

**COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT**

DATE: August 28, 2019

TO: Planning Commission

FROM: Planning Staff

SUBJECT: Consideration of a Coastal Development Permit (CDP), pursuant to Section 6328.4 of the San Mateo County Zoning Regulations, to allow installation of 1,500 linear feet of 4-inch non-potable water line leading from the existing reservoir gate valve down to the County Quarry Park Ranger Station. The project includes 598 cubic yards of grading; removal of 200 eucalyptus trees with less than 17-inch diameter at breast height (dbh) on and adjacent to the reservoir embankment; and minimal brush clearing/grubbing. The project site is located at Quarry County Park in the El Granada area of San Mateo County. This project is appealable to the California Coastal Commission.

County File Number: PLN 2019-00065

PROPOSAL

The Applicant, the San Mateo County Parks Department, proposes to install 1,500 linear feet of 4-inch, PVC (polyvinyl chloride), non-potable, water line leading from the existing reservoir gate valve down to the existing County Quarry Park Ranger Station. The entire 1,500 feet of the new water line will be placed underground in a typical 1.5 foot wide by 3.5 – 4 foot deep trench. The water line will be stubbed-out/divided to provide a 2-inch non-potable water line to irrigate meadows and the existing community garden; and a separate 4-inch line for fire suppression. Approximately 460 feet of the proposed water line involves “cross-country” installation extending it from the reservoir valve gate (on parcel APN 047-340-290, zoned PAD/CD) down to the thrust block connection (on parcel APN 047-340-020, zoned RM-CZ/CD) at the dirt access road. The proposed project includes 598 cubic yards of grading (302 cubic yards cut and 296 cubic yards fill). The proposed project also entails the removal of 200 eucalyptus trees with less than 17-inch dbh that are growing on and adjacent to the existing reservoir embankment and minimal brush clearing/grubbing of the site.

RECOMMENDATION

That the Planning Commission approve the Coastal Development Permit, County File PLN 2019-00065, by making the required findings and adopting conditions of approval as listed in Attachment A.

BACKGROUND

Report Prepared By: Renée T. Ananda, Planner III, Telephone 650/599-1554

Applicant: San Mateo County Parks Department

Owner: San Mateo County Parks Department

Location: Quarry County Park, 1195 Columbus Street, El Granada

APN(s): 047-340-290 and 047-340-020

Size of Parcels: Respectively, 467 acres (approximately) and 10.75 acres

Existing Zoning: PAD/CD (Planned Agricultural District/Coastal Development) and

RM-CZ/CD (Resource Management-Coastal Zone/Coastal Development)

General Plan Designation: Agriculture Rural and Open Space Rural

Parcel Legality: Legal parcels, encompassing County Park.

Sphere-of-Influence: Half Moon Bay

Williamson Act: Parcels are not under a Williamson Act Contract.

Existing Land Use: County Park that includes a Ranger Station (office and storage building), community garden, playground, and public hiking trails.

Water Supply: Coastside County Water District

Sewage Disposal: None; outside of Granada Sanitary District service area; vault toilets are provided.

Flood Zone: FEMA Flood Insurance Rate Map designation indicates parcel as Zone X,

Area of Minimal Flooding, Community Map No. 06081C0140E, dated October 16, 2012.

Environmental Evaluation: Categorically exempt under provisions of Class 3 (New Construction or Conversion of Small Structures), Section 15303(d), of the California Environmental Quality Act Guidelines.

Setting: Quarry Park was acquired by the County and managed by Midcoast Park Lands from 1995 to 2008, until County Parks took over all ownership and management. The proposed project site spans two (2) parcels (APNs 047-340-290, zoned RM-CZ/CD and 047-340-020, zoned PAD/CD) within the Quarry County Park boundary. The park is located outside of the Urban-Rural Boundary within a rural/open space setting and the subject parcels are designated Agriculture Rural and Open Space Rural under the General Plan. The Community of El Granada is a residential area that abuts the park to the west and southwest. Park access is via an existing road that starts from the park entrance located at the intersection of Columbus and Santa Maria Avenue. The access/service road extends northward from the park entrance and continues through a meadow that is bordered by groves of non-native trees and vegetation, including eucalyptus (blue gum) and annual grassland, to its east and west. Public trails, including the Meadow Trail and Middle Ridge Trail can be found to the east and west of the Ranger Station. There are ephemeral (0.12 acre), intermittent (0.41 acre), and perennial (0.03 acre) streams in the park, however none occur on or near the proposed project site. The service road terminates at an existing 1.49-acre pond/reservoir with a storage capacity of approximately 2.39 acre-feet. Existing development comprises the main parking lot located at the entrance (at Columbus Street and Santa Maria Avenue), Ranger Station (office and storage building), playground, community garden plots, restroom, picnic areas, and trails.

Chronology:

<u>Date</u>	<u>Action</u>
February 12, 2019	- Application submitted to the San Mateo County Planning Department
March 19, 2019	- Application PLN 2019-00065 deemed complete
August 28, 2019	- Planning Commission public hearing

DISCUSSION

A. KEY ISSUES

1. Conformance with the General Plan (GP)

Applicable General Plan Policies are discussed below.

a. Vegetative, Water, Fish, and Wildlife

Policy 1.1 (*Conserve, Enhance, Protect, Maintain, and Manage Vegetative, Water, Fish and Wildlife Resources*) provides for the conservation, enhancement, protection, and management of

vegetative, water, fish, and wildlife resources. The goal of Policy 1.2 (*Protect Sensitive Habitats*) is to protect sensitive habitat types and ensure that these habitats are not reduced in size; additionally, the conditions necessary to maintain sensitive habitats must not be degraded. Policy 1.4 (*Access to Vegetative, Water, Fish and Wildlife Resources*) protects and promotes the public's right to access vegetative, water, fish, and wildlife resources for recreation and study purposes, consistent with protecting public and private property owners' rights and preservation of resources.

The proposed project is within Quarry County Park which provides for public recreation and protection of its natural resources. The park comprises informal and formal recreational trails and community-directed uses and amenities. The more intense development at Quarry Park (parking, playground/tot lot) is located close to the park entrance at the intersection of Columbus Street and Santa Maria Avenue. The trails and other support outbuildings extend into the Park's steeper, out lying, densely wooded areas conducive to hiking and the preservation and observation of vegetative and wildlife resources. County Parks' Biological Resources Assessment report for the Quarry Park Master Plan (prepared in March 2017 and updated in December 2018), identifies the biological communities at Quarry Park. Non-sensitive biological community comprises a total of approximately 508 acres, this includes 310 acres of eucalyptus grove and non-native grasslands, both of which predominate the project area. Sensitive communities in Quarry Park include beaches, riparian, streams (perennial, ephemeral, and intermittent), and seasonal and perennial ponds. The biologist who prepared the assessment did not find any Species of Special Concern in the proposed project area. The County Parks staff biologist reviewed the updated assessment and conducted a site visit on February 22, 2019. Vegetation types include non-native grasses, some shrubs, and predominantly eucalyptus (*Eucalyptus globulus*) woodland. The biologist's conclusion is that no Species of Special Concern are present in the proposed area of disturbance and none would be removed as part of the proposed project. A search of the California Native Plant Society Database and the California Natural Diversity Database indicate that neither State nor Federally listed threatened or endangered species of plant or wildlife occur on the Park property. County Parks environmental consultant for the Biological Resources Assessment also found no evidence of special or threatened plant or animal species within or near any areas where development is proposed. County Parks' biologist's field review also indicates that there are no wetlands, or wetland meadows within the project site or its vicinity. The proposed project would provide irrigation for the existing community garden and meadows, as well as function as a water source for fire suppression in the area. The proposed

project also includes replacement of the existing valve at the reservoir gate. Proposed work involves minimal clearing of brush and the removal of approximately 200 eucalyptus trees with a diameter at breast height (dbh) of less than 17-inches. The proposed project also includes 598 cubic yards of grading (302 cubic yards of cut and 296 cubic yards of fill). The County Arborist visited the site in October 2018 and determined that the eucalyptus trees do not meet the significant tree threshold.

Installation of the water line would not permanently change the natural landscape or visual open space/rural character of the area. The proposed project includes implementation of an Erosion and Sediment Control Plan to prevent the project's potential impacts to natural resources in the area. Some vegetative cover would be removed, as mentioned above. Clearing the surface increases an area's susceptibility to erosion, therefore staff recommends condition of approval No. 9 to require the applicant to implement stabilization measures to the site after the land is disturbed including re-vegetation with native species. The project is intended to provide recreational opportunities for existing and future residents of the County by providing for the maintenance of the community garden and open space areas (the two meadows), as well as water service for fire suppression. Temporary closure of a portion of the Meadow Trail will be necessary during installation activities (such as trenching). The applicant will place temporary signage at the site and in the area to inform the public and to detour trail users during construction work, as necessary. The public would still have access to many of the park's other hiking trails during construction activities and after project completion. Staff has proposed conditions of approval to require that the applicant implement Best Management Practices (BMPs). BMPs shall be inspected regularly and maintained to ensure these control measures are installed appropriately and working effectively. The proposed project, with the Erosion and Sediment Control Plan, and as conditioned will maintain the natural resources of the park (including vegetation, water, fish, and wildlife), protect these resources from degradation, and retain the public's existing rights to access vegetative, water, fish and wildlife resources, consistent with Policies 1.1, 1.2, and 1.4.

b. Rural Land Use

The General Plan contains goals and objectives for Rural Land Use. Rural Lands include open space areas in the County as well as those dedicated to agriculture. The subject parcels are designated Agricultural Rural (APN 047-340-290) and Open Space Rural (APN 047-340-020) under the General Plan. Policy 9.1 (*Goal for Land Use*

Planning in the Rural Area) establishes a goal for rural areas to ensure the provision of compatible and harmonious land uses. Development reviewed under Policy 9.1 must be concentrated in specific areas to encourage the conservation and managed production of natural resources in a manner that meets general social and economic needs. Objectives include: 1) careful management of natural resources, such as soil, timber, and minerals; 2) protection of scenic and pastoral qualities of rural lands; 3) provision of diverse recreational opportunities; and 4) to minimize the amount of environmental damage from projects for the development of infrastructure. Policy 9.4 (*Land Use Objectives for the Rural Lands*) provides land use objectives for the protection and conservation of vegetation, water, fish and wildlife resources, productive agriculture and forestry soil resources, and other resources that are vital to the local economy. Policy 9.7 (*Rural Lands*) and Policy 9.11 (*Designation of Rural Lands*) respectively provide the definition for Rural Lands and the designation of Rural Lands within unincorporated San Mateo County. Policy 9.13 (*Land Use Objectives for the Rural Lands*) seeks to protect and enhance resources of Rural Lands to (amongst other criteria) provide a variety of outdoor recreational opportunities. Policy 9.23 (*Land Use Compatibility in Rural Lands*) encourages the compatibility of land uses to promote health and safety. Land Use Policies 9.30 (*Development Standards to Minimize Land Use Conflicts with Agriculture*), Policy 9.35 (*Encourage Existing and Potential Public Recreation Land Uses*), and Policy 9.36 (*Development Standards to Minimize Land Use Conflicts in Public Recreation Lands*) ensure that there is no conflict between development and agricultural and recreational uses. Policy 9.40 (*Maintenance of the Open Space Character of Lands Designated as General Open Space*) requires performance standards to maintain the open space character of lands. Policy 9.42 (*Development Standards for Land Use Compatibility in General Open Space Lands*) requires that development retain the open space character of the parcel and cause the least disturbance to scenic resources.

The project site is located on parcels that are outside of lands designated as “Rural Service Centers” and “Rural Residential Subdivisions”. The project site comprises two (2) parcels that meet the definition of Rural Lands, as designated and defined by Policies 9.7 and 9.11. The project parcels are within Quarry Park which provides for recreational use open to the public, including an extensive network of informal access trails, a community garden, and playground with structures. The proposed project will provide irrigation for the existing community garden, two meadows, and will serve as a water source for fire suppression in the area. The new water line and replacement of the valve at the reservoir gate will not detract from the open space character of the area. The proposed project is intended to provide

public safety and recreational benefits for existing and future residents of the County. Maintenance of the community garden and meadows, as well as water service for fire suppression would ensure there are continued recreational opportunities available in the park (and effectively within the Coastal Zone). The new water line will be installed underground, therefore it would not permanently change the natural landscape or visual open space/rural character of the area. The proposed project is consistent with the General Plan including Policies 9.1, 9.4, 9.35, 9.36, and 9.42, as discussed above, for the protection of recreational uses and open space. APN 047-340-020 contains Class 2 Prime Agricultural Soils along the access road area to the south of the ranger station. A very small strip of Class 2 Prime Agricultural Soils can be found on APN 047-340-290 along the boundary with the adjacent parcel (APN 047-340-040) on the south. None of the proposed project activities will be conducted on Prime Agricultural Soil. Staff notes that historically there has been no agriculture conducted within Quarry Park¹. The proposed water line would not prohibit the potential for agricultural use if contemplated in the future. The proposed project is therefore consistent with GP Rural Lands Policies 9.13 and 9.30. Furthermore, the water line's use for fire suppression provides for public safety, consistent with GP Policy 9.23.

c. Soil Resources

Policy 2.1 (*Protect and Preserve Soil as a Resource*) provides for the protection of soil as a resource to sustain healthy plant, animal, and human life, which ensures that good quality soil remains available within San Mateo County. Policies 2.2 (*Minimize Soil Erosion*), 2.3 (*Prevention of Soil Contamination*), and 2.4 (*Protection of Productive Soil Resources*) all provide for the protection of soil resources. Respectively they require the use of conservation practices to minimize erosion, appropriate use, storage, and disposal of toxic substances. The General Plan's soil resources policies, overall, require that soil productivity be protected from abuse, misuse, and degradation. Policy 2.5 (*Minimize Depletion of Productive Soil Resources in Agricultural Areas*) is to ensure that management practices in agricultural areas are applied to minimize depletion of productive soils.

The proposed project, as mentioned above, includes an Erosion and Sediment Control Plan that incorporates temporary and permanent measures, such as wattles and re-vegetation of the project site. Soil conservation standards and management techniques to control erosion

¹ Leslie Lazarotti, WRA Environmental Consultants, *Biological Resources Assessment San Mateo County Quarry Park Master Plan Project El Granada, San Mateo County, California*, p1. Prepared for San Mateo County Parks in March 2017 and revised in December 2018.

and reduce off-site sediment migration shall be implemented to minimize the extent and duration of exposure of the soil and to protect and stabilize disturbed areas. All soils disturbed by construction/maintenance activities will be treated with the appropriate controls within three (3) working days or sooner during wet season and within fourteen (14) days or sooner during the dry season. Dry season disturbed soil surfaces that have the potential for wind or traffic airborne dust will be treated sooner than the fourteen (14) day time frame. Staff has conditioned the proposed project to require the applicant to implement Best Management Practices (BMPs) to reduce erosion. BMPs include placement of sterile rice straw over the work site (and trenching area) and installation of wattles along the portion of the new water line extending from the reservoir to the point where it meets the fire road, and at the location of the system thrust block. Sterile rice straw and wattles (including three sets of wattles placed in a U shape 20 feet beyond the project work site) would also be placed from the thrust block location to the end of the line at the existing container site. All earth work will be compacted to prevent migration of soil from the respective locations. Staff's recommended condition of approval requires that BMPs shall be inspected regularly and maintained to ensure these control measures are installed appropriately and working effectively. Installation of the proposed water line would not contaminate the soil or reduce the availability of quality agricultural soil resources. The project parcels contain a minimal amount of Prime Soil, as described in the Rural Land Use discussion above. None of the project activities will occur on Prime Soil. The proposed project with the Erosion and Sediment Control Plan and as conditioned is consistent with Policy 2.23, which regulates excavation, grading, filling, and land clearing activities to protect against soil erosion and sedimentation; and Policy 2.27 that regulates development to protect against soil contamination.

d. Visual Quality

The General Plan, particularly Policies 4.1 (*Protection of Visual Quality*), 4.3 (*Protection of Vegetation*), and 4.4 (*Protection of Appearance of Rural and Urban Development*), provides for the protection of visual resources. These policies, among others, protect scenic resources and the natural visual quality of San Mateo County; as well as promote aesthetically pleasing development in rural areas. Policy 4.17 (*Protections for Coastal Features*) regulates coastal development to protect and enhance natural landscape features and the visual quality of areas within the Coastal Zone. Policy 4.26 (*Earthwork Operations*) requires that grading or earth-moving operations be kept to a minimum; and that where grading is necessary,

ensure that graded areas blend with the natural landform. Policy 4.29 (*Trees and Vegetation*) provides for the preservation of trees and natural vegetation (except where required for development that is approved) and requires replacement of trees and vegetation with native plant materials where possible. Policy 4.29 also requires that large native trees be afforded special protection. Policy 4.58 (*Tree and Vegetation Removal*) allows for the removal of trees and natural vegetation when done in accordance with existing regulations. This policy additionally prohibits the removal of more than 50% of the tree cover except as allowed by a permit. Policy 4.65 (*Utilities in County Scenic Corridors*) requires that new distribution lines be installed underground.

The proposed project is located at a site within the Cabrillo Highway / Highway 1 County Scenic Corridor. The project as described above is to install an underground water line to provide non-potable water from the existing reservoir gate valve for irrigation and fire suppression. The project would not result in significant impacts to vegetation at the site or in the area, as discussed above. Visual impacts would be temporary, primarily during the installation work, as the new water line would be located underground, consistent with Policies 4.26, 4.29, and 4.65. The County Arborist, as mentioned above, visited the site in October 2018 and determined that the eucalyptus trees do not meet the “significant tree” threshold under the Resource Management zoning. The proposed brush clearing would be minimal; and the project includes re-vegetation of the site with native species. The proposed project is consistent with Policies 4.58 and 4.17 as the project would not permanently change or detract from the natural landscape or visual open space/rural character of the area.

e. Historical and Archaeological Resources

The General Plan has goals and objectives to protect and preserve historical and archaeological/paleontological resources. Such resources must be protected from destruction so that they are preserved for future scientific research and public education. General Plan policies are in place to regulate development in a manner that meets these goals. The policies include Policies 5.20 (*Site Survey*), and 5.21 (*Treatment*), which respectively require an adequate mitigation plan to protect archaeological/paleontological resources and that construction work be suspended when archaeological/paleontological resources are encountered.

Staff has included conditions of approval No. 11 and 12 that requires all work to stop at the work site in the event archaeological resources or human remains are encountered during construction activities. The

“Stop Work” shall allow for a sufficient and well-timed investigation and or appropriate excavation of the site by a qualified professional. The proposed project is conditioned to require the applicant prepare a mitigation plan that includes a stop work measure which complies with Policies 5.20 and 5.21.

f. Park and Recreation Resources

The General Plan’s goals are to ensure the provision of equitable and balanced park and recreation facilities. Identified park and recreation needs are to be met in a manner that best enhances the physical, mental, and spiritual quality of life for San Mateo County residents. Park and Recreation Resources policies, including Policies 6.5 (*Access to Park and Recreation Facilities*) and 6.11 (*Coastal Recreation Access*) regulate development and emphasize the protection of and access to recreation and park facilities.

The primary objective of the proposed project is to provide a reliable connection to a water source (the existing reservoir) for fire suppression in the park and abutting residential area, to the extent possible. The new water line will also serve to irrigate two (2) park meadows as needed, one (1) to the west of the Meadow Trail and the other one (1) located above the children’s playground to the south of the proposed project area. The water line will also serve the Community Garden during the growing season and the existing landscape screening around the Ranger Station storage containers. The proposed project will promote continuance of the community garden and the growth of the landscaping/vegetation used for screening of the storage containers that can be seen from the public trail. Recreation facilities of the park would be retained, consistent with the General Plan’s park and recreation policies, including Policies 6.5 and 6.11.

g. General Land Use

The General Plan has goals and objectives relative to Land Use. Policies 7.18 (*Land Use Objectives for Rural Areas*) and 7.19 (*Appropriate Land Use Designations for Rural Areas*). These two policies locate land uses in rural areas to preserve natural resources, to provide for managed productive use and monitoring of resources, provide outdoor recreation, and protect public health and safety; and primarily plan for recreation, general open space, and agriculture, among other generalized types of land use. The proposed project site located in Quarry Park is within an area designated under the General Plan as Agriculture Rural and Open Space Rural. These designations allow for resource management and production such as agriculture,

and recreation. Use of the land for the proposed water line will provide for the protection of public safety in the event of fire, will not conflict with any potential for agricultural use, and will continue the outdoor recreational opportunities by maintaining the existing community garden has to offer. The proposed project is consistent with the General Plan including Policies 7.18 and 7.19 Land Use.

2. Conformance with the Local Coastal Program (LCP)

The LCP provides for the protection of resources within the Coastal Zone. The proposed project is located within the Coastal Zone and combined with the Coastal Development (CD) overlay district which requires a Coastal Development Permit (CDP) for development projects. Staff has reviewed the project and found that it complies with applicable LCP policies, as discussed below.

a. Locating and Planning Development

Policy 1.6 (*Definition of Rural Areas*), defines rural areas as those lands suitable for a variety of land uses including residential, agricultural, and recreational which are consistent with retaining Open Space to preserve natural resources, provide outdoor recreation, and protect public health and safety. Policy 1.7 (*Designation of Rural Areas*), designates lands outside the urban/rural boundary as indicated on the LCP Land Use in effect on March 25, 1986. These include areas that were designated Agriculture, General Open Space, and Public Recreation. Policy 1.8 (*Land Uses and Development*), allows new development in rural areas only if it is demonstrated that the development will not diminish the ability to keep all prime agricultural land and other land suitable for agriculture in agricultural use, or shown not to result in significant adverse impacts on coastal resources. LCP Policy 1.25 (*Protection of Archaeological/Paleontological Resources*) requires the protection of archaeological resources.

The proposed project includes implementation of an Erosion and Sediment Control Plan that would avoid, reduce, and control potential adverse environmental impacts on natural resources in the area, as a result of the project. Staff has conditioned the proposed project to require the applicant to implement specific BMPs to address erosion. These BMPs shall be inspected regularly and maintained to ensure these control measures are installed appropriately and working effectively.

The proposed project is conditioned to require the applicant to prepare an archaeological mitigation plan that includes a stop work measure, consistent with LCP Policy 1.25, in case unanticipated cultural resources are uncovered.

b. Agriculture

The LCP provides for the protection of agricultural resources within the Coastal Zone. The proposed project site as mentioned above is within an area zoned for agricultural use and resource management. LCP Policy 5.4 (*Designation of Lands Suitable for Agriculture*) provides for parcels in agricultural areas that contain other lands suitable for agriculture. Policy 5.6 (*Permitted Uses on Lands Suitable for Agriculture Designated as Agriculture*), outlines permitted uses on such lands, which includes public recreation as a permitted use.

The proposed project is sited on portions of the two parcels that meet the definition of Lands Suitable for Agriculture. The replacement valve at the reservoir gate and part of the water line valve are located within parcel APN 047-340-290, which is zoned PAD/CD. The thrust block connection at the Ranger Station and the initial 45 feet (approximately) of the water line extending from the station are on parcel APN 047-340-020, which is zoned RM-CZ/CD. APN 047-340-020 contains Class 2 Prime Agricultural soils along the access road area to the south of the Ranger Station. A very small strip of Class 2 Prime Agricultural soils can be found on APN 047-340-290 along the boundary with adjacent parcel APN 047-340-040 on the south. None of the proposed project activities would be conducted on Prime Soils. See the General Plan discussion above regarding Rural Land Use.

The proposed project does not conflict with agricultural land use in the area, consistent with LCP policies for the protection of agriculture in the Coastal Zone, including LCP Policies 5.4 and 5.6.

c. Sensitive Resources

The LCP includes a component for Sensitive Habitats which provides for the protection of sensitive resources in the Coastal Zone. LCP Policy 7.1 defines sensitive habitats as areas that, in summary, meet the following criteria: 1) contain or support rare and endangered species; 2) perennial and intermittent streams and tributaries; 3) tidelands and marshes; 4) coastal areas that contain breeding or nesting sites and coastal areas used by migratory and resident water-associated birds for resting and feeding; 5) areas used for scientific study and research of wildlife; 6) lakes ponds, and adjacent shore habitat; 7) existing game and wildlife refuges and reserves; and 8)

sand dunes. Policy 7.2 designates sensitive habitats within the County; and Policy 7.3 requires protection of those types of habitat.

The project area is a rural and open space setting. The Biological Assessment for the Quarry Park Master Plan identifies the biological communities within the park. There is no sensitive habitat, as defined and designated by the LCP, within the project site or the immediate vicinity. See the detailed General Plan discussion above regarding vegetative, water, fish, and wildlife policies. The proposed project will not result in impacts to sensitive resources, therefore it complies with the LCP policies, including LCP Policy 7.3, for the protection of sensitive habitats.

d. Visual Resources

The LCP provides for the protection of Visual Resources as demonstrated under the LCP's Natural Features – Landforms section particularly Policy 8.5. (*Location of Development on rural lands larger than 20,000 sq. ft.*). Policy 8.5 requires new development to be located on a portion of a parcel where the development: 1) is least visible from State and County Scenic Roads; 2) is least likely to significantly impact views from public viewpoints; and 3) is consistent with all other LCP requirements, while best preserving the visual and open space qualities of the parcel overall. The LCP's Natural Forms – Vegetative Forms provides policies for trees and vegetative cover. Policy 8.9 (*trees*) requires new development be designed and located in a manner to minimize tree removal. Policy 8.9 also prohibits the removal of trees in scenic corridors except by selective harvesting which protects the existing visual resource or by methods necessary for approved development in compliance with LCP policies. Policy 8.10 (*Vegetative Cover (with the exception of crops grown for commercial purposes)*) requires that removed vegetation be replaced with plant materials, including trees, shrubs, and ground cover, be compatible with surrounding vegetation and suitable to the climate, soil, and ecological characteristics of the area. Policy 8.23 (*Utilities in County Scenic Corridors*) requires that new distribution lines be installed underground. Policy 8.31 (*Regulation of Scenic Corridors in Rural Areas*) contains provisions for regulating development in scenic corridors, including that LCP policies for vegetative forms and the Zoning Regulations of the Resource Management District be applied to development, specifically for protection of scenic corridors in the Coastal Zone. These regulations require that public views within and from scenic corridors shall be protected and enhanced, and development shall not be allowed to significantly obscure, detract from, or negatively affect the quality of these views. Vegetative screening or setbacks may be used to mitigate such impacts. No

development shall be permitted on grass and/or brush land in scenic areas unless such development will be screened effectively from existing or proposed public viewing areas or scenic corridors. Screening should consist of natural materials of the area, preferably natural vegetation.

The LCP provides for the protection of visual resources within the coastal zone, including through policies that are designed to minimize tree removal, and explicitly prohibits the removal of living trees with a trunk circumference greater than 55 inches at 4 1/2 feet above the ground, which translates into a prohibition on tree removal for trees roughly 17.5" dbh and above.² The proposed project would entail the removal of 200 eucalyptus trees with less than 17-inch diameter at breast height (dbh) that are growing on and adjacent to the reservoir's 171-foot long embankment. Tree removal is necessary to ensure the integrity of the embankment. The dense stand of eucalyptus on and adjacent to the embankment can potentially displace large volumes of soil. Tree roots can also create macropores (pores/spaces) within the embankment which allow water to collect or flow through the soil that could damage the embankment or breach it. The development of macropores and / or displacement of soil could result in structural failure of the existing embankment. Ground disturbance at the site would be temporary. The project vicinity is undeveloped, with a thick stand of eucalyptus trees, shrubs, and grass, as mentioned above. The site is located within the County's Cabrillo Highway/Highway 1 Scenic Corridor; however, the new development is not visible from Highway 1. The replacement valve will be on the existing reservoir facility; and as discussed previously, the new water line will be located underground. Disturbed areas will be re-vegetated with a native, annual seed mix. The proposed project will not permanently change the natural landscape or visual open space/rural character of the area. It will not result in significant impacts on visual resources, consistent with LCP policies for the protection of visual resources, including LCP Policies 8.5, 8.9, 8.10, 8.23, 8.31, and Section 6325.1.

e. Recreation/Visitor-serving Facilities

The LCP provides for recreational and visitor-serving facilities and uses in the Coastal Zone. LCP Policy 11.3 provides the definition of public recreation facilities as lands and facilities serving primarily a recreation function which are operated by public agencies. Such facilities include parks, recreation areas, wild areas, and trails. LCP Policy 11.4 allows for the permitting of recreation facilities designed to

² Trees are rarely perfectly circular, but a perfectly circular tree with a circumference of 55" is the same as a perfectly circular tree with a diameter of 17.5".

enhance coastal recreation opportunities for the public and that do not substantially alter the natural environment.

The proposed project is located within Quarry County Park, a public recreation facility, as defined under LCP Policy 11.1. The water line, although not a stand-alone recreational facility, would enhance opportunities for the public's recreational experience in the Coastal Zone. The proposed project would provide a water source that assists with retaining the community garden and ensures the vitality of the landscape screening at the Ranger Station, as well as the meadows all of which contribute to a positive recreational experience for the public. An available source of water for fire suppression would also benefit public safety within this recreational facility and its environs without substantial alteration of the natural environment. The proposed project is consistent with LCP Policy 11.1.

B. ENVIRONMENTAL REVIEW

The proposed project is categorically exempt from the California Environmental Quality Act (CEQA) under CEQA Guidelines, Section 15303 (New Construction or Conversion of Small Structures), Class 3, which exempts limited numbers of new, small facilities or structures.

C. REVIEWING AGENCIES

Building Department
Coastside Fire
California Coastal Commission

ATTACHMENTS

- A. Recommended Findings and Conditions of Approval
- B. Vicinity Map and Site Plan
- C. Project Plans
- D. Erosion Control Plan

RTADD0366_WCU.DOCX

County of San Mateo
Planning and Building Department

RECOMMENDED FINDINGS AND CONDITIONS OF APPROVAL

Permit or Project File Number: PLN 2019-00065 Hearing Date: August 28, 2019

Prepared By: Renée T. Ananda For Adoption By: Planning Commission
Project Planner

RECOMMENDED FINDINGS

Regarding the Environmental Review:

1. That the project is exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15303.

Regarding the Coastal Development Permit:

2. That the project, as described in the application and accompanying materials, is consistent with the General Plan as discussed in A.1 of this staff report.
3. That the project, as described in the application and accompanying materials required by Section 6328.7 of the San Mateo County Zoning Regulations and as conditioned in accordance with Section 6328.14 of the San Mateo County Zoning Regulations, conforms to the plans, policies, requirements, and standards of the San Mateo County Local Coastal Program as described in Section A.2 of this staff report.

RECOMMENDED CONDITIONS OF APPROVAL

Current Planning Section

1. The approval applies only to the proposal as described in this report and the materials submitted for review and approval by the Planning Commission on August 28, 2019. The Community Development Director may approve minor revisions or modifications to the project if they are found to be consistent with the intent of and substantially in conformity with this approval.
2. This permit shall be valid for two (2) years from the date of approval within which time the project shall be completed. A time extension may be obtained for good cause upon the applicant's written request submitted to and approved by the

Community Development Director. The request shall be submitted to the Community Development Director two (2) weeks prior to the expiration date.

3. Prior to initiating construction, the applicant shall finalize the draft erosion and sediment control plan entitled "Erosion Control Plan Quarry Park 1195 Columbus Avenue, El Granada APN: 047340290". The applicant shall submit to the Planning Department a full size (24"x36") Erosion and Sediment Control Plan, overlaying the project site, to scale. The Erosion and Sediment Control Plan must be reviewed and approved by the Current Planning Section prior to the beginning of construction.
4. Prior to any construction or grading activities and continuously between October 1 and April 30, the applicant shall implement the erosion and sedimentation control and best management practices (BMPs) specified in the project specifications to protect against detrimental discharge of sediment to natural habitats and resources. The applicant shall apply stabilizing measures to all denuded areas after the land is disturbed and provide all materials necessary to provide an effective means to stabilize soils and control erosion at the site, including but not limited to placement of wattles or straw bales; and minimizing vegetation removal. The applicant shall regularly inspect all erosion control measures and BMPs at the site to ensure they are properly installed and working effectively. Deficiencies shall be immediately corrected, as they occur. BMPs shall be implemented through to project completion. Applicant shall train and provide instruction to all project employees and subcontractors regarding the construction BMPs including, but not limited to:
 - a. Storing, handling, and disposing of construction materials and wastes properly, to prevent their contact with ground surface and storm water.
 - b. Controlling and preventing the discharge of all potential pollutants, including petroleum products, chemicals, wash water or sediments.
 - c. Avoiding cleaning, fueling, or maintaining vehicles on-site, except in a designated area where wash water is contained and treated.
 - d. Protecting adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.
 - e. Performing clearing and earth-moving activities only during dry weather conditions.
 - f. Limiting construction access routes and stabilizing designated access points.

- g. Avoiding tracking dirt or other materials off-site; cleaning off-site paved areas and sidewalks using dry sweeping methods.
 - h. During work activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from the work areas.
5. This project must include dust control provisions as detailed in the Grading Permit Performance Standards Handbook.
 6. All equipment used in land clearing operations shall meet spark arrester and fire-fighting tool requirements as specified in the California Public Resources Code.
 7. No grading shall be allowed during the winter season (October 1 to April 30) to avoid potential soil erosion unless approved, in writing, by the Community Development Director. The property owner shall submit a letter-request to the Current Planning Section, at least two (2) weeks prior to commencement of grading, stating the date when grading will begin.
 8. Construction activities shall be performed to avoid the general nesting period for birds. If construction or vegetation removal cannot be performed during the September to February time period, then pre-construction surveys shall be performed by a qualified biologist to locate any active nests prior to the start of construction. Said surveys must be conducted no more than fourteen (14) days prior to the start of proposed construction activities. If active nests are observed, buffer zones shall be established around trees/shrubs with nests, with a buffer size established by the qualified biologist through consultation with the California Department of Fish and Wildlife (CDFW). Buffered zones shall be avoided during construction activities until young have fledged or the nest is otherwise abandoned.
 9. Construction activities shall be limited to the hours of 7:00 a.m. until 6:00 p.m., Monday through Friday, and Saturdays from 9:00 a.m. until 5:00 p.m. Construction is not permitted on Sundays, Thanksgiving, or Christmas.
 10. A building permit is required. No site disturbance shall occur, including any vegetation removal or grading, until a building permit has been issued.
 11. Unexpected Discovery of Cultural Resources: Not all cultural resources are visible on the ground surface. Prior to the start of construction or ground-disturbing activities, the applicant shall ensure all field personnel are educated of the possibility of encountering buried prehistoric or historic cultural resources. Personnel will be trained that upon discovery of buried cultural resources, work within 50 feet of the find must cease and the applicant shall contact a qualified archaeologist immediately to evaluate the find. If the find is found to be eligible for

listing on the National Register of Historic Places or the California Register of Historical Resources, then plans for treatment, evaluation, and mitigation of impacts to the find shall be developed and implemented according to the qualified archaeologist's recommendations.

12. Unanticipated Discovery of Human Remains: The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the County coroner shall be notified immediately. If the human remains are determined to be prehistoric, the coroner shall notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). The MLD has 48 hours after being given access to the site to make recommendations to the landowner regarding disposition of the remains.

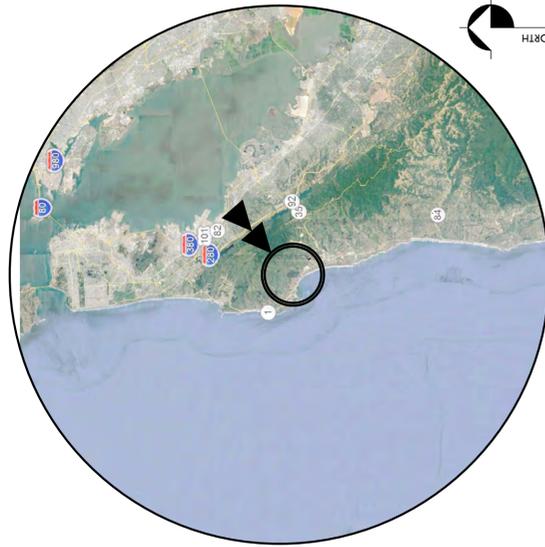
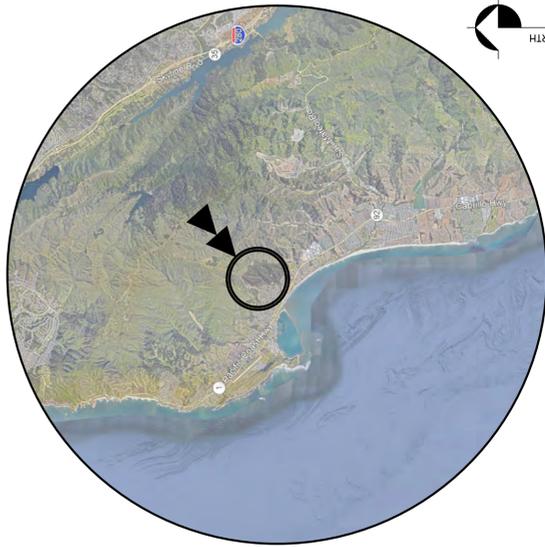
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COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT B

QUARRY PARK 1195 COLUMBUS STREET, EL GRANADA, CA NON-POTABLE WATER IMPROVEMENTS 100% ENGINEERING DESIGN PLANS



1 EXISTING SITE PLAN
SCALE: 1" = 150' @ 22"x34"

PROJECT CONTACTS

CIVIL ENGINEER
FALL CREEK ENGINEERING, INC.
1525 SEABRIGHT AVENUE
SANTA CRUZ, CA 95062
PHONE: 831-426-9054
CONTACT: PETER HAASE, P.E.
PRINCIPAL ENGINEER

GENERAL NOTES

PROJECT DESCRIPTION

QUARRY PARK IS A SAN MATEO COUNTY PARK THAT ENCOMPASSES 517 ACRES LOCATED IN EL GRANADA. SAN MATEO COUNTY PARKS (PARKS) HAS PROPOSED IMPROVEMENTS FOR SECURITY AND FOR FUTURE DEVELOPMENT ANTICIPATED AT THE SITE, WHICH INCLUDE WATER SYSTEM IMPROVEMENTS. CURRENTLY, THE SITE HOUSES A RANGER OFFICE AND STORAGE BUILDING. THE EXISTING RESERVOIR OUTLET HAS A 6" VALVE THAT HAS BEEN LEAKING AND MADE NO LONGER USABLE DUE TO THE TIME-SENSITIVE NATURE OF REPLACING THE VALVE, FCE HAS BEEN RETAINED TO PREPARE ENGINEERING DESIGN PLANS FOR THE NON-POTABLE WATER SYSTEM IMPROVEMENTS, WHICH INCLUDE USING THE EXISTING RESERVOIR TO PROVIDE A FIRE AND IRRIGATION NON-POTABLE WATER SERVICES FOR THE SITE.

THE IMPROVEMENTS WHICH INCLUDE:

1. GENERAL SITE IMPROVEMENTS
 - 1.1. ACCORDANCE WITH COUNTY CODE, AS WELL AS OTHER NECESSARY SITE DESIGNATION, TRENCHING DETAILS AND PLANS FOR CONSTRUCTION ACTIVITIES AT THE SITE CONDITIONS
 - 1.2. SITE CONDITIONS
2. NON-POTABLE WATER SYSTEM IMPROVEMENTS
 - 2.1. REPLACING A 6" NON-POTABLE WATER VALVE AT RESERVOIR OUTLET
 - 2.2. ADDING A 4" NON-POTABLE WATER LINE THAT WILL PROVIDE A 4" FIRE SERVICE & 2" IRRIGATION SERVICE

ALL IMPROVEMENTS ARE PROPOSED UNLESS OTHERWISE STATED.

SURVEY NOTES

1. THE LIDAR, IMAGERY, AND APN DATA SOURCE: SAN MATEO COUNTY GIS ENTERPRISE DATA

#	ID	COVER SHEET	SHEET INDEX	SHEET TITLE
1	C0.0	COVER SHEET		
2	C1.0	SITE IMPROVEMENT PLAN		
3	C2.0	DETAILS		
4	C3.0	GENERAL, MATERIAL & CONSTRUCTION SPECIFICATIONS		

LEGEND

- (E) CONTOURS
- (E) ADJACENT PARCEL LINES
- (E) PROPERTY BOUNDARY
- (E) ASPHALT ROAD
- (E) DIRT ROAD
- (E) DOMESTIC WATER MAIN

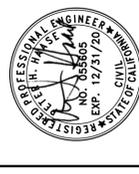
COVER SHEET
SHEET TITLE

CLIENT:
SAN MATEO COUNTY PARKS
ATTN: SAM HERZBERG
4555 COUNTY CENTER, 4TH FLOOR
REDWOOD CITY, CA 94063
TEL: (650) 363-4020

PROJECT TITLE:
NON-POTABLE WATER IMPROVEMENTS
QUARRY PARK, 1195 COLUMBUS STREET
EL GRANADA, CA 94018
SP PROJECT NO: XXXXXX

FALL CREEK ENGINEERING, INC.
Consulting Engineers
Civil/Environmental/Water Resources

1525 SEABRIGHT AVE.
SANTA CRUZ, CA 95062
TEL: (831) 426-9054



DRAWN BY: BJS
CHECKED BY: CIC/PHH
DATE: JANUARY 24, 2019
JOB NO: 21852
SCALE: AS SHOWN
SHEET: AS SHOWN

C0.0
1 OF 4



Looking south from reservoir, eucalyptus trees.



Looking north toward reservoir, eucalyptus trees.



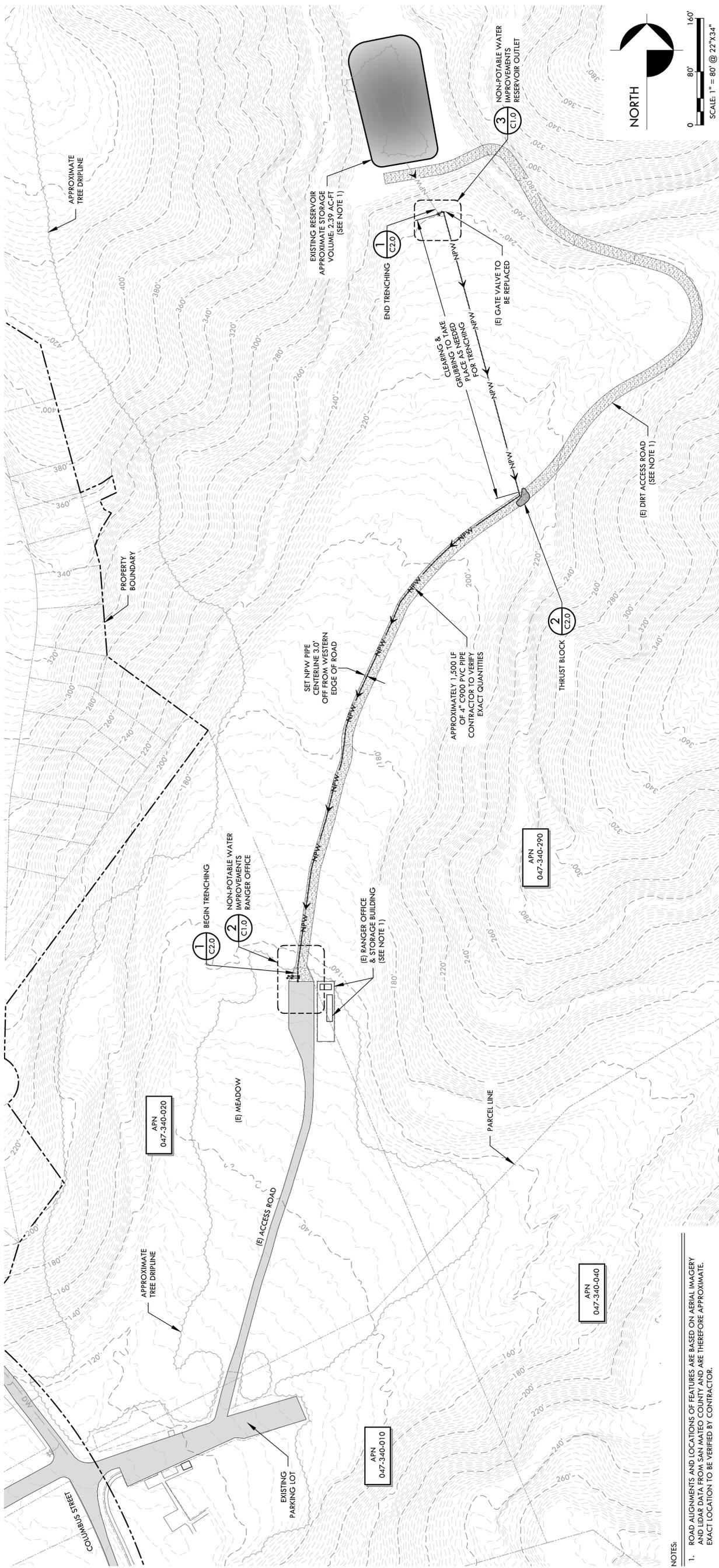
Looking south toward existing access road, open area to cleared and grubbed for installation of the water line.





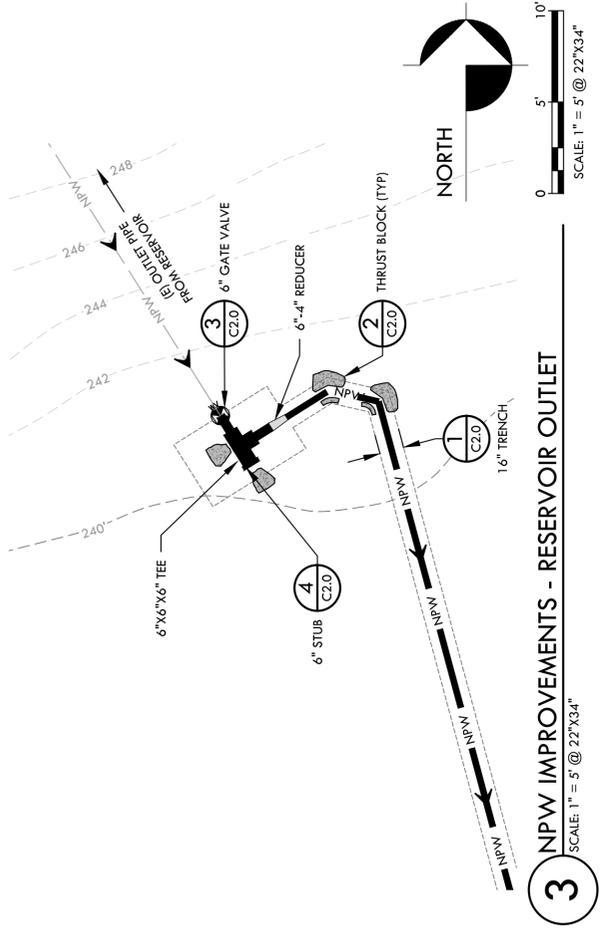
COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT C

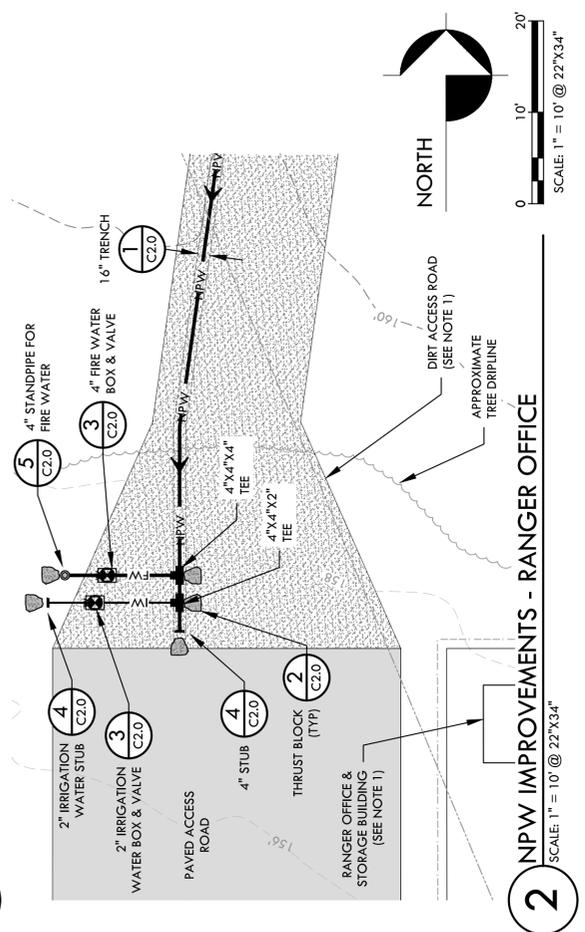


NOTES:
 1. ROAD ALIGNMENTS AND LOCATIONS OF FEATURES ARE BASED ON AERIAL IMAGERY AND LIDAR DATA FROM SAN MATEO COUNTY AND ARE THEREFORE APPROXIMATE. EXACT LOCATION TO BE VERIFIED BY CONTRACTOR.

1 SITE IMPROVEMENT PLAN
 SCALE: 1" = 80' @ 22"x34"



3 NPW IMPROVEMENTS - RESERVOIR OUTLET
 SCALE: 1" = 5' @ 22"x34"



2 NPW IMPROVEMENTS - RANGER OFFICE
 SCALE: 1" = 10' @ 22"x34"

LEGEND

---	(E) CONTOURS
---	(E) DIRT ACCESS ROAD (SEE NOTE 1)
---	(E) ADJACENT PARCEL LINES
---	(E) PROPERTY BOUNDARY
---	(E) ASPHALT ROAD
---	(E) DIRT ROAD
---	WATER VALVE
---	THRUST BLOCK

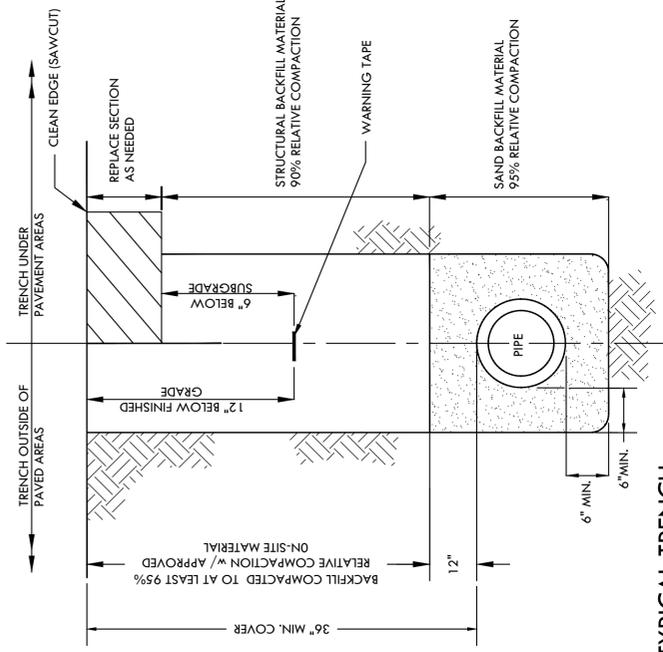
---	NPW	4" NON-POTABLE WATER PVC PIPE
---	FW	4" FIRE WATER PIPE
---	IW	2" IRRIGATION WATER PIPE

ABBREVIATIONS

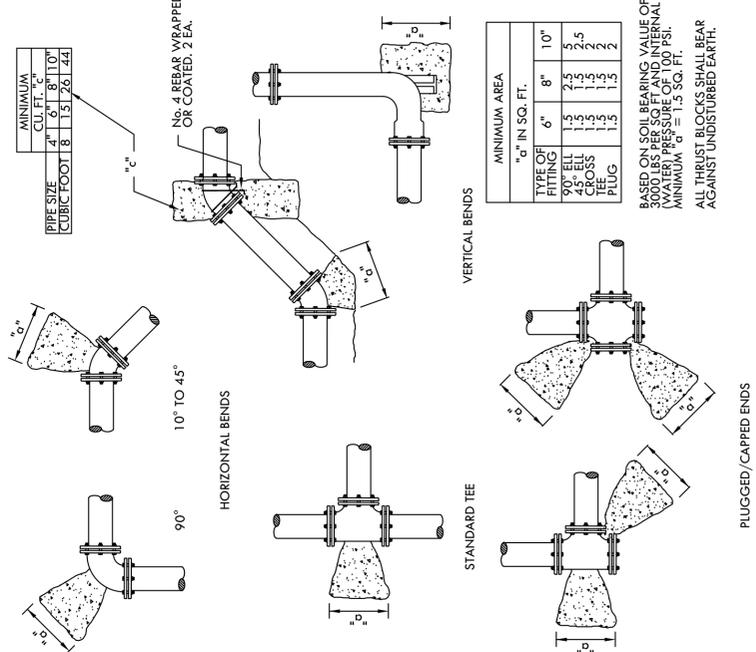
AC	ASPHALT CONCRETE	MIN	MINIMUM
(E)	EXISTING	NPW	NON-POTABLE WATER
EG	EXISTING GRADE ELEVATION	NTS	NOT TO SCALE
FL	FINISHED GRADE ELEVATION	SF	SQUARE FOOT
LF	FLOW LINE	T	THICKNESS
MAX	LINEAR FOOT	TYP	TYPICAL
	MAXIMUM		

WATER LINE INSTALLATION NOTES:

1. THE WATER MAINS SHALL BE INSTALLED USING NEW PIPE MATERIAL OF PVC EXCEPT WHERE INDICATED ON THE PLANS.
2. NEW WATER LINES SHALL BE INSTALLED AT A MINIMUM HORIZONTAL DISTANCE OF TEN (10) FEET FROM, AND A MINIMUM VERTICAL DISTANCE OF TWO (2) FEET ABOVE EXISTING SANITARY SEWER LINES.
3. WHERE THE ABOVE SEPARATION CAN NOT BE ACHIEVED, THE HORIZONTAL AND VERTICAL DISTANCES SHALL BE MAXIMIZED AT LEAST FIVE (5) FEET OR THE GREATEST EXTENT POSSIBLE HORIZONTALLY AND AT LEAST TWO (2) FEET BELOW EXISTING SANITARY SEWER LINES VIA HORIZONTAL DIRECTIONAL DRILLING.



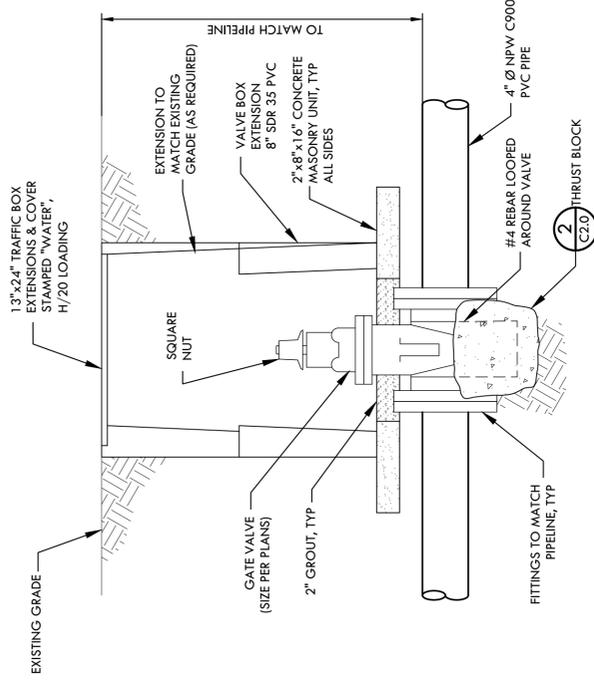
1 TYPICAL TRENCH
SCALE: NTS



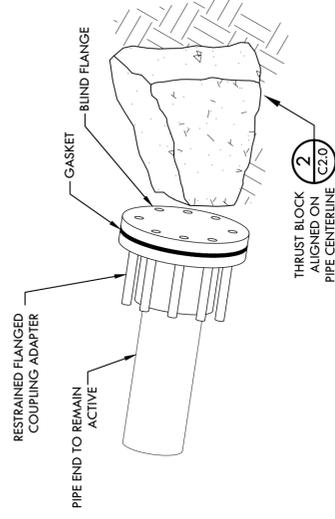
2 TYPICAL THRUST BLOCKS
SCALE: NTS

NOTES:

1. A CHRISTY G-5 VALVE BOX AND CAST IRON COVER MARKED "WATER" MAY BE USED FOR VALVES 2" AND SMALLER.
2. ALL VALVE BOXES NOT INSTALLED IN THE ROAD SHALL HAVE A CONCRETE COLLAR AROUND THE RIM.



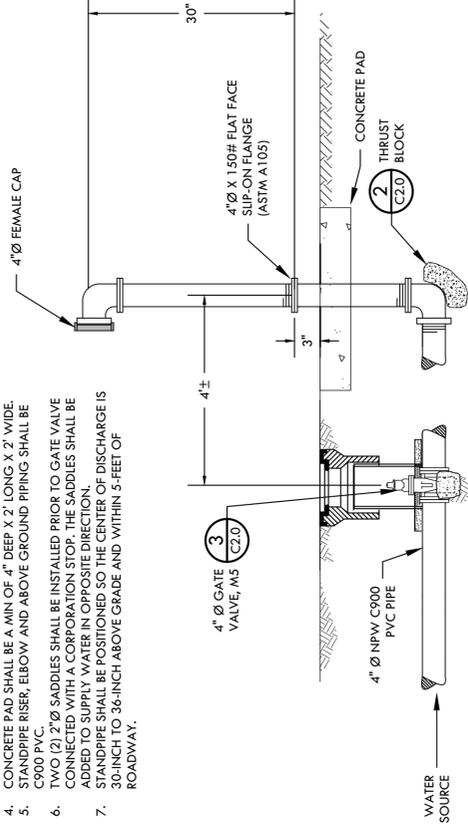
3 TYPICAL GATE VALVE INSTALLATION
SCALE: NTS



4 TYPICAL PIPE STUB
SCALE: NTS

STANDPIPE NOTES:

1. STANDPIPE INSTALLATION SHALL CONFORM TO AA CFS-02 RURAL WATER STANDARDS.
2. UNDERGROUND STANDPIPE SUPPLY PIPE SHALL BE 4"Ø AWWA C900. THE STANDPIPE OUTLETS SHALL BE TWO (2) 2-1/2" NH WITH REMOVABLE METALLIC CAP.
3. CONCRETE PAD SHALL BE A MIN OF .4" DEEP X 2' LONG X 2' WIDE.
4. STANDPIPE RISER, ELBOW AND ABOVE GROUND PIPING SHALL BE C900 PVC.
5. TWO (2) 1/2"Ø SADDLES SHALL BE INSTALLED PRIOR TO GATE VALVE OPERATION. THE SADDLES SHALL BE INSTALLED IN OPPOSITE DIRECTIONS TO SUPPLY WATER. STANDPIPE SHALL BE POSITIONED SO THE CENTER OF DISCHARGE IS 30 INCH TO 36 INCH ABOVE GRADE AND WITHIN 5- FEET OF ROADWAY.



5 FIRE WATER STANDPIPE
SCALE: NTS



COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT D

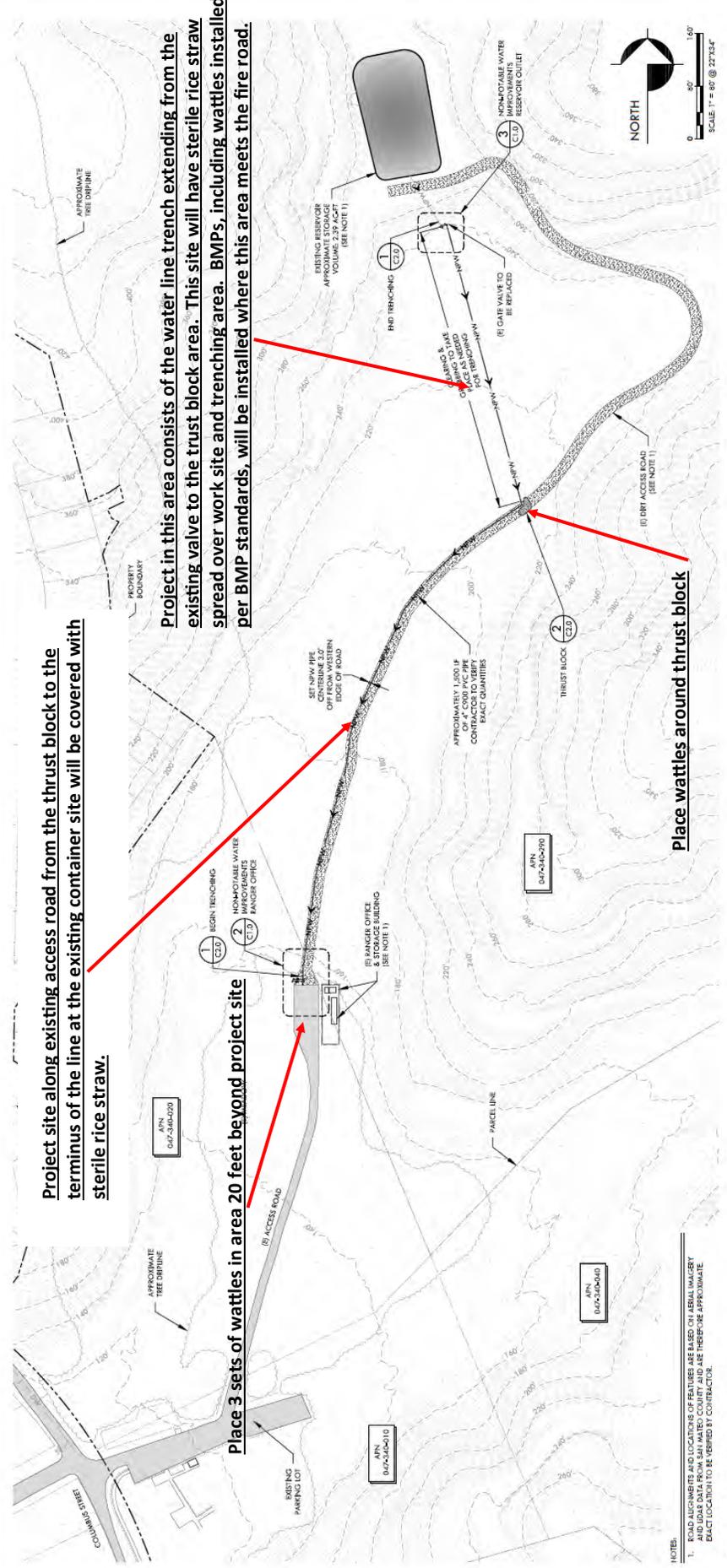
EROSION CONTROL

Project site along existing access road from the thrust block to the terminus of the line at the existing container site will be covered with sterile rice straw.

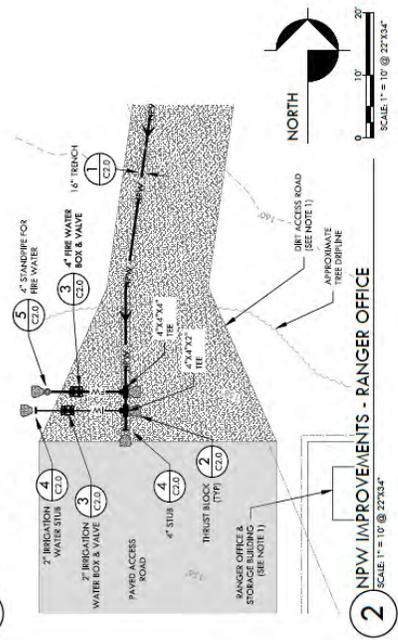
Project in this area consists of the water line trench extending from the existing valve to the thrust block area. BMPs, including wattles installed spread over work site and trenching area. BMPs, including wattles installed per BMP standards, will be installed where this area meets the fire road.

Place 3 sets of wattles in area 20 feet beyond project site

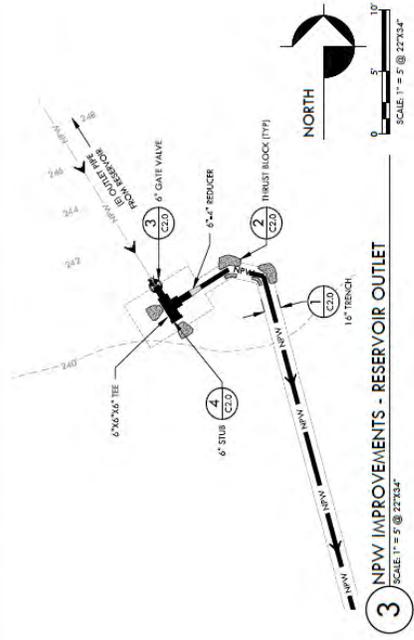
Place wattles around thrust block



1 SITE IMPROVEMENT PLAN
SCALE 1" = 80' @ 27'x34"



2 NPW IMPROVEMENTS - RANGER OFFICE
SCALE 1" = 10' @ 27'x34"



3 NPW IMPROVEMENTS - RESERVOIR OUTLET
SCALE 1" = 5' @ 27'x34"

LEGEND

(---) 10'	(---) CONTOURS
(---) NPW	(---) NON-POTABLE WATER PIPE
(---) FW	(---) 4" NON-POTABLE WATER PVC PIPE
(---) FW	(---) 4" FIRE WATER PIPE
(---) FW	(---) 2" BRIGADION WATER PIPE
(---) ---	(---) ADJACENT PARCELS
(---) ---	(---) PROPERTY BOUNDARY
(---) ---	(---) ASPHALT ROAD
(---) ---	(---) DIRT ROAD
(---) ---	(---) WATER VALVE
(---) ---	(---) THRUST BLOCK

ABBREVIATIONS

AC	ASPHALT CONCRETE	AN	ANNUUM
(E)	EXISTING	NSW	NON-POTABLE WATER
FC	FINISHED GRADE ELEVATION	PS	POUND SQUARE FOOT
FL	FLOW LINE	T	THICKNESS
IF	LINEAR FOOT	TPP	TYPICAL
MAX	MAXIMUM		

Erosion Control Plan

Quarry Park

1195 Columbus Ave

El Granada

APN: 047340290

Per the request of County of San Mateo Planning and Building, San Mateo County Department of Parks is to develop an erosion and sediment control plan for the new non potable water line from the Wicklow Reservoir.

The plan is as follows:

PURPOSE:

- To reduce or eliminate soil losses and sedimentation by controlling impacts of rainfall, runoff or winds on soils, slopes, stream banks, stockpiles, and other surfaces.
- Vegetation is managed to preserve sight distance and clearance for pedestrians: to reduce hazards and maintain road surfaces and structures
- Soil disturbance, whether by natural forces or by activities, drastically accelerates the rate of erosion. Careful planning with proper selection and installation of erosion control methods can and will greatly reduce the impact of maintenance activities related to erosion.

BMP OUTCOMES

- Avoid concentrating run offs onto slopes
- Reduce run off energy that can dislodge and move soils
- Reduce overland flow velocities
- Minimize organic material introduction to water bodies
- Recycle/reuse vegetative materials where practical

CONSERVATION OUTCOMES

- Reduce/ eliminate sediment into watercourses
- Reduce storm water pollution
- Preserve vegetation and soil resources
- Reduce fire hazard
- Protect endangered and sensitive plant species
- Protect water quality by preserving native vegetation for erosion and sediment reduction
- Preserve and or enhance visual resources and preserve safety of users by improving sight distances

EROSION and SEDIMENT CONTROL METHODS

As spelled out in Maintenance Activities 8.19 and 8.21; San Mateo County Department of Parks will apply standard erosion control and sediment management methods. All soils disturbed by construction/maintenance activities will be treated with the appropriate controls within 3 (three) working days or sooner during wet season and with 14 (fourteen) days or sooner during the dry season. Dry season disturbed soil surfaces treatment that has the potential for wind or traffic airborne dust will be treated soon than the 14 (fourteen) day time period.

Crews working existing vegetation during the above activities will limit work to the maximum extent practical while still allowing access to the work.

Temporary erosion control methods will consist of any or all listed methods when practical to site requirements and topography. The methods shall consist of straw logs, straw mulch, and netting all installed to specifications to preserve soil and or prevent wind erosion. Temporary erosion control methods will be applied to the work site(s) when soil disturbance is beyond 14 (fourteen) days. Wattles will be installed per the general installation guidelines BMPs

Permanent control methods may consist of straw mulch, straw or coir logs netting and revegetation where applicable. This control methods will be applied at the conclusion of soil disturbances within 3 (three) working days during rainy season and within 14 (fourteen) during dry season.

Plastic sheeting will be used to protect stockpiles against wind or rain erosion.

Effective erosion and sedimentation control requires first that the soil surface be protected from the erosive forces of wind, rain and runoff, and second that eroded soil be captured on-site. The following conservation principles shall be integrated into a system of control measures and management techniques to control erosion and reduce off-site sediment migration.

MINIMIZE THE EXTENT AND DURATION OF EXPOSURE

- Schedule construction activities to minimize the exposed area and the duration of exposure. Stabilize disturbed areas as quickly as possible.

PROTECT AREAS TO BE DISTURBED FROM STORMWATER RUNOFF

- Use berms, diversions, pumps, and barriers to intercept runoff and divert it away from excavations and other disturbed areas. Install these measures before beginning maintenance activities.

STABILIZE DISTURBED AREAS

- Removing the vegetative cover and altering the soil structure by clearing the surface increase an area's susceptibility to erosion. Apply stabilizing measures after the land is disturbed and implement temporary or permanent vegetation, mulches, or other BMPs to correspond with maintenance activities. During the winter season, November through April, no soils shall remain exposed and unworked for more than 2 days. During the summer season, May through October, no soils shall remain exposed and unworked for more than 7 days. This condition applies to all soils on site, whether at final grade or not.

MINIMIZE RUNOFF VELOCITIES

- Clearing existing vegetation reduces the surface roughness and infiltration rate and thereby increases runoff velocities and volumes. Use measures that break the slopes to reduce the problems associated with concentrated flow volumes and runoff velocities.

RETAIN SEDIMENT ON THE SITE

- Even with careful planning some erosion is unavoidable. The resulting sediment must be trapped on the site. Plan the location where sediment deposition will occur and maintain access for cleanout.

INSPECT AND MAINTAIN CONTROL MEASURES

- Inspection and maintenance are vital to the performance of erosion and sedimentation BMPs. Failure of a BMP may be hazardous or damaging to roadway infrastructure, habitat, people and/or property. It is essential to inspect all BMPs to ensure that they are working properly and to ensure that problems are corrected as soon as they develop.

RECYCLING

Mulching exposed soils with native leaf litter and duff provides a reuse for those materials as well as supplying native plant seeds to disturbed areas.

BMPs

- Erosion control blankets and mats
- Hand seeding
- Hydro seeding
- Mulching
- Surface roughing
- Wattle/Fascine
- Brush layering
- Mulching
- Brush packing