CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT OFFICE 725 FRONT STREET, SUITE 300 SANTA CRUZ, CA 95060 (831) 427-4863





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APPEAL STAFF REPORT – DE NOVO REVIEW

Application number	A-2-SMC-01-032, Da Rosa Residence
Applicant	.Thomas Da Rosa
Local Government	.San Mateo County
Local Decision	Approved with Conditions October 30, 2001
Substantial Issue	The Commission found that the appeal of the local government action on this development raised a substantial issue on January 9, 2002.
Project location	.194 Coronado Avenue, Miramar, San Mateo County; APN 048-013-570.
Project description	.Construction of a 36-foot-high, 3-story 1,800-square-foot, single-family residence, an attached 440-square-foot garage, tandem parking arrangement, and three test wells for domestic use.
Appellants	.Committee for Green Foothills, Barbara K. Mauz, Robert La Mar, Steve Marzano, Ric Lohman, and Larry Kay.
File documents	Draft Montara-Moss Beach Water Well EIR, prepared for the County of San Mateo, Department of Environmental Management, Planning and Development Division (Kleinfelder, INC, 1989a); Da Rosa Property Biological Resources Assessment, Miramar, California, De Novo Review of A-2-SMC-01-032 (LSA Associates, Inc., December 22, 2003); Preliminary Hydrogeological Evaluation, Proposed New Production Well, APN 048-013-570, Coronado Ave., San Mateo County, California (Geoconsultants, Inc., June 11, 2002).

Staff recommendation ... Approval

Summary: The applicant proposes to construct a 2,870 sq. ft., 3-story, 36-foot-high single-family residence consisting of 1,800 sq. ft. of livable space, a 440 sq. ft. garage, 630 sq. ft of uninhabitable space on the ground floor, and a well on a nonconforming 4,400 square foot lot. San Mateo County approved the project on October 30, 2001. This approval was appealed to the Commission and the Commission found that the appeals raised substantial issues regarding the conformance of the approved development with the sensitive habitat and groundwater resource policies of the San Mateo LCP. In order to approve a coastal development permit through a *de novo* review of the project, the Commission



California Coastal Commission November 2004 Meeting in San Pedro

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required a site-specific biological resources assessment and wetland delineation conducted in accordance with the LCP definition of wetlands, as well as an analysis of the impacts of the approved well on waterdependent environmentally sensitive habitat areas and priority land uses.

The applicant submitted a wetland delineation, which determined that wetlands did not exist on the subject property. The Commission's staff biologist determined, however, that a wetland area was located on an adjacent property. Since the widths of the subject and adjacent properties are only 40 feet, even a reduced minimum 50-foot buffer zone to protect the wetland on the adjacent property would extend onto the subject Da Rosa property, inconsistent with the policies of the certified LCP. In view of the other residential uses in the immediate vicinity of this property and the fact that the uses allowed in wetland buffers would not provide the applicant with an economically viable use of his property, the full implementation of LCP policies to prevent residential use of the subject property is not consistent with Section 30010 of the Coastal Act. The small size and narrow width of this nonconforming property greatly limit the ability to provide meaningful mitigation measures to protect the wetlands on the adjacent property, which is a significant setback given that the subject property is only 40 feet in width. To further protect the adjacent wetland, staff recommends a condition to prevent the planting of nonnative invasive plants within the 10-foot side-yard setback.

The applicant submitted a hydrogeologic study that demonstrated that the project site and adjacent wetlands are located in a separate hydrogeologic unit from the proposed well, and are supported by surface hydrology which would be unaffected by groundwater withdrawal. Thus, a hydrogeologic study to determine the safe yield is unnecessary to establish that the proposed well would not adversely impact water-dependent sensitive resources. Additionally, the project is conditioned to require that the applicant connect to the public water system when additional public water becomes available, and to discontinue the use of the well at that time. The project is also conditioned to require the implementation of best management practices during construction, as well as submission of a storm water pollution prevention plan.

As conditioned, staff recommends approval.

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I. Project Procedural History

San Mateo County has a certified LCP, and the proposed project was reviewed in a local coastal permit process before the County took action on it on October 30, 2001. The County's approval was then appealed to the Commission by the Committee for Green Foothills, Barbara K. Mauz, Robert La Mar, Steve Marzano, Ric Lohman, and Larry Kay. On January 9, 2002, the Commission found that the appeals of the development approved by San Mateo County raised substantial issues regarding the conformance of the approved development with the sensitive habitat and groundwater resource policies of the San Mateo LCP. In order to approve a coastal development permit through a *de novo* review of the project, the Commission required a site-specific biological resources assessment and wetland delineation conducted in accordance with the LCP definition of wetlands, as well as an analysis of the impacts of the approved well to water-dependent environmentally sensitive habitat areas and priority land uses.

II. Staff Recommendation on CDP Application

The staff recommends that the Commission, after public hearing, **approve** a coastal development permit for the proposed development subject to the standard and special conditions below.

Motion. I move that the Commission approve Coastal Development Permit Number A-2-SMC-01-032 pursuant to the staff recommendation.



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Staff Recommendation of Approval. Staff recommends a **YES** vote. Passage of this motion will result in approval of the coastal development permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution to Approve a Coastal Development Permit. The Commission hereby approves the coastal development permit on the grounds that the development as conditioned, will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the coastal development permit complies with the California Environmental Quality Act because either: (1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment; or (2) there are no feasible mitigation measures or alternatives that would substantially lessen any significant adverse effects of the amended development on the environment.

III. Conditions of Approval

A. 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 or 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.



B. Special Conditions

1. Conditions Imposed By Local Government.

This action has no effect on conditions imposed by a local government pursuant to an authority other than the Coastal Act.

2. Landscaping.

The planting of invasive plant species, as identified on the California Exotic Pest Plant Council's "Exotic Pest Plants of Greatest Ecological Concern in California" list, is prohibited.

3. Public Water.

The property owner shall apply for and shall obtain service from the local public water company when it has availability of an adequate public water supply for the project, at which time use of the on-site well shall be discontinued.

4. Implementation of Best Management Practices During Construction.

Appropriate best management practices shall be implemented during construction to prevent erosion, sedimentation, and the discharge of pollutants during construction. These measures shall be selected and designed in accordance with the California Storm Water Best Management Practices Handbook. These measures shall include: 1) limiting the extent of land disturbance to the minimum amount necessary to construct the project; 2) designating areas for the staging of construction equipment and materials, including receptacles and temporary stockpiles of graded materials, which shall be covered on a daily basis; 3) providing for the installation of silt fences, temporary detention basins, and/or other controls to intercept, filter, and remove sediments contained in any runoff from construction, staging, and storage/stockpile areas; 4) incorporating good construction housekeeping measures, including the use of dry cleanup measures whenever possible; 5) collecting and filtering cleanup water when dry cleanup methods are not feasible; 6) cleaning and refueling construction equipment at designated offsite maintenance areas, and; 7) the immediate clean-up of any leaks or spills. The construction areas shall be delineated with fencing and markers to prevent land-disturbing activities from taking place outside of these areas.

5. Post Construction Stormwater Pollution Prevention Plan.

A. Prior to issuance of the coastal development permit, the applicant shall submit, for the review and approval of the Executive Director, a Post-Construction Stormwater Pollution Prevention Plan showing final drainage and runoff control measures. The plan shall be prepared by a licensed engineer and shall incorporate structural and non-structural Best Management Practices (BMPs) designed to control the volume, velocity and pollutant load of storm water leaving the developed site after completion of



construction. The Post-Construction Polluted Runoff Prevention Plan shall include, at a minimum, the BMPs specified below:

a. A pop-up drainage emitter system, or similar device shall be installed to conduct roof runoff from roof gutter systems and downspouts away from structural foundations and to disperse runoff in lawn or landscaped areas. Emitters shall be sized according to downspout and watershed (roof area) size. Pipe riser height shall be designed to create head sufficient enough to lift pop-up. Outfall and sheetflow shall be designed to disperse runoff onto vegetated areas or suitable landscaped.

b. Where possible, runoff from the driveway should be directed to natural drainage systems that allow for filtration.

c. Native or noninvasive drought-tolerant adapted vegetation shall be selected, in order to minimize the need for fertilizer, pesticides/herbicides, and excessive irrigation.

d. The final site plan shall show the finished grades and the locations of the drainage improvements, including downspouts and, where necessary, splashguards.

B. The permittee shall undertake development in accordance with the approved plan. Any proposed changes to the approved plan shall be reported to the Executive Director. No changes to the approved plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

IV. Recommended Findings and Declarations

The Commission finds and declares as follows:

A. Project Location and Description

The proposed development is located on a substandard 4,400-square-foot lot located on Coronado Avenue, in the unincorporated Miramar area of San Mateo County. The property is zoned R-1/S-94 (Single Family Residential/10,000 square-foot minimum parcel size, 50-foot minimum parcel width), DR (Design Review), and CD (Coastal Development); the Combining District designation was "S-9" at the time of application, which requires a 50 ft. width and 10,000 sq. ft. lot area. The site is located in an existing residential neighborhood (Exhibits 1 and 2). The property consists of Lot 20, Block 7, of the Shore Acres Subdivision. The property is located on Coronado Avenue, southwest of State Route 1 (Cabrillo Highway) and the raised bed of the former Ocean Shore Railroad right-of-way, fronting on Coronado Avenue at the north in the unincorporated community of Miramar. The Miramar area of unincorporated San Mateo County is located on a coastal bluff west of Half Moon Bay Airport. The property lies on the narrow, relatively flat and level coastal terrace between the coastal hills and the beach at Half Moon Bay. The ocean cliff, riprap seawall, and beach are approximately 164 ft. southwest



of the project site on the far side of Mirada Rd.; perennial Arroyo de en Medio Creek lies approximately 574 ft. to the southeast. Properties to the west are developed with single-family residences and commercial recreation uses. A single-family residence is being constructed on an adjacent property (APN 048-013-580) west of the Da Rosa site. The property directly to the east of the proposed project site is vacant. Many of the surrounding properties have been merged to form building sites that are more conforming to the S-9 standards but still do not meet the 10,000 sq. ft. minimum lot size. The property is relatively flat.

The proposed development consists of a 2,870 sq. ft., 3-story, 36-foot-high single-family residence consisting of 1,800 sq. ft. of livable space, a 440 sq. ft. garage, and 630 sq. ft of uninhabitable space on the ground floor. The development is on a nonconforming lot (size 4,400 sq. ft.) with a minimum lot size of 10,000 sq. ft. The residence will have four bedrooms and 2.5 bathrooms; the permit includes provisions for three test wells leading to construction of a domestic well in the north corner of the parcel (Exhibit 3). As a condition of its approval, the County required that in the event that a public water supply becomes available, the applicant shall be required to switch to this alternative. The County also required the applicant to obtain a well permit and construct a well in accordance with the quality and quantity standards of the Environmental Health Division prior to submitting any building permit application.

B. Coastal Issues

1. Wetlands

a. Applicable Policies

San Mateo County LCP Policy 7.3 provides for the protection of sensitive habitat areas, including wetlands, and states:

(a) Prohibit any land use or development which would have significant adverse impact on sensitive habitat areas; (b) Development in areas adjacent to sensitive habitats shall be sited and designed to prevent impacts that could significantly degrade the sensitive habitats. All uses shall be compatible with the maintenance of biologic productivity of the habitats.

LCP Policy 7.14 (in part) 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.

LCP Policy 7.16 describes permitted uses in wetlands, which do not include residential development:

Within wetlands, permit only the following uses: (1) nature education and research, (2) hunting, (3) fishing, (4) fish and wildlife management, (5) mosquito abatement through water management and biological controls; however, when determined to be ineffective, allow



chemical controls which will not have a significant impact, (6) diking, dredging, and filling only as it serves to maintain existing dikes and an open channel at Pescadero Marsh, where such activity is necessary for the protection of pre-existing dwellings from flooding, or where such activity will enhance or restore the biological productivity of the marsh, (7) diking, dredging, and filling in any other wetland only if such activity serves to restore or enhance the biological productivity of the wetland, (8) dredging manmade reservoirs for agricultural water supply where wetlands may have formed, providing spoil disposal is planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation, and (9) incidental public service purposes, including, but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

LCP Policy 7.17 describes performance standards in wetlands, in relevant part:

Require that development permitted in wetlands minimize adverse impacts during and after construction...

LCP Policy 7.18 establishes buffer zones for wetlands and states:

Buffer zones shall extend a minimum of 100 feet landward from the outermost line of wetland vegetation. This setback may be reduced to no less than 50 feet only where (1) no alternative development site or design is possible; and (2) adequacy of the alternative setback to protect wetland resources is conclusively demonstrated by a professional biologist to the satisfaction of the County and the State Department of Fish and Game. A larger setback shall be required as necessary to maintain the functional capacity of the wetland ecosystem. [Emphasis added.]

b. Commission Action on Appeal

The appellants contended that the County-approved development was inconsistent with LCP policies concerning protection of wetlands and other environmentally sensitive habitat areas. Commission staff determined that no site-specific surveys of biological resources regarding the red-legged frog and the San Francisco garter snake had been performed prior to the County's approval. In addition, no wetland delineation was conducted for the project site as part of the County's review, although an archaeological report for the project site reported observations of standing water and wetland plants on the project site. The Commission found that the project raised a substantial issue due to the lack of a wetland delineation and biological survey for the project site, and required that a site-specific biological resources assessment and a wetland delineation, conducted in accordance with the LCP definition of wetlands, be carried out prior to *de novo* review of the project.

c. Interim History Since Substantial Issue Determination

On March 26, 2003, the applicant submitted a Biological Resources Assessment, which showed that an approximately 30-square-foot wetland area, based on the LCP definition of wetlands, was located at the northwest corner of the subject property. In a letter dated May 2, 2003, Commission staff discussed the presence of this wetland and the need for a sufficient wetland buffer on the property, as defined by the



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LCP, and concluded that LCP policies 7.14, 7.18, and 7.19 regarding wetlands could be interpreted to preclude approval of the proposed residential development on the site. Regarding the establishment of buffer zones surrounding a wetland, LCP policy 7.18 requires a wetland buffer setback of 100 feet; the setback may be reduced to no less than 50 feet if no alternative development or design is possible, *and* if the adequacy of the reduced setback is conclusively demonstrated to the County and the State Department of Fish & Game. Due to the small size of the Da Rosa property (4,400 sq. ft.), even if the buffer could be reduced to 50 feet consistent with LCP Policy 7.18, approximately half of the property would fall within the area required by the buffer. Maintaining even a 50-foot buffer would reduce the buildable portion of the lot to approximately 2,000 sq. ft. Any residential development would also have to include a driveway placed within the wetland buffer, inconsistent with LCP Policy 7.19.

On February 17, 2004 the applicant submitted a revised wetland delineation (Exhibit 4) for the subject property. The revised wetland delineation concluded that the 30-square foot wetland area located in the northwest corner of the Da Rosa property was subject to transitory ponding due to recent improvements to Coronado Street that reduced the ability of storm water to drain from the Da Rosa parcel and an adjacent parcel onto the roadway. The revised report concluded that this area did not display evidence of hydric soils or wetland plant cover and thus does not meet LCP wetland criteria. The Commission's staff biologist reviewed the revised wetland delineation report and agreed with the conclusion that this 30-square foot area did not constitute a wetland. This report also determined that there is no suitable habitat on or immediately adjacent to the subject parcel for the San Francisco garter snake, California red-legged frog, or other state or federally listed species.

On April 1, 2004, Commission staff viewed the Da Rosa property from the adjacent road and photographed and observed areas of standing water in close proximity to the subject property. The Commission's staff biologist reviewed the photographs of this area and concluded that the presence of standing water and obligate wetland plants demonstrated that this area was a wetland, as defined by the LCP. The Commission staff biologist contacted the consulting biologist, who informed him that this wetland area was located on the adjacent Process Research property (APN 048-013-22, Exhibit 2), which at that time was subject to a foreclosure judgment. Since the widths of the subject and adjacent lots are only 40 feet, the buffer zone for the wetland on the adjacent property would extend onto the Da Rosa lot, inconsistent with the wetland buffer provisions of the certified LCP. Commission staff requested that a wetland delineation be done of the adjacent Process Research lot. The applicant did not agree to provide this wetland delineation.

Commission staff contacted the applicant's representative to discuss the possibility of purchasing the vacant property adjacent to the Da Rosa site with the intent of merging these properties to provide a larger, more conforming parcel and to ensure compliance with San Mateo County LCP Zoning Regulation Section 6133.3b(3) which requires that "all opportunities to acquire additional contiguous land in order to achieve conformity with the zoning regulations currently in effect have been investigated and proven to be infeasible." A larger parcel potentially would provide more flexibility regarding the siting of the house with respect to necessary wetland setback buffers. In order to make the findings required by this LCP provision, Commission staff requested information from the applicant regarding



the potential purchase of the adjacent property in order to increase the size of the nonconforming parcel. Regarding an adjacent property to the west (APN 048-013-580, Exhibit 2), the County granted a CDP to David Hodge for development of a single-family home on this property, and in November 2003 the Commission determined that an appeal of the County's CDP approval for this property raised no substantial issue concerning the conformance of the approved development with the certified LCP. A home is now under construction on the Hodge property. Regarding APN 048-013-290, which is located adjacent to the northern property boundary of the Da Rosa parcel, Michael Edward Foley currently owns this property and has indicated that he is not interested in selling the property. The vacant Process Research property (APN 048-013-220, Exhibit 2) is located on the eastern side of the lot owned by Mr. Da Rosa. The Process Research property was the subject of foreclosure proceedings. In previous phone conversations with the applicant's representative, he had stated that Mr. Da Rosa intended to bid on this property, but expressed concern about the likelihood of wetlands being located on this adjacent lot. Recently, however, the owner of the property subject to foreclosure paid off the delinquent assessments on the property. The owner of this property has also indicated that the property is not for sale.

Commission staff visited the Da Rosa site in October 2004. Construction is underway at the adjacent Hodge property and the Da Rosa property is being used as a storage area for construction equipment and supplies. In addition, the Process Research parcel (previously subject to foreclosure), which also contains wetlands, has been filled with crushed stone.¹

The evidence in the record, i.e. photographs and staff observations of obligate wetland plants and standing water, demonstrates that wetlands existed on the adjacent Process Research property. Although these wetlands have been disturbed recently, for purposes of determining whether a coastal development permit should be granted, it is appropriate to analyze the project as if the wetlands remained intact. As noted above, the wetland buffer requirement of the LCP could not be met with respect to the proposed development on the Da Rosa parcel. In considering previous development applications, the Commission has agreed that policies of the Coastal Act and LCPs should not be applied in a manner that will result in the taking of private property for public use in violation of the State and Federal Constitutions. Consistent with court decisions interpreting these constitutional prohibitions, the Commission has determined that the relevant inquiry when considering applications for development that raise taking issues is whether implementation of these policies will deny a property owner all economically viable use of his or her land. In reviewing the economic viability issue, the Commission must also consider the property owner's legitimate investment-backed expectations.

d. Implementing Sections 30010 and 30233 of the Coastal Act

As described above, the record before the Commission evidences the presence of wetlands on the adjacent Process Research property. The proposed development on the Da Rosa property includes a 1,800 square foot single-family residence, an attached 440-square foot garage and associated driveway, and associated infrastructure improvements on a 4,400 square foot site. As noted above, maintaining

¹ Commission staff will separately investigate whether development on the Da Rosa property and the Process Research property constitute violations of the San Mateo County LCP and are subject to enforcement proceedings under the Coastal Act.



even a minimum 50-foot buffer would reduce the buildable portion of the property to approximately 2,000 sq. ft. Any residential development would also have to include a driveway placed within the wetland buffer. In addition, other aspects of the project would need to be located within the wetland buffer zone with resultant disruptions from residential development and subsequent use of the site, such as installation of a storm drainage system, utility trenching, exterior lighting and, over the long run, ordinary residential activities on the premises such as allowing dogs or other activity in the habitat area. None of the development activity described is dependent on a location within the sensitive resource area. Therefore, the proposed development in the wetland buffer cannot be found consistent with San Mateo County LCP sensitive habitat policy 7.18; thus, the project should be denied.

The sensitive habitat policies of the San Mateo County LCP, however, must be applied in the context of Coastal Act Section 30010, which provides that the policies of Local Coastal Programs "shall not be construed as authorizing the commission . . . to exercise [its] power to grant or deny a permit in a manner which will take or damage private property for public use, without the payment of just compensation." Thus, if strict construction of the restrictions in San Mateo County LCP Policy 7.18 would cause a taking of property, this policy must not be so applied and instead must be implemented in a manner that will avoid this result.

Recent court decisions demonstrate that to answer the question whether implementation of a given regulation to a specific project will cause a taking requires an ad hoc factual inquiry into several factors. Specifically, the courts have consistently indicated that this inquiry must include consideration of the economic impact that application of a regulation would have on the property. A land use regulation or decision may cause a taking if it denies an owner all economically viable use of his or her land. (*Lucas v. South Carolina Coastal Council* (1992) 505 U.S. 1003, 112 S. Ct. 2886; also see *Keystone Bituminous Coal Assn. v. DeBenedictis* (1987) 480 U.S. 470, 495, citing *Agins v. Tiburon* (1980) 447 U.S. 255, 260.) Another factor that must be considered is the extent to which a regulation or regulatory decision "interferes with reasonable investment backed expectations." (*Keystone Bituminous Coal Assn. v. Debenedictis*, supra, 480 U.S. 470, 495, citing *Kaiser Aetna v. United States* (1979) 444 U.S. 164, 175.)

In addition, in order to avoid allegations of a taking, certain types of mitigation measures, such as exactions requiring the dedication of a fee interest in property, must be "roughly proportional" to the impact remediated. (*Dolan v. City of Tigard* (1994) 114 S. Ct. 2309.) Other factors that may be reviewed in conducting a takings analysis include whether the land use regulation substantially advances a legitimate state interest. (*Nollan v. California Coastal Commission* (1987) 483 U.S. 825.) This is not a significant limitation in analyzing this permit application because the state's interest in protecting environmentally sensitive habitats is well recognized.

Finally, it is necessary to consider whether the property proposed for development by the applicant is subject to existing limitations on the owner's title, such as prescriptive rights, that might preclude the applied-for use. It is also necessary to ensure that the proposed use would not constitute a nuisance. The question as to whether any portion of the development is subject to prescriptive rights does not apply in this case. Furthermore, development of the parcel with a single-family residence in the configuration proposed by the applicant would not constitute a nuisance.



Thus, the Commission interprets Section 30010, together with the recent court decisions, to mean that if an applicant demonstrates that Commission denial of the project would deprive his or her property of all reasonable economic use, the Commission may be required to allow some development even where a Coastal Act or LCP provision would otherwise prohibit it, unless the proposed project would constitute a nuisance under state law. In other words, unless the proposed project would constitute a public nuisance under state law, Policy 7.18 of the certified LCP cannot be read to deny all economically beneficial or productive use of land because this section of the certified LCP cannot be interpreted to require the Commission to act in an unconstitutional manner. In complying with this requirement, however, a regulatory agency may deny a specific development proposal, while indicating that a more modest alternative proposal could be approved, and thus assure the property owner of some economically viable use.

The applicant submitted financial information to demonstrate a sufficient real property interest in the subject property to allow some development. Staff has determined that the applicant bought the parcel in 1999, for which fair market value was paid. During the period when the applicant purchased the parcel, this parcel and other parcels in the Shore Acres subdivision were zoned for single-family residential use. Thus, in the year that the parcel was purchased, the applicant could have legitimately assumed that development of a single-family home on this lot was a reasonable expectation. Continued residential development on similar lots within the Shore Acres subdivision over the intervening years lends further credence to that expectation. Therefore, in view of the other residential uses in the immediate vicinity of this privately held parcel, the Commission finds that the proposed residential use is a reasonable economic use, and also that the uses allowed by San Mateo County LCP Policy 7.16 would not provide an economically viable use.

In view of the findings that (1) none of the uses provided for in San Mateo County LCP Policy 7.16 would provide an economic use, (2) residential use of the property would provide an economic use and (3) the applicant had a reasonable investment-backed expectation that such use would be allowed on the property, the Commission further finds that denial of a residential use, based on the inconsistency of this use with San Mateo County LCP policy 7.18, could constitute a taking. Therefore, consistent with Coastal Act Section 30010 and the Constitutions of California and the United States, the Commission determines that full implementation of LCP policy 7.18 to prevent residential use of the subject property is not authorized in this case.

Having reached this conclusion, however, the Commission also finds that Section 30010 only instructs the Commission to construe the policies of LCPs, including San Mateo County LCP policy 7.18, in a manner that will avoid a taking of property. It does not authorize the Commission to otherwise suspend the operation of or ignore these policies in acting on permit applications. Instead, the Commission is only directed to avoid construing these applicable LCP policies in a way that would take private property for public use. Aside from this instruction, the Commission is still otherwise directed to enforce the requirements of the LCP.

In regard to how the development can be configured to further minimize impacts to wetlands, the



Commission must determine the essential and non-essential components of the proposed single-family residential use. The greater the size of the house and the greater the number and size of accessory components allowed as part of the residential development, the greater the size of the area of disturbance to the adjacent wetlands. Two examples of where this factor was a major determinant in the Commission's consideration of how to condition an approval of a development to minimize impacts on ESHA and assure that the development would be in the greatest conformity with coastal development policies and standards and avoid a denial that would result in an uncompensated taking of property can be found in the Commission's past actions on the Burdick (CDP No. 1-93-038) and Feiner (CDP No. 1-95-054) projects. In both of these cases, the Commission considered whether permit conditions to reduce the size of certain project components in the interest of minimizing the amount of pygmy forest impacted by structural improvements would be an appropriate measure in the interest of striving for the greatest level of conformity with the Coastal Act's ESHA protection policies.

At the time that the Burdick project was considered by the Commission in September of 1994, the Mendocino County staff reviewed its building permits to determine the average size of houses approved. The report determined that the average size of houses approved in the Burdick project vicinity was approximately 1,700 square feet, and the average size of comparable combined garage/storage structures to be approximately 700 square feet. The Commission granted a coastal development permit to Burdick to allow construction of a 1,888-square-foot residence, a 528-square-foot attached garage, and a 48-square-foot storage shed.

The more recent amendment to the Feiner permit proposed a manufactured home that was to encompass 1,352 square feet with a detached garage of 672 square feet and a 520-square-foot deck. The Commission found in that instance that because the proposed house and garage would be both within the range of existing residences in the project vicinity, and within the range of the Commission's previous approval of residential development in the pygmy forest area at the Burdick property, the proposed residential development provided that property owner with an economically viable use.

The proposed project includes a modest-sized house (1,800 square feet of living space) and a 440 square foot garage on a small, narrow, severely constrained 40-x-110-foot lot. Reducing the size of the proposed Da Rosa residence to reduce the conflict with LCP Policy 7.18 (which requires a minimum 50-foot wetlands buffer) could only be accomplished by reducing the footprint, but not the height, of the proposed house. In this case, however, the proposed house is tall and narrow, similar to other single-family dwellings in the area, and the square footage of the proposed house is in line with other existing residential development in the area. Also, the proposed project includes 10-foot side yard setbacks, which limit the width of the house to 20 feet.

In general, when a project must be approved to avoid a taking, the project will still include implementation of mitigation measures necessary to minimize the impacts of development on sensitive habitats, such as wetlands. In this case, however, the Commission is not requiring additional wetland mitigation measures because: 1) the small size and narrow width of this nonconforming property, which is surrounded by other residential development, greatly limits the ability to require meaningful



mitigation measures to protect the adjacent wetlands, and; 2) the project includes a 10-foot side-yard setback from the wetlands on the adjacent Process Research property, which is a significant setback given that the subject property is only 40 feet in width. The Commission also notes that the proposed 10-foot side-yard setback meets the minimum side-yard setback otherwise required by the certified LCP for this nonconforming property.

Consistent with the required minimum 10-foot side-yard setback, future development, such as additions to the proposed residence, would be prohibited. Allowable uses in the setback, if properly undertaken, would be protective of the adjacent wetland habitat. Fencing, which is an allowable use in the setback, would be beneficial to habitat protection because it would limit people and pets from entering the wetland on the adjacent Process Research property. Landscaping in the setback/buffer area would also improve habitat values by providing screening, filtering of runoff, etc., as long as the landscaping did not include nonnative invasive plants. Nonnative invasive plants invade native habitat areas and vastly alter the ecological landscape by out-competing and excluding native plants and animals; altering nutrient cycles, hydrology, and wildfire frequencies, and hybridizing. Rare species are particularly vulnerable to the changes brought about by nonnative invaders. The most effective and efficient way to deal with weedy species is to prevent invasions. Preventing invasion is of greater conservation benefit in the long run than the far more costly and difficult efforts to control a widespread pest species. To ensure that the buffer area is not landscaped with nonnative, invasive plants, Special Condition #2 of this permit prohibits the planting of any invasive plant species that is identified on the California Exotic Pest Plant Council's "Exotic Pest Plants of Greatest Ecological Concern in California" list. The Commission finds that the special condition attached to the permit will minimize the disturbance of the adjacent wetland and will thus minimize significant adverse impacts to the wetland while providing for a reasonable use of the property that will avoid an unconstitutional taking of private property for public use.

2. Safe Yield Test

a. Applicable Policy

LUP Policy 2.32 regarding groundwater supplies states, in relevant part:

Require, if new or increased well production is proposed to increase supply, that: (c) The amount pumped be limited to a safe yield factor which will not impact water dependent sensitive habitats, riparian habitats and marshes. (d) Base the safe yield and pumping restriction on studies conducted by a person agreed upon by the County and the applicant which shall: (1) prior to the granting of the permit, examine the geologic and hydrologic conditions of the site to determine a preliminary safe yield which will not adversely affect a water dependent sensitive habitat; and (2) during the first year, monitor the impact of the well on groundwater and surface water levels and quality and plant species and animals of water dependent sensitive habitats to determine if the preliminary safe yields adequately protect the sensitive habitats and what measures should be taken if and when adverse effects occur.



b. Commission Action on Appeal

The appellants contended that the County-approved development was inconsistent with LCP policy 2.32(d) because neither the County nor the applicant examined the geologic or hydrologic conditions of the site to determine the safe yield for the domestic well. Safe yield is the amount of water that can be withdrawn without significantly adversely impacting water dependent sensitive habitats. Because a significant question remained regarding whether a safe yield test was required for the approved development, the Commission found that the appeal raised a substantial issue regarding the conformity of the approved project with LCP Policy 2.32(d).

c. Analysis

LUP Policy 2.32(c) requires that if new or increased well production is proposed to increase water supply, the amount of water pumped from the well must be limited to a safe yield factor which will not impact water-dependent sensitive habitats, riparian habitats and marshes. LUP Policy 2.32(d) requires that the safe yield and pumping restrictions be based on studies that examine the geologic and hydrologic conditions of the site to determine a preliminary safe yield that will not adversely affect water-dependent sensitive habitats. LUP Policy 2.32(d) further requires that during the first year the applicant monitor the impact of the well on groundwater and surface water levels and quality and plant species and animals of water dependent sensitive habitats to determine if the preliminary safe yield adequately protects the sensitive habitats and what measures should be taken if adverse effects occur.

The applicant submitted a hydrogeological evaluation for the proposed new production well (Exhibit 5). Based on a review of available hydrogeological literature in the vicinity of the subject property, along with an on-site field reconnaissance, the report concluded that the construction of a domestic well on the Da Rosa property would pose no significant adverse effects on the neighboring area. In addition, the County's Environmental Health Division evaluated the well site for potential saltwater intrusion and concluded that no evidence of saltwater intrusion was present on the site (Exhibit 6). These evaluations, however, are not equivalent to a safe yield test.

However, according to the hydrogeological report, the Da Rosa property is underlain by alluvial fan deposits consisting of fine-grained unconsolidated surficial sands and silts. These deposits rarely exceed 40 feet in depth and much of this material is found above the ground-water table and therefore is not generally considered to be a viable groundwater source. Marine terrace deposits, consisting of poorly consolidated to slightly indurated sands and gravels, underlie the alluvial fans. The base of these sediments lies 70 to 80 feet below the surface in this area. In general, these terrace deposits are considered to be the primary aquifer in this area. Thus, the project site and any adjacent wetlands are located in a separate hydrogeologic unit from the proposed well, and are supported by surface hydrology which would be unaffected by groundwater withdrawal. Thus, a hydrogeologic study to determine the safe yield with respect to potential impacts on water dependent sensitive habitats, riparian habitats and marshes is unnecessary to determine that the proposed well would not adversely impact water dependent sensitive resources. In addition, consistent with the conditions previously imposed by the County, Special Condition #3 requires the applicant to connect to the local public water supply when public



water becomes available. Therefore, as conditioned, the Commission finds that the proposed project is consistent with LUP Policy 2.32.

3. Water Quality

San Mateo County LUP policy 7.13 requires provisions to prevent runoff and sedimentation from exceeding pre-development levels. Due to increased runoff, water quality can be adversely affected by an increase in paving surfaces. The proposed project is located within several hundred feet of the Monterey Bay National Marine Sanctuary. Special Condition #4 requires appropriate best management practices to protect water quality during construction. Special Condition #5 requires the installation of post-construction storm water pollution prevention measures designed to reduce runoff and protect the quality of coastal waters. With these conditions, the project is consistent with San Mateo County LUP policy 7.13.

4. California Environmental Quality Act (CEQA)

Section 13096 of the California Code of Regulations requires that a specific finding must be made in conjunction with coastal development permit applications showing the application to be consistent with any applicable requirements of CEQA. Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available that would substantially lessen any significant adverse effect that the activity may have on the environment.

The environmental review of the project conducted by Commission staff involved the evaluation of potential impacts to relevant coastal resource issues, including environmentally sensitive wetland habitats and groundwater impacts. This analysis is reflected in the findings that are incorporated into this CEQA finding as if set forth in full. This staff report responds to all public comments that have been received as of the date of this staff report. Mitigation measures are incorporated as conditions of this approval. Accordingly, as so conditioned, the Commission finds that the proposed project is consistent with CEQA, as there are no feasible alternatives or feasible mitigation measures available that would substantially lessen any significant adverse effect that the activity may have on the environment.





MAP 1: Da Rosa Project Area Location. (Source: USGS "Half Moon Bay" 7.5 minute topographic quadrangle, 1991)

EXHIBIT NO. 1	
APPLICATION NO. A-2-SMC-01-032	
DA ROSA	
Location map	

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INTRODUCTION

This report presents the results of a delineation by LSA Associates, Inc. (LSA) of the potential extent of wetlands on the Da Rosa property (APN 048-013-570) in unincorporated San Mateo County, near the community of Miramar. This report is intended to determine whether any areas on the Da Rosa property met the wetland definition utilized by the County of San Mateo (the County) in its certified Local Coastal Program (LCP), which implements the California Coastal Act (CCA).

On January 14, 2002, the Coastal Commission requested additional information on the potential impacts of the proposed development to environmentally sensitive habitat area, including, but not limited to, habitat for the San Francisco garter snake or California red-legged frog. Information was also requested for a wetland delineation identifying any wetlands as defined by the San Mateo County LCP on or adjacent to the site. This report is intended to address these issues.

PROJECT SITE DESCRIPTION

The project site is located in unincorporated San Mateo County on the coast north of Half Moon Bay, California, a few blocks north of the town limit of the community of Miramar (Figure 1). The Da Rosa property faces onto Coronado Avenue, within one block of the Pacific Ocean. The Miramar restaurant is on the north side of Coronado Avenue, just northwest of the site and the Miramar Beach Hotel is immediately to the west. It lies at an elevation of approximately 20 feet NGVD. Figure 2 illustrates the location of the property in relation to local streets and to the community of Miramar.

The property is a vacant lot, 40 feet wide and 100 feet deep, in an existing residential and commercial neighborhood. The lot is one of several vacant lots in the neighborhood. There are several existing residences to the southeast along Cortez Avenue. Houses were being constructed on two nearby lots at the time of the assessment. One residence was under construction to the east on Coronado Avenue and one to the south along Cortez Avenue., contiguous with the Da Rosa parcel

Vegetation

Nomenclature used in this report follows that of The Jepson Manual: Higher Plants of California (Hickman 1993).

The lot supports a relatively homogeneous mix of ruderal plants that are periodically mown. In the past the site may also have been disced for weed abatement. Dominant plant species on the site include bristly ox-tongue (Picris echioides), common vetch (Vicia sativa), and ripgut brome (Bromus diandrus). Associated species include Italian ryegrass (Lolium multiflorum), wild oats (Avena fatua), fennel (Foeniculum vulgare), fumitory (Fumaria officinalis), Bermuda buttercup (Oxalis pescaprae), poison hemlock (Conium maculatum), Harding grass (Phalaris aquatica), California blackberry (Rubus ursinus), wild radish (Raphanus sativa), and annual fescue (Vulpia sps.). Exhibit 4

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The first ten feet of the property adjacent to Coronado Avenue has less vegetation, apparently due to compaction, disturbance, and infertile surface material resulting from recent widening of Coronado Avenue.

Soils

The Natural Resource Conservation Service (formerly the Soil Conservation Service, SCS) has not published detailed soil maps of the Miramar area of San Mateo County, but based on soil survey maps of nearby areas, the likely local soil types can be determined. Soil Survey maps exist for El Granada, just to the north of the project site, and areas just to the south of the project site, between Miramar and Half Moon Bay (SCS, 1961). Soils along the coast, but interior to the beach, in these areas are nearly level Denison clay loams and Denison loams (SCS 1961).

Denison series soils are "dark-colored, moderately well drained to imperfectly drained soils on low terraces" that formed from granitic alluvium under grassy vegetation (SCS 1961, pg. 49). The black surface soil is slightly to moderately acidic. The black sub-surface soil displays a prismatic structure that is heavy and extremely hard when dry. It is neutral to slightly acidic and may be mottled in the subsoil. The phase of Denison clay loam associated with nearly level terrain has high water-holding capacity and very slow runoff, with slightly to nonexistent erosion hazard. Denison most commonly occurs on level terrain in San Mateo County. Denison loam is similar, but the upper 3 to 30 inches is loam. Some coarser material may be deposited in higher areas. Denison loam also has a high water holding capacity and " permeability is moderate in the surface soil and moderately slow to slow in the subsoil" (SCS 1961, pg. 49).

Appendix A provides a copy of the SCS soil map and series description.

Hydrology

The property is nearly level with many small hummocks created by the deposition of fill. Water can drain off the property in almost any direction, as the property is slightly elevated above the adjacent lots. A very slight slope leading down to Coronado Avenue was apparent, and another slope along the northeast side of the property leads down to the adjacent parcel. Sources of water are direct rainfall, runoff from Coronado Avenue, and, for limited areas along the property boundary, runoff from adjacent parcels.

There are no streams on or adjacent to the lot. Two natural creeks or drainages are present in the vicinity of the property. The Arroyo de en Medio is approximately 900 feet south of the parcel and an unnamed drainage is 500 to 600 feet north of the property.

REGULATORY BACKGROUND

California Coastal Act

The California Coastal Act created the California Coastal Commission, which regulates development along the coast. In addition to preserving human access to beaches and retaining the natural beauty of the coast, the Coastal Commission is also charged with wetland preservation. Regional regulation

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is implemented by Local Coastal Programs (LCP).

The San Mateo County LCP defines wetlands as areas "where the water table is at, near, or above the land surface long enough to bring about the formation of hydric soils, or to support the growth of plants which are normally found to grow in water or wet ground" (San Mateo County 1998, section 7.14). In other words, the County LCP has two requirements for a wetland: 1) wetland hydrology sufficient to 2) form hydric soils or support the growth of hydrophytic vegetation.

The San Mateo County LCP also states:

In San Mateo County, wetlands typically contain the following plants: cordgrass, pickleweed, jaumea, frankenia, marsh mint, tule, bulrush, narrow-leaf cattail, broad-leaf cattail, pacific [sic] silverweed, salt rush, and bog rush. To qualify, a wetland must contain at least 50% of some combination of these plants, unless it is a mudflat.

This condition appears to limit wetlands under the County LCP definition to areas supporting at least 50 percent of some of the listed plants. The listed plants are all typically associated with wetlands which have semi-permanently to permanently flooded or saturated conditions. These areas are commonly recognized as marshes and bogs. The first four listed plants and salt rush are typical salt marsh plants associated with tidal and other estuarine marshes and coastal strand habitats. Tule and narrow-leaf cattail are the typical emergent vegetation associated with perennial marshes and ponds. Pacific Silverweed and bog rush are also typically associated with bogs, along the borders of lagoons, or springs/seeps.

The Coastal Commission staff, however, has stated in the past that they do not consider this restrictive interpretation to be consistent with the Coastal Act requirements and view the list of plants as examples of the types of plants (i.e., hydrophytic plants) that can occur in wetlands.

Exhibit 4

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METHODS

WETLAND IDENTIFICATION METHODOLOGY

While the San Mateo County LCP defines the criteria for wetlands, it does not provide procedures or technical criteria for defining wetland boundaries. California Coastal Commission (1984) standards also do not define detailed procedures or technical criteria for wetland boundary assessments. Therefore, field investigations of potential wetlands occurring on the project site were conducted using the routine determination method given in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987). This method establishes specific sample sites within suspected wetlands that are then examined for hydrophytic vegetation, hydric soils, and wetland hydrology. The Manual also defines wetland criteria for each element using applicable sources of information. These technical criteria are summarized below.

Data obtained through these field procedures was then used to determine the presence of and boundary lines between a wetland and an adjacent upland using the LCP definition.

Technical Criteria

The LCP addresses three technical criteria to assess the presence of wetlands. These criteria are adequate hydrology (a mandatory element) that results in the formation of hydric soils or supports the presence of wetland vegetation (one of the two criteria must be met).

Vegetation Criterion. Hydrophytic species typically have morphological, physiological, and/or reproductive adaptation(s) which allow the plants to grow, effectively compete, reproduce, and/or persist in anaerobic soil conditions. The FWS National Wetland Inventory has developed indicator status categories to define hydrophytic species (Reed 1987). The categories are based on the estimated probability that plants would or would not occur in wetlands. These categories are listed below:

Indicator Categories

<u>Obligate Wetland (OBL)</u>. Occur almost always (estimated probability >99%) under natural conditions in wetlands.

Facultative Wetland (FACW). Usually occur in wetlands (estimated probability 67% to 99%), but occasionally found in nonwetlands.

<u>Facultative (FAC)</u>. Equally likely to occur in wetlands or nonwetlands (estimated probability 34% to 66%).

<u>Facultative Upland (FACU)</u>. Usually occur in nonwetlands (estimated probability 67% to 99%), but occasionally found in wetlands (estimated probability 67% to 99%). $E \times hibit$

<u>Obligate Upland (UPL)</u>. Occurs almost always (estimated probability >99%) under natural conditions in nonwetlands.

Plant species occurring in the obligate or facultative wetland categories represent species which would normally be found in wetlands (*i.e.*, hydrophytic species) and in most wetlands comprise the dominant character of the community. Facultative species have about an equal opportunity of being found in wetlands as in uplands. The term facultative in biological considerations means the ability to grow in other than normal conditions. Facultative species, because they can grow and be found in wetlands, are considered as positive indicators of wetland conditions. Facultative species, however, are a poor character to define upland/wetland boundaries or the presence of wetlands in the absence of other evidence such as hydric soils or wetland hydrology because of their broad tolerance and adaptability to a variety of conditions. Facultative species are probably better classified as mesophytic species rather than true hydrophytic species. In cooler and moister coastal areas in particular, facultative species often comprise the dominant species in upland areas. Facultative upland and upland plants are rarely present in wetlands and are not considered to be indicators of wetland conditions.

For this assessment, a dominance of plants in the obligate and facultative wetland categories as defined by Reed (1987) were generally considered to be positive indicators of wetlands. Facultative species were identified as wetland plants if hydric soils or wetland hydrology was present.

Soil Criterion. Hydric soils are defined by criteria set forth by the National Technical Committee for Hydric Soils (SCS and NTCHS 1991). These criteria are based on the depth and duration of soil saturation. A hydric soil is a soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part.

The following criteria reflect those soils that meet this definition:

1. All Histosols except Folists, or

2. Soils in Aquic suborder, Aquic subgroups, Albolis suborder, Salorthids great group, Pell great groups of Vertisols, Pachic subgroups, or Cumulic subgroups that are:

a. Somewhat poorly drained and have a frequently occurring water table at less than 0.5 foot (ft) from the surface for a significant period (usually more than 2 weeks) during the growing season, or

b. poorly drained or very poorly drained and have either:

(1) a frequently occurring water table at less than 0.5 ft from the surface for a significant period (usually more than 2 weeks) during the growing season if textures are coarse sand, sand, or fine sand in all layers within 20 inches (in), or for other soils

(2) a frequently occurring water table at less than 1.0 ft from the surface for a significant period (usually more than 2 weeks) during the growing season if permeability is equal to or greater than 6.0 in/horizon (h) in all layers within 20 in, or Exhibit

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(3) a frequently occurring water table at less than 1.5 ft from the surface for a significant period (usually more than 2 weeks) during the growing season if permeability is less than 6.0 in/h in any layer within 20 in, or

3. Soils that are frequently ponded for a long duration (7 days to one month for a single event) or very long duration (greater than 1 month for a single event) during the growing season, or

Soils that are frequently flooded for a long duration (7 days to one month for a single event) 4. or very long duration (greater than 1 month for a single event) during the growing season.

Hydric soils are commonly identified in the field by using indicators of persistently saturated soil, technically known as redoximorphic features. These features are caused by anaerobic, reduced soil conditions that are brought about by prolonged soil saturation. The most common redoximorphic features are distinguished by soil color, which is strongly influenced by the frequency and duration of soil saturation. Hydric soils tend to have dark (low chroma) colors which are often accompanied by reddish mottles (iron mottles), reddish stains on root channels (oxidized rhizospheres), or grey colors (gleying).

Common indirect field characteristics of hydric soils identified in the Corps Manual and CCC guidance (1994) are 1) a chroma of 2 or less with mottling and 2) a chroma of 1 or less without mottling.

Soil chroma is a measure of the brightness of a soil color. Low chroma soils, particularly dark brown and black soils, tend to have high organic matter contents. High organic matter is often a characteristic of wetlands, but is also common in non-wetland or upland communities such as grasslands. Chroma and mottling can also be reflective of historic soil development under aquic conditions and may be relic characteristics, lasting perhaps hundreds of years. Soils formed in alluvial and marine environments often exhibit such visual characteristics. Therefore, while chroma and mottling are useful field characteristics, they do not provide absolute evidence of active hydric soils in areas where natural conditions have been altered or where the soils may have developed under aquic conditions.

The native soils in the Miramar area are naturally very dark, thus low soil chroma was not considered a strong hydric indicator for purposes of this study. Soils were identified as hydric if accompanied by stronger, consistent hydric indicators such as mottling, rhizospheres, or gleying.

Hydrology Criterion. Wetland hydrology occurs in those areas where the presence of water has an overriding influence on characteristics of vegetation and soils due to anaerobic and reducing conditions, respectively (Corps 1987). Cowardin et al. (1979) describes several water regime modifiers to describe wetland and deepwater habitats. For nontidal, palustrine wetlands such as occur on the site, the modifiers range from permanently flooded to temporarily flooded. intermittently flooded and artificially flooded. However, the FWS classification system does not provide specific technical guidance to define each modifier.

The Corps Manual (1987) defines a similar suite of hydrologic zones for the purposes of defining wetland hydrology. These hydrologic zones are based on the duration of inundation and/or soil saturation during the growing season. The Corps Manual considers areas experiencing a duration of Exhibit 4

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continuous soil saturation or inundation greater than 12.5 percent of the growing season to have wetland hydrology. Areas with between 5 and 12.5 percent of the growing season (irregularly inundated or saturated) can be either wetlands or uplands. Areas with less than 5 percent are not wetlands.

The growing season is essentially year-round in coastal California regions such as the San Mateo coast. The percent figures above translate to a minimum of 45.6 days of continuous saturation or inundation to positively be a wetland. Irregularly inundated or saturated conditions range from approximately 18 days to 45 days. Thus, areas with a minimum of 18 days of continual saturation or inundation can be wetlands, but are not necessarily.

Because it is often impracticable to directly measure inundation duration periods, Corps procedures define a number of indicators which can be used to assess wetland hydrology. These indicators include recorded data such as stream gages and, more commonly used, field indicators such as visual observation of soil saturation, watermarks, drift lines, matted vegetation, sediment deposits, and drainage patterns. Technical guidance also considers the effects of atypical or abnormal rainfall in assessing the presence of wetland hydrology. Field observations of the presence of indicators (or lack there of) may need to be tempered or considered in relation to the presence of unusual rainfall patterns (i.e., above normal or below normal).

Field Methodology

An initial site assessment was conducted on March 6, 2002. A second assessment was conducted on March 27, 2002 by a LSA staff soil scientist and a botanist to collect field data. A follow-up assessment was conducted on December 10, 2003. Over an inch of precipitation had fallen in the area during the week prior to the March 27th survey and over 3.8 inches in the previous month (University of California 2001). The long term (1948 through 2001) average rainfall for the month of March is 3.94 inches.

Potential wetlands were identified by the presence of basins, ditches, or other depressed topographic features, suppressed vegetation, or the presence of hydrophytic vegetation. Sample sites were established at points with vegetation representative of the site and in potential wetland areas. Where a particular sample site exhibited wetland characteristics, additional sample sites were established as necessary to determine the location of the wetland boundary. LSA established three sample sites within the study area. Field data sheets for these sites are included as Appendix B, and their location are shown on the attached delineation map (Figure 3).

ENVIRONMENTALLY SENSITIVE HABITAT AREAS

The potential for environmentally sensitive habitat areas (ESHAs), including endangered species habitat, to occur on or adjacent to the property was evaluated based on visual assessment of the habitats on and adjacent to the property, review of existing available information (i.e., California Natural Diversity Data Base, the Mirada Surf Project DEIR [EIP Associates 1998]), and LSA's generally familiarity with the resources in western San Mateo County.

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Exhibit 4



RESULTS

WETLANDS

As previously described, the lot supports a relatively homogeneous mix of ruderal plants that are periodically mown. Dominant plant species on the site include bristly ox-tongue (*Picris echioides*, FAC), common vetch (*Vicia sativa*, UPL), and ripgut brome (*Bromus diandrus*, UPL).

Three samples sites were established on the lot in areas where wetland-adapted plant species seemed particularly numerous. One sample site (SS #1) was sampled in an area of wetter vegetation near the center of the property. Two additional sample points were established in a low area in the northeastern corner of the site, adjacent to Coronado Road. SS #2 was located within the low area, while SS #3 was located in a clearly upland location nearby. Figure 3 shows the location of the sample sites.

Vegetation

Vegetation within the Da Rosa parcel is composed of a ruderal mix of upland and marginally wetland herbaceous species. SS#1 was located in an area that was representative of the most hydrophytic portions of the plant community in the parcel. The site was dominated by bird's foot trefoil (*Lotus corniculatus*, FAC), Italian rye, and Bermuda buttercup (*Oxalis pes-caprae*, UPL). Based on these dominants, the site meets the federal hydrophytic vegetation criterion (two of the three dominant species can occur in wetlands); however, the two species are both classified as facultative (FAC) species, which by definition have about an equal chance of occurring in uplands as wetlands. Typically, species with a FAC ranking are poor indicators of wetland conditions, especially in coastal areas.

SS#2 describes the vegetation in the low elevation area in the northern corner of the property. This area falls within the shoulder of Coronado Avenue, which had recently been widened and resurfaced. The asphalt was new, and the road shoulders were freshly graded and largely devoid of vegetation. There was more vegetation around the SS #2 location, however, than along other parts of the road. Dominant plants at this sample site included bristly ox-tongue (FAC) and Italian ryegrass (FAC), both facultative plants.

The plant community surrounding the low area in the northern corner is representative of the remainder of the parcel in that it is largely composed of ruderal species with no particular affinity for wetlands.

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Exhibit 4

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Soils

The soil at SS#1 is very dark, but soils on all parts of the project site are dark, even when there is no other evidence of potential wetland conditions. No other evidence of hydric soil conditions was noted at SS#1.

Neither iron mottles, manganese mottles nor rhizospheres were present inside or outside of the low area at SS#2.

Hydrology

The project site is nearly level with small hummocks created by the deposition of fill. Water can drain off the property in almost any direction. There is a very slight slope down to Coronado Avenue and a slope on the northeast side of the property that leads down to the adjacent parcel on that edge of the parcel.

The area immediately northeast of the Da Rosa parcel contained shallow standing water when our March, 2002 assessment was made. This water was overland runoff that had been blocked and confined by the elevated fill surfaces on the Da Rosa property and the newly-refurbished Coronado Street roadway. This water may have been runoff from Coronado Avenue (the new road surface is center-crowned) and the adjacent lot to the east. This standing water extended into the low area on the northern corner of the Da Rosa property. No ponding was observed at this location or elsewhere in the vicinity of the property on December 10, 2003.

Regulatory Status of Site

The only potential wetland on the site is the 30-square-foot area in the northeast corner that was shallowly ponded in March, 2002. This ponding clearly developed as a result of blockage of overland runoff by the recent Coronado Street improvement work, by the previous placement and spreading of fill material on the Da Rosa property, and increased runoff from Coronado Street and adjacent residences.

No such ponding was observed in the northeast corner in December, 2003 following heavy rains. This area does not display evidence of persistent hydric soil conditions, and the plant cover is dominated by the same association of facultative grasses and herbs that covers the rest of the site. No facultative wetland or obligate wetland plants occur at the sample site.

The hydrologic parameter is questionable in the northeast corner and neither the hydric soils nor the wetland vegetation parameters have been met. This area does not appear to be a likely wetland per LCP criteria.

ENVIRONMENTALLY SENSITIVE HABITAT AREAS

The Da Rosa Parcel lies within an existing developed residential and commercial area. The site's character is of a disturbed vacant lot and there is no suitable habitat on or immediately adjacent to the parcel for the San Francisco garter snake, California red-legged frog, or other state or federally listed

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threatened or endangered species. The garter snake and frog are primarily associated with ponds, creeks, and other perennial or nearly perennial aquatic habitats and the associated uplands surrounding such wetlands.

There are no records for either species in the immediate area. The closest potential habitats are the Arroyo de en Medio which is approximately 900 feet south of the parcel, an unnamed drainage is 500 to 600 feet north of the property, and a small agricultural pond approximately 1,500 feet northeast of the property on the east side of Highway 1.

All of these sites border or go through existing urban environments. The property, as well as the three potential habitat areas are also separated by existing roads and/or residential development which effectively isolates movement between these three habitat areas at least in a direct corridor that would encompass the Da Rosa parcel.

The site also lies outside of the boundaries of the California red-legged frog critical habitat unit (Map Unit 14) designated by the Service for the on March 13, 2001 (61 FR 25813), but which was recently withdrawn as a result of the settlement agreement regarding the adequacy of the economic analysis for the designation.

Exhibit #

A-2-SMC-01-037

CONCLUSIONS

LSA identified one area of about 30 square feet on the Da Rosa property that is subject to transitory ponding. The ponding is a consequence of the recent improvements to Coronado Street (crowning, paving, new shoulders) which appears to have reduced the ability for storm water to drain from the Da Rosa and adjacent parcel onto the roadway. This area does not display evidence of hydric soils or wetland plant cover, and so does not meet LCP wetland criteria

No other areas of the property exhibit wetland characteristics sufficient to meet LCP or Corps of Engineers wetland criteria.

The property also does not qualify as an ESHA based on presence of sensitive species habitat, as no such species are likely to occupy or use the property.

A-2-SMC-01-032

Exhibit 4



June 11, 2002 Project G1339-01

Mr. David J. Byers Attorney at Law McCracken, Byers, and Haesloop 1528 South El Camino Real, Suite 306 San Mateo, CA 94402

RE: PRELIMINARY HYDROGEOLOGICAL EVALUATION PROPOSED NEW PRODUCTION WELL APN 048-013-570 CORONADO AVENUE SAN MATEO COUNTY, CALIFORNIA

Dear Mr. Byers:

In accordance with your authorization of April 11, 2002, this report presents the results of a hydrogeological evaluation of the subject property. We understand that it is proposed to construct a new well on the property for domestic water supply. At this date, the County of San Mateo is debating amendments to Chapter 4.68 of the County Code that would alter current ground-water adequacy requirements. Therefore, although the main purpose of this study was to determine the relative impacts of a new well on existing wells and wetlands in the immediate vicinity, it is important to note that it is preliminary in nature, and is not intended to necessarily satisfy specific future requirements of the County of San Mateo or those suggested by the California Coastal Commission.

LOCAL HYDROGEOLOGY

The site is underlain primarily by Quaternary-age younger alluvial fan deposits consisting of fine-grained unconsolidated surficial sands and silts (Brabb and Pampeyan, 1983). Existing drilling logs in the vicinity indicate that this unit rarely exceeds 40 feet in depth. Although permeable, much of this material is found above the ground-water table, and therefore is not generally considered to be a viable ground-water source. However, locally where saturated, the fan deposits can yield moderate to large quantities of water to wells.

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Marine terrace deposits, also of Quaternary age, underlie the alluvial fans. These materials consist of poorly consolidated to slightly indurated sands and gravels (Brabb and Pampeyan, 1983). The base of these sediments lies 70 to 80 feet below the surface in this area based on local well logs. Generally, the terrace deposits are considered to be the primary aquifer in the area, and will yield moderate to large quantities of water.

Cretaceous granitic rocks underlie the Quaternary deposits at depth. Because of their impermeable nature, the granite is not considered a major source of ground water, although small quantities can be obtained from well-developed fracture zones.

The property lies within the Arroyo de en Medio sub-basin of the Mid-Coast ground-water aquifer (Balance Hydrologics, Inc., 2002). Ground-water elevations in the vicinity of the parcel are estimated to vary between 25 and 30 feet above mean sea level (Geoconsultants, Inc., 1994). Therefore, it can be expected that ground water will occur at a depth of 5 to 10 feet below the surface.

FIELD RECONNAISSANCE

Our field reconnaissance was performed on April 16, 2002. We visually inspected the subject parcel on Coronado Avenue, and then searched the surrounding area for evidence of existing wells or significant wetlands. Within the area bounded by Cortez Avenue on the southeast, Magellan Avenue on the northwest, Mirada Road on the southwest, and Alameda Avenue on the northeast, no individual water wells were located. It appears from the water mains in front of the existing residences that most of the parcels are supplied by Coastside County Water District. Many of the parcels are vacant at present and are covered with grasses. However, no naturally occurring wetlands were found within the area of reconnaissance. This conclusion was documented earlier by San Mateo County (County of San Mateo Environmental Services Agency, 2001).

CONCLUSIONS

Based on our review of available hydrogeological literature on the parcel vicinity along with our field reconnaissance, we believe that the construction of a domestic well at the subject site will pose no adverse effects on the neighboring area. An aquifer test was performed on a well roughly 0.6 miles to the southeast (Geoconsultants, Inc., 1989). This well was constructed within the same Arroyo de en Medio sub-basin, and within the same geologic subsurface sequence as the proposed well on the subject parcel. The well exhibited only 12 feet of drawdown while pumping at a constant rate of 22.9 gallons per minute (gpm) during a 24-hour period. Since the County of San Mateo currently requires only 2.5 gpm for a period of 4 hours, we believe that the chances of developing an adequate supply for domestic use on the parcel are go

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Furthermore, analysis of the test results indicated that if the well were being pumped at a rate of 5 gpm, the impact on a well 50 feet away would be on the order of one foot of water level decline (Geoconsultants, Inc., 1989). Since there appear to be no wells within at least a 300-foot radius of the subject parcel, we believe that normal pumping of the proposed well will not impact existing wells. Similarly, it appears unlikely that there would be any adverse effects to any potential nearby wetlands outside the 300-foot radius.

As stated above, the County of San Mateo is considering amendments to their water code. Depending on the nature of the final changes, the conclusions reached here may need to be adjusted. Nevertheless, the following recommendations are presented as a guideline to satisfy both the County and the California Coastal Commission.

RECOMMENDATIONS

Based on this preliminary evaluation of a new well at the subject site, we present the following recommendations.

- 1. The drilling and construction of the new water well should be performed under the observation of a California Registered Geologist.
- 2. Samples of the cuttings should be obtained at 10-foot intervals for classification.
- Once the well drilling and construction have been completed, a 24-hour constant-rate pumping test should be performed with drawdown and recovery measurements made at selected intervals. Information from this test will allow for the determination of aquifer characteristics such as transmissivity and specific capacity.
- 4. Prior to the end of the pumping test, a sample of the water should be collected, transported to a certified laboratory, and analyzed for Title 22 constituents as required by County of San Mateo Division of Environmental Health.

LIMITATIONS

Geoconsultants, Inc. has provided its findings, recommendations, specifications, and professional advice after preparing such information in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the fields of engineering geology and hydrogeology. This acknowledgment is in lieu of all warranties either express or implied.

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Geoconsultants, Inc. makes no guarantee of the granting of well approval, well use, and/or pumping permits by city, county, state, or other governmental authorities. No guarantee is made that water will be found in any specific quantity or mineral quality at the proposed test well location or within specific depth intervals stated. Environmental changes, either naturally-occurring or artificially induced, may cause the quality and/or quantity of water produced to change with time. Therefore, we do not guarantee continued production or consistent mineral quality of ground water from any well in the future.

It has been a pleasure performing this service for you. If you have any questions regarding the data, conclusions, or recommendations, do not hesitate to call.

Sincerely,

GEOCONSULTANTS, INC.

John K. Hofer Engineering Geologist, EG-1065

Copies: Addressee (3) JKH:rls

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Memo

To: Farhad Mortazavi, Planning Division

From: Dean D. Petersen, PE, REHS Director, Environmental Health

Date: December 7, 2001

SUBJECT: PLANNING PROJECT 1999-00890 – APN 048-013-570 – PROPOSED DOMESTIC WATER WELL

Earlier this year, the San Mateo County Planning Commission raised concerns over potential salt-water intrusion due to a proposed domestic water well to serve the subject project. At that time I presented a brief and basic primer to the commission regarding the mechanics of salt-water intrusion. For the subject property, the risk of salt-water intrusion is unlikely for the following main reasons

- 1. There is no historic evidence of salt-water intrusion in the immediate area. Currently there are five (5) domestic wells in the area. These wells have been installed between the years1987 and 2000. Chemistry for each of these wells are well within drinking water standards and have not indicated any potential of seawater intake (see attached map).
- 2. Encroachment of seawater in coastal areas typically occurs when massive amounts of fresh water is pumped for an extended period, thus destroying the natural seawater/fresh-water barrier. The relatively small amounts of water drawn from the limited number of demestic wells in the area are not of concern.

Chapter 4.68 of the San Mateo County Ordinance Code addresses the installation and operation of domestic wells. This ordinance and well standards established by the State of California are enforced by Environmental Health. The established standards are intended to protect each individual water well from contamination and that the water is adequate and safe. Due to geologic uncertainty, it is impossible to predict the performance of any well without field and laboratory testing. However, there has not been any evidence presented to Environmental Health that single-family domestic wells in this area have either failed or negatively impacting groundwater or surrounding habitat. Until this occurs, there should be no need to require testing or studies beyond what would be required if this well in drilled.

