annual Grassland

Non-native annual grassland is an herbaceous plant community dominated by annual grasses that are not native to California. Grass species found in this community within the Study Area include pampas grass (*Cortaderia* sp.), ripgut brome (*Bromus diandrus*), Italian rye grass (*Festuca perennis*), velvet grass (*Holcus lanatus*), and Harding grass (*Phalaris aquatica*). Annual and perennial wildflowers and forbs occurring in this community include common yarrow (*Achillea millefolium*), California poppy (*Eschscholzia californica*), mustard, dock (*Rumex* sp.), wild radish (*Raphanus* sp.), and poison hemlock (*Conium maculatum*). Patches of beach strawberry occasionally occur in this community. Within the Study Area, non-native annual grassland is located primarily in the vacant lots along San Ramon Avenue and limited areas along Del Mar Avenue. Google™ earth imagery shows certain vacant lots along San Ramon Avenue have been regularly maintained (mowed) from September 2008 through 2012. This disturbance likely promotes the continuation of non-native annual grassland and pampas grass in the maintained vacant lots adjacent to San Ramon Avenue.

Seasonal Freshwater Wetland

Seasonal wetland plant communities occur in swales and depressions that are ponded or saturated during the rainy season for sufficient duration to support vegetation adapted to wetland conditions. The County of San Mateo LCP defines wetlands as areas where the water table is at, near, or above the land surface long enough to bring about the formation of hydric soils or to support at least 50% cover of plants which normally are found to grow in water or wet ground. Small pockets of obligate or facultative wetland plants, namely rush (*Juncus* sp.), sedge (*Cyperus* sp.) and velvet grass, occur within the Study Area along Del Mar and San Ramon Avenues. A Wetland Delineation is needed to determine if jurisdictional wetlands occur within the Project impact area. Additionally, a large contiguous wetland exists approximately 200 feet east of the San Ramon Avenue, but would not be

impacted by the proposed Project.

Landscape/Ornamental

The Study Area is located within residential neighborhoods and vacant lots. The majority of areas along Del Mar and Madrone Avenues consist primarily of non-native landscape (ornamental) vegetation such as Monterey pine (*Pinus radiata*), Pride of Madeira (*Echium* sp.), Calla lily (*Zantedeschia aethiopica*), redhot poker (*Kniphofia uvaria*), periwinkle (*Vinca* sp.), and lawn grasses (unidentified).

C. Soils

Soils underlying the project area are sandy clay loam, interspersed with localized fill associated with the existing nearby development (ESA, 2013). Serpentine soils are not known to occur in the Project area (USDA, 1961).

III. Methods

A. Background Data

A review of special status plant species with the potential to occur in the Project area was conducted using a combination of state and federal agency resources. A list of special status plant species known to, or believed to occur within the Project vicinity (USGS Montara Mountain, San Mateo, Half Moon Bay, and Woodside 7.5' quadrangles) was generated using the Sacramento U.S. Fish and Wildlife Service (USFWS) website (USFWS, 2011). A list of California Native Plant Society (CNPS) plants listed as Rare and Endangered was queried using the CNPS Inventory website (CNPS, 2013). The California Natural Diversity Database (CNDDB) compiled by the CDFW was queried to determine if any of the special status plant species from the USFWS and CNPS lists are known to occur within the Project vicinity. The CNDDB query results were further analyzed and mapped (Appendix A – Figure 4) to determine if any special status plant species have been documented to occur within 1 mile of the Project area. The results of these three queries have been tabulated in Section IV, A, Table 1, below. Marine species and species that do not typically occur within the plant communities and habitats that currently exist in the Project area were excluded.

B. Previous Studies

Peninsula Open Space Trust, 2006

Biological surveys were conducted in conjunction with the preparation of an Initial Study/Mitigation Negative Declaration (IS/MND) for the Pillar Point Bluff Trail Project, located on open space just south of the proposed Project. Special status plant surveys were conducted in spring and summer 2005 and no special status plant species were detected. Two plant associations designated as a high priority by CDFW (coastal terrace prairie and coyote brush-lizard tail coastal scrub) were identified as occurring in the Pillar Point Bluff Trail Project study area.

ESA Surveys, 2013

ESA conducted biological surveys in conjunction with the preparation of a draft IS/MND for the proposed Project. ESA identified coastal marsh milk-vetch (*Astragalus pycnostachyus* var. *pycnostachyus*), rose leptosiphon (*Leptosiphon rosaceus*), coast yellow leptosiphon (*L. croceus*), Hickman's cinquefoil (*Potentilla hickmanii*), and additional species of special status plants that grow in coastal scrub and coastal bluff habitat as having the potential to occur in the Project area. The draft IS/MND concluded that Project grading activities could destroy special status plants and suggested the following mitigation measures: a special status plant survey should be conducted within suitable habitat in the Project area (this study) and any special status plants identified in the Project area should either be protected from construction-related disturbance or collected and relocated to suitable habitat if direct impacts could not be avoided.

C. Field Survey Methods

County biologists, Carole Foster and Adam Remmel, surveyed the Project site on April 26, April 29, and May 29, 2013, to determine potential impacts to sensitive plant species. Qualifications of the County biologists are given in Appendix D. The surveys were conducted during the peak blooming periods for special status species determined to have the potential to occur in the Study Area. Surveys were floristic in nature and involved identifying all plant species observed in the Study Area using the Jepson Manual (Hickman, 1993) to the taxonomic level necessary to determine whether or not they were rare. Species that could not be positively identified were compared to known special status plant species characteristics to ensure special status plants were not present. A list of observed plant species is presented in Section IV, B, Table 2, below. Additionally, major plant communities and

habitat types within and adjacent to the sites were identified in order to evaluate the suitability of the habitat for special status plant species and to identify the presence of special status natural communities (Appendix A – Figure 3).

The Study Area was surveyed by walking the entire site and noting all plant taxa and communities observed. All areas were easily accessible. For special status plants with known extant populations in the vicinity, reference sites were observed to verify whether those species were identifiable at the time of the survey and to obtain a visual image of the target species and associated habitat.

IV. RESULTS

A. Background Data Search Results

Based upon a review of the resources listed in Section III, A, special status plant species have been documented to occur in the vicinity of the Study Area (Table 1, below). Special status plant species known to occur or have historically occurred within one mile of the Study Area include coastal marsh milk-vetch, rose leptosiphon, coast yellow leptosiphon, and Hickman's cinquefoil. Known extant populations of coastal marsh milk-vetch, coast yellow leptosiphon, and Hickman's cinquefoil (outside of the Study Area) were visited on May 1, 2013 to determine if the surveys were being conducted during the blooming period of each species. Coast yellow leptosiphon and Hickmann's cinquefoil were observed to be blooming at the time of the survey. Coastal marsh milk-vetch was observed, but was not in bloom. However, coastal marsh milk-vetch is perennial with distinctive foliage, and is easily identifiable during the non-blooming period. Precise locations have not been documented for known occurrences of rose leptosiphon within the Project vicinity (CNDDB, 2013). Therefore, rose leptosiphon blooming periods could not be verified.

Table 1. Special Status Plant Species with the Potential to Occur within the Project Vicinity, Their Presence within 1 Mile of the Seal Cove/Moss Beach Area Roads Improvement Project Site, and The Likelihood of Occurrence in the Project Area

Common Name *Scientific Name*	Federal Status	State Status	CNPS Status[2]	Habitat Description	Species Observed on Project Site (Y/N)	CNDDB[1] Occurrence within 1 Mile of Project Site (Y/N)	Likelihood of Occurrence in the Project Area
Beach strawberry *Fragraria chiloensis*	None	None	None	Found on beaches, and in coastal bluff scrub and grasslands. Blooms Feb-Mar.	Y	N	Beach strawberry occurs in patches within the San Ramon and Del Mar Avenue road right-of-ways.
	LCP Section 7.49, Unique Species						
Bent-flowered fiddleneck *Amsinckia lunaris*	None	None	1B	Found in coastal bluff scrub, cismontane woodland, and grasslands. Blooms Mar-Jun.	N	N	Surveys were conducted during bent-flowered fiddleneck's blooming period. No *Amsinckia* or similar species were observed; therefore, this species is not likely to occur.
Choris's popcorn-flower *Plagiobothrys chorisianus* var. *chorisianus*	None	None	1B	Found in chaparral, coastal scrub, and coastal prairie. Blooms Mar-Jun.	N	N	Surveys were conducted during Choris's popcornflower's blooming period. No *Plagiobothrys* or similar species were observed; therefore, this species is not likely to occur.
Coastal marsh milk-vetch *Astragalus pycnostachyus* var. *pycnostachyus*	None	None	1B	Found in coastal dunes, coastal scrub, and marshes and swamps (coastal salt, stream sides). Blooms Apr-Oct.	N	Y	Coastal marsh milk-vetch is perennial and is distinctive during the non-blooming period. No *Astragalus* or similar species were observed; therefore, this species is not likely to occur.
Coastal triquetrella *Triquetrella californica*	None	None	1B	Found in coastal bluff scrub and coastal scrub. Moss.	N	N	No mosses were observed during the surveys; therefore, coastal triquetrella is not likely to occur.
Coast yellow leptosiphon *Leptosiphon croceus*	None	None	1B	Found in coastal bluff scrub and coastal prairie. Blooms Apr-May.	N	Y	Surveys were conducted during coast yellow leptosiphon's blooming period. No *Leptosiphon* or similar species were observed; therefore, this species is not likely to occur.

Table 1. Special Status Plant Species with the Potential to Occur within the Project Vicinity, Their Presence within 1 Mile of the Seal Cove/Moss Beach Area Roads Improvement Project Site, and The Likelihood of Occurrence in the Project Area

Common Name *Scientific Name*	**Federal Status**	**State Status**	**CNPS Status[2]**	**Habitat Description**	**Species Observed on Project Site (Y/N)**	**CNDDB[1] Occurrence within 1 Mile of Project Site (Y/N)**	**Likelihood of Occurrence in the Project Area**
Crystal Springs lessingia *Lessingia arachnoidea*	None	None	1B	Found in cismontane woodland, coastal scrub, and grasslands often on serpentinite and roadsides. Blooms Jul-Oct.	N	N	Surveys were not conducted during Crystal Springs lessingia's blooming period. However, pre-construction surveys will be conducted during this species blooming period.
Davidson's bush mallow *Malacothamnus davidsonii*	None	None	1B	Found in chaparral, cismontane woodland, coastal scrub, and riparian woodland. Blooms Jun-Jan.	N	N	Although surveys were not conducted during Davidson's bush mallow's blooming period, this plant has distinctive foliage during the non-blooming period. Only one mallow-type plant, *Malva parviflora*, was observed during the surveys; therefore, Davidson's bush mallow is not likely to occur.
Fragrant fritillary *Fritillaria liliacea*	None	None	1B	Found in cismontane woodland, coastal prairie, coastal scrub, and grasslands often in serpentinite. Blooms Feb-Apr.	N	N	Surveys were conducted during the later stage of fragrant fritillary's blooming period. No *Fritillaria* or similar species were observed; therefore, this species is not likely to occur.
Franciscan onion *Allium peninsulare var. franciscanum*	None	None	1B	Found in cismontane woodland and grasslands often in serpentinite. Blooms May-Jun.	N	N	Surveys were conducted during Franciscan onion's blooming period. No *Allium* or similar species were observed; therefore, this species is not likely to occur.
Franciscan thistle *Cirsium andrewsii*	None	None	1B	Found in broadleaved upland forest, coastal bluff scrub, coastal prairie, and coastal scrub. Blooms Mar-Jul.	N	N	Surveys were conducted during Franciscan thistle's blooming period. Only one thistle-type plant, *Cirsium vulgare*, was observed during the surveys; therefore, Franciscan thistle is not likely to occur.

Table 1. Special Status Plant Species with the Potential to Occur within the Project Vicinity, Their Presence within 1 Mile of the Seal Cove/Moss Beach Area Roads Improvement Project Site, and The Likelihood of Occurrence in the Project Area

Common Name ***Scientific Name***	**Federal Status**	**State Status**	**CNPS Status[2]**	**Habitat Description**	**Species Observed on Project Site (Y/N)**	**CNDDB[1] Occurrence within 1 Mile of Project Site (Y/N)**	**Likelihood of Occurrence in the Project Area**
Hall's bush mallow *Malacothamnus hallii*	None	None	1B	Found in chaparral and coastal scrub. Blooms May-Sep (October uncommon).	N	N	Surveys were conducted during Hall's bush mallow's blooming period. Only one mallow-type plant, *Malva parviflora*, was observed during the surveys; therefore, Hall's bush mallow is not likely to occur.
Hickman's cinquefoil *Potentilla hickmanii*	E	E	1B	Found in coastal bluff scrub, closed-cone coniferous forest, meadows and seeps, and freshwater marshes and swamps. Blooms Apr-Aug.	N	Y	Surveys were conducted during Hickman's cinquefoil's blooming period. No *Potentilla* or similar species were observed; therefore, this species is not likely to occur.
Kellogg's horkelia *Horkelia cuneata* ssp. *sericea*	None	None	1B	Found in closed-cone coniferous forest, chaparral (maritime), and coastal scrub. Blooms Apr-Sep.	N	N	Surveys were conducted during Kellogg's horkelia's blooming period. No *Horkelia* or similar species were observed; therefore, this species is not likely to occur.
Marin checker lily *Fritillaria lanceolata var. tristulis*	None	None	1B	Found in coastal bluff scrub, coastal prairie, and coastal scrub. Blooms Feb-May.	N	N	Surveys were conducted during Marin checker lily's blooming period. No *Fritillaria* or similar species were observed; therefore, this species is not likely to occur.
Marsh microseris *Microseris paludosa*	None	None	1B	Found in closed-coned coniferous forest, cismontane woodland, coastal scrub, and grassland. Blooms Apr-Jun (July uncommon).	N	N	Surveys were conducted during marsh microseris's blooming period. No *Microseris* or similar species were observed; therefore, this species is not likely to occur.

Table 1. Special Status Plant Species with the Potential to Occur within the Project Vicinity, Their Presence within 1 Mile of the Seal Cove/Moss Beach Area Roads Improvement Project Site, and The Likelihood of Occurrence in the Project Area

Common Name *Scientific Name*	**Federal Status**	**State Status**	**CNPS Status[2]**	**Habitat Description**	**Species Observed on Project Site (Y/N)**	**CNDDB[1] Occurrence within 1 Mile of Project Site (Y/N)**	**Likelihood of Occurrence in the Project Area**
Montara Manzanita *Arctostaphylos montaraensis*	None	None	1B	Found in chaparral and coastal scrub. Blooms Jan-Mar.	N	N	Montara manzanita is perennial and is distinctive during the non-blooming period. No *Arctostaphylos* or similar species were observed; therefore, this species is not likely to occur.
Oregon polemonium *Polemonium carneum*	None	None	2	Found in coastal scrub, coastal prairie, and pine forests. Blooms Apr-Sep.	N	N	Surveys were conducted during Oregon polemonium's blooming period. No *Polemonium* or similar species were observed; therefore, this species is not likely to occur.
Pappose tarplant *Centromadia parryi ssp. parryi*	None	None	1B	Found in chaparral, coastal prairie, meadows/seeps, marshes, and grasslands. Blooms May-Nov.	N	N	Surveys were conducted during the early stage of pappose tarplant's blooming period. Only one tarweed-type plant, *Madia* sp., was observed during the surveys; therefore, Pappose tarplant is not likely to occur.
Perennial goldfields *Lasthenia californica ssp. macrantha*	None	None	1B	Found in coastal bluff scrub, coastal dunes, and coastal scrub. Blooms Jan-Nov.	N	N	Surveys were conducted during perennial goldfield's blooming period. No *Lasthenia* or similar species were observed; therefore, this species is not likely to occur.
Point Reyes horkelia *Horkelia marinensis*	None	None	1B	Found in coastal dunes, coastal prairies, and coastal scrub/sandy. Blooms May-Sep.	N	N	Surveys were conducted during the early stage of Point Reyes horkelia's blooming period. However, this species is perennial and has distinctive foliage during the non-blooming period. No *Horkelia* or similar species were observed; therefore, this species is not likely to occur.

Table 1. Special Status Plant Species with the Potential to Occur within the Project Vicinity, Their Presence within 1 Mile of the Seal Cove/Moss Beach Area Roads Improvement Project Site, and The Likelihood of Occurrence in the Project Area

Common Name *Scientific Name*	**Federal Status**	**State Status**	**CNPS Status[2]**	**Habitat Description**	**Species Observed on Project Site (Y/N)**	**CNDDB[1] Occurrence within 1 Mile of Project Site (Y/N)**	**Likelihood of Occurrence in the Project Area**
Rose leptosiphon *Leptosiphon rosaceus*	None	None	1B	Found in scrub habitat on coastal bluffs. Blooms Apr-Jul.	N	Y	Surveys were conducted during rose yellow leptosiphon's blooming period. No *Leptosiphon* or similar species were observed; therefore, this species is not likely to occur.
San Francisco campion *Silene verecunda* ssp. *verecunda*	None	None	1B	Found in coastal bluff scrub, chaparral, coastal prairie, coastal scrub and grassland (sandy). Blooms Mar-Jun (July and August uncommon).	N	N	Surveys were conducted during San Francisco campion's blooming period. No *Silene* or similar species were observed; therefore, this species is not likely to occur.
San Francisco collinsia *Collinsia multicolor*	None	None	1B	Found in closed-cone coniferous forest and coastal scrub. Blooms Mar-May.	N	N	Surveys were conducted during San Francisco collinsia's blooming period. No *Collinsia* or similar species were observed; therefore, this species is not likely to occur.
San Francisco owl's clover *Triphysaria floribunda*	None	None	1B	Found in coastal prairie, coastal scrub, and valley and foothill grassland. Blooms Apr-Jun.	N	N	Surveys were conducted during San Francisco owl's clover's blooming period. No *Triphysaria* or similar species were observed; therefore, this species is not likely to occur.
San Francisco Bay spineflower *Chorizanthe cuspidata* var. *cuspidata*	None	None	1B	Found in coastal bluff scrub, coastal dunes, coastal prairie and coastal scrub. Blooms Apr-Jul (August uncommon).	N	N	Surveys were conducted during San Francisco Bay spineflower's blooming period. No *Chorizanthe* or similar species were observed; therefore, this species is not likely to occur.

Table 1. Special Status Plant Species with the Potential to Occur within the Project Vicinity, Their Presence within 1 Mile of the Seal Cove/Moss Beach Area Roads Improvement Project Site, and The Likelihood of Occurrence in the Project Area

Common Name *Scientific Name*	**Federal Status**	**State Status**	**CNPS Status[2]**	**Habitat Description**	**Species Observed on Project Site (Y/N)**	**CNDDB[1] Occurrence within 1 Mile of Project Site (Y/N)**	**Likelihood of Occurrence in the Project Area**
Short-leaved evax *Hesperevax sparsiflora var. brevifolia*	None	None	2	Found in coastal bluff scrub and coastal dunes. Blooms Mar-Jun.	N	N	Surveys were conducted during short-leaved evax's blooming period. No *Hesperevax* or similar species were observed; therefore, this species is not likely to occur.
white-rayed pentachaeta *Pentachaeta bellidiflora*	E	E	1B	Found in grasslands often associated with serpentinite. Blooms Mar-May.	N	N	Surveys were conducted during white-rayed pentachaeta's blooming period. No *Pentachaeta* or similar species were observed; therefore, this species is not likely to occur.

Notes:

[1] California Natural Diversity Database (CNDDB), Wildlife & Habitat Data Analysis Branch, Department of Fish and Wildlife, Government Version - Information dated April 2, 2013.

[2] California Native Plant Society (CNPS). 2013. Inventory of Rare and Endangered Plants (online edition, v7-13apr 4-18-13). California Native Plant Society. Sacramento, CA. Accessed on April 25, 2013 from http://www.cnps.org/inventory

Species Status Abbreviations:

(E) Endangered

(T) Threatened

(P) Proposed

(CA) Listed by the State of California, but not the US Fish and Wildlife Service

(X) Critical Habitat designated for this species

(PX) Proposed Critical Habitat

(CDFW: SSC) California Species of Special Concern

CNPS Status Abbreviations:

1B Rare, threatened, or endangered in California and elsewhere.

2 Rare, threatened, or endangered in California, but more common elsewhere

3 Plants about which we need more information – a review list

4 Limited distribution

Beach Strawberry

Beach strawberry (*Fragaria chiloensis*) typically occurs on beaches, bluffs, and grasslands along the California coast below 200 meters elevation and outside of California north to Alaska and south to Chile. Beach strawberry is a perennial herb that spreads via runners (Jepson, 2013). San Mateo County LCP Policy 7.49 specifies protections for any California wild strawberry, including beach strawberry, within one-half mile of the coast (SMCPBD, 1998). This includes the Seal Cove area of Moss Beach east to approximately the Half Moon Bay Airport. The LCP requires either the prevention of any activity that would destroy beach strawberry plants or successful transplanting if destruction of the plant cannot be avoided. Beach strawberry is not included in the CNPS Inventory of Rare and Endangered Plants.

Beach strawberries were observed within the proposed work area at the intersection of San Ramon and Bernal Avenues, and in small patches along Del Mar Avenue. Other small patches of beach strawberry were observed within 25 feet of the work area in the vacant lot east of San Ramon Avenue and in residential yards along Del Mar Avenue and Madrone Avenue. Beach strawberry plants protected under the LCP, located within the impact area during pre-construction surveys, should be clearly marked (e.g., flagging tape or orange plastic fencing) by the contractor as directed by a qualified biologist to establish an exclusionary zone. If any protected plant cannot be excluded from the area of impact, it should be transplanted to a suitable site under the supervision of a qualified biologist.

Coastal Marsh Milk-Vetch

The CNPS lists coastal marsh milk-vetch as a 1B species, meaning that it is rare, threatened, or endangered in California and elsewhere. Coastal marsh milk-vetch blooms from April through October and is typically found within coastal salt marshes, swamps, streamsides, coastal dunes, and coastal scrub habitat (CNPS, 2013).

This species has been reported within 1 mile of the Project site in the vicinity of Pillar Point, with no precise location given (CNDDB, 2013). The closest accessible and easily identifiable CNDDB occurrence is south of San Gregorio Creek along Highway 1. This site was used as a reference site to verify blooming status during the survey period. Although coastal marsh milk vetch was not observed to be in bloom during the survey period, the plant is generally tall and easily identifiable

during non-blooming stages. At the Project site, potential habitat for coastal marsh milk-vetch is limited to the coastal scrub habitat adjacent to San Ramon Avenue. The Project site was extensively surveyed, and coastal marsh milk-vetch was not detected. Thus, this species will not be impacted by the proposed project.

Coast Yellow Leptosiphon

The CNPS lists coast yellow leptosiphon as a 1B species, meaning that it is rare, threatened, or endangered in California and elsewhere. Coast yellow leptosiphon blooms from April through May and is typically found within coastal bluff scrub and coastal prairie habitats (CNPS, 2013). An extant CNDDB documented occurrence of this species is located within coastal prairie habitat north of Juliana Avenue in Moss Beach (Appendix A – Figure 3). This site was used as a reference site to verify blooming status during the survey period. The plants were observed growing approximately 275 feet north of Juliana Avenue on the edge of a coastal bluff. Although coastal prairie and coastal bluff scrub habitats exists at the Project site in the vicinity of San Ramon Avenue, the area was extensively surveyed and coast yellow leptosiphon was not detected. Therefore, this species will not be impacted by the proposed Project.

Hickman's Cinquefoil

Hickman's cinquefoil is listed as an Endangered species under the Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA). The CNPS lists Hickman's cinquefoil as a 1B species, meaning that it is rare, threatened, or endangered in California and elsewhere. Hickman's cinquefoil blooms from April through August and is typically found within coastal bluff scrub, closed-cone coniferous forest, meadows and seeps, and freshwater marshes and swamps (CNPS, 2013). Hickman's cinquefoil was historically reported within 0.7 miles of the Project site growing near the coastal bluff edge (Appendix A – Figure 3), but is believed to be extirpated at that location due to developmental pressures and erosion. Several colonies of Hickman's cinquefoil have been reported within 2.3 miles of the Project site within the Corral de Tierra open space north of Montara. This site was used as a reference site to verify blooming status during the survey period. Within the Project area, suitable habitat for Hickman's cinquefoil may exist within the coastal bluff scrub habitat around San Ramon Avenue or in the seeps and willow thickets to the east of San Ramon Avenue. However, Hickman's cinquefoil has not been reported at the Project site (CNDDB, 2013) and was not detected during the site surveys. Therefore, this species will not be impacted by

the proposed Project.

Rose Leptosiphon

The CNPS lists rose leptosiphon as a 1B species, meaning that it is rare, threatened, or endangered in California and elsewhere. Rose leptosiphon blooms from April through July and is typically found within coastal bluff scrub habitat (CNPS, 2013). This species was historically reported within 1 mile of the Project site in the vicinity of Moss Beach (Appendix A – Figure 4). With the exception of a small population at Mori Point in Pacifica, all local populations are listed in the CNDDB as possibly extirpated and no precise locations are noted. Therefore, a reference population to verify blooming period status was not identified for this species. At the Project site, suitable habitat may exist within the grassland and scrub habitat adjacent to San Ramon Ave. However, all sites were surveyed, and rose leptosiphon was not detected. Thus, this species will not be impacted by the proposed Project.

B. Field Survey Results

Beach strawberry was observed within the proposed Project impact area at the San Ramon Avenue/Bernal Avenue intersection and in small patches along Del Mar Avenue (Appendix A – Figure 3). A small stand of California blackberry was observed adjacent to coyote brush scrub habitat just southeast of the residence at 885 San Ramon Avenue. No other special status plant species or special status natural communities were observed within the Study Area. All species observed within the Study Area are listed in Table 2, below.

Table 2- Plant Species Observed at or Adjacent to the Seal Cove/Moss Beach Area Roads Improvement Project Site

(Nomenclature follows Jepson 1993 or Jepson Flora Project 2013)

Common Name	***Scientific Name***
Baccharis (Unidentified)	*Baccharis* sp.
Barley*	*Hordeum* sp.
Beach strawberry	*Fragaria chiloensis*
Bermuda buttercup*	*Oxalis pes-caprae*
Bird's foot trefoil*	*Lotus corniculatus*
Blue-eyed grass	*Sisyrinchium bellum*
Brass buttons*	*Cotula coronopifolia*
Bristly ox-tongue*	*Picris echioides*
Bull thistle*	*Cirsium vulgare*
Bur clover*	*Medicago* sp.

Table 2- Plant Species Observed at or Adjacent to the Seal Cove/Moss Beach Area Roads Improvement Project Site

(Nomenclature follows Jepson 1993 or Jepson Flora Project 2013)

Common Name	***Scientific Name***
California bee-plant	*Scrophularia californica*
California blackberry	*Rubus ursinus*
California coffeeberry	*Frangula californica* (previously *Rhamnus californica*)
California poppy	*Eschscholzia californica*
Calla lily*	*Zantedeschia aethiopica*
Cape ivy*	*Delairea odorata*
Cheeseweed mallow*	*Malva parviflora*
Common borage*	*Borago officinalis*
Common vetch*	*Vicia sativa*
Common yarrow	*Achillea millefolium*
Cotoneaster*	*Cotoneaster* sp.
Coyote brush	*Baccharis pilularis*
Cudweed	*Pseudognaphalium* sp.
Curly dock*	*Rumex crispus*
Cut-leaf geranium*	*Geranium dissectum*
Cut-leaved plantain*	*Plantago coronopus*
Dandelion*	*Taraxacum* sp.
Dock*	*Rumex* sp.
Elderberry	*Sambucus* sp.
English plantain*	*Plantago lanceolata*
Filaree*	*Erodium* sp.
Garden nasturtium*	*Tropaeolum majus*
Harding grass*	*Phalaris aquatica*
Ice plant*	*Drosanthemum* sp.
Italian rye grass*	*Festuca perennis (Lolium multiflorum)*
Monterey cypress**	*Cupressus macrocarpa*
Monterey pine**	*Pinus radiata*
Morning glory	*Calystegia* sp.
Mustard*	*Brassica* sp.
Myoporum*	*Myoporum laetum*
Narrow leaved flax*	*Linum bienne*
Ornamentals (Unidentified)	
Pacific sanicle	*Sanicula crassicaulis*
Pampas grass*	*Cortaderia* sp.
Periwinkle*	*Vinca* sp.
Pineapple weed*	*Chamomilla suaveolens*
Poison hemlock*	*Conium maculatum*

Table 2- Plant Species Observed at or Adjacent to the Seal Cove/Moss Beach Area Roads Improvement Project Site

(Nomenclature follows Jepson 1993 or Jepson Flora Project 2013)

Common Name	***Scientific Name***
Pride of Madeira*	*Echium* sp.
Redhot poker*	*Kniphofia uvaria*
Ripgut brome*	*Bromus diandrus*
Rush	*Juncus* sp.
Scarlet pimpernel*	*Anagallis arvensis*
Sea fig*	*Carpobrotus* sp.
Sedge	*Cyperus* sp.
Sheep sorrel*	*Rumex acetosella*
Sweet alyssum*	*Lobularia maritima*
Sweet fennel*	*Foeniculum vulgare*
Sow thistle*	*Sonchus* sp.
Tarweed	*Madia* sp.
Velvet grass*	*Holcus lanatus*
Wild cucumber	*Marah fabaceus*
Wild oat*	*Avena fatua*
Wild radish*	*Raphanus* sp.
Willow herb	*Epilobium* sp.
Wood sorrel	*Oxalis* sp.

Notes:
* Denotes a non-native species
** Denotes a California native species out of its native range

V. CONCLUSION

With the exception of the locally important beach strawberry, no other special status plant species were observed during focused botanical surveys in the Study Area. The presence of beach strawberry within the Project impact area will require consultation with SMCPBD under the LCP. A small stand (less than 1,000 square-feet) of California blackberry occurs along San Ramon Avenue within the Project impact area. The *Rubus ursinus* shrub alliance is designated as a high priority community by CDFW. However, given its small size and occurrence directly adjacent to a residential neighborhood, the *Rubus ursinus* stand located in the Study Area may not be considered as a high-quality occurrence. Impacts to this community should be assessed in the Project's IS/MND. Any special status plants observed in close proximity to the work area during subsequent surveys should be

clearly marked (e.g., flagging tape or orange plastic fencing) to establish an exclusionary zone. Any special status plants observed within the Project impact area during subsequent surveys should be mitigated for following measures detailed in the Project's IS/MND.

VI. REFERENCES

Bossard, C.C., J.M. Randall, and M.C. Hoshovsky (eds.). 2000. Invasive Plants of California's Wildlands: *Cortaderia jubata*. Berkeley, California. University of California Press.

California Department of Fish and Wildlife (CDFW). 2009. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. November 24, 2009. http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

CDFW. 2010. List of Vegetation Alliances and Associations. Vegetation Classification and Mapping Program, Sacramento, CA. September 2010. http://www.dfg.ca.gov/biogeodata/vegcamp/natural_comm_list.asp.

CDFW. 2013. California Natural Diversity Database. Biogeographic Data Branch. Accessed on April 25, 2013. http://www.dfg.ca.gov/biogeodata/cnddb/.

California Native Plant Society (CNPS). 2013. Online Inventory of Rare and Endangered Plants, V7-13apr 4-18-13. Accessed April 25, 2013. http://cnps.site.aplus.net/cgi-bin/inv/inventory.cgi.

County of San Mateo Planning and Building Division (SMCPBD). 1998. Local Coastal Program Policies, 1998 update. http://www.co.sanmateo.ca.us/vgn/images/portal/cit_609/10073428lcp_1098.pdf

ESA. 2013. Seal Cove/Moss Beach Area Roads Improvement Project Initial Study/Mitigated Negative Declaration (draft), prepared for the County of San Mateo Department of Public Works, April 1, 2013.

Hickman, J.C. (ed.). 1993. The Jepson Manual: Higher Plants of California. University of California Press.

Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Prepared for the California Department of Fish and Game, Sacramento, California.

Jepson Flora Project (eds.). 2013. Jepson eFlora. Accessed from April 26 through May 31, 2013. http://ucjeps.berkeley.edu/IJM.html.

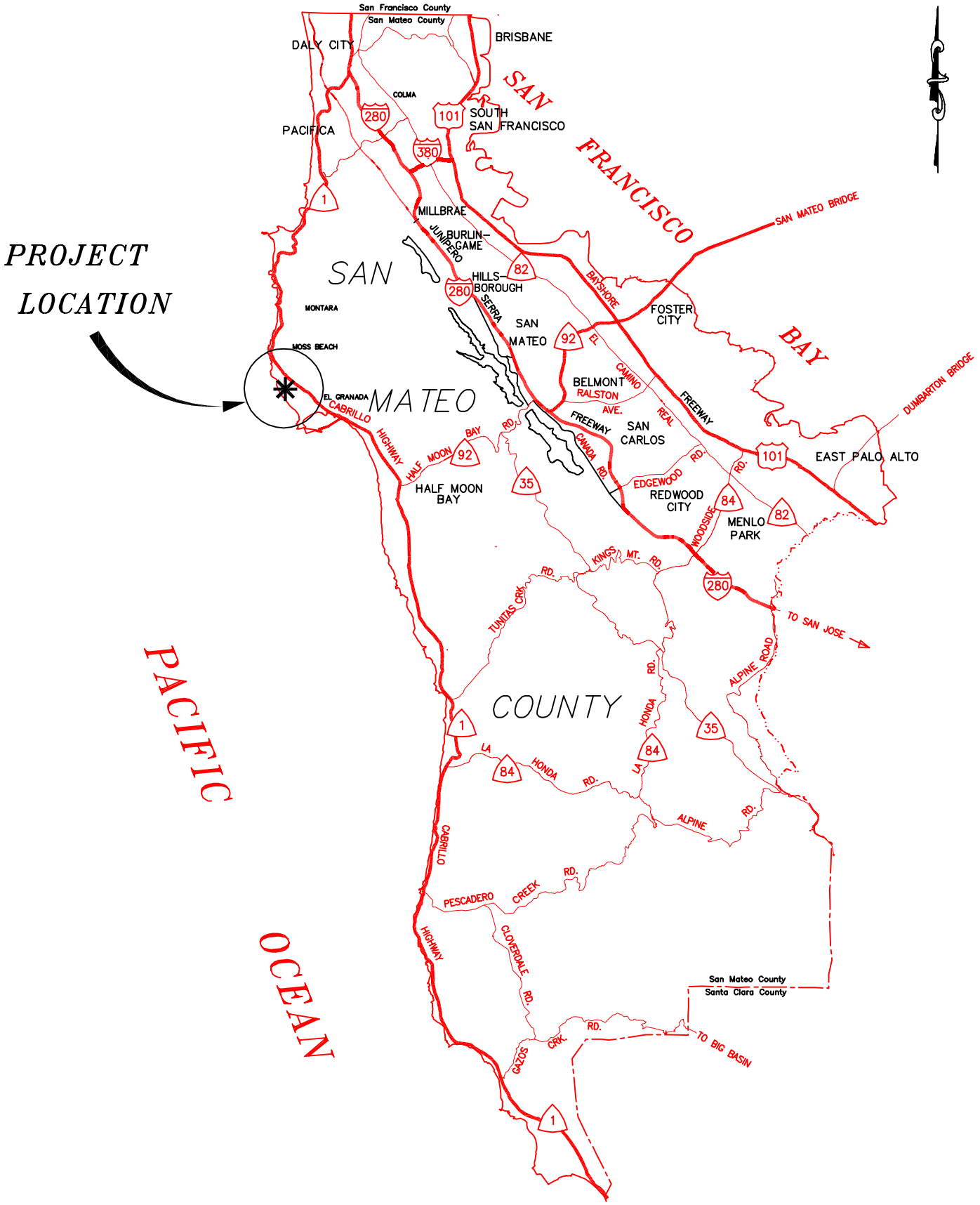
SMCPBD. 2006. Pillar Point Bluff Trail Project. Exhibit 3: Initial Study/Mitigated Negative Declaration.

U.S. Department of Agriculture (USDA). 1961. Soil Survey, San Mateo County Area, California.

U.S. Fish and Wildlife Service (USFWS). 2011. Quadrangle Species List for San Mateo County, Sacramento Fish and Wildlife Service. http://www.fws.gov/sacramento/es_species/Lists/es_species_lists.cfm.

APPENDIX A:

Project Figures



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COUNTY OF SAN MATEO PUBLIC WORKS	DESIGNED BY:	**MOSS BEACH/SEAL COVE ROAD IMPROVEMENTS PROJECT** **SPECIAL STATUS PLANTS SURVEY REPORT** **FIGURE 1 - VICINITY MAP**	SCALE: NONE
	CHECKED BY: WN		DATE: JUN 2013
	DRAWN BY: CF		FILE NO: **1/XXXX**

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
SAN MATEO COUNTY

555 COUNTY CENTER, 5TH FLOOR
REDWOOD CITY, CALIFORNIA 94063-1665

Moss Beach/Seal Cove Road Improvements Project

Special Status Plants Survey Report

Figure 2 Project Location and Study Area Map

N
W E
S

Legend

Road Improvement Project Area

Study Area

0 50 100 150 200 250
Feet

County of San Mateo
Department of Public Works
June 4, 2013

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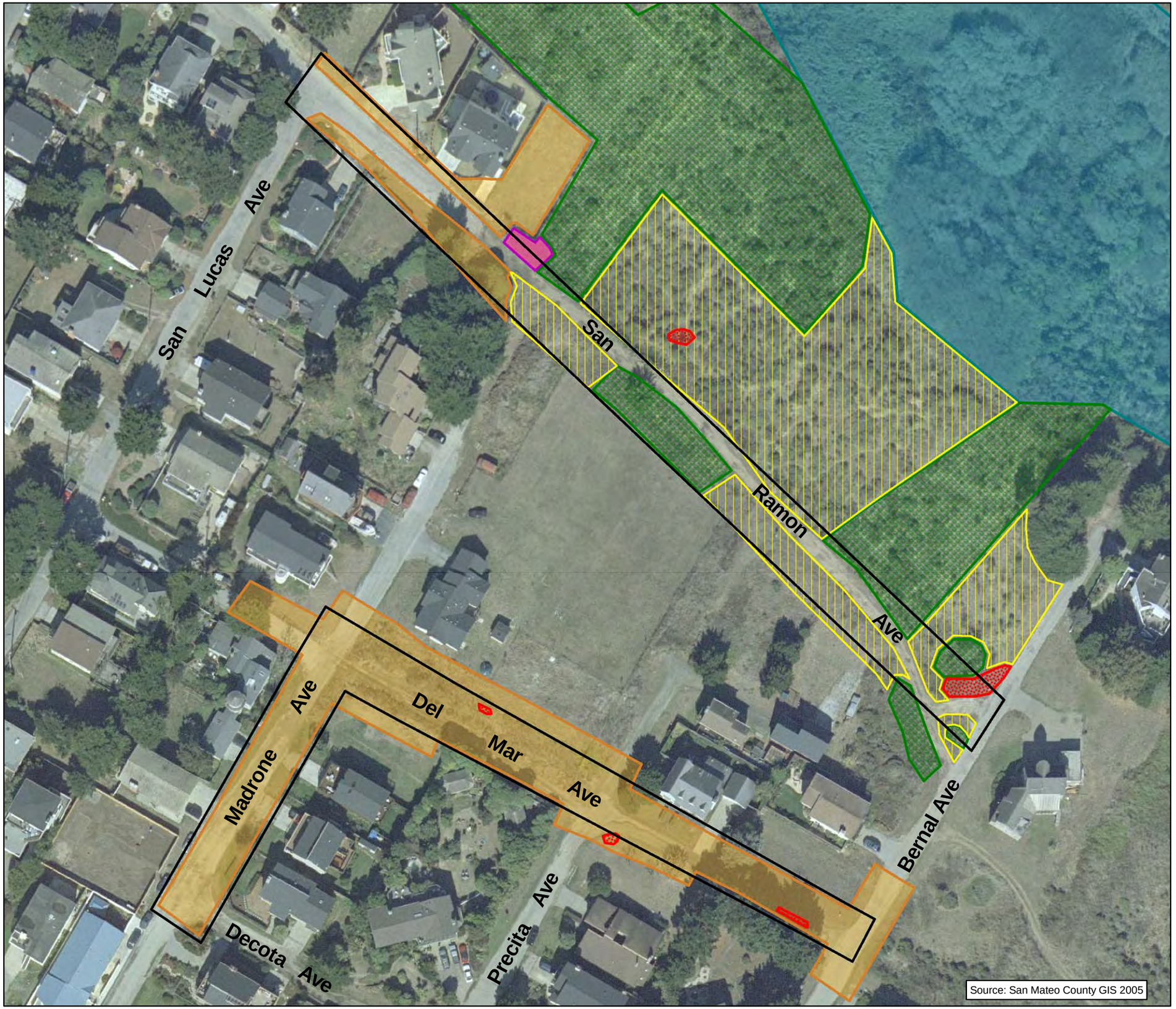
Moss Beach/Seal Cove Road Improvements Project

Special Status Plants Survey Report

Figure 3 Locations of Dominant Plant Communities Map



N
W E
S

Legend

- Road Improvement Project Area
- Coastal Scrub
- Grassland
- Beach Strawberry
- California Blackberry
- Landscape/Ruderal
- Wetland

0 50 100 150 200
Feet

County of San Mateo
Department of Public Works
June 4, 2013

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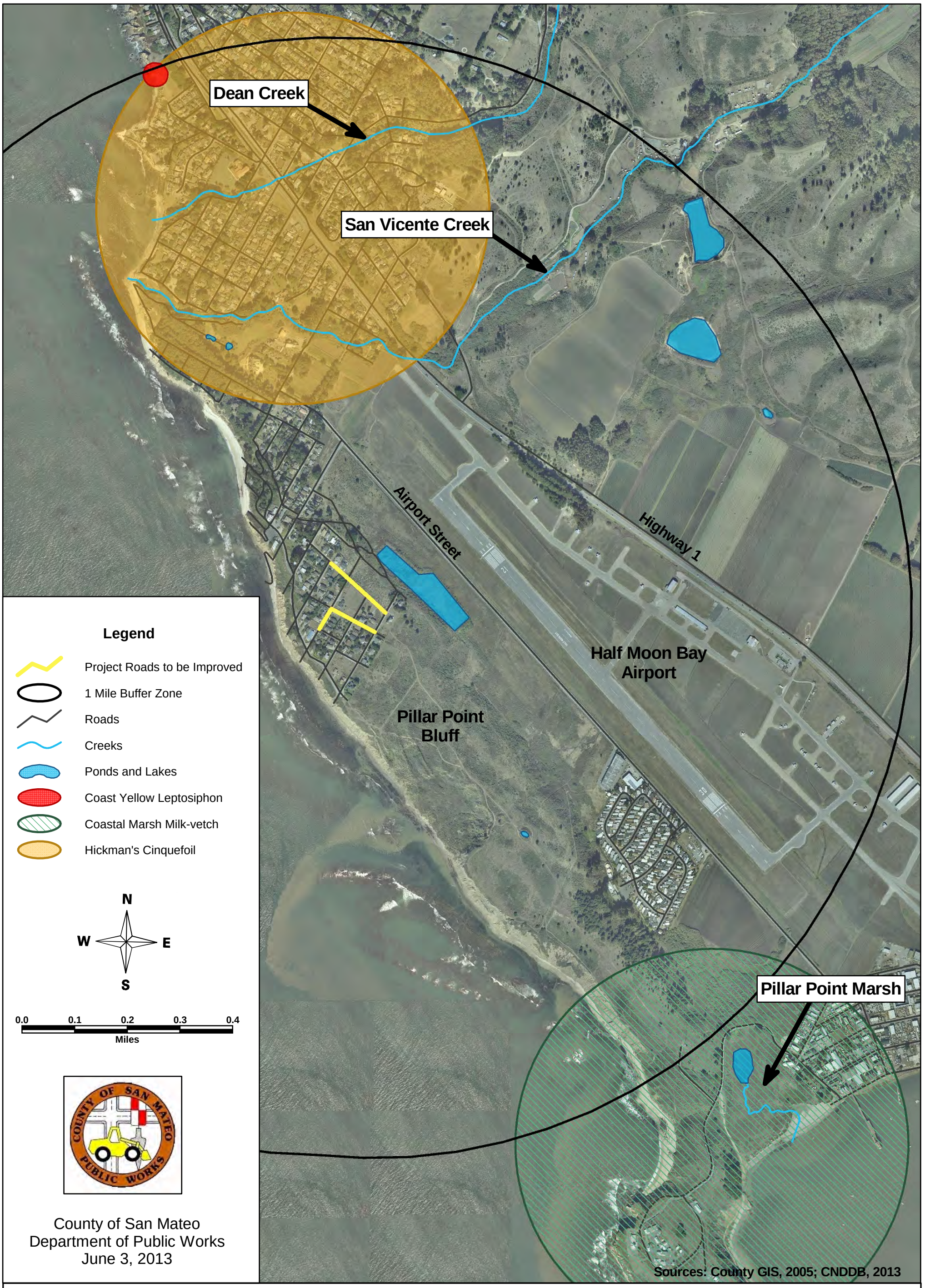

Moss Beach/Seal Cove Road Improvements Project
Special Status Plants Survey Report

Figure 4 - Locations of Special Status Plant Species Occurrences

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APPENDIX B:

Study Area Site Photos

San Ramon Avenue:

Photo 1 – View on April 30, 2013 looking northwest along San Ramon Avenue towards the residence at 885 San Ramon Avenue. Habitat at this site is non-native grassland and coyote brush scrub on both sides of the roadway, and ruderal on the dirt road and along the shoulders.

Photo 2 – View on May 29, 2013 looking northwest along San Ramon Avenue towards the residence at 885 San Ramon Avenue.

Photo 3 – View on May 29, 2013 looking northwest along San Ramon Avenue towards the San Lucas Avenue intersection. Habitat at this section of San Ramon Avenue is primarily ruderal and landscape ornamental.

Photo 4 – View on May 29, 2013 looking southeast along San Ramon Avenue towards the Bernal Avenue intersection. Note the stand of California blackberry (*Rubus ursinus*) on the left side of the photo (location indicated by arrow).

Photo 5 – Photo taken on May 29, 2013 showing example of coyote brush scrub and ruderal roadside shoulder habitat along San Ramon Avenue.

Photo 6 – Large patch of beach strawberry *(Fragaria chiloensis)* within the San Ramon Avenue right-of-way at the intersection of San Ramon and Bernal Avenues.

Photo 7 – View on April 30, 2013 looking east from San Ramon Avenue towards the large willow patch and wetland seep located approximately 200-feet from the Project site (location indicated by arrow).

Del Mar Avenue:

Photo 8 – View on May 29, 2013 looking southeast on Del Mar Avenue towards the Bernal Avenue intersection. Small patches of beach strawberry occur in the grassy shoulder at this location (as indicated by arrow). The County road right-of-way boundary is located at the fence line shown in the photo.

Photo 9– View on May 29, 2013 looking northwest on Del Mar Avenue towards the Precita Avenue intersection. Habitat at this location is primarily landscape ornamental with small patches of beach strawberry along the grassy shoulders.

Photo 10 – View on May 29, 2013 looking northwest along Del Mar Avenue towards the Madrone Avenue intersection. Habitat at this location is primarily ruderal on the dirt road and ruderal/landscape ornamental with small patches of beach strawberry along the shoulders within the County road ROW.

Photo 11 – View on April 30, 2013 looking southeast along Del Mar Avenue towards the Precita Avenue intersection. Habitat at this location is primarily ruderal on the dirt road and ruderal/landscape ornamental with small patches of beach strawberry along the shoulders within the County road ROW.

Madrone Avenue:

Photo 12 – View on April 26, 2013 looking west along Madrone Avenue toward the Pacific Ocean. Habitat at this location is exclusively ruderal and landscape ornamental.

Photo 13 – View on May 29, 2013 looking east along Madrone Avenue towards the Del Mar Avenue intersection. Habitat at this location is exclusively ruderal and landscape ornamental. Small patches of beach strawberry occur in residential lawns beyond the Project impact area (outside of the County road ROW).

Sensitive Species Reference Sites:

Photo 14 – Photo of flowering coast yellow leptosiphon *(Leptosiphon croceus)* taken on May 1, 2013 to verify surveys were conducted during the appropriate local blooming period for this species. The reference site is located on Vallemar Bluff in the Moss Beach area, approximately 1 mile north of the Project site.

Photo 15 – Photo of flowering Hickman's cinquefoil *(Potentilla hickmanii)* taken on May 1, 2013 to verify surveys were conducted during the appropriate local blooming period for this species. The reference site is located in the Rancho Corral de Tierra park in the Montara area, approximately 2.5 miles north of the Project site.

Photo 16 – Photo of coastal marsh milk-vetch *(Astragalus pycnostachyus* var. *pycnostachyus)* taken on May 1, 2013. Although this species was not flowering during the site visit, the foliage is distinctive and easily identifiable during its non-blooming period. The reference site is located south of San Gregorio Creek along Highway 1.

APPENDIX C:

Plant Survey Data Sheets

Plant Survey Data Sheet

Site: San Ramon Ave (Sea/Cove) Date/Time: 26 APR 2013 / 1300 PDT to 1415 PDT

Surveyors: C. Foster, A. Remmel

Within ½ mile of coast? (Yes) No

Landscape (land use, disturbance):
Rural residential / open space, non-native grasslands coyote brush scrub, large patches of berry vine. Central area east of road has been mowed in previous years. Large stands of pampas grass in mowed areas.

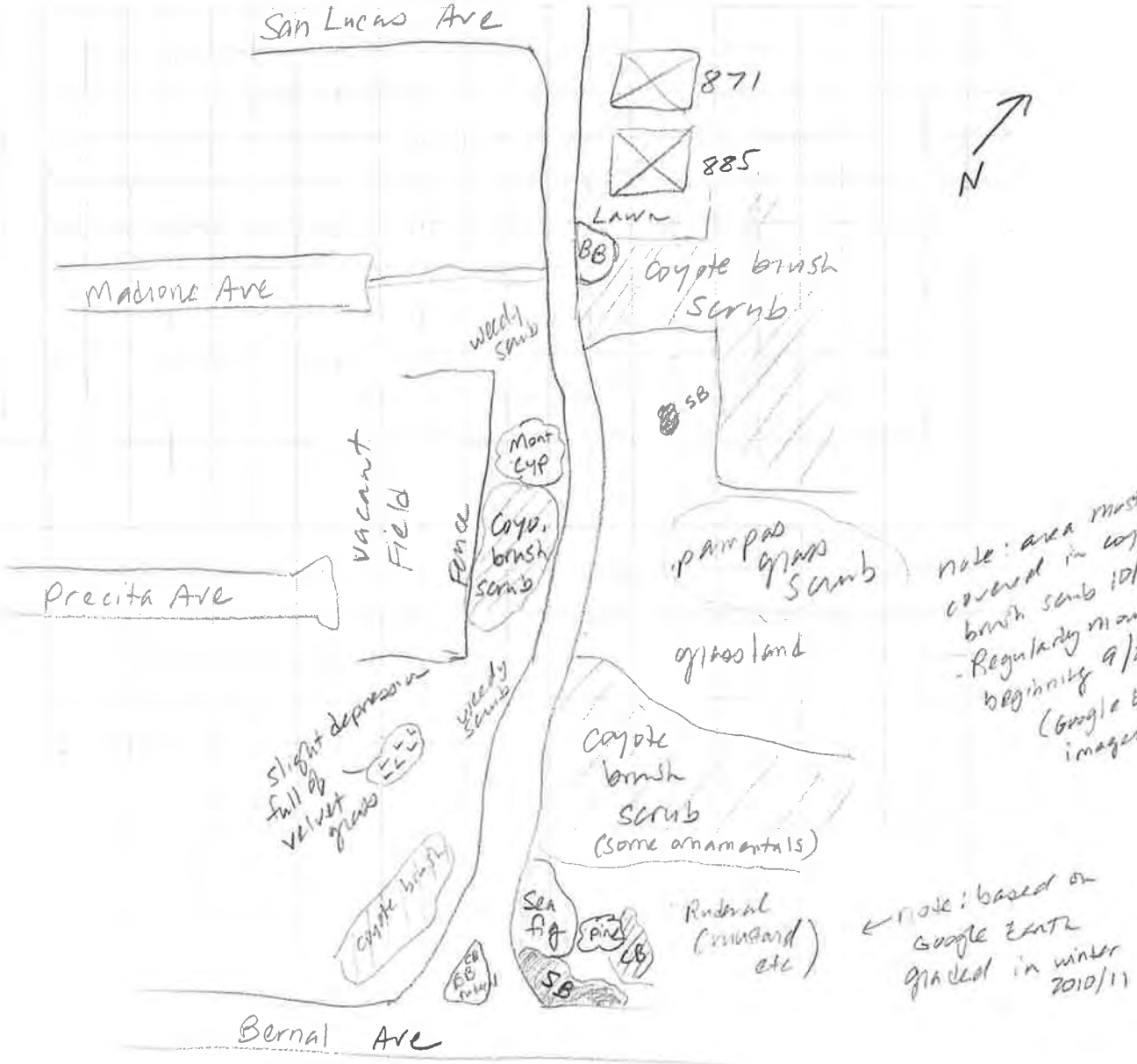
Habitat (topography, community, %cover):
Relatively flat coastal terrace. Land slopes downward to the northeast of the road, where terrace drops off to the east, seep wetlands occur.

Species Present	% cover/ # of indiv.	Species Present	% cover/ # of indiv.
Fragaria chilaensis		common borage	
Carpobrotus sp		Oxalis pes-caprae	
common yarrow		Cortaderia sp	
bur clover		blue-eyed grass	
melilotus sp.		Scarlet pimpernel	
Avena fatua		birds foot trefoil	
brome grass		man-root (Marah sp)	
Ca. blackberry		sow thistle	
cutleaf plantain		wild mustard	
brass buttons		English Plantain	
geranium dissectum		Ca. Figwort	
wild radish		Ca. Poppy	
sweet fennel		common vetch	
bristly oxtongue		velvet grass	
coyote brush		sheep sorrel dock	
cheeseweed mallow		garden alyssum	
unid. ornamental shrubs		pacific Sanicle	
garden nasturtium		elderberry	
cape ivy		Hordeum sp.	
bull thistle		Spike rush (Juncus sp.)	
Harding grass		dandelion	
cotoneaster		coffeeberry	
poison hemlock		Italian thistle	
Cudweed sp.		myoporum	

Notes: Surveyed within road right-of-way, and 25 ft beyond ROW where accessible. Did not survey past fencelines. Monterey Cypress within right of way. Monterey pine near Bernal Ave intersection

Site Map

Total area surveyed: 71,375 ft² (1.6 ac)



CB - coyote brush
SB - Beach Strawberry
BB - Ca. Blackberry brambles

Plant Survey Data Sheet

Site: Del Mar Ave (Seal Cove) Date/Time: 30 APR 2013 / 0930 PDT to 1130 PDT

Surveyors: C. Foster, A. Remmel

Within ½ mile of coast? (Yes) No

Landscape (land use, disturbance): Residential neighborhood on coastal bluff/terrace. Gravel road from Bernal to Precita. Dirt road from Precita to Madrone. Deep ruts in dirt road. Mostly landscape plants adjacent to road.

Habitat (topography, community, %cover):
Relatively flat coastal terrace.

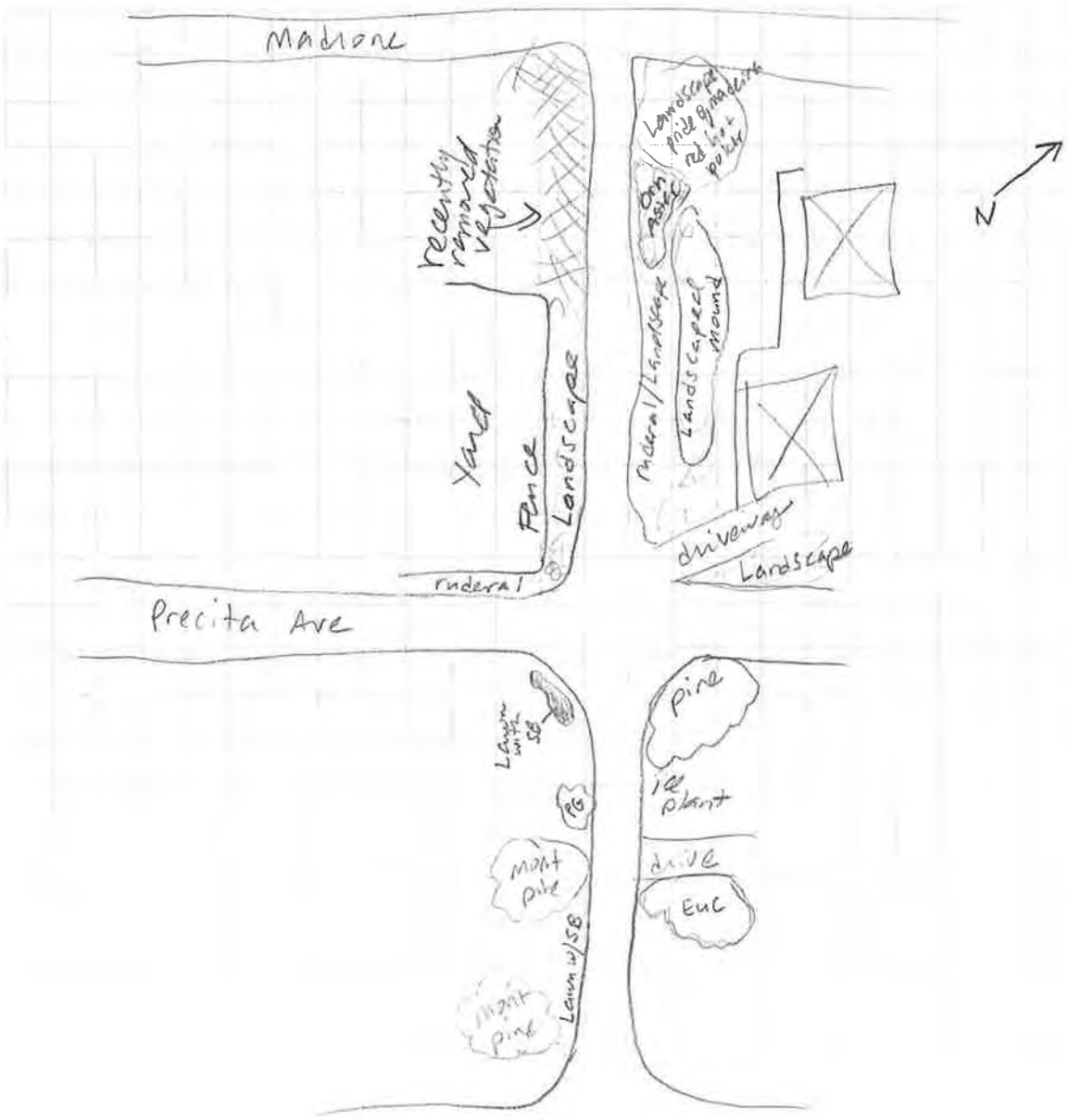
Species Present	% cover/ # of indiv.
Bristly ox-tongue	
Common yarrow	
Geranium dissectum	
Sow thistle (Sonchus sp.)	
Bur clover	
Scarlet Pimpernel	
wild radish	
Cutleaf plantain	
brass buttons	
Avena fatua	
poison hemlock	
ripgut brome	
coyote brush	
Plantago lanceolata	
Plantago coronopus	
Carpobrotus sp.	
Fragaria chiloensis	
sweet fennel	
blue-eyed grass	
velvet grass	

Species Present	% cover/ # of indiv.
Erodium sp (filaree)	
Oxalis pes-caprae	
Redhot poker	
pride of Madeira	
Calla Lily	
Ornamental asteraceae	
various landscape shrubs	
Melilotus sp.	
Italian ryegrass	
ornamental monterey pine	
Elderberry (Sambucus sp) under pine	
Cortaderia sp.	
unid. ornamental aster (groundcover)	

Notes: Did not survey past fencelines. Mainly surveyed within ROW. except in vacant lots and road intersections

Site Map

Total area surveyed: 42,600 ft² (1.0 ac)



Plant Survey Data Sheet

Site: Madrone Ave (seal cove) Date/Time: 26 APR 2013 1130-1200 PDT

Surveyors: C. Foster, A. Remmel

Within ½ mile of coast? (Yes) No

Landscape (land use, disturbance):

Residential / ornamental, ruderal

Habitat (topography, community, %cover):

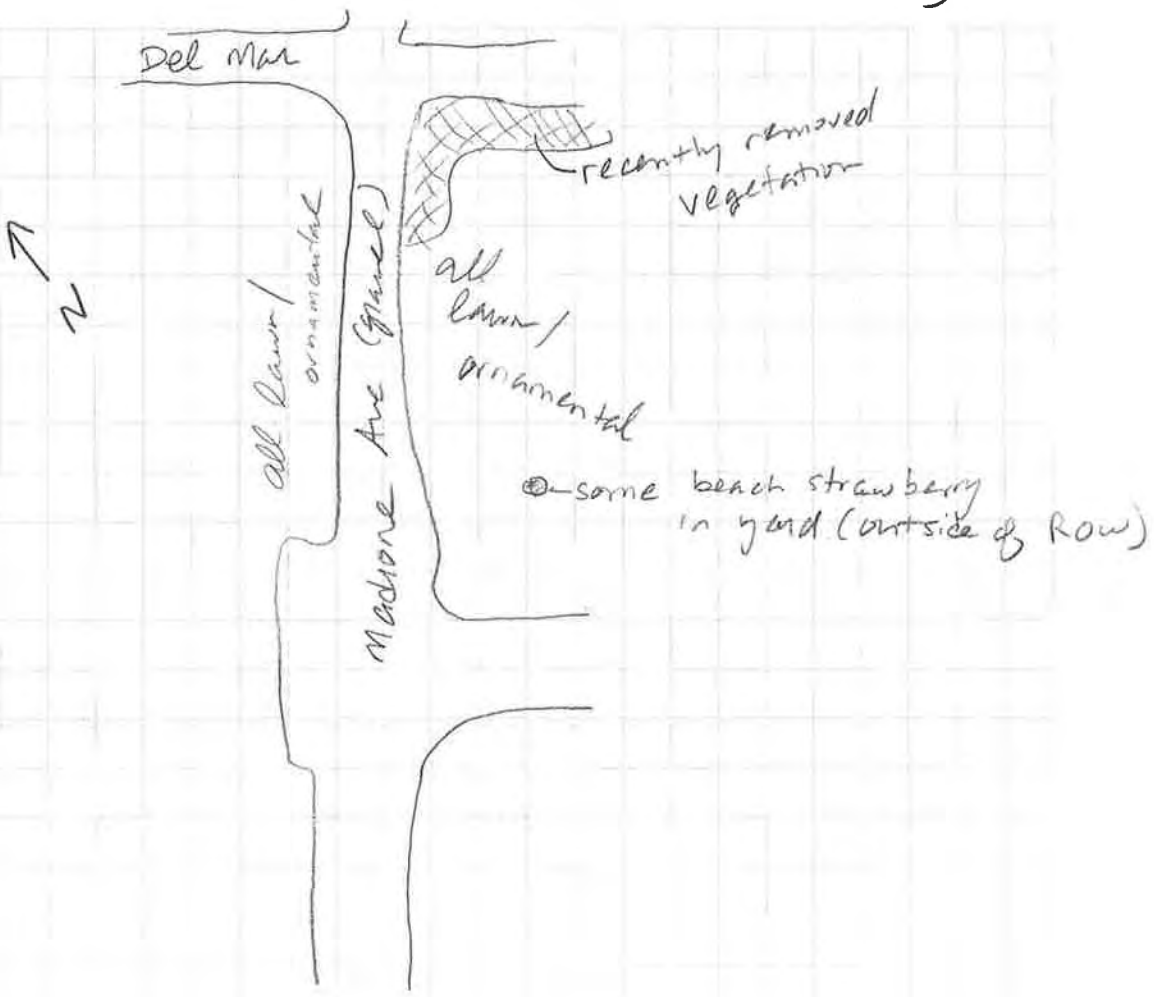
Relatively flat topography.

Species Present	% cover/ # of indiv.	Species Present	% cover/ # of indiv.
filarec			
cutleaf plantain			
Bristly ox-tongue			
Medicago sp.			
Dandelion			
Sow thistle			
Lawn grasses			
ornamental groundcover			
Geranium dissectum			
Brass buttons			
cheeseweed mallow			
poison Hemlock			
wild radish			
scarlet pimpernel			
Vinca sp.			
garden nasturtium			
Pineapple weed			

Notes: Beach strawberry in lawn within residential fenced yard. Only surveyed to fence lines.

Site Map

Total area surveyed: 11,743 ft² (0.3 ac)



Plant Survey Data Sheet

Site: San Ramon Ave (Seal cove) Date/Time: 29 May 2013 / 1000 PDT to 12:00 PDT

Surveyors: C. Foster

Within ½ mile of coast? (Yes) / No

Landscape (land use, disturbance):

Same as previous

Habitat (topography, community, %cover):

Species Present	% cover/ # of indiv.
Beach Strawberry	
Sea Fig (Carpobrotus sp.)	
Common yarrow	
Wild oat	
Ca. Blackberry	
Poison Hemlock	
coffeeberry	
cotoneaster sp.	
bull thistle	
Cortaderia sp.	
dandelion	
Juncus sp.	
curly dock	
Rumex (unid., possibly willow)	
Bur clover (Medicago)	
brass buttons	
sweet fennel	
Eng. plantain	
cut-leaf plantain	
sheep sorrel	
Ca. poppy	
Vetch (common)	
sow thistle (Sonchus sp)	

Species Present	% cover/ # of indiv.
wild cucumber (marah sp)	
velvet grass	
elderberry sp.	
coyote brush	
cape ivy	
willow herb (Epilobium sp) not flowering	
garden nasturtium	
common borage	
Flax (Linum bienne)	
Ca. figwort / bee-plant	
mustard	
wild radish	
Hordeum sp.	
Harding grass	
cheeseweed mallow	
scarlet pimpernel	
bristly ox-tongue	
Italian thistle	
Geranium dissectum	
Blue-eyed grass	
alyssum	
birds-foot trefoil	
ornamental shrubs (unid)	
Pacific sanicle (seeding/fruiting)	

Notes: Monterey cypress and Monterey pine within ROW.

Unidentified Baccharis in coyote brush scrub

Site Map

Total area surveyed: 1.6 ac

Same as previous

Plant Survey Data Sheet

Site: Del Mar Ave (Seal Cove) Date/Time: 29 May 2013 / 1200 PDT to 1300 PDT

Surveyors: C. Foster

Within ½ mile of coast? (Yes) / No

Landscape (land use, disturbance):

Same as previous

Habitat (topography, community, %cover):

Species Present	% cover/ # of indiv.
Beach Strawberry	
Bristly ox-tongue	
Melilotus sp.	
Dandelion	
Sweet fennel	
Blue-eyed grass	
Velvet grass	
brass buttons	
cut-leaf plantain	
sea fig (Carpobrotus)	
ice plant (Drosanthemum)	
Vetch (Vicia sp)	
Juncus sp	
wild oat	
Common yarrow	
Elderberry (under pine)	
Hordeum sp	
morning glory	
oxalis sp (not pes-caprae)	
tanweed (Madia sp)	

Species Present	% cover/ # of indiv.
Cheeseweed mallow	
English plantain	
coyote brush	
ripgut brome	
scarlet pimpernel	
sow thistle (Sonchus sp)	
Red hot poker	
pride of Madeira	
calla lily	
ornamental Asteraceae (ground cover)	
various landscape shrubs/trees	
Geranium dissectum	
pampas grass (Cortaderia sp)	
Italian ryegrass	
Bur clover (medicago sp)	
wild radish	
sedge (Cyperus sp)	
Rumex crispus	
Rumex sp.	
other landscape plants (horsetail, nasturtium) aster, etc	

Notes: Monterey pines in or adjacent to ROW.

Site Map

Total area surveyed: 1 ac

Same as previous

Plant Survey Data Sheet

Site: Madrone Ave (Seal Cove) Date/Time: 29 May 2013 / 1300 PDT to 1330 PDT

Surveyors: C. Foster

Within ½ mile of coast? (Yes) / No

Landscape (land use, disturbance):

Same as previous

Habitat (topography, community, %cover):

Species Present	% cover/ # of indiv.	Species Present	% cover/ # of indiv.
Melilotus sp.			
Geranium dissectum			
Sow thistle			
Cut-leaf plantain			
Wild radish			
Scarlet pimpernel			
garden nasturtium			
Bristly ox-tongue			
Dandelion			
brass buttons			
bur clover			
cheeseweed mallow			
chamomile			
Hordeum sp.			
Italian ryegrass			
garden alyssum			
Plantago sp. (Mexican?)			
Sod grass			
Ornamentals (uni 2)			

Notes:

Site Map

Total area surveyed: 0.3 ac

Same as previous

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APPENDIX D:

Qualifications of Surveyors

Carole Foster, Biologist
County of San Mateo Department of Public Works
Utilities-Flood Control-Watershed Protection
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APPENDIX C

Preliminary Wetlands Delineation Report

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MOSS BEACH/SEAL COVE AREA ROADS IMPROVEMENT PROJECT

Wetlands Study,
San Mateo County, California

Prepared for
San Mateo County
Department of Public Works

June 2013

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ACRONYMS AND ABBREVIATIONS USED IN THIS DOCUMENT

CCA	California Coastal Act
CCC	California Coastal Commission
CFR	Code of Federal Regulations
Corps	United States Army Corps of Engineers
CWA	Clean Water Act
EPA	United States Environmental Protection Agency
FAC	Facultative plant species
FACU	Facultative upland plant species
FACW	Facultative wetland plant species
GIS	Geographic Information System
LCP	Local Coastal Program
OBL	Obligate wetland plant species
OHWM	Ordinary high water mark
NI	No indicator
NRCS	Natural Resource Conservation Service
NRPW	Non-relatively permanent waters
ROW	Right of way
RPW	Relatively permanent waters
RWQCB	Regional Water Quality Control Board
SWANCC	Solid Waste Agency of Northern Cook County
TNW	Traditionally navigable waters
UPL	Upland plant species
USDA	United States Department of Agriculture

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CHAPTER 1
Introduction

1.1 Objective

This report documents the extent of potentially jurisdictional waters of the United States and waters of the state which occur within the Moss Beach/Seal Cove Area Roads Improvement Project (Project) boundary. The project area lies within the rural residential community of Moss Beach, located west of Highway 1, between the communities of Montara and Princeton by the Sea (**Figure 1**).

The purpose of this document is to identify features within the delineation study area under potential jurisdiction of the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (RWQCB), and the San Mateo County Local Coastal Program (LCP) as authorized by the California Coastal Commission (CCC), and to provide the background information necessary to support a future Coastal Development Permit (CDP) Application. The wetland delineation process involves determining the boundaries between wetlands, waters and surrounding uplands using Corps, RWQCB, and CCC definition of wetlands and/or waters.

1.2 Summary of Results

ESA conducted a formal wetland delineation of the Moss Beach/Seal Cove Area Roads Improvement Project wetland delineation study area on May 29, 2013. The field delineation identified and documented all potentially jurisdictional wetlands and other waters of the U.S. and waters of the State within the delineation study area. No federal or State jurisdictional wetlands or waters were observed within study area.

A detailed summary of all jurisdictional features documented within the delineation study area is presented in Table 4-1 (see Chapter 4). Wetland datasheet are presented in **Appendix A**; a soil map is provided in **Appendix B**; the climate summary (WETS Table) information table is provided in **Appendix C**; and representative photographs are provided in **Appendix D**.

SOURCE: ESRI, 2013

Moss Beach/Seal Cove Road Improvements Project . 2120603.02

Figure 1

Regional Overview Map

1.3 Responsible Parties

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1.4 Project Description

1.4.1 Project Background

The County of San Mateo Department of Public Works proposes improvement of three existing dirt roads in a rural residential area of Moss Beach, an unincorporated community within San Mateo County, California. The proposed project would provide community residents with an access alternative to Ocean Boulevard, which is presently the only paved road connecting San Lucas Avenue with Madrone, Precita, and Bernal Avenues. Ocean Boulevard, which runs adjacent to coastal bluffs, south of the project area, is closed in some areas, west of San Lucas Avenue, due to bluff erosion. The existing alternative access routes, which include the road segments to be improved, are not designed to County road standards, and therefore are not maintained by the County. As such, they are presently in fair to poor condition, some with large potholes that impede direct passage.

1.4.2 Proposed Improvements

The project includes improvement of approximately 1,500 linear feet of roads within the County's ROW. Specific road segments to be improved include: (1) San Ramon Avenue, between San Lucas Road and Bernal Avenue (737 linear feet); (2) Del Mar Avenue, between Madrone Avenue and Bernal Avenue (472 linear feet); and (3) Madrone Avenue, between Decota Avenue and Del Mar Avenue (275 linear feet). The above described road segments would be improved by construction of 16-foot wide paved road sections comprised of approximately three inches of asphalt concrete and nine inches of cement-treated base. Surface drainage features, consisting of vegetated swales, would be constructed on either side of the roadway to capture and treat stormwater. The swales would measure, on average, seven feet wide and less than one foot deep. Upon completion of the project, the County would assume maintenance responsibility for these road segments.

1.4.3 Project Construction

The project would require ground disturbance of an approximately 52,300 square-foot area, including all road grading and swale areas. Excavation of roadside areas, to an estimated depth of approximately two feet, would also be required for swale construction. The proposed improvements would require removal of one tree (Monterey cypress) and trimming of up to two trees that have grown into the County right of way (ROW). The project would not include utility relocation or construction of sidewalks, lighting, or other service improvements.

Construction equipment required would include the following: backhoe, blade (for grading), rollers, cement-treat machine, and several utility trucks (for water, asphaltic emulsion, etc.). Construction equipment and materials staging would occur on Los Banos Avenue, a paved road. All construction equipment would be stored in this area when not in use. Any necessary on-site maintenance or refueling would also occur within this area.

A workforce of five people is expected for the project, including: one foreman, two laborers, and two equipment operators. The improvements would require approximately 29 truck trips for the import of asphalt and concrete, and approximately 40 truck trips for the off-haul of soil excavated for swale construction (approximately 150 cubic yards). Any excavated materials that cannot be reused onsite would be deposited at either an approved sanitary landfill or private receiving site outside of the Coastal Zone.

Construction is proposed to occur over approximately 45 days, in Summer/Fall 2013. All construction activities would occur during the daytime, between the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday. No work would occur on weekends or holidays.

1.4.4 Project Operation

Upon completion of improvements, road maintenance, including periodic inspections and necessary repairs, would be conducted by the County, similar to other County-maintained roads.

CHAPTER 2
Setting

2.1 Delineation Study Area

The delineation study area is located within the community of Seal Cove/Moss Beach, approximately one-half mile west of Highway 1, between the Half Moon Bay Airport and the Pacific Ocean (Figure 1). Moss Beach is generally located at the northern terminus of Pillar Ridge, in the Midcoast area of San Mateo County. The project area lies within the State's Coastal Zone boundary, as defined under California Public Resources Code Section 30103, and therefore is subject to the provisions of the County of San Mateo LCP.

The delineation study area includes the County ROW along San Ramon Avenue between San Lucas Avenue and Bernal Avenue, along Del Mar Avenue between Madrone Avenue and Bernal Avenue and along Madrone Avenue between Del Mar Avenue and Decota Avenue (**Figure 2**). The study area is bounded by development to the north and west, and open space – including Pillar Point Bluff County Park – to the east and south.

2.2 Climate and Topography

The overall northern California climate is Mediterranean in nature, which is characterized by warm, dry summers and cool, wet winters, with the bulk of precipitation occurring as rain in the winter months. The average annual temperature in Half Moon Bay is 54.8 ºF, while mean annual rainfall is 27.98 inches (USDA, NRCS, 2002).

The study area is generally flat, but gently slopes from southeast to northwest from an elevation of approximately 120 feet above sea level to approximately 100 feet above sea level.

SOURCE: ESRI, 2013

Moss Beach/Seal Cove Road Improvements Project . 2120603.02

Figure 2

Project Area Map

2.3 Soils

The United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Web Soil Survey (USDA NRCS, 2013) was consulted to determine the soil types occurring within the delineation study area.

One soil type, Typic Argiustolls loamy-Urban land association 5 to 15 percent slopes, was mapped within the delineation study area (see Appendix B). This soil type is not included on the National List of Hydric Soils (USDA NRCS, 2012).

The Typic Argiustolls loamy-Urban land association is composed of approximately 50 percent Typic Argiustolls and similar soils and 30 percent urban land. Typic Argiustolls are moderately well drained soils with a depth of greater than 80 inches to both a restrictive layer and to a water table. The soil texture is typically sandy clay loam from 0 to 60 inches below the surface. Parent material is coastal alluvium derived from sedimentary rock. The urban land component includes areas covered by asphalt, concrete, buildings and other structures.

2.4 Hydrology

The study area is located within the Denniston Creek Watershed on a relatively flat coastal terrace directly abutting the Pacific Ocean. Within the study area, shallow ditches or drainage swales are located along the edges of existing roadways. During periods of heavy rain, surface runoff is directed through these shallow roadside ditches and conveyed across Ocean Boulevard directly to the Pacific Ocean.

The unpaved roadways on San Ramon Avenue and Del Mar Avenue are heavily compacted, with tire ruts, depressions that occasionally pond water. One tire rut on Del Mar Avenue near Precita Avenue was saturated at the time of the survey. No standing water was observed within the study area during the site survey conducted on May 29, 2013.

2.5 Vegetation

Plant communities are assemblages of plant species that regularly occur together in the same area, which are defined by species composition and relative abundance. The study area contains two plant communities: non-native annual grassland and coyote brush scrub. The remaining areas are either existing developed or compacted dirt roadways that support little to no vegetation or landscaped lawns and gardens.

Non-native grassland occurs along the northeastern edge of Del Mar Avenue between Madrone Avenue and Precita Avenue and along both sides of San Ramon Avenue between Madrone Avenue and Bernal Avenue. Dominants in the non-native grassland include Italian ryegrass (*Festuca perennis*), wild oat (*Avena* sp.), velvet grass (*Holcus lanatus*), and mustard (*Brassica nigra*).

Coyote brush scrub occurs in small patches along both sides of San Ramon Avenue. Coyote brush (*Baccharis pilularis*) is the dominant species found in this community. Species common in the non-native grassland such as Italian ryegrass, wild oat, soft brome (*Bromus hordeaceus*), and Mediterranean barley (*Hordeum murinum*) occur in the understory.

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CHAPTER 3
Methods

3.1 Definitions and Regulatory Setting

U.S. Army Corps of Engineers

Definitions

Many of the terms used throughout this report have specific meanings with respect to the delineation of Waters of the U.S. These terms are defined below:

Waters of the United States: The Code of Federal Regulations (33 CFR § 328.3[a]; 40 CFR § 230.3[s]) defines 'waters of the United States' as:

> (1) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (2) All interstate waters including interstate wetlands; (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mud flats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce including any such waters which are or could be used by interstate or foreign travelers for recreational or other purposes; or from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or which are used or could be used for industrial purposes by industries in interstate commerce; (4) All impoundments of waters otherwise defined as waters of the United States under the definition; (5) Tributaries of waters identified in paragraphs (1) through (4); (6) Territorial seas; and (7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (1) through (6).

Wetlands: The Corps and the U.S. Environmental Protection Agency (EPA) define wetlands as, "Those areas that are saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support a prevalence of vegetation typically adapted for the life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." Corps wetlands must typically exhibit three parameters: 1) wetland hydrology, 2) hydrophytic vegetation, and 3) hydric soils in order to meet the federal definition.

> **Wetland Hydrology:** This term encompasses all hydrologic characteristics of areas that are periodically inundated or have soils saturated to the surface at some time during the growing season. These include both riverine and non-riverine hydrology indicators, such as sediment deposits, drift lines, and oxidized rhizospheres along living roots in the upper 12 inches of the soil. In the Arid West, hydrologic indicators may be absent in any given year due to annual variability in precipitation and in times of drought. The *Arid West Supplement* (Corps, 2008) cites a technical standard that can be used for disturbed or

problematic sites that support wetland vegetation and soils but where wetland hydrology is not apparent. 'This standard calls for 14 or more consecutive days of flooding, ponding, or a water table 12 inches or less below the soil surface during the growing season at a minimum frequency of 5 years in 10'.

Hydrophytic Vegetation: Hydrophytic vegetation is defined as plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanently or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present. Emphasis is placed on the assemblage of plant species that exert a controlling influence on the character of the plant community, rather than on a single indicator species, i.e., there must be a prevalence of hydrophytic vegetation present in order to satisfy this wetland parameter.

***Wetland Indicator Status*:** Refers to the probability that a plant will occur in a wetland or not. Indicator status categories are as follows:

- *Obligate (OBL)*: almost always occurs in wetlands
- *Facultative wetland (FACW)*: usually occurs in wetlands, sometimes may occur in uplands
- *Facultative (FAC)*: equally likely to occur in wetlands or nonwetlands
- *Facultative upland (FACU)*: usually occurs in uplands but may occasionally occur in wetlands
- *Obligate upland (UPL)*: almost never occurs in wetlands
- *No indicator (NI)*: no indicator assigned due to lack of information

Hydric Soil: A soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part. Hydric soils are often characterized by redoximorphic features (such as redox concentrations, formerly known as mottles), which form by the reduction, translocation, and/or oxidation of iron and manganese oxides. Hydric soils may lack hydric indicators for a number of reasons. In such cases the same standard used to determine wetland hydrology when indicators are lacking can be used.

Ordinary High Water Mark: Ordinary high water mark (OHWM) is defined in 33 CFR § 328.3[e] as '…that line on the shore established by the fluctuations of water and indicated by physical characteristics, such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, the presence of litter or debris, or other appropriate means that consider the characteristics of the surrounding area'.

Other Waters: The term "other waters of the United States" includes water bodies, such as rivers and streams, that may not meet the full criteria for wetlands designation but that do exhibit evidence of an OHWM and are navigable or hydrologically connected to a navigable water body. Under the latest regulatory guidance, some types of other waters must have a significant nexus to a navigable water body to be considered jurisdictional by the Corps.

Traditionally Navigable Waters: Traditionally navigable waters (TNW) are all waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.

Relatively Permanent Waters: Relatively permanent waters (RPW) are non-navigable tributaries of traditional navigable waters that are relatively permanent, meaning they typically flow year-round or have continuous flow at least seasonally (e.g., typically three months).

Non-Relatively Permanent Waters: Non-relatively permanent waters (NRPW) include non-navigable tributaries with ephemeral or seasonal flows lasting less than three months.

Significant Nexus: This term refers to the hydrologic and ecologic connection between a TNW and its tributaries. Under recent guidance from the Corps and EPA certain wetlands and waters must have a significant nexus with a TNW in order to be considered jurisdictional.

Growing Season: The growing season is that part of the year when soil temperatures at 19.7 inches below the soil surface are higher than biologic zero (5°C/41° F). Growing season dates should be determined through onsite observations whenever possible. Since onsite data gathering is often not possible growing season dates can be approximated by using WETS tables from the nearest appropriate WETS station. The WETS table 70 percent probability average beginning and ending dates for 28° F temperatures can be used to represent the "normal" growing season for wetland determinations (NRCS, 1995). According to the Half Moon Bay WETS Station data (see Appendix C) the normal growing season for the study area would be 365 days (USDA, NRCS, 2002).

Regulations

Wetlands and other waters (e.g., rivers, streams, and natural ponds) are a subset of waters of the U.S. and receive protection under Section 404 of the CWA. The Corps has primary federal responsibility for administering regulations that concern waters of the U.S. and requires a permit if a project proposes placement of structures within navigable waters and/or alteration of waters of the U.S. The EPA has the ultimate authority under the CWA and can veto the Corps' issuance of a permit to fill jurisdictional waters of the U.S.

In recent years several Supreme Court cases have challenged the scope and extent of the Corps' jurisdiction over waters of the United States and have led to several reinterpretations of that authority. The most recent of these decisions are the case of Solid Waste Agency of Northern Cook County (SWANCC) v. the Army Corps of Engineers (January 9, 2001) and Rapanos v. United States (June, 2006). The SWANCC decision found that jurisdiction over non-navigable, isolated, intrastate waters could not be based solely on the use of such waters by migratory birds. The reasoning behind the SWANCC decision could be extended to suggest that waters need a demonstrable connection with a 'navigable water' to be protected under the CWA. The introduction of the term isolated has led to the consideration of the relative connectivity between waters and wetlands as a jurisdictionally relevant factor. The more recent Rapanos case further questioned the definition of "waters of the United States" and the scope of federal regulatory jurisdiction over such waters but resulted in a split decision which did not provide definitive answers but expanded on the concept that a 'significant nexus' with traditional navigable waters was needed for certain waters to be considered within the jurisdiction of the Corps.

On June 5, 2007 the EPA and the Corps released guidance on CWA jurisdiction in response to the Rapanos Supreme Court decisions, which can be used to support a finding of CWA coverage for a particular water body when either a) there is a significant nexus between the stream or wetland in question and navigable waters in the traditional sense; or b) a relatively permanent water body is hydrologically connected to traditional navigable waters and/or a wetland has a surface connection with that water. According to this guidance the Corps and the EPA will take jurisdiction over the following waters: 1) Traditional navigable waters; 2) Wetlands adjacent to traditional navigable waters, including adjacent wetlands that do not have a continuous surface connection to traditional navigable waters; 3) Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months); 4) Wetlands adjacent to non-navigable tributaries, as defined above, that have a continuous surface connection to such tributaries (e.g. they are not separated by uplands, a berm, dike, or similar feature).

The EPA and the Corps will claim jurisdiction over the following waters, based on a fact-specific determination of significant nexus, as defined below, to a traditional navigable water: non-navigable tributaries that are not relatively permanent; wetlands adjacent to non-navigable tributaries that are not relatively permanent; and wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

The EPA and the Corps generally do not assert jurisdiction over the following features: swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow); ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

The EPA and the Corps have defined the significant nexus standard as follows:

> A significant nexus analysis assesses the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters.

Significant nexus analysis includes consideration of hydrologic and ecologic factors including: volume, duration, and frequency of flow; proximity to a traditional navigable water; size of the watershed; average annual rainfall; average annual winter snow pack; potential of tributaries to carry pollutants and flood waters to traditional navigable waters; provision of aquatic habitat that supports a traditional navigable water; potential of wetlands to trap and filter pollutants or store flood waters; and maintenance of water quality in traditional navigable waters.

Regional Water Quality Control Board

Under Section 401 of the CWA, the RWQCB must certify that actions receiving authorization under Section 404 of the CWA also meet state water quality standards. The RWQCB also regulates waters of the state under the Porter-Cologne Act Water Quality Control Act (Porter-Cologne Act). The RWQCB requires projects to avoid impacts to wetlands if feasible and requires that projects do not result in a net loss of wetland acreage or a net loss of wetland function and values.

In addition California defines wetlands by presence of one or more of the following three attributes in addition to wetland hydrology:

- At least periodically, the land supports predominantly hydrophytes (at least 50 percent of the aerial vegetative cover);
- The substrate is predominantly undrained hydric soil; and
- The substrate is not soil (such as a rocky shore) and is saturated with water or covered by shallow water at some time during the growing season of each year.

Under normal circumstances, the federal definition of wetlands requires all three wetland identification parameters to be met, whereas the California definition requires the presence of at least one of these parameters. For this reason, identification of wetlands by State agencies consists of the union of all areas with a non-soil substrate that are periodically inundated or saturated, or in which at least seasonal dominance by hydrophytes may be documented, or in which hydric soils are present.

California Coastal Commission

Wetlands and other environmentally sensitive habitats in California's Coastal Zone are regulated under the California Coastal Act (CCA) of 1976. The CCA requires that most development avoid and buffer wetland resources. The study area lies within the Coastal Zone and the project is subject to the regulations of the San Mateo County LCP. Under the LCP, San Mateo County defines a wetland

> "as an area where the water table is at, near, or above the land surface long enough to bring about the formation of hydric soils or to support the growth of plants which normally are found to grow in water or wet ground. Such wetlands can include mudflats (barren of vegetation), marshes, and swamps. Such wetlands can be either fresh or saltwater, along streams (riparian), in tidally influenced areas (near the ocean and usually below extreme high water of spring tides), marginal to lakes, ponds, and manmade impoundments. Wetlands do not include areas which in normal rainfall years are permanently submerged (streams, lakes, ponds and impoundments), nor marine or estuarine areas below extreme low water of spring tides, nor vernally wet areas where the soils are not hydric.
>
> In San Mateo County, wetlands typically contain the following plants: cordgrass, pickleweed, jaumea, frankenia, marsh mint, tule, bulrush, narrow-leaf cattail, broadleaf cattail, pacific silverweed, salt rush, and bog rush. To qualify, a wetland must contain at least a 50% cover of some combination of these plants, unless it is a mudflat."

In practice, San Mateo County usually does not consider wetland vegetation to be limited to the twelve species listed above, but further relies on the CCC's wetland definition.

The CCC regulations (California Code of Regulations Title 14 (14 CCR)) establish a "one parameter definition" that only requires evidence of a single parameter to establish wetland conditions:

> "Wetland shall be defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent and drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salts or other substances in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, adjacent to, vegetated wetlands or deep-water habitats. (14 CCR Section 13577)."

The CCC regulations do not provide definitions of hydric soils or hydrophytic vegetation, but rely on the *1987 Army Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987), *USFWS List of Plant Species that Occur in Wetlands* (which has recently been updated to the *National Wetland Plant List* [Lichvar and Kartesz, 2012]), and the *Field Indicators of Hydric Soils in the United States* (USDA NRCS, 2010) as appropriate documents to use when determining the presence of wetlands. The CCC also acknowledges that the observation of indicators in the field is subject to uncertainty and error and wetland delineators must exercise professional judgment when conducting a wetland delineation.

3.2 Office Preparation

Literature Review

ESA reviewed the following information relevant to this delineation:

- *Jepson eFlora* (Jepson Flora Project, 2012) and *The Jepson Manual: Higher Plants of California* (Hickman, 1993)
- 2013 Geographic Information System (GIS) retrieved aerial photographs
- USDA NRCS, Web Soil Survey online application
- *National Wetland Plant List* (Lichvar and Kartesz, 2012)
- Standard biological references and field guides.

3.3 Field Survey Methods

Dates

ESA biologist M. Giolli conducted a routine delineation of waters of the U.S./waters of the state within the wetland delineation study area on May 29, 2013.

Field Delineation Methods

Data Collection

Field preparation included production of high resolution aerial photographs of the site. All wetland and drainage signatures on project site aerial photographs were investigated within the delineation study area. The delineation study area was walked such that visual coverage was 100 percent. All potential waters within the study area were delineated for all regulatory agencies (Corps, RWQCB, and CCC).

Data were collected at seven data points within the study area. Data point locations are shown on **Figure 3**. Data points were taken at sites representative of the vegetation, hydrology, and physical characteristics across the various potential wetland types and at adjacent upland areas, if applicable. Results were extrapolated to nearby areas exhibiting similar vegetation and hydrologic conditions. Arid West data sheets were used to record information at each data point.

Determination of Hydrophytic Vegetation

At each datapoint vegetation was analyzed within a five-foot radius for herbaceous species, 10-foot radius for shrub species, and a 30-foot radius for trees. Shrubs and trees were only recorded if they appeared to be rooted within the proposed wetland area. All species noted within the study plots were recorded on the data sheets. The indicator status of each species was confirmed in the field, to the extent feasible, with the *National Wetland Plant List* (Lichvar and Kartesz, 2012) for the Arid West Region. Dominance and/or prevalence calculations were generally performed in the field as well. When the vegetation passed either the dominance or prevalence test the point was considered to have hydrophytic vegetation.

Determination of Hydric Soils

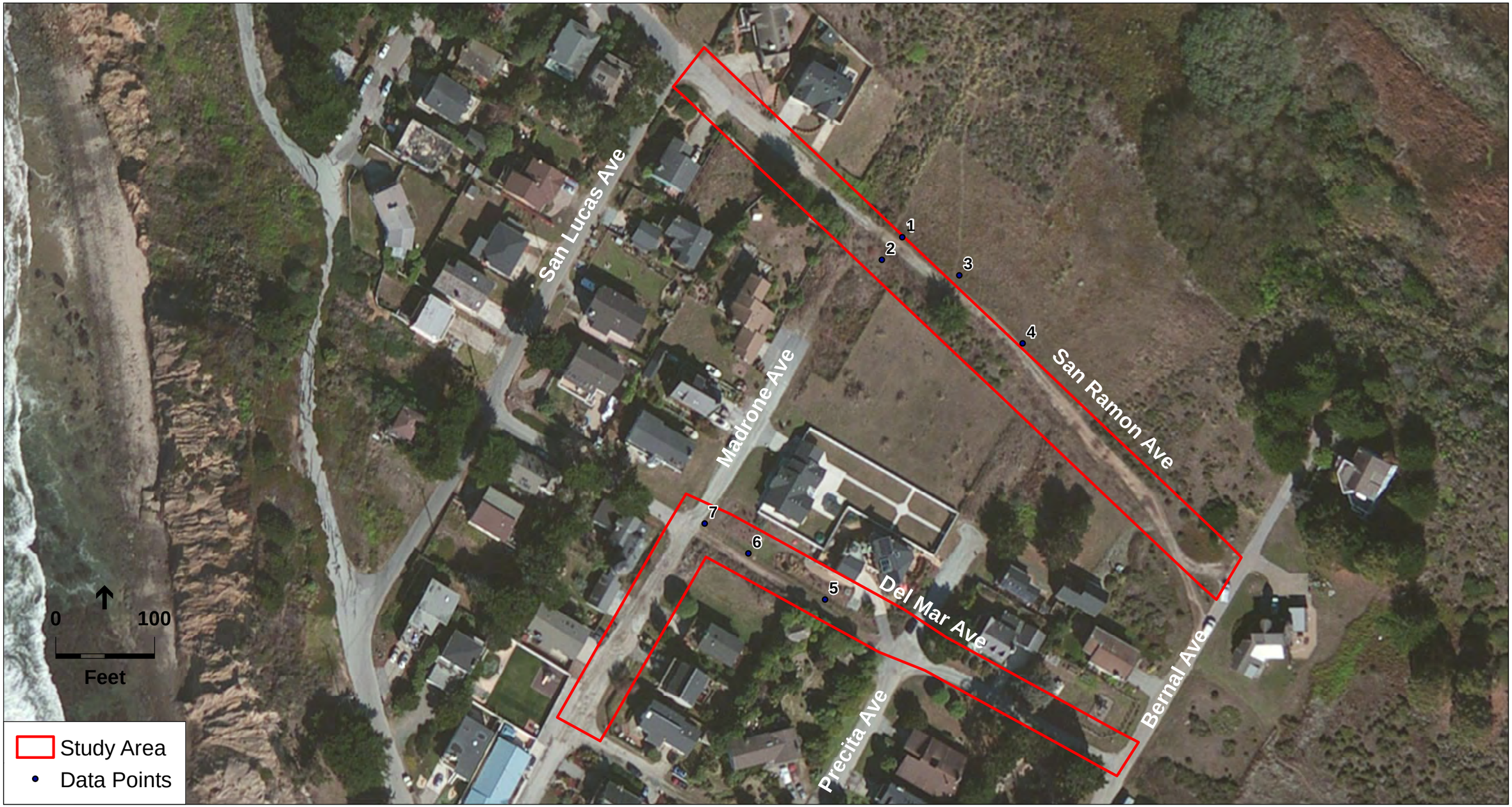
Soils were analyzed in accordance with the Corps' *Arid West Manual* (2008) and the *Field Indicators of Hydric Soils in the United States* (USDA NRCS, 2010). Soil pits were excavated to the maximum depth possible and soil color was matched against a standard color chart (Munsell, 2000). Soils were also inspected for redoximorphic features and soil texture was determined. It was then possible to determine if the soils met any of the hydric soils criteria listed on the Arid West data sheets. Where soils did not exhibit hydric soil criteria consideration was given as to whether the data point in question had the potential to be saturated, ponded or have a water table within 12 inches of the surface for 14 or more consecutive days during the growing season. With the presence of wetland vegetation and hydrology, this technical standard can be used to characterize a soil as hydric (Corps, 2008).

Determination of Wetland Hydrology

Hydrology was assessed using the Corps' 2008 *Arid West Manual's* hydrology indicators (e.g., oxidized rhizospheres along living roots, aquatic invertebrates, drift deposits and sediment deposits in a riverine system). Soils at all of the sample points were dry at the time of the delineation field work. Where hydrology indicators were weak, consideration was given as to whether the technical standard quoted above for hydrology and soils might reasonably be applied to a given site.

Mapping and Acreage Calculations

Features and data points were mapped by hand on aerial images and field notes were taken on the characteristics of each feature (vegetation type and quality, disturbance levels, etc.). Data points were then digitized using ArcGIS 10.1.



SOURCE: ESRI, 2013

Moss Beach/Seal Cove Area Roads Improvement Project. 120603.02

Figure 3

Wetland Delineation Study Area

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CHAPTER 4
Results

4.1 Organization

Field delineation results for the delineation study area are presented below. Delineation datasheets for the project, and other supporting information, such as a soils map, and representative photographs for the delineation study area are presented in Appendices A through D.

4.2 Results

Five areas that had at least some evidence of one or more wetland indicators were examined for the presence of wetland indicators. These include a velvet grass dominated grassland, a poison hemlock (*Conium maculatum*) dominated ruderal area, and an Italian ryegrass dominated grassland along San Ramon Avenue, and an Italian ryegrass dominated grassland along Del Mar Avenue. In contrast, other roadside areas were dominated by upland vegetation, including coyote brush, wild oat, and California blackberry (*Rubus ursinus*). None of the sampled locations met the criteria for jurisdictional wetlands.

Data points 1 and 3 were taken within the velvet grass dominated grassland along the northeastern edge of San Ramon Avenue. At data point 1, velvet grass, a FAC species, provided approximately 25 percent cover, while the three other dominant species (coyote brush, yarrow [*Achillea millefolia*], and California blackberry), all either FACU or UPL species, provided a total of approximately 55 percent cover. Dominants at data point 3 included sheep sorrel (*Rumex acetosella*; FACU), velvet grass, coyote brush and California blackberry. Neither data point passed the Corps Dominance Test, nor did they contain greater than 50 percent cover of wetland vegetation. Soils at these data points had a silty clay loam texture and 10YR 2/2[1] color, lacked redoximorphic features, and did not exhibit any hydric soil indicators. The area was relatively flat and did not contain any wetland hydrology indicators.

Data point 2 was taken within the poison hemlock dominated ruderal area along the southwestern edge of San Ramon Avenue. Poison hemlock (FACW), black mustard (UPL), California figwort (*Scrophularia californica*; FAC), and California blackberry (FACU) were dominant species. Hydrophytes provided approximately 50 percent cover, but did not pass the Corps Dominance Test which requires greater than 50 percent cover of OBL, FACW, or FAC species. The soil

[1] All soils sampled exhibited a low chroma of 2. These soils are mollisols, which are typical grassland soils where low chroma is not the result of hydric conditions, but rather the result of relatively high levels of below-ground organic matter input.

sample was silty clay loam with 10YR 2/2 color and lacked redoximorphic features. The data point did support any hydric soil or wetland hydrology indicators.

Data point 4 was taken within the Italian ryegrass dominated grassland along the northeastern edge of San Ramon Avenue. Italian ryegrass (FAC), coyote brush, and California blackberry were the dominant species. The area did not pass the Corps Dominance Test, but did have approximately 70 percent cover of FAC species. Similar to the previous data points, this soil sample was 10YR 2/2 silty clay loam and lacked redoximorphic features. The area was located on a relatively flat terrace and did not contain any hydric soil or wetland hydrology indicators.

Data points 5 and 6 were taken within the Italian ryegrass dominated grassland along the northeastern edge of Del Mar Avenue. Data point 5 contained 90 percent cover of Italian ryegrass and 2 percent cover of spreading rush (*Juncus patens*; FACW) and did meet the Corps Dominance Test. Data point 6 contained 90 percent cover of capeweed (*Arctotheca calendula*, NI) and 9 percent cover of Italian ryegrass (FAC), meadow barley (*Hordeum brachyantherum*; FACW), and spreading rush (FACW). Data point 6 did not meet the Corps Dominance Test. Soil samples at both data points were 10YR 3/2 silty clay with 2 to 3 percent redoximorphic concentrations. Although redoximorphic features were present, neither soil sample met any of the hydric soil indicators. Hydric soil indicator F3 (Depleted Matrix) requires a value of 4 or greater and hydric soil indicator F6 requires 5 percent or more redox concentrations with a chroma of 2 or less. The area was located above and adjacent to saturated tire ruts within Del Mar Avenue, but no hydric indicators were present within the Italian ryegrass dominated grassland.

Data point 7 was also taken within the Italian ryegrass dominated grassland adjacent to Del Mar Avenue, but in a location topographically higher than data points 5 and 6. This data point contained less than 50 percent cover of hydrophytic vegetation and lacked hydric soil and wetland hydrology indicators.

4.3 Conclusions

An evaluation of the results of the wetland delineation for each the Corps, RWQCB, and CCC is provided below. No federal or State jurisdictional wetlands or waters were observed within study area. However, the ultimate decision of jurisdiction lies with the regulating agency.

U.S. Army Corps of Engineers

No areas within the study area met all three Corps parameters (wetland hydrology, hydrophytic vegetation, and hydric soils) to be considered a federally jurisdictional wetland. The Italian ryegrass dominated grassland along the northeastern edge of Del Mar Avenue did meet the hydrophtic vegetation criteria but hydric soil characteristics were not strong enough to meet any of the hydric soil indicators. Additionally, this grassland was located on a coastal terrace and did not contain evidence of prolonged ponding or other wetland hydrology indicators.

No “other waters” of the U.S. were observed within the study area.

Regional Water Quality Control Board

The RWQCB regulates federally jurisdictional wetlands and waters of the U.S. under Section 404 of the CWA. As mentioned above, federally jurisdictional wetlands and waters of the U.S. are absent from the study area.

Additionally, the RWQCB regulates waters of the State under the Porter-Cologne Act. No areas within the study area met the State's wetland definition as wetland hydrology indicators were not observed at any of the data points within the study area.

California Coastal Commission

The LCP defines a wetland as an area with hydric soils or hydrophytic vegetation. Although the LCP states that the wetland must contain at least 50 percent of twelve specific wetland plants, San Mateo County generally relies on the CCC's wetland definition. The CCC uses a "one parameter" definition of wetlands, which only requires evidence of a single parameter to establish wetland conditions. Additionally, both the LCP and CCC define a wetland as an area where the "water table is at, near, or above the land surface long enough to promote the formation of hydric soils or support of the growth of hydrophytes." The CCC also refers to the Corps wetland delineation methods, which utilize vegetation, soils and hydrology indicators, for defining wetland parameters.

Three areas contained at least 50 percent cover of hydrophytic vegetation: the poison hemlock dominated ruderal area adjacent to San Ramon Avenue at data point 2, the Italian ryegrass dominated grassland adjacent to San Ramon Avenue at data point 4, and the Italian ryegrass dominated grassland adjacent to Del Mar Avenue at data point 5.

Poison hemlock (FACW) and California figwort (FAC) covered exactly 50 percent of data point 2, with black mustard (UPL) and prickly ox-tongue (*Helminthotheca echioides*; FACU) providing exactly 50 percent cover. This data point only slightly falls within the LCP definition of at least 50 percent cover of hydrophytic plants. No hydric soil indicators or wetland hydrology indicators were present, indicating that this area does not meet the CCC's wetland definition of an area where the "water table is at, near, or above the land surface long enough to promote the formation of hydric soils or support of the growth of hydrophytes."

At data point 4, Italian ryegrass, velvet grass and English plantain (*Plantago lanceolata*), all FAC species, provided approximately 70 percent cover within the within the Italian ryegrass dominated grassland. FAC species are generally weak wetland indicators as they are equally likely to occur in wetlands or non-wetlands. Additionally this area lacked hydric soil or wetland hydrology indicators, which provides evidence that this area does not meet the CCC's wetland definition.

The grassland at data point 5 contained 90 percent cover of Italian ryegrass, a FAC species and generally weak wetland indicator. Although soil at this soil sample did contain some redoximorphic features, it did not meet the Corps definition of a hydric soil, nor were any wetland hydrology indicators present. The lack of hydric soils and wetland hydrology indicators demonstrates that this site does not meet the CCC's wetland definition.

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CHAPTER 5
Report Preparation and References

5.1 Report Preparation

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Report Preparation:	M. Giolli
GIS:	M. Giolli
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5.2 References and Sources Consulted

Environmental Laboratory, 1987. *Corps of Engineers Wetland Delineation Manual*, January 1987, Final Report, Department of the Army Waterways Experiment Station, Vicksburg, Mississippi.

Hickman, J.C., (Ed.), 1993. *The Jepson Manual: Higher Plants of California.* University of California Press, Berkeley, California.

Jepson Flora Project (eds.), 2013. *Jepson eFlora*, http://ucjeps.berkeley.edu/IJM.html

Lichvar, Robert W. and John T. Kartesz, 2012. National Wetland Plant List version 3.0 (http://wetland_plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH and BONAP, Chapel Hill, NC.

Munsell Soil Color Charts, 2000 revised edition. Munsell Color, Macbeth Division of Kollmorgen Instruments Corporation, New Windsor, NY.

U.S. Army Corps of Engineers (Corps), San Francisco District, 2007. *Information Requested for Verification of Corps Jurisdiction*, revised November 2007. Available on line: http://www.spn.usace.army.mil/Portals/68/docs/regulatory/2%20-%20Info%20Req.pdf.

Corps, 2008. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (*Version 2.0*), December 2008, Final Report, [ERDC/EL TR-08-28], U.S. Army Engineer Research and Development Center, Vicksburg, MS.

United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS), 2002, Half Moon Bay, San Mateo County, WETS Table Documentation, www.wcc.nrcs.usda.gov/ftpref/support/climate/wetlands/ca/06081.txt.

USDA NRCS, 2010. *Field Indicators of Hydric Soils in the United States A Guide for Identifying and Delineating Hydric Soils*, Version 7.0, 2010.

USDA NRCS, 2012. *National List of Hydric Soils*, soils.usda.gov/use/hydric/.

USDA NRCS, 2013. Soil Survey Staff, Web Soil Survey. Data request for Seal Cove Project, websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx, accessed on May 23, 2013.

APPENDIX A
Wetland Datasheets

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Seal Cove City/County: San Mateo Co Sampling Date: 5/29/13 ph. 3934

Applicant/Owner: San mateo co. State: CA Sampling Point: 1

Investigator(s): M. Cadli Section, Township, Range:

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0

Subregion (LRR): C Lat: 37°30'57.831"N Long: 122°30'35.743"W Datum: NAD83

Soil Map Unit Name: Typic Arginstolls loamy - Urban Land 5-15% slope NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: _____)			
1. N/A			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. Baccharis pilularis	5%	Y	UPL
2.			
3.			
4.			
5.			
	5 = Total Cover		
Herb Stratum (Plot size: _____)			
1. Achillea millefolia	15	Y	FACU
2. Holcus lanatus	25	Y	FAC
3. Brassica nigra	10		UPL
4. Raphanus sativus	2		UPL
5. Conium maculatum	2		FACW
6. Cortaderia jubata	1		FACU
7. Scrophularia californica	5		FAC
8.			
	60 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1. Rubus ursinus	35	Y	FACU
2.			
	35 = Total Cover		

% Bare Ground in Herb Stratum 5% % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

__ Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

Vegetation did not pass dominance test and no hydric soils or hydrology indicators present

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 2/2	100%	none				silty clay loam	Organic matter, root mass
2-15	10YR 2/2	100%	none				silty clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No ✓

Remarks:

No Redox present, no other hydric soil indicators

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ____ Depth (inches): _____

Water Table Present? Yes ____ No ____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No ____ Depth (inches): _____

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology indicators present. Area generally flat, no signs of ponding

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Seal Cove City/County: San Mateo CO Sampling Date: 5/29/13

Applicant/Owner: San Mateo CO State: CA Sampling Point: 2

Investigator(s): M. Giolli Section, Township, Range:

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 1

Subregion (LRR): C Lat: 37°30'57.602"N Long: 122°30'36.106"W Datum: NAD83

Soil Map Unit Name: Typic Argiustolls loamy - Urban land 5-15% slope NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. N/A			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Conium maculatum	35	Y	FACW
2. Brassica nigra	20	Y	UPL
3. Scrophularia californica	15	Y	FAC
4. Helminthotheca echioides	5		FACU
5.			
6.			
7.			
8.			
	75 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1. Rubus ursinus	30%	Y	FACU
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 15% % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

Vegetation did not pass dominance test and no hydr soils or hydrology indicators present

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-14	10YR 2/2	100%	none				silty clay loam	very hard

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

No Redox present, no other hydric soil indicators

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

no hydrology. No water present, no signs of ponding

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Seal Cove City/County: San Mateo Co. Sampling Date: 5/29/13

Applicant/Owner: San Mateo CO State: CA Sampling Point: 3

Investigator(s): M. Ciolli Section, Township, Range:

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 2%

Subregion (LRR): C Lat: 37°30'57.529"N Long: 122°30'35.075"W Datum: NAD83

Soil Map Unit Name: Typic Argixtolls loamy-Urban land 5-15% slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. Baccharis pilularis	40%	Y	UPL
2.			
3.			
4.			
5.			
	4 = Total Cover		
Herb Stratum (Plot size: _____)			
1. Rumex acetosella	40%	Y	FACU
2. Holcus lanatus	15	Y	FAC
3. Avena barbata	2		UPL
4. Festuca pratensis	2		FAC
5. unk herb	1		NI
6. Lolium perenne	1		FACW
7.			
8.			
	61 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1. Rubus ursinus	30%	Y	FACU
2.			
	30 = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species _____	x 1 =	_____
FACW species _____	x 2 =	_____
FAC species _____	x 3 =	_____
FACU species _____	x 4 =	_____
UPL species _____	x 5 =	_____
Column Totals: _____ (A)		_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

Vegetation did not pass dominance test and no hydric soils or hydrology indicators present

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/2	100%	none				Silty Clay Loam	dense Root mat
4-14	10YR 2/2	100%	none					

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

no hydric soil indicators observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

no hydrology indicators observed.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Seal Cove City/County: San Mateo Co Sampling Date: 5/29/13

Applicant/Owner: San Mateo Co. State: CA Sampling Point: 4

Investigator(s): M. Gioli Section, Township, Range:

Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): none Slope (%): 10

Subregion (LRR): C Lat: 37°30'56.605"N Long: 122°30'34.097"W Datum: NAD83

Soil Map Unit Name: Typic Argiustolls loamy-Urban land 5-15% slope NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____ No ✓	
Wetland Hydrology Present?	Yes _____ No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: _____)			
1. N/A			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. Baccharis pilularis	5%	Y	UPL
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Festuca arundinacea	50%	Y	FAC
2. Holcus lanatus	15		FAC
3. Plantago lanceolata	5		FAC
4. Brassica nigra	5		UPL
5. Avena barbata	5		UPL
6. Bromus hordeaceus	10		FACU
7.			
8.			
	90 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1. Rubus ursinus	2%	Y	FACU
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 10% % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

Vegetation did not pass dominance test and no hydric soils or hydrology indicators present.

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-1	10YR 2/2	100%	none				silty clay loam	dense root mass
1-12	10YR 2/2	100%	none					

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

no hydrology indicators observed.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Seal Cove City/County: San Mateo Co. Sampling Date: 5/29/13

Applicant/Owner: San Mateo Co. State: CA Sampling Point: 5

Investigator(s): M. Giolli Section, Township, Range:

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): none

Subregion (LRR): C Lat: 37°30'54.193"N Long: 122°30'36.649"W Datum: NAD83

Soil Map Unit Name: Typic Argiustolls loamy-Urban land 5-15% slope NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:
Juncus present may have been installed as part of adjacent landscaping

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1. none			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1. none			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: ____)			
1. Festuca perennis	90%	Y	FAC
2. Juncus patens	2%		FACW
3.			
4.			
5.			
6.			
7.			
8.			
	92 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1. N/A			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 5% % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:
Juncus may have been installed as part of adjacent landscaping

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10"	10YR3/2	97	7.5YR 6/8	23	C	M	Silty clay loam	occassional redox features scattered throughout matrix
Sample uniform - too hard to dig below 10"								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Some Redox present (only 2-3%), but does not meet hydric soil indicators Value is too low to meet F3 and Redox cover below 5% for F6.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Located above and adjacent to roadside tire ruts. Tire ruts were heavily compacted and saturated at time of survey.

No Wetland hydrology indicators observed, no water or saturation at data point

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Seal Cove City/County: San Mateo Co Sampling Date: 5/29/13

Applicant/Owner: San Mateo Co State: CA Sampling Point: C6

Investigator(s): M. Gioli Section, Township, Range:

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): none

Subregion (LRR): C Lat: 37°30'54.703"N Long: 122°30'37.565"W Datum: NAD83

Soil Map Unit Name: Typic Argiustolls loamy-Urban land 5-15% slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: ____)			
1. N/A			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1. N/A			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: ____)			
1. Arctotheca calendula	90%	Y	NI
2. Festuca perennis	5%	N	FAC
3. Hordeum brachyantherum	2%	N	FACW
4. Juncus patens	2%	N	FACW
5.			
6.			
7.			
8.			
	99 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1. N/A			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 1 % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	____	x 1 =	____
FACW species	4	x 2 =	8
FAC species	5	x 3 =	15
FACU species	____	x 4 =	____
UPL species	____	x 5 =	____
Column Totals:	9 (A)		23 (B)

Prevalence Index = B/A = 2.6

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

Did not pass Dominance Test. Did pass prevalence Index, but hydric soil and wetland hydrology are not present.

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10"	10YR3/2	97%	7.5YR 6/8	2-3	C	M	Silty clay	
Sample uniform - too hard to dig below 10"								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Some Redox present (only 2-3%), does not meet hydric soil indicators. Value is too low to meet F3 and Redox cover below 5% for F6.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Located above and adjacent to roadside tire ruts. Tire ruts were heavily compacted and saturated at time of survey.

No wetland hydrology indicators observed, no water or saturation at data point

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Seal Cove City/County: San Mateo Co Sampling Date: 5/29/13

Applicant/Owner: San Mateo Co State: CA Sampling Point: 7

Investigator(s): M. Giolli Section, Township, Range:

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 3%

Subregion (LRR): C Lat: 37°30'54.937"N Long: 122°30'38.13"W Datum: NAD83

Soil Map Unit Name: Typic Argixerolls loamy-Urban land 5-15% slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: ____)			
1. N/A			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1. N/A			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: ____)			
1. Avena barbata	40	Y	UPL
2. Festuca perennis	45	Y	FAC
3. Raphanus sativus	15		UPL
4.			
5.			
6.			
7.			
8.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1. N/A			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species ____	x 1 =	____
FACW species ____	x 2 =	____
FAC species ____	x 3 =	____
FACU species ____	x 4 =	____
UPL species ____	x 5 =	____
Column Totals: ____ (A)		____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

Does pass Dominance Test.

SOIL

Sampling Point: 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/2	100	none			silty	Clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

No hydric soil indicators observed

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

no hydrology indicators observed.

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APPENDIX B
Soil Map

SOURCE:ESRI, 2013; USDA NRCS

Moss Beach/Seal Cove Area Roads Improvement Project. 120603.02

Figure B-1
Soils Map

APPENDIX C

WETS Tables for Half Moon Bay, San Mateo County

>

WETS Station : HALF MOON BAY, CA3714 Creation Date: 08/29/2002
Latitude: 3728 Longitude: 12227 Elevation: 00040
State FIPS/County(FIPS): 06081 County Name: San Mateo
Start yr. - 1971 End yr. - 2000

Month	Temperature (Degrees F.) avg daily max	avg daily min	avg	Precipitation (Inches) avg	30% chance will have less than	more than	avg # of days w/.1 or more	avg total snow fall
January	58.7	43.2	51.0	5.55	2.71	6.78	8	0.0
February	59.7	44.2	52.0	4.91	2.23	6.00	7	0.0
March	59.8	44.6	52.2	4.36	2.00	5.32	7	0.0
April	60.8	44.7	52.8	1.76	0.83	2.15	3	0.0
May	61.1	47.6	54.4	0.79	0.21	0.95	1	0.0
June	63.1	49.9	56.5	0.26	0.09	0.33	0	0.0
July	64.4	51.9	58.1	0.16	0.03	0.20	0	0.0
August	65.8	53.1	59.5	0.27	0.09	0.33	0	0.0
September	67.0	51.7	59.4	0.44	0.11	0.55	1	0.0
October	65.5	48.7	57.1	1.82	0.63	2.19	2	0.0
November	62.4	45.6	54.0	3.56	1.57	4.34	5	0.0
December	58.9	43.3	51.1	4.10	2.05	5.01	6	0.0
Annual	-----	-----	-----	------	22.05	31.54	--	----
Average	62.3	47.4	54.8	------	------	------	--	----
Total	-----	-----	-----	27.98	------	------	40	0.0

GROWING SEASON DATES

Probability	Temperature: 24 F or higher	28 F or higher	32 F or higher
	Beginning and Ending Dates Growing Season Length		
50 percent *	---------- > 365 days	12/19 to 12/19 > 365 days	> 365 days > 365 days
70 percent *	---------- > 365 days	12/19 to 12/19 > 365 days	> 365 days > 365 days

* Percent chance of the growing season occurring between the Beginning and Ending dates.

total 1948-2002 prcp

Station : CA3714, HALF MOON BAY
------- Unit = inches

yr	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	annl
48							0.00	0.00	0.04	0.55	0.66	4.99	6.24
49	1.73	3.91	M4.96	0.00	0.41	0.00	0.00	0.17	M0.00	M0.00			11.18
50		M2.24	1.34	2.12	0.37	0.14	0.00	0.00	0.08	1.95	5.46	6.01	19.71
51	M5.11	2.98	2.84	0.91	0.98	0.17	0.12	0.00	0.28	1.16	M4.15	M11.30	30.00
52	9.31	2.20	6.21	0.62	0.45	1.14	0.03	0.00	0.15	0.27	2.66	M11.36	34.40
53	4.55	M0.09		M3.17	0.60	0.56	0.00	0.53	0.12	0.67	M3.33	1.04	14.66
54	4.18	2.58	5.03	1.49	0.06	0.64	0.10	0.55	0.08	0.23	1.96	4.53	21.43
55	5.06	1.37	0.28	2.50	0.36	0.07	0.17	0.12	0.28	0.21	M2.32	M13.81	26.55
56	11.38	M2.81	0.00	1.88	M1.37	M0.07	M0.25	M0.45	0.45	1.75	0.00	0.57	20.98
57	M3.31	M4.42	M5.98	1.65	4.10	0.08	0.00	0.08	1.08	3.17	1.78	M3.88	29.53
58	M6.23	M10.79	M9.38	M5.83	0.68	0.71	0.38	0.00	0.18	0.27	0.50	1.89	36.84
59	5.07	5.64	0.64	0.42	0.36	0.00	0.00	0.21	3.66	M0.40	0.00	1.97	18.37
60	M5.29	4.66	1.90	1.27	0.71	0.00	0.00	0.00	0.00	0.88	M5.12	1.70	21.53
61	M2.98	1.89	M3.25	M1.06	1.73	0.22	0.00	0.10	0.57	0.12	3.66	M3.18	18.76
62	M2.09	8.64	3.52	0.82	0.24	0.00	0.00	M0.29	0.51	10.97	0.60	M3.57	31.25
63	3.44	3.65	4.33	M5.08	0.64	0.00	0.00	0.03	0.09	2.48	4.00	1.04	24.78
64	5.32	0.52	2.46	0.23	0.47	0.58	0.00	0.00	0.00	1.89	M3.11	M7.50	22.08
65	4.41	1.40	M1.58	M5.22	0.00	0.06	0.00	0.23	0.00	0.00	5.58	4.96	23.44
66	3.77	3.51	0.68	0.71	0.20	0.00	0.12	0.27	0.25	0.00	5.18	3.62	18.31
67	10.44	0.25	6.18	7.43	0.25	1.44	0.00	0.00	0.00	0.76	2.13	2.89	31.77
68	6.19	2.62	5.78	0.61	0.24	0.00	0.00	0.28	0.00	0.65	2.69	5.90	24.96
69	8.06	8.68	2.07	2.76	0.06	0.40	0.00	0.00	0.21	1.73	0.76	4.55	29.28
70	8.49	2.31	2.04	0.32	0.27	0.21	0.00	0.00	0.00	0.90	M8.41	7.67	30.62
71	1.61	0.76	3.49	1.51	0.53	0.08	0.28	0.36	0.40	0.23	M2.29	M5.10	16.64
72	1.27	1.33	0.19	1.25	0.11	0.28	0.00	0.00	0.98	6.90	6.49	3.17	21.97
73	8.78	7.33		0.23	0.21	0.05	0.00	0.09	0.62	3.04	9.50	6.32	36.17
74	4.87	2.16	7.20	3.22	0.01	0.50	1.01	0.13	0.00	1.36	0.64	3.64	24.74
75	2.95	4.88	7.11	2.14	0.10	0.28	0.52	0.59	0.02	4.49	0.85	0.69	24.62
76	0.52	2.54	1.13	2.04	0.13	0.04	0.14	1.56	0.59	0.30	1.73	2.41	13.13
77	2.26	1.31	3.15	0.20	1.23	0.00	0.16	0.27	1.59	0.47	3.37	5.60	19.61
78	9.01	5.62	5.58	4.50	0.00	0.00	0.00	0.00	0.00	0.05	3.04	0.83	28.63
79	8.11	6.27	4.83	0.89	0.85	0.00	0.29	0.13	0.00	3.23	3.97	5.76	34.33
80	5.40	7.49	1.90	1.88	0.32	0.03	0.07	0.05	0.18	0.18	0.65	2.44	20.59
81	7.48	2.42	4.71	0.24	0.33	0.00	0.00	0.42	0.37	3.98	7.08	6.00	33.03
82	12.01	5.11	7.91	5.02	0.00	0.42	0.00	0.15	1.73	3.82	7.03	5.41	48.61
83	8.98	M9.14	M13.05	3.33	0.89	0.03	0.00	0.14	0.80	1.12	M8.07	M9.46	55.01
84	0.26	2.15	M2.12	1.09	0.20	0.46	0.06	0.33	0.18	3.81	9.86	3.20	23.72
85	1.02	2.90	5.07	0.13	0.32	0.47	0.31	0.05	0.40	1.51		3.18	15.36
86	4.98	11.48	7.12	0.50	0.84	0.09	0.08	0.25	2.20	0.42	0.32	3.10	31.38
87	5.10	3.87	4.16	0.95	0.06	0.08	0.00	0.10	0.00	M2.13	2.63	6.03	25.11
88	4.48	0.58	0.12	3.04	0.69	0.29	M0.15	0.01	0.02	0.94	3.55	5.17	19.04
89	2.01	1.30	7.95	1.83	0.31	0.10	M0.13	M0.27	M0.95	2.05	1.95	0.03	18.88
90	M4.29	M2.52	1.33	0.29	2.82	0.46	0.24	0.14	0.33	0.55	0.74	2.58	16.29
91	0.56	4.19	8.81	0.90	0.67	0.32	0.27	0.92	0.25	M2.63	M1.01	3.60	24.13
92	3.18	8.70	3.45	0.40	0.06	0.84	0.02	0.18	0.12	2.88	0.67	8.10	28.60
93	M9.21	5.59	2.79	1.68	1.38	M0.48	0.06	M0.17	M0.21	M0.62	M1.55	M2.77	26.51
94	M2.63	M5.61	M0.77	M1.85	M1.64	0.11	0.13	0.17	0.09	0.08	M5.34	3.93	22.35
95	11.38	0.26	M8.71	2.35	1.54	0.78	0.05	0.05	0.15	0.07	0.30	8.25	33.89
96	8.27	7.05	3.34	1.98	2.16	0.13	0.06	0.07	0.20	1.47	2.71	8.83	36.27
97	9.86	0.29	0.59	0.96	0.44	0.57	0.13	0.77	0.08	0.77	7.84	3.65	25.95
98	12.13	15.70	2.58	2.73	4.01	0.30	0.18	0.06	0.25	0.99	3.75	2.12	44.80
99	6.40	7.60	4.82	2.73	0.12	0.46	0.05	0.34	0.21	0.82	2.94	0.93	27.42
0	7.53	11.27	2.45	3.10	1.72	0.18	0.26	0.19	0.41	3.74	1.30	0.69	32.84

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APPENDIX D

Representative Photographs

Photo 1: View of San Ramon Avenue facing southeast from San Lucas Avenue (May 2013).

Photo 2: View of San Ramon Avenue facing northwest from Bernal Avenue (May 2013).

Moss Beach/Seal Cove Area Roads Improvements Project 120603.02 ■

Source: ESA, 2013

Figure D-1
Representative Photographs

Photo 3: View of Madrone Avenue facing southwest from Del Mar Avenue (May 2013).

Photo 4: View of Del Mar Avenue facing northwest from Precita Avenue (May 2013).

Moss Beach/Seal Cove Area Roads Improvements Project 120603.02 ■

Source: ESA, 2013

Figure D-2
Representative Photographs

Photo 5: Photo of Data Point 1 (May 2013).

Photo 6: Photo of Data Point 2 (May 2013).

Moss Beach/Seal Cove Area Roads Improvements Project 120603.02■

Source: ESA, 2013

Figure D-3
Representative Photographs

Photo 7: Photo of Data Point 3 (May 2013).

Photo 8: Photo of Data Point 4 (May 2013).

Source: ESA, 2013

Figure D-4
Representative Photographs

Photo 9: Photo of Data Point 5 (May 2013).

Photo 10: Photo of Data Point 6 (May 2013).

Moss Beach/Seal Cove Area Roads Improvements Project 120603.02 ■

Source: ESA, 2013

Figure D-5
Representative Photographs

Photo 11: Photo of Data Point 7 (May 2013).

Source: ESA, 2013

Figure D-6
Representative Photographs

County of San Mateo - Planning and Building Department

ATTACHMENT E

SEAL COVE/MOSS BEACH AREA ROADS IMPROVEMENT PROJECT

Response to Comments

State Clearinghouse #2014022038

Prepared for
County of San Mateo Department of
Public Works

April 2014

SEAL COVE/MOSS BEACH AREA ROADS IMPROVEMENT PROJECT

Response to Comments

State Clearinghouse #2014022038

Prepared for
County of San Mateo Department of
Public Works

April 2014

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SECTION 1
Introduction

1.1 Background

This document has been prepared to respond to comments received by San Mateo County (County) on the Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND) for the Seal Cove/Moss Beach Area Roads Improvement Project (proposed project). Included in this document are an introduction, comment letters received during the 30-day public review period, responses to comments, and revisions to the Draft IS/MND, if deemed applicable. This document, together with the Draft IS/MND, constitutes the Final Initial Study/Mitigated Negative Declaration ("Final IS/MND") for the Seal Cove/Moss Beach Area Roads Improvement Project. The Draft IS/MND, dated February 2014, is hereby incorporated by reference as part of this Final IS/MND.

The San Mateo County Department of Public Works ("the Department" or "the County") is acting as the Lead Agency pursuant to CEQA Guidelines §15050(a). As the Lead Agency, the Department prepared an Initial Study pursuant to CEQA Guidelines §15063 and §15070 and circulated the Draft IS/MND for agency and public review during a 30-day public review period pursuant to CEQA Guidelines §15073. The County prepared the Draft IS/MND to inform the public of the potential environmental effects of the proposed roads improvement project and identify possible ways to minimize impacts. This Final IS/MND evaluates and responds to comments received on the Draft IS/MND in accordance with CEQA Guidelines §15074.

1.2 Project Summary

The County proposes to implement the Seal Cove/Moss Beach Area Roads Improvement Project. The project is proposed for two locations, both of which occur in the area of Moss Beach, San Mateo County, California. The first is located within the community of Seal Cove/Moss Beach, approximately one-half mile west of Highway 1, between the Half Moon Bay Airport and the Pacific Ocean. The second is located on Carlos Street, at its intersection with California Avenue, approximately one-half mile north of the Half Moon Bay Airport, and east of Highway 1.

At the Seal Cove site, the County proposes approximately 1,500 linear feet of roadway improvements within the County's right-of-way (ROW). Specific road segments to be improved include: (1) San Ramon Avenue, between San Lucas Road and Bernal Avenue; (2) Del Mar Avenue, between Madrone Avenue and Bernal Avenue; and (3) Madrone Avenue, between Decota Avenue and Del Mar Avenue. The above described road segments would be improved by

construction of 16-foot-wide paved road sections comprised of approximately three inches of asphalt concrete and nine inches of cement-treated base. Surface drainage features, consisting of biotreatment facilities separated by check dams, would be constructed on either side of the roadway to capture and treat stormwater runoff. The biotreatment areas would measure approximately five feet wide and approximately six inches deep.

At the Carlos Street site, the County proposes to replace an approximately 1,100-square-foot paved area of County ROW with a combination of vegetated biotreatment facility (60 square feet) and pervious paving (1,040 square feet).

1.3 Public Participation

In accordance with §15073 of the CEQA Guidelines, the County submitted the Draft IS/MND to the State Clearinghouse for a 30-day public review period starting on February 25, 2014. Legal notices announcing availability of the Draft IS/MND for public review and comment were published in the Redwood Examiner, San Mateo County Times, and Half Moon Bay Review newspapers. In addition, the County circulated a Notice of Intent to Adopt the Draft IS/MND to interested agencies and individuals. The public review period ended on March 27, 2014. During the public review period, the County received 13 comment letters on the Draft IS/MND.

SECTION 2
Response to Comments

2.1 Introduction

This section includes a summary of entities who submitted comments on the Draft IS/MND, presents the text of the comments submitted, and provides the County's responses to comments raising substantive issues or questions related to the project or the Draft IS/MND.

2.2 List of Comment Letters

The following is a list of public agencies and individuals who submitted comments on the Draft IS/MND during the public review period. No comments were received after the close of the comment period.

State Agencies		**Date Received**
A.	State of California Coastal Commission	March 27, 2014
B.	State of California Office of Planning and Research	March 25, 2014
Individuals		
C.	Sabrina Brennan	February 26, 2014
D.	Diane Brosin and Tim McDonald	March 22, 2014
E.	Kathryn Slater-Carter	February 26, 2014
F.	Pete and Eileen Fingerhut	March 21, 2014
G.	TJ Glauthier and M. Brigid O'Farrell	March 9, 2014
H.	Barry Lifland	March 26, 2014
I.	Leslie O'Brien	March 25, 2014
J.	Susan Royer	March 25, 2014
K.	David Vespremi, Peter Fingerhut, and Steve Beardsley	March 26, 2014
L.	David Vespremi	March 3, 2014
M.	David Vespremi [2012 Neighborhood Petition]	March 3, 2014

Many of the comments received on the Draft IS/MND were submitted via email. In addition, many of these emails included strings of conversation between commenters. Where this is the case, only the specific comments submitted from a commenter to the County are addressed in each response.

2.3 Comment Letters and Responses

The full text of each comment letter is included below, followed by the County's response. Substantive comments raised in these letters have been delineated on the letter and assigned an alpha-numeric comment code (e.g., A-3, E-5), corresponding to the letter and comment. Responses to concerns raised in these comments are presented in the pages immediately following the comment letter.

In accordance with CEQA Guidelines §15074(b), the County Planning Commission considers the Draft IS/MND together with comments received during the public review process prior to adopting the Final IS/MND and approving the project. The CEQA Guidelines do not require the preparation of a response to comments document. In addition, many of the comments received during the public comment period do not pertain to substantive environmental issues related to the project or CEQA. Nevertheless, the County has prepared the following responses for the benefit of the Planning Commission, the public, and as a courtesy to the commenters.

Based on the review of the comments received, no new, potentially significant impacts beyond those identified in the Draft IS/MND would occur. All potential impacts identified in the Draft IS/MND were determined to be either less-than-significant or less-than-significant with mitigation.

STATE OF CALIFORNIA – NATURAL RESOURCES AGENCY EDMUND G. BROWN, JR., GOVERNOR

CALIFORNIA COASTAL COMMISSION
45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2 219
VOICE (415) 904-5 260
FAX (4 15) 904-5 400
TDD (415) 597-5885

March 27, 2014

Zack Azzari
San Mateo County Public Works
555 County Center, 5th Floor
Redwood City, CA 94063-1665

Re: Initial Study/Mitigated Negative Declaration Seal Cove/Moss Beach Area Roads Improvement Project (State Clearinghouse No. 2014022038)

Dear Mr. Azzari,

Thank you for the opportunity to comment on the *Seal Cove/Moss Beach Area Roads Draft Initial Study/Mitigated Negative Declaration* ("IS/MND"), *February 2014* that was received in our office on February 28, 2014. The IS/MND was prepared by ESA for the County of San Mateo Department of Public Works ("County"). The County proposes to develop three existing unpaved roads at two locations in Moss Beach, San Mateo County. The proposed project comprises the construction of approximately 1,500 linear feet of 16-foot-wide road/travel way. The road would be paved with three inches of asphalt-concrete and underlain with nine inches of cement. The proposed project also includes the construction of 0.30 acre of storm water treatment facilities (bio-retention measures and check-dams).

Traffic
San Mateo County's certified Local Coastal Program (LCP) Public Works Policy 2.57 protects the public's ability to access the coast but the extreme traffic congestion on Highways 1 and 92 significantly interferes with the public's ability to access the area's substantial public beaches and other visitor-serving coastal resources. The primary access to Moss Beach, San Mateo County is via Highway 1. The IS/MND analysis indicates that traffic volumes on Highway 1 would temporarily be increased during construction activities by an estimate of 0.1 percent in daily traffic. The conclusion presented in the IS/MND is that the project would not result in a substantial increase in traffic during construction and operational activities and it would not cause any Level-of-Service (LOS) to exceed the standard. Staff suggests that measures be identified to reduce the potential for impacts to traffic on Highway 1. These measures could include conducting construction outside of commute travel peak hours and during recreational travel off-season, i.e. outside of the months of July/August which are typically the busiest months for traffic from seasonal recreation and visitor travel in the area. A-1

Land Use
The IS/MND provides that the purpose of the proposed project is to give residents alternative, paved access routes between San Lucas, Madrone, and Precita Avenues, and Bernal Avenue. This would then provide paved road connections to Ocean Blvd. The construction of pavement

on San Ramon Avenue could lead to in an increase in development in the area. As you know, should development plans be contemplated in the future for those properties, the County must assure consistency with the certified LCP policies for Land Use and New Development as provided in the *Locating and Planning New Development Component.*

A-2

Please feel free to contact me at (415) 904-5260 if you have any questions concerning these comments.

Sincerely,

Renée J. Ananda

Renée Ananda
Coastal Program Analyst
North Central Coast District

Response to Letter A
State of California Coastal Commission, Renee Ananda

Response to Comment A-1

Commenter suggests the inclusion of measures to reduce the potential for traffic impacts on Highway 1, such as scheduling construction outside of commute travel peak hours and outside of recreational travel periods (i.e., outside of the months of July/August).

The Draft IS/MND notes on pages 2-61 and 2-62 that Annual Average Daily Traffic (AADT) on Highway 1 in the project vicinity is about 15,100 vehicles. Project construction would temporarily increase traffic in the area by 20 round-trips per day for approximately 45 days. As noted in Comment A-1, this volume represents approximately 0.1 percent of the Highway 1 AADT. This increase would be minor and not be expected to have a substantial adverse effect under CEQA on traffic conditions in the region, and therefore does not constitute a significant impact warranting mitigation. However, regarding the commenter's request to conduct construction activities outside of the commute travel peak hours, it is expected that truck trips associated with construction workers may occur before or during the start of the commute travel peak hours while other trips associated with materials hauling would occur throughout the day. Thus, only a portion of the 20 round-trips per day would occur during peak commute hours. Regarding the commenter's request that construction occur outside the months of July and August; construction is expected to occur during summer/fall months and may coincide with the months of July and August. However, it is expected that recreational travel trips would occur throughout the day, and with higher use occurring on weekends. The effect of 20 additional round-trips per day for approximately 45 days would not likely be noticeable during either commute peak hour or by recreation travelers.

Response to Comment A-2

Commenter states the County must assure any future development plans proposed for the Seal Cove are consistent with the certified Local Coastal Program (LCP) policies for Land Use and New Development, as provided in the LCP's Locating and Planning New Development Component. This comment is noted. The Draft IS/MND (page 2-49) acknowledges that development within the Seal Cove area is regulated by the LCP. The County will assure that any future development approved for the area is consistent with all applicable plans, policies, and regulations, including those of the San Mateo County LCP.

LETTER B

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Edmund G. Brown Jr.
Governor

Ken Alex
Director

March 25, 2014

Zack Azzari
San Mateo County, Dept. of Public Works
555 County center, 5th Floor
Redwood City, CA 94063

Subject: Seal Cove/Moss Beach Area Roads Improvement Project
SCH#: 2014022038

Dear Zack Azzari:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on March 24, 2014, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. B-1

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

LETTER B (cont.)

Document Details Report
State Clearinghouse Data Base

SCH# 2014022038
Project Title Seal Cove/Moss Beach Area Roads Improvement Project
Lead Agency San Mateo County

Type MND Mitigated Negative Declaration

Description Improvements to approximately 1,500 linear feet of existing dirt roads within San Mateo County's roadway right-of-way, and construction of approximately 0.30 acres of bioretention facilities and previous paving to capture and treat stormwater. The project would occur in two locations, both of which occur within the community of Moss Beach, between Montara and Princeton by the Sea.

Lead Agency Contact

Name Zack Azzari
Agency San Mateo County, Dept. of Public Works
Phone 650 363 4100 **Fax**
email
Address 555 County center, 5th Floor
City Redwood City **State** CA **Zip** 94063

Project Location

County San Mateo
City
Region
Lat / Long 37° 30' 54" N / 122° 30' 38" W
Cross Streets California Avenue / Carlos Street and Del Mar Avenue / Madrone Avenue
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways Hwy 1
Airports Half Moon Bay
Railways
Waterways Dean Creek, Denniston Creek, Pacific Ocean
Schools
Land Use Adjacent to properties designated for residential and neighborhood commercial uses.

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Coastal Zone; Flood Plain/Flooding; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects

Reviewing Agencies Resources Agency; Department of Conservation; Department of Fish and Wildlife, Region 3; Department of Parks and Recreation; Department of Water Resources; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 4; Air Resources Board; Air Resources Board, Transportation Projects; Regional Water Quality Control Board, Region 2; Native American Heritage Commission

Date Received 02/21/2014 **Start of Review** 02/21/2014 **End of Review** 03/24/2014

Response to Letter B
State of California, The Governor's Office of Planning and Research, Scott Morgan

Response to Comment B-1

Commenter notes that the County has complied with applicable State Clearinghouse review requirements for environmental document pursuant to the California Environmental Quality Act.

This comment is noted. No response is required.

LETTER C

SABRINA BRENNAN
Email dated 02/26/2014
(In Response to TJ Glauthier Seal Cove Update Email dated 02/25/2014)

From: Sabrina Brennan <sabrina@dfm.com>
To: TJ Glauthier <tjglauthier@gmail.com>
CC: Lisa Ketcham <lisa.ketcham@comcast.net>, <daveolsonmcc@gmail.com>, <chrisjohnson_mcc@yahoo.com>, Laura Stein <laura.stein@comcast.net>, <joeljanoe@gmail.com>, <erin.deinzer@gmail.com>, <SealCoveISMND@smcgov.org>, <ISMND@smcgov.org>, Aimee Luthringer <ltl_greenheron@yahoo.com>
Date: 2/26/2014 9:51 AM
Subject: Re: Seal Cove Roads Update
Attachments: Seal Cove NOI_Final 2014-02-20.pdf

Hello TJ,

Thanks for letting me know about the plans for new roads in Seal Cove.

I would like a presentation by the County and an opportunity to ask questions in advance of the public comment period. C-1

Aslo, I think the email address "SealCoveISMND@smcgov.org" on the attachment might not work. Please provide an email address for the planner responsible for receiving public comments. C-2

Sabrina

On Feb 25, 2014, at 10:49 PM, TJ Glauthier wrote:

Dear Seal Cove Neighbors and Friends,

We have an update on the status of the road improvements that we've been working on for several years. This information has been conveyed to us by Ann Stillman, the San Mateo County Deputy Director of the Public Works Department and the head of their Engineering and Resource Protection section. She and Zack Azzari, the Civil Engineer responsible for our project, have prepared a full assessment of the project and posted it for review and public comment for the next 30 days.

Ann tells us that if everything goes smoothly, then the project construction should begin approximately August 1st. Supervisor Don Horsley has been very helpful, including getting the $400,000 funding for the project, and intends to see that this is completed this year if at all possible -- during his first term in office.

As you will recall, the project will include paving the current unimproved sections of San Ramon St., Del Mar St., and Madrone St. In addition, the Country will do some work on Carlos St., near the Moss Beach Post Office, to mitigate or offset some of the environmental impacts of the road work here.

I am attaching two documents here. One is the official notice of public comment for the next 30 days on the project. It is officially described as an "Intent to Adopt a Mitigated Negative Declaration" for the project. What that means, I am told, is that the County is declaring that there is no significant environmental impact from the project, after considering actions that they are taking to mitigate any impact.

The other document is the 228 page report that they have prepared on our project. That includes the detailed description of the project, pictures, environmental assessment, etc. I expect this is more than most of us ever really wanted the Country to have to go through, but here it is, to meet all the requirements of both the County's rules and those needed for the Coastal Development Permit that is also required. This report is a large file, so if it does not

come through to you, you can access it on the SM County website at the following link:
http://www.co.sanmateo.ca.us/portal/site/publicworks/

Lisa Ketchum, as the Chair of the Midcoast Community Council, has also received these documents and has posted them on the MCC website and in some other public locations and online sites. Thanks Lisa.

Ann has asked if the community would like to have another meeting of the type that we have had before to discuss these plans further. I think most of us feel we've discussed it enough, but please let me know if you would like to ask for another meeting.

I'm sure you join me in looking forward to our new and improved access to Seal Cove coming soon.

All the best,

TJ

TJ Glauthier

Response to Letter C
Sabrina Brennan

Response to Comment C-1

Commenter requests a presentation by the County and an opportunity to ask questions in advance of the public comment period.

The comment was received on February 26, 2014, one day after the start of the comment period; therefore, there was not opportunity to discuss the project with the commenter prior to the comment period. However, it is noted that the County held a public meeting on September 24, 2012 at Cypress Meadows Wedding, Conference and Event Center, 343 Cypress Avenue, Moss Beach, CA 94038. In addition, the public will have another opportunity to hear presentations and comment on the project when the Final IS/MND and coastal development permit application appear before the Planning Commission, tentatively scheduled for April 23, 2014. Public notification will be provided in advance of the Planning Commission meeting. If commenter has additional questions, they may be submitted via the project's email address: SealCoveISMND@smcgov.org.

Response to Comment C-2

Commenter suggests the IS/MND email address "SealCoveISMND@smcgov.org" might not be functional. As evidenced by receipt of this comment, which was delivered via the above referenced email address; the project's email address (SealCoveISMND@smcgov.org) was functional throughout the duration of the public comment period. No other comments on the functionality of the email address were received.

LETTER D

DIANE BROSIN & TIM MACHOLD
Email dated 03/22/2014

From: "Diane Brosin/Tim Machold" <macbro@pacbell.net>
To: <sealcoveismnd@smcgov.org>
Date: 3/22/2014 6:31 PM
Subject: FW: Public Comment on Seal Cove/Moss Beach Area Roads Improvement Project - project update

From: Diane Brosin/Tim Machold [mailto:macbro@pacbell.net]
Sent: Saturday, March 22, 2014 6:28 PM
To: 'zazzari@smcgov.org'; 'sealcovismnd@smcgov.org'
Cc: 'tjglauthier@gmail.com'; dhorsley@smcgov.org
Subject: Public Comment on Seal Cove/Moss Beach Area Roads Improvement Project - project update

Mr. Azzari, Acting Principal Civil Engineer
San Mateo County Public Works

Dear Mr. Azzari,

Our family has lived on Bernal Avenue for almost 30 years. We've watched with concern the dramatic deterioration that has taken place in our roadsthroughout that time. Although it's been a long and tortuous process, including lots of meetings, discussions, research, etc. to come to this point, we are delighted that appropriate improvements are now on the calendar. We appreciate the diligent efforts by the Public Works Department, along with our neighbor, T.J. Glauthier and others in organizing discussions that have resulted in what looks like a well-conceived plan which will ensure greater safety, passable roadways and necessary egress in times of peril. We are in support of creating uniformity in dimensions and surfaces, as well as use of vegetated swales to mitigate storm runoff.

It was no small fete to gain consensus amongst the majority of neighbors, and I commend all involved in persevering to that end. I'm sure there have been those who've suggested modifications which satisfy their individual preferences, but after all the gatherings in which so many options were explored, we think it is both appropriate and fair that the roadway has been designed by professionals who have kept in mind the best solution for the community as a whole. We are pleased that Supervisor Horsley secured funding and that the work is now scheduled for completion by fall, 2014. We look forward to a smoother, safer ride come October. Feel free to contact us if we can contribute to the success of this project. D-1

Sincerely,

Diane Brosin and Tim Machold
65 Bernal Avenue
Moss Beach, CA 94038
650.728.7768
macbro@pacbell.net

Response to Letter D
Diane Brosin and Tim Machold

Response to Comment D-1

Commenters express support for the project's creation of uniformity in dimensions and surfaces, as well as use of vegetated swales to mitigate storm runoff.

This comment is noted. No response is required.

LETTER E

Reference TJ Glauthier Response Email dated 02/28/2014

From: Kathryn Slater-Carter <kathryn0@sonic.net>
To: <SealCoveISMND@smcgov.org>, Lisa Ketcham <lisa.ketcham@comcast.net>
CC: TJ Glauthier <tjglauthier@gmail.com>, <daveolsonmcc@gmail.com>, <chrisjohnson_mcc@yahoo.com>, Laura Stein <laura.stein@comcast.net>, <joeljanoe@gmail.com>, <erin.deinzer@gmail.com>, <ISMND@smcgov.org>, Aimee Luthringer <ltl_greenheron@yahoo.com>, sabrina brennan <sabrina@dfm.com>
Date: 2/26/2014 12:04 PM
Subject: Re: Seal Cove Roads Update

Hi all, I think this should be at the MCC ASAP. This could be change in County policy and all who live on 'privately maintained' roads may have in interest in the possible change. Perhaps it is just a case of long deferred maintenance, I do not know. But the difference should be explained. for instance, Alta Vista Road in Montara is used by many homes, but privately maintained, It appears to be a public road. Perhaps the County can bring a map of publicly and privately maintained roads. E-1

Thanks, I look forward to the your reply.

Kathryn

On Feb 26, 2014, at 9:51 AM, Sabrina Brennan wrote:

> SealCoveISMND@smcgov.org

LETTER E (cont).

KATHRYN SLATER-CARTER
Email dated 02/26/2014
And
TJ GLAUTHIER
Response Email dated 02/28/2014

From: tjglauthier <tjglauthier@gmail.com>
To: Kathryn Slater-Carter <kathryn0@sonic.net>
CC: "SealCoveISMND@smcgov.org" <SealCoveISMND@smcgov.org>, Lisa Ketcham <lisa.ketcham@comcast.net>, "daveolsonmcc@gmail.com" <daveolsonmcc@gmail.com>, "chrisjohnson_mcc@yahoo.com" <chrisjohnson_mcc@yahoo.com>, Laura Stein <laura.stein@comcast.net>, "joeljanoe@gmail.com" <joeljanoe@gmail.com>, "erin.deinzer@gmail.com" <erin.deinzer@gmail.com>, "ISMND@smcgov.org" <ISMND@smcgov.org>, Aimee Luthringer <ltl_greenheron@yahoo.com>, sabrina brennan <sabrina@dfm.com>
Date: 2/28/2014 9:51 AM
Subject: Re: Seal Cove Roads Update

Kathryn,

It's a good discussion to have with Don Horsley and others at the County, and the MCC is probably the right place to start it. However, I would caution you about being too optimistic that this represents a major policy change.

The Seal Cove roads action has been taken in large part to offset the loss of Ocean Blvd, which was the primary access for many of us. Further erosion has been a problem at the southern end of the current closure, at the intersection of San Lucas and Ocean. If (or when) that intersection is closed, many of us will have no access to our homes via county roads.

The cost of the road improvements is also significant. Fortunately, Don has been able to secure that for us. Finally, as you will see in the 228 page report that the County prepared, there are a lot of requirements that the County must meet in order to take new roads into the County system. This had taken years and a lot of technical and expert work.

Happy to discuss this if you'd like. I'm over at Jury duty again today - I got onto the "one trial" process that's taken all week.

TJ

> On Feb 26, 2014, at 12:03 PM, Kathryn Slater-Carter <kathryn0@sonic.net> wrote:
>
> Hi all, I think this should be at the MCC ASAP. This could be change in County policy and all who live on 'privately maintained' roads may have in interest in the possible change. Perhaps it is just a case of long deferred maintenance, I do not know. But the difference should be explained. for instance, Alta Vista Road in Montara is used by many homes, but privately maintained, It appears to be a public road. Perhaps the County can bring a map of publicly and privately maintained roads.
>
> Thanks, I look forward to the your reply.
>
> Kathryn
>
>
>
>> On Feb 26, 2014, at 9:51 AM, Sabrina Brennan wrote:
>>
>> SealCoveISMND@smcgov.org

Response to Letter E
Kathryn Slater-Carter

Response to Comment E-1

Commenter expresses concern that the proposed project may represent a change in County policy.

As discussed on page 1-3 of the Draft IS/MND, the project is necessary to provide community residents with an access alternative to Ocean Boulevard, which is presently the only paved road connecting San Lucas Avenue with Madrone, Precita, and Bernal Avenues, in Seal Cove. Ocean Boulevard, which runs adjacent to coastal bluffs south and west of the project area, is closed in some areas west of San Lucas Avenue due to bluff erosion. As bluff erosion and retreat continues, additional portions of Ocean Boulevard may become impassible, thereby eliminating paved access for area residents. The existing alternative access routes, which include the road segments to be improved, are not designed to County road standards and therefore are not maintained by the County. The project is, therefore, necessary to provide long-term, safe, all-weather vehicular access to community residents. This is consistent with County policy set forth in the Montara-Moss Beach-El Granada Community Plan (1985), which has been incorporated by reference into the County's Local Coastal Program (2013). The Community Plan states: "The narrow, unimproved streets of Montara, Moss Beach, and El Granada contribute to the small town character of the community, but they need to be paved in order to control drainage and provide an adequate all weather travel surface." Therefore, the project does not represent a change in County policy.

The commenter also requests a map of County and non-County maintained roads (what the commenter refers to as "publicly and privately maintained roads"). For additional information regarding publicly and privately maintained roads, commenter is encouraged to contact the San Mateo County Department of Public Works' Design Section.

LETTER F

PETE FINGERHUT
Email dated 03/21/2014

From: Pete Fingerhut <fingerhut@gmail.com>
To: <zazzari@smcgov.org>, Jim Porter <jporter@co.sanmateo.ca.us>, <astillman@co.sanmateo.ca.us>, <echen@smcgov.org>, <wng@smcgov.org>
Date: 3/21/2014 2:40 PM
Subject: Seal Cove Road Improvement Comments

Hi All,

I wrote one email already that indicated some of my concerns but I wanted to write again just to make sure all my bullet points are articulated.:

1. The one tree trunk slated for removal on the corner of Precita and Del Mar is connected to the main trunk of the tree. This is not a Cyprus but a Pine tree that must be trimmed during the winter months or else the tree becomes very susceptible to Pine Beetle Infestation. This was mentioned to the county when they were on site analyzing the road bed on Del Mar. F-1
2. I want to make sure that the construction of the road on Del Mar does not affect my setbacks. These setbacks must be kept in accordance with zoning and building codes. F-2
3. If there is wiggle room on the size of the swales, I would suggest minimizing the swales in order to make the road more in line with the scale of existing roads in the community F-3
4. I would encourage the county to install speed bumps to prevent speeding in the confined spaces in the community F-4
5. No parking signs should be placed throughout so that folks don't think of the swales as parking opportunities. F-5
6. Finally, I would encourage that the county send a representative or representatives to come out to the site and meet with those affected and map out with stakes and cones the proposed routes the roads will take. That will alleviate much of the angst that those affected are currently feeling as the drawings provided are not true to scale and don't really represent what we will be seeing as the final product. F-6

Thank you,

Pete and Eileen Fingerhut
100 Del Mar Ave.
650.922.3205

Response to Letter F
Pete and Eileen Fingerhut

Response to Comment F-1

Commenter explains that the portion of the tree at the corner of Precita Avenue and Del Mar Avenue that is encroaching into the right-of-way and would require trimming is a pine tree, and requires trimming in the winter months so as to avoid pine beetle infestations.

A certified arborist has surveyed the tree in question and concluded that two separate trees exist at the subject location. One is a stone pine and the other is a Monterey pine. The stone pine is a fallen tree and would be removed completely. The Monterey pine would remain. County tree trimming and removal activities typically include removal of cut wood and when necessary, treatment of cut stumps and adjacent trees to remain with insecticide appropriate for use at the site to prevent infestation.

Response to Comment F-2

Commenter requests that proposed road improvements along Del Mar Avenue avoid impacts on commenter's property setbacks.

The proposed road improvements would occur entirely within the existing County right-of-way and would not affect private property lines. Therefore, the setbacks would not be affected.

Response to Comment F-3

Commenter requests swale size be reduced to make the road more in line with the scale of existing roads in the community (i.e., smaller).

In accordance with State requirements, the biotreatment measures, or swales, have been sized to capture and treat stormwater runoff from the new roads. The size of the treatment areas is dependent upon the surface area of the road. For the swale size to be reduced, the road width would have to be reduced.

Pursuant to County Ordinance No. 03656, the proposed 16-foot road width is the minimum permitted in the Midcoast area of San Mateo County. Therefore, the County may not construct roads smaller than the proposed 16-foot-wide travelway. Moreover, the proposed road width is generally consistent with that of existing roads throughout the neighborhood.

Response to Comment F-4

Commenter suggests installation of traffic calming devices to prevent vehicles from speeding in the neighborhood.

Traffic calming measures such as speed humps are only installed if a traffic analysis performed by the Department indicates the road or intersection meets certain criteria. Such analysis cannot

be conducted until the roads have been constructed; therefore, traffic calming measures cannot be considered for this project at this time.

Please see **Appendix A**, Property Owner Update Letter dated April 14, 2014.

Additionally, County staff does not expect the proposed project would cause such an increase in vehicle speeds. No traffic calming devices exist on Bernal Avenue, which is similar in size to the road widths proposed (approximately 20 feet in width), longer than the segment of San Ramon Avenue proposed for paving, and the County has received no complaints of speeding along Bernal Avenue.

Response to Comment F-5

Commenter suggests installing "no parking" signs throughout the project area so people do not think of swales as parking opportunities.

This would be evaluated upon completion of the Project, but "No Parking Signs" would not be installed as part of the project. Parking restrictions are generally initiated or requested by property owners. Upon receipt of such a request, including a description of the specific problem, the Department's Traffic Section would evaluate the issue. After the roads were constructed the Department would monitor the biotreatment measures for maintenance issues that may arise as a result of parking. If a no parking remedy is determined to be appropriate, the Department must make a formal recommendation to the Board of Supervisors for consideration and approval before parking restrictions can be implemented.

Please see **Appendix A**, Property Owner Update Letter dated April 14, 2014.

Response to Comment F-6

Commenter requests that a County representative visit the site to meet with neighborhood residents and to map out with stakes and cones the proposed routes the roads will take.

County staff met with neighborhood residents at a public meeting on September 24, 2012 at Cypress Meadows Wedding, Conference and Event Center, 343 Cypress Avenue, Moss Beach, CA 94038, to discuss the project design and answer questions. In addition, on April 10 and 11, 2014, a County representative visited the site and installed flags along the proposed project route, delineating the extent of project work within the right-of-way by marking the proposed edge of pavement/inside edge of biotreatment measure and outside edge of biotreatment measure. Additionally, the County sent a letter to the property owners within the project limits, dated April 14, 2014, explaining the markings. If commenter has additional questions, they may be submitted via the project's email address: SealCoveISMND@smcgov.org.

LETTER G

TJ GLAUTHIER
Email dated 03/09/2014

From: TJ Glauthier <tjglauthier@gmail.com>
To: Zack Azzari <zazzari@smcgov.org>, <SealCoveISMND@smcgov.org>
CC: "Ann M Stillman, P.E." <astillman@smcgov.org>, Nick Calderon <ncalderon@smcgov.org>, Brigid O'Farrell <mbrigidofarrell@gmail.com>
Date: 3/9/2014 1:55 PM
Subject: Public Comment On Draft Seal Cove IS/MND document

Mr. Zach Azzari, Acting Principal Civil Engineer
San Mateo County Public Works

Dear Mr. Azzari,

Thank you for carrying on the work to improve and bring some of our informal, dirt roads into the County road system here in our Seal Cove neighborhood. We have appreciated the support that Ann Stillman and Jim Porter have provided over the past several years on this project and look forward to working with you as well. And, of course, we sincerely appreciate the leadership that Supervisor Don Horsley has provided on this project, including securing the funding for it.

This project is important to all of us in the Seal Cove area. And in particular, it is urgent for at least 25 homeowners, including us. Ocean Boulevard was previously our primary route to and from our home. Once it was closed we have had only one route in or out, through several streets including San Lucas. As you know, the intersection of San Lucas and Ocean Boulevard, which is adjacent to the closed section, has also deteriorated over the past several years. DPW has repaired that intersection, but it seems to many of us that it is only a matter of time before that intersection also fails and must be closed. If and when that happens, unless these new roads are improved and accepted by the County, we and at least 25 other homes would have no access route to our homes via County roads. And, frankly, the dirt roads are in such terrible condition that they can only be reliably used by trucks and/or 4-wheel drive vehicles. This issue also affects emergency vehicle access as well.

We have played an active role over the past few years in helping to convene the local homeowners and other interested people, such as the MCC, to meet with the DPW in order to discuss potential solutions to these issues. We cannot speak for everyone, of course, but in our view the Draft Initial Study/Mitigated Negative Declaration, including its appendices, is very well done and is entirely faithful to the proposal that the community approved at its meeting with the DPW in September 2012. Among the key points of agreement are:

The unimproved sections of three roads would be improved and accepted into the County system -- San Ramon, Del Mar, and Madrone
Those would be done in a manner that is as consistent as possible with the other roads in the neighborhood, including keeping them to a width of 16 feet if possible, and not having curbs and gutters
There would probably be vegetated swales at the sides in order to help mitigate storm water runoff

G-1

In addition, we urge you to give careful consideration to safety measures in your final design. In particular, we believe that it is necessary to install a stop sign at the intersection of San Ramon and San Lucas. That intersection has very limited visibility and will be dangerous when San Ramon is a through street.

G-2

We understand that you have also received comments from others in the neighborhood. That is entirely proper. However, if any points other than the ones above are being characterized as representing the "majority view" of the homeowners, we believe you should question that. In particular, there was in our view no recommendation in the community meetings regarding making any changes to the other existing roads in the neighborhood. There also was no consensus that one of the streets should be wider than the others, or dealing with lines of sight or signage. All of those details were understood to be left to the County as part of its detailed design work.

We appreciate your effort and hope that this project can proceed along as rapidly as possible. We understand and

G-1

support all the necessary steps involved in planning and permitting. Now, however, we hope this can be completed in this summer's construction window, in August and September. G-1 (cont.)

We would be happy to discuss any of this with you if you wish.

Thank you,

TJ & Brigid

TJ Glauthier & M. Brigid O'Farrell
1001 Ocean Blvd.,
Moss Beach, CA 94038
650-353-6061
tjglauthier@gmail.com

Response to Letter G
TJ Glauthier and Brigid O'Farrell [March 9, 2014]

Response to Comment G-1

Commenters explain their active role in the public process, participation in meetings with community groups and County staff, approval of the work done for the Draft IS/MND, key points of community agreement, and express appreciation for County staff's efforts. Commenters note they would like to see the project constructed in August and September 2014.

This comment is noted. No response is required.

Response to Comment G-2

Commenter asserts that the proposed project will create an intersection at the corner of San Ramon Avenue and San Lucas Avenue with limited visibility, thereby warranting installation of a stop sign.

The proposed road design is consistent with the existing small roads in the neighborhood. The intersection cited by the commenter is presently paved. Furthermore, the intersection is presently unsigned, as are all but one intersection (Park Avenue at Los Banos Avenue) in the Seal Cove neighborhood. As a result, the project would not be expected to increase the risk of traffic hazards at this intersection.

Additionally, traffic calming measures such as stop signs are only installed if a traffic analysis performed by the Department indicates the road or intersection meets certain criteria. Such analysis cannot be conducted until the roads have been constructed; therefore, traffic calming measures cannot be considered for this project at this time.

Please see **Appendix A**, Property Owner Update Letter dated April 14, 2014.

LETTER H

BARRY LIFLAND
Email dated 02/26/2014

From: Barry L <exstanford.micro@yahoo.com>
To: "James C. Porter" <jporter@smcgov.org>
CC: <echen@smcgov.org>
Date: 3/26/2014 12:31 PM
Subject: Seal Cove/Moss Beach Roads Improvement Project

PUBLIC COMMENT FOR: DRAFT IS/MND

RE: Road Improvements on Portions of Del Mar, Madrone, and San Ramon Avenues in the Seal Cove/Moss Beach Area - Project Update

I have an ownership interest in and reside at the property on 75 Precita Avenue, Moss Beach (APN: 037-277-150); on Del Mar and Precita Avenues.

I fully support the 'project' as detailed in the 'update' and in the other supporting documents. I am particularly pleased that the paving of Del Mar will be 'centered' on the PROW.

I want to thank SMCo Dept. of Public Works for the comprehensive project to improve our local roads and access and for all the hard work Public Works has put into this project.

H-1

I do not need another community meeting. The project documents are very comprehensive.

Barry Lifland
75 Precita Avenue
Moss Beach, CA 94038
650-728-5253

Response to Letter H
Barry Lifland

Response to Comment H-1

Commenter expresses support for the proposed roadway improvements, particularly that the paving of Del Mar Avenue will be centered on the public right-of-way, and notes the project will improve local roads and access.

This comment is noted. No response is required.

LETTER I

LESLIE O'BRIEN
Email dated 03/25/2014

From: Leslie OBrien <leslieob@sbcglobal.net>
To: "sealcoveISMND@smcgov.org" <sealcoveISMND@smcgov.org>
Date: 3/25/2014 6:50 PM
Subject: Seal Cove Road Improvements

As the property owner of 75 Precita Avenue, which borders on Del Mar, I wish to express my thanks and gratitude for the work that has been done to date on improving access to our community. I firmly support the construction of a paved road centered in the ROW of Del Mar Avenue with proper drainage. The current state of the ROW has deep depressions in which standing water pools and becomes a breeding habitat for mosquitoes, which permits the possible spread of West Nile virus. I hope to see this plan put in action with the welcomed result of a reliable ingress and egress route. I-1

Thank you,

Leslie O'Brien

Response to Letter I
Leslie O'Brien

Response to Comment I-1

Commenter expresses support for the construction of a paved road centered in the right-of-way of Del Mar Avenue, with proper drainage to eliminate mosquito breeding habitat, and provides reliable ingress and egress.

This comment is noted. No response is required.

LETTER J

SUSAN ROYER
Email dated 03/25/2014

From: Susan Royer <sealcovesusie@sbcglobal.net>
To: <SealCoveISMND@smcgov.org>, <echen@smcgov.org>, <wng@smcgov.org>, <Zazzari@smcgov.org>
Date: 3/25/2014 12:48 PM
Subject: Road Improvements in Seal Cove

Dear Mr. Eric Chen, Ms. Wency Ng and Mr. Zack Azzari:

My husband and I completely support the proposed road improvement project in Seal Cove. J-1

Sincerely,

Michael and Susan Royer

90 Precita Ave.
P.O. Box 856
Moss Beach, CA 94038
(650) 728-3993

Response to Letter J
Michael and Susan Royer

Response to Comment J-1

Commenter expresses support for the project.

This comment is noted. No response is required.

LETTER K

David Vespremi 125 Precita Ave. Moss Beach, CA 94038 (415) 710-7837 vespremi@earthlink.net

James Porter, Director of Public Works
San Mateo County Department of Public Works
555 County Center 5th Floor
Redwood City CA 94063
(650) 599-1421

March 26, 2014

Mr. Porter,

I am in receipt of your letter dated March 14, 2014. First, I would like to thank you for providing us with an update on the Seal Cove Road Improvement Project. The additional details contained in this letter, together with the preliminary plans available on the county's website, were very helpful in understanding where we are with the project and what lies ahead. I speak for myself, and I'm sure all of the Seal Cove residents, in saying that the open channels of communication are much appreciated.

A number of Seal Cove neighbors directly impacted by the planned paving work, and specifically, those adjacent to the Del Mar ROW (future Del Mar Ave), have had the opportunity to get together and discuss the content of your update letter along with the proposed preliminary plans. Although you likely have received individual comments, and will almost certainly receive more prior to the March 27th close of public comment on the Negative Declaration, we did want to join together to send a collective letter as well. Specifically, we have the following requests and comments:

(1) We are hereby requesting that project engineering staff meet with us in person on site at Del Mar prior to the commencement of construction to walk over the planned construction site with us and answer questions about size, location, configuration, and other project particulars. Ideally, this should happen before the preliminary plans are finalized. K-1

(2) We note that in our prior undersigned correspondence, we requested signage providing clear direction to visitor traffic to primary points of interest including appropriate access to the POST Trails and South Stairs accessing the FMR. We had also requested traffic signs to deal with newly created intersections. We note that although there is mention of the removal of two "End County Road" signs, there is not mention of additional signage in response to our request.

We feel strongly that this needs to be included in the plans. Specifically, we would like signs directing visitor traffic to the visitor parking lot on Airport Road, which, although underutilized, is designed specifically for this purpose and provides the parking, trash cans, and other facilities not available at the impromptu parking lot that has been occurring at the corner of Bernal and Ocean Blvd. K-2

If there are signs directing visitors to a private restaurant (the Distillery) then it stands to

David Vespremi 125 Precita Ave. Moss Beach, CA 94038 (415) 710-7837 vespremi@earthlink.net

reason that there should be at least as prominent signing directing visitors to the Airport Blvd. visitor parking lot.

This issue is important to us, has been raised repeatedly, and needs to be addressed in scoping documents for the planned work.

Further, once the ROW becomes a county road, there will be new intersections created, including a particularly problematic at-present, uncontrolled blind intersection at the corner of Del Mar and Precita, For this reason, stop signs need to be installed to prevent collisions. K-3

(3) We are requesting that the bio swales be kept to the minimum possible width and that the county explore using a single swale on Del Mar Ave in particular as it is unclear to us that swales on either side are required or warranted. It seems sufficient to have a single swale with appropriate grading in the direction of the swale as opposed to swales on either side. If a single swale can be utilized, we propose that a designated walking path be used alongside the new road in the place of the second swale. Historically, Del Mar has been used primarily as a walking and biking path by residents. By paving it as a road for motor vehicles, the county is providing an additional type of access - namely for cars and trucks - but this should not come at the expense of pedestrians and cyclists that have, and will likely continue, to make up the majority of its users. For this reason, providing a clear, separated access along the side of the driven surface will ensure that safe pedestrian and cyclist access will be preserved. K-4 K-5

In the event that two swales are absolutely required, we ask that these be kept to the bare minimum width and that no parking signs are utilized to make clear their intended purpose and preserve their integrity. K-6

(4) We had previously (and repeatedly) requested speed bumps and other traffic calming devices and there is no mention of these in the preliminary plans. There are a number of small children that play on this ROW and will continue to do so after it is paved and turned into a county road. We would like to see specific mention of what methods the county plans to employ to ensure speeds are kept down, just as they are with the speed bumps on Los Banos. K-7

(5) Lastly, the planned sixteen foot paved width is significantly wider (in some instances, nearly double the width) of recent seal coat and paving work the county has done in our neighborhood. Good examples of this disparity can be found on San Lucas Ave where a county installed curb, and tall bushes on the opposing side, have narrowed the drivable surface to a fraction of county requirements. For this reason, although we are not requesting that all encroachments be addressed to mirror the new paving, we are asking for a commitment that the worst of these bottlenecks be remedied. These are our collective comments and the undersigned would like for these to be confirmed as such in response to the public comment period K-8

David Vespremi 125 Precita Ave. Moss Beach, CA 94038 (415) 710-7837
vespremi@earthlink.net

for this project.

Best,

David Vespremi, 125 Precita Ave _____ 3/26/14

Peter Fingerhut, 100 Del Mar Ave _____ 3/26/14

Steve Beardsely, 140 Precita Ave _____ 3/26/14

Response to Letter K
David Vespremi, Peter Fingerhut, and Steve Beardsley

Response to Comment K-1

Commenter requests that a County representative visit the site to meet with neighborhood residents and answer questions about the size, location, and configuration of the project.

This comment is noted. Please see Response to Comment F-6.

Response to Comment K-2

Commenter requests the installation of signage to direct visitor traffic to nearby points of interest, including appropriate access to the POST Trails and South Stairs accessing the Fitzgerald Marine Reserve and to the visitor parking lot on Airport Road.

The Department may permit installation of these types of signs through an encroachment permit process. The request must come from the entity that is managing the specific resource to be signed. Such signs belong to the entity which was permitted to install the signs. The Department has no responsibility relating to the installation or maintenance of Points of Interest type signs.

Response to Comment K-3

Commenter asserts that the proposed project will create a blind intersection at the corner of Del Mar Avenue and Precita Avenue, thereby warranting installation of a stop sign.

This comment is noted. Please see Response to Comment G-2.

Response to Comment K-4

Commenter requests swale size be reduced, and that swales be constructed on only one side of the road, rather than both sides as proposed.

In accordance with State requirements, the biotreatment measures, or swales, have been sized to capture and treat stormwater runoff from the new roads. The size of the treatment areas is dependent upon the surface area of the road. The road size cannot be reduced any further and still comply with County Road standards (see Ordinance 03656) requiring that roads be 16-feet-wide at a minimum. As a result, the project design does not allow for further reductions in swale width while also meeting State stormwater treatment requirements. The road and swales would be constructed within the County ROW, with the road constructed along the centerline of the ROW.

Response to Comment K-5

Commenter requests separated access for bicyclists and pedestrians along the portion of Del Mar Avenue proposed for improvement.

The proposed road improvements along Del Mar Avenue are in keeping with the character of other roads in the neighborhood. None of the roads in the neighborhood has sidewalks or separated access for bicyclists and pedestrians. The road in question is presently accessible to motorists, bicyclists, and pedestrians, as are all other roads in the community. The proposed improvements would not preclude continued use of the road segment in question by pedestrians or bicyclists.

Response to Comment K-6

Commenter requests swales be kept to minimum size and "no parking" signs be installed to prevent parking within swale areas.

This comment is noted. Please see Response to Comment K-4 regarding biotreatment measure widths. Please see Response to Comment F-5 regarding "no parking' signage.

Response to Comment K-7

Commenter suggests installation of traffic calming devices to prevent vehicles from speeding in the neighborhood. Commenter cites Los Banos Avenue as an example of a street where such measures have been effective.

This comment is noted. Please see Response to Comment F-4.

Additionally, conditions on Los Banos are different from those of smaller roads in the neighborhood. Los Banos is 40 feet wide in the area of the traffic calming devices and connects to Airport Road, which is a frontage road to Highway 1.

Response to Comment K-8

Commenter suggests the proposed 16-foot road width is significantly wider than some neighborhood roads the County has recently been sealed or paved. San Lucas Road is provided as an example.

This comment is noted. As discussed in Response to Comment K-4, County road standards limit new road construction in the project area to a minimum width of 16 feet (San Mateo County Ordinance No. 03656). As a result, the proposed 16-foot road width is the minimum permitted in the Midcoast area of San Mateo County. The recent improvements performed by the County in the Seal Cove neighborhood were maintenance type projects. Additional roadwork in the neighborhood to widen roads is not proposed as part of this project.

LETTER L

DAVID VESPREMI
Email dated 03/03/2014

>>> David Vespremi <dvespremi@gmail.com> 3/3/2014 12:33 PM >>>
Hi Zack, bumps,

Thanks. The formal comment I have is the attached neighborhood petition that was submitted back in October of 2012 (attaching again here for your reference).

To the extent that the Negative Declaration addresses the concerns set forth in this petition (route configuration, bio swales, lane widths, etc.) thank you. On behalf of myself and the neighbors that made these requests, we appreciate their inclusion.

To the extent that the Negative Declaration is silent on some of these concerns, it would be helpful to have clarification on the following:

(1) Speed bumps and other traffic calming devices - could you please confirm that these are planned and identify where they are going to be placed? L-1

(2) Visibility improvements (including adjustments to fencing, trees, etc.) and stops signs at intersections - could you please confirm that these are planned and identify where they are going to be implemented? L-2

(3) Signage to better direct visitor traffic to points of interest - could you please confirm that this is planned and identify what specific measures are going to be implemented? L-3

Beyond the two above items in connection with the neighborhood petition, could you please provide copies of the following:

(1) Any engineering drawings or renderings identifying the new paved routes - especially to the extent that these use survey marks or other features to help residents identify both the path of the paved lanes and the bio swale positions. L-4

(2) Any response(s) from the Coastal Commission on the proposed plan(s). L-5

Lastly, could you please identify what, if any, adjustments are planned to existing encroachments and/or additional paving will be used to ensure that existing surface streets are brought up to at least the same standards in terms of width that are planned for the new ones? You''ll note that many, if not the majority, of existing roads are paved to less than 16' width. Related to this, are additional bio swales or other drainage improvements anticipated for our neighborhood to deal with run-off outside of those planned for the new roads? L-6

Obviously, these last two reflect a concern re: ensuring that the traffic burdens are distributed equally among both the existing and new routes as well as water run-off.

In the event that no additional work has been planned to ensure that existing roads will be brought up to the same standards as the new ones going in, has the option to designate "one-way" lanes of travel been looked at by project staff (as suggested at the last community workshop) and what was the outcome of that analysis? While major arteries that span the neighborhood like San Ramon will logically carry traffic in both directions - as this is the primary replacement for Ocean Blvd (which previously also supported two directions of travel) - it is less clear that short-run connectors also need to support two-way traffic. In fact, enlisting one-way traffic restrictions could serve to both narrow the planned paving below 16' in width and at the same time, better/more efficiently funnel visitor traffic around the periphery of the L-7

neighborhood to reach key points of interest (the bluff trail head) rather than through the middle of the neighborhood. L-7 (cont.)

I hope this correspondence suits what you had requested. If not, please let me know what adjustments if any are needed.

Thanks again,
David

>>>On Thu, Feb 27, 2014 at 2:24 PM, Zack Azzari <zazzari@smcgov.org> wrote:>>>
Good afternoon Mr. Vespremi,
Thank you for your email, analysis, questions and concerns. Your efforts in breaking things out into three areas, is appreciated. We would prefer that you submit your list of questions in a formal letter.
I already shared your email with County Department of Public Works' staff involved in the Project, and currently I am waiting for their feedback.
At this point I am not available to meet with you, as I first plan on receiving all involved response, then formulate the appropriate response to your email.
Thank you,

Zack Azzari, P.E., Senior Civil Engineer
County of San Mateo, Public Works
555 County Center, 5th Floor, Redwood City, CA 94063-1665
Office 650-599-1450 (tel:650-599-1450), Mobile 650-399-6415 (tel:650-399-6415), Fax 650-361-8220 (tel:650-361-8220)
Email: zazzari@smcgov.org

>>> David Vespremi <dvespremi@gmail.com> 2/26/2014 12:55 PM >>>
Hi Zak,

Thanks for connecting. I still think that an in-person meeting this week with yourself, Ann Stillman, and/or Jim Porter might be best as there is a lot of ground to cover in terms of unaddressed questions/concerns, but here is an overview in anticipation of such a meeting. L-8

Basically, I have broken things out into three areas: process, presentation, and substance.

Process:

TJ's email and the attachments don't really give a sense of where we are procedurally. What has happened so far and what is left to happen between now and breaking ground in August. For example, has the Draft Initial Study/Mitigated Negative Declaration already been reviewed by the Coastal Commission as part of a CDP application? If so, when did this occur and what comments or feedback L-9 L-10

were provided by the Commission and how were these reflected in the document that was shared with the neighbors. If not, when is this expected to occur? Will there be an opportunity for public comment before the Coastal Commission? L-10 (cont.)

What other procedural gateways lie ahead before ground breaking and at what point, if any, might the public be able to attend and participate?

Presentation:

Are there engineering drawings and/or renderings depicting the anticipated road alignments? Why weren't these included in the materials shared with the neighbors? Where and when might the public see these? L-11 Also, why were outdated illustrative materials included repeatedly throughout the negative declaration? For example - our house at 125 Precita, which has been in existence since 2009 is omitted from the majority of the county's illustrative materials, most particularly the ariel "birds-eye" view renderings. It seems that materials generated in 2013 shouldn't be relying on GIS materials dating back to 2005 when these are badly out of date. L-12

Substance:

We were required to do a hydrology and soils analysis as a precondition to building our house, yet there is no hydrology report dealing with issues like impacts on private wells, water table impacts, or similar issues included in the materials. L-13 As an example, based on the hydrology report for our lot (adjacent to Del Mar Ave) the county required us to install an elaborate and expensive in-ground dissipator which sits squarely within, and should have been noted, in the study area, but there is no reference to this in the materials. L-14 If this was missed, why was it overlooked and what might the run-off impacts be for this dissipator or the aquifer feeding the private well from which we draw our household drinking water? For that matter, there is only a cursory review of the possibility of a seasonal wetlands (done in May for some reason), when it is well documented that there is a seasonal marsh submerging most of Del Mar Ave between Madrone and Precita in the intended paving area during the winter months - including now, as I type this. L-15 I understand that bio swales are designed to take water from a level surface, but I don't understand how bio swales can address a topographical low point that is generally under two feet or more of standing water for months at a time or why a comprehensive report was done on vegetation, but not on this far more significant issue of water run off. L-16

A large number of residents, myself included, signed a petition requesting lines of site to be improved, speed bumps to be installed, and improved navigation and traffic flow signs to be installed including stop signs at newly formed intersections. When will we have confirmation from the county about how these will be addressed and included in the new street plan? L-17

Further, during the public workshops, it was requested by a majority of the community that whatever standard the new roads are built to (not to exceed 16 feet in drivable width) that the other roads in the neighborhood be brought up to at least that same standard. By putting in newly paved roads at 16 feet in width, with 3 foot swales on either side, but not adjusting the existing roads to meet at least this standard, it stands to reason that the traffic patters will dramatically shift to favor the new roads - and this flies in the face of community input. The deal, as I and many others understood it, was that the roads would be made equal - and this would, by definition, require adjustments to existing roads to bring them in line with the new ones going in to keep everything equal. L-18

We also understood that San Ramon, as the replacement for Ocean Blvd, would be wider than the ancillary short-run streets of Madrone and Del Mar, yet there is no indication of this in the materials. Was this an oversight or is San Ramon going to be wider than Madrone and Del Mar? What about the issue of adjusting the driving surfaces and lines of site on the existing roads to bring them up to at least the same standard if not, the current county standards? L-19

For that matter, there are various types of asphalt available for paving - with different permeability, wear, and noise profiles - and yet no mention was made of what type of asphalt was selected for this project, based on what criteria, nor how the edges of this asphalt would be finished vis a vis the bio swales on either side. Will cars be allowed to park in or on the swales? I would imagine not as this would degrade their integrity and promote the run-off of automotive fluids into the Marine Reserve. Will there be hardscaping and/or signage incorporated to deter parking on or otherwise compromising the integrity of the swales? L-20 L-21

These are just a handful of questions I have and would welcome the opportunity to meet with you further this week to discuss. Please let me know your availability.

Thanks,
David
(415) 710-7837 (tel:%28415%29%20710-7837)

>>>On Wed, Feb 26, 2014 at 11:37 AM, Zack Azzari <zazzari@smcgov.org> wrote:>>>
Good morning Mr. Vespremi,
It was nice talking to you this morning.
Following up on our brief conversation, please reply to this email with your questions.
Thank you,

Zack Azzari, P.E., Senior Civil Engineer
County of San Mateo, Public Works
555 County Center, 5th Floor, Redwood City, CA 94063-1665
Office 650-599-1450 (tel:650-599-1450), Mobile 650-399-6415 (tel:650-399-6415), Fax 650-361-8220 (tel:650-361-8220)
Email: zazzari@smcgov.org

Response to Letter L
David Vespremi

Response to Comment L-1

Commenter requests information regarding the types and locations of proposed traffic calming measures.

Please see to Response to Comment F-4.

Response to Comment L-2

Commenter requests information regarding the types and locations of visibility improvements (including adjustments to fencing, trees, etc.) and stop signs at intersections.

As noted on page 1-6 of the Draft IS/MND, the project would require tree removal and trimming within the right-of-way. Such removal/trimming would be required on San Ramon Avenue, between San Lucas Avenue and Madrone Avenue; and on Del Mar Avenue, between Precita Avenue and Bernal Avenue. Please see Response to Comment G-2 for additional discussion of stop signs at intersections.

Response to Comment L-3

Commenter requests information regarding the inclusion of additional signage directing visitor traffic to points of interest.

Please see Response to Comment K-2.

Response to Comment L-4

Commenter requests engineering drawings or renderings identifying the new paved routes to help residents identify both the path of the paved lanes and the bioretention facilities.

At the request of community representatives, the County posted preliminary engineering plans on the County's website**.** Community leaders were notified of the posting in a letter dated March 14, 2014**.** On April 9 and 10, 2014, a County representative visited the site and installed flags along the proposed project route, delineating the extent of project work within the right-of-way by marking the proposed edge of pavement/inside edge of biotreatment measure and outside edge of biotreatment measure. Additionally, the County sent a letter to the property owners within the project limits, dated April 14, 2014, explaining the markings. If commenter has additional questions, they may be submitted via the project's email address: SealCoveISMND@smcgov.org.

It should be noted that the Department of Public Works recently implemented a new website and the link to the preliminary engineering drawings provided in the March 14, 2014 letter is no longer available. However, current updates and documents associated with this project can be found at http://publicworks.smcgov.org/public-works-projects.

Response to Comment L-5

Commenter requests a copy of comments provided by the Coastal Commission on the Draft IS/MND.

Please see Comment Letter A and Responses to Comments A-1 and A-2.

Response to Comment L-6

Commenter requests information regarding the County's plans to address existing encroachments and non-conforming roads within the neighborhood, beyond the project sites, to ensure traffic burdens are distributed equally among existing and new routes, and to address water run-off.

All work proposed as part of this project is described in Section 1, Project Description, of the Draft IS/MND. As noted in Response to Comment K-8, some of the existing roads in the Seal Cove area do not conform to existing County road standards. Additional improvements beyond those identified in the CEQA document, such as improvements to existing non-conforming roads, are not part of the proposed project. Nevertheless, Commenter's concern has been forwarded to the San Mateo County Department of Public Works' Traffic Section for consideration.

Response to Comment L-7

Commenter asks whether the County considered designating any of the roads proposed for improvement as "one-way" and suggests such an approach may allow road widths to be reduced to less than the proposed 16-foot travelway.

County road standards do not permit the construction of "one-way" roads and limits new road construction to a minimum width of 16 feet. The proposed project does not include the creation of "one-way" roads through the seal Cove neighborhood.

Response to Comment L-8

Commenter requests an in-person meeting with San Mateo County Department of Public Works staff to discuss outstanding questions and concerns.

This comment is noted. Please see Response to Comment F-6.

Response to Comment L-9

Commenter requests a summary of the procedural process leading up to ground-breaking.

As noted on page 1-7 of the Draft IS/MND, prior to ground-breaking, the San Mateo County Planning Commission must adopt the Final IS/MND and issue a Coastal Development Permit. These items will be the subject of public hearings before the Planning Commission, tentatively scheduled for April 23, 2014. Additional steps required prior to ground-breaking were presented in the County's letters to property owners within the project limits. Please see **Appendix A**, Property Owner Update Letters dated March 14, 2014 and April 14, 2014.

Response to Comment L-10

Commenter asks whether the Coastal Commission has reviewed the Draft IS/MND and whether there will be an opportunity for public comment before the Coastal Commission.

The Coastal Commission has reviewed and provided comments on the Draft IS/MND. The Coastal Commission's comment letter is provided as Comment Letter A. The County's responses to comments raised in the Coastal Commission's letter are included as Response to Comment A-1 and A-2. As the County has a certified Local Coastal Program, jurisdiction for approving coastal development permits lies with the San Mateo County Planning Commission. Unless the County's decision on issuance of the coastal development permit is appealed to the State, the Coastal Commission is not expected to have any further involvement in the project.

Response to Comment L-11

Commenter asks whether engineering drawings and/or renderings depicting the anticipated roadway alignments have been developed and why the materials were not shared with the neighbors.

Detailed engineering drawings were under development at the time of CEQA document preparation. The level of detail contained within such drawings is not required for the CEQA analysis and is typically not included in CEQA compliance documents. As noted in Response to Comment L-4, preliminary engineering plans have been made available to the public via the County's website, and the proposed project area has been staked and flagged onsite.

Response to Comment L-12

Commenter notes that Draft IS/MND Figure 2, which depicts the alignment of the proposed roadway improvements, includes an aerial photograph that predates construction of commenter's residence.

This comment is noted. The purpose of the figure is to depict the alignment of the proposed roadway improvements. This depiction of the alignment is accurate. The analysis contained within the CEQA document relies upon many sources and is in no way limited by the date of the photograph. Furthermore, a ground-level photograph of commenter's residence is included in Draft IS/MND Figure 3. Nevertheless, for the benefit of the public, Figure 2 has been revised to include a more current aerial photograph and is included as **Appendix B**.

Response to Comment L-13

Commenter notes the absence of a hydrology report addressing the project's impacts on private wells and the water table, as was required for construction of commenter's home.

As discussed on page 2-43 through 2-47 of the Draft IS/MND, the County considered the project's implications for groundwater quantity and quality. The proposed project has been designed in accordance with the C.3 provisions of the California Regional Water Quality Control Board's Municipal Regional Stormwater NPDES Permit (Order R2-2009-0074). The purpose of

the C.3 provision is to ensure that new development incorporate measures to address both soluble and insoluble stormwater runoff pollutant discharges and prevent increases in runoff flows. The County has developed technical guidance for the design of biotreatment measures to guide implementation and achievement of the C.3 requirements. The proposed project includes biotreatment measures that were designed in accordance with State and County guidelines to capture and treat stormwater runoff from the proposed roadway improvements.

The sizing of the biotreatment measures considers the soil permeability and associated infiltration rates. To determine these rates, the County conducted soil permeability tests throughout the project area. The results of these tests are included as **Appendix C**. Accordingly, the proposed biotreatment measures provide for the capture, treatment, and infiltration of increased stormwater. As noted in response to Draft IS/MND Questions 9a and 9f, given the size of the proposed road, and with the construction of biotreatment measures in accordance with State and County standards, degradation of surface or groundwater quality is not anticipated. Furthermore, as discussed in response to Draft IS/MND question 9b, because the project provides for groundwater infiltration and would have no operational water demands, no long-term effects on groundwater supply or water table elevations is anticipated.

Response to Comment L-14

Commenter notes that an underground stormwater runoff dissipator for commenter's property exists within the project area, but is not mentioned in the Draft IS/MND.

As discussed on Draft IS/MND page 2-59, County staff is aware of the potential for underground utilities, including water, wastewater, storm drain, natural gas, electrical, and telecommunications lines to occur within the work areas. Itemization of each potentially affected utility is not required under CEQA. The analysis acknowledges the potential for disruption or damage to these facilities. Accordingly, **Mitigation Measure PUB-1** requires the County or its contractor to determine prior to construction the locations of all overhead and underground utility lines that could be affected by the proposed project. In addition, the measure requires the County or its contractor to review the locations of these facilities, notify the owner of these facilities of potential disruption prior to construction, and to minimize the duration of potential service disruption. Furthermore, commenter's concern has been forwarded to the San Mateo County Department of Public Works' Design Section for reference.

Response to Comment L-15

Commenter asserts the Draft IS/MND's includes only a cursory review of the potential for a seasonal wetland to occur along Del Mar Avenue, between Madrone Avenue and Precita Avenue.

As discussed on page 2-25 of the Draft IS/MND, the site was visited by qualified wetlands specialists in winter and spring of 2013. A detailed wetlands assessment is also included as Draft IS/MND Appendix C. Standing water in tire ruts and deep depressions along Del Mar Avenue is noted throughout the Draft IS/MND and in Appendix C. However, based upon standard wetlands

identification methodology established by the U.S. Army Corps of Engineers and the California Coastal Commission, the area was determined not to include any wetlands.

Response to Comment L-16

Commenter notes that a topographical low point exists along Del Mar Avenue and asks how the project will address drainage in an area where water pools for extended durations.

The stretch of Del Mar Avenue to which Commenter refers is presently unpaved, includes deep tire ruts and potholes, and is without formal drainage. As discussed on page 2-47 of the Draft IS/MND, the project proposes to formalize areas such as those along Del Mar Avenue, improve connectivity of drainage pathways, and facilitate infiltration of surface runoff. As noted in Response to Comment L-13, the proposed biotreatment measures have been designed in accordance with State and County guidelines which require treatment measures be sized to accommodate runoff from new impervious areas, as well as runoff from adjacent contributing areas, while taking into consideration soil permeability. Furthermore, the project proposes no substantial grade changes, steep slopes, or other site modifications that would substantially alter drainage within the project area.

Response to Comment L-17

Commenter asks about the inclusion of traffic calming devices, traffic flow signs, and stop signs at newly created intersections.

Please see the County's responses regarding traffic calming devices in Response to Comment F-4; visitor traffic signage in Response to Comment K-2, and stop signs in Responses to Comments G-2.

Response to Comment L-18

Commenter asks about plans to bring non-conforming roads in the neighborhood into conformance with minimum County road standards.

Please see Response to Comment L-6.

Response to Comment L-19

Commenter asks whether San Ramon, as the replacement for Ocean Boulevard, would be wider than the ancillary short-run streets of Madrone and Del Mar Avenues.

All work proposed as part of this project is described in Section 1, Project Description, of the Draft IS/MND. As discussed on Draft IS/MND page 1-4, all the roads to be constructed as part of the project would be constructed to the same width of 16 feet.

Response to Comment L-20

Commenter notes the Draft IS/MND does not mention the type of asphalt paving that would be used for the project and how the edges would be finished, relative to the swales.

Page 1-4 of the Draft IS/MND notes that the County proposes to construct roads comprised of three inches of asphalt concrete over a nine inch cement-treated base. The impacts associated with the project would not be expected to change based upon variation in the composition of the asphalt that would be used for the new road surfaces or the finish of the road edges. The asphalt concrete used would be Type B (1/2" Med., Max.) with 2"x6" pressure-treated header board edging and biotreatment measures on both sides of the paved road.

Response to Comment L-21

Commenter asks whether cars will be allowed to park in the biotreatment areas and whether "no parking" signage will be installed to prevent parking in such areas.

Please see Response to Comment F-5.

Seal Cove Neighborhood Petition

LETTER M

October 6, 2012

While we applaud the dedication of resources and staff to improving neighborhood access for Seal Cove residents and visitors alike, the undersigned below would like to go on record with the following:

We, the undersigned below, have concerns about minimizing visitor traffic through the center of the neighborhood, keeping vehicle speeds down, and ensuring that drainage is effectively addressed. To this end:

(1) While we support the proposal that was circulated, we are opposed to the proposed addition that was suggested at the last neighborhood meeting of connecting Precita and Madrone to provide access San Ramon. There is no precedent for this, it is not needed, it will further confuse visitor traffic by sending cars attempting to access the POST trail head through the center of the neighborhood, and we do not believe that there is majority support for this proposal among neighborhood residents, most particularly those of us with homes that would be impacted by this proposal. M-1

(2) We are opposed to having the paving at both Madrone and Del Mar be any wider than the proposed 16 feet, and would prefer even narrower than that if possible. Neither Del Mar nor Madrone have ever been, nor are intended to become, major neighborhood arteries, neither is visitor serving, and 8-10 neighborhood children frequently play in this area. Given the work that is being planned at San Ramon as the major new artery both for improved road access, as well as for the new coastal trail alignment, we would like to see the narrowest roads possible at Madrone and Del Mar to help reduce speeds and preserve the neighborhood character. Every effort should be made to closely conform the paving work with the current traveled path alignments. M-2

(3) In addition to (2) above, we would like to see speed bumps installed on Del Mar Ave to help further reduce vehicle speeds as this is already an ongoing issue and will only get worse the speed increases that will result from the planned surface improvements. We would ask that this be planned at the outset as opposed to taking a "wait and see" approach as the risk to life and limb is otherwise too high (there have already been a number of close calls). M-3

Visibility improvements and/or stop signs along Del Mar should also be addressed as the southbound approach to Precita, in particular, is almost completely blind. M-4

(4) We would like to see much improved signage for visitors directing them to Seal Cove points of interest including the Distillery, POST trailhead and north Fitzgerald stairs without taking them through the center of our community. San Ramon should be clearly marked as the direct route to POST and back to Highway 1, and both Cypress and Los Banos should much more clearly be marked directing visitors to the Distillery and north Fitzgerald stairs. M-5

(5) We would like to see permeable paving at least at Del Mar Ave as this is a low lying area that is frequently flooded much of the year and at least two neighboring homes are on private wells, so keeping as much rain water on site and reducing carcinogenic asphalt run-off is of particular importance. Further, we would prefer to see vegetated bio swales used in lieu of impervious (concrete or asphalt) alternatives for the same reason. We would further point out that numerous snakes, frogs, and other small animals call this habitat home, so vegetated bio swales would better preserve their natural habitat than hard paving for drainage. M-6 M-7

Thank you,
Seal Cove residents

NAME	STREET ADDRESS	SIGNATURE
David & Roberta Vespremi	125 Precita Ave	
Pete Fingerhut	100 Del Mar Av	
JACKIE PARKER	50 MADRONE AVE	
Arthur Ching	50 Madrone Ave	
Danielle Moore	131 Madrone Ave	

1

LETTER M (cont.)

Alassandra Hratt	131 Madrone Ave	Alassandra Hratt
Corrine Dal Porto	131 Madrone Ave	Corrine Dal Porto
Marco Hratt	131 Madrone Ave	Marco Hratt
Lynn Messick	51 Precita Ave	L Messick
Tracy Beardsley	140 Precita Ave	Tracy Beardsley
Steve Beardsley	140 Precita Ave.	
Eileen Fingerhut	100 Del Mar Ave	
Dean Lauritzen	836 Park Ave	
Scott Meyer	856 Park Ave	
Wesley Brykailo (By Proxy)	31 Precita Ave	(By Proxy)

Seal Cove Neighborhood Petition

LETTER M (cont.)

October 6, 2012

While we applaud the dedication of resources and staff to improving neighborhood access for Seal Cove residents and visitors alike, the undersigned below would like to go on record with the following:

We, the undersigned below, have concerns about minimizing visitor traffic through the center of the neighborhood, keeping vehicle speeds down, and ensuring that drainage is effectively addressed. To this end:

(1) While we support the proposal that was circulated, we are opposed to the proposed addition that was suggested at the last neighborhood meeting of connecting Precita and Madrone to provide access San Ramon. There is no precedent for this, it is not needed, it will further confuse visitor traffic by sending cars attempting to access the POST trail head through the center of the neighborhood, and we do not believe that there is majority support for this proposal among neighborhood residents, most particularly those of us with homes that would be impacted by this proposal.

(2) We are opposed to having the paving at both Madrone and Del Mar be any wider than the proposed 16 feet, and would prefer even narrower than that if possible. Neither Del Mar nor Madrone have ever been, nor are intended to become, major neighborhood arteries, neither is visitor serving, and 8-10 neighborhood children frequently play in this area. Given the work that is being planned at San Ramon as the major new artery both for improved road access, as well as for the new coastal trail alignment, we would like to see the narrowest roads possible at Madrone and Del Mar to help reduce speeds and preserve the neighborhood character. Every effort should be made to closely conform the paving work with the current traveled path alignments. M-8

I do not agree to any speed bumps on Del Mar Ave or any neighbor street.

(3) In addition to (2) above, we would like to see speed bumps installed on Del Mar Ave to help further reduce vehicle speeds as this is already an ongoing issue and will only get worse the speed increases that will result from the planned surface improvements. We would ask that this be planned at the outset as opposed to taking a "wait and see" approach as the risk to life and limb is otherwise too high (there have already been a number of close calls). Visibility improvements and/or stop signs along Del Mar should also be addressed as the southbound approach to Precita, in particular, is almost completely blind.

(4) We would like to see much improved signage for visitors directing them to Seal Cove points of interest including the Distillery, POST trailhead and north Fitzgerald stairs without taking them through the center of our community. San Ramon should be clearly marked as the direct route to POST and back to Highway 1, and both Cypress and Los Banos should much more clearly be marked directing visitors to the Distillery and north Fitzgerald stairs.

(5) We would like to see permeable paving at least at Del Mar Ave as this is a low lying area that is frequently flooded much of the year and at least two neighboring homes are on private wells, so keeping as much rain water on site and reducing carcinogenic asphalt run-off is of particular importance. Further, we would prefer to see vegetated bio swales used in lieu of impervious (concrete or asphalt) alternatives for the same reason. We would further point out that numerous snakes, frogs, and other small animals call this habitat home, so vegetated bio swales would better preserve their natural habitat than hard paving for drainage.

Thank you,
Seal Cove residents

NAME	STREET ADDRESS	SIGNATURE
Irma Elias	76 Precita Ave.	Irma Elias
Joel Elias	76 Precita Ave.	J.E.

Response to Letter M
Signed Petition from Seal Cove Community Members [Submitted by David Vespremi]

Response to Comment M-1

Commenters express opposition to extensions of Precita Avenue and Madrone Avenue to connect with San Ramon Avenue.

This comment is noted. Commenters are referred to Draft IS/MND page 1-4, which describes the proposed roadway improvements. The road extensions cited in the comment are not proposed as part of this project.

Response to Comment M-2

Commenters express opposition to having paving at Madrone Avenue and Del Mar Avenue be wider than 16 feet, and would prefer the paving be narrower if possible.

This comment is noted. As discussed on Draft IS/MND page 1-4, the proposed roadway improvements would be constructed to widths of 16 feet. As discussed in Response to Comment K-8, this is the minimum width allowed by County road standards.

Response to Comment M-3

Commenters request the inclusion of traffic calming devices along Del Mar Avenue.

This comment is noted. Please see Response to Comment F-4.

Response to Comment M-4

Commenters request visibility improvements and/or stop signs along Del Mar Avenue.

This comment is noted. Please see Response to Comment G-2.

Response to Comment M-5

Commenters request improved signage for visitor traffic.

This comment is noted. Please see Response to Comment K-2.

Response to Comment M-6

Commenters request permeable paving along Del Mar Avenue because it is a low lying area that is frequently flooded and is near two neighborhood wells.

Permeable paving was considered for use in the proposed project. As discussed in Response to Comment L-13, soil tests performed for this project indicated low soil permeability throughout

the project area. This is evident from the ponding of water cited by commenter. As a result, the reductions in surface runoff from pervious versus conventional paving would not be expected to differ substantially. Furthermore, pervious paving would have been far more costly and not be expected to provide the same types of treatment function offered by the proposed biotreatment measures. As a result, the project design includes conventional paving with vegetated biotreatment measures to capture, treat, and provide for infiltration of stormwater runoff. Please also see Responses to Comments L-13 and L-15.

Response to Comment M-7

Commenters request vegetated bioswales be used for drainage, rather than asphalt or concrete gutters.

This comment is noted. As discussed on Draft IS/MND page 1-4, surface drainage features, consisting of bioretention facilities separated by check dams, would be constructed on either side of the new road surfaces to capture and treat stormwater runoff.

Response to Comment M-8

Commenters note that they are opposed to the installation of traffic calming devices on Del Mar Avenue or any other neighboring street.

This comment is noted. As indicated on Draft IS/MND page 1-4, traffic calming devices are not among the components of the proposed improvements.

SECTION 3
Revisions to the Draft IS/MND

This section includes revisions to the text of the Draft Initial Study/Mitigated Negative Declaration, in amendment form. The text revisions are in the order they appear in the Draft IS/MND and include text corrections and clarifications to the Draft IS/MND. Newly added text is shown in underline format, and deleted text is shown in strikeout format. In addition, an explanation of the reason for the text revision is provided.

Section 1.4.3 on page 1-6 (first paragraph, third sentence) of the Draft IS/MND is revised as follows:

> At the Seal Cove site, the proposed improvements would require removal of ~~one~~ two trees (one Monterey cypress and one stone pine) and trimming of up to ~~two~~ one trees ~~that have~~ has grown into the County ROW.

Section 2.1(a, b) on page 2-5 (first paragraph) of the Draft IS/MND is revised as follows:

> The visual character of the Seal Cove project site would be changed through the removal of one Monterey cypress tree and one stone pine tree, and trimming of ~~up to two~~ one other trees within the ROW. However, the project site is within a rural area that lies along a transition zone between coastal scrub and urban development, where the landscape is characterized by both low lying scrub vegetation and intermittent native and ornamental trees. Removal of ~~a~~ two trees and trimming ~~of up to two~~ one other trees would not open views to areas or structures that are currently screened from public views.

Section 2.1(c) on page 2-5 (second paragraph, first sentence) of the Draft IS/MND is revised as follows:

> As noted in 1a, above, removal of one Monterey cypress and one stone pine, and trimming of one trees within the ROW at the Seal Cove site would not be expected to significantly degrade the existing visual character or quality of the site.

Section 2.1(f) on page 2-6 (second paragraph, third sentence) of the Draft IS/MND is revised as follows:

> As such, even if the project were not exempt from the DR district regulations, removal from the Seal Cove site of the Monterey cypress and stone pine for the purpose of improving site drainage and surface runoff would be consistent with the DR district standards.

Section 2.4(e) on page 2-25 (third paragraph, first sentence) of the Draft IS/MND is revised as follows:

> Project activities would require the removal of one large Monterey cypress (*Cupressus macrocarpa*) tree from the right-of-way of San Ramon Avenue, and one large stone pine (*Pinus pinae*) from the right-of-way of Del Mar Avenue at the Seal Cove site.

Explanation

At the time of Draft IS/MND publication, the trees at the northeast corner of the Del Mar Drive and Precita Avenue intersection were thought to be a single pine tree whose limbs would require trimming to clear the right-of-way for the proposed improvements. A certified arborist's assessment has determined that what was previously thought to be a single tree is actually two separate trees – one stone pine and one Monterey pine. The stone pine has fallen and is encroaching into the right-of-way. As a result, it would be removed entirely as part of the project. This modification has not changed significance determinations for any impacts discussed in the Draft IS/MND.

APPENDIX A

Property Owner Update Letters (dated March 14, 2014 and April 14, 2014)

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COUNTY OF SAN MATEO
DEPARTMENT OF PUBLIC WORKS

James C. Porter
Director

County Government Center
555 County Center, 5th Floor
Redwood City, CA 94063
650-363-4100 T
650-361-8220 F
www.smcgov.org

April 14, 2014

Re: Road Improvements on Portions of Del Mar, Madrone, and San Ramon Avenues in the Seal Cove/Moss Beach Area – Project Update

Dear Property Owner:

On March 27, 2014, the public comment period for the draft environmental document ("Draft IS/MND") for this project closed.

As stated in our letter to you dated March 14, 2014, responses to the comments received by the Department of Public Works (Department) will be included with the Draft IS/MND for consideration by the County of San Mateo Planning Commission (Planning Commission). The Planning Commission is scheduled to consider certification of the Draft IS/MND and approval of a Coastal Development Permit at their meeting on April 23, 2014 at 10:00 am in the Board of Supervisors Chambers located at 400 County Center in Redwood City. The documents, including the responses to public comments, will be available on the Planning Commission website (http://planning.smcgov.org/public-hearings) on Thursday, April 17, 2014.

Based on our review of the comments, we thought it would be beneficial to provide additional or clarifying information at this time. Responses to the items listed below will also be included in the information available for the Planning Commission to consider.

Request for Field Markings

There was a request that the proposed road improvements be delineated in the field. The Department placed field markings on the above-mentioned streets during the week of April 7, 2014. As has been communicated previously, the proposed asphalt road surface is to be 16-feet wide centered within the public right-of-way with surface drainage features on both sides of each road. The inner-most markings placed in the field delineate the outside limits of the 16-foot wide asphalt road surface, which also marks the inner limits of the surface drainage features (biotreatment measures). The outer-most field markings delineate the outside edge of the surface drainage features. The enclosed "Typical Section" drawing depicts the road improvements within the road right of way and the locations of the field markings.

Request Consideration of Reduced Swale Sizes

To comply with the Municipal Regional Stormwater NPDES (National Pollutant Discharge Elimination System) Permit (Order R2-2009-0074) (MRP), issued by the California Regional Water Quality Control Board, specific biotreatment measures are required to be incorporated into the project.

The surface drainage features serve as the above-mentioned biotreatment measures and consist essentially of vegetated swales of

widths varying from 3.5 to 5.6 feet with depths ranging from 0.35 to 0.6 feet along the outside edges of the roadway. A series of rock check dams are to be constructed across the swales in specific locations to retain the stormwater runoff and help facilitate stormwater treatment and infiltration. ***The widths and depths of the swales have been designed to meet the required stormwater treatment volumes for compliance with Provision C.3 Requirements of the MRP.*** As stated in our letter dated March 14, 2014, additional stormwater measures will be constructed at an alternate location (Carlos Street between Virginia and California Avenues) to comply with the stormwater requirements as accommodating all stormwater measures within the project limits was found to be infeasible due to the need for even wider swales.

Request for Traffic Calming Measures and Signage

(1) Traffic Calming Measures: Traffic calming measures such as speed humps and stop signs are only installed if a traffic analysis performed by the Department indicates the road or intersection meets certain criteria. Such analysis cannot be conducted until the roads have been constructed; therefore, traffic calming measures cannot be considered for this project at this time.

Once the project has been completed and upon majority resident request, a traffic analysis of the streets by the Department can be conducted. However, in order to allow traffic to settle into more consistent traffic patterns, such an analysis would not be conducted for a minimum of three months after the completion of the project.

Speed Humps:
The County has a ***Residential Speed Control Device Program***, which requires the following:

a) The 85th percentile speed on a street is at least 32 MPH. The 85th percentile speed is the speed at and below which 85 percent of all vehicles traveled during traffic count surveys, and is considered the standard for traffic engineering practice.
b) Applies only to residential streets.
c) Cannot be placed on a curve or a steep slope.
d) Approved by emergency services and a majority of the residents.

Additional information regarding the County's Residential Speed Control Device Program requirements and process can be found on the Department's website under the "Information For Residents" tab at: http://publicworks.smcgov.org/.

Stop Signs:
The Department must perform a traffic analysis to determine if specific intersections meet required criteria before stop signs can be considered. An analysis regarding stop signs could be conducted after the project is completed and sufficient time has elapsed for traffic patterns to be established. Meanwhile, right of way rules still apply at uncontrolled intersections.

(2) No Parking Signs: This will be evaluated upon completion of the Project, but "No Parking Signs" will not be installed as part of the project. Parking restrictions are generally initiated or requested by property owners. Upon receipt of such a request, including a description of the specific problem, the Department's Traffic Section would evaluate the issue. After the roads have been constructed the Department will monitor the biotreatment measures for maintenance issues that may arise as a result of parking. If a no parking remedy is determined to be appropriate, the Department must make a formal recommendation to the Board of Supervisors for consideration and approval before parking restrictions can be implemented.

(3) Signage to Points of Interest: The Department may permit installation of these types of signs through an encroachment permit process. The request must come from the entity that is managing the specific resource to be signed. Such signs belong to the entity which was permitted to install the signs. The Department has no responsibility relating to the installation or maintenance of Points of Interest type signs.

If you have any questions, please contact Eric Chen, Wency Ng, or Gil Tourel of my staff at (650) 363-4100. They can also be reached via email at:

echen@smcgov.org
wng@smcgov.org
gtourel@smcgov.org

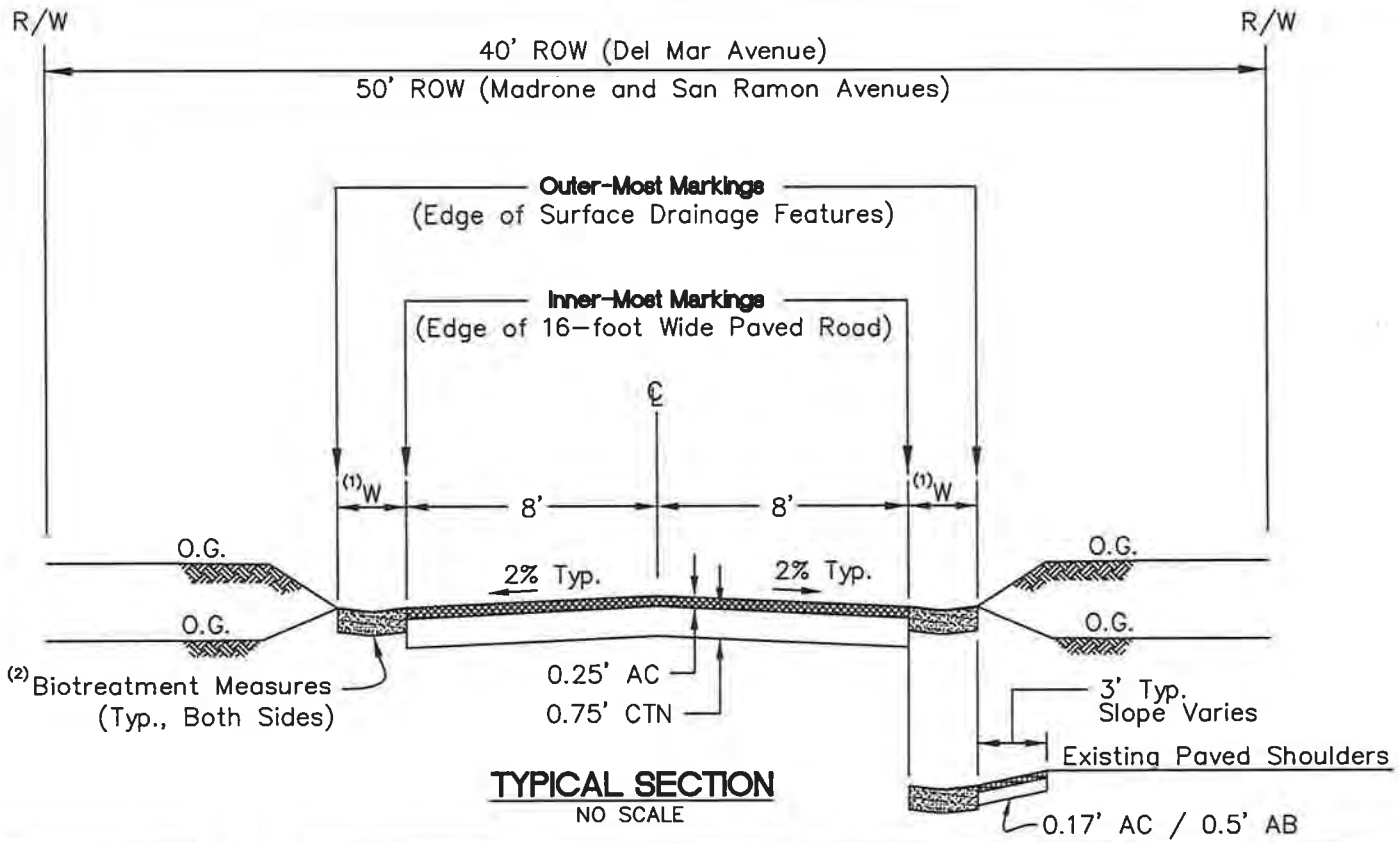
Very truly yours,

James C. Porter
Director of Public Works

JCP:AMS:GT:WN:EPC
[County Project No. P23G1]
f:\users\design\ldd\e4903000\docs\property owners (0 04 18a 24 25)\04b - seal cove po project update ltr 2.docx

Encl: "Typical Section" drawing

cc: Supervisor Don Horsley
Lisa Ketcham, Chair, MidCoast Community Council
P.O. Box 248, Moss Beach, CA 94038
Jim Eggemeyer, Director, Department of Planning and Building



TYPICAL SECTION

NO SCALE

LEGEND:

AB	Aggregate Base
AC	Asphalt Concrete
CTN	Cement-Treated Native
O.G.	Original Ground
ROW	Right-Of-Way
Typ.	Typical

NOTES:

(1)

Street	W
Del Mar Avenue	5.6'
Madrone Avenue	3.5'
San Ramon Avenue	5.0'

(2) The biotreatment measures are essentially self-retaining vegetated swales consisting of 0.17 Mulch over 0.50' of Amended Soil, with Rock Check Dams as needed and spaced at various intervals. Rock Check Dam spacing is dependent upon the slope of the road – the greater the road slope, the more frequent the interval.

FILENAME: F:\USERS\DESIGN\LDD\E4903000\Dwg\Details\PO LTR E4903 TYPICAL SECTION.dwg

DESIGNED BY: EPC	SCALE: AS SHOWN
CHECKED BY: WN	DATE: APRIL 2014
DRAWN BY: EPC	FILE NO: 1/4903

SEAL COVE ROAD IMPROVEMENTS ON
DEL MAR AVENUE, MADRON AVENUE AND SAN RAMON AVENUE

TYPICAL SECTION

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
SAN MATEO COUNTY

555 COUNTY CENTER, 5TH FLOOR
REDWOOD CITY, CALIFORNIA 94063-1665

COUNTY OF SAN MATEO

BOARD OF SUPERVISORS
DAVE PINE
CAROLE GROOM
DON HORSLEY
WARREN SLOCUM
ADRIENNE J. TISSIER

Department of Public Works

JAMES C. PORTER
DIRECTOR

555 COUNTY CENTER, 5TH FLOOR • REDWOOD CITY • CALIFORNIA 94063-1665 • PHONE (650) 363-4100 • FAX (650) 361-8220

March 14, 2014

Dear Property Owner:

Re: Road Improvements on Portions of Del Mar, Madrone, and San Ramon Avenues in the Seal Cove/Moss Beach Area – Project Update

On September 24, 2012 the Department of Public Works (Department) held a community meeting regarding the above-mentioned project (Project). Drawings depicting the conceptual road improvements for the three road segments were included in the meeting notification and were presented during the meeting. The Department has completed the preliminary design and environmental document for the proposed road improvements. Enclosed is a "Project Map" that illustrates the road segments included in the Project, for your reference.

This letter is meant to inform the property owners regarding the progress on this project, the modifications to the design based on stormwater requirements, the availability of the environmental document for review and comment, and the schedule going forward.

Seal Cove Site - Del Mar, Madrone, and San Ramon Avenues:
Consistent with the information presented at the community meeting, the asphalt road surface is proposed to be 16-feet wide centered within the public right-of-way with surface drainage features on both sides of each road.

The 16-foot wide roadway will be constructed with an asphalt surface underlain with a cement-treated base material (see enclosed "Typical Section"). Additionally, to comply with the Municipal Regional Stormwater NPDES (National Pollutant Discharge Elimination System) Permit (Order R2-2009-0074) (MRP), issued by the California Regional Water Quality Control Board, specific biotreatment measures (measures) are required to be incorporated into the project. These measures consist essentially of vegetated swales of widths varying from 3.5 to 5.6 feet and depths of 0.35 to 0.6 feet along the outside edges of the roadway to treat stormwater runoff. A series of rock check dams are to be constructed across the swales in specific locations to retain the stormwater runoff and help facilitate stormwater treatment and infiltration. The widths and depths of the swales were designed to accommodate the required stormwater treatment volumes for compliance with the MRP. These measures will limit parking along the shoulder areas where the measures are constructed. We intend to monitor the measures after construction to determine whether parking restrictions must be put into effect.

The Project's preliminary design plans have been posted to the Department's website, under the "Seal Cove/Moss Beach Roads Improvement Project" listed on the "General Information" tab at: http://www.smcgov.org/portal/site/publicworks. Details of these biotreatment measures can be found in this location as well.

Carlos Street Site:

The MRP requires that in certain instances stormwater measures with specific treatment capacities must be constructed based upon the impervious pavement to be constructed. The Department evaluated the requirements for this Project and determined that not all of the required stormwater measures could feasibly be accommodated or incorporated within the Project limits or along the three road segments. To provide the additional stormwater measures required, the Department is proposing to replace approximately 1,100-square-feet of paved area within the County road right-of-way on Carlos Street between Virginia and California Avenues with a combination of vegetated biotreatment facilities and pervious paving.

Environmental Document – Draft Initial Study/Mitigated Negative Declaration

Pursuant to the State of California Public Resources Code and the "Guidelines for Implementation of the California Environmental Quality Act of 1970" as amended to date, the County of San Mateo has prepared a Draft Initial Study/Mitigated Negative Declaration (IS/MND) on the Project. The public comment period of the Draft IS/MND is from February 25, 2014 to March 27, 2014 at 5:00pm. The Draft IS/MND is available online at the Department's website, under the "Seal Cove/Moss Beach Roads Improvement Project" listed on the "General Information" tab at: http://www.smcgov.org/portal/site/publicworks. A copy of the Notice of Public Review and Intent to Adopt a Proposed Mitigated Negative Declaration is also posted at the same location.

Project Schedule

Following the comment period for the Draft IS/MND, we plan to have the County Planning Commission consider approval of the Draft IS/MND and a Coastal Development Permit for the Project at their April 23, 2014 meeting. The Department will prepare responses to the comments received on the Draft IS/MND for consideration by the County Planning Commission. After approval of these documents, the Department will finalize the Project Plans and Specifications and advertise the Project for receipt of formal bids in June 2014. Based on the proceeding schedule, we anticipate that construction will begin in August 2014. We have estimated the number of construction working days to be 45, in which the project would be completed by October 2014, absent an appeal of the Coastal Development Permit application.

Depending upon the feedback received from this letter and the Draft IS/MND, the Department may schedule a community meeting to discuss comments, concerns, or questions related to the Project.

If you have any questions, please contact Eric Chen, Wency Ng, or Zack Azzari of my staff at (650) 363-4100. They can also be reached via email at:

echen@smcgov.org
wng@smcgov.org
zazzari@smcgov.org

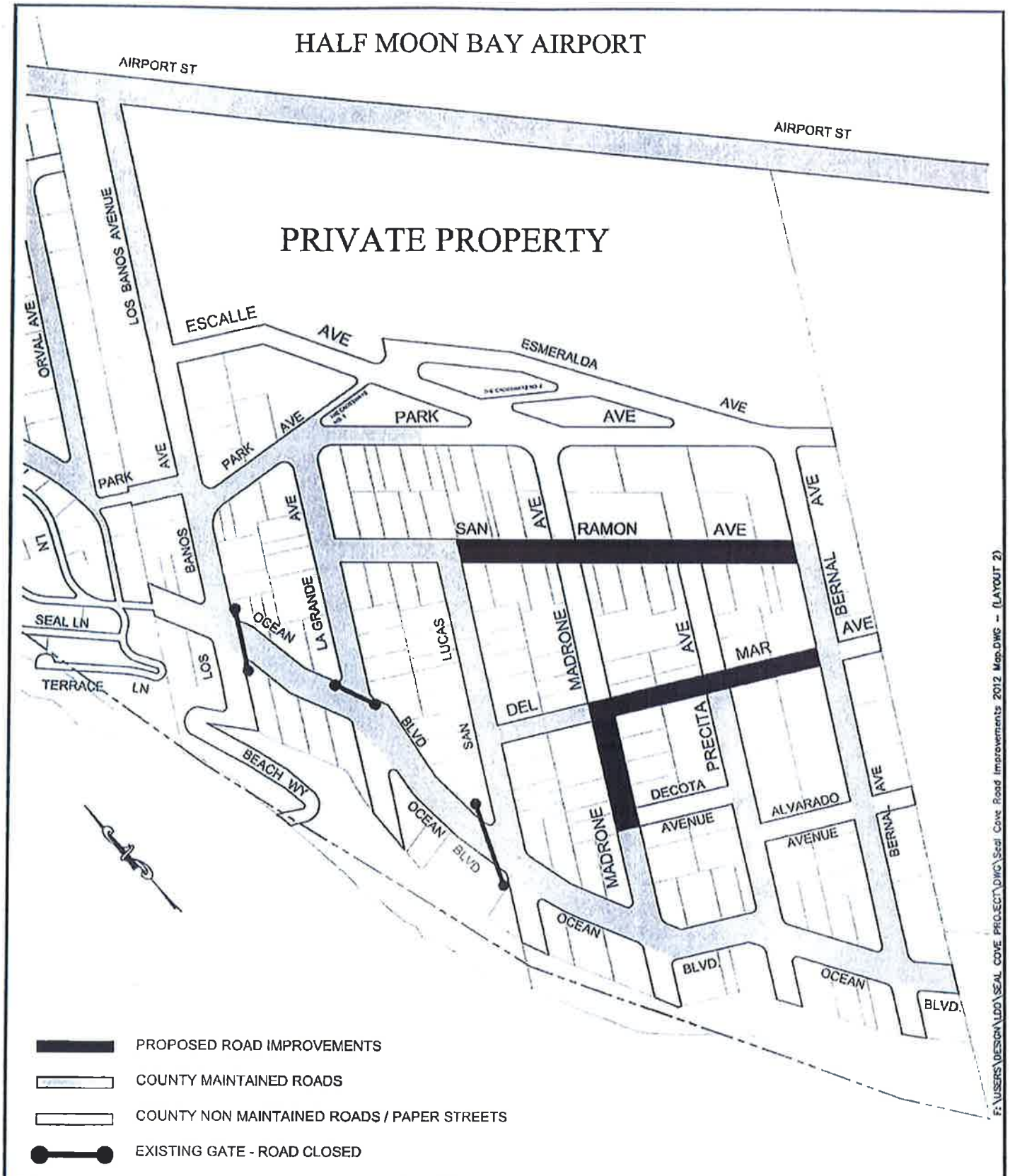
Very truly yours,

James. C Porter
Director of Public Works

JCP:AMS:WN:EPC
f:\users\design\ldd\e4903000\docs\property owners (0 04 05b 18a 24 25)\04 - seal cove po project update ltr.docx

Encl: Project Map
Typical Section

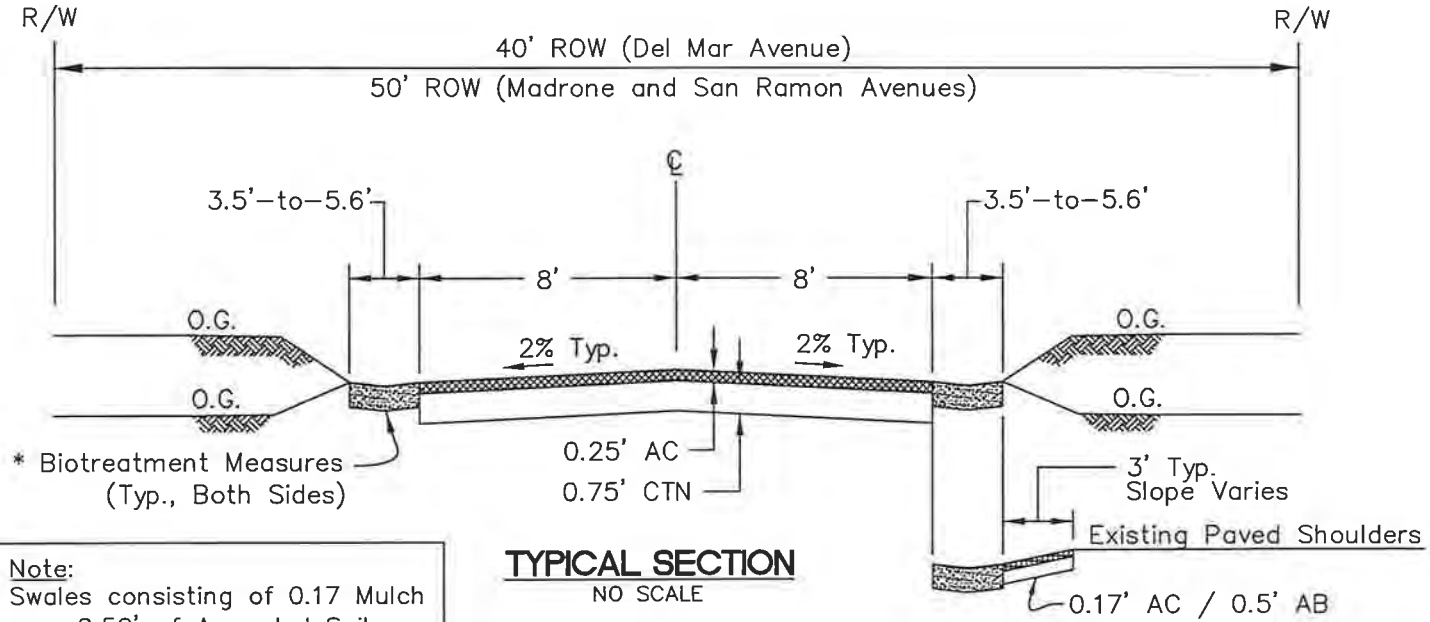
cc: Supervisor Don Horsley
Lisa Ketcham, Chair, MidCoast Community Council
P.O. Box 248, Moss Beach, CA 94038
Jim Eggemeyer, Director, Department of Planning and Building



	DESIGNED BY: JS	SEAL COVE ROAD IMPROVEMENT PROJECT	SCALE: AS SHOWN
	CHECKED BY: WN	DEL MAR AVENUE, MADRONE AVENUE AND SAN RAMON AVENUE	DATE:
	DRAWN BY: JS	PROJECT MAP	FILE NO: 1/SCP

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
SAN MATEO COUNTY

555 COUNTY CENTER, 5TH FLOOR
REDWOOD CITY, CALIFORNIA 94063-1665



TYPICAL SECTION

NO SCALE

* Note:
Swales consisting of 0.17 Mulch over 0.50' of Amended Soil, with Rock Check Dams spaced at various intervals, as needed.

Rock Check Dam spacing is dependent upon the slope of the road – the greater the road slope, the more frequent the interval.

LEGEND:

AB	Aggregate Base
AC	Asphalt Concrete
CTN	Cement–Treated Native
O.G.	Original Ground
ROW	Right–Of–Way
Typ.	Typical

FILENAME: F:\USERS\DESIGN\LDD\E4903000\Dwg\Details\PO LTR E4903 TYPICAL SECTION.dwg

DESIGNED BY: EPC	SEAL COVE ROAD IMPROVEMENTS ON	SCALE: AS SHOWN
CHECKED BY: WN	DEL AMR AVENUE, MADRON AVENUE AND SAN RAMON AVENUE	DATE:
DRAWN BY: EPC	TYPICAL SECTION	FILE NO: 1/4903

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
SAN MATEO COUNTY

555 COUNTY CENTER, 5TH FLOOR
REDWOOD CITY, CALIFORNIA 94063–1665

bcc: Joseph A. LoCoco, Deputy Director, Road Services
Ann M. Stillman, Deputy Director, Engineering and Resource Protection
Zack Azzari, Acting Principal Civil Engineer, Engineering and Construction
Karen E. Pachmayer, Principal Civil Engineer, Engineering and Construction
Wency Ng, Senior Civil Engineer, Project Development and Design
Gilles Tourel, Senior Civil Engineer, Project Development and Design
Eric Chen, Associate Civil Engineer, Project Development and Design

APPENDIX B

Revised Figure 2-1

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SOURCE: ESRI, 2013; NAIP, 2012

Moss Beach/Seal Cove Road Improvements Project . 120603.02

Figure 2

Project Area Map

APPENDIX C
Soil Permeability Test

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DEL MAR AVENUE

Hydraulic Conductivity
ASTM D 5084
Method C: Falling Head Rising Tailwater

Job No:	011-541	**Boring:**	DM-1/DM-2	**Date:**	04/26/13
Client:	BAGG	**Sample:**		**By:**	MD/PJ
Project:	COUSM-13-02	**Depth, ft.:**		**Remolded:**	

Visual Classification: Dark Brown Silty SAND w/ organics (slightly plastic)

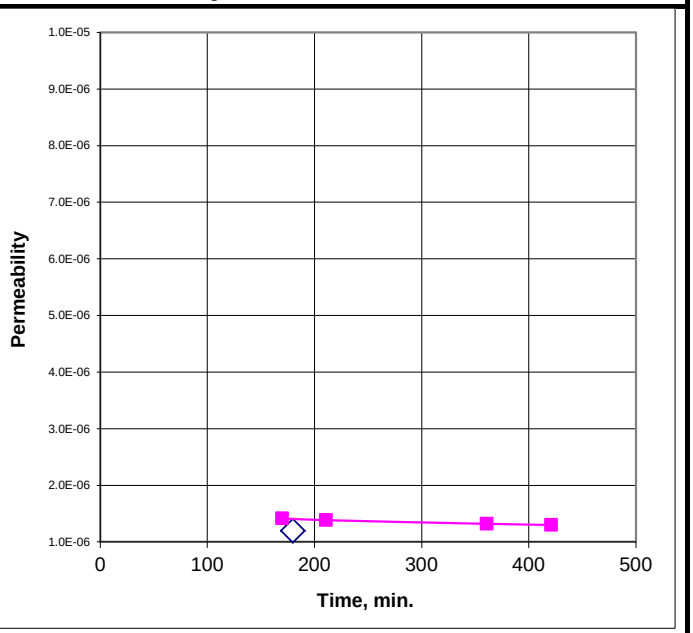
Max Sample Pressures, psi:

Cell:	Bottom	Top	Avg. Sigma3
74	69.5	68.5	5

B: = >0.95 **("B" is an indication of saturation)**

Max Hydraulic Gradient: = 13

Date	Minutes	Head, (cm)	K,cm/sec
4/22/2013	0.00	27.00	Start of Test
4/22/2013	180.00	24.10	1.2E-06
4/24/2013	170.00	85.83	1.4E-06
4/24/2013	211.00	83.63	1.4E-06
4/24/2013	361.00	76.03	1.3E-06
4/24/2013	421.00	73.33	1.3E-06



Average Hydraulic Conductivity: 1.E-06 cm/sec

Sample Data:	Initial (As-Received)		Final (At-Test)
Height, in	3.00		3.00
Diameter, in	2.38		2.38
Area, in2	4.43		4.43
Volume in3	13.29		13.29
Total Volume, cc	217.8		217.8
Volume Solids, cc	139.4		139.4
Volume Voids, cc	78.4		78.4
Void Ratio	0.6		0.6
Total Porosity, %	36.0		36.0
Air-Filled Porosity (θa),%	18.7		0.4
Water-Filled Porosity (θw),%	17.3		35.6
Saturation, %	48.1		99.0
Specific Gravity	2.65	Assumed	2.65
Wet Weight, gm	407.1		447.0
Dry Weight, gm	369.4		369.4
Tare, gm	0.00		0.00
Moisture, %	10.2		21.0
Wet Bulk Density, pcf	116.6		128.1
Dry Bulk Density, pcf	105.8		105.8
Wet Bulk Dens.ρb, (g/cm^3)	1.87		2.05
Dry Bulk Dens.ρb, (g/cm^3)	1.70		1.70

Remarks: Light compactive effort.

MADRONE AVENUE

Hydraulic Conductivity
ASTM D 5084
Method C: Falling Head Rising Tailwater

Job No:	011-548	**Boring:**	M-3/M-4	**Date:**	05/10/13
Client:	BAGG	**Sample:**		**By:**	MD/PJ
Project:	COUSM-13-02	**Depth, ft.:**		**Remolded:**	Light compactive effort near opt.

Visual Classification: Dark Brown Clayey SAND w/ Gravel & organics/Silty SAND (slightly plastic) w/ Gravel & organics

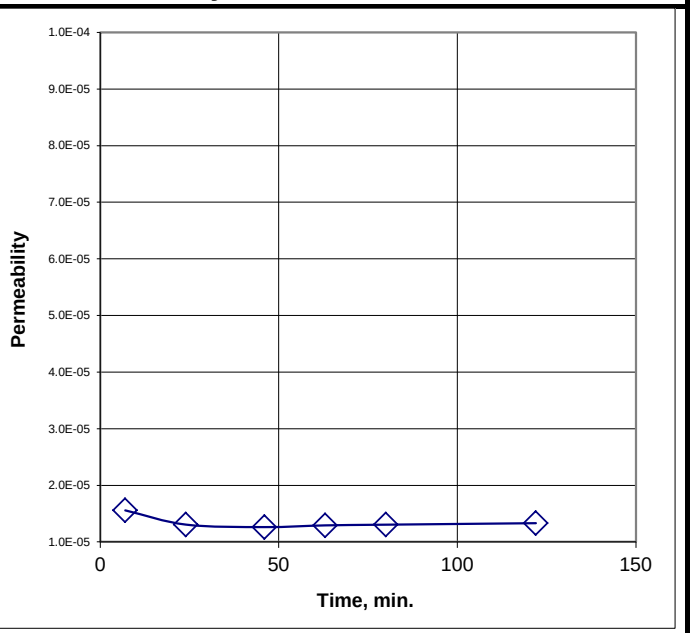
Max Sample Pressures, psi:

Cell:	Bottom	Top	Avg. Sigma3
74	69	69	5

B: = >0.95 **("B" is an indication of saturation)**

Max Hydraulic Gradient: = 3

Date	Minutes	Head, (cm)	K,cm/sec
5/7/2013	0.00	27.00	Start of Test
5/7/2013	7.00	25.50	1.6E-05
5/7/2013	24.00	22.90	1.3E-05
5/7/2013	46.00	19.90	1.3E-05
5/7/2013	63.00	17.60	1.3E-05
5/7/2013	80.00	15.60	1.3E-05
5/7/2013	122.00	11.50	1.3E-05



Average Hydraulic Conductivity: 1.E-05 cm/sec

Sample Data:	Initial (As-Received)		Final (At-Test)
Height, in	3.00		3.05
Diameter, in	2.38		2.38
Area, in2	4.43		4.46
Volume in3	13.29		13.60
Total Volume, cc	217.8		222.9
Volume Solids, cc	130.2		130.2
Volume Voids, cc	87.6		92.8
Void Ratio	0.7		0.7
Total Porosity, %	40.2		41.6
Air-Filled Porosity (θa),%	17.9		2.1
Water-Filled Porosity (θw),%	22.3		39.5
Saturation, %	55.4		95.1
Specific Gravity	2.70	Assumed	2.70
Wet Weight, gm	400.0		439.6
Dry Weight, gm	351.4		351.4
Tare, gm	0.00		0.00
Moisture, %	13.8		25.1
Wet Bulk Density, pcf	114.6		123.1
Dry Bulk Density, pcf	100.7		98.4
Wet Bulk Dens.ρb, (g/cm^3)	1.84		1.97
Dry Bulk Dens.ρb, (g/cm^3)	1.61		1.58

Remarks: Due to stress rellief cracks after the test final density is approximate.

SAN RAMON AVENUE

Hydraulic Conductivity
ASTM D 5084
Method C: Falling Head Rising Tailwater

Job No:	011-541	**Boring:**	SR-1/SR-2	**Date:**	04/23/13
Client:	BAGG	**Sample:**		**By:**	MD/PJ
Project:	COUSM-13-02	**Depth, ft.:**		**Remolded:**	

Visual Classification: Dark Brown Organic Silty SAND w/ Gravel (slightly plastic)

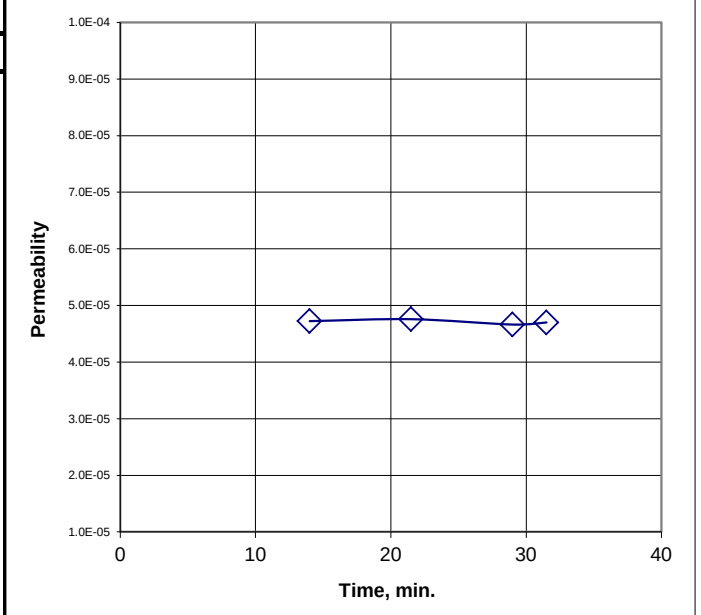
Max Sample Pressures, psi:

Cell:	Bottom	Top	Avg. Sigma3
53.5	48.5	48.5	5

B: = >0.95 **("B" is an indication of saturation)**

Max Hydraulic Gradient: = 8

Date	Minutes	Head, (in)	K,cm/sec
4/22/2013	0.00	24.00	Start of Test
4/22/2013	14.00	15.00	4.7E-05
4/22/2013	21.50	11.60	4.8E-05
4/22/2013	29.00	9.20	4.7E-05
4/22/2013	31.50	8.40	4.7E-05



Average Hydraulic Conductivity: 5.E-05 cm/sec

Sample Data:	Initial (As-Received)		Final (At-Test)
Height, in	3.00		2.95
Diameter, in	2.38		2.41
Area, in2	4.43		4.56
Volume in3	13.29		13.46
Total Volume, cc	217.8		220.5
Volume Solids, cc	146.3		146.3
Volume Voids, cc	71.5		74.2
Void Ratio	0.5		0.5
Total Porosity, %	32.8		33.6
Air-Filled Porosity (θa),%	18.5		1.3
Water-Filled Porosity (θw),%	14.3		32.4
Saturation, %	43.5		96.2
Specific Gravity	2.50	Assumed	2.50
Wet Weight, gm	396.9		437.2
Dry Weight, gm	365.8		365.8
Tare, gm	0.00		0.00
Moisture, %	8.5		19.5
Wet Bulk Density, pcf	113.7		123.7
Dry Bulk Density, pcf	104.8		103.5
Wet Bulk Dens.ρb, (g/cm^3)	1.82		1.98
Dry Bulk Dens.ρb, (g/cm^3)	1.68		1.66

Remarks: Light compactive effort. The sample slumped after the test. Therefore the post-test dimensions, and all associated values, are approximate.

County of San Mateo - Planning and Building Department

ATTACHMENT F

SAN MATEO COUNTY CALIFORNIA

PRELIMINARY PLANS
NOT APPROVED FOR CONSTRUCTION

PRELIMINARY PLANS
NOT APPROVED FOR CONSTRUCTION

ROAD IMPROVEMENTS ON PORTIONS OF DEL MAR, MADRONE AND SAN RAMON AVENUES IN THE SEAL COVE/MOSS BEACH AREA (COUNTY ROAD NOS. 1234, 1226 AND 1225)

TOTAL PROJECT APPROXIMATELY 1,600 FEET IN LENGTH

(COUNTY PROJECT NO. P23G1)

TO BE SUPPLEMENTED BY STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS DATED MAY 2006 AND ADOPTED BY SAN MATEO COUNTY, NOVEMBER 14, 2006, BY RESOLUTION NO. 068389

REGISTERED PROFESSIONAL ENGINEER
JAMES C. PORTER
C 48056
EXPIRES 12/31/13
CIVIL
STATE OF CALIFORNIA

APPROVED:

DATE: _____

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2013

SHEET INDEX:

1. TITLE SHEET AND TYPICAL SECTION
2. PLAN & PROFILE: MADRONE AVENUE
3. PLAN & PROFILE: DEL MAR AVENUE
4–5. PLAN & PROFILE: SAN RAMON AVENUE
6. DETAILS: DRAINAGE
7. DETAILS: UTILITY
8. DETAILS: UTILITY
9. DETAILS: MISCELLANEOUS

FIELD BOOKS:

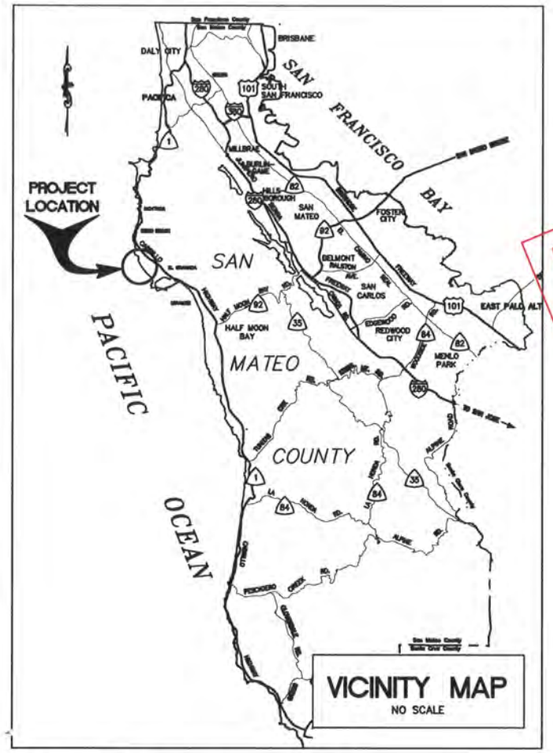
781–5 (PAGE 7)

BASIS OF BEARING:

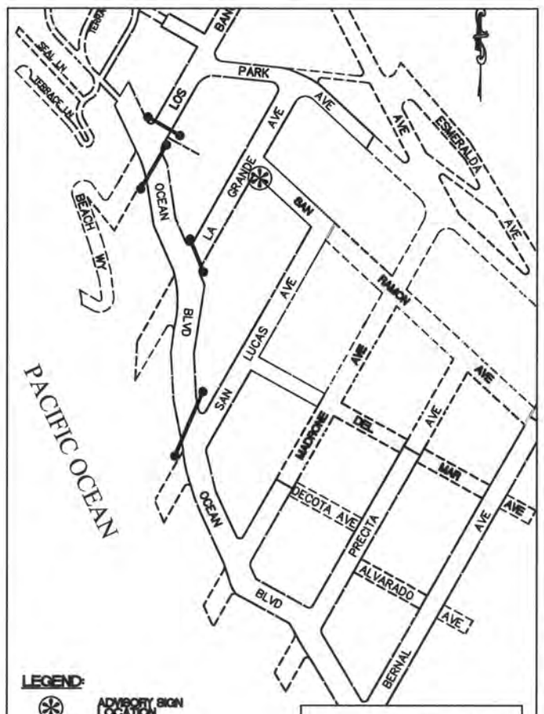
CENTERLINE OF BERNAL AVENUE
(BETWEEN 2 FOUND MONUMENTS)
N28–30E AS SHOWN ON 6 MAPS 19–20

BENCH MARK LOCATION and ELEVATION (NGVD DATUM):

¾–INCH PIPE WITH SMCO PLASTIC PLUG AT BERNAL AVENUE AND DEL MAR AVENUE (FOUND BURIED 6 INCHES DOWN);
ELEVATION = 112.49'
PER FIELD BOOK 781–5, PAGE 7
(DATUM LISTED AS UNKNOWN)



VICINITY MAP
NO SCALE



LOCATION MAP
NO SCALE

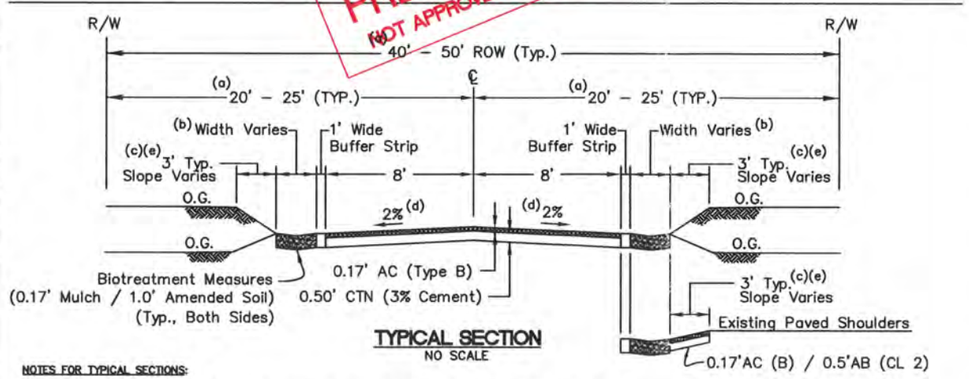
ABBREVIATIONS:

AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
BC	BEGIN CURVE
BM	BIOTREATMENT MEASURE
BVCS	BEGIN VERTICAL CURVE STATION
BVCE	BEGIN VERTICAL CURVE ELEVATION
CONC.	CONCRETE
℄	CENTERLINE
CL	CLASS
CTN	CEMENT TREATED NATIVE
CTR	CENTER
EC	END OF CURVE
EL, ELEV	ELEVATION
ELEC	ELECTRIC, ELECTRICAL
EP	EDGE OF EXISTING PAVEMENT
ETW	EDGE OF EXISTING TRAVELWAY
EVCS	END VERTICAL CURVE STATION
EVCE	END VERTICAL CURVE ELEVATION
EX, EXIST.	EXISTING
FG	FINISHED GROUND
FH	FIRE HYDRANT
FL	FLOWLINE
G, g	GAS
GB	GRADE BREAK
GRND	GROUND
GV	GAS VALVE
INV	INVERT
ISP	INTERNET SERVICE PROVIDER
LT, L	LEFT
LF	LINEAR FOOT
MAX	MAXIMUM
MIN	MINIMUM
MISC	MISCELLANEOUS
OG	ORIGINAL GROUND
PCC	PORTLAND CEMENT CONCRETE
PR	PROPOSED
PT	POINT
PVI	POINT OF VERTICAL INTERSECTION
R =	RADIUS OF HORIZONTAL CURVE
R, RT	RIGHT
R/W, ROW	RIGHT–OF–WAY
REF	REFERENCE
S	SLOPE
SHT	SHEET
SPEC	SPECIFICATION
SS	SANITARY SEWER MAIN
SSFM	SANITARY SEWER FORCE MAIN
SSMH	SANITARY SEWER MANHOLE
STA	STATION
STD	STANDARD
TRANS	TRANSITION
TYP	TYPICAL
TBM	TOP OF BIOTREATMENT MEASURE
UND	UNDERGROUND
UNK	UNKNOWN
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
W	WATER
WM	WATER METER
WV	WATER VALVE

LEGEND:

ATT	AT&T LINE (EX UNDERGROUND)
CATV	COMCAST LINE (EX UNDERGROUND)
E	ELECTRICAL LINE (EX UNDERGROUND)
E E E E	ELECTRICAL SERVICE (EX UNDERGROUND)
G G	GAS LINE (EX)
g g g g	GAS SERVICE (EX)
SS SS	SANITARY SEWER MAIN (EX)
SSFM	SANITARY SEWER FORCE MAIN (EX)
W W	WATER LINE (EX)
X X	FENCE
	DRIVEWAY CROSSING: AC
	DRIVEWAY CROSSING: CONCRETE
	DRIVEWAY CROSSING: GRAVEL
	MISCELLANEOUS AC PAVING
	CL 2 AB
	DRAIN ROCK (3/4" CRUSHED)
	DRIVEWAY NUMBER
100	HOUSE NUMBER
(100.00)	EXISTING ELEVATION
100.00	PROPOSED ELEVATION
	JOINT UTILITY POLE
GV	GAS VALVE
WM	WATER METER
WV	WATER VALVE
SSMH	SANITARY SEWER MANHOLE
	DETAIL NO. / SHEET NO.
	EXISTING TREE
FH	FIRE HYDRANT
	MAILBOX
	SURVEY MONUMENT OR SPIKE & WASHER
	FLEXIBLE SEWER MAIN DELINEATOR
	SIGN
	EXISTING SWALE FLOWLINE
	NEW SWALE FLOWLINE
	ABOVE–GROUND UTILITY VAULT WITH BOLLARD PROTECTION

PRELIMINARY PLANS
NOT APPROVED FOR CONSTRUCTION



TYPICAL SECTION
NO SCALE

NOTES FOR TYPICAL SECTIONS:

(a) ROW WIDTHS ARE 50 FEET FOR MADRONE AND SAN RAMON AVENUES, AND 40 FEET FOR DEL MAR AVENUE.

(b) WIDTH OF BIOTREATMENT MEASURES VARY PER STREET, AS FOLLOWS: 3.5' FOR MADRONE AVENUE, 5.6' FOR DEL MAR AVENUE, AND 5.0' FOR SAN RAMON AVENUE.

(c) SLOPES SHALL BE AS SHOWN ABOVE, UNLESS OTHERWISE SHOWN ON THE PLANS.

(d) DRIVEWAY CROSSINGS (CONCRETE, DIRT, GRAVEL AND AC) SHALL BE CONSISTENT SWITH THE DRIVEWAY CROSSING DETAILS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER. CONTRACTOR SHALL NOT PROCEED WITH DRIVEWAY CROSSING WORK PRIOR TO APPROVAL BY THE ENGINEER. ALL AREAS BEYOND SAID DRIVEWAY CROSSING LIMITS THAT ARE DAMAGED BY THE CONTRACTOR'S OPERATIONS, AS DETERMINED BY THE ENGINEER, SHALL BE REPAIRED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

(e) DRIVEWAY SURFACE MATERIALS SHALL BE REPLACED IN KIND. THE MAXIMUM SLOPE FOR DRIVEWAYS SHALL BE 20%. DRIVEWAY CROSSING LIMITS MAY VARY FROM THE LIMITS OF THE PAVED SHOULDER AREAS.

GENERAL NOTES:

1. CONTRACTOR SHALL CONFINE HIS OPERATIONS AND ACTIVITIES WITHIN THE PROJECT LIMITS, CONSISTING OF ROAD RIGHT–OF–WAY AND/OR PROJECT CONFORMS, AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER.
2. CONTINUOUS DUST CONTROL SHALL BE PROVIDED, AS REQUIRED BY SECTION 17, "DEVELOP AND APPLY WATER," OF THE PROJECT SPECIAL PROVISIONS AND THE DIRECTIONS OF THE ENGINEER. A WATER TRAILER SHALL BE PRESENT AND OPERATIONAL ON SITE DURING CONSTRUCTION.
3. LOCATIONS AND DEPTHS OF EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE UTILITIES TO DETERMINE EXACT LOCATIONS AND DEPTHS. CONTRACTOR SHALL CALL "UNDERGROUND SERVICE ALERT" (U.S.A.) AT 1–800–642–2444 AT LEAST TWO (2) WORKING DAYS BEFORE EXCAVATION WORK IS TO BEGIN. WHEN CALLING, CONTRACTOR SHALL BE PREPARED TO GIVE THE LOCATION AND NATURE OF WORK, START DATE, AND COMPANY NAME, ADDRESS AND TELEPHONE NUMBER. CONTRACTOR SHALL PROVIDE COUNTY WITH DOCUMENTATION, SHOWING ITS COORDINATION WITH U.S.A.
4. PLANS MAY NOT SHOW ALL EXISTING WATER LINES, GAS LINES, SANITARY SEWER LATERALS, AND/OR OTHER UNDERGROUND UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION AND PRESERVATION OF ALL SUCH FACILITIES, AS SHOWN ON THE PLANS OR IDENTIFIED BY U.S.A., WHICH ARE NOT TO BE RELOCATED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CAREFULLY HAND DIG AREAS OF SUSPECTED EXISTENCE OF UTILITIES, NOT SHOWN ON THE PLANS, AT NO EXTRA COST TO THE COUNTY AND AS DIRECTED BY THE ENGINEER.
5. WHEN DIRECTED BY THE ENGINEER, CUT AND FILL SLOPE RATIOS SHALL BE VARIED TO AVOID TREES OR OTHER EXISTING IMPROVEMENTS.
6. CONTRACTOR IS ADVISED THAT EXCAVATION MAY CONFLICT WITH WATER LINES, GAS LINES, SANITARY SEWER LATERALS, AND/OR OTHER UNDERGROUND UTILITIES. ANY DAMAGE TO EXISTING FACILITIES CAUSED BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED THEREFORE.
7. DRIVEWAY OPENINGS AND CROSSING LOCATIONS SHOWN ARE APPROXIMATE ONLY. EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER. DRIVEWAY CROSSING LIMITS VARY, AND SHALL BE AS SHOWN ON THE PLANS, UNLESS OTHERWISE ADJUSTED BY THE ENGINEER.
8. VEGETATION AND IMPROVEMENTS (INCLUDING FENCES) WHICH ARE DESIGNATED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR. VEGETATION AND IMPROVEMENTS (INCLUDING FENCES) SHALL BE REMOVED ONLY WHEN DIRECTED, IN WRITING, BY THE ENGINEER. NO TREES, VEGETATION OR IMPROVEMENTS (INCLUDING FENCES) SHALL BE REMOVED WITHOUT PRIOR WRITTEN CONSENT AND APPROVAL FROM THE ENGINEER. REFERENCE IS MADE TO SECTION 11 , "MOBILIZATION," OF THE PROJECT SPECIAL PROVISIONS REGARDING REQUIREMENTS FOR ADVANCE NOTIFICATION OF PROPERTY OWNERS.
9. PROJECT SURVEY AND STAKING SERVICES SHALL BE AS PROVIDED FOR IN THE SPECIAL PROVISIONS. CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 100, "CONSTRUCTION STAKING AND LAYOUT," OF THE PROJECT SPECIAL PROVISIONS.
10. CONTRACTOR SHALL EXERCISE CARE WHEN EXCAVATING NEAR TREES AND ROOTS OF TREES TO REMAIN. REFERENCE IS MADE TO SECTION 19, "ROADWAY EXCAVATION," OF THE PROJECT SPECIAL PROVISIONS.

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COUNTY OF SAN MATEO PUBLIC WORKS

REVISION	DATE		
		DESIGNED BY: EPC	ROAD IMPROVEMENTS ON PORTIONS OF DEL MAR, MADRONE, AND SAN RAMON AVENUES IN THE SEAL COVE/MOSS BEACH AREA
		CHECKED BY: WN	TITLE SHEET AND TYPICAL SECTION
		DRAWN BY: EPC	

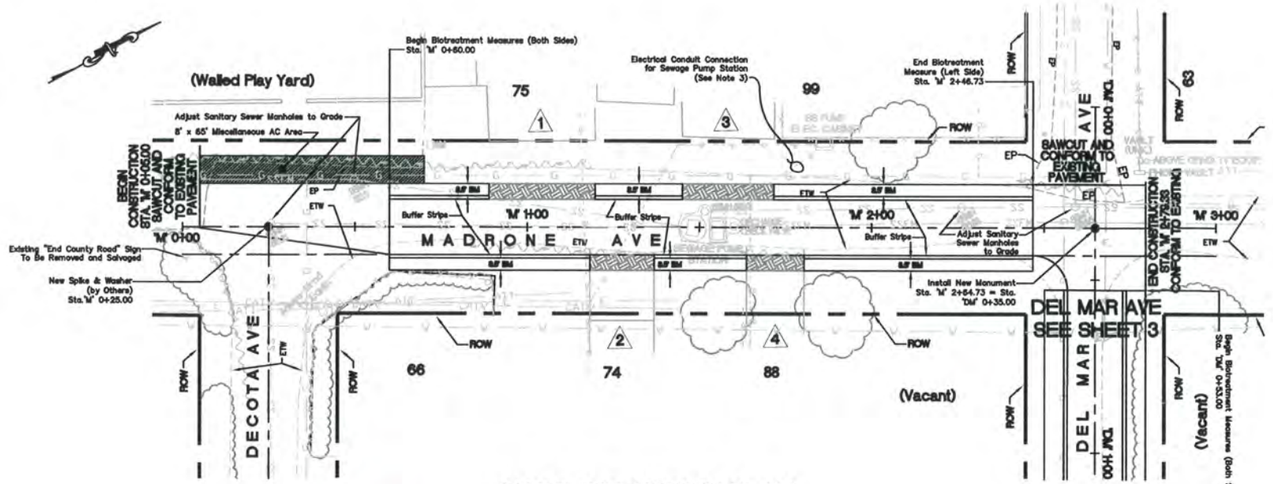
SCALE: AS SHOWN
DATE: 01/23/2014
FILE NO.: 1/4903

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
SAN MATEO COUNTY

555 COUNTY CENTER, 5th FLOOR
REDWOOD CITY, CALIFORNIA 94063

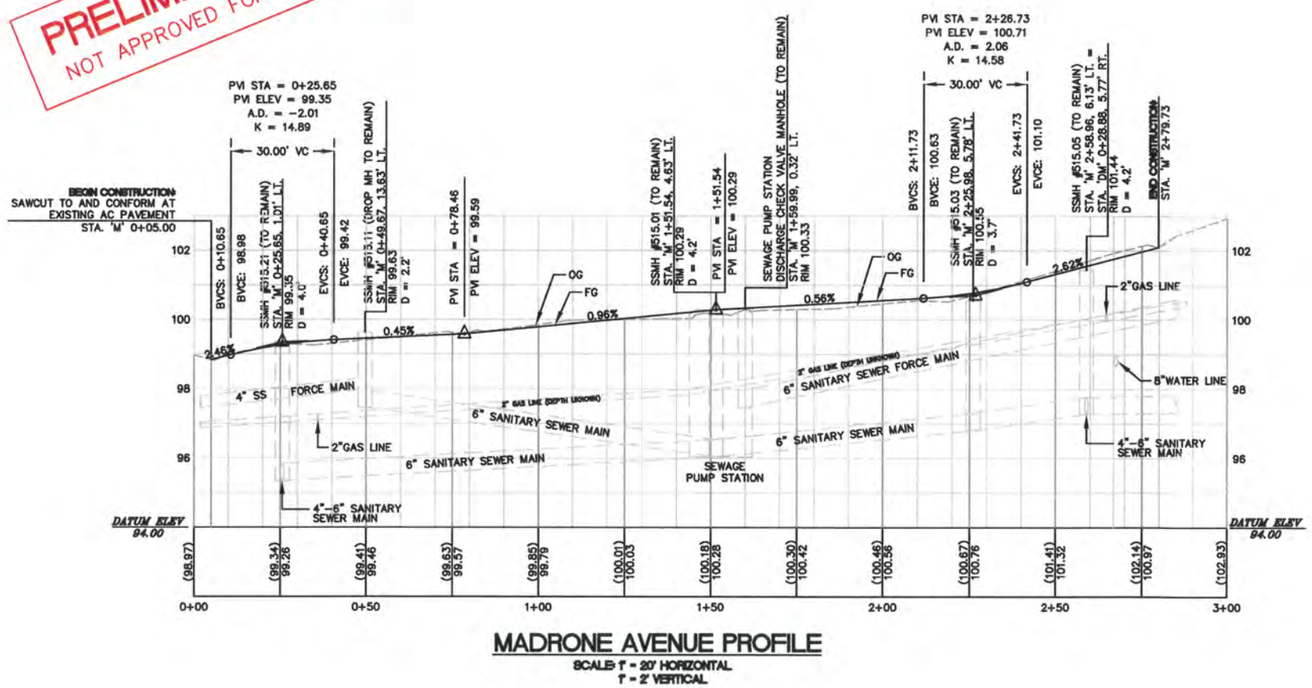
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4

1
SHEET 1 OF 9



MADRONE AVENUE PLAN

SCALE: 1" = 20'



MADRONE AVENUE PROFILE

SCALE: 1" = 20' HORIZONTAL
1" = 2' VERTICAL

REGISTERED PROFESSIONAL ENGINEER
JAMES C. PORTER
C 48056
EXPIRES 12/31/13
CIVIL
STATE OF CALIFORNIA

APPROVED:

DATE: _____

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2013

LEGEND:

- AC DRIVEWAY CONFORM
- DIRT/GRAVEL DRIVEWAY CONFORM
- DIRT DRIVEWAY SWALE CROSSINGS
- MISCELLANEOUS AC PAVING
- CONCRETE
- DRIVEWAY NUMBER
- EXISTING SWALE FLOWLINE
- NEW SWALE FLOWLINE

NOTES:

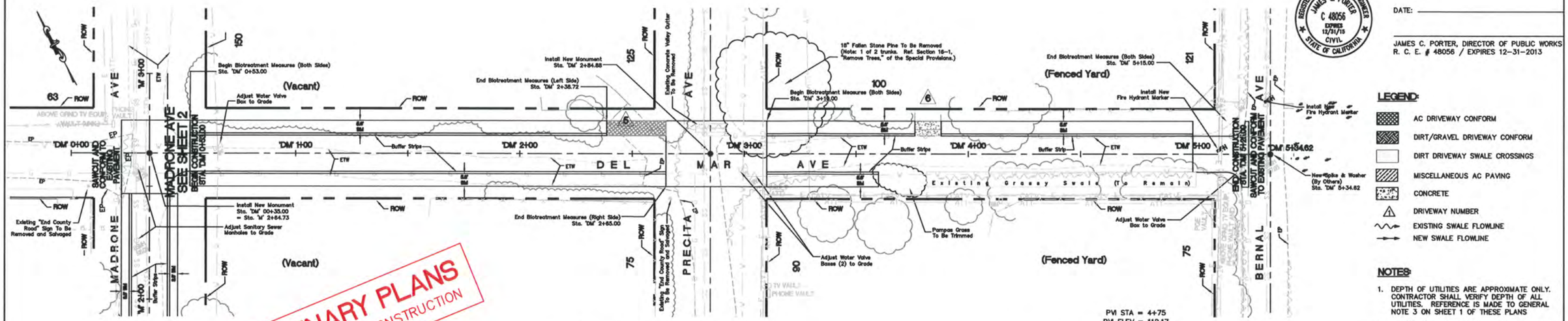
1. DEPTH OF UTILITIES ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY DEPTH OF ALL UTILITIES. REFERENCE IS MADE TO GENERAL NOTE 3 ON SHEET 1 OF THESE PLANS
2. EXCEPT FOR LOCATION OF SANITARY SEWER MAINS (GRAVITY), LOCATION OF UTILITIES (INCLUDING SANITARY SEWER FORCE MAINS) ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES. REFERENCE IS MADE TO GENERAL NOTE 3 ON SHEET 1 OF THESE PLANS.
3. LOCATION OF ELECTRICAL CONNECTION BETWEEN THE SS PUMP ELECTRICAL CABINET AND THE SEWAGE PUMP STATION IS UNKNOWN. CONNECTION CONSISTS OF TWO (2) CONDUITS, WHICH CONTRACTOR SHALL VERIFY DEPTH AND LOCATION OF PRIOR TO BEGINNING CONSTRUCTION. REFERENCE IS MADE TO GENERAL NOTE 3 ON SHEET 1 OF THESE PLANS.

PRELIMINARY PLANS
NOT APPROVED FOR CONSTRUCTION

FILENAME: F:\USERS\DESIGN\1200\E4903000\DWG\E4903002-S.DWG [E4903002]

		DESIGNED BY: EPC	SEAL COVE ROAD IMPROVEMENTS ON DEL MAR AVENUE, MADRONE AVENUE AND SAN RAMON AVENUE	SCALE: AS SHOWN
		CHECKED BY: WN		DATE: 04/05/2013
		DRAWN BY: EPC	PLAN AND PROFILE: MADRONE AVENUE	FILE NO.: 1/4903
		JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY		555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063
REVISION	DATE			
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4				2 SHEET 2 OF 8

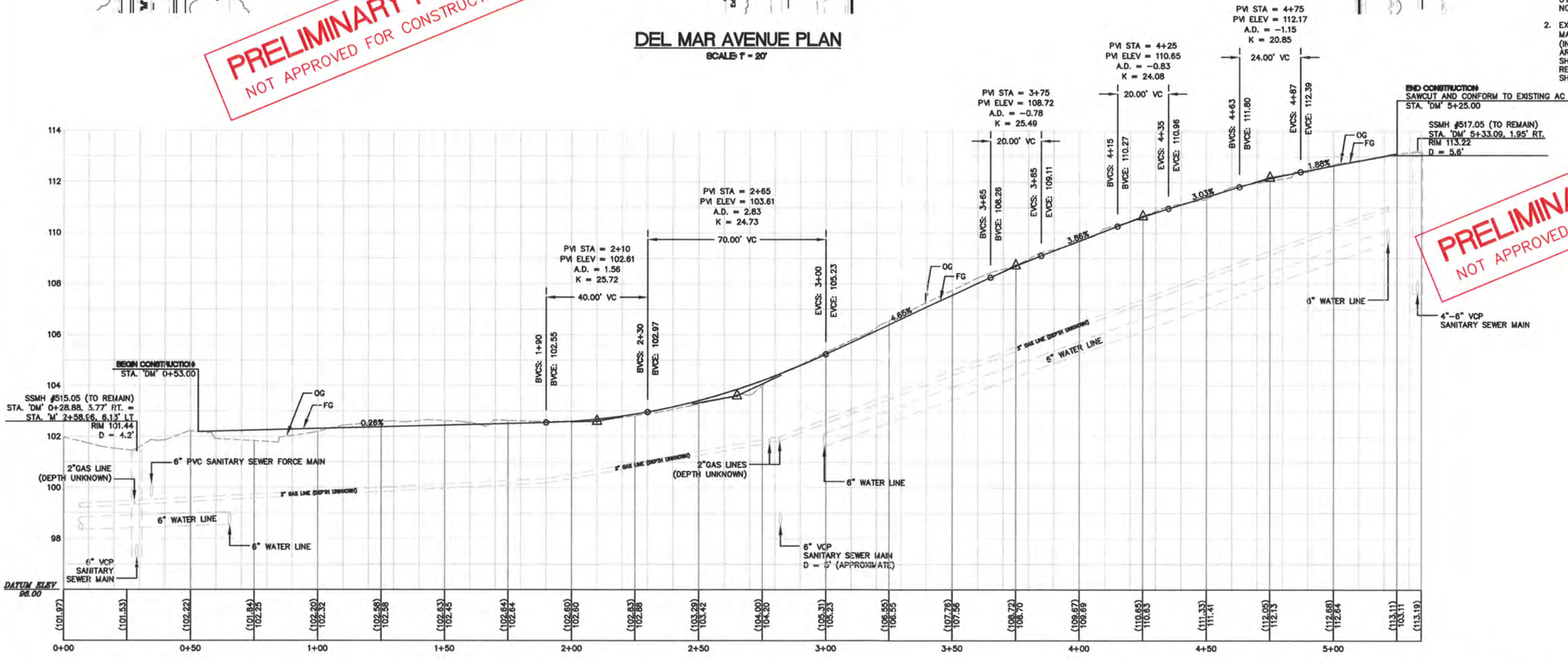
COUNTY OF SAN MATEO PUBLIC WORKS



PRELIMINARY PLANS
NOT APPROVED FOR CONSTRUCTION

DEL MAR AVENUE PLAN

SCALE: 1" = 20'



PRELIMINARY PLANS
NOT APPROVED FOR CONSTRUCTION

DEL MAR AVENUE PROFILE

SCALE: 1" = 20' HORIZONTAL
1" = 2' VERTICAL

APPROVED:

DATE: _____

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2013

REGISTERED PROFESSIONAL ENGINEER
JAMES C. PORTER
C 48056
EXPIRES 12/31/15
CIVIL
STATE OF CALIFORNIA

LEGEND:

- AC DRIVEWAY CONFORM
- DIRT/GRAVEL DRIVEWAY CONFORM
- DIRT DRIVEWAY SWALE CROSSINGS
- MISCELLANEOUS AC PAVING
- CONCRETE
- DRIVEWAY NUMBER
- EXISTING SWALE FLOWLINE
- NEW SWALE FLOWLINE

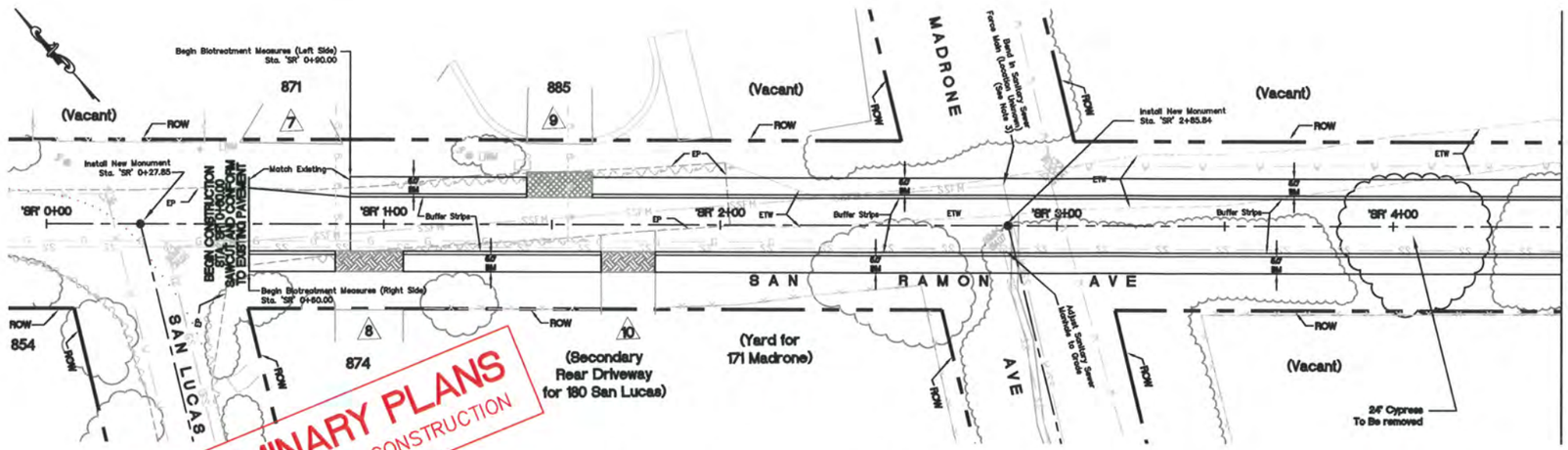
NOTES:

1. DEPTH OF UTILITIES ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY DEPTH OF ALL UTILITIES. REFERENCE IS MADE TO GENERAL NOTE 3 ON SHEET 1 OF THESE PLANS
2. EXCEPT FOR LOCATION OF SANITARY SEWER MAINS (GRAVITY), LOCATION OF UTILITIES (INCLUDING SANITARY SEWER FORCE MAINS) ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES. REFERENCE IS MADE TO GENERAL NOTE 3 ON SHEET 1 OF THESE PLANS.

FILENAME: F:\USERS\DESIGN\LDD\E4903000\PWP\E4903002-3.DWG [E4903003]

COUNTY OF SAN MATEO PUBLIC WORKS

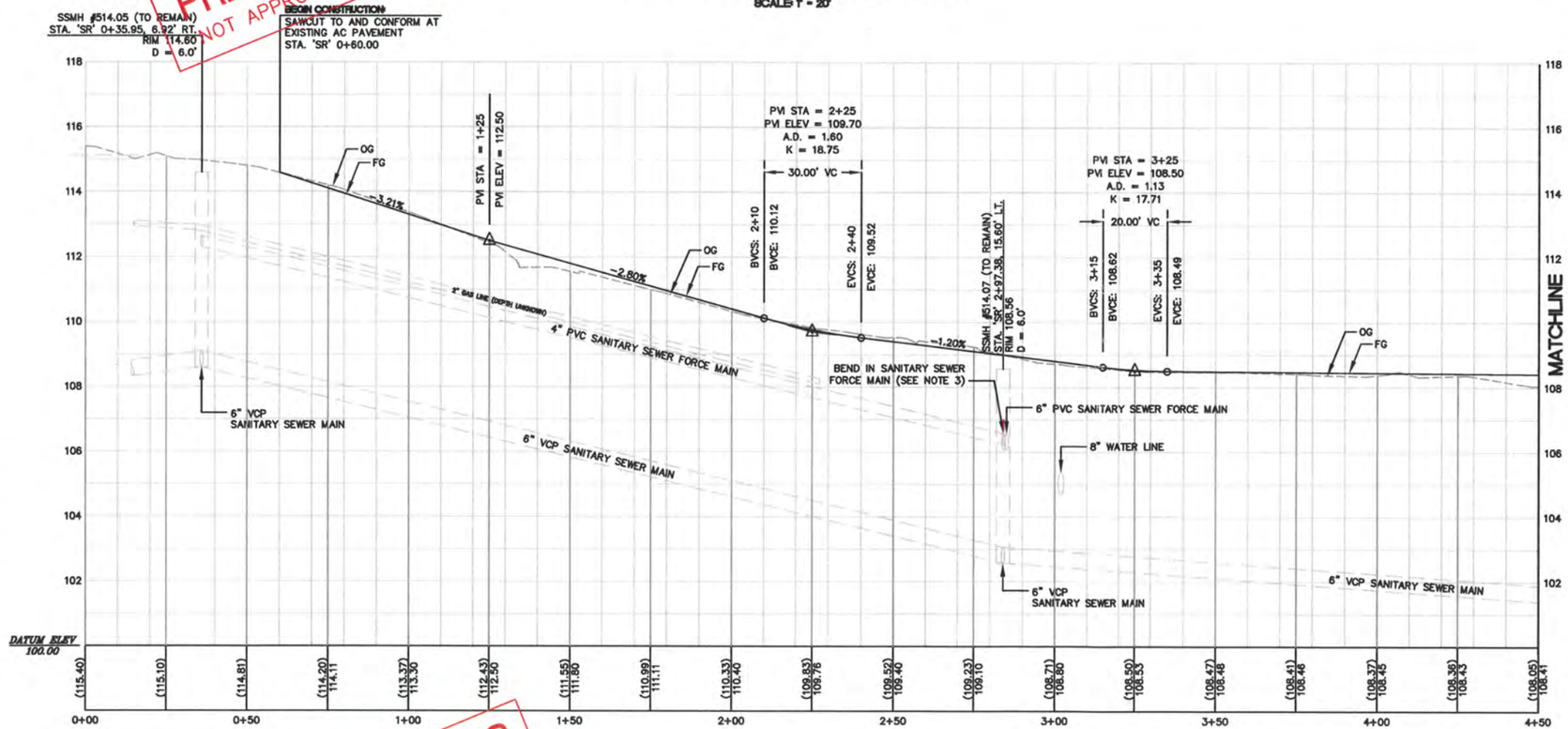
REVISION	DATE	DESIGNED BY: EPC	CHECKED BY: WN	DRAWN BY: EPC	SEAL COVE ROAD IMPROVEMENTS ON DEL MAR AVENUE, MADRONE AVENUE AND SAN RAMON AVENUE PLAN AND PROFILE: DEL MAR AVENUE	SCALE: AS SHOWN DATE: 04/05/2013 FILE NO.: 1/4903
		JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY			555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063	
		FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4				3 SHEET 3 OF 8



MATCHLINE STA. 'SR' 4+50.00 SEE SHEET 5

SAN RAMON AVENUE PLAN (1/2)

SCALE: 1" = 20'



MATCHLINE STA. 'SR' 4+50.00 SEE SHEET 5

SAN RAMON AVENUE PROFILE (1/2)

SCALE: 1" = 20' HORIZONTAL
1" = 2' VERTICAL

REGISTERED PROFESSIONAL ENGINEER
JAMES C. PORTER
C 48056
EXPIRES 12/31/15
CIVIL
STATE OF CALIFORNIA

APPROVED:

DATE: _____

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2013

LEGEND:

- AC DRIVEWAY CONFORM
- DIRT/GRAVEL DRIVEWAY CONFORM
- DIRT DRIVEWAY SWALE CROSSINGS
- MISCELLANEOUS AC PAVING
- CONCRETE
- DRIVEWAY NUMBER
- EXISTING SWALE FLOWLINE
- NEW SWALE FLOWLINE

NOTES:

1. DEPTH OF UTILITIES ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY DEPTH OF ALL UTILITIES. REFERENCE IS MADE TO GENERAL NOTE 3 ON SHEET 1 OF THESE PLANS
2. EXCEPT FOR LOCATION OF SANITARY SEWER MAINS (GRAVITY), LOCATION OF UTILITIES (INCLUDING SANITARY SEWER FORCE MAINS) ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES. REFERENCE IS MADE TO GENERAL NOTE 3 ON SHEET 1 OF THESE PLANS.
3. THE CONTRACTOR IS ADVISED THAT THE LOCATION AND DEPTH OF THE SANITARY SEWER FORCE MAIN IS UNKNOWN, BUT MAY BE AS SHALLOW AS EIGHTEEN INCHES (18"). REFERENCE IS MADE TO GENERAL NOTE 3 ON SHEET 1 OF THE PLANS.

FILENAME: F:\USERS\DESIGN\LDP\E4903000\DWG\E4903002-SLDWG [E4903004]

COUNTY OF SAN MATEO PUBLIC WORKS

REVISION	DATE	DESIGNED BY: EPC	CHECKED BY: WN	DRAWN BY: EPC	JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY

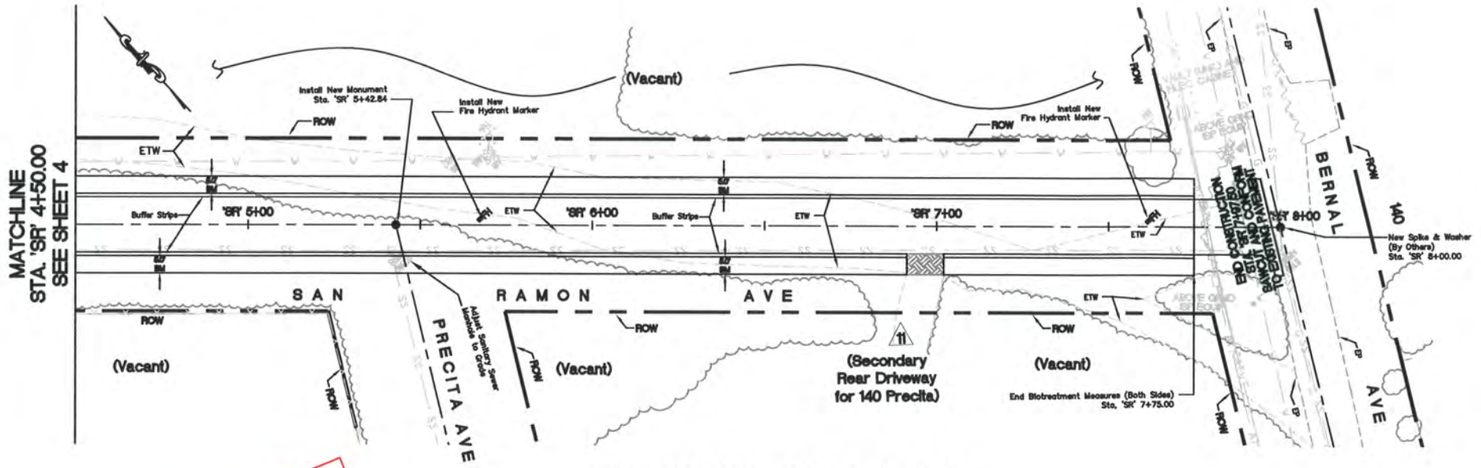
SEAL COVE ROAD IMPROVEMENTS ON DEL MAR AVENUE, MADRONE AVENUE AND SAN RAMON AVENUE

PLAN AND PROFILE: SAN RAMON AVE (1/2)

555 COUNTY CENTER, 5th FLOOR
REDWOOD CITY, CALIFORNIA 94063

SCALE: AS SHOWN
DATE: 04/05/2013
FILE NO.: 1/4903

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4



SAN RAMON AVENUE PLAN (2/2)

SCALE: 1" = 20'

LEGEND:

- AC DRIVEWAY CONFORM
- DIRT/GRAVEL DRIVEWAY CONFORM
- DIRT DRIVEWAY SWALE CROSSINGS
- MISCELLANEOUS AC PAVING
- CONCRETE
- DRIVEWAY NUMBER
- EXISTING SWALE FLOWLINE
- NEW SWALE FLOWLINE

NOTES:

1. DEPTH OF UTILITIES ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY DEPTH OF ALL UTILITIES. REFERENCE IS MADE TO GENERAL NOTE 3 ON SHEET 1 OF THESE PLANS
2. EXCEPT FOR LOCATION OF SANITARY SEWER MAINS (GRAVITY), LOCATION OF UTILITIES (INCLUDING SANITARY SEWER FORCE MAINS) ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES. REFERENCE IS MADE TO GENERAL NOTE 3 ON SHEET 1 OF THESE PLANS.

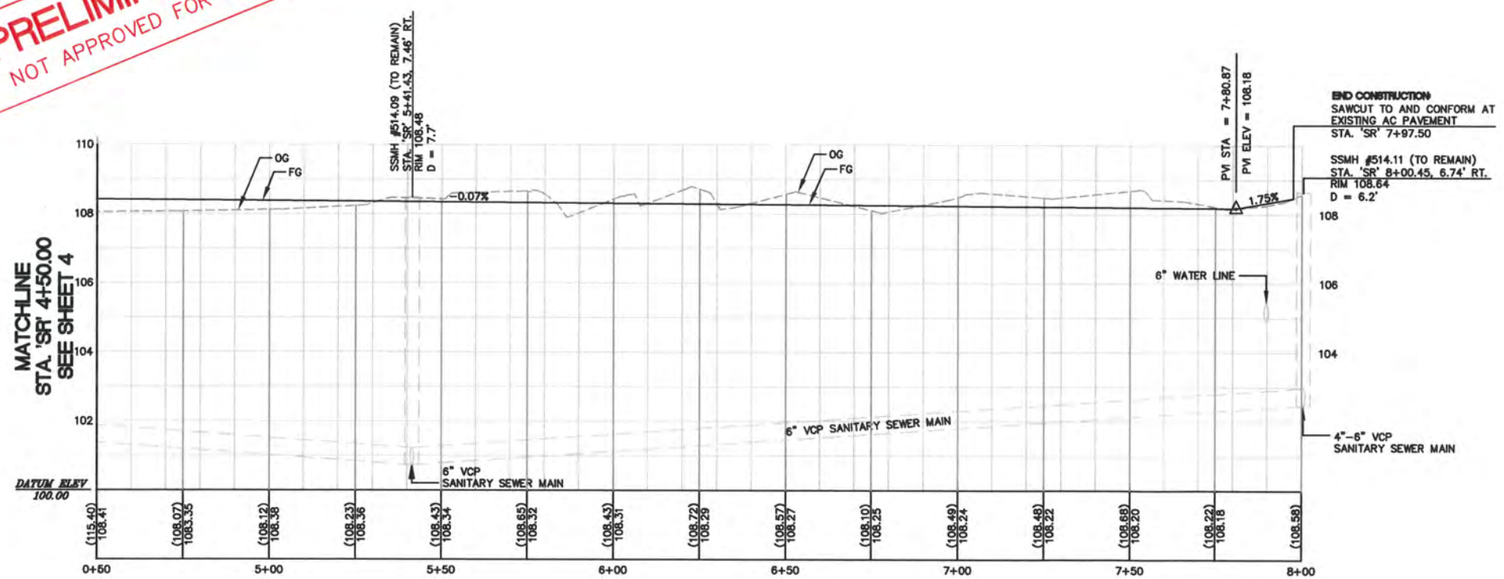
REGISTERED PROFESSIONAL ENGINEER
JAMES C. PORTER
C 48056
EXPIRES 12/31/15
CIVIL
STATE OF CALIFORNIA

APPROVED:

DATE: _____

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2013

PRELIMINARY PLANS
NOT APPROVED FOR CONSTRUCTION



SAN RAMON AVENUE PROFILE (2/2)

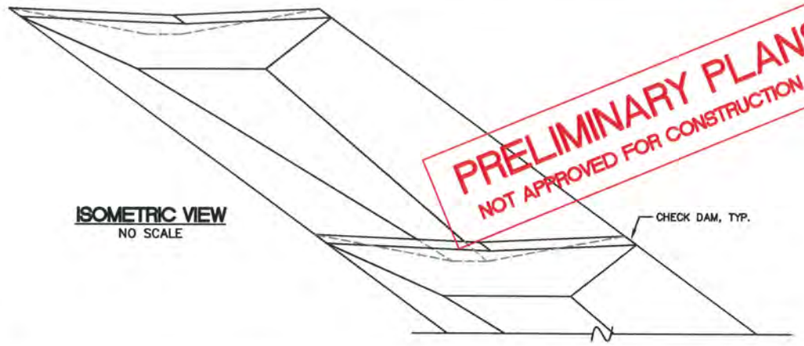
SCALE: 1" = 20' HORIZONTAL
1" = 2' VERTICAL

PRELIMINARY PLANS
NOT APPROVED FOR CONSTRUCTION

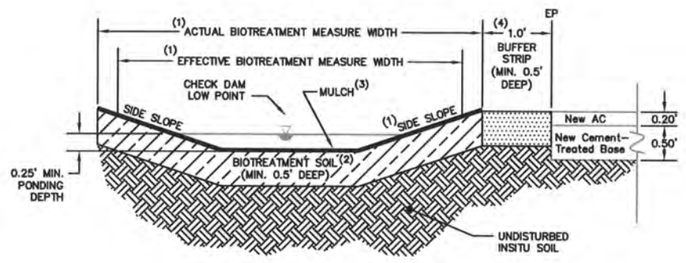
FILENAME: F:\USERS\DESIGN\LDD\E4603000\PWV\E4603002-SJWG [E4603005]

REVISION	DATE	DESIGNED BY: EPC CHECKED BY: WN DRAWN BY: EPC	SEAL COVE ROAD IMPROVEMENTS ON DEL MAR AVENUE, MADRONE AVENUE AND SAN RAMON AVENUE PLAN AND PROFILE: SAN RAMON AVE (2/2)
		JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY	555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063
		FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4	SHEET 5 OF 8

SCALE: AS SHOWN
DATE: 04/05/2013
FILE NO.: 1/4903



ISOMETRIC VIEW
NO SCALE



TYPICAL CROSS-SECTION
NO SCALE

CHECK DAM SPACING TABLES

MADRONE AVENUE (DECOTA AVENUE TO DEL MAR AVENUE)
(CHECK DAM WIDTH = 0.5' ; CHECK DAM HEIGHT = 0.6')

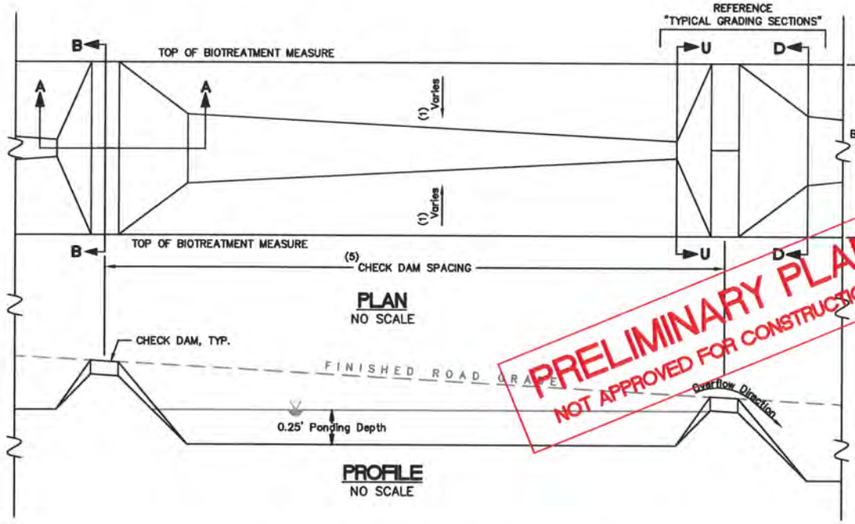
LEFT (WEST) SIDE					RIGHT (EAST) SIDE					
REACH			CHECK DAMS		REACH			CHECK DAMS		COMMENTS
FROM	TO	LENGTH	SPACING	NO.	FROM	TO	LENGTH	SPACING	NO.	
'M' 0+05.00	'M' 0+60.00	55 LF	N/A	N/A	'M' 0+05.00	'M' 0+60.00	55 LF	N/A	N/A	DECOTA AVE INTERSECTION – NO BIOTREATMENT MEASURES
'M' 0+60.00	Driveway 1	28 LF	26	0	'M' 0+60.00	Driveway 2	58 LF	26	1	DRIVEWAYS 1 & 2 WILL SERVE AS CHECK DAMS.
Driveway 1	Driveway 3	25 LF	26	0	Driveway 2	Driveway 4	27 LF	26	0	DRIVEWAYS 3 & 4 WILL SERVE AS CHECK DAMS.
Driveway 3	'M' 2+18.5	44 LF	44.5	1	Driveway 4	'M' 2+18.5	38 LF	44.5	1	
'M' 2+18.5	'M' 2+46.73	28.23 LF	9.5	2	'M' 2+18.5	'M' 2+46.73	28.23 LF	9.5	2	'M' 2+46.73: BEGIN DEL MAR INTERSECTION

DEL MAR AVENUE (MADRONE AVENUE TO BERNAL AVENUE)
(CHECK DAM WIDTH = 0.5' ; CHECK DAM HEIGHT = 0.6')

LEFT (NORTH) SIDE					RIGHT (SOUTH) SIDE					
REACH			CHECK DAMS		REACH			CHECK DAMS		COMMENTS
FROM	TO	LENGTH	SPACING	NO.	FROM	TO	LENGTH	SPACING	NO.	
'DM' 0+53.00	'DM' 1+49.00	96 LF	96	1	'DM' 0+53.00	'DM' 1+49.00	96 LF	96	1	'DM' 0+53.00: END MADRONE AVE INTERSECTION
'DM' 1+49.00	Driveway 5	90 LF	14	5	'DM' 1+49.00	'DM' 2+65.00	116 LF	14	7	
PRECITAS AVENUE INTERSECTION					PRECITAS AVENUE INTERSECTION					
Precitas Ave	Driveway 6	66 LF	5.5	11	Precitas Ave	'DM' 3+75.00	66 LF	5.5	12	DRIVEWAYS 6 WILL SERVE AS A CHECK DAM.
Driveway 6	'DM' 4+27.00	42 LF	6.5	6	'DM' 3+75.00	'DM' 4+27.00	52 LF	6.5	8	
'DM' 4+27.00	'DM' 4+75.00	48 LF	8	6	'DM' 4+27.00	'DM' 4+75.00	48 LF	8	6	
'DM' 4+75.00	'DM' 5+15.00	40 LF	13	2	'DM' 4+75.00	'DM' 5+15.00	40 LF	13	2	

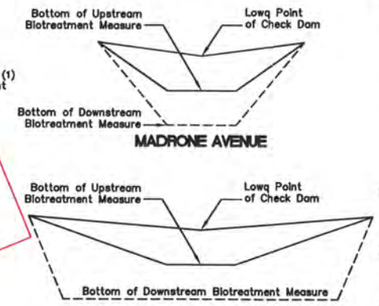
SAN RAMON AVENUE (SAN LUCAS AVENUE TO BERNAL AVENUE)
(CHECK DAM WIDTH = 0.5' ; CHECK DAM HEIGHT = 0.6')

LEFT (NORTH) SIDE					RIGHT (SOUTH) SIDE					
REACH			CHECK DAMS		REACH			CHECK DAMS		COMMENTS
FROM	TO	LENGTH	SPACING	NO.	FROM	TO	LENGTH	SPACING	NO.	
DRIVEWAY 7					'SR' 0+60.00	Driveway 8	25 LF	8	2	LEFT SIDE: BIOTREATMENT MEASURES BEGIN AFTER DVWY 7.
'SR' 0+90.00	Driveway 9	53 LF	9	5	Driveway 8	Driveway 10	75 LF	9	7	DRIVEWAYS 8, 9 & 10 WILL SERVE AS CHECK DAMS.
Driveway 9	'SR' 2+20.00	57 LF	9	6	Driveway 10	'SR' 2+20.00	38 LF	9	4	
'SR' 2+20.00	'SR' 3+25.00	105 LF	21	5	'SR' 2+20.00	'SR' 3+25.00	105 LF	21	5	
'SR' 3+25.00	'SR' 7+75.00	450 LF	357	1	'SR' 3+25.00	Driveway 11	357 LF	357	0	DRIVEWAY 11 WILL SERVE AS A CHECK DAM.
					Driveway 11	'SR' 7+75.00	72 LF	357	0	

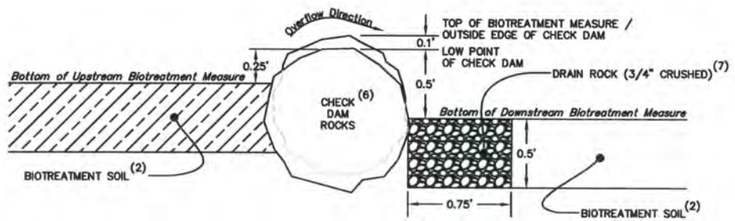


PLAN
NO SCALE

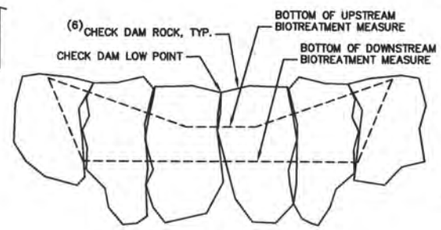
PROFILE
NO SCALE



TYPICAL CHECK DAM SECTIONS
NO SCALE



SECTION A-A
NO SCALE



SECTION B-B
NO SCALE

BIOTREATMENT MEASURE DETAILS
NOT TO SCALE

BIOTREATMENT MEASURE NOTES:

(1) REFERENCE "TYPICAL CROSS-SECTION":
- i. EFFECTIVE BIOTREATMENT MEASURE WIDTH IS THE DESIGNED TOP WIDTH; ACTUAL BIOTREATMENT MEASURE WIDTH IS THE WIDTH REQUIRED TO ACCOMODATE THE ADDITIONAL 0.1' CHECK DAM HEIGHT ABOVE THE OVERFLOW LOW POINT OF THE CHECK DAMS. REFERENCE IS MADE TO SECTIONS A–A & B–B OF THESE BIOTREATMENT MEASURE DETAILS.
- ii. BIOTREATMENT MEASURE TOP WIDTHS VARY PER STREET. REFERENCE "TYPICAL GRADING SECTIONS".
- iii. BIOTREATMENT MEASURES ARE TRAPEZOIDAL BETWEEN CHECK DAM REACHES. TOP WIDTHS ARE MAINTAINED; SIDE SLOPES AND BOTTOM WIDTHS TRANSITION BETWEEN UPSTREAM AND DOWNSTREAM CHECK DAMS. REFERENCE "PLAN" VIEW.

(2) SUBGRADE OF BIOTREATMENT MEASURES SHALL BE REPLACED WITH BIOTREATMENT SOIL IN CONFORMANCE WITH SECTION 71–3, "BIOTREATMENT SOIL," OF THE SPECIAL PROVISIONS.

(3) BIOTREATMENT MEASURES SHALL BE PLANTED (WITH NATIVE GRASSES) AND MULCHED IN CONFORMANCE WITH THE PROVISIONS OF SECTION 71–5, " BIOTREATMENT VEGETATION," OF THE SPECIAL PROVISIONS.

(4) BUFFER STRIP SHALL BE COMPACTED TO 90% RELATIVE COMPACTION TO PROVIDE EDGE FOR THE NEW AC PAVEMENT. REFERENCE IS MADE TO SECTION 71–2, "BUFFER STRIP," OF THE SPECIAL PROVISIONS.

(5) CHECK DAM SPACING VARIES DEPENDING UPON ROAD GRADE. REFERENCE IS MADE TO "CHECK DAM SPACING" TABLE OF THESE PLANS.

(6) CHECK DAM ROCKS:
- i. REFERENCE SECTION 71–4a, "CHECK DAM ROCKS," OF THE SPECIAL PROVISIONS.
- ii. CHECK DAM ROCKS SHALL BE GREEN BASALT WALL ROCK, OR APPROVED EQUAL, WITH A TYPICAL HEIGHT OF TWELVE INCHES (12").
- iii. CHECK DAM ROCKS SHALL BE HAND–PLACED SO AS TO MINIMIZE VOIDS, AND THEN TAMPED TO FIRMLY SET IN PLACE.
- iv. VOIDS THAT REMAIN AFTER TAMPING (IN AND AROUND CHECK DAM ROCKS) SHALL BE COMPLETELY FILLED WITH TIGHTLY–PACKED NATIVE SOIL, SMALLER ROCKS, OR A COMBINATION THEREOF.
- v. THE NUMBER OF ROCKS PER CHECK DAM MAY VARY DEPENDING UPON THE ACTUAL SIZE AND SHAPE OF EACH ROCK.

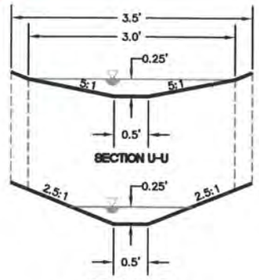
(7) SCOUR–CONTROL FOOTER: REFERENCE IS MADE TO SECTION 71–4b, "DRAIN ROCK (3/4" CRUSHED)," OF THE SPECIAL PROVISIONS.

REGISTERED PROFESSIONAL ENGINEER
JAMES C. PORTER
C 48056
EXPIRES 12/31/13
CIVIL
STATE OF CALIFORNIA

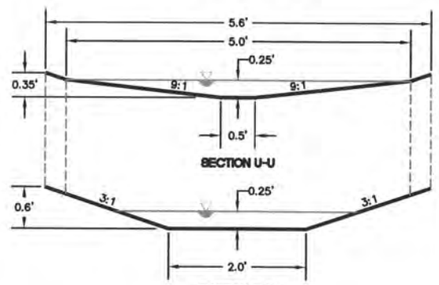
APPROVED:

DATE: _____

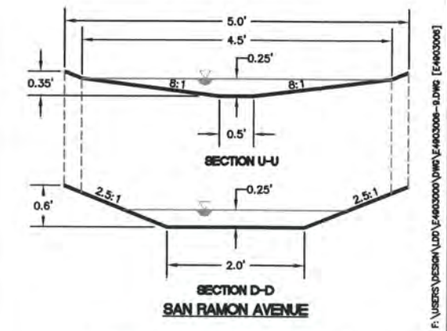
JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12–31–2013



MADRONE AVENUE



DEL MAR AVENUE



SAN RAMON AVENUE

TYPICAL GRADING SECTIONS
NO SCALE

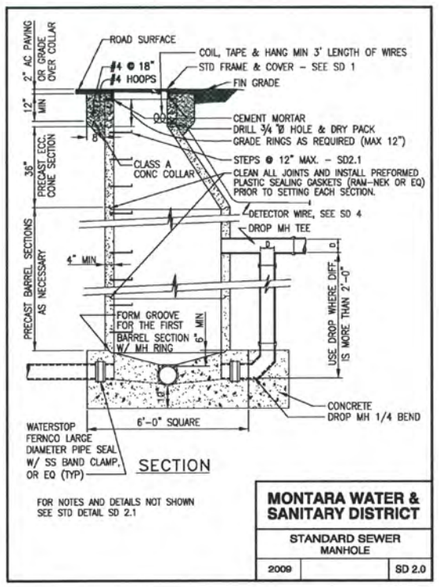
FILENAME: F:\USERS\DESIGN\L101\Z4903000\DWG\Z4903000-GDWG [Z4903000]

		DESIGNED BY: EPC	SEAL COVE ROAD IMPROVEMENTS ON DEL MAR AVENUE, MADRONE AVENUE AND SAN RAMON AVENUE
		CHECKED BY: WN	DETAILS: DRAINAGE
		DRAWN BY: EPC	
REVISION	DATE	JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY	555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063

SCALE: AS SHOWN
DATE: 01/23/2014
FILE NO.: 1/4903

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4

6
SHEET 6 OF 9

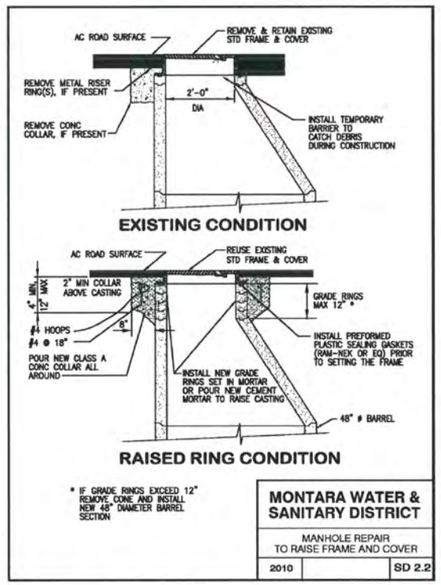


FOR NOTES AND DETAILS NOT SHOWN SEE STD DETAIL SD 2.1

MONTARA WATER & SANITARY DISTRICT

STANDARD SEWER MANHOLE

2009		SD 2.0

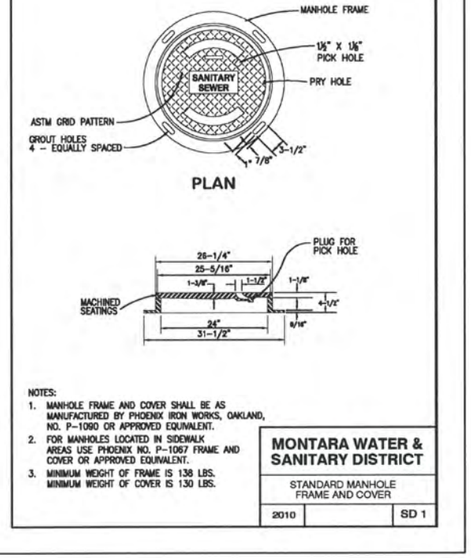


* IF GRADE RINGS EXCEED 12" REMOVE CONE AND INSTALL NEW 48" DIAMETER BARREL SECTION

MONTARA WATER & SANITARY DISTRICT

MANHOLE REPAIR TO RAISE FRAME AND COVER

2010		SD 2.2

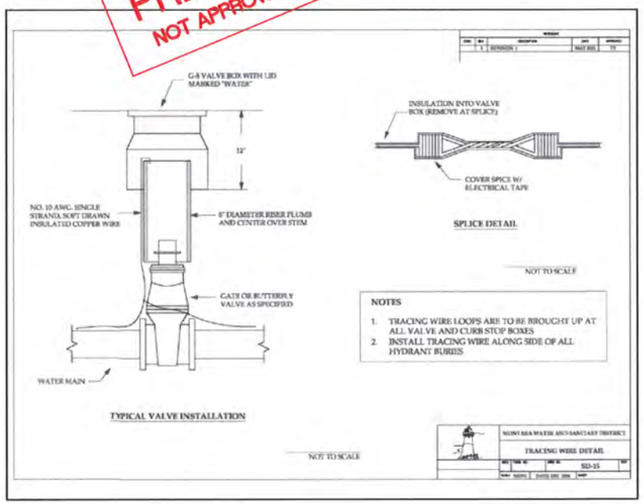


NOTES:
1. MANHOLE FRAME AND COVER SHALL BE AS MANUFACTURED BY PHOENIX IRON WORKS, OAKLAND, NO. P-1090 OR APPROVED EQUIVALENT.
2. FOR MANHOLES LOCATED IN SIDEWALK AREAS USE PHOENIX NO. P-1067 FRAME AND COVER OR APPROVED EQUIVALENT.
3. MINIMUM WEIGHT OF FRAME IS 138 LBS. MINIMUM WEIGHT OF COVER IS 130 LBS.

MONTARA WATER & SANITARY DISTRICT

STANDARD MANHOLE FRAME AND COVER

2010		SD 1



NOTES
1. TRACING WIRE LOOPS ARE TO BE BROUGHT UP AT ALL VALVE AND CURB STOP BOXES
2. INSTALL TRACING WIRE ALONG SIDE OF ALL HYDRANT BURIES

MONTARA WATER AND SANITARY DISTRICT

TRACING WIRE DETAIL

SD-15

PRELIMINARY PLANS
NOT APPROVED FOR CONSTRUCTION

PRELIMINARY PLANS
NOT APPROVED FOR CONSTRUCTION

PRELIMINARY PLANS
NOT APPROVED FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
JAMES C. PORTER
C 48056
EXPIRES 12/31/13
CIVIL
STATE OF CALIFORNIA

APPROVED:

DATE: _____

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2013

MONTARA WATER AND SANITARY DISTRICT DETAILS

NOT TO SCALE

REVISION	DATE	DESIGNED BY: EPC	DRAWN BY: EPC	CHECKED BY: WN	JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY

SEAL COVE ROAD IMPROVEMENTS ON DEL MAR AVENUE, MADRONE AVENUE AND SAN RAMON AVENUE
DETAILS: UTILITY

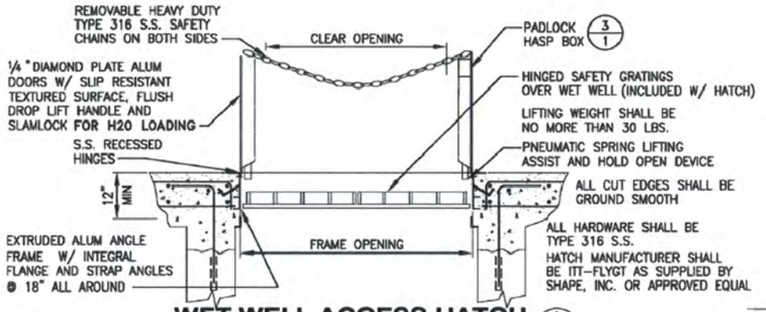
555 COUNTY CENTER, 5th FLOOR
REDWOOD CITY, CALIFORNIA 94063

SCALE: AS SHOWN
DATE: 01/23/2014
FILE NO.: 1/4903

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4

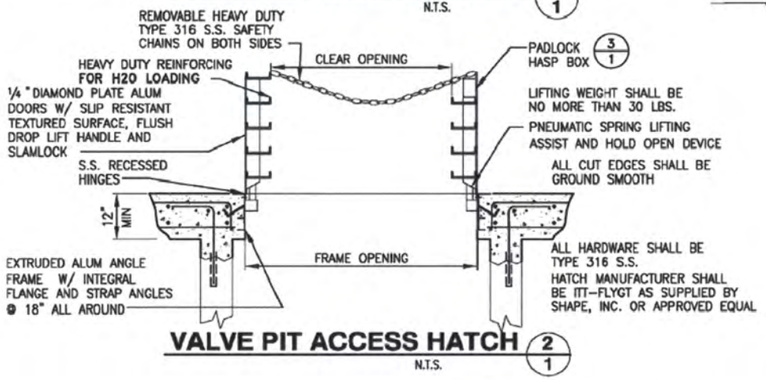
SHEET 7 OF 9

FILENAME: F:\USERS\DESIGN\LDD\E4903000\DWG\E4903006-9.DWG [E4903007]



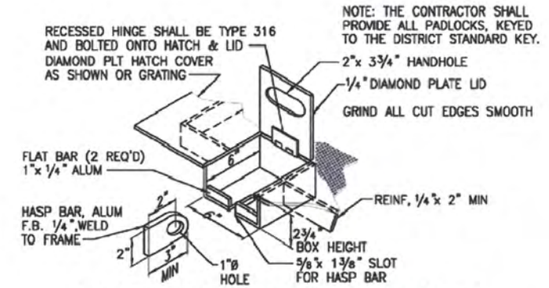
WET WELL ACCESS HATCH 1/1

N.T.S.



VALVE PIT ACCESS HATCH 2/1

N.T.S.



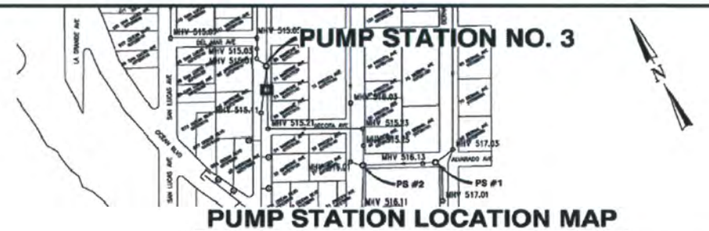
RECESSED PADLOCK BOX 3/1

N.T.S.

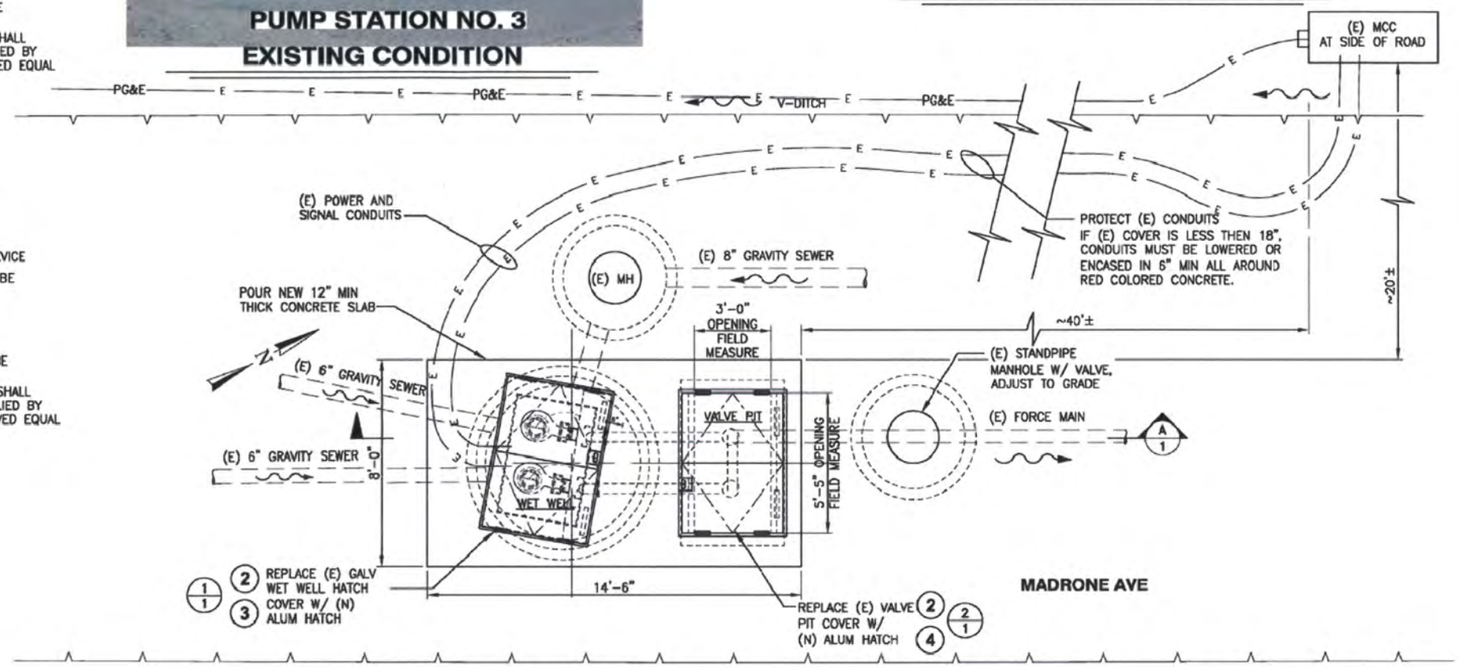
NOTES:

1. CUT PUMP STATION WALLS AND REMOVE AND DISPOSE OF EXISTING CONC SLAB AND PIT COVERS. ON VALVE PIT, ADD OR REMOVE ADJUSTING RINGS IF APPLICABLE.
2. FIELD VERIFY ALL EXISTING DIMENSIONS PRIOR TO SUBMITTING SHOP DRAWINGS FOR HATCH COVERS AND REBAR. ALL ROUGH OPENING AND CLEAR OPENING DIMENSIONS SHALL BE FIELD VERIFIED WITH MONTARA WATER AND SANITARY DISTRICT ENGINEER PRIOR TO SHOP DRAWING SUBMITTALS. CONFIRM BOTH HATCH ALIGNMENTS W/ ENGINEER, DRILL IN AND PLACE REBAR AND POUR NEW CONCRETE SLAB AROUND HATCHES AS SHOWN.
3. PROVIDE AND INSTALL NEW HEAVY DUTY ALUMINUM WET WELL HATCH COVER, DOUBLE LEAF, H-20 TRAFFIC LOAD RATED, WITH NUTRAILS, SAFETY GRATES & REMOVABLE TYPE 316 SS SAFETY CHAINS EACH SIDE AS DETAILED ON THIS SHEET. HATCH MINIMUM CLEAR OPENING SHALL BE 4'-7" x 3'-1", SEE NOTE 2.
4. PROVIDE AND INSTALL NEW HEAVY DUTY ALUMINUM VALVE PIT HATCH COVER, DOUBLE LEAF, H20 TRAFFIC LOAD RATED, WITH REMOVABLE TYPE 316 SS SAFETY CHAINS EACH SIDE AS DETAILED ON THIS SHEET. MINIMUM CLEAR OPENING SHALL BE 3'-0" x 5'-5" OR MATCH EXISTING BOX OPENING, SEE NOTE 2.

PUMP STATION NO. 3
EXISTING CONDITION

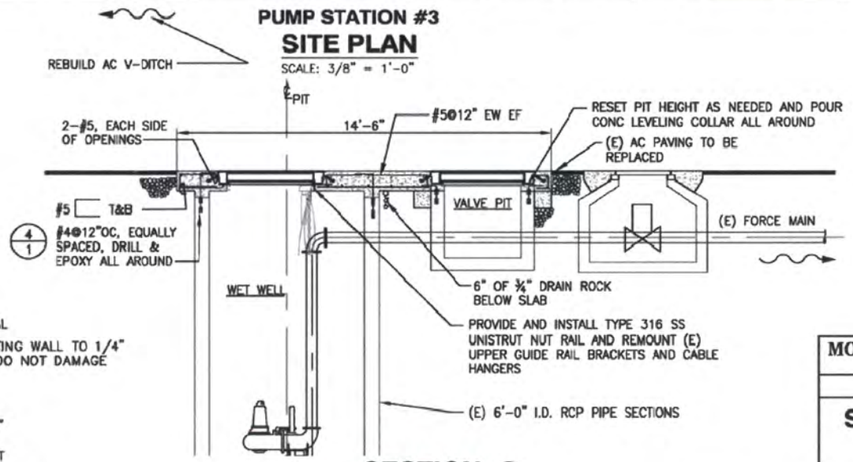


PUMP STATION LOCATION MAP



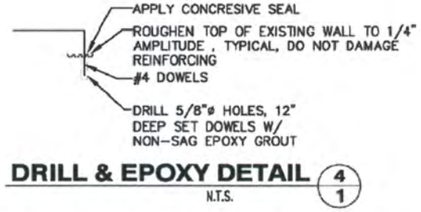
PUMP STATION #3 SITE PLAN

SCALE: 3/8" = 1'-0"



SECTION A/1

SCALE: 3/8" = 1'-0"



DRILL & EPOXY DETAIL 4/1

N.T.S.

1" — IF THIS DOES NOT MEASURE ONE INCH, THESE PLANS ARE NOT TO SCALE.

1 OF 1

MONTARA WATER AND SANITARY DISTRICT
San Mateo County, California

2013 San Mateo County Paving

SEAL COVE PUMP STATION #3 HATCH REPLACEMENT

NUTE ENGINEERING
SAN RAFAEL, CALIFORNIA

Drawn by:	prn	Job No.:	8244	Scale:	AS SHOWN
Checked by:	PC			Date:	MAY 2013

Printed: May 14, 2013 12:18 PM
L:\District\Montara\8244 Seal Cove PS3 Hatch Replacement\8244-Seal Cove 3 Hatch Replacement.dwg Layout: PS#3 HATCH REPLACEMENT Pagesetup: ----

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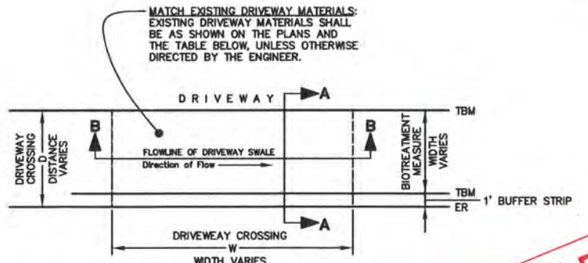
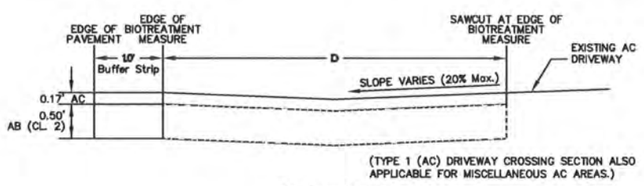
MONTARA WATER AND SANITARY DISTRICT SEWAGE PUMP STATION PLAN SHEET

SEAL COVE ROAD IMPROVEMENTS ON DEL MAR AVENUE, MADRONE AVENUE AND SAN RAMON AVENUE
DETAILS: UTILITY

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY	555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063	8 SHEET 8 OF 9

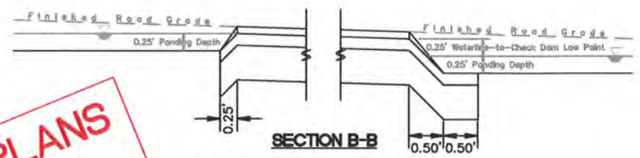


PLAN VIEW



(TYPE 1 (AC) DRIVEWAY CROSSING SECTION ALSO APPLICABLE FOR MISCELLANEOUS AC AREAS.)

SECTION A-A



SECTION B-B

TYPE 1 (AC) DRIVEWAY CROSSING

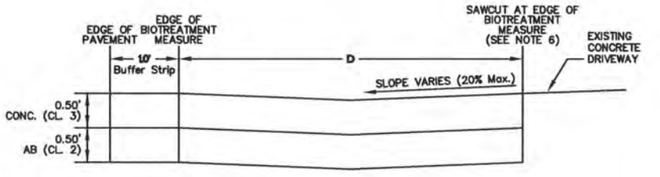
PRELIMINARY PLANS
NOT APPROVED FOR CONSTRUCTION

DRIVEWAY CROSSINGS

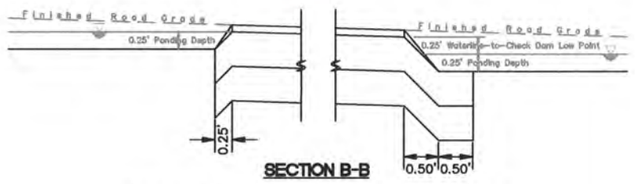
NO.	APPROX. LOCATION (DWY CENTERLINE STATION)	W (FT.)	D (FT.)	TYPE	MATERIAL
MADRONE AVENUE					
1	'M' 1+04.31 L	21	3.5	3	GRAVEL
2	'M' 1+27.52 R	18	3.5	3	GRAVEL
3	'M' 1+58.37 L	27	3.5	3	GRAVEL
4	'M' 1+71.99 R	16	3.5	3	GRAVEL
DEL MAR AVENUE					
5	'DM' 2+50.00 L	16	5.6	1	AC
6	'DM' 3+82.12 L	12	5.6	2	CONC
SAN RAMON AVENUE					
7	'SR' 0+72.50 L	30	5	3	GRAVEL
8	'SR' 0+95.72 R	20	5	3	GRAVEL
9	'SR' 1+52.53 L	19	5	1	AC
10	'SR' 1+73.13 R	16	5	3	GRAVEL
11	'SR' 6+96.68 R	11	5	3	GRAVEL

NOTES:

1. LOCATIONS AND DIMENSIONS ARE APPROXIMATE ONLY.
2. ANY DAMAGE TO FACILITIES (SUCH AS DRIVEWAYS, PAVED SHOULDERS AND PATHS) ADJACENT TO LIMITS OF CONFORM, RESULTING FROM THE CONTRACTOR'S OPERATIONS, AS DETERMINED BY THE ENGINEER, SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED THEREFORE.
3. THE DRIVEWAY CROSSING DISTANCE (D) LISTED IN THIS TABLE IS A MAXIMUM DISTANCE. ALL CONSTRUCTION PAST THESE LIMITS WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER SHALL BE AT THE CONTRACTOR'S EXPENSE, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED THEREFORE.
4. DRIVEWAY CROSSINGS SHALL HAVE A MAXIMUM 20% SLOPE. IF A 20% SLOPE IS UNATTAINABLE FOR DRIVEWAY CONFORMS WITHIN THE SPECIFIED DISTANCE, THEN AT THE ENGINEER'S DIRECTIONS, LIMITS MAY BE EXTENDED TO ACHIEVE THIS SLOPE. ADJUSTMENT TO ACHIEVE 20% MAXIMUM SLOPE DOES NOT APPLY TO SHOULDER CONFORM AREAS.
5. FINISH AND SUB-BASE MATERIAL WITHIN 30" OF SUBGRADE SHALL BE COMPACTED TO 95% RELATIVE COMPACTION.
6. PLACE 1/2" DIAMETER x 18" LONG DOWELS AT INTERFACE BETWEEN NEW TYPE 2 (CONCRETE) CROSSINGS AND EXISTING CONCRETE DRIVEWAYS.

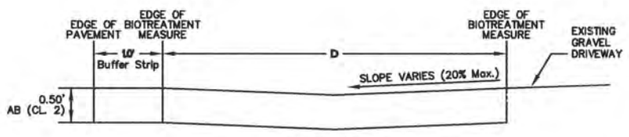


SECTION A-A

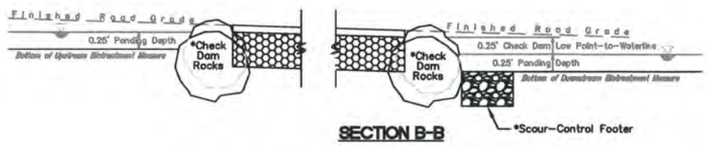


SECTION B-B

TYPE 2 (CONCRETE) DRIVEWAY CROSSING



SECTION A-A



SECTION B-B

TYPE 3 (GRAVEL) DRIVEWAY CROSSING

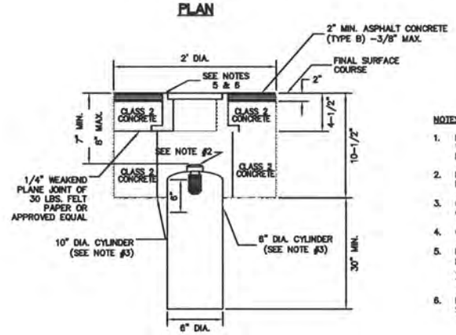
*NOTE: REFERENCE SECTIONS A-A & B-B OF "BIOTREATMENT MEASURE DETAILS," ON SHEET 6.

DRIVEWAY CROSSING DETAILS

NOT TO SCALE

PRELIMINARY PLANS
NOT APPROVED FOR CONSTRUCTION

PLAN



SECTION A-A

NOTES:

1. MONUMENT FRAME & COVER SHALL BE PHOENIX IRON WORKS P-2001-A WITH MONUMENT COVER OR APPROVED EQUAL.
2. BRASS MARKER FURNISHED BY COUNTY; CONCRETE SHALL BE PACKED TIGHTLY AROUND STEM OF BRASS MARKER.
3. 6" & 10" DIA. CYLINDERS TO BE FURNISHED BY CONTRACTOR.
4. CONCRETE SHALL BE CLASS 2 (RODDED OR VIBRATED).
5. MONUMENT CASTING SHALL BE HELD SECURLY IN PLACE (TO FINISH LINE & GRADE) PRIOR TO POURING THE UPPER 4-1/2 INCHES OF CONCRETE. (SUGGESTED METHOD: WIRE THE CASTING TO A 3-FOOT LONG 2" X 4" TIMBER.
6. MONUMENT CASTINGS SHALL BE INSTALLED AFTER THE FINAL SURFACE COURSE HAS BEEN COMPLETED.

STANDARD STRUCTURES MONUMENT, FRAME AND COVER,

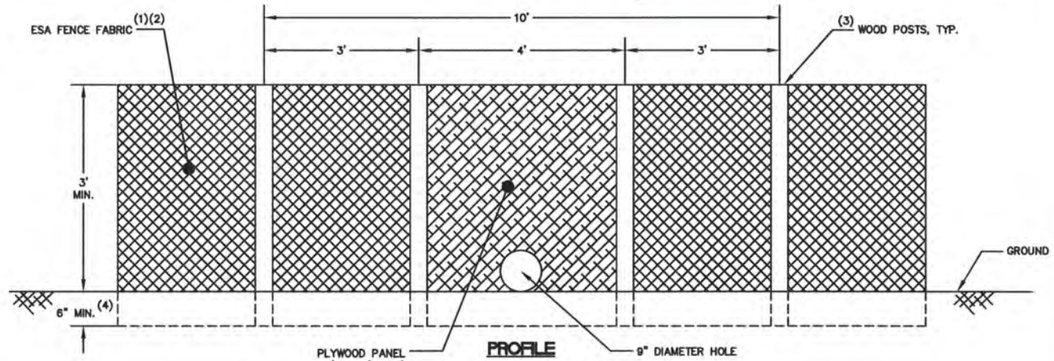
REGISTERED PROFESSIONAL ENGINEER
JAMES C. PORTER
C 48056
EXPIRES 12/31/15
CIVIL
STATE OF CALIFORNIA

APPROVED:

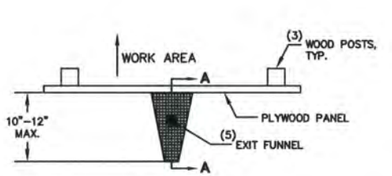
DATE: _____

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2013

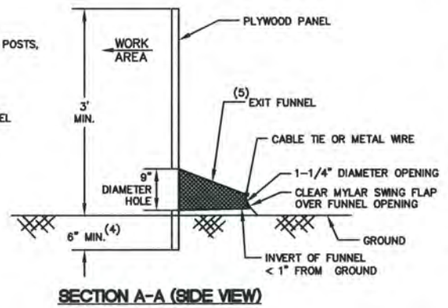
PRELIMINARY PLANS
NOT APPROVED FOR CONSTRUCTION



PROFILE



TOP VIEW



SECTION A-A (SIDE VIEW)

NOTES:

1. ESA FENCE FABRIC SHALL BE GEOTEX 104F OR APPROVED EQUAL, OR PLYWOOD PANELS IN LIEU OF ESA FENCE FABRIC.
2. ESA FABRIC SHALL BE STAPLED TO PLYWOOD WITH 1/2" STABLES < 12" APART, OR OTHER ACCEPTABLE FASTENER AS LISTED IN THE SPECIAL PROVISIONS.
3. WOODEN POSTS SHALL BE USED UNLESS SOIL CONDITIONS WARRANT THE USE OF STEEL POSTS.
4. TEMPORARY FENCING (TYPE ESA), INCLUDING ESA FENCE FABRIC, SHALL BE BURIED 6" MIN. BENEATH EXISTING GROUND.
5. EXIT FUNNEL SHALL BE MADE OF 1/8" HARDWARE CLOTH, SPACED EVERY 100' OR AS DIRECTED BY THE QUALIFIED BIOLOGICAL MONITOR (QBM).

TEMPORARY EXCLUSION FENCE (TYPE ESA) DETAILS

NOT TO SCALE

PRELIMINARY PLANS
NOT APPROVED FOR CONSTRUCTION

COUNTY OF SAN MATEO PUBLIC WORKS

REVISION	DATE	DESIGNED BY: EPC	CHECKED BY: WN	DRAWN BY: EPC

SEAL COVE ROAD IMPROVEMENTS ON DEL MAR AVENUE, MADRONE AVENUE AND SAN RAMON AVENUE

DETAILS: MISCELLANEOUS

SCALE: AS SHOWN
DATE: 01/22/2014
FILE NO.: 1/4903

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
SAN MATEO COUNTY

555 COUNTY CENTER, 5th FLOOR
REDWOOD CITY, CALIFORNIA 94063

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4

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SHEET 9 OF 9

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