COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT

DATE: June 8, 2016

TO: Planning Commission

FROM: Planning Staff

SUBJECT: EXECUTIVE SUMMARY: Consideration of a Coastal Development, Planned Agricultural Development and Use Permits for the construction of a new water booster pump at the Denniston Reservoir and replacement of existing water transmission lines along Bridgeport Drive and Coral Reef Avenue, in the unincorporated El Granada area of San Mateo County. This project is appealable to the California Coastal Commission.

County File Number: PLN 2016-00008 (Coastside County Water District)

PROPOSAL

The Coastside County Water District (CCWD) proposes to (1) construct a new water booster pump station next to the existing pump station at the Denniston Reservoir, and (2) replace the existing 8-inch diameter water main along Bridgeport Drive and Coral Reef Avenue with a 12-inch diameter water main.

Water treated at the Denniston Water Treatment Plant (WTP) is stored in an existing 1.5 million gallon (MG) tank (Denniston Tank) located on a hillside approximately 170 feet above the Denniston WTP. There is a relatively flat hydraulic grade line between the Denniston Tank and the Carter Hill Tank; as a result of this grade line, gravity flow from the Denniston Tank to the Carter Hill Tank currently is limited to approximately 300 gallons per minute (gpm). In order to increase the flow from Denniston WTP into the CCWD distribution system and be able to push water all the way to the southern end of the District's distribution lines, pumping is required.

The Coastside County Water District proposes to install a Booster Pump Station adjacent to the existing Denniston Pump Station on CCWD property. The Booster Pump Station will increase maximum flow rates from the Denniston Tank to the Carter Hill Tank, and, as a result, will allow the Denniston WTP to operate at full capacity. The Booster Pump Station will be designed for up to three vertical, electric turbine pumps, with two pumps installed initially and room for a third as needed. The maximum capacity of each pump will be 600 gallons per minute.

Following the completion of the El Granada Pipeline Replacement Project in 2008, CCWD's main north-south transmission pipeline has sufficient capacity to convey the maximum output of the Denniston WTP south into the rest of CCWD's distribution system. However, the larger diameter El Granada Pipeline does not extend all the way to the Denniston Water Treatment Plant. The residential distribution network of 8-inch and 6-inch pipelines along Bridgeport Drive in El Granada, which currently conveys Denniston WTP treated water to the northern end of the El Granada Pipeline, creates a flow-limiting bottleneck that must be eliminated to allow the Denniston WTP to operate at full capacity. The Project before the Planning Commission includes installation of 3,460 feet of new transmission pipeline along Bridgeport Drive and Coral Reef Avenue, connecting to the 12-inch main at the intersection of Coral Reef and Sevilla Avenues. All new pipelines will be installed within existing paved roadways.

RECOMMENDATION

Approve the requested permits, County File Number PLN 2016-00008, by adopting the required findings and conditions of approval in Attachment A.

SUMMARY

The combination of the booster pump station and transmission pipeline will eliminate a hydraulic restriction that limits the flow from the District's Denniston Water Treatment Plant (DWTP) into the District's distribution system. One of the principal goals of the Project is to ensure that the District will be able meet critical water needs in the event of a disaster that cuts off the supply of imported water from the San Francisco Public Utilities Commission (SFPUC) system. San Francisco Public Utilities Commission water, which makes up the majority of the District's supply, comes several miles through a single pipeline from Crystal Springs Reservoir or Pilarcitos Reservoir to the Nunes Water Treatment Plant in Half Moon Bay. Any event which interrupts the pipeline or renders the Crystal Springs Pump Station inoperable for more than two days would leave the District solely dependent on the Denniston source to meet basic health and safety and fire protection requirements. Restricting DWTP flow to 400 gpm makes it very difficult to meet these basic needs, requiring immediate and severe water rationing restrictions if the supply of imported water were cut off. Completion of the Project will make it possible to supply baseline water needs (without irrigation) of 800 – 1,200 gpm for the entire District from the DWTP for an extended period of time, thus ensuring a more reliable water supply for all District customers.

The Project will also allow the District to make maximum use of local water resources while protecting environmental resources and agricultural water supply. With increased flow capacity from the DWTP, the District can take advantage of high winter flows in Denniston Creek while the impact of diversions is minimal. In summer, when agricultural and environmental water needs take priority, the District will slow or cease DWTP operation to accommodate those needs.

Staff has completed a review of the project and all the submitted documents and reports in order to determine the project's conformity to applicable Local Coastal Program policies and regulations. Potential impacts to special status species and water quality were identified. For the purposes of compliance with the California Environmental Quality Act (CEQA), the District has assumed the role of lead agency. As such, the District contracted with Analytical Environmental Services to prepare and circulate an Environmental Impact Report for a larger project, of which the items before the Planning Commission are two components. Other components of that larger project may or may not come before the Commission at a later date for subsequent Coastal Development Permits. Planning staff has reviewed the project and concluded that the project, as conditioned, complies with the County's Local Coastal Program and Zoning Regulations.

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COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT

DATE: June 8, 2016

TO: Planning Commission

FROM: Planning Staff

SUBJECT: Consideration of a Coastal Development, Planned Agricultural Development and Use Permits, pursuant to Sections 6328.4, 6353, and 6500 of the County Zoning Regulations, for the construction of a new water booster pump at the Denniston Reservoir and replacement of existing water transmission lines along Bridgeport Drive and Coral Reef Avenue, in the unincorporated El Granada area of San Mateo County. This project is appealable to the California Coastal Commission.

County File Number: PLN 2016-00008 (Coastside County Water District)

PROPOSAL

The Coastside County Water District (CCWD) proposes to (1) construct a new water booster pump station next to the existing pump station at the Denniston Reservoir, and (2) replace the existing 8-inch diameter water main along Bridgeport Drive and Coral Reef Avenue with a 12-inch diameter water main.

Water treated at the Denniston Water Treatment Plant (WTP) is stored in an existing 1.5 million gallon (MG) tank (Denniston Tank) located on a hillside approximately 170 feet above the Denniston WTP. There is a relatively flat hydraulic grade line between the Denniston Tank and the Carter Hill Tank; as a result of this grade line, gravity flow from the Denniston Tank to the Carter Hill Tank currently is limited to approximately 300 gallons per minute (gpm). In order to increase the flow from Denniston WTP into the CCWD distribution system and be able to push water all the way to the southern end of the District's distribution lines, pumping is required.

The Coastside County Water District proposes to install a Booster Pump Station adjacent to the existing Denniston Pump Station on CCWD property. The Booster Pump Station will increase maximum flow rates from the Denniston Tank to the Carter Hill Tank, and, as a result, will allow the Denniston WTP to operate at full capacity. The Booster Pump Station will be designed for up to three vertical, electric turbine pumps, with two pumps installed initially and room for a third as needed. The maximum capacity of each pump will be 600 gallons per minute.

Following the completion of the El Granada Pipeline Replacement Project in 2008, CCWD's main north-south transmission pipeline has sufficient capacity to convey the maximum output of the Denniston WTP south into the rest of CCWD's distribution system. However, the larger diameter El Granada Pipeline does not extend all the way to the Denniston Water Treatment Plant. The residential distribution network of 8-inch and 6-inch pipelines along Bridgeport Drive in El Granada, which currently conveys Denniston WTP treated water to the northern end of the El Granada Pipeline, creates a flow-limiting bottleneck that must be eliminated to allow the Denniston WTP to operate at full capacity. The Project before the Planning Commission includes installation of 3,460 feet of new transmission pipeline along Bridgeport Drive and Coral Reef Avenue, connecting to the 12-inch main at the intersection of Coral Reef and Sevilla Avenues. All new pipelines will be installed within existing paved roadways.

In conversations with staff, the applicant has provided the following reasoning for this project: "The combination of the booster pump station and transmission pipeline will eliminate a hydraulic restriction that limits the flow from the District's Denniston Water Treatment Plant (DWTP) into the District's distribution system. While the DWTP has a design capacity of 1,200 gpm, the capacity of the distribution piping in the Bridgeport Drive area limits gravity flow from DWTP and Denniston Storage Tank to about 400 gallons per minute. Completion of the Project will provide a flow capacity of 1,200 gpm, matching the current capacity of the Denniston Water Treatment Plant.

One of the principal goals of the Project is to ensure that the District will be able meet critical water needs in the event of a disaster that cuts off the supply of imported water from the San Francisco Public Utilities Commission (SFPUC) system. San Francisco Public Utilities Commission water, which makes up the majority of the District's supply, comes several miles through a single pipeline from Crystal Springs Reservoir or Pilarcitos Reservoir to the Nunes Water Treatment Plant in Half Moon Bay. Any event which interrupts the pipeline or renders the Crystal Springs Pump Station inoperable for more than two days would leave the District solely dependent on the Denniston source to meet basic health and safety and fire protection requirements. Restricting DWTP flow to 400 gpm makes it very difficult to meet these basic needs, requiring immediate and severe water rationing restrictions if the supply of imported water were cut off. Completion of the Project will make it possible to supply baseline water needs (without irrigation) of 800 – 1,200 gpm for the entire District from the DWTP for an extended period of time, thus ensuring a more reliable water supply for all District customers.

The Project will also allow the District to make maximum use of local water resources while protecting environmental resources and agricultural water supply. With increased flow capacity from the DWTP, the District can take advantage of high winter flows in Denniston Creek while the impact of diversions is minimal. In summer, when agricultural and environmental water needs take priority, the District will slow or cease DWTP operation to accommodate those needs.

Finally, by increasing the contribution of local sources to the District's overall water supply portfolio, the Project will help moderate rate increases and keep water affordable

for all customers. The cost of imported water currently stands at more than $5,000 per million gallons and will rise to $10,000 per million gallons within a few years. At the higher price, an annual yield of 265 million gallons from the DWTP – approximately the peak level attained in previous years – will save more than $2.6 million per year in imported water expense, over $400 for every customer account."

RECOMMENDATION

Approve the requested permits, County File Number PLN 2016-00008, by adopting the required findings and conditions of approval in Attachment A.

BACKGROUND

Report Prepared By: Michael Schaller, Project Planner, Telephone 650/363-1849

Applicant: Coastside County Water District

Owner: Coastside County Water District (Denniston Reservoir) San Mateo County (Public Right-of-Way: Bridgeport and Coral Reef)

Location: Denniston Reservoir and Eastern end of El Granada.

General Plan Designation: Agriculture – Rural (Denniston Reservoir) Medium Density Residential – Urban (Bridgeport Drive)

Zoning: Planned Agricultural Development (Denniston Reservoir) R-1/S-17 (Single-Family Residential/5,000 sq. ft. minimum parcel) – (Bridgeport)

Flood Zone: Zone AE (Base Flood Elevations Determined), FEMA Community Panel 06081C-0138E, Effective Date: October 16, 2012.

Existing Land Use: Water Storage Reservoir and Farm Buildings (Denniston Reservoir) Residential Street (Bridgeport Drive)

Project History: In 1998 the Coastside County Water District (CCWD) adopted a plan to replace the existing 10-inch water transmission line which delivers water to the El Granada area. This plan envisioned replacement in three phases. In 1999, the District submitted an application for a Coastal Development Permit (CDP) to replace the northern segment within the community of El Granada. This permit was approved by the Board of Supervisors on October 19, 1999. An appeal was subsequently filed with the California Coastal Commission (CCC). In 2003, after conducting their own analysis of the proposed new pipeline, the CCC approved the project. In 2006, the County approved a CDP for the second phase of pipeline replacement. This permit was not appealed by the California Coastal Commission.

Environmental Evaluation: Final Environmental Impact Report certified by Coastside County Water District on February 11, 2015.

Setting: The project site is within unincorporated, rural land in San Mateo County. The project area around the Denniston Reservoir site is composed of undeveloped, open space used for recreational and agricultural purposes. The area surrounding Bridgeport Drive and Coral Reef Avenue is composed of single-family dwellings, developed on 5,000 sq. ft. lots. The Denniston Reservoir location lies within the Cabrillo Highway County Scenic Corridor. Vegetation at this site consists of several mature eucalyptus trees with adjacent red elderberry trees, and an understory of cape ivy, white ramping fumitory, nasturtium, and bull thistle. However, the area encompassing the footprint of the proposed new pump station lacks vegetation and is primarily an open dirt area. Vegetation along the banks of the Reservoir consists of common knotweed, monkey-flower, stinging nettle, Hooker's evening primrose, red elderberry, California blackberry, California figwort, and California tule. The Reservoir and the portions of Denniston Creek downstream of the project site provide potential habitat for the California red-legged frog (CRLF), western pond turtle (WPT) and the San Francisco garter snake (SFGS).

DISCUSSION

A. KEY ISSUES

1. Conformance with the County General Plan

The County's Local Coastal Program (LCP) is a subset of the County General Plan. As such, the two documents have been deemed internally consistent. The analysis below, under the LCP Section, provides evidence of the project's consistency with not only the LCP but, by extension, the County's General Plan.

2. Conformance with the Local Coastal Program

a. Public Works Component

Policy 2.5 - *Review of Public Works Project*s. This policy requires all governmental bodies, including special districts, to submit to the Planning agency a list of the proposed public works projects recommended for planning or construction during the ensuing fiscal year. When queried by staff, the applicant stated that they do not have any other major public works projects planned for the upcoming fiscal year as shown in their annually updated 10-year Capital Improvement Program.

Policy 2.6 - *Capacity Limits*. This policy limits development or expansion of public works facilities to a capacity which does not

exceed that needed to serve buildout of the Local Coastal Program. As discussed above, the applicant replaced extensive sections of the main El Granada Pipeline in two phases (2003 and 2006). The current proposal will complete this phased pipeline replacement, and will have no effect on the number of new water connections available from CCWD. Both the County's staff report in 1999 and the CCC's report of 2003 (A-2-SMC-99-063) contain extensive analysis of build-out demand in relation to the replacement of the 10" pipeline with a 16" line. When replacement of these first segments of the pipeline were proposed, it was found by both the County and the CCC that the proposed 16-inch diameter pipe did not exceed project buildout figures for the area served by the water district. This final phase of the pipeline replacement continues with the same size pipe.

In addition, the conditions of approval contained in the 2003 Coastal Commission permit prohibit the creation of any new non-priority connections. It also prohibits the transfer of any uninstalled priority connections to non-priority uses. The Commission found that these limitations help to ensure that the capacity of the 16" pipeline will not exceed the previously approved Phase I water supply capacity. The CCC's 2003 staff report is included as Attachment G for reference. Staff has included the relevant CCC condition of approval from their 2003 permit as a condition that is still applicable for this permit.

The purpose of the booster pump will allow the District to utilize an existing local water source in order to reduce reliance upon water from the San Francisco Water Department (via the Crystal Springs pipeline), during winter months. The booster pump will also provide the District with the ability to feed water from the Denniston Reservoir into the entirety of the system if there should be a failure of the Crystal Springs pipeline. Neither element of this project – the replacement pipeline and the booster pump – increases the amount of water that the District has at its disposal nor do they increase the total number of connections that the District is authorized to issue. Neither element will expand the District's distribution network into new areas that are not authorized for urban development.

Policy 2.7 - *Phased Development of Public Works Facilities*. This policy requires the phased development of public works facilities in order to ensure that permitted public works capacities are limited to serving needs generated by development which is consistent with the Local Coastal Program policies. Again, as was discussed in the CCC's 2003 staff report, completion of the 16" pipeline will not increase capacity beyond that which has already been approved. The Water District's capacity is limited by the remaining number of uninstalled connections. In addition, the rate at which these

uninstalled connections can be utilized is limited by both the City of Half Moon Bay's and the County's LCP's which have limits on the number of building permits that can be issued per year.

Policy 2.22 - *New and Expanded Water Supply and Distribution Capacity*. This policy allows new or expanded water supply, service connections, treatment, storage and distribution capacity to serve new development only when existing capacity has been consumed or will be consumed within the time required to construct additional water supply capacity.

This project will not increase the District's existing water supply or allow for any additional connections beyond those authorized under the 2003 permit. The proposed new Bridgeport pipeline will be a high-pressure pipe dedicated to transmitting water from the Denniston Water Treatment Plant (DWTP) into the District's system. Transmission through the Project area now relies on a the distribution network of 8-inch, 10-inch, 12-inch, and parallel 6-inch pipelines serving residences along Bridgeport Drive, Coral Reef Avenue, and neighboring streets, limiting the pressure needed to move DWTP water. With the new pipeline in place, the District will be able to lower distribution pressures in the Bridgeport Drive area, reducing the risk of pressure-related pipe breaks in the distribution system. The project does not extend the District's pipeline network beyond existing served areas.

The construction of the booster pump at Denniston Reservoir will allow the District to move water from one end of their distribution network to the other if water from the Crystal Springs pipeline should be interrupted by an earthquake or other disaster.

b. Agriculture Component

The County Zoning Regulations are the implementing plan for the Local Coastal Program. As such, Chapter 21A of the zoning regulations mirrors this Agriculture Component of the LCP, but with greater detail. Analysis of the project against the LCP's agriculture policies will be discussed below in Section 3 of this staff report.

c. 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. This includes areas supporting rare or endangered species. The area immediately around the footprint of the proposed booster pump is composed of non-native

grasses and eucalyptus seedlings. Adjacent is the aquatic habitat associated with Denniston Reservoir and beyond that lies the riparian habitat associated with upper and lower Denniston Creek. The aquatic habitat of the reservoir and the associated riparian habitat meet the definition of sensitive habitats and will be discussed in further detail below. The work areas within El Granada (Bridgeport Drive, etc.) are paved roads and all work will be confined to these paved areas. However, there is one location on Bridgeport (between Sea Crest Court and Shelter Cove Drive) with adjacent riparian habitat associated with an intermittent creek that drains into Denniston Creek.

Policy 7.5 – *Permit Conditions*. This policy requires, as part of the development review process, that the applicant demonstrate that there will be no significant impact on sensitive habitats or species. The applicant has prepared an Environmental Impact Report (EIR) for their Capital Improvement Program, of which this project is a component. The EIR included a biological report prepared by Analytical Environmental Services. The EIR identified the potential for several listed species to occur within or near the project site, particularly the pump house location on top of the dam. These include California red-legged frog (CRLF) and San Francisco garter snake (SFGS). The EIR recommended mitigation measures to reduce potential impacts to these species. Those measures were accepted by the District, acting at the lead agency for California Environmental Quality Act (CEQA), when they adopted the Environmental Impact Report. Staff has included those mitigation measures as Conditions of Approval Nos. 3 - 8 in Attachment A. With implementation of these measures, the project complies with this policy.

Policy 7.8 - *Designation of Riparian Corridors*. This policy establishes riparian corridors for all perennial and intermittent streams and lakes and other bodies of freshwater in the Coastal Zone. It designates those corridors shown on the Sensitive Habitats Map and any other riparian area meeting the definition of Policy 7.7 as sensitive habitats requiring protection, except for manmade irrigation ponds over 2,500 sq. ft. surface area. Denniston Reservoir falls under this last exception. However, the habitat at the base of the Reservoir's dam and then continuing downstream meets the definition of a riparian habitat. This downstream area is approximately 250 feet away from the proposed booster pump location. This distance places the proposed booster pump location outside of the required 50-foot buffer zone for this habitat (see Policy 7.11 – *Establishment of Riparian Buffer Zones*).

A small portion of the pipe replacement on Bridgeport Drive will be within the 50-foot buffer associated with the unnamed riparian corridor

which passes under the street. The pipe replacement within this buffer zone is a permitted use under Policy 7.12 (*Permitted Uses in Riparian Buffer Zones*) which allows for "necessary water supply projects" and "pipelines."

Policy 7.14 - *Definition of Wetland*. This policy defines "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 man-made impoundments.

Denniston Reservoir meets this definition of a wetland, as there are areas around the perimeter of the reservoir that contain wetland vegetation. However, it should be noted that the County has issued a series of CDP's to the District over the years to trim this vegetation back and to periodically dredge the reservoir in order to maintain its capacity. The proposed booster pump location falls within the required 100-foot buffer for this wetland habitat, per Policy 7.18 (*Establishment of Wetland Buffer Zones*). However, "incidental public service purposes" are an allowed use within wetland buffer zones, per Policy 7.16 (*Permitted Uses in Wetlands*).

c. Visual Resources Component

Policy 8.5 - *Location of Development*. This policy requires that new development be located on a portion of a parcel where the development: (1) is least visible from State and County Scenic Roads; and (2) is least likely to significantly impact views from public viewpoints. The location of the proposed booster pump is within the boundaries of the Cabrillo Highway County Scenic Corridor. However, the site is approximately 1/2-mile east of the highway and screened from view by existing farm buildings that lie immediately west of the project site. The new booster pump building will not be visible to motorists or other users of Cabrillo Highway because of the distance and intervening buildings. Additionally, the booster pump building will be only 12.5 feet tall and will be constructed of concrete blocks, left in their natural grey color, which should reduce the building's visibility even more when viewed at a distance.

3. Compliance with Planned Agricultural Development Zoning Regulations

Section 6353 - *Uses Permitted Subject to The Issuance of a Planned Agricultural Permit*. This policy outlines permitted uses on non-prime agriculturally zoned lands. The Denniston Reservoir site is zoned Planned Agricultural Development (PAD) and is adjacent to existing agricultural fields. However, the actual location of the proposed booster pump is on top of the reservoir's dam and not an area utilized for agriculture. The booster pump, and in fact the rest of the District's infrastructure at the Reservoir, are not listed as allowed uses on "lands suitable for agriculture". However, Chapter 24 (Use Permits) of the Zoning Regulations allows the County to issue a Use Permit for necessary public infrastructure projects when found necessary for the public health and safety.

Section 6355 - *Substantive Criteria for Issuance of a Planned Agricultural Permit*. Each application for conversion of PAD zoned land must be found consistent with the following criteria:

a. General Criteria

(1) *The encroachment of all development upon land which is suitable for agricultural use shall be minimized*. As stated above, the proposed location of the booster pump is on top of the existing Denniston dam. This location is not suitable for agricultural use due to the relatively small amount of flat land and the inaccessibility of this location for daily agricultural activities.

(2) *All development permitted on a site shall be clustered*. The applicant has proposed constructing the booster pump immediately adjacent to the existing pump station, in an area that is already flat and devoid of major vegetation. No adjacent agricultural land will be impacted by this location.

b. Water Supply Criteria

Adequate and sufficient water supplies needed for agricultural production and sensitive habitat protection in the watershed are not diminished. The proposed booster pump will not change the amount of water that the District is allowed to divert out of Denniston Creek, nor when that diversion may occur. The adjacent farmer continues to maintain and utilize his senior water rights. The purpose of the pump is to better move the water that the District is entitled to into the entirety of their system.

c. Criteria for the Conversion of Lands Suitable for Agriculture and Other Land

All lands suitable for agriculture and other lands within a parcel shall not be converted to uses permitted by a Planned Agricultural Permit unless all of the following criteria are met:

(1) *All agriculturally unsuitable lands on the parcel have been developed or determined to be undevelopable*. As stated above, the location of the proposed booster pump on top of the dam is an unsuitable location for agriculture due to inaccessibility and limited area. No agriculture has ever been practiced on top of the dam, therefore no "lands suitable for agriculture" are being converted.

(2) *Clearly defined buffer areas are developed between agricultural and non-agricultural uses*. The booster pump location on top of the dam is separated from the nearby agricultural fields by existing farm buildings that form a buffer between the two uses. The nearest agricultural fields are over 300 feet away. Additionally, the booster pump building is unmanned, except for regular maintenance inspections.

(3) *The productivity of any adjacent agricultural lands is not diminished, including the ability of the land to sustain dry farming or animal grazing*. As discussed above, there is over 300 feet of separation between the proposed booster pump and nearby active agricultural buildings. Additionally, the booster pump building will be unmanned. There is no evidence to suggest that construction and use of the booster pump will diminish or inhibit adjacent agricultural operations.

(4) *Public service and facility expansions and permitted uses do not impair agricultural viability, either through increased assessment costs or degraded air and water quality*. The parcel on which the booster pump is proposed is owned by the Coastside County Water District. All new improvements will occur on this parcel. There is no evidence to suggest that these improvements will affect the assessed value of the adjacent agricultural lands. There is also no evidence to suggest that the construction of the booster pump will negatively impact water or air quality as long required mitigation measures for addressing construction-related emissions are implemented.

4. Use Permit Findings

As discussed above, public infrastructure type projects, such as the proposed booster pump, are not principally permitted uses within the PAD Zoning District. However, Section 6500(b) (*Use Permits*) of the County Zoning regulations provides for the:

> *Location of electric power, gas, water and oil lines; public utility or public service uses or public buildings in any district when found to be necessary for the public health, safety, convenience or welfare, except that a use permit shall not be required for local distribution lines.*

The project is a public utility/service use and thus qualifies for this overarching Use Permit category. As was discussed previously, the new booster pump is necessary to allow the District to more adequately use existing water supplies and reduce reliance upon water supplied by the San Francisco Water Department during periods of the year when local supplies are available. Additionally, the proposed booster pump will provide redundancy to the District's system if there should be a failure of the Crystal Springs pipeline.

B. ENVIRONMENTAL REVIEW

The two components that are the project before the Planning Commission today were analyzed as part of a larger potential project discussed in the Denniston/San Vicente Water Supply Project Environmental Impact Report. This environmental review was conducted by Coastside County Water District (CCWD). Section 15050 of the CEQA Guidelines states that where a project is to be carried out or approved by more than one public agency, one public agency shall be responsible for preparing the environmental review. That agency shall be referred to as the Lead Agency. For the purposes of this project, CCWD, as the agency that will actually carry out the project, assumed the Lead Agency role. On February 11, 2015, the Board of Directors for CCWD certified the Final EIR for the Denniston/ San Vicente Water Supply Project. A Notice of Determination was filed by the District with the State Clearinghouse on February 12, 2015.

C. REVIEWING AGENCIES

California Coastal Commission
California Department of Fish and Wildlife
Department of Public Works
Local Agency Formation Commission
County Fire Marshal
County Parks Department
Midcoast Community Council
Agricultural Advisory Committee

ATTACHMENTS

A. Recommended Findings and Conditions of Approval
B. Location Map
C. Transmission Pipeline Plan
D. Booster Pump Station Site Plan
E. Booster Pump Building Exterior Elevations
F. Final Environmental Impact Report – Denniston/San Vicente Water Supply Project (Please note: due to size constraints, only the Planning Commission is receiving a copy of this document with this staff report. This document can be viewed and downloaded from the CCWD website at: http://www.coastsidewater.org/reports_and_studies/Denniston-San-Vicente-Water-Supply-Project-Environmental-Impact-Report-Volume-II.pdf)
G. 2003 Coastal Commission Staff Report – El Granada Pipeline Replacement Project

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Attachment A

County of San Mateo
Planning and Building Department

RECOMMENDED FINDINGS AND CONDITIONS OF APPROVAL

Permit or Project File Number: PLN 2016-00008 Hearing Date: June 8, 2016

Prepared By: Michael Schaller, Senior Planner For Adoption By: Planning Commission

RECOMMENDED FINDINGS

Regarding the Environmental Review, Find:

1. That the Commission, acting as a responsible agency, has reviewed and considered the Final Environmental Impact Report, prepared by Coastside County Water District, acting as Lead Agency.

Regarding the Coastal Development Permit, Find:

2. 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 with regard to the protection of biotic and visual resources.

3. That the project conforms to the specific findings required by policies of the San Mateo County Local Coastal Program as discussed in Section A(2) of the Staff Report dated May 25, 2016. Specific conditions have previously been placed upon the applicant's Capital Improvements Program which limit the total number of connections that the District may allow. Those specific conditions have been carried over to this permit as well.

Regarding the Planned Agricultural Development Permit, Find:

General Criteria

4. *The encroachment of all development upon land which is suitable for agricultural use shall be minimized*. The proposed location of the booster pump is on top of the existing Denniston dam. This location is not suitable for agricultural use due to the relatively small amount of flat land and the inaccessibility of this location for daily agricultural activities.

5. *All development permitted on a site shall be clustered*. The applicant has proposed constructing the booster pump immediately adjacent to the existing pump station, in an area that is already flat and devoid of major vegetation. No adjacent agricultural land will be impacted by this location.

Water Supply Criteria

6. *Adequate and sufficient water supplies needed for agricultural production and sensitive habitat protection in the watershed are not diminished*. The proposed booster pump will not change the amount of water that the District is allowed to divert out of Denniston Creek, nor when that diversion may occur. The adjacent farmer continues to maintain and utilize his senior water rights. The purpose of the pump is to better move the water that the District is entitled to into the entirety of their system.

Criteria for the Conversion of Lands Suitable for Agriculture and Other Land

7. *All agriculturally unsuitable lands on the parcel have been developed or determined to be undevelopable*. The location of the proposed booster pump on top of the dam is an unsuitable location for agriculture due to inaccessibility and limited area. No agriculture has ever been practiced on top of the dam, therefore no "lands suitable for agriculture" are being converted.

8. *Clearly defined buffer areas are developed between agricultural and non-agricultural uses*. The booster pump location on top of the dam is separated from the nearby agricultural fields by existing farm buildings that form a buffer between the two uses. The nearest agricultural fields are over 300 feet away. Additionally, the booster pump building is unmanned, except for regular maintenance inspections.

9. *The productivity of any adjacent agricultural lands is not diminished, including the ability of the land to sustain dry farming or animal grazing*. As discussed above, there is over 300 feet of separation between the proposed booster pump and nearby active agricultural buildings. Additionally, the booster pump building will be unmanned. There is no evidence to suggest that construction and use of the booster pump will diminish or inhibit adjacent agricultural operations.

10. *Public service and facility expansions and permitted uses do not impair agricultural viability, either through increased assessment costs or degraded air and water quality*. The parcel on which the booster pump is proposed is owned by the Coastside County Water District. All new improvements will occur on this parcel. There is no evidence to suggest that these improvements will affect the assessed value of the adjacent agricultural lands. There is also no evidence to suggest that the construction of the booster pump will negatively impact water or air quality as long required mitigation measures for addressing construction-related emissions are implemented.

Regarding the Use Permit, Find:

11. That the construction of the proposed booster pump and water main pipeline replacement at the proposed locations are necessary for the public health, safety, convenience or welfare. The project is a public utility/service use and thus qualifies for a Use Permit. The new booster pump and water mains are necessary to continue providing the residents of the MidCoast County Water District with water for domestic consumption and fire suppression.

RECOMMENDED CONDITIONS OF APPROVAL

Current Planning Section

1. The approval applies only to the proposal as described in this report and materials submitted for review and approval by the Planning Commission on June 8, 2016. 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 in substantial conformance with this approval.

Mitigation Measures Identified in the Certified Environmental Impact Report

Air Quality

2. Mitigation Measure 4.2-1: The following mitigation measures shall be implemented by the applicant to reduce construction related criteria emissions:

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

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

    c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. 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, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

    f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of

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 visible emissions evaluator.

h. Post a publicly visible sign with the telephone number ad 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.

California Red-legged Frog (CRLF) and San Francisco Garter Snake (SFGS)

3. Mitigation Measure 4.3-1k: An approved biological monitor shall be present on site during all construction and dredging activities. This biological monitor shall have the authority to temporarily halt construction for the protection of listed wildlife species.

4. Mitigation Measure 4.3-1o: At least 14 days prior to the onset of any construction or maintenance activities, including dredging of Denniston Reservoir, the applicant shall submit the name(s) and credentials of biologists who would shall conduct activities specified in the following measures. No project activities shall begin until the applicant has received written approval from the U.S. Fish and Wildlife Service (USFWS)/California Department of Fish and Wildlife (CDFW) that the biologist(s) is qualified to conduct the work.

5. Mitigation Measure 4.3-1q: Prior to commencement of any groundbreaking activities, all construction personnel will receive training on listed species and their habitats by an approved biologist. The importance of these species and their habitat will be described to all employees as well as the minimization and avoidance measures that are to be implemented as part of the Proposed Project. An educational brochure containing color photographs of all listed species in the work area(s) will be distributed to all employees working within the project site. The original list of employees who attend the training sessions will be maintained by the applicant and be made available for review by the USFWS and the CDFW upon request.

6. Mitigation Measure 4.3-1t: All vehicles associated with construction and excavation activities will be clustered within designated staging areas at the end of each work day or when not in use to minimize habitat disturbance and water quality degradation.

7. Mitigation Measure 4.3-1u: Before vehicles move from the staging areas at the start of each work day or before they return to this location at the end of each work day, the on-site biological monitor will check under the vehicles and their

tires to ensure no listed species are utilizing the equipment as temporary shelter. In addition, the qualified biologist shall inspect the vicinity of the anticipated work area that will support the construction equipment. Any vehicle parked within the project site for more than 15 minutes shall be inspected by the biological monitor before it is moved to ensure that CRLF or SFGS have not moved under the vehicle.

8. Mitigation Measure 4.3-1x: Because CRLF and SFGS may take refuge in cavity-like and den-like structures such as pipes, and may enter stored pipes and become trapped, all construction pipes, culverts, or similar structures that are stored at a construction site for one or more overnight periods will be either securely capped prior to storage or thoroughly inspected by the biological monitor for wildlife before the pipe is subsequently buried, capped, or otherwise used or moved in any way.

Western Pond Turtle (WPT)

9. Mitigation Measure 4.3-1bb: Prior to commencement of daily construction or excavation activities, the biological monitor will conduct a preconstruction survey for the western pond turtle. If WPT is present, the biologist will be allowed sufficient time to move them from the work site before work activities begin.

Pallid Bat

10. Mitigation Measure 4.3-1cc: If any trees are proposed for removal, a qualified wildlife biologist shall conduct a focused survey for roosting bats no more than 14 days prior to the anticipated date of tree removal. Trees that contain cavities will be thoroughly investigated for evidence of bat activity. A letter report shall be prepared and submitted to the applicant following the preconstruction survey to document the results. If the preconstruction survey determines that there is no evidence of roosts, then no additional mitigation will be required so long as construction commences within 14 days prior to the preconstruction survey.

11. Mitigation Measure 4.3-1dd: If special status bats are found roosting within any trees slated for removal, the areas shall be demarcated by exclusionary fencing and avoided until a qualified biologist can assure that the bats have vacated.

Migratory Birds and Other Birds of Prey

12. Mitigation Measure 4.3-1gg: Should any trees be planned for removal, they shall be removed between September 16 and March 14, which is outside of the nesting bird season (the nesting bird season is between March 15 and September 15).

13. Mitigation Measure 4.3-1hh: Should removal be required outside of the dates identified above then a qualified biologist shall conduct a preconstruction survey within 14 days prior to commencement of any construction activities associated

with the Proposed Project, should construction be anticipated to commence during the nesting season for birds of prey and migratory birds (between March 15 and September 15). A letter report shall be prepared and submitted by the applicant following the preconstruction survey to document the results. If surveys show that there is no evidence of nests, then no additional mitigation will be required so long as construction commences within 14 days prior to the preconstruction survey.

14. Mitigation Measure 4.3-1ii: If any active nests are located within the vicinity of the project site, a buffer zone shall be established around the nests. A qualified biologist shall monitor nests weekly during construction to evaluate potential nesting disturbance by construction activities. The biologist should delimit the buffer zone with construction tape or pin flags within 100 feet of the active nest and maintain the buffer zone until the end of breeding season or the young have fledged. Guidance from the CDFW will be requested if establishing a 100-foot buffer zone is impractical. A letter report shall be prepared and submitted to the applicant following the preconstruction survey to document the results.

Hazards and Hazardous Materials

15. Mitigation Measure 4.7-1a: During construction, staging areas, welding areas, or areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel. To the extent feasible, the contractor shall keep these areas clear of combustible materials in order to maintain a firebreak.

16. Mitigation Measure 4.7-1b: Any construction equipment that normally includes a spark arrester shall be equipped with an arrester in good working order. This includes, but is not limited to, vehicles, heavy equipment, and chainsaws.

17. Mitigation Measure 4.7-2: Personnel shall follow written Standard Operating Procedures (SOPs) for filling and servicing construction equipment and vehicles. The SOPs, which are designed to reduce the potential for incidents involving hazardous materials, shall include the following:

    a. Refueling shall be conducted only with approved pumps, hoses, and nozzles;

    b. Catch pans shall be placed under equipment to catch potential spills during servicing;

    c. All disconnected hoses shall be placed in containers to collect residual fuel from the hose;

    d. Vehicle engines shall be shut down during refueling;

e. No smoking, open flames, or welding shall be allowed in refueling or service areas;

f. Refueling shall be performed away from bodies of water to prevent contamination of water in the event of a leak or spill;

g. Service trucks shall be provided with fire extinguishers and spill containment equipment, such as absorbents;

h. Should a spill contaminate soil, the soil shall be put into containers and disposed of in accordance with local, State, and Federal regulations;

i. All containers used to store hazardous materials shall be inspected at least once per week for signs of leaking or failure. All maintenance and refueling areas shall be inspected monthly. Results of inspections shall be recorded in a logbook that will be maintained on site; and

j. The amount of hazardous materials used in project construction and operation shall be consistently kept at the lowest volumes needed.

Hydrology and Water Quality

18. Mitigation Measure 4.8-1: The Coastside County Water District (CCWD) shall comply with the SWRCB NPDES General Permit for Discharges of Stormwater Runoff Associated with Construction Activity (General Permit). The SWRCB requires that all construction sites have adequate control measures to reduce the discharge of sediment and other pollutants to streams to ensure compliance with Section 303 of the Clean Water Act. To comply with the NPDES permit, prior to construction the applicant shall file a Notice of Intent with the SWRCB and prepare a Stormwater Pollution Prevention Plan (SWPPP), which includes a detailed, site specific listing of the potential sources of stormwater pollution; pollution prevention measures (erosion and sediment control measures and measures to control non-stormwater discharges and hazardous spills); a description of the type and location of erosion and sediment control best management practices (BMPs) to be implemented at the project site; and a BMP monitoring and maintenance schedule to determine the amount of pollutants leaving the Proposed Project site. A copy of the SWPPP must be current and remain on the project site. Control measures are required prior to, and throughout, the rainy season. Water quality BMPs identified in the SWPPP shall include, but are not limited to, the following:

    a. Temporary erosion control measures (such as silt fences, staked straw bales, and temporary revegetation) shall be employed for disturbed areas. No disturbed surfaces will be left without erosion control measures in place during the winter and spring months.

b. Sediment shall be retained on-site by the detention basin, on-site sediment traps, or other appropriate measures.

c. A spill prevention and countermeasure plan shall be developed which would identify proper storage, collection, and disposal measures for potential pollutants (such as fuel, fertilizers, pesticides, etc.) used on-site. The plan would also require the proper storage, handling, use, and disposal of petroleum products.

d. Construction activities shall be scheduled to minimize land disturbance during peak runoff periods and to the immediate area required for construction. Soil conservation practices shall be completed during the fall or late winter to reduce erosion during spring runoff. Existing vegetation will be retained where possible. To the extent feasible, grading activities shall be limited to the immediate area required for construction.

e. Surface water runoff shall be controlled by directing flowing water away from critical areas and by reducing runoff velocity. Diversion structures such as terraces, dikes, and ditches shall collect and direct runoff water around vulnerable areas to prepared drainage outlets. Surface roughening, berms, check dams, hay bales, or similar devices shall be used to reduce runoff velocity and erosion.

f. Sediment shall be contained when conditions are too extreme for treatment by surface protection. Temporary sediment traps, filter fabric fences, inlet protectors, vegetative filters and buffers, or settling basins shall be used to detain runoff water long enough for sediment particles to settle out. Store, cover, and isolate construction materials, including topsoil and chemicals, to prevent runoff losses and contamination of groundwater.

g. Topsoil removed during construction shall be carefully stored and treated as an important resource. Berms shall be placed around topsoil stockpiles to prevent runoff during storm events. Re-use of topsoil for restoration of native vegetation shall be limited to topsoil salvaged from areas with only native plant species.

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

i. Disturbed areas shall be revegetated after completion of construction activities.

j. Provide sanitary facilities for construction workers.

Noise

19. Mitigation Measure 4.9-1: Construction activities shall be limited to the hours of 7:00 am to 6:00 pm Monday through Friday and 9:00 am to 5:00 pm Saturday. Construction activities shall not be conducted on Sundays or holidays. In addition, the contractor shall implement the following BMPs to further reduce noise impact due to construction:

    a. Stationary equipment and staging areas shall be located as far as practical from noise-sensitive receptors.

    b. All construction vehicles or equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and acoustical shields or shrouds, in accordance with manufacturer's recommendations.

    c. To the extent feasible, existing barrier features (structures) shall be used to block sound transmission between noise sources and noise sensitive land uses.

    d. The general contractors for all construction and demolition activities shall provide a contact number for citizen complaints and a methodology for dealing with such complaints such as designating a noise disturbance coordinator. This noise disturbance coordinator shall receive all public complaints about construction related noise and vibration, shall be responsible for determining the cause of the complaint, and shall implement any feasible measures to be taken to alleviate the problem. All complaints and resolution of complaints shall be reported to the County weekly.

2003 Coastal Commission (Capacity Limits)

20. Water Supply Capacity

    a. The total number of water service connections permitted within the CCWD Service District shall not exceed the service capacity of Phase I of the Crystal Springs project. The water service capacity of the Phase I Crystal Springs project shall be defined as a total of 8,078 5/8-inch meter equivalent service connections. All remaining uninstalled nonpriority water service connections within the CCWD Service District shall be distributed only within the District boundaries as those boundaries were defined on January 1, 2003. Reallocation of existing water supplies to provide additional service connections is prohibited under Phase I of the Crystal Springs project.

    b. Existing or reserved priority use service connections may only be reallocated to a non-priority use, pursuant to Policy 2.8 of the San Mateo County Certified Land Use Plan.

c. Any increase in water supply or distribution capacity to provide additional service connections in excess of the Phase I limitations specified above, including but not limited to any augmentation or reallocation of existing water supplies, shall require a coastal development permit from the affected local jurisdiction(s). Any such action by a local government on a coastal development permit application for an increase in water supply or distribution capacity beyond the Phase I limitations specified above shall be appealable to the Coastal Commission. If the permittee or its successor(s) seeks a coastal development permit to increase water supply or distribution capacity in excess of the Phase I limitations specified above, the applicant for such permit shall be required to include in such permit application information concerning phasing of infrastructure capacity in conformity with the requirements of the San Mateo County and City of Half Moon Bay LCPs. The information provided shall be sufficiently detailed and complete to enable the permit issuing authority to evaluate whether the proposed increase in water supply and/or distribution capacity is in phase with the existing or probable future capacity of other area infrastructure, including but not limited to the need for an adequate level of service for Highways 1 and 92 as required by the applicable local coastal program and Subsection "d" below.

d. No increase in water supply or distribution capacity shall be permitted within the CCWD Service District in excess of the Phase I limitations specified in Subsection "a" above, unless the existing or probable future capacity of other related infrastructure, including but not limited to the San Mateo County Mid-Coast and City of Half Moon Bay regional transportation system, is sufficient to adequately serve the level of development that would be supported by the proposed increase in water supply and/or distribution capacity. Adequate level of service for Highways 1 and 92 shall be defined, at minimum, as Level of Service (LOS) C except during the peak two-hour commuting period and the ten-day average peak recreational hour when LOS E is acceptable, unless the permittee must abide by a stricter standard that is required under the applicable LCP at the time that such permit application is considered.

Best Management Practices (BMPs) to be Implemented for the Proposed Project

21. Non-Hazardous Materials

a. Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days.

b. Use (but do not overuse) reclaimed water for dust control.

22. Hazardous Material

a. Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.

b. Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.

c. Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.

d. Arrange for appropriate disposal of all hazardous wastes.

23. Waste Management

a. Cover waste disposal containers securely with tarps at the end of every work day and during wet weather.

b. Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site.

c. Clean or replace portable toilets, and inspect them frequently for leaks and spills.

d. Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.).

e. Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.

24. Construction Entrances and Perimeter

a. Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off-site.

b. Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

25. Maintenance and Parking

a. Designate an area, fitted with appropriate BMPs, for vehicle and equipment parking and storage.

b. Perform major maintenance, repair jobs, and vehicle and equipment washing off-site.

c. If refueling or vehicle maintenance must be done on-site, work in a bermed area away from storm drains and over a drip pan big enough to collect fluids.

d. Recycle or dispose of fluids as hazardous waste.

e. If vehicle or equipment cleaning must be done on-site, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.

f. Do not clean vehicle or equipment on-site using soaps, solvents, degreasers, steam cleaning equipment, etc.

26. Spill Prevention and Control

a. Keep spill cleanup materials (rags, absorbents, etc.) available at the construction site at all times.

b. Inspect vehicles and equipment frequently for and repair leaks promptly. Use drip pans to catch leaks until repairs are made.

c. Clean up spills or leaks immediately and dispose of cleanup materials properly.

d. Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).

e. Sweep up spilled dry materials immediately. Do not try to wash them away with water, or bury them.

f. Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.

g. Report significant spills immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill: (1) Dial 911 or your local emergency response number, and (2) call the Governor's Office of Emergency Services Warning Center, 800/852-7550 (24 hours).

27. Sediment Control

a. Protect storm drain inlets, gutters, ditches, and drainage courses with appropriate BMPs, such as gravel bags, fiber rolls, berms, etc.

b. Prevent sediment from migrating off-site by installing and maintaining sediment controls, such as fiber rolls, silt fences, or sediment basins.

c. Keep excavated soil on the site where it will not collect into the street.

d. Transfer excavated materials to dump trucks on the site, not in the street.

28. Containment

a. Fluid spills shall not be hosed down. The contractor shall use dry cleanup methods (absorbent materials, cat litter, and/or rags) whenever possible. If water must be used, the contractor will be required to collect the water and spilled fluids and dispose of it as hazardous waste. Spilled fluids shall not be allowed to soak into the ground or enter into any watercourse.

b. Spilled dry materials shall be swept up immediately. Dry spills shall not be washed down or buried. Spills on dirt areas should be removed by digging up and properly disposing of contaminated soil.

c. Significant spills shall be reported to San Mateo County Environmental Health Services Division, or other emergency office as warranted, immediately and documented using the San Mateo Countywide Water Pollution Prevention Program (SMCWPPP) Construction Site Inspection Report form.

29. Equipment Maintenance and Fueling

a. A separate area shall be designated for equipment maintenance and fueling, away from any slopes, watercourses or drainage facilities.

b. Where equipment is expected to be stored for more than a few days, cleanup materials and tools shall be kept nearby and available for immediate use (refer to Condition No. 9, “Containment”).

c. Equipment shall not be stored in areas that will potentially drain to watercourses or drainage facilities.

d. If equipment must be stored in areas with the potential to generate runoff, drip pans, berms, sandbags or absorbent booms shall be employed to contain any leaks or spills.

e. Equipment shall be inspected daily for leaks or damage and promptly repaired.

f. Timing of Work: Construction activities that remove vegetative soil cover and/or potentially release sediment into stormwater will be conducted during the dry season (June 1 and October 15). Activities that are subject to permit requirements will be conducted during the period authorized by the permits.

30. Sand Bags/Rock Socks

a. When used in water bodies, this BMP must be used in accordance with permit conditions.

b. Secure ends of sandbags to ensure material does not scatter.

c. When used as a barrier, stack bags tightly together and in alternate (brick-layer) fashion.

d. During construction, inspect daily during the work week. Schedule additional inspections during storm events. Make any required repairs.

e. Replace damaged sandbags/rock socks.

f. Remove sediment when deposits reach half the height of the sandbag barrier.

g. Replace rock socks when half full of sediment, or when water no longer flows through rock sock or when water is not clean after flowing through rock sock.

31. Dust Management Controls

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

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

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

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

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

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

g. Post a publicly visible sign with the telephone number and person to contact at the County regarding dust complaints. Following the review of any dust complaints, the County project manager shall respond and take corrective action within 48 hours.

32. Staging and Access

Staging, access, and parking areas will be located outside of sensitive habitat areas.

33. Invasive Plant Control

In order to minimize the spread of invasive plants, all equipment (including personal gear) will be cleaned of soil, seeds, and plant material prior to arriving on the Project site to prevent introduction of undesirable plant species.

34. Prepare and Implement Traffic Control Plan

The applicant and/or its contractor will prepare and implement a traffic control plan to reduce traffic impacts on surface roads within the project area, to reduce potential traffic safety hazards, and ensure adequate access for emergency responders, and construction vehicles, as appropriate. The applicant and/or its contractor will coordinate construction activities with Cal-Fire and the San Mateo County Department of Public Works, as appropriate. The traffic control plan will provide for the appropriate control measures including (but not limited to) barricades, warning signs, flaggers, speed control devices, and other measures.

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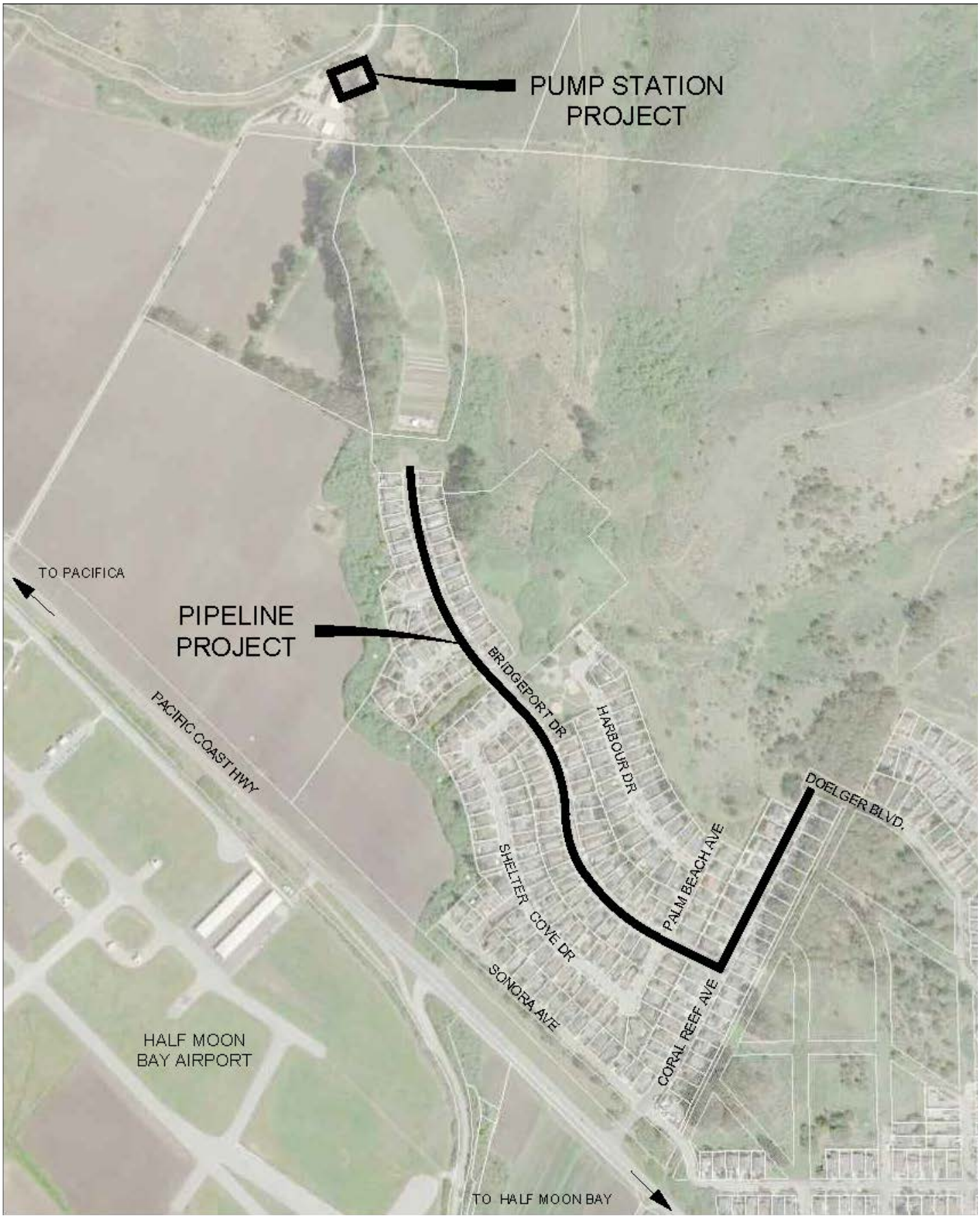
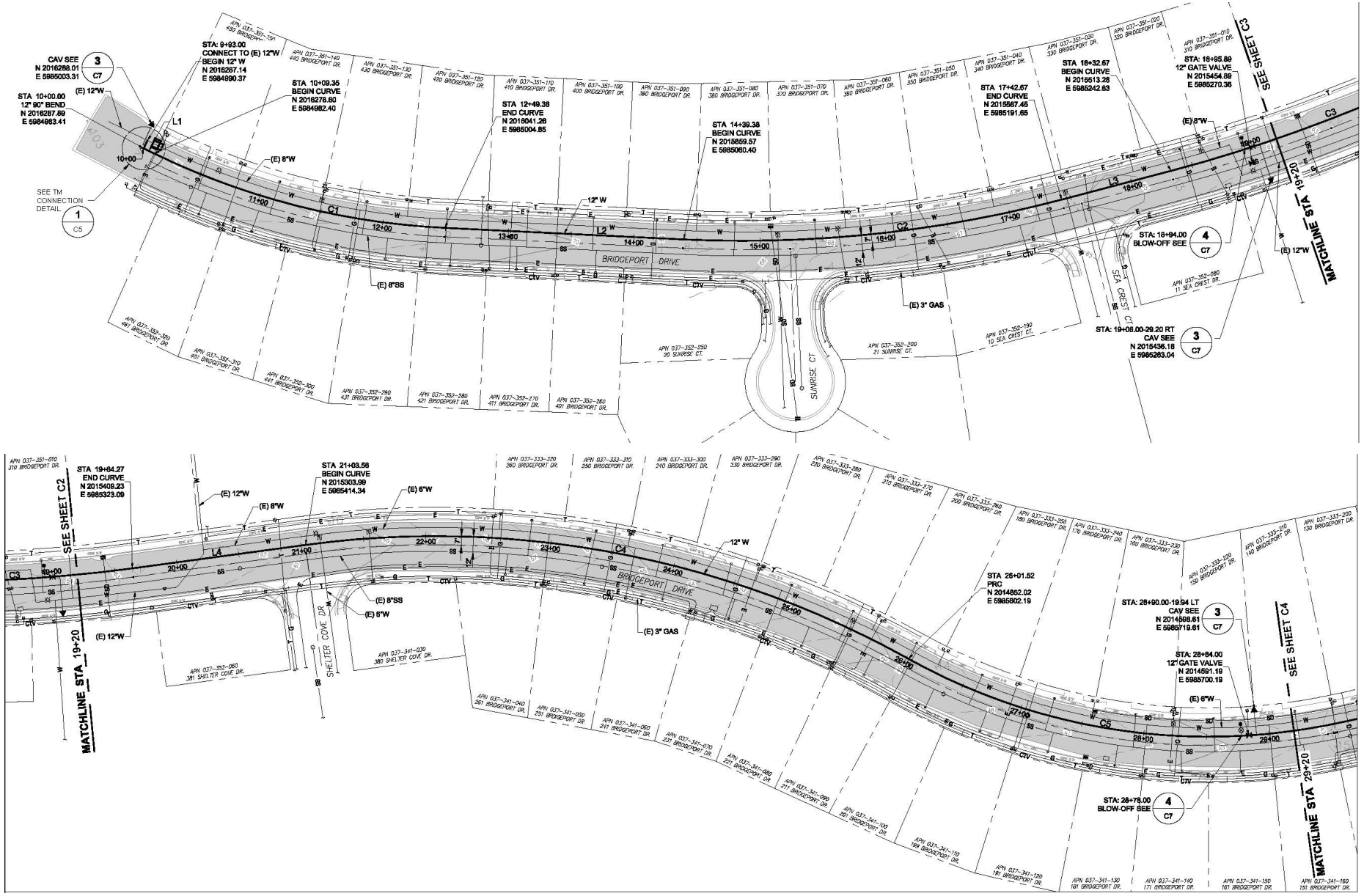


San Mateo County Planning Commission Meeting

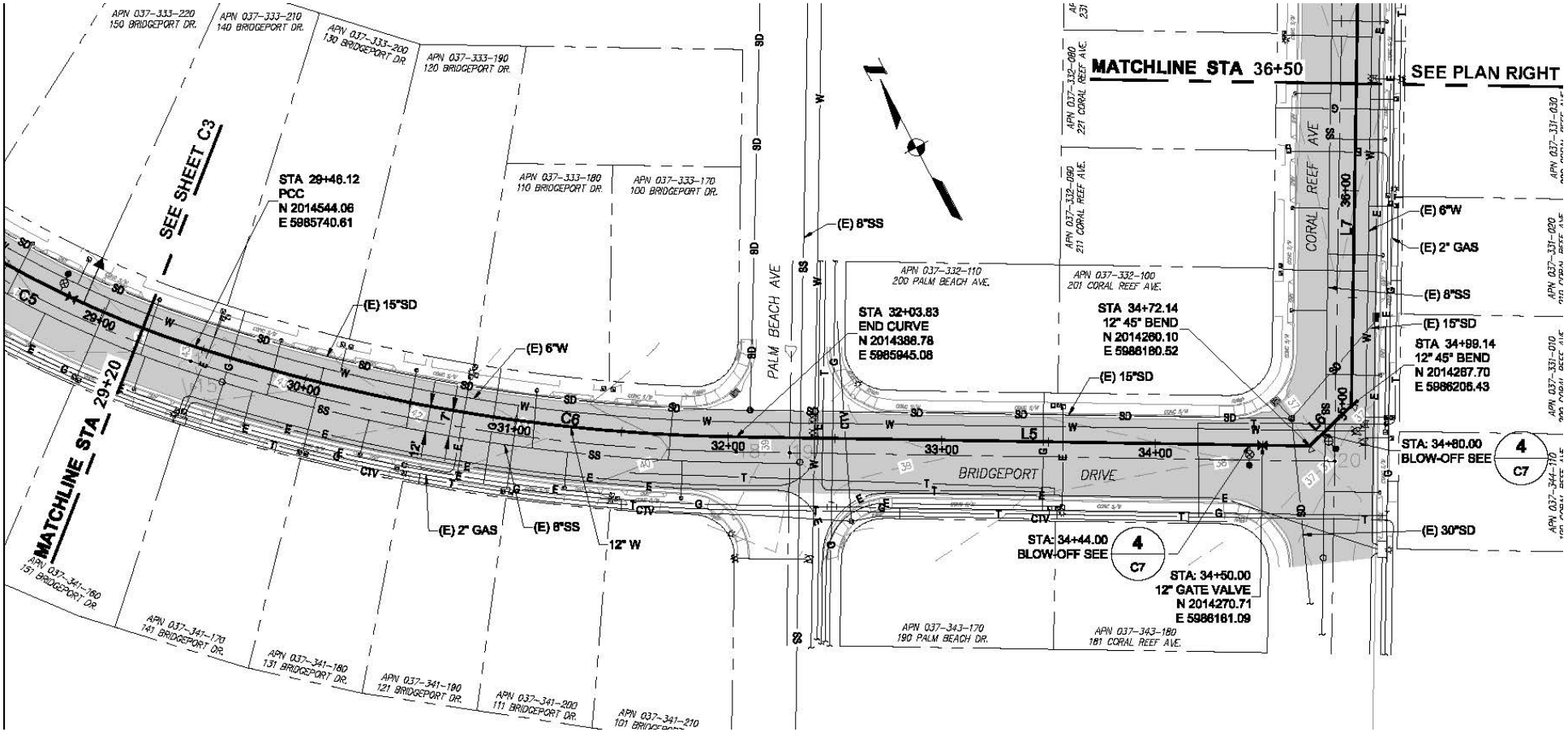
Owner/Applicant:	**Coastside County Water District**	Attachment:	**B**
File Numbers:	**PLN 2016-00008**		



San Mateo County Planning Commission Meeting

Owner/Applicant: **Coastside County Water District** Attachment: **C-1**

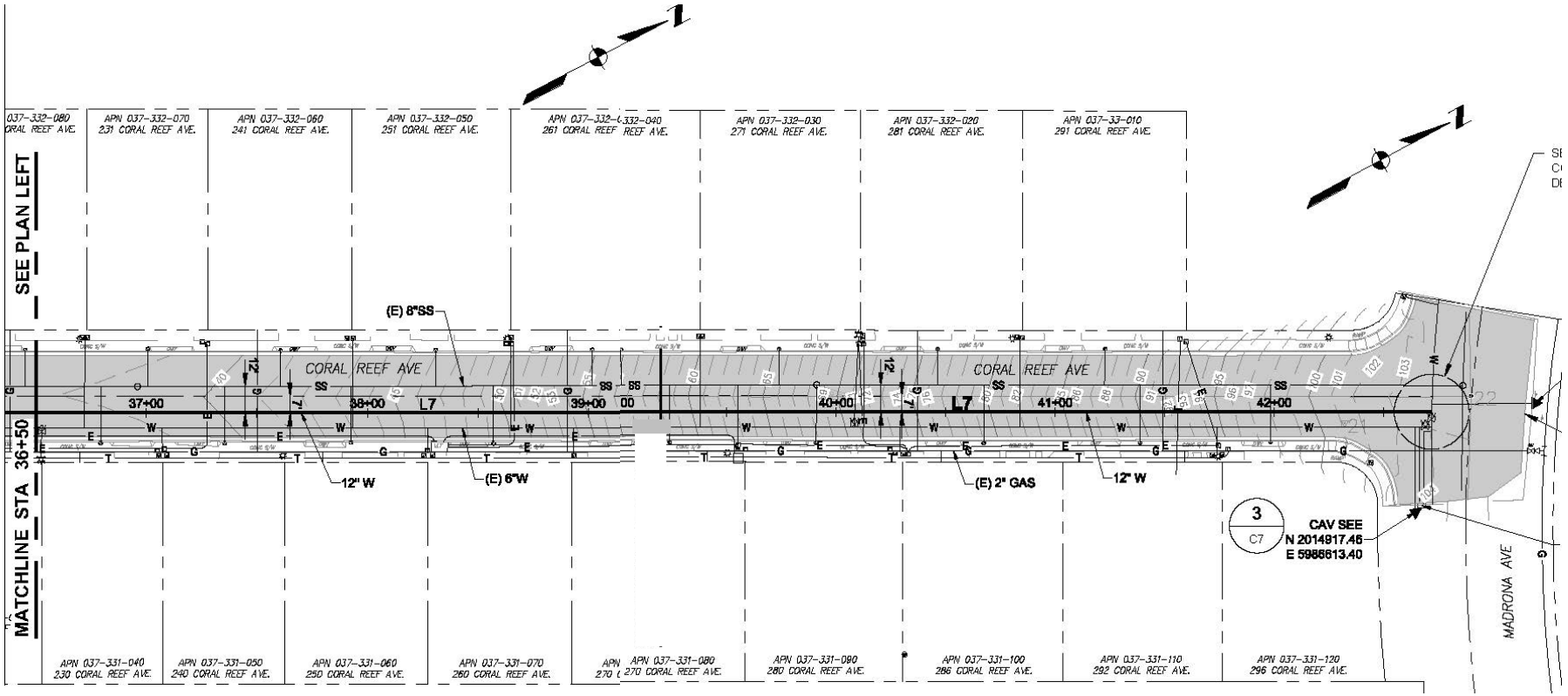
File Numbers: **PLN 2016-00008**



San Mateo County Planning Commission Meeting

Owner/Applicant: **Coastside County Water District** Attachment: **C-2**

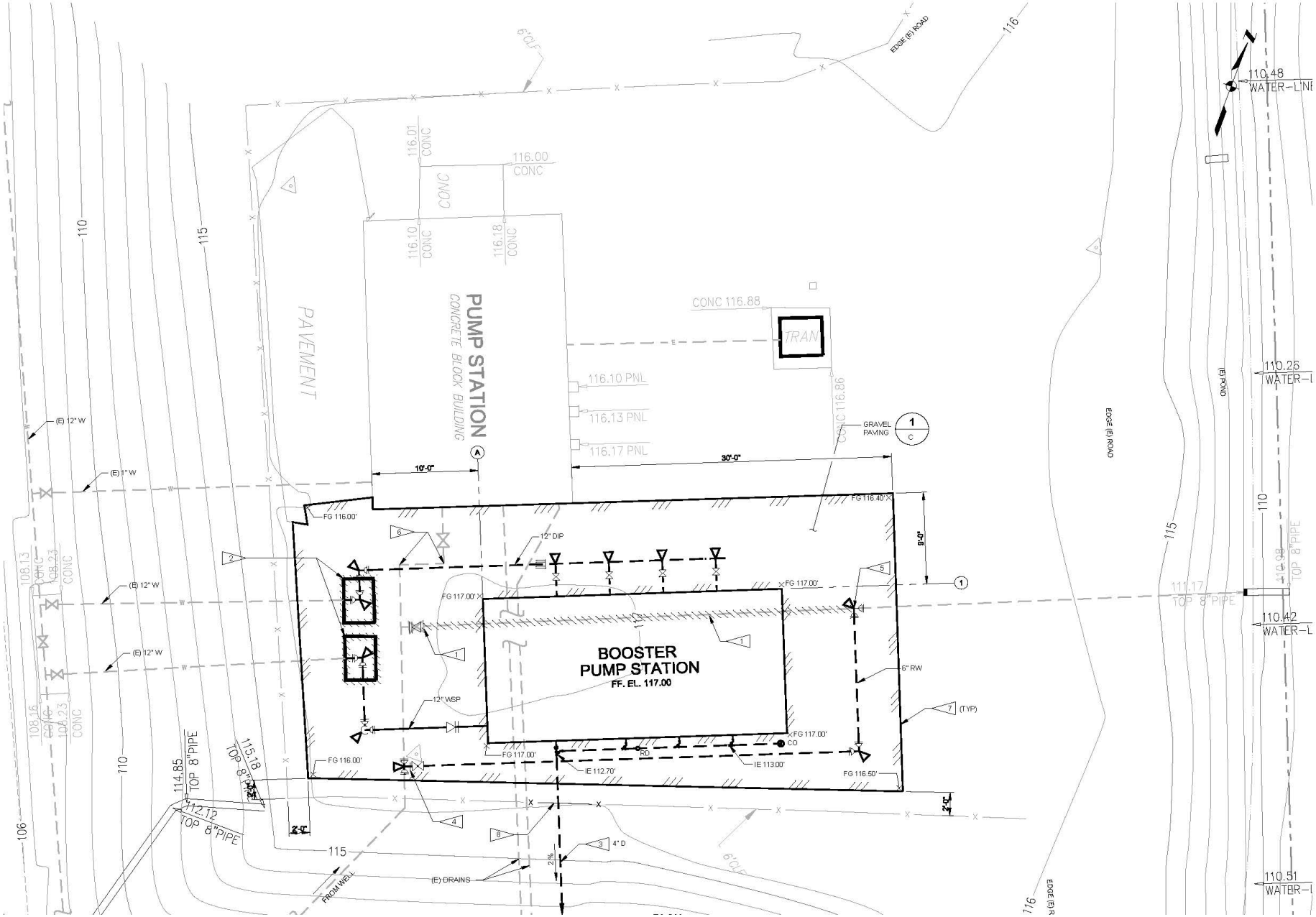
File Numbers: **PLN 2016-00008**



San Mateo County Planning Commission Meeting

Owner/Applicant: **Coastside County Water District** Attachment: **C-3**

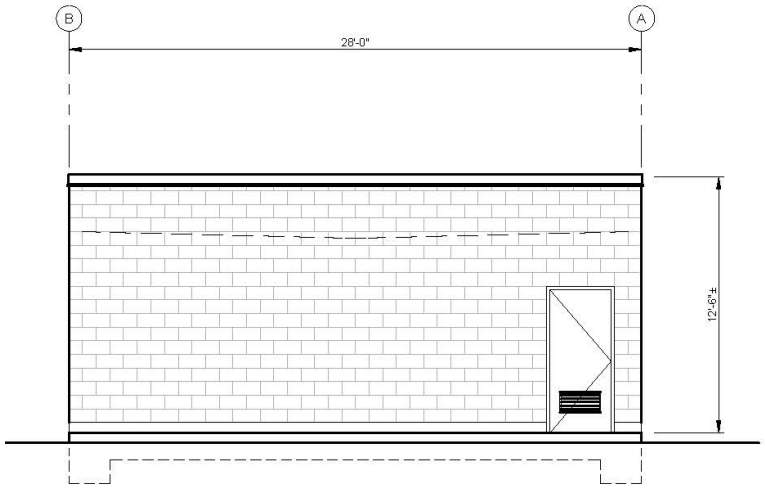
File Numbers: **PLN 2016-00008**



San Mateo County Planning Commission Meeting

Owner/Applicant: **Coastside County Water District** Attachment: **D**

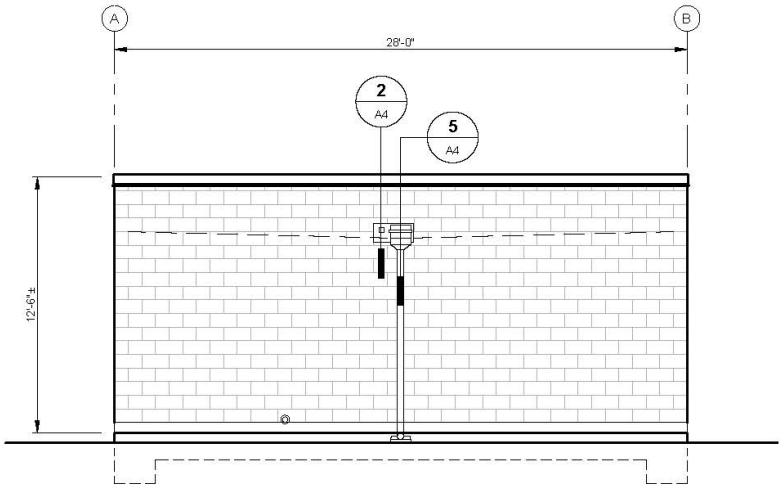
File Numbers: **PLN 2016-00008**



NORTH ELEVATION

0 3 6

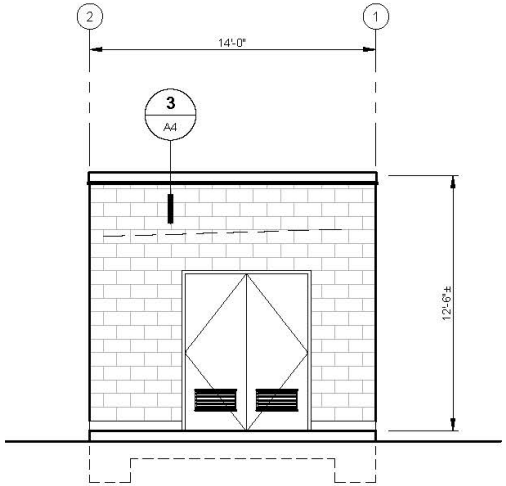
1/4"=1'-0"



SOUTH ELEVATION

0 3 6

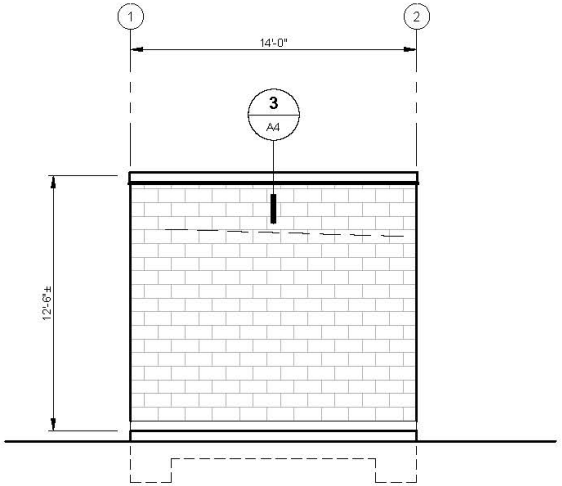
1/4"=1'-0"



EAST ELEVATION

0 3 6

1/4"=1'-0"



WEST ELEVATION

0 3 6

1/4"=1'-0"

San Mateo County Planning Commission Meeting

Owner/Applicant: **Coastside County Water District** Attachment: **E**

File Numbers: **PLN 2016-00008**

County of San Mateo - Planning and Building Department

ATTACHMENT F

Final Environmental Impact Report Denniston/San Vicente Water Supply Project

(Please note: due to size constraints, only the Planning Commission is receiving a copy of this document with this staff report. This document can be viewed and downloaded from the CCWD website at: http://www.coastsidewater.org/reports_and_studies/Denniston-San-Vicente-Water-Supply-Project-Environmental-Impact-Report-Volume-II.pdf)

County of San Mateo - Planning and Building Department

ATTACHMENT G

STATE OF CALIFORNIA—THE RESOURCES AGENCY
CALIFORNIA COASTAL COMMISSION
NORTH CENTRAL COAST DISTRICT
45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE AND TDD (415) 904-5260
FAX (415) 904-5400

ATTACHMENT D

W-12d & 12e

Filed:	March 25, 1999 (HMB) November 10, 1999 (SMC)
Substantial Issue:	July 15, 1999 (HMB) February 18, 2000 (SMC)
Staff:	SLB/CLK-SF
Staff Report:	November 21, 2003
Hearing Date:	December 10, 2003

APPEAL STAFF REPORT
DE NOVO REVIEW

APPEAL NO.: **A-1-HMB-99-20**
A-2-SMC-99-63

APPLICANT: **Coastside County Water District**

LOCAL GOVERNMENT: **City of Half Moon Bay (A-1-HMB-99-20)**
San Mateo County (A-2-SMC-99-63)

PROJECT LOCATION: In the City of Half Moon Bay, along Highway 1 in the vicinity of Bev Cunha's Country Road (Sewer Plant Road) and Wave Avenue (A-1-HMB-99-20) and in unincorporated El Granada within San Mateo County from San Clemente Road south along Columbus Street, Moro Avenue, Ventura Avenue, and terminating at Santiago Avenue (A-2-SMC-99-63).

PROJECT DESCRIPTION: Replacement of two sections of an existing 10-inch diameter water pipeline with a new 16-inch diameter pipeline as the first phase of the planned replacement of the entire 3.5-mile long pipeline connecting the Coastside County Water District's Nune's Treatment Plant (Crystal Springs Project) in Half Moon Bay to its Denniston Treatment Plant in El Granada, San Mateo County **(Exhibits 1 & 2)**.

APPELLANTS:

A-1-HMB-99-20:	Carol Cupp
A-2-SMC-99-63:	Coastal Commissioners Mike Reilly and Christina Desser; Ric Lohman

EXECUTIVE SUMMARY

The proposed development is for replacement of two sections of the existing, 54-year old, 10-inch, welded steel El Granada water transmission pipeline with a new, 16-inch, ductile iron water pipeline. The portion of the project within the City consists of 2,200 lineal feet, which would be constructed on the east side of the Frontage Road from the south side of Sewer Plant Road to approximately 200 feet north of Wave Avenue in Half Moon Bay. The second portion would be constructed in the unincorporated area of El Granada from San Clemente Road south along Columbus Street, Moro Avenue, and Ventura Avenue, and terminating at Santiago Avenue within San Mateo County. The existing 10-inch transmission pipeline runs from the Carter Hill West pipeline and the Nunes Water Treatment Plant in Half Moon Bay to the Denniston treatment plant in El Granada and supplies water for residential, commercial, agricultural, and industrial uses and fire suppression within a large portion of Coastside County Water District ("CCWD") service area (**Exhibit 3**). The proposed development is the first part of a planned, larger project which would eventually replace the entire length of the approximately 3.5 mile El Granada pipeline, running from the Carter Hill West pipeline in Half Moon Bay to the Denniston Storage Tank near the Denniston Water Treatment Plant in El Granada.

At issue under the public works policies of the Half Moon Bay and San Mateo County LCPs is whether the capacity of new, larger pipeline (1) would exceed that needed to serve projected water demand at LCP buildout, and (2) is in phase with the existing capacity of other regional infrastructure facilities. Although the actual operating capacities of the existing and proposed pipelines are a function of numerous factors such as friction, head losses due to bends and valves and pumping, for purposes of a simple comparison, the theoretical capacity of a 16-inch pipeline is roughly 3.4 times that of a 10-inch pipeline. CCWD has provided extensive analysis and factual information supporting its proposed sizing of the transmission line. Project opponents, including the City of Half Moon Bay and former CCWD Board members, contend that the proposed pipeline is oversized and would therefore be growth inducing.

After reviewing the various technical reports and studies provided by CCWD and the substantial public comments concerning the project and meeting with both staff and elected officials from the water district and each of the effected local governments, Commission staff determined that the information contained in the permit applications does not fully justify the proposed sizing of the replacement pipeline. In particular, reliance on outdated LCP buildout figures and theoretical rather than actual use data results in overstated demand projections. Commission staff therefore conducted an independent analysis of the probable future demand for water service in the area served by the El Granada pipeline, taking into account updated population data from the 2000 census, historical water use data from CCWD's meter records, reductions to the allowable rate of growth in both the City and County under anticipated amendments to the current growth control ordinances, and ongoing LCP updates in both jurisdictions. In addition, staff based its analysis on a 20-year planning horizon consistent with the LCPs' requirement for phased development of public works facilities rather than maximum potential development under full LCP buildout.

Based on this analysis, the staff has determined that while the applicant's demand projections are perhaps overstated, the capacity of the proposed replacement pipeline would not exceed demand for water service in 2020. However, staff recognizes that a substantial margin of error exists in this analysis due to necessary assumptions used to project growth, demand by user type, and to

determine the operating capacity of the proposed pipeline as part of a complex water supply and distribution system.

Road access to the Mid-Coast region of San Mateo County including the City of Half Moon Bay and the portion of the California coast within this region is limited to Highways 1 and 92. The current volume of traffic on these highways exceeds their capacity and the regional transportation studies conclude that even with substantial investment in transit and highway improvements, congestion will only get worse in the future. As a result, the level of service on the highways at numerous bottleneck sections is currently and will in the future continue to be rated as LOS F. The most recent Countywide Transportation Plan predicts far greater congestion on these two corridors by 2010, stating: "In 2010 the most congested corridor [in San Mateo County] will be Western 92." This report projects increases in the traffic volumes of 197 and 218 percent on Highways 1 and 92, respectively, in the Mid-Coast region, and attributes these increases to "the anticipated levels of new development on the Coastside and the continued pattern of Coastsiders out-commuting to jobs in San Francisco and on the Bayside." As the Commission has previously found in its actions on the Pacific Ridge and Beachwood Subdivision projects in Half Moon Bay, Highways 1 and 92 in the Mid-Coast Region are not adequate to serve either the current or the expected future demands of development. As such, the proposed expansion of CCWD water service capacity would not be in phase with either the existing or probable future capacity of the region's transportation system.

However, CCWD contends that the purpose of the proposed pipeline replacement project is only to allow delivery of the water service capacity that the water district was authorized to provide under the coastal development permit granted for Phase I of its Crystal Springs project in 1984, which allowed CCWD to import water from the San Francisco Water Department's Crystal Springs Reservoir and to expand the Nunes treatment plant. In fact, CCWD has already entered into service contracts for all of the available non-priority use water service connections within the capacity limitations of Phase I of the Crystal Springs Project, although as of January 1, 2003, 1,329 non-priority service connections remained to be installed. In addition, as of January 1, 2003, CCWD had sufficient service capacity remaining to provide 599 service connections designated specifically for priority land-uses such as public recreational facilities. As such, the proposed pipeline replacement project would serve only the level of growth provided for under the already approved Phase I Crystal Springs Project. Therefore, consistent with this understanding of the project purpose, Special Conditions 4.A. and 4.B. limit CCWD's service capacity to that provided under Phase I Crystal Springs.

Although Special Conditions 4.A. and 4.B. would ensure that the proposed project would not increase water supply capacity beyond that already approved under Phase I of the Crystal Springs Project, it is evident that even this capacity is out of phase with the existing and probable future capacity of the region's transportation system. As such, the LCPs arguably prohibit any increase in water transmission capacity in excess of that necessary to serve the existing level of development. Nevertheless, because the land use plans and zoning currently in effect provide for potential continued growth in Phase I at a level that could generate additional demand for water service and because the application of certified LCP policies and standards, rather than the size of the pipe, will ultimately determine the level of development allowable given the existing and probable future capacity of the region's highways, staff recommends approval of the proposed project.

However, consistent with the LCPs' phasing policies and the coastal access policies of the Coastal Act, future expansion of the region's water supply system to support growth in excess of that already provided under Crystal Springs Phase I should not be approved unless the regional transportation system is improved to provide adequate service to support such additional growth. Therefore, Special Conditions 4.C and 4.D. prohibit future expansion of CCWD's water supply capacity from occurring out of phase with transportation and other area infrastructure.

EXHIBITS

1.0 LOCAL GOVERNMENT ACTION

1.1.1.1 City of Half Moon Bay

On January 28, 1999, the City of Half Moon Bay Planning Commission conditionally approved Coastal Development Permit PDP-44-98 for the replacement of 2,200 lineal feet of the existing 10-inch welded steel water line with a 16-inch ductile iron water line to be constructed on the east side of the Frontage Road from the south side of Sewer Plant Road to approximately 200 feet north of Wave Avenue. This first phase of the El Granada Pipeline Replacement Project is called the Casa del Mar Pipeline Replacement Project, named after the Casa del Mar subdivision adjacent to it.

The City's approval was appealed to the Half Moon Bay City Council, on February 7, 1999 by appellant Carol Cupp. On March 2, 1999, the City Council heard the appeal and voted on it, but failed, by a 2-2 vote, to reach a decision. The City's March 15, 1999 Notice of Final Action therefore transmitted the notice of the Planning Commission's January 28, 1999 conditional approval of the project as the City's final action notice. A March 9, 1999 determination by the City Attorney that the Planning Commission's action did in fact constitute the City's final action on the project accompanied the March 15 Notice of Final Action. The appellant then filed the appeal to the Commission in a timely manner, on March 25, 1999, within the ten-working day appeal period.

1.1.1.2 San Mateo County

On May 26, 1999, the County of San Mateo Planning Commission on a 2 to 1 vote denied Coastal Development Permit PLN 1999-00192 for the proposed CCWD pipeline project in El Granada. The project consists of replacement of 3,200 lineal feet of an existing 10-inch welded steel water line with a 16-inch ductile iron water line to be constructed in the unincorporated area of El Granada, from San Clemente Road south along Columbus Street, Moro Avenue, and Ventura Avenue, and terminating at Santiago Avenue.

The Planning Commission denial was appealed to the Board of Supervisors by CCWD, and was brought before the Board on August 3, 1999. At that hearing, the Board decided to require an independent engineering review of the sizing and other calculations for the project performed prior to a decision. The analysis, prepared by the firm of Brian Kangas Foulk (BKF) was presented to the Board, which then approved the CDP for the project at its October 19, 1999 hearing.

The County's Notice of Final Action was received by the Commission on October 27, 1999. The appellants then filed appeals to the Commission in a timely manner, on November 10, 1999, within the ten-working day appeal period.

2.0 APPEAL PROCESS

2.1 APPEAL JURISDICTION

Coastal Act Section 30603 provides that action taken by a local government on a coastal development permit application may be appealed to the Coastal Commission for certain kinds of developments located within certain geographic appeal areas, including those located between the sea and the first public road paralleling the sea or within three hundred feet of the mean high tide line or inland extent of any beach or top of the seaward face of a coastal bluff, those located

in a sensitive coastal resource area or those located within 100 feet of any wetland, estuary, or stream. Furthermore, permits may be appealed for either developments approved by counties which are not designated the principal permitted use under the county's certified LCP or developments constituting a major public works or a major energy facility whether approved or denied by a city or county.

The two portions of the pipeline (the 2,200 lineal feet and 3,200 lineal feet) now before the Commission as well as the entire 3.5 mile-long project is appealable to the Commission as a major public works project because it is a public transmission facility for water with a cost greater than $100,000. The portion of the water pipeline that is the subject of the appeal would cost more than $300,000.

2.2 FILING OF APPEAL

2.2.1.1 City of Half Moon Bay

Appeal to the Commission was timely filed on March 25, 1999, within ten working days of receipt by the Commission of notice of final local action on March 15, 1999. On March 26, the Commission sent notice of the appeal to the CCWD and the City of Half Moon Bay. Pursuant to Section 30621 of the Coastal Act, an appeal hearing must be set within 49 days from the date an appeal of a locally issued coastal development permit is filed. In accordance with the California Code of Regulations, on March 26, 1999 staff requested all relevant documents and materials regarding the subject permit from the City, to enable staff to analyze the appeal and prepare a recommendation as to whether a substantial issue exists. Consistent with Section 13112 of the California Code of Regulations, since the Commission did not timely receive all requested documents and materials, at the April 16, 1999 meeting the Commission opened and continued the hearing. Subsequently, all of the remaining file materials were transmitted to the Commission.

Section 30625(b) of the Coastal Act requires the Commission to hear an appeal unless the Commission determines that no substantial issue is raised by the appeal. Hearing of the question of substantial issue, originally scheduled for June 1999, was postponed at the applicant's request to the July 1999 Commission meeting. At its July 1999 meeting, the Commission found that the proposed development raised a substantial issue of conformity with the policies of the certified LCP.

The applicant subsequently requested postponement of the Commission's de novo review of the project, pending review and reconsideration of the project by the applicant. In 2002, CCWD requested that the appeal proceed, and it was agendized for the December 2002 meeting; however, at the applicant's request the hearing schedule on the appeal was postponed pending additional information. In the interim, CCWD has provided updated water usage figures for its service area and additional analysis of the capacity of the replacement project.

2.2.1.2 San Mateo County

Appeal to the Commission was timely filed on November 10, 1999, within ten working days of receipt by the Commission of notice of final local action on October 27, 1999. On November 12, 1999, the Commission sent notice of the appeal to the CCWD and the City of Half Moon Bay. Pursuant to Section 30621 of the Coastal Act, an appeal hearing must be set within 49 days from the date an appeal of a locally issued coastal development permit is filed. In accordance with the

California Code of Regulations, on November 12, 1999 staff requested all relevant documents and materials regarding the subject permit from the City, to enable staff to analyze the appeal and prepare a recommendation as to whether a substantial issue exists. Consistent with Section 13112 of the California Code of Regulations, since the Commission did not timely receive all requested documents and materials, at the December 10, 1999 meeting, the Commission opened and continued the hearing. Subsequently, all of the remaining file materials were transmitted to the Commission.

Section 30625(b) of the Coastal Act requires the Commission to hear an appeal unless the Commission determines that no substantial issue is raised by the appeal. At its February 2000 meeting, the Commission found that the proposed development raised a substantial issue of conformity with the policies of the certified LCP.

The applicant subsequently requested postponement of the Commission's de novo review of the project, pending review and reconsideration of the project by the applicant. In 2002, CCWD requested that the appeal proceed, and it was agendized for the December 2002 meeting; however, at the applicant's request the hearing schedule on the appeal was postponed pending additional information. In the interim, CCWD has provided updated water usage figures for its service area and additional analysis of the capacity of the replacement project.

2.3 STANDARD OF REVIEW

2.3.1.1 City of Half Moon Bay

The proposed development is located in the Coastal Zone within the City of Half Moon Bay. Section 30604(b) states that after certification of a local coastal program, a coastal development permit shall be issued if the issuing agency or the Commission on appeal finds that the proposed development is in conformity with the certified local coastal program. The standard of review for this project is therefore the City's certified LCP. Because a portion of the project is located between the sea and the first public road, pursuant to Section 30604(c) of the Coastal Act, the standard of review also includes the public access and recreation policies of the Coastal Act (Sections 30210 through 30224).

Pursuant to Policy 1-1 of the City's certified Land Use Plan (LUP), the City has adopted the coastal planning and management policies of the Coastal Act (Sections 30210 through 30264) as the guiding him policies of the LUP. Policy 1-4 of the City's LUP states that prior to issuance of any development permit, a finding shall be made that the development meets the standards set forth in all applicable LUP policies. Thus, the LUP incorporates the Chapter 3 policies of the Coastal Act and these policies are included in the standard of review for the proposed project.

2.3.1.2 San Mateo County

The proposed development is located in the Coastal Zone within San Mateo County. Section 30604(b) states that after certification of a local coastal program, a coastal development permit shall be issued if the issuing agency or the Commission on appeal finds that the proposed development is in conformity with the certified local coastal program. The standard of review for this project is therefore the County's certified LCP. Because a portion of the project is located between the sea and the first public road, pursuant to Section 30604(c) of the Coastal Act, the standard of review also includes the public access and recreation policies of the Coastal Act (Sections 30210 through 30224).

Pursuant to the County's certified Land Use Plan (LUP), the County has adopted policies consistent with the coastal planning and management policies of Chapter 3 of the Coastal Act as the guiding policies of the LUP. Thus, the LUP incorporates the Chapter 3 policies of the Coastal Act and these policies are included in the standard of review for the proposed project.

3.0 STAFF RECOMMENDATION

3.1 Motion and Resolution – City of Half Moon Bay

The staff recommends conditional approval of Coastal Development Permit Application No. A-1-HMB-99-20.

Motion: *I move that the Commission approve Coastal Development Permit Application No. A-1-HMB-99-20, subject to the conditions specified below.*

Staff Recommendation of Approval

The staff recommends a YES vote. To pass the motion, a majority of the Commissioners present is required. Approval of the motion will result in the adoption of the following resolution and findings.

Resolution

The Coastal Commission hereby **grants** permit No. A-1-HMB-99-20, subject to the conditions below, for the proposed development on the grounds that (1) the development is in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976 and (2) there are no feasible alternatives or feasible mitigation measures other than those specified in this permit that would substantially lessen any significant adverse impact that the activity may have on the environment.

3.2 Motion and Resolution – San Mateo County

The staff recommends conditional approval of Coastal Development Permit Application No. A-2-SMC-99-63.

Motion: *I move that the Commission approve Coastal Development Permit Application No. A-2-SMC-99-63, subject to the conditions specified below.*

Staff Recommendation of Approval

The staff recommends a YES vote. To pass the motion, a majority of the Commissioners present is required. Approval of the motion will result in the adoption of the following resolution and findings.

Resolution

The Coastal Commission hereby **grants** permit No. A-2-SMC-99-63, subject to the conditions below, for the proposed development on the grounds that (1) the development is in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976 and (2) there are no feasible alternatives or feasible mitigation measures other than those specified in this permit that would substantially lessen any significant adverse impact that the activity may have on the environment.

3.3 Standard Conditions

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Interpretation. Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
4. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
5. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

3.4 Special Conditions

All previous conditions of approval imposed on the project by the City of Half Moon Bay and San Mateo County pursuant to an authority other than the California Coastal Act remain in effect. To the extent such City of Half Moon Bay and San Mateo County conditions conflict with the Coastal Commission's conditions for Coastal Development Permits A-1-HMB-99-20 and A-2-SMC-99-63, the applicant will be responsible for obtaining permit amendments to resolve any such conflicts.

1. Erosion Control

   A. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall provide, for the review and approval of the Executive Director, an Erosion Control Plan to reduce erosion and, to the maximum extent practicable, retain sediment on-site during and after construction. The plan shall be designed to minimize the potential sources of sediment, control the amount of runoff and its ability to carry sediment by diverting incoming flows and impeding internally generated flows, and retain sediment that is picked up on the project site through the use of sediment-capturing devices. The plan shall also limit application, generation, and migration of toxic substances, ensure the proper storage and disposal of toxic materials, apply nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters. The Erosion Control Plan shall incorporate the Best Management Practices (BMPs) specified below.

      1. Erosion & Sediment Source Control

         a. Sequence construction to install sediment-capturing devices first, followed by runoff control measures and runoff conveyances. Land clearing activities should only commence after the minimization and capture elements are in place.

b. Time the clearing and grading activities to avoid the rainy season (October 15 through April 30).

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

d. Clear only areas essential for construction.

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

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

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

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

i. Excess fill shall not be disposed of in the Coastal Zone unless authorized through either an amendment to this coastal development permit or a new coastal development permit.

2. Runoff Control and Conveyance

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

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

3. Sediment-Capturing Devices

a. Install stormdrain inlet protection that traps sediment before it enters the storm sewer system. This barrier could consist of filter fabric, straw bales, gravel, or sand bags.

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

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

4. Chemical Control

a. Store, handle, apply, and dispose of pesticides, petroleum products, and other construction materials properly.

b. Establish fuel and vehicle maintenance staging areas located away from all drainage courses, and design these areas to control runoff.

c. Develop and implement spill prevention and control measures.

d. Provide sanitary facilities for construction workers.

e. Maintain and wash equipment and machinery in confined areas specifically designed to control runoff. Thinners or solvents should not be discharged into sanitary or storm sewer systems. Washout from concrete trucks should be disposed of at a location not subject to runoff and more than 50 feet away from a stormdrain, open ditch or surface water.

f. Provide adequate disposal facilities for solid waste, including excess asphalt, produced during construction.

g. Develop and implement nutrient management measures. Properly time applications, and work fertilizers and liming materials into the soil to depths of 4 to 6 inches. Reduce the amount of nutrients applied by conducting soil tests to determine site nutrient needs.

B. The applicant shall undertake development in accordance with the final erosion control plans approved by the Executive Director. No proposed changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required. The applicant shall be fully responsible for advising construction personnel of the requirements of the Erosion Control Plan.

C. All of the above described erosion control measures shall be maintained pursuant to the following requirements.

1. All BMP traps/separators and/or filters shall be cleaned at minimum prior to the onset of the storm season and no later than October 15th each year.

2. Sediment traps/basins shall be cleaned out at any time when 50% full (by volume).

3. Sediment shall be removed from silt fences at any time when it reaches 1/3 the fence height.

4. All pollutants contained in BMP devices shall be contained and disposed of in an appropriate manner.

5. Non-routine maintenance activities that are expensive but infrequent, such as detention basin dredging, shall be performed on as needed based on the results of the monitoring inspections described above.

D. Throughout the construction period, the applicants shall conduct regular inspections of the condition and operational status of all structural BMPs required by the approved Erosion Control Plan. Authorized representatives of the Coastal Commission and/or the

City of Half Moon Bay and San Mateo County shall be allowed to enter the property as needed to conduct on-site inspections throughout the construction period.

2. Archaeology

   A. **PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT,** the applicant shall submit an archaeological mitigation and monitoring plan prepared by a qualified subsurface archaeologist, for review and approval of the Executive Director. The plan shall address the requirements of LCP ordinance 18.38.040 and include a description of monitoring methods, frequency of monitoring, procedures for halting work on the site and a description of reporting procedures that will be implemented during ground disturbing activities to ensure that cultural resources are not disturbed. This shall include a list of the personnel involved in the monitoring activities and their qualifications, and shall include qualified local Native Americans as project monitors.

   B. **DURING ALL GROUND DISTURBING ACTIVITIES,** the applicant shall retain a qualified archaeologist, approved by the Executive Director, to monitor all earth disturbing activities per the approved monitoring plan. The applicant shall also include qualified local Native Americans as project monitors. If an area of cultural deposits is discovered during the course of the project, all construction shall cease in the vicinity of the resource, and a new plan shall be submitted for the review and approval of the Executive Director that illustrates avoidance of such resources to the maximum extent practicable.

   C. **PRIOR TO COMMENCEMENT OF CONSTRUCTION,** the archaeological monitor shall conduct a brief training session with construction personnel discussing the cultural sensitivity of the area and the protocol for discovery of cultural resources during construction. The archaeological monitor shall also inform all qualified local Native Americans of the timing of construction and their opportunity to participate in construction monitoring.

3. Monitoring. On or before April 1 of each year, the permittee shall submit to the Executive Director an updated annual Water Supply Evaluation Report for the prior calendar year that includes all of the following information:

   A. Annual water sales (million gallons) for each of the following user categories:

      1. Priority Uses
         - Public Recreational
         - Visitor-Serving Commercial
         - Coastal-Dependent Industrial
         - Agricultural
         - Total Priority Uses

      2. Non-Priority Uses
         - Residential Single-Family
         - Residential Multi-Family
         - General (Non-Coastal Dependent) Commercial

- General (Non-Coastal Dependent) Industrial
- Total Non-Priority Uses

B. A complete list of all new service connections installed in the prior calendar year by each of the use categories specified in Paragraph A above. The list shall identify the specific property to which each service connection is assigned by assessor's parcel number and map.

C. A complete list of all existing installed service connections within CCWD service district as of December 31 of the prior calendar year by each of the use categories specified in Paragraph A above. The list shall identify the specific property to which each service connection is assigned by assessor's parcel number and map.

D. A complete list of all uninstalled priority service connections remaining within the CCWD service district as of December 31 of the prior calendar year, including both sold and unsold uninstalled connections. The list shall identify the specific property to which each service connection is assigned by assessor's parcel number and map.

E. A complete list of all uninstalled non-priority service connections remaining within the CCWD service district as of December 31 of the prior calendar year, including both sold and unsold uninstalled connections. The list shall identify the specific property to which each service connection is assigned by assessor's parcel number and map.

F. A complete list of all service connection transfers identifying whether the transferred connection is priority or non-priority and the specific properties from which each connection was transferred from and to by assessor's parcel number and map.

G. Monthly water production for each supply source.

H. Updated detailed schematic plan and description of water supply and delivery system, including all existing and planned system components. The plan and description shall indicate all system improvements and significant repairs completed during the prior calendar year.

4. Water Supply Capacity.

A. The total number of water service connections permitted within the CCWD Service District shall not exceed the service capacity of Phase I of the Crystal Springs project. The water service capacity of the Phase I Crystal Springs project shall be defined as a total of 8,078 5/8-inch meter equivalent service connections. The 1,329 uninstalled non-priority 5/8-inch meter equivalent water service connections within the CCWD Service District remaining as of January 1, 2003 shall be distributed only within the CCWD Service District boundaries as those boundaries were defined on January 1, 2003. Reallocation of existing water supplies to provide additional service connections is prohibited under Phase I of the Crystal Springs project.

B. A minimum of 599 5/8-inch meter equivalent service connections shall be reserved for priority uses as identified in Condition 3.A.1 above. Existing or reserved priority use service connections may only be reallocated to a non-priority use, pursuant to Policy 2.8 of the San Mateo County Certified LUP.

C. Any increase in water supply or distribution capacity to provide additional service connections in excess of the Phase I limitations specified in 4.A. above, including but not limited to any augmentation or reallocation of existing water supplies, shall require a coastal development permit from the affected local jurisdiction(s). Any such action by a local government on a coastal development permit application for an increase in water supply or distribution capacity beyond the Phase I limitations specified in Condition 4.A above shall be appealable to the Coastal Commission. If the permittee or its successor(s) seeks a coastal development permit to increase water supply or distribution capacity in excess of the Phase I limitations specified in 4.A. above, the applicant for such permit shall be required to include in such permit application information concerning phasing of infrastructure capacity in conformity with the requirements of the San Mateo County and City of Half Moon Bay LCPs. The information provided shall be sufficiently detailed and complete to enable the permit issuing authority to evaluate whether the proposed increase in water supply and/or distribution capacity is in phase with the existing or probable future capacity of other area infrastructure, including but not limited to the need for an adequate level of service for Highways 1 and 92 as required by the applicable local coastal program and Subsection D below.

D. No increase in water supply or distribution capacity shall be permitted within the CCWD Service District in excess of the Phase I limitations specified in 4.A. above, unless the existing or probable future capacity of other related infrastructure, including but not limited to the San Mateo County Mid-Coast and City of Half Moon Bay regional transportation system, is sufficient to adequately serve the level of development that would be supported by the proposed increase in water supply and/or distribution capacity. Adequate level of service for Highways 1 and 92 shall be defined, at minimum, as Level of Service (LOS) C except during the peak two-hour commuting period and the ten-day average peak recreational hour when LOS E is acceptable, unless the permittee must abide by a stricter standard that is required under the applicable LCP at the time that such permit application is considered.

5. Facility Decommissioning.

A. Within 180 days of completing installation of the final phase of the El Granada pipeline replacement project, the permittee shall, pursuant to an approved coastal development permit, decommission and remove in its entirety the Frenchman's Creek Pump Station. Replacement of the next section of the existing 10-inch diameter El Granada pipeline shall not occur until a coastal development permit application for decommissioning and removal of the pump station has been filed as complete.

B. Upon completion of the El Granada pipeline replacement project, the existing 10-inch El Granada pipeline shall either be permanently sealed and abandoned in place or removed.

6. Regional Infrastructure Coordination.

A. The permittee shall coordinate with state, regional and local government agencies, public utilities, and special districts to encourage the use of public and private infrastructure facilities in a manner that is consistent with the policies of the California Coastal Act and the City of Half Moon Bay and San Mateo County Local Coastal Programs.

B. If the permittee can establish that sufficient capacity is reserved for priority land uses consistent with the provisions of this coastal development permit, including Special Condition 3 above, as well as the provisions of the applicable local coastal program(s), the permittee is encouraged to propose to allow the use of available pipeline transmission capacity for the purpose of reducing the dependence of existing development on individual private wells within the urban Mid-Coast Region. Any proposal to use the CCWD El Granada Pipeline to transport water to areas outside of the CCWD Service District, as that service district was defined on January 1, 2003, shall require an amendment to this coastal development permit.

4.0 FINDINGS AND DECLARATIONS

4.1 Project Description

4.1.1 Project Location and Site Description

The portion of the pipeline to be replaced within the City of Half Moon Bay begins approximately 0.65 miles north of the Highway 1 and Highway 92 intersection near downtown Half Moon Bay and continues north for 2,200 feet along the east side of Frontage Road, which lies parallel to Highway 1 on its west side. This 2,200-foot distance runs from a south terminus near the south side of Sewer Plant Road to a north terminus approximately 200 feet north of Wave Avenue. The 3,200-foot portion of the pipeline located in the County's jurisdiction would be constructed predominantly in County street right-of-ways between San Clemente Road and Santiago Avenue (**Exhibit 4**).

4.1.1.1 CCWD Water System

CCWD's service area, shown in **Exhibit 3**, includes the City of Half Moon Bay and several unincorporated coastal communities in San Mateo County, including Miramar, Princeton by the Sea, and El Granada. The service area's boundaries extend approximately 9.5 miles north to south along the coast and 1.5 miles east to west. The service area boundaries for the less extensive service area of the El Granada Pipeline are shown in **Exhibit 4**. **Exhibit 3** also shows various components of the CCWD system, including the Crystal Springs Pipeline ("CSP"), CCWD's two water treatment plants (in the south, the Nunes plant, and in the north, the Denniston plant in El Granada), the main transmission lines west of the Nunes plant, storage tanks for treated water, pump stations, and wells.

Water is supplied to the CCWD service area by the Nunes treatment plant, located on Carter Hill in Half Moon Bay, and the Denniston treatment plant, located in El Granada approximately 1.3 miles north of the Highway 1 and Highway 92 intersection. The Nunes treatment plant, with a rated capacity of 3,125 gpm, or 4.5 mgd, and a normal operational production capacity, according to CCWD, in excess of rated capacity during periods of low untreated water turbidity during summer and fall months of 3,848 gpm, or 5.54 mgd, supplies the majority of the water consumed in the CCWD service area.[1] The Nunes plant treats water pumped from the Pillarcitos well field and the Crystal Springs Reservoir, which is connected to the Nunes plant by the CSP (**Exhibit 3**).[2] The Crystal Springs Reservoir, in turn, is connected to and can receive water from

[1] CCWD Year 2001 Water Supply Evaluation, at II-7.

[2] The Nunes treatment plant was upgraded and the CSP constructed in 1994. Capacity of the expanded Nunes Water treatment plant was limited to that needed to serve Phase I buildout; transmission capacity of the CSP was limited to

the San Francisco water system. The CCWD has had this direct link to the San Francisco Water Department's Hetch Hetchy system since completion of the CSP in 1994. The normal summer treatment capacity of the Nunes Plant of 3,848 gpm is the full, rated capacity of the CSP pump station.[3] The Denniston treatment plant draws water from a CCWD well field and the Denniston Reservoir, which collects water from Denniston Creek. The production capacity of the Denniston plant, ranging seasonally from a maximum production rate of 700 gpm, or 0.50 mgd, to 258 gpm, or 0.37 mgd, under drought conditions, is dependent on adequate water supply from the Denniston well field and Denniston Reservoir and is substantially less than that of the Nunes treatment plant.[4] Average August production from Denniston is 436 gpm, or 0.31 mgd.[5]

The normal annual production capacity after several normal years of precipitation, or "normal yield," of both plants is 1,086 mg, according to CCWD's 2001 Water Supply Evaluation.[6] CCWD's estimated "safe yield" from both plants, the annual production under drought conditions, is 760 mg.[7]

The El Granada transmission pipeline runs between the two CCWD treatment plants, and supplies a large portion of the CCWD service area with water. At its southern end, treated water is supplied from the Nunes Treatment Plant to the El Granada and Main Street pipelines by the Carter Hill West pipeline (**Exhibit 3**). The southern portion of the El Granada pipeline lies within the City's LCP jurisdiction; the northern portion is within San Mateo County. The El Granada pipeline thus forms the backbone of the CCWD water transmission and delivery infrastructure from Half Moon Bay northward and is critical to delivery of water to CCWD customers. Flow within the existing El Granada pipeline is currently enhanced by the Frenchman's Creek booster pump, which was installed in 1972 when gravity flow within the existing pipeline was no longer adequate to meet demand, and by a portable booster pump, which is required to supplement flow at peak demand periods. The booster pump can pump 250 gpm southward and 350 gpm northward, and is operated northward under normal system operation.

The El Granada transmission line can be operated in several different modes, according to the location of the available water source and prevailing water demand. Under normal circumstances, the pipeline is operated bi-directionally, with treated water from the Denniston plant flowing southward and treated water from the Nunes treatment plant flowing northward to CCWD customers arrayed along the length of the pipeline and concentrated in Half Moon Bay and El Granada. However, the pipeline can also be operated uni-directionally, for example, under extreme drought conditions where the Denniston plant production capacity is reduced, with water from the Nunes treatment flowing northward and supplying water for the entire service area.

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that need to serve long-term buildout under the County LCP. The Commission found in September 1985 that appeals of San Mateo County permit CDP 84-68 did not raise a substantial issue of conformity with the County LCP.

[3] CCWD Year 2001 Water Supply Evaluation, at II-7.

[4] CCWD Year 2001 Water Supply Evaluation, at II-6.

[5] CCWD Evaluation of Future Scenarios for the Water Distribution System ("Future Scenarios"), at 5-6.

[6] CCWD Year 2001 Water Supply Evaluation, at II-5. CCWD's Evaluation of Future Scenarios gives a slightly higher normal annual yield of 1,093 mg. (Future Scenarios, at B-1).

[7] CCWD Year 2001 Water Supply Evaluation, at II-5. CCWD's Evaluation of Future Scenarios gives a lower annual safe yield of 730 mg. (Future Scenarios, at B-1).

The pipeline is augmented by several storage tanks placed along the length of the pipeline, with a total, existing storage capacity of 8.05 million gallons. These storage tanks serve to maintain system pressure and meet water demand during peak periods when demand exceeds production capacity. In addition to providing water storage for "operating reserve" (the difference between supply capacity and peak demand rates), the tanks serve to meet fire flows and provide an emergency reserve for equipment and/or facilities outages. Although a recent CCWD study of future system operations indicates that existing storage capacity is less than required to meet all excess capacity needs by 0.34 million gallons,[8] CCWD staff has verbally indicated to Commission staff that due to overlaps in transmission pipeline pressure zones existing storage capacity is in fact adequate for system needs.

On the demand side of the equation, the number of water connections served by CCWD has increased steadily for the last several decades.[9] There are presently a total of 6,169 water service connections installed. CCWD has water treatment plant capacity for an additional 1,900 connections, of which 1,416 have been purchased (1,314 non-priority, 102 priority connections), over next 15 to 20 years. 1,052 of the 1,416 connections that have already purchased, but not yet installed, are within the El Granada pipeline service area. Of these, 510 are in the County, and 542 in the City. Thus the total currently projected number of water connections at LCP build-out is the sum of the 6,169 currently installed connections plus 1,900 additional connections, or a total of 8,069 connections.[10]

CCWD's future water demand projections for its system modeling are based on 6,150 current connections as of November 6, 2001 plus 1,416 connections sold but not installed, a total of 7,566 meters.[11] These demand projections, derived as the number of equivalent meters multiplied by average water sales per meter for the period from July 1, 1999 to June 30, 2000, are discussed in detail below.

"Unmetered water," the difference between water produced and water sold, which includes water lost to leakage and water used for fire suppression, has historically varied widely.[12] CCWD assumed a figure for unaccounted-for water of 7 percent of production in calculating future system demand.[13]

4.1.2 El Granada Pipeline Replacement

The proposed development, located within the City of Half Moon Bay and the San Mateo County, involves replacement of two sections of the existing, 10-inch El Granada water

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[8] Future Scenarios, Table 4, at 7.

[9] From 2,163 connections in 1970, by June 30, 2000 CCWD had 5,527 connections installed. As of November 6, 2001, CCWD served 6,150 installed connections, and had sold, but not yet installed, 1,416 connections. Future Scenarios, at 5.

[10] Future Scenarios, at 5. (CCWD's earlier Urban Water Management Plan, 2000-2005, gives total projected connections in 2020 of 7,314, with a corresponding annual demand of 1,052 mg, or about 394 gallons per connection per day).

[11] Future Scenarios, at 5. This report defines an equivalent meter as "a 5/8-inch meter or the number of 5/8-inch meters that would have the same rated maximum capacity as that of a larger meter. For example, a 5/8-inch meter has a rated maximum capacity of 20 gallons per minute (gpm) and a 1-inch meter has a rated maximum capacity of 50 gpm. A 1-inch meter is considered to be 2.5 equivalent meters (50/20 = 2.5)."

[12] CCWD Year 2001 Water Supply Evaluation, App. D., Table 4.

[13] Future Scenarios, at B-3.

transmission pipeline with new, 16-inch pipe. Two thousand, two hundred lineal feet of the pipeline would be constructed on the east side of the Frontage Road from the south side of Sewer Plant Road to approximately 200 feet north of Wave Avenue in Half Moon Bay. The remaining 3,200 lineal feet of the proposed project would be constructed predominantly in County street right-of-ways between San Clemente Road and Santiago Avenue. The proposed development is the first phase of the planned, eventual replacement of the entire, approximately 3.5-mile long El Granada pipeline, running from the Carter Hill West Pipeline and Nunes Water Treatment Plant in Half Moon Bay to Storage Tank No. 1 near the Denniston Water Treatment Plant in El Granada. These two projects would be the first phase of the planned replacement of the entire 3.5-mile long 10-inch diameter water transmission pipeline that connects CCWD's Nunes and Denniston Treatment Plants.

A future, segment of pipeline would connect to the south end of the section of pipe proposed to be replaced under CDP A-1-HMB-99-20 in the City and run south to terminate approximately 900 feet northeast of the Highway 1 and Highway 92 intersection, near the north end of Main Street at Lewis Foster Drive. The remaining approximately 2½ miles of piping would connect as part of a future project to the north end of the currently proposed replacement section within the City and extend north to terminate at CCWD's existing El Granada Water Storage Tank No. 1 in unincorporated San Mateo County, approximately 1.3 miles north of the city limits.

The existing, 10-inch transmission pipeline, with a total length of 18,600 feet, runs from the western terminus of the Carter Hill West Pipeline in Half Moon Bay to near the Denniston treatment plant in El Granada and supplies water for residential, commercial, agricultural, industrial and fire safety use within the majority of the CCWD service area. Originally built in 1947, the existing pipeline is now over 50 years old and has exceeded its useful service life. As part of the project, the old pipeline would be abandoned (taken out of service, sealed, and left in place). The replacement pipeline segments that are the subject of these appeals would be installed in a 3-foot-deep trench next to the old pipeline. The project also includes the transfer of existing distribution pipeline connections to the new pipe along with installation of new fire hydrants, valves and other supporting facilities.

4.2 Matching Public Works Capacity to Anticipated Demand for Services

The Half Moon Bay (Half Moon Bay) and San Mateo County (San Mateo County) Local Coastal Program Land Use Plans both contain policies that limit the development and expansion of public works facilities to the capacity required to serve the demand generated by the level of development allowable under buildout of the LCPs. They also require the phasing of infrastructure improvements so that various public works capacities are synchronized and not growth inducing in a manner that conflict with each other. These policies form the standard of review under the City and County LCPs for determining the size of the proposed El Granada Pipeline relative to future demand for water service.

4.2.1.1 Half Moon Bay LUP Policies

Policy 10-3

> The City shall limit development or expansion of public works facilities to a capacity which does not exceed that needed to serve build-out of the Land Use Plan, and require the phased development of public works facilities in

accordance with phased development policies in Section 9 and the probable capacity of other public works facilities.

Policy 10-6

The City shall limit the size of each permitted public works facility to that size and capacity required for the extent and amount of development existing and proposed within the first two phases of development as shown on Table 9.3.

Policy 10-9

The City will support an increase in the water supply to capacity which will provide for, but not exceed, the amount needed to support build-out of the Land Use Plan of the City and County within the Coastside County Water District.

Policy 10-10

The City will support the phased development of water supply facilities (chiefly pumping stations and water treatment facilities) so as to minimize the financial burden on existing residents and avoid growth-inducing impacts, so long as adequate capacity is provided to meet the City needs in accordance with the phased development policies (including expected development to the year 2000) and allocations for floriculture.

4.2.1.2 San Mateo County LUP Policies

2.6 Capacity Limits

Limit development or expansion of public works facilities to a capacity which does not exceed that needed to serve buildout of the Local Coastal Program.

2.7 Phased Development of Public Works Facilities

Require the phased development of public works facilities in order to insure that permitted public works capacities are limited to serving needs generated by development which is consistent with the Local Coastal Program policies.

2.9 Phase I Capacity Limits

Base the first phase capacity of public works facilities on documentable and short-term need (approximately 20 years or less) consistent with the Local Coastal Program. Monitor the needs of existing land uses and use these results and the existing and probable future capacity of related public works and services to document the need.

2.11 Monitoring of Phase I

a. Require that public agencies, utilities or special districts monitor the needs of land uses for public works capacity during Phase I.

b. Notify affected public agencies, utilities and special districts of the requirements for monitoring included in this plan.

2.12 Timing and Capacity of Later Phases

a. Use the results of Phase I monitoring to determine the timing and capacity of later phase(s).

b. Guide timing by allowing later phase(s) to begin when Phase I capacity has been or will be consumed within the time period required to construct additional capacity.

c. Establish the capacity by: (1) estimating the capacity needed to serve the land use plan at buildout, (2) considering the availability of related public

works to establish whether capacity increases would overburden the existing and probable future capacity of other public works and (3) considering the availability of funds.

d. Require every phase to go through the development review process.

2.13 Coordination with the City of Half Moon Bay

Coordinate with the City of Half Moon Bay's certified Local Coastal Program to take into consideration the policies of the City's LCP when determining: (1) Phase I sewer capacity and (2) when and how much to increase the capacity of all public works facilities after Phase I.

2.25 Phase I Capacity Limits

Require that Phase I capacity not exceed the water supply which: (1) serves the development which can be sewered by the Phase I 2.0 mgd adwf sewer capacity allocated for Mid-Coast areas within the urban boundary and (2) meets the documented needs of floriculturalists within the existing Coastside County Water District Service Area. Use recent data on the amount of water consumed by land use to determine the actual water supply capacity allowed.

2.26 Monitoring of Phase I

Require that the water service providers, presently Coastside County Water District (CCWD) and the Citizens Utilities Company (CUC), monitor: (1) the actual amount of water consumption by land use, and (2) the rate of growth of new development. Require them to submit an annual data report to the County summarizing the results of this monitoring.

2.27 Timing and Capacity of Later Phases

a. Use the results of Phase I monitoring to determine the timing and capacity of later phase(s).

b. Guide timing by allowing later phase(s) to begin when Phase I capacity has been consumed or will be consumed within the time required to construct additional water supply capacity.

c. Establish the capacity by: (1) estimating the water supply capacity needed to serve the land use plan at buildout, (2) considering the availability of related public works and whether expansion of the water supply would overburden the existing and probable future capacity of other public works and (3) considering the availability of funds.

2.28 Phase I Capacity Allocations

Require, as a condition of permit approval, that the Phase I capacity to a particular area does not exceed the proportion of buildout that Phase I sewage treatment allocations permit.

2.29 Reservation of Capacity for Priority Land Uses

a. Reserve water supplies for each land use given priority by the Coastal Act or the Local Coastal Program. These priority uses are shown on Table 2.17. Amend this table to reflect all changes in the Land Use Plan which affect these land uses.

b. For each phase of water supply development, reserve capacity adequate to allow each priority land use to develop to the percent of buildout allowed by the phase.

c. Allow capacity to be reallocated to non-priority land uses in accordance with Policy 2.8.

2.35 Pipeline Project Proposal

a. Require, if a pipeline to Crystal Springs or San Andreas Lake is proposed to increase water supplies, assurance from CCWD and the San Francisco Water Department of the long-range availability of the water supply.

b. Require the phased development of pump stations and treatment facilities in accordance with Policy 2.25.

c. Require that the pipeline size not exceed the closest nominal size to what is required to carry peak daily demand at buildout.

d. Require that storage facilities be located consistent with LCP policies, particularly the Agricultural, Sensitive Habitats and Hazards Components.

4.2.2 Planning Horizon

The term *buildout* can be interpreted to mean the maximum level of development allowable under the applicable land use plans and zoning. Under this interpretation, public works facilities would be designed to serve existing development plus the maximum level of additional development that could occur under current land use policies and zoning with no consideration to the time horizon required to reach this theoretical buildout level. This is the interpretation proposed by CCWD in its review of the proposed pipeline replacement project for conformity with the Half Moon Bay and San Mateo County LCPs.

Because the accuracy of growth projections decreases further into the future and because such factors as new technologies, and regulatory and social changes may significantly alter future per capita demand for public services, demand projections over too great a time horizon are likely to be inaccurate. Development of public works capacity in excess of that required to serve the actual demand generated by development may contribute to future pressure for plan changes to accommodate increased development and/or to accelerate the rate of growth.

The explanatory text of the Half Moon Bay LCP prefacing the Development policies summarizes this fundamental point:

> *The projections are viewed, therefore, as a target rather than a commitment. In addition, Section 9.4 of this Land Use Plan limits new residential development in the City to a maximum annual population growth of 3%. Based upon the 1990 U.S. Census, this maximum 3% annual population growth equates to approximately 103 dwelling units per year in the initial year.*
>
> *The Land Use Plan seeks to provide for such projected development, to the extent consistent with specific Coastal Act resource protection policies, City objectives, and the timely availability of services to support such development. The actual ability of the City to accommodate new development during the second 10 years of the forecast period may be limited by the availability of increased water supplies to the mid-coastside, expansion of the sewer system and improvements to transportation systems serving Half Moon Bay.*

In recognition of the potential growth-inducing effects of public works development, both the

Half Moon Bay and San Mateo County LCPs require phased development of new and expanded public works facilities. For example, San Mateo County LUP Policy 2.7 states: "Require the phased development of public works facilities in order to insure that permitted public works capacities are limited to serving the needs generated by development which is consistent with the Local Coastal Program policies." Half Moon Bay LUP Policy 10-10 states: "The City will support the phased development of water supply facilities (chiefly pumping stations and water treatment facilities) so as to minimize the financial burden on existing residents and avoid growth-inducing impacts, so long as adequate capacity is provided to meet the City needs in accordance with the phased development policies (including expected development to the year 2000) and allocations for floriculture." However, while both LCPs require the phased development of infrastructure, neither plan specifically defines the planning horizon to be used for this purpose.

Half Moon Bay LUP Policy 10-6 limits public works expansion projects to "the first two phases of development as shown on Table 9.3," and Table 9.3 shows population growth in the City for the period of 1990 through 2020. LCP buildout is also addressed in Tables 1.1 and 1.2 of the Half Moon Bay LUP, both of which project anticipated levels of development within the city. Table 1.1, Maximum Housing and Population Half Moon Bay Land Use Plan, projects population growth and residential development in the City through 2020 based on a maximum annual population growth rate of 3%. Table 1.2, Half Moon Bay Maximum Projected Housing and Population Mid-Coastside Urban Areas, projects growth in both the incorporated and unincorporated areas of the Mid-Coast over a 20-year period from 1980 through 2000. None of the policies or tables in the Half Moon Bay LUP related to growth and buildout address development beyond 2020. San Mateo County LUP Policy 2.9 states: "Base the first phase capacity of public works facilities on documentable and short-term need (approximately 20 years or less) consistent with the Local Coastal Program."

In reviewing the proposed development, the Commission must apply both the planning horizon of approximately 20 years or less from San Mateo County LUP Policy 2.9 along with the buildout and phasing projections through 2020 contained in the Half Moon Bay LCP. Consistent with these policies, the Commission finds that under both the San Mateo County and Half Moon Bay LCPs for purposes of reviewing the proposed development, the term *buildout* as used in the above-cited policies must be interpreted to mean the next phase of buildout reasonably likely to occur under the LCPs by the year 2020 within the area served by the proposed pipeline. Therefore, in accordance with the above-cited policies requiring the phased development of public works facilities, the capacity of the proposed water transmission pipeline must not exceed the demand for water necessary to serve the anticipated level of development in 2020.

But the phasing requirements of the LCP polices of Half Moon Bay and San Mateo County are also clear that increases in critical infrastructure capacities should be synchronized through "Phase 1", before embarking on new infrastructure projects for a theoretical "Phase 2". This is clear in San Mateo County LCP Policies 2.9, 2.11 and particularly 2.12, which requires that the results of monitoring Phase 1 development trends be used to determine the timing and capacity of later phases. So, for example, the Crystal Springs Water Supply project was intended to provide water connections for the anticipated growth of Phase 1, defined as the amount of water to serve the Phase 1 2.0 mgd sewer capacity for the Mid-Coast areas (Policy 2.25). However, before building infrastructure that might provide capacity beyond this Phase 1 number, the LCP

requires that the County "consider[] the availability of related public works to establish whether capacity increases would overburden the existing and probable future capacity of other public works..." (2.12c). Thus, precisely because of the inherent uncertainty of buildout projections, the LCP established a monitoring system and requirement for phased, synchronized infrastructure development to guard against excessive growth inducing projects. More important, this LCP growth management system provides a mechanism to assure that specific parts of the County and City infrastructure system do not out grow or provide capacity beyond other parts of the system. This is out of recognition that excess capacity in a system component (such as water supply) might further aggravate a system that is potentially at its limits (for example, highway capacity).

The Half Moon Bay LCP also recognizes this methodology in the explanatory text prefacing its public services chapter. While it is clear that the LCP allows for infrastructure projects that meet a reasonably foreseeable buildout scenario, particularly for major supply projects such as the Crystal Springs project, it is also clear that the LCP policies are intended to guard against growth inducing capacities, particularly for other types of infrastructure projects such as distribution pipelines. And again, the importance of "recalibrating" the public infrastructure system during Phase 1 is critical. The LCP states:

> *While it is not desirable to construct more public works capacity than required, it is also not cost-effective to underestimate potential demand by such an amount that subsequent costly expansions will be needed within a short time-period. Construction of excessive capacity poses problems of excessive financial burden and pressure for growth in excess of that proposed to be accommodated. On the other hand, provision of inadequate capacity to accommodate expected needs within a reasonable time horizon related to the useful life of the facilities can result in overburdened facilities and "stop" and "start" development practices resulting from unexpected service moratoria which are detrimental to orderly growth. Of even greater importance is coordinated phasing of public works capacity increases so that expansion of one service does not result in growth which cannot be accommodated by another. This is also essential in order to provide for reasonable, orderly growth in increments which the City and special service districts can monitor and handle without a burden on other services, such as fire and police services. The necessary response to this problem is coordination of facility expansions and management of new development on an incremental basis.*
>
> *The Plan proposes to phase both public works capacity increases and new development in order to maintain balance between them. The phasing of development over time is incorporated in the policies of Section 9, Development. The policies in this section are intended to support and reinforce this phased development plan. However, it is neither desirable nor feasible to phase or limit all early capacity expansions in line with a specific target period of growth, such as 10 years or 20 years. The appropriate amount of capacity to be provided depends on the relative costs and financial impacts associated with construction of varying levels of capacity in relation to future potential demand. In the case of*

> *water supply improvements, major projects required to increase overall available supply cannot be undertaken in small increments, either technically or cost-effectively. However, some types of water delivery facilities can and may appropriately be phased in order to minimize additional cost and possible growth-inducing pressures. Road improvements are susceptible to a more refined phasing approach, within limits. There are a variety of potential improvements, and moderate increases in capacity can be achieved prior to commitments to significant changes in highway facilities, pending greater certainty about needs and possibly increased transit patronage. Generally, sewage treatment plant capacities can be expanded in increments, although detailed cost analysis is necessary to determine the relative benefits of commitments to specific capacities. [Emphasis added.]*

In any event, to understand whether the proposed CCWD pipeline is appropriately sized, it is important to understand both the relationship of the project to anticipated growth over the next twenty years, and its relation to other parts of the public infrastructure system.

First, determining whether the proposed 16-inch pipeline is appropriately sized to accommodate growth over a 20-year planning horizon (starting in 2000 and ending in 2020) involves a comparison of the projected water demand in 2020 on the one hand, with pipeline transmission capacity on the other. An analysis of projected water demand and pipeline transmission capacity is presented in the following sections.

4.2.3 2020 Projected Growth

Both the San Mateo County and City of Half Moon Bay certified LCPs provide a starting point for understanding the question of projected water demand in the CCWD service area in 2020. Tables 1.1 and 9.3 of the City's LCP show that at the time of certification (1985) the projected buildout population and number of housing units was estimated to be 20,857 to 21,065 and 7,991 to 8,071 respectively in the City by 2020.[14][15] These housing unit numbers and corresponding population were based on the estimated theoretical maximum buildout allowed under the LCP at the time of certification (2,726 units existing in 1985 plus a maximum of 5,265 to 5,345 potential new units). The phasing or rate of increase in population was based on a projected 3% annual growth rate under Measure A (**Exhibit 5**, Appendix B). Table 9.1 further breaks down the number of potential new units by geographic area in the City.

Similarly, the San Mateo County LCP projects buildout for different areas of the coastal zone, including for the portion of the CCWD water service area in the County. The CCWD Engineering Master Plan looks directly to the County's water usage projections contained in San Mateo County LUP Table 2.10 to estimate water usage at LUP buildout. These water usage projections are based on the County's growth projections at buildout in the area served by CCWD, and are broken down by land use type. Residential growth within the County's Mid-Coast is regulated by San Mateo County LUP Policy 1.22a, which sets annual growth limits for

[14] The LUP's population projections are based on an assumed average household size of 2.61 persons per household taken from 1990 ABAG and San Mateo County household size estimates corresponding to the 1990 Census tally. Household size assumptions are discussed separately below.

the Mid-Coast of 125 new units per year "unless the County Board of Supervisors makes the finding that water, schools and other public works have sufficient capacity to accommodate additional growth."

Although each LCP contains estimates of theoretical buildout, both City and County are engaged in an LCP update process, which may significantly reduce these buildout targets. This is important to consider in evaluating the CCWD project. In particular, the City has expressed concern that obsolete buildout numbers were used to size and justify the pipe expansion. The City also points to an inconsistency in the LCP between the stated buildout levels and the rate of growth permissible under the its new local growth control law Measure D. The City asserts that under the rate of growth permissible under Measure D, it would take 60 years to reach buildout, well in excess of the LCP's recommended 20-year planning horizon.

The Commission agrees that the growth projections contained in the LCPs are out of date and do not reflect plan changes, including new growth control measures, that are likely to be implemented in the near future. Nor do they include updates to reflect developments that may have occurred at lower densities then originally projected, or that may not ever occur due to changed circumstances. Thus, the Commission finds that in order to rationally evaluate the proposed CCWD pipeline replacement, it is necessary to review the buildout projections contained in the LCPs in light of current information regarding actual past and likely future growth rates and the pending plan updates.

One method for calculating projected water demand involves determining the anticipated level of development in 2020 and the corresponding water usage for the various types of development. The El Granada pipeline serves both residential uses (single-family and multidwelling units) and nonresidential uses (marine related, floriculture, beaches and parks, recreation, restaurants, commercial, hotel and motels, schools, and irrigation). Growth rates and water usage differ between these two general use categories. Accordingly, projected growth of water demand ideally should be calculated separately for residential and nonresidential uses. In addition, water usage can be calculated as a daily average and a peak daily average. Thus, total projected average and peak water demand in 2020 will equal the sum of future residential and nonresidential average and peak water demands. More specifically, the Commission's analysis involves the following seven steps:

1. Project residential growth in the City and County portions served by the El Granada pipeline to find total population within the service area in 2020;
2. Estimate average daily water usage per capita;
3. Multiply the total projected population by the average daily water usage per capita to find total daily average water demand for residential uses in 2020;
4. Estimate and project daily average water use for nonresidential uses;
5. Add projected daily average water demand for residential uses and projected average daily water demand for nonresidential uses to find total daily average water demand for pipeline service area;
6. Find peak water demand by multiplying average daily water demand by a range of peak day multipliers; and
7. Correct for unmetered water.

As detailed below, following the above steps, the range of average water demand for the CCWD El Granada service area ranges from 1.83 million gallons of water per day (mgd) to 2.04 mgd, and peak water demand ranges from 2.74 mgd to 3.88 mgd in the year 2020.

4.2.3.1 2020 Population

The first use category for which growth by 2020 needs to be projected is residential (single-family and multi-unit dwellings). As noted above, the El Granada pipeline serves residential populations in both Half Moon Bay and San Mateo County. The City and County LCPs both contain policies that control population growth; however, their approach is somewhat different. The County controls growth under LCP Policy 1.22, which limits the number of building permits in the Mid-Coast per year to 125, while the City controls the rate of growth by restricting the allowed population increase to 3% per year under LCP Policy 9.4. Since the City and County LCPs use different approaches to control the rate of growth, it is necessary to calculate the projected population for the portions of the El Granada pipeline in the City and County separately.

In addition, as a noted in Section 4.2.2, both the County and City will likely make the current LCP growth control measures more restrictive through anticipated plan amendments and updates. Presently, County planners are reevaluating the County's annual growth rate limitations in LUP Policy 1.22, as well as the buildout figures given in the certified LCP as part of an LCP update process. More specifically, County planners have recommended, and the County is presently considering, substantially lowering the annual growth rate from 125 building permits to between 30 to 80 permits per year. The City has already significantly lowered the rate of growth permissible by reducing it from 3% to 1% under the recently approved local growth control initiative Measure D. Although the measure has yet to be certified by the Commission, staff anticipates it will become part of the LCP in some form. Lowering the number of building permits allowed per year within the County's Mid-Coast region under LCP Policy 1.22 and lowering the 3% growth rate allowed in the City to 1% would significantly lower the projected total population and dwelling units for 2020. To understand the question of appropriate utility sizing, it is informative to calculate the projected population in 2020 under various scenarios, including applying the growth control limits from the certified LCP, as well as the more restrictive limits, which will likely be implemented following LCP amendments, and/or comprehensive LCP updates.

4.2.3.2 Half Moon Bay Population projections for 2020

CCWD provides water to the entire City of Half Moon Bay; however, the El Granada pipeline only serves the portion north of Highway 92. Using the US census data, Commission staff calculates that the approximate population in the areas within the city served by the pipeline in 2000 was 5,409. Under the certified LCP Policy 9.4, growth is allowed to occur up to 3% a year. Therefore, using the estimated base 2000 population of 5,409, the total projected population in the service area would equal 10,062 in 2020 under a 3% growth scenario.

This projected population, though, exceeds the theoretical maximum buildout in the certified LCP. As discussed previously, Table 9.1 in the Half Moon Bay LCP lists both existing units and the maximum potential new units that could occur in various sub-areas of the City, including areas within the El Granada service area. Thus, it is possible to calculate the estimated maximum amount of development allowed at buildout by adding the total number of existing

units within the service area to the maximum number of potential units, which totals 2,936 units. Further, an estimated maximum population for the City's El Granada pipeline service area can also be projected by multiplying this maximum potential number of units by a number of persons per household conversion factor. According to the 2000 Census, average household size in Half Moon Bay is 2.75 persons per household in 2000. Using this factor, there would be an approximate population of 8074 in the City portion of the El Granada pipeline service area – considerably less than the straight 3% growth projection of 10,062. In other words, this area of the City would be builtout well before 2020 at 3% annual growth (approximately 2013-14)

Whereas the population estimate of 8074 establishes an upper range for the 2020 population in the City's El Granada pipeline service area, the lower end of a range can be estimated by assuming implementation of the lower 1% growth rate required by the as yet uncertified Measure D passed by the voters.. . Projecting growth at a 1% rate from the base 2000 population of equals 6,666. Thus, as shown in the Table 1 below, the projected population in 2020 within the City portion of El Granada pipeline service area would range from 6,666 (Scenario B) to 8,074 (Scenario A).

Table 1

Growth Scenarios	2020 Population Half Moon Bay Service Area
Growth Scenario A (3% Annual Increase)	8,074
Growth Scenario B (1% Annual Increase)	6,666

4.2.3.3 San Mateo County Mid-Coast 2020

In San Mateo County, the El Granada pipeline serves the communities of El Granada, Miramar, and Princeton-by-the-Sea. According to the most recent census data, the population in these communities in 2000 totaled 5,412. As indicated by the February 2002 Mid-Coast Local Coastal Program up (LCP) Update Project document, the maximum potential for growth at buildout is 1,140 units. Using the same persons per household conversion factor of 2.75, employed in the calculations related to the City, the total number of additional population at buildout would be 3,135. This document shows that a maximum of 930 additional units could be developed in El Granada and 210 units in Miramar.[15] Within the Mid-Coast, the undeveloped lots in El Granada and Miramar represent 52% of potential units. Whether all the units are developed by 2020 depends on how growth control limits are applied and whether the growth limits become more restrictive through the LCP update process. Thus, to determine the potential new units/people over a 20 year planning horizon, it is necessary to consider impacts of LCP growth control limits.

As stated above, San Mateo County LCP Policy 1.22 limits the number of building permits per year; however, the policy does not specify how those permits should be distributed throughout the various communities of the Mid-Coast. Thus, it is possible, although highly unlikely that development could concentrate on an annual basis in El Granada and Miramar. It is more realistic that growth would be spread evenly throughout the various communities of the Mid-Coast, which also include Montara and Moss Beach. In this case, development may occur at a rate proportional to the total amount of growth potential in the Mid-Coast (i.e. 52% of new growth is allocated to El Granada and Miramar). Considering growth limitations of 125 permits

[15] Princeton-by-the-Sea does not contain land zoned for residential uses; those residential uses that currently exist are nonconforming.

per year under the current LCP and 80 permits per year under an updated LCP, as well as how new development is distributed annually throughout the Mid-Coast, population growth could be calculated in the following four ways:

C. The County allocates the entire 125 permits allowed under LCP Policy 1.22 to the El Granada and Miramar areas;
D. The County allocates 65 permits (52% of the 125 permits allowed per year) to El Granada and Miramar;
E. The County allocates 80 permits per year of allowed under an updated LCP, are allocated to the El Granada and Miramar with the areas; and
F. The County allocates 42 permits, (52% of the 80 permits allowed per year under updated LCP) to the El Granada and Miramar areas.

Table 2 below lists additional units that could be developed in El Granada and Miramar by 2020 under Scenarios C, D, E, and F and the increased population that could result from the development of those units. To calculate the total amount of additional units that could result by 2020, the number of permits allocated per year to El Granada and Miramar under Scenarios C through F were multiplied by 20 (the results are presented in the second column of the table below). Multiplying the additional units allowed under each growth scenario (Column 2 in the table below) by 2.75 persons per household gives the total number of residents that could be added to the County areas served by pipeline under each growth scenario (totals found in third column of Table 2).

4.2.3.3.1 Table 2

Growth Scenarios	2020 Maximum Units	2020 Maximum Population
Growth Scenario C (125 permits per year)	1,140	3,135
Growth Scenario D (65 permits per year-52% of 125)	1,140	3,135
Growth Scenario E (80 permits per year)	1,140	3,135
Growth Scenario F (42 permits per year -52% of 80)	840	2,310

Under Growth Scenarios C, D, and E, all of the remaining units in El Granada and Miramar could be developed by 2020; however, calculating growth using Scenario F, only 840 units of the potential 1,140 could be developed. Therefore, Scenarios C through F present a potential residential population increase of 2,310 to 3,135 as shown in the third column above.

In addition to this potential growth, two parcels exist within the service area that are exempt from LCP Policy 1.22 growth limits and could be developed by 2020: (1) Moss Beach Highlands site, which could result in 128 new units and 352 people (128 multiplied by 2.75 persons per household), and (2) El Granada site, which could result in 104 new units and 286 people (104 multiplied by 2.75 persons per household). Together, if the affordable housing sites are both developed before 2020, they could introduce an additional 232 units/638 people to the pipeline service area.

To calculate the total potential population increase by 2020, it is necessary to add the potential population increases shown in Column 3 of Table 2 to the potential population increase from the development of the affordable housing sites (638 persons), as shown in Table 3 below.

Table 3

	Growth Scenario F	Scenario C, D & E
Projected population increase under growth scenarios	2,310	3,135
Projected population increase from affordable housing	638	638
Total projected population	2,948	3,773

The population growth allowed within the County section of the El Granada pipeline service area under the current and potentially updated LCP Policy 1.22 and the exempt affordable housing sites represent a range of 2,948 to 3,773 within the County section of the El Granada pipeline service area as shown in the third row of Table 3 above. Adding the figures for new potential growth to the 5,412 population figure from the 2000 census, the Commission concludes that the total projected population in the County section served by the pipeline could range from 8,360 to 9,185 in 2020 as shown in the Table 4 below:

Table 4

	Growth Scenario F	Growth Scenarios C, D & E
2000 population	5,412	5,412
Projected 2020 population increase (from Table 3)	2,948	3,773
Total projected 2020 population	8,360	9,185

4.2.3.4 Total Projected 2020 Population within Project Service Area

Calculating the total projected population within the service area, involves adding the 2020 projected population for the City under Growth Scenarios A and B and the projected population for the County under Growth Scenarios C through F. It should be noted that although four growth scenarios are evaluated for the County, the maximum potential development of 1,440 units will be reached before 2020 under each of the Growth Scenarios C, D, and E. Therefore only two possible population figures 8,360 (Scenario F) and 9,185 (Scenarios C, D, & E) are projected.

Table 5 below presents a range of projected populations in the service area in 2020. The first column lists the projected population totals under Growth Scenarios A and B and the second column lists the two projected populations within the County. The third column gives the ranges of total projected population, which results from adding Column 1 to Column 2. The extreme ends of the range are in bold.

Table 5

Half Moon Bay 2020 Population	San Mateo County 2020 Population	Total 2020 Service Area Population
6666 (Growth Scenario B)	8,360 (Growth Scenario F)	**15,026** (B + F)
8074 (Growth Scenario A)	8,360 (Growth Scenario F)	16,434 (A + F)
6666 (Growth Scenario B)	9,186 (Growth Scenarios C, D, and E)	15,851 (A + C, D, E)
8074 (Growth Scenario A)	9,186 (Growth Scenarios C, D, and E)	**17,259** (A + C, D, E)

4.2.4 2020 Water Demand

The next step in assessing 2020 water demand in the project service area involves projecting both residential and non-residential water use based on the foregoing population growth forecasts.

4.2.4.1 Residential Use

CCWD has provided data summarizing actual, average daily residential usage on an annual basis for the period from 1975 to 2002. According to CCWD's published information, the average daily usage figure per single-family residence for the last 27 years, 1975 through 2002, was 247 gallons per residence per day. Given the household size of 2.75 persons per household, the daily per capita usage figure for this period is 89.8 gallons.

In order to find the total projected daily water demand for residential uses in 2020 within the pipeline service area, it is necessary to multiply the range of projected population for 2020 found in Table 5 by the daily water usage per capita (89.8 gallons per day). In Table 6 below, Column 1 list the projected population in 2020 under the various growth scenarios and Column 2 list the daily per capita water usage multiplier of 89.8 gallons. The last column presents the results of multiplying the projected population figures (Column 1) by the daily per capita water usage amount of 89.8 (Column 2).

Table 6

Total 2020 project pop. in service area under various growth scenarios	Daily per capita water usage	Average water demand for residential uses in 2020
15,036 (B)(F)	89.8 gpd	**1.35 mgd**
16,434 (A)(F)	89.8 gpd	1.48 mgd
15,851 (B)(C,D,E)	89.8 gpd	1.42 mgd
17,259 (A)(C,D,E)	89.8 gpd	**1.55 mgd**

As shown in Table 6 above, projected year 2020 average daily residential water use in the pipeline service area ranges from 1.35 millions of gallons per day to 1.55 millions of gallons per day depending on the different growth assumptions discussed above (the extreme ends of the range are in bold).

4.2.4.2 Nonresidential Use

CCWD serves a variety of nonresidential uses including floriculture, beaches and parks, recreation, marine related, restaurants, commercial, hotels and motels, schools, and irrigation. CCWD provided actual nonresidential water usage from the pipeline service area for the months of June, July, August, and September from the year 2002. Total water usage for these four months totaled 43.83 the millions of gallons, which is approximately an average 359,262 gallons per day.

4.2.4.3 Total Projected Water Demand in 2020

Taking the sum of the range of projected average water demand in 2020 for (1) residential uses and (2) nonresidential uses, produces a total average projected water demand for the pipeline service area. Table 7 below presents the range of total projected water demand in 2020. Column 1 lists the range of projected water demand for residential uses found in Table 6. In parentheses, adjacent to each of the projected water demands are the letters that correspond to the various growth scenarios used to derive each total. Column 2 contains the projected water demand for

nonresidential uses. The last column provides the projected average water demand in 2020 for all uses within the service area. These totals are the sum of projected residential and non-residential demand, which produces a range from 1.71 millions of gallons per day to 1.91 millions of gallons per day.

Table 7

Projected average water demand for residential uses in 2020	Projected average water demand for nonresidential uses in 2020	Total projected average water demand in pipeline service area in 2020
1.35 mgd (B)(F)	0.36 mgd	**1.71 mgd**
1.42 mgd (B)(C,D,E)	0.36 mgd	1.78 mgd
1.48 mgd (A)(F)	0.36 mgd	1.84 mgd
1.55 mgd (A)(C,D,E)	0.36 mgd	**1.91 mgd**

4.2.4.4 Peak Demand

Peak daily demand is the term used to describe the system water requirements during hot weather days when water usage is the highest for the year. More precisely, peak demand is the maximum water volume drawn from the system over a 24-hour period. CCWD uses three separate peak day multipliers in calculating peak day demand. The 1997 Engineering Master Plan Report uses a multiplier of 150% to determine current peak day demand, and a multiplier of 180% to determine future peak day demand. The February 2002 Future Scenarios Report uses a maximum day to average day ratio of 190%, based on historical usage figures. For the 20 years from 1980 to 2000 for which maximum and average day ratios are available, CCWD states that maximum day ratios ranged from 147% to 199% of average day demand and that 17% of the maximum day demand values exceeded 190% of average day demand. CCWD's methodology in determining appropriate maximum day ratio given the wide, historical range in maximum day ratios is unclear. Sizing the pipeline to meet a maximum day demand that is 190%, or almost two times that of average day demand means that the pipeline will be able to meet demand on 83% of maximum demand days, assuming a similar, future distribution of maximum day ratios to that experienced between 1980 and 2000, and that the shortfall at most will be less than 5% of demand on the remaining 17% of maximum demand days (9/1990). A peak day multiplier of 180% to 190% of average day demand therefore ensures that all water demands will be met on all but a small percentage of days, and that on those days the shortfall will be minimal. The historical, maximum day ratios would appear to justify peak day multipliers of 180% to 190% of average day demand. Given the historical peak day demand, it is appropriate to use a peak daily multiplier of 180% to 190%; however, to provide a full range of peak day multipliers, it is also appropriate to also use a multiplier of 150% as shown in Table 8 below. In the table, the first column lists the range of water demand projected in the pipeline service area for 2020 from greatest to least under the various growth scenarios. Column 2 represents the peak day multiplier and Column 3 is the total peaked demand, which results from multiplying the first and second columns.

Table 8

Total projected average water demand in pipeline service area in 2020	Peak day multiplier	Total peak demand
1.84 mgd (A)(F)	1.5	2.75 mgd
1.71 mgd (B)(F)	1.5	**2.56 mgd**

1.91 mgd (A)(C,D,E)	1.5	2.86 mgd
1.70 mgd (B)(C,D,E)	1.5	2.67 mgd
1.84 mgd (A)(F)	1.8	3.30 mgd
1.71 mgd (B)(F)	1.8	3.08 mgd
1.91 mgd (A)(C,D,E)	1.8	3.44 mgd
1.70 mgd (B)(C,D,E)	1.8	2.67 mgd
1.84 mgd (A)(F)	1.9	3.49 mgd
1.71 mgd (B)(F)	1.9	3.25 mgd
1.91 mgd (A)(C,D,E)	1.9	**3.63 mgd**
1.70 mgd (B)(C,D,E)	1.9	3.39 mgd

Table 8 above shows a range of 2.56 millions of gallons per day to 3.63 millions of gallons per day when using peak day multipliers of 150%, 180%, and 190% (high and low end of range are bold). Table 9 below gives the range of projected average and peak daily demands in 2020 in millions of gallons per day taken from the sections above.

Table 9

	Low end of range	High end of range
Average Daily Demand	1.71 mgd	1.91 mgd
Peak Daily Demand	2.56 mgd	3.63 mgd

4.2.4.5 Unmetered Water

The 1997 Engineering Master Plan does not explicitly account for water lost to leakage or other unaccounted-for water. In the Future Scenarios report, CCWD assumes a figure for unaccounted-for water of 7 % of production in calculating future system demand.[16] "Unmetered water," the difference between water produced and water sold, which includes water lost to leakage, water used for firefighting and training, and water used for pipeline flushing, has historically varied widely, but has been declining since 1975, both in absolute terms and as a percentage of total water sales.[17] Since 1990, unmetered water was less than 10 percent of sales. A replacement pipeline would presumably reduce water lost to leakage significantly. To account for unmetered water, projected future demand in the 1997 Engineering Master Plan should probably be increased by the 7 % figure used by the Future Scenarios report to describe water loss system-wide.

[16] Future Scenarios, at B-3.
[17] Year 2001 Water Supply Evaluation, App. D., Table 4.

Table 10

	Low end of range	High end of range
Average Daily Demand	1.71 mgd	1.91 mgd
7% of Average Daily Demand	.12 mgd	.13 mgd
Total	1.83 mgd	2.04 mgd
Peak Daily Demands	2.56 mgd	3.63 mgd
7% of Peak Daily Demand	.18 mgd	.25 mgd
Total	2.74 mgd	3.88 mgd

Table 10 above calculates the total water demand increased by 7% to account for unmetered water. Table 10 shows a range of between 1.83 and 2.04 millions of gallons per day of average water demand in 2020 and a peak water demand of 2.74 to 3.88 millions of gallons per day. These totals account for projected future water demand in 2020 including residential, nonresidential uses and unmetered water.

4.2.5 Pipeline Capacity

CCWD has not presented a clear statement of the capacity of the proposed 16-inch pipeline in terms of a maximum volume of water that the proposed pipeline would be capable of delivering. Instead, to ascertain "the optimal size and capacity for the El Granada Pipeline replacement," CCWD applied its water demand projections at buildout of 2.03-2.58 mgd average and 3.67-4.66 mgd peak to the District Engineer's "four primary engineering criteria":

1. Service Area and Service Capability. The replacement pipeline, when complete, should have sufficient capacity to serve the entire northern service area under the "Denniston Project Not Operable" mode. The minimum requirement should be to meet average (not peak) day needs at a development level not greater than LCP buildout.
2. Operational Energy. It is acceptable to use the booster pump station to meet future estimated peak day demands. Pumping should not be required to meet average day demands, so as to reduce energy costs and have adequate gravity flows to maintain adequate service if the pump station is inoperable.
3. Minimum pressure requirements for maximum day and peak hour demand: 35 psi; minimum pressure for fire flow with concident demand: 20 psi. Fire flow for single family residential 1,000 gpm. (Future Scenarios, p. 9)
4. Transmission Pipeline Redundancy. Sound engineering practice favors the construction of parallel pipelines. The El Granada replacement pipeline should not be so large that a future parallel pipeline would increase capacity beyond what is allowed by the LCPs.
5. Construction Cost. Project costs can be substantially reduced if the pipeline is sized below peak day demands. If future demands occur which exceed the capacity of the replacement pipeline, they could be met with parallel pipelines in future developments or by increased booster pump capacity.

After listing these criteria, the CCWD "Narrative" concludes that 16 inches is the optimal pipe size under these criteria for the El Granada Transmission Pipeline. The "Casa del Mar Pipeline Replacement Project, Narrative in Support of a Coastal Development Application, CCWD July 24, 1998" states:

> *When completed, the 16-inch El Granada Transmission Pipeline replacement will have the ability to meet future average day requirements (2.03-2.58 mgd) at buildout of the City and County LCPs. It will supply 55% of the peak day demands (3.67-4.66 mgd) at buildout, well below the allowable LCP maximums*

This statement is reiterated in the Master Plan. Following is a discussion of the first four of these engineering criteria (construction cost, while an important consideration for the applicant, is not a significant factor in reviewing the project for LCP consistency), plus a sixth criterion not addressed in CCWD's analysis.

4.2.5.1 Denniston Non-Operable Assumption

CCWD employs as an engineering criterion that the replacement pipeline, when complete, should have sufficient capacity to serve the entire northern service area under the "Denniston Project Not Operable" mode. The Denniston Project refers to water supplied by CCWD facilities in the northern part of its service area (wells, treatment facility, storage tank depicted in **Exhibit 4**), in El Granada. The El Granada Pipeline, which is the sole transmission pipeline between Half Moon Bay and El Granada, is operated bi-directionally depending on the source of supply. Denniston source water is transmitted southward and water from the Nunes treatment plant (Crystal Springs) is transmitted northward. During the majority of the year, the water supply available from the Denniston Project is sufficient to meet the requirements of the northern portion of the CCWD service area. Under normal operation, flow in the northern portion of the El Granada Transmission Pipeline is from north to south (conveying Denniston water to the southern El Granada area) and the flow in the southern portion of the pipeline is from south to north (conveying water from the Carter Hill storage tanks in Half Moon Bay to the northern Half Moon Bay area and Miramar).

In designing the replacement pipeline to have sufficient capacity to serve the entire northern service area under the "Denniston Project Not Operable" mode, CCWD has planned a system with enough capacity for San Francisco Water Department source water, delivered from the south end of the system, to provide water service to the entire northern service area. When the Denniston Project is operable, as is the normal situation, the volume of water that could be transmitted northbound through the proposed 16-inch line would be much greater than that needed to serve the area.

CCWD's Engineering Master Plan utilizes the "Denniston Not Operable" scenario in its capacity calculations, taking into account the potential for water quality problems, power loss, treatment plant equipment malfunctions, and water supply disruption. CCWD in particular takes into account that the water sources for the Denniston treatment plant, namely, wells and surface diversion from Denniston Creek and reservoir, have limitations, which make them unreliable.

To evaluate the appropriateness of the Denniston Not Operable assumption, it is necessary to evaluate the assumption against past experience and ask how likely the contingency is that the Denniston plant be out of service. Historically, while there has been a wide variation in water

production from the Denniston plant water sources based on rain conditions, the Denniston plant has never been entirely non-operational, either due to power loss and treatment plant equipment malfunction or to water supply disruption.

Historical data for CCWD production (from CCWD 2001 Water Supply Evaluation) shows that since 1994, the year in which the Crystal Springs pipeline was completed, water from Denniston has accounted for fully 32 percent of total production from all sources. Since 1980, water from Denniston has accounted for 35 percent of production from all sources. Over the past 22 years, annual water production at Denniston has ranged from 143.1 mg (in 1991) to 317.7 mg (in 1980) and a mean of 230.42 mg (a standard deviation of 40 mg). Average production over this period has been 239.16 mg.

CCWD's Calendar Year 2001 Water Supply Evaluation states that CCWD's determination of the "safe yield" annual production of the Denniston treatment plant is 144 mg (101 mg from surface water and 43 mg from the Denniston well field), representing 19 percent of the total annual safe yield of 760 mg from all sources. "Normal yield" from Denniston is 231 mg, or 21 percent of total annual "normal yield" of 1,086 mg.[18] Over the short term, the peak production of the Denniston plant is 700 gpm (compared to peak production of the Nunes plant of 3,800 gpm), or 0.50 mgd, 16 percent of the total peak plant production of 4,500 gpm. Average August production from Denniston is 436 gpm, or 0.31 mgd, 18 percent of the average total day supply rate of 2,370 gpm.

According to CCWD's planning estimates under drought conditions, during the peak summer months when water supplies are lowest, the lowest projected daily supply from the Denniston plant is 258 gpm, or 0.371 mgd, compared with flow under average precipitation conditions of 569 gpm, or 0.819 mgd.[19] Under these drought conditions, Denniston production is still about 11% of total daily production.

Given the actual historical production of the Denniston treatment plant and CCWD's projections for Denniston production even under drought conditions, it is important to understand how the capacity of the proposed pipeline would be impacted if the Denniston Plant is operating. Under the Denniston operating scenario, the pipeline capacity still falls within the range of projected demand in 2020; however, the capacity is more appropriately sized to serve peak day demand in 2020 under the highest growth scenario and using a peak day multiplier of 190%.

4.2.5.2 Gravity Flow System

CCWD employs as a second design criterion the requirement that the pipeline should be able to meet average day demands by gravity flow, without any additional pumping required. A gravity flow system would reduce operating costs and energy use, which would reduce costs for CCWD customers. A gravity flow pipeline is also desirable because it is not dependent on pumping and provides a failsafe system which would continue to provide water during power outages and emergency conditions where pumping was not possible. Gravity flow through the pipeline is controlled by the water level in storage tanks in four locations: Carter Hill tanks, Miramar tank, El Granada Tank No. 1, and Denniston tank. In discussing design criteria, CCWD also considers

[18] 2001 Water Supply Evaluation, at II-5. CCWD's Urban Water Management Plan, 2000-2005, states a total yield in years of normal precipitation of 1,071 mg, and assumes a total normal yield of 219 mg available from Denniston. The Urban Water Management Plan gives the same figures for "safe yield" as the 2001 Water Supply Evaluation.
[19] 2001Water Supply Evaluation, at II-6.

as an alternative to a gravity flow system a 12-inch pipeline that would require pumping to meet future peak day demands.

In finding substantial issue, the Commission found that a gravity flow pipeline could have the capacity, when pumps are utilized, to deliver more water on an "average day" than is needed for buildout and thus that a substantial issue was raised as to whether the proposed public works facility will be limited to a capacity that does not exceed that needed to serve buildout consistent with LUP Policy 10-3. While utilizing pumps could increase the capacity of a pipeline to deliver more water than it otherwise could, additional pumps are not part of the project description, and CCWD would need a separate permit or permit amendment to add such pumps.

4.2.5.3 Fire Protection

CCWD's Future Scenarios report evaluates pipeline replacement alternatives against fire flow pressure requirements. The report concludes that, on this criterion, "there is little difference in the results for the possible new pipelines."[20] The report shows that for the new 12-inch line with the Frenchman's Creek Pump Station alternative, required fire flows as specified by the Half Moon Bay Fire Protection District would be met at all of a list of certain, critical locations, except the Beach House Hotel. At the Beach House hotel, a 12-inch line would provide flows of 2,900 gpm, with required flows of 3,000 gpm, a difference of only 100 gpm. According to the hydraulic model, the percentage of pressure nodes in the system with less than the minimum required pressure of 1,000 gpm does not differ significantly between the 16-inch and 12-inch with pump station alternatives, although either alternative would be an improvement over the existing 10-inch line.

The ability of a new system to meet fire safety needs is an important criterion for evaluation of replacement alternatives. CCWD's Future Scenarios study makes clear that the 16-inch line is not the only replacement alternative that would satisfy this criterion. As the issue is addressed in the Future Scenarios report, a water system's provision for fire safety is a function most importantly of system pressure and available per minute flow throughout the system, less than overall increase in water demand. CCWD figures for unmetered water, discussed above, includes water utilized for firefighting, and no additional adjustment to CCWD's future demand projections is required to account for this component of demand beyond the adjustment for unmetered water. As long as minimum pressure and per minute flow requirements are met, this requirement for this component of water usage is satisfied.

4.2.5.4 Transmission Pipeline Redundancy

CCWD that sound engineering practice favors the construction of parallel pipelines. Thus, the El Granada replacement pipeline should not be so large that a future parallel pipeline would increase capacity beyond what is allowed by the LCPs. Assuming that under the LCPs CCWD's water system should be designed to meet, but not exceed, peak day demand, and the future construction of a second parallel El Granada pipeline, the proposed pipeline should be sized to provide no more than half of the peak day demand at buildout.

4.2.5.5 Montara Sanitary District Possible Additional Future Demand

The Montara Sanitary District (MSD) presently provides sanitary sewer services for Montara and Moss Beach, the area adjacent to and immediately north of CCWD's service area. MSD is

[20] Future Scenarios, at 13.

recently acquired a water system formerly belonging to a privately-owned utility company, Cal-Am (previously Citizen's Utility Company), that delivers water within a portion of MSD's service area. A moratorium on new connections has existed in the MSD service area since 1981. CPUC requires a total production capacity of 550 gpm, or 0.792 mgd, before the moratorium may be lifted. To lift the moratorium would therefore require an additional 148 gpm, or 0.213 mgd, of production capacity. MSD states that the total, current production capacity of its water production sources is 0.579 mgd, or 402 gpm, with reliable capacity of 0.452 mgd, or 314 gpm, and that future demand at LCP buildout within MSD's service area will be between 0.864 and 1.168 mgd. Thus, according to MSD, between 0.285 and 0.589 mgd of additional water will be required to serve projected demand at buildout within its service area. MSD is considering alternatives to increase its supply, including purchasing water from the San Francisco Water Department's Crystal Spring Reservoir and transferring this water through the El Granada pipeline.

MSD contends that provisions of the California Water Code would give it the right, under certain conditions, to use "excess capacity" to transfer water through the El Granada pipeline. However, MSD's proposal to transport San Francisco Water Department water through the El Granada pipeline is contingent on a number of factors, before any water could be transferred through the CCWD system. First, the proposal would require an additional, physical pipeline connection from El Granada to Montara, which presently does not exist. Second, MSD would have to enter into a purchase contract with the San Francisco Water Department or other seller, which also does not presently exist. Third, MSD and CCWD would have to agree on and work out arrangements for the use of CCWD's transmission facilities, including the El Granada pipeline, which would involve a number of issues, including the amount of available capacity for such a purpose.

Accounting for additional demand of between 0.213 and 0.589 mgd in the MSD service area would significantly affect the El Granada pipeline sizing calculations relative to demand at LCP buildout, and serve to justify a larger diameter pipeline. However, in its sizing justifications for the El Granada pipeline, CCWD did not take account of additional, future demand from MSD and MSD has not joined CCWD as a co-applicant on this project. Given the number of contingencies that would have to be met before MSD could wheel water through the El Granada pipeline, the MSD proposal remains speculative and it would be premature for the Commission to take into account possible future MSD water demand in evaluating CCWD's pipeline proposal. Given the technical complexities inherent to the MSD proposal, which are beyond the expertise of Commission staff to address and are better left to the local water districts to resolve, MSD should work together with CCWD on a joint proposal, if CCWD and MSD wish to account for possible, future MSD demand in the sizing of the El Granada transmission pipeline.

4.2.5.6 Conclusion – Pipeline Capacity

In order for the Commission to evaluate whether or not the capacity of the proposed pipeline would exceed the projected demand for water at buildout, it is necessary to determine the capacity of the proposed pipeline. However, while it is clear that a 16-inch pipeline has far more capacity than the current 10-inch pipeline, the information provided by the applicant does not clearly state how the proposed project would affect the actual operating capacity of CCWD's complex water supply and distribution system.

According to the Commission's Staff Engineer, an idealized 16-inch pipeline could accommodate roughly 3.4 times the flow of an idealized 10-inch pipeline. These "idealized pipelines" do not include any water losses, friction losses, head losses due to bends or valves, or any flow increases due to booster pumps. The idealized pipeline from Miramar to El Granada could have a capacity of approximately 6 million gallons per day, at a velocity of almost 5.4 feet per second. The maximum capacity of actual pipeline will be limited by the friction and head losses, as well as limitations imposed by the existing water system. With peak velocities of 5.4 fps, flows at this idealized maximum capacity would greatly exceed the pressures that can be accommodated at the end user locations. In addition, flows are this rate would cause draw down at the Miramar water tank and thus jeopardize the emergency water supplies available for fire suppression. Finally, it is damaging to the infrastructure to operate it routinely at its extreme, maximum capacity.

As discussed above, CCWD has not presented a clear statement of the capacity of the proposed 16-inch pipeline in terms of the maximum volume of water that the proposed pipeline would be capable of delivering. CCWD's District Engineer states:

> *In summary, it is important to understand that the E.G. pipeline does not have a maximum flow capacity which can be calculated because the pipeline does not simply convey water from one storage tank to another. Instead, the E.G. pipeline functions as part of an overall water transmission and distribution system, and the flow through the E.G. pipeline is dependent on the size and flow rate through the pipeline upstream of it as well as the flow through the distribution system pipelines connected to it.*

Since the applicant has been unable to provide a capacity estimate for purposes of LCP analysis, the Commission has derived a theoretical pipeline capacity of 2.56 mgd from data contained in CCWD's Master Plan. The Master Plan states that the 16-inch pipeline would be capable of meeting 55% of a peak daily demand at buildout of 4.66 mgd. Fifty-five percent of the 4.66 mgd maximum daily peak demand at buildout is 2.56 mgd. Thus, the Master Plan appears to provide that the maximum operating capacity of the proposed 16-inch pipeline would be 2.56 mgd.

However, this extrapolation is based on questionable design criteria, in particular, the Denniston non-operable assumption. A larger pipeline would be required to supply the entire service area from the Nunes treatment plant at the south end of the system than would be necessary with supply both at the north and south ends of the pipeline. However, as discussed above, under normal operating conditions, the Denniston treatment plant accounts for a substantial portion of the water transported by the El Granada pipeline, and at least 8% during drought conditions. Thus it would appear that the Denniston non-operational assumption may inappropriately support a larger diameter pipeline than is actually needed.

In addition, the discussion above illustrates how it is difficult to ascertain the maximum capacity of the proposed 16-inch El Granada pipeline. Since CCWD did not identify the maximum capacity of the pipeline, and it appears that the pipeline capacity could be increased when water production is increased and added to the system (e.g. Denniston operating scenario), it is unclear whether the pipeline is actually appropriately sized because it might be able to accommodate additional water, which it could serve to additional demand.

4.2.6 Conclusion – Matching Demand to Capacity

According to the 1997 Master Plan, CCWD sized the propose pipeline to serve a peak demand at buildout of the LCPs of 4.66 mgd. However, as discussed above, the Commission finds that the demand projection used by CCWD is greater than is reasonably justified. Therefore, the Commission has re-evaluated probable future water service demand within the service area of the proposed pipeline, taking into account anticipated LCP updates and a 20-year planning horizon to forecast growth, and CCWD meter records to establish use levels by both residential and non-residential uses.

Through this analysis, the Commission has derived a range of possible demand projections. In addition to the ranges projected by the Commission, the City of Half Moon Bay planning staff has provided a figure of 145 units maximum potential growth for the city areas served by the pipeline (**Exhibit 6**). Thus, in addition to the possible future demand scenarios above, the Commission has carried out the same calculations using the City's projected maximum potential growth within the pipeline service area. Table 11 below summarizes the projected average and peak demand for 2020 based on a range of growth assumptions as well as using the City's growth projection. Scenarios 1 and 2 of Table 11 are based on the City's growth assumption of 145 units by 2020.

Table 11: Projected 2020 Service Area Demand

Scenarios	Average water demand in pipeline service area in 2020	Peak demand at 150% of average	Peak demand at 180% of average	Peak demand at 190% of average
Scenario 1 [(G)(F)]	1.75 mgd	**2.62 mgd**	3.14mgd	3.32 mgd
Scenario 2 [(G)(C,D,E)]	1.83 mgd	2.74 mgd	3.29 mgd	3.47 mgd
Scenario 3 [(B)(F)]	1.83 mgd	2.74 mgd	**3.29 mgd**	3.47 mgd
Scenario 4 [(B)(C,D,E)]	1.91 mgd	2.86 mgd	3.43 mgd	3.62 mgd
Scenario 5 [(A)(F)]	1.96 mgd	2.95 mgd	3.53 mgd	3.73 mgd
Scenario 6 [(A)(C,D,E)]	2.04 mgd	3.06 mgd	3.68 mgd	**3.88 mgd**

These demand projections vary depending on the growth scenario used, with the lowest demand of 2.62 mgd based on the City's reduced growth projection of a total of 145 new units constructed in the pipeline service area by 2020 and using a 150% peak use multiplier (Scenario 1 at 150%). The highest projected demand of 3.88 mgd is based on the maximum allowable growth under the current LCPs and a peak use multiplier of 190% (Scenario 6 at 190%). Of these demand scenarios, the Commission finds that a peak day demand of 3.29 mgd (Scenario 3 at 180%) represents the most reasonable 2020 demand projection for the pipeline service area, assuming that other infrastructure capacity is otherwise available to support this growth. All of these demand projections are substantially lower than the peak day demand at LCP buildout of 4.66 mgd assumed by CCWD. It should be emphasized, that all of these projections are general estimates, with considerable uncertainty associated with them. As discussed below, though, given the LCP requirements of phasing infrastructure development, it is apparent that the "most likely" growth scenario assumed is not as critical to the question of how much capacity the CCWD pipeline should have.

As discussed above, the actual operating capacity of the proposed pipeline is uncertain. However, the applicant states that the pipeline is designed only to meet the service capacity already approved under the Phase I Crystal Springs Project, i.e., a total of 8,078 5/8-inch by ¾-

inch equivalent meter service connections, with 1,329 non-priority and 599 priority uninstalled connections remaining. CCWD contends that such capacity would be consistent with the Half Moon Bay and San Mateo County buildout limitations and that the project is therefore consistent with the LCPs.

Based on the foregoing growth and demand projections, the Commission finds that the 1,329 non-priority and 599 priority uninstalled connections remaining under Phase I of the Crystal Springs Project would not exceed the most likely demand scenarios for water service within the CCWD service district in 2020. However, in light of the above-discussed uncertainties concerning the actual operational capacity of the proposed pipeline, the Commission finds it necessary to condition the permit to limit new service connections to its stated design capacity. Accordingly, Special Condition 4.A. would limit the number of new non-priority service connections to only those uninstalled connections remaining under the previously approved capacity of the Phase I Crystal Springs Project. As discussed below in the discussion of Phasing, this condition is also necessary to meet LCP requirements for synchronized infrastructure improvements through Phase 1.

To ensure that water service capacity is reserved to support priority land uses as required under the LCPs, Special Condition 4.B. prohibits the transfer of any of the 599 remaining uninstalled priority service connections to a non-priority use, except under the limited circumstances within the San Mateo County portion of the service district under the limited circumstances specified pursuant to San Mateo County LUP Policies 2.8.c and 2.8.d. The Commission finds that these limitations help to ensure that the capacity of the proposed pipeline would not exceed the previously approved Phase I water supply capacity.

Special Conditions 4.C. and 4.D. further require that any future increases to CCWD's water supply and/or delivery system are linked to corresponding increases in the capacity of other major infrastructure serving the Mid-Coast Region. In particular, Special Condition 4.D. prohibits future capacity increases to the CCWD water supply and distribution system until such time that the region's transportation system is capable of providing adequate service to support growth beyond that provided by Phase I of the Crystal Springs Project. These conditions are necessary to ensure that the service capacity of the CCWD water system remains in phase with the region's other infrastructure service capacity as required by both the City and County LCPs.

CCWD states that replacement of the El Granada pipeline with a 16-inch diameter pipe as proposed would allow the system to function by gravity flow, obviating the need to for the existing Frenchmen's Creek Pump Station. As such, future use of the pump station with the 16-inch line in place would significantly increase distribution capacity in excess of that proposed by CCWD. In addition, CCWD is proposes to abandon the existing 10-inch pipeline in place rather than remove it. Consequently, it is plausible that, if repaired, the 10-inch pipeline could be put back into service, which would also increase distribution capacity in excess of that proposed by CCWD. Therefore, to ensure that water distribution capacity is not increased Special Condition 5 would require CCWD to decommission and physically remove the pump station and to either permanently seal or remove the 10-inch pipeline upon completion of the project.

In addition, Special Condition 3 requires the applicant to provide an annual monitoring report consistent with the requirements of Half Moon Bay LUP Policy 10-2 and San Mateo County LUP Policy 2.26. The information provided by the required monitoring reports will assist in

revising water service demand projections as part of the update to the City and County LCPs.

The Commission finds that, taken together, Special Conditions 4 and 5 ensure that the capacity of the proposed pipeline would not exceed the demand for water service within the CCWD service district allowable under the phased buildout requirements of the Half Moon Bay and San Mateo County LCPs. Therefore, the Commission finds that the proposed project is consistent with Half Moon Bay LUP Policies 10-3, 10-6, 10-9, and 10-10 and San Mateo County LUP Policies 2.6, 2.7, 2.9, 2.11, 2.12, 2.13, 2.25, 2.26, 2.27, 2.28, 2.29, and 2.35.

More important, though, as previously explained, both the San Mateo County and Half Moon Bay LCPs require the phasing of infrastructure improvements. In particular, at a minimum the LCPs seek to assure that new infrastructure capacity is not provided that could be growth inducing or that could exceed reasonably foreseeable capacities of other parts of the community's infrastructure. In particular, the LCPs require that monitoring occur, and that Phase 1 buildout be examined carefully to assure that Phase 2 capacities are not provided prematurely.

As discussed above, there is a serious capacity problem with the Highway and roads infrastructure in the Half Moon Bay area. This problem exists at current levels of development, and will only be exacerbated by buildout of remaining water connections sold through the Crystals Springs Project. At a minimum, therefore, it is important that new infrastructure capacities not exceed the Phase I limits that are currently provided by the pool of remaining water connections in the CCWD service area. In addition, it is important that the CCWD verify that the actual pipeline project built is the minimum necessary to serve this anticipated buildout of Phase I. Therefore, Special Conditions 3, 4, and 5 are necessary to assure consistency with LCP policies requiring phased buildout and avoidance of growth inducing capacities (Half Moon Bay LUP Policies 10-3, 10-6, 10-9, and 10-10 and San Mateo County LUP Policies 2.6, 2.7, 2.9, 2.11, 2.12, 2.13, 2.25, 2.26, 2.27, 2.28, 2.29, and 2.35).

4.3 Phased Development of Public Works Facilities

The Half Moon Bay and San Mateo County LCPs require public works projects involving an increase in capacity to be coordinated with the phasing of other services, by taking into consideration the availability of related public works. New or expanded public works capacity that would exceed the existing and probable future capacity of other public works facilities is prohibited under these policies. Thus, the capacity of the proposed water supply pipeline may not overburden the "existing and probably future capacity" of other infrastructure elements including highways, sewage treatment, and schools.

4.3.1.1 City of Half Moon Bay LUP Policies

Policy 10-3

> The City shall limit development or expansion of public works facilities to a capacity which does not exceed that needed to serve build-out of the Land Use Plan, and require the phased development of public works facilities in accordance with phased development policies in Section 9 and the probable capacity of other public works facilities.

Policy 10-4

> The City shall reserve public works capacity for land uses given priority by the Plan, in order to assure that all available public works capacity is not consumed

by other development and control the rate of new development permitted in the City to avoid overloading of public works and services.

Policy 10-10

The City will support the phased development of water supply facilities (chiefly pumping stations and water treatment facilities) so as to minimize the financial burden on existing residents and avoid growth-inducing impacts, so long as adequate capacity is provided to meet the City needs in accordance with the phased development policies (including expected development to the year 2000) and allocations for floriculture.

Policy 10-25

The City will support the use of Level of Service C as the desired level of service on Highways 1 and 92, except during the peak two-hour commuting period and ten-day average peak recreational hour when Level of Service E will be acceptable.

4.3.1.2 San Mateo County LUP Policies

2.12 Timing and Capacity of Later Phases

a. Use the results of Phase I monitoring to determine the timing and capacity of later phase(s).

b. Guide timing by allowing later phase(s) to begin when Phase I capacity has been or will be consumed within the time period required to construct additional capacity.

c. Establish the capacity by: (1) estimating the capacity needed to serve the land use plan at buildout, (2) considering the availability of related public works to establish whether capacity increases would overburden the existing and probable future capacity of other public works and (3) considering the availability of funds.

d. Require every phase to go through the development review process.

[Emphasis added.]

2.27 Timing and Capacity of Later Phases

a. Use the results of Phase I monitoring to determine the timing and capacity of later phase(s).

b. Guide timing by allowing later phase(s) to begin when Phase I capacity has been or will be consumed within the time period required to construct additional capacity.

c. Establish the capacity by: (1) estimating the capacity needed to serve the land use plan at buildout, (2) considering the availability of related public works to establish whether capacity increases would overburden the existing and probable future capacity of other public works and (3) considering the availability of funds.

d. Require every phase to go through the development review process.

[Emphasis added.]

4.3.2 Highway Capacity

Road access to the Mid-Coast region of San Mateo County including the City of Half Moon Bay and the portion of the California coast within this region is limited to Highways 1 and 92. The current volume of traffic on these highways exceeds their capacity and the regional transportation studies conclude that even with substantial investment in transit and highway

improvements, congestion will only get worse in the future.[21] As a result, the level of service on the highways at numerous bottleneck sections is currently and will in the future continue to be rated as LOS F.[22] LOS F conditions are currently experienced at certain intersections and at bottleneck sections of both highways during both the weekday PM peak-hour commuter period and during the weekend mid-day peak. Because there are no alternative access routes to and along the coastline in this area of the coast, 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 most recent Countywide Transportation Plan predicts far greater congestion on these two corridors by 2010, stating "in 2010 the most congested corridor [in San Mateo County] will be Western 92."[23] This report projects increases in the traffic volumes of 197 and 218 percent on Highways 1 and 92, respectively, in the Mid-Coast region, and attributes these increases to "the anticipated levels of new development on the Coastside and the continued pattern of Coastsiders out-commuting to jobs in San Francisco and on the Bayside." This latest report serves to corroborate and underscore the findings of all of the previous traffic studies conducted in the region over the past three decades that Highways 1 and 92 in the Mid-Coast Region are not adequate to serve either the current or the expected future demands of development.

As discussed above, the proposed development would provide an increase in the CCWD's water system capacity needed to support substantial future growth in the Mid-Coast region. However, as documented in the Countywide Transportation Plan, the present and probable future capacity of the highway network serving this region is not sufficient to serve this level of growth. As such, the capacity of the proposed pipeline would not be phased in accordance with the probable capacity of the area's transportation infrastructure and would support a level of growth that cannot be reasonably accommodated by the area's highways.

In light of the above findings, the Commission might find that the subject permit applications are inconsistent with Half Moon Bay LUP Policies 10-3, 10-4, 10-and 25, and San Mateo County LUP Policies 2.12 and 2.27. However, this would require the Commission to further determine that development in Half Moon Bay and the San Mateo County Mid-Coast must be limited to the level for which the current and probable future capacity of the area's highways are adequate to serve, i.e., that highway capacity is the limiting factor to growth in the region.

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[21] San Mateo County Countywide Transportation Plan Alternatives Report, City/County Association of Governments, San Mateo County (C/CAG 1997.)
San Mateo County Congestion Management Plan, City/County Association of Governments, San Mateo County (C/CAG 1998.)
San Mateo County Congestion Management Plan, City/County Association of Governments, San Mateo County (C/CAG 2000.)

[22] Traffic analysis is commonly undertaken using the level of service rating method. The level of service rating is a qualitative description of the operational conditions along roadways and within intersections. Level of service is reported using an A through F letter system to describe travel delay and congestion. Level of service (LOS) A indicates free-flowing conditions. LOS E indicates the maximum capacity condition with significant congestion and delays. A LOS F rating indicates traffic that exceeds operational capacity with unacceptable delays and congestion. LUP Policy 10-25 makes Level of Service E the lowest acceptable level of service during commuting hours and the ten-day average peak recreational hour.

[23] (C/CAG 2000)

While limiting development to the level that can be reasonably served by the area's highways is supported by the above-cited LCP policies, this approach is not carried through in the growth management policies contained in either the currently certified LCPs or the more restrictive growth management policies expected to be implemented in the future. Although these LCP growth measures control the rates of growth in the City and County Mid-Coast, the plans nevertheless provide for continued new development to a level far in excess of the existing or reasonably foreseeable future capacity of the highways, including new residential subdivisions, residential development of agricultural lands, and buildout of small substandard lots in both "paper subdivisions" and existing neighborhoods platted between 1900 and 1920. Unless more restrictive land use and zoning policies, including transportation demand management schemes, are implemented to reduce the overall level of development allowable under these plans, growth will continue under the LCPs in excess of highway capacity.

As discussed above, the existing water supply capacity approved under the Crystal Springs Project is already significantly out of phase with the existing and probable future capacity of the Mid-Coast Region's transportation system, in conflict with the Half Moon Bay and San Mateo County LCPs. However, according to the applicant, the proposed project is intended only to deliver water service necessary to meet its obligations under the already approved under Phase I of the Crystal Springs Project and to provide adequate fire suppression capability within its service area, and would not increase capacity beyond that which has already been approved. Therefore, consistent with the applicant's project description, Special Condition 4.A. would prohibit any expansion to CCWD's service capacity under Crystal Springs Phase I.

To ensure that future increases in water system capacity do not further exacerbate existing infrastructure phasing issues, Special Conditions 4.C. and 4.D. would require that any future increases to CCWD's water supply and/or delivery system beyond Phase I of the Crystal Springs Project are linked to corresponding increases in the capacity of other major infrastructure serving the Mid-Coast Region. In particular, Special Condition 4.D. prohibits future capacity increases to the CCWD water supply and distribution system until such time that the region's transportation system is capable of providing adequate service to support growth beyond that provided by Phase I of the Crystal Springs Project. These conditions are necessary to ensure that the service capacity of the CCWD water system remains in phase with the region's other infrastructure service capacity as required by both the City and County LCPs.

4.3.3 Wastewater Treatment Capacity

In 1994 The Sewer Authority Mid-Coastside (SAM) applied to the County to expand their wastewater capacity to 4.0 mgd in order to deliver sewer connections until buildout levels are reached. This expansion, from 2 mgd in Phase I to 4.0 mgd at buildout, was not in phase with other infrastructure, and in fact exceeded estimated buildout demand by approximately 1 mdg. The Final Environmental Impact Report conducted for the SAM expansion noted:

> *If future wastewater generation remains close to historical levels, the 4.0 mgd plant would be able to serve LCP build-out and have capacity remaining (January 16, 1989).*

In granting the coastal development permit for the plant expansion, the Commission found that the existing plant was undersized to accommodate peak flow, and had been in violation of the San Francisco Bay Regional Water Quality Control Board on several occasions for releasing

untreated wastewater. As the Monterey Bay National Marine Sanctuary is the receiving waters for this discharge, the Commission found a larger plant to be most protective of coastal resources, while not exceeding build-out levels. Consequently, wastewater treatment capacity within the CCWD service area is not a limiting factor to future development. Therefore the proposed pipeline replacement will not induce growth in excess of wastewater treatment capacity in conformity with Half Moon Bay LUP Policy 10-3 and San Mateo County LUP Policies 2.12 and 2.17.

4.3.4 Schools

Coastside County Water District service area falls within the Cabrillo Unified School District (CUSD), a district representing seven primary, secondary and continuing education schools that serve Mid-Coast San Mateo County and Half Moon Bay. With a grant from the State in the year 2000, the district was able to modernize several of its facilities, including the high school, upgraded technology and the purchase of four new busses. CUSD experienced a $1.5 budget shortfall in 2002-03 fiscal year. In order to retain low student/teacher ratios and other vital programs, the District chose to eliminate bus service in the fall of 2002.

Increases in school infrastructure capacity is not limited to the same degree as highways, water treatment, etc. It is limited, however, by financial constraints such as the current fiscal deficit. CUSD has several funding options: state grants, local voter-approved bond acts, federal grants, and private funds. A proposed bond act was narrowly rejected by district voters in March 2002. Consequently, CUSD has been approaching private donors and looking for funds to make up the difference.

CUSD determines capacity through a formulation that's designed to calculate the amount of new students who must be accommodated. District Superintendent John Bayless reports that any growth induced by the sale of any new connections could potentially be absorbed by CUSD's schools, although the district is operating at full capacity. CUSD is required to maintain small class sizes in order to keep a federal grant that provides significant for the district. CUSD has budgeted for a new middle school.

Although fiscal constraints will likely affect the rate that new and expanded school facilities are developed, unlike highway capacity, no physical or regulatory barriers exist that would ultimately prevent future expansion of Mid-Coast school facilities to meet the demand generated by growth in the region. As such, the proposed pipeline replacement will not induce growth in excess of the capacity of Mid-Coast schools in conformity with Half Moon Bay LUP Policy 10-3 and San Mateo County LUP Policies 2.12 and 2.17.

4.3.5 Conclusion – Public Works Facility Phasing

The proposed expansion of CCWD water service capacity would be in phase with Mid-Coast region's existing wastewater treatment capacity as well as with the probable future capacity of Mid-Coast school facilities, but is not in phase with either the existing or probable future capacity of the region's highways.

The Commission recognizes that the development levels provided for in the certified LCPs are not entitlements and represent the maximum potential development allowable after application of all relevant policies and standards of the certified local coastal program. The certified development levels do not represent the actual development level allowable after application of

all relevant policies and standards of the certified LCP, including the LCP policies relating to traffic and public access to the coast.

More important, though, as previously explained, both the San Mateo County and Half Moon Bay LCPs require the phasing of infrastructure improvements. In particular, at a minimum the LCPs seek to assure that new infrastructure capacity is not provided that could be growth inducing or that could exceed reasonably foreseeable capacities of other parts of the community's infrastructure. In particular, the LCPs require that monitoring occur, and that Phase 1 buildout be examined carefully to assure that Phase 2 capacities are not provided prematurely.

As discussed above, there is a serious capacity problem with the Highway and roads infrastructure in the Half Moon Bay area. This problem exists at current levels of development, and will only be exacerbated by buildout of remaining water connections sold through the Phase I of the Crystals Springs Project. At a minimum, therefore, it is important that new infrastructure capacities not exceed the Phase I limits that are currently provided by the pool of remaining water connections in the CCWD service area. In addition, it is important that the CCWD future increases in water system capacity do not further exacerbate this infrastructure capacity phasing issue. Therefore, Special Conditions 3, 4, and 5 are necessary to assure consistency with LCP policies requiring phased buildout and avoidance of growth inducing capacities (Half Moon Bay LUP Policies 10-3, 10-6, 10-9, and 10-10 and San Mateo County LUP Policies 2.6, 2.7, 2.9, 2.11, 2.12, 2.13, 2.25, 2.26, 2.27, 2.28, 2.29, and 2.35).

4.4 Archeology

Both the Half Moon Bay and San Mateo County LCPs requires the protection of archaeological and paleontological resources pursuant to the LUP policies cited below:

4.4.1.1 Half Moon Bay LUP Policies

Policy 6-4

> As part of any project to construct new roads, trails, sewer or water lines, or other public projects involving substantial excavation which could destroy archaeological resources within the areas designated on the Map of Potential Archaeological resources, provision shall be made for an archaeological survey and the opportunity to sample and salvage the site by a qualified archaeologist as a part of the construction project.

4.4.1.2 San Mateo County LUP Policies

1.24 Protection of Archaeological/Paleontological Resources

> Based on County archaeology/Paleontology Sensitivity Maps, determine whether or not site proposed for new development are located within areas containing potential archaeological/paleontological resources. Prior to approval of development proposed in sensitive areas, require that a mitigation plan, adequate to protect the resource and prepared by a qualified archaeologist/paleontologist be submitted for review and approval and implemented as part of the project.

The City of Half Moon Bay ordinances also address specific requirements for Archeological resource identification, protection , and mitigation (e.g. 18.38.040).

According to the CCWD's environmental analysis for the project, "there is a high possibility of identifying Native American cultural resources in the project area, generally, and mitigation is recommended" (IS-25). In particular, section 2 of the project which is the Half Moon Bay section, has been identified as having previously recorded archaeological site approximately 100 feet upstream of Frenchman's Creek east of Highway 1. Although no direct impacts are anticipated from the project, the pipeline replacement project involves extensive ground disturbance, and there is a general need to assure that there are no adverse impacts to archeological or other cultural resources. The environmental document recommends consulting a qualified archaeologist in the event that resources are discovered during excavation. To assure full conformance with the LCPs, as well as protection of sensitive resources, Special Condition 2 is necessary. This condition requires that prior to issuance of the permit, that a mitigation and monitoring plan be submitted to the Executive Director for approval. In addition, during all ground disturbing activities, CCWD shall retain a qualified archaeologist and qualified local Native Americans for monitoring. In the event that archaeological resources are discovered, all construction shall cease in the vicinity of the resource, and a new plan shall be submitted that avoids such resources to the maximum extent practicable. The Commission finds that as conditioned the proposed development is consistent with Half Moon Bay LUP Policy 6-4 and Zoning Code Section 18.38.040 and San Mateo County LUP Policy 1.24.

4.5 Water Quality

The City of Half Moon Bay LCP contains a variety of LUP policies to protect sensitive marine and coastal water resources, including riparian areas a marine habitats (Chapter 3). In addition, the LCP incorporates the water quality protection policies of the Coastal Act (e.g. 30230, 30231). LUP policy 4.9 specifically requires that new development address potential adverse impacts from runoff and drainage. The ordinances of the LCP also address protection of coastal water habitats with specific corresponding ordinances to protect riparian areas from adverse runoff (18.38.010 et seq.). The San Mateo County LCP likewise contains policies to protect coastal water habitats, including marine, riparian, and wetland resources (see LUP Chapter 7).

As proposed the project will span over a mile in the both the City and the County. Although there will be minimal to no direct impacts to sensitive habitats, the project involves extensive excavation for installation of the replacement pipeline. Therefore, it is necessary to protect against potential adverse runoff to the surrounding environment, including the numerous riparian areas in the project vicinity. Condition 1 requires that the CCWD implement construction best management practices to address this project impact.

5.0 CEQA

Section 13096 of the Commission's administrative regulations requires Commission approval of CDP applications to be supported by a finding showing the application, as modified by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits approval of a proposed development if there are feasible alternatives or feasible mitigation measures available that would substantially lessen any significant impacts that the activity may have on the environment.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. These findings address and respond to all public comments regarding significant adverse

environmental effects of the project that were received prior to Commission action. The proposed development has been conditioned in order to be found consistent with the policies of the certified LCPs, and the public access and recreation policies of the Coastal Act. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, that would substantially lessen any significant adverse impact that the development may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found consistent with the requirements of the certified LCP and Coastal Act and to conform to CEQA.

APPENDIX A -- REFERENCES

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