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

Th-9a

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Staff Report:	April 21, 2006
Hearing Date:	May 11, 2006
Staff:	Chris Kern – SF

STAFF REPORT – APPEAL
DE NOVO REVIEW

APPEAL NO.:	**A-2-PAC-05-018**
APPLICANT:	**North Pacifica LLC**
LOCAL GOVERNMENT:	**City of Pacifica**
ACTION:	Approval with Conditions
SUBSTANTIAL ISSUE	The Commission found that the appeal of the local government action raised a substantial issue on January 11, 2006.
PROJECT LOCATION:	4000 Block of Palmetto Avenue, Pacifica, San Mateo County APNs 009-402-250 and -260
PROJECT DESCRIPTION:	Subdivision and construction of a 43 residential unit development, including 19 single-family detached homes and 24 townhouses, 72,000 cubic yards of grading and related infrastructure improvements on 5.8 acres of vacant land
APPELLANT:	John Curtis
SUBSTANTIVE FILE DOCUMENTS:	See Appendix A
STAFF RECOMMENDATION:	Denial

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Exhibits

1. Location Map
2. Site Plan
3. Building Elevations
4. Grading Plan
5. TRA Initial Biological Survey, dated April 1997
6. Letter from WRA to the Syndicor Real Estate Group, dated April 30, 1997
7. WRA Wetland Delineation for the "Pacific Cove Parcel," dated August 1999
8. WRA revised jurisdictional wetlands map, dated November 30, 1999
9. Letter from WRA to the City of Pacifica, dated December 27, 1999
10. Letter from C. Fong, ACOE, to T. Fraser, WRA, dated January 3, 2000
11. Memorandum from Taylor Peterson, TRA, to Allison Knapp, City of Pacifica, dated January 24, 2000
12. WRA Wetland Delineation for the "Edgemar Road Parcel," dated March 2000
13. Letter from C. Fong, ACOE, to T. Fraser, WRA, dated May 11, 2001
14. Letter from WRA to the City of Pacifica, dated March 19, 2002
15. Letter from WRA to the City of Pacifica, dated May 22, 2002
16. Memorandum from Eben Polk, TRA, to Michael Josselyn, dated March 22, 2002
17. Letter from Lisa Stalteri to Peter Imhof, dated November 26, 2002
18. Letter from Robert J. Kalmbach, North Pacifica LLC to Peter Imhof, dated November 22, 2002
19. Memorandum from Commission Biologist John Dixon to Peter Imhof, et al., dated November 21, 2002
20. Wetlands Map
21. Vegetation Map

Executive Summary

The staff recommends that the Commission deny the permit application because the project is inconsistent with the policies of the Pacifica Local Coastal Program (LCP) concerning protection of wetlands, water quality, and ESHA.

The project would fill wetlands for residential development and would include substantial grading, vegetation removal, residential development, and road construction within the 100-foot buffer of wetlands located on and adjacent to the project site. Pacifica LUP Policy 14 does not permit filling of wetlands for residential development and restricts development within wetland habitat buffers. As such, the staff recommends that the Commission deny the permit on the grounds that the proposed development is inconsistent with Pacifica LCP wetland protection policies.

The project does not include feasible site design, source control, or treatment control best management practices (BMPs) to reduce the volume or pollutant load of storm water leaving the site. As a result, the project would result in a 70% increase in runoff of polluted storm water from the site, which would be discharged to the ocean without treatment. As such, the project is not designed or conditioned to protect the biological productivity and quality of coastal waters as required by LUP Policy 12. Therefore, the staff recommends that the Commission deny the permit on the grounds that the project is inconsistent with Pacifica LCP water quality protection policies.

Grading associated with the proposed development would directly impact coastal terrace prairie habitat on the adjacent "Fish" parcel. Grading in coastal terrace prairie habitat would conflict with the certified LCP because coastal terrace prairie meets the LCP definition of *environmentally sensitive habitat* (ESHA) and LUP Policy 18 prohibits development in ESHA. Therefore, the staff recommends that the Commission deny the permit on the grounds that the project is inconsistent with Pacifica LCP ESHA protection policies.

Denial of the proposed permit will not eliminate all economically beneficial or productive use of the applicant's property or unreasonably limit the owner's reasonable investment backed expectations of the subject property. Denial of this coastal development permit application would still leave the applicant available alternatives to use the property in a manner that would be consistent with the policies of the LCP.

For example, since the wetlands are all located on or near the southeastern and southern boundaries of the project site, development could be clustered in the northwestern portion of the site, allowing a similar number of residential units as approved by the City to be developed while avoiding and buffering the wetlands. Realignment of a portion of Edgemar Road and changes to the grading plan would also be necessary to avoid impacts to coastal terrace prairie ESHA on the adjacent "Fish" parcel. A clustered design would also reduce impervious surface coverage, which along with other feasible site design, source control and treatment control BMPs would allow the site to be developed in a manner that meets the water quality requirements of the LCP.

Project revisions necessary to bring the development into conformity with the certified LCP while feasible, would involve substantial site design and engineering work. Such fundamental project revisions are beyond the scope of project changes typically achieved through

Commission-imposed conditions of approval on a permit application. Rather, it is the project applicant's responsibility to revise the project plans to address the issues that the Commission has identified.

1.0 Staff Recommendation

The staff recommends that the Commission deny Coastal Development Permit Application A-2-PAC-05-18.

Motion

I move that the Commission approve Coastal Development Permit No.A-2-PAC-05-018 for the development as proposed by the applicant.

Staff Recommendation of Denial

Staff recommends a NO vote. Failure of this motion will result in denial of the permit and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution to Deny the Permit

The Commission hereby denies a coastal development permit for the proposed development on the grounds that the development will not conform with the policies of the City of Pacifica certified Local Coastal Program. Approval of the permit would not comply with the California Environmental Quality Act because there are feasible mitigation measures or alternatives that would substantially lessen the significant adverse impacts of the development on the environment.

2.0 Findings and Declarations

The Commission hereby finds and declares:

2.1 Project Description and Location

The proposed development consists of a subdivision and development of 43 residential units, including 19 single-family detached homes and 24 townhouses, an interior driveway and road network (including the improvement of the Edgemar Road right-of-way), necessary infrastructure and a private park/open space area on a total of 5.8 acres of land (the 4.2-acre bowl site plus approximately 1.6 acres of roadway construction and grading) at the 4000 block of Palmetto Avenue in Pacifica (APNs 009-402-250 and -260) (**Exhibits 1-3**). The project would involve in excess of 36,000 cubic yards each of cut and fill and substantial grading of the sloped site to create building pads (**Exhibit 4**). As part of the project, an existing 18-inch culvert draining to the ocean would be capped and buried and would not be incorporated into the new drainage system.

In November 2003, the applicant cleared and grubbed the site removing vegetation and disturbing the soil. The clearing and grubbing was the first stage of the development approved under the City's CDP. However, because the CDP has been suspended pending the outcome of the Commission's determination of appealability and final resolution of any appeals, the clearing and grubbing was unpermitted development. For purposes of evaluating the develoment for conformity with the policies of the certified LCP for the de novo review of the project, the Commission will review the project as if this unpermitted development had notoccurred.

The proposed development is located in the City of Pacifica north of Highway 1, east of Palmetto Avenue and west of the Pacific Point housing site. The project area is in the Fairmont West Neighborhood and is zoned R-3-G (Multiple-Family Residential Garden District), which allows for an average density of 10 to 15 dwelling units per acre. However, as stated in both the Land Use Plan (LUP) portion of the City's certified LCP and the City's General Plan:

> Site conditions will determine specific density and building type. Site conditions include slope, geology, soils, access, available utilities, public safety, visibility, and environmental sensitivity.

Thus, the actual allowable density for any particular site may be lower than the 10 to 15 dwelling unit per acre range indicated where site conditions dictate.

The site consists of two parcels: a 4.2-acre sloping, bowl-shaped parcel ("the Bowl") and a 1.6-acre parcel comprised of the Edgemar Road right-of-way. The land to the west of the project area, between Palmetto Avenue and the shoreline, is presently undeveloped and consists of coastal scrub habitat.

2.2 Wetlands

Both the LUP portion and the IP portion of the Pacifica LCP contain wetland definitions. The LUP defines wetlands as:

> [L]and where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes. In certain types of wetlands vegetation is lacking and soils are poorly developed or absent. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deep-water habitats.

This definition closely tracks the definition of wetlands contained in Section 13577(a) of the Commission's regulations. The LCP wetland definition contained in Pacifica Zoning Code Section 9-4.4302(aw) is effectively the same as the Coastal Act Section 30121 definition of wetland with the exception of the two, additional terms, "streams" and "creeks", stating:

> "Wetland" shall mean land which may be covered periodically or permanently with shallow water, including saltwater marches, freshwater marshes, streams, creeks, open or closed brackish water marshes, swamps, mudflats, or fens.

The Commission's December 16, 2005 determination of appealability was based, in part, on the finding that the proposed development would be located within 100 feet of wetlands as defined in Section 13577(a) of the Commission's regulations. In addition to determining that three wetland areas located on and adjacent to the project site meet the definition of wetland contained in Section 13577(a) for the purpose of determining appeal jurisdiction, the Commission's findings also conclude that:

> Since the LCP wetland definitions mirror the operative language of both Coastal Act Section 30121 and Section 13577(a), the scope of the wetland definition under the LCP is effectively identical to that contained in the Coastal Act and Commission regulations. More particularly, the broader Coastal Act and Pacifica Zoning Code definitions encompass and inform the definition contained in 14 CCR Section 13577(a) and the LUP.

> *If the subject property contains wetlands that meet the standards of 14 CCR Section 13577(a), then the subject property also contains wetlands that meet the more general wetland definitions contained in both the Coastal Act and the certified LCP*. [Emphasis added.]

Accordingly, the Commission has determined that the areas identified in its December 16, 2005 action as Wetland Areas 1, 2, and 3 are not only wetlands for the purpose of determining Commission appeal jurisdiction, but that these areas also meet the LCP definition of wetland. As of the date of this staff report, the applicant has not submitted new information rebutting the Commission's previous findings regarding the presence of wetlands on, and adjacent to, the site. For the reasons set forth herein and as explained in the Commission's findings regarding its December 16, 2005 determination of appealability, the Commission finds that Wetland Areas 1, 2, and 3 are wetlands within the meaning of the LCP and the Coastal Act.

2.2.1 Evidence Concerning Presence of Wetlands

The following correspondence, studies and reports prepared in the course of the City's permit action and CEQA review have addressed the presence of wetlands on and near the project site:

- Thomas Reid Associates ("TRA") initial biological survey, dated April 1997 (**Exhibit 5**)
- Letter from Michael Josselyn, Wetland Research Associates ("WRA") to the Syndicor Real Estate Group, dated April 30, 1997 (**Exhibit 6**)
- WRA wetland delineation for the "Pacific Cove" Parcel, dated August 1999 (**Exhibit 7**)
- WRA revised jurisdictional wetlands map, dated November 30, 1999 (**Exhibit 8**)
- Letter from Thomas Fraser, WRA, to the City of Pacifica, dated December 27, 1999 (**Exhibit 9**)
- Army Corps letter to Tom Fraser, dated January 3, 2000 (**Exhibit 10**)
- Memorandum from Taylor Peterson, TRA, to Allison Knapp, City of Pacifica, dated January 24, 2000 (Peer review of the July 1999 WRA wetland delineation and the December 27, 1999 WRA LCP wetland delineation letter) (**Exhibit 11**)
- WRA wetland delineation for the "Edgemar Road Parcel," dated March 2000 (**Exhibit 12**)
- Army Corps letter to Tom Fraser, dated May 11, 2001 (**Exhibit 13**)
- Draft EIR, March 2002
- Letter from Michael Josselyn, WRA, to the City of Pacifica, dated March 19, 2002 (**Exhibit 14**)
- Letter from Michael Josselyn, WRA, to the City of Pacifica, dated May 22, 2002 (**Exhibit 15**)
- FEIR, June 2002
- Memorandum from Eben Polk, TRA, to Michael Josselyn, dated March 11, 2002 (**Exhibit 16**)

The applicant has refused Commission staff access to the project site (**Exhibits 17 and 18)**. As a result, the Commission biologist has not visited the site.

Under the wetland definition stated in both the City's certified LCP and 14 CCR Section 13577(a)(1), wetlands are defined as "land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes . . .." As this definition has consistently been applied by the Commission, the presence of any one of the three Army Corps wetland criteria, wetland hydrology, a predominance of wetland vegetation, or hydric soils, can be sufficient evidence to qualify an area as a wetland.

The standard practice for wetland field delineation is contained in the 1987 Corps of Engineers Wetlands Delineation Manual. Guidelines are provided for the field identification of hydrophytic vegetation, hydric soils, and wetland hydrology.

Wetland vegetation is a community characteristic based on the relative frequency of upland and wetland species among the dominant vegetation. A predominance of wetland plants is demonstrated when greater than 50 percent of the dominant species present are listed as FAC, FACW, or OBL in the U.S. Fish and Wildlife Service List of Plant Species That Occur in Wetlands, Region O – California. The estimated likelihood of occurring in wetlands is between 33% and 67% for FAC species, between 67% and 99% for FACW species, and > 99% for OBL species.

Hydric soils are soils that are formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part. The resultant physical and chemical conditions produce characteristic changes in the soil that can be detected in the field. Low chroma colors (due to the leaching and removal of feric iron) and redoximorphic features (analogous to rust concentrations) are the two most common field indicators of hydric soils. Flooding or ponding for more than seven consecutive days, the presence of a rotten egg smell, and the accumulation of organic matter also indicate hydric soils.

Wetland hydrology is demonstrated when field indicators of inundation or saturation are present. One "primary" or two "secondary" indicators are required to demonstrate hydrology. The best indicator is the observation of standing water or soil saturation, which is indicated by the accumulation of water in a soil pit. Other "primary" indicators are watermarks and drift lines, which are indicative of inundation and algal mats, which fall under the category "sediment deposits." Secondary indicators are the presence of oxidized rhizospheres (root channels) associated with living plant roots in the upper 12 inches of the soil, presence of water stained leaves, local soil survey hydrology data for identified soils, and the FAC-neutral test of the vegetation. The FAC-neutral test is the determination of predominance of wetland indicator species after excluding all FAC plants.

Available information, including the initial TRA site survey, the WRA wetland delineations and the various WRA correspondence, the TRA peer review, and the evidence and conclusions presented in the EIR, indicates that at least two areas within 100 feet of the approved development exhibit the presence of all three wetland criteria: (1) the area associated with what the applicant's biologist refers to as the unmaintained "drainage ditch" along Edgemar Road (Wetland Area 1) and (2) the excavated area on the parcel south of Edgemar Road adjacent to the project site (Wetland Area 2). In addition, the weight of the evidence supports a finding that two

other areas on the project site also qualify as wetlands: (1) what WRA's August 1999 delineation characterizes as "upland areas" dominated by arroyo willow that appear to carry winter surface flow and may contain a ponded area (Wetland Area 3) and (2) a wetlands area on the west side of the site (Wetland Area 4).

Following publication of the Commission staff's November 21, 2002 report, Commission staff received a copy of a memorandum from TRA to Michael Josselyn, dated March 11, 2002, summarizing and discussing field observations made by TRA staff during visits to the proposed project site and adjoining Edgemar parcel on March 27, 2001, January 23, 2002, February 5, 2002, and March 8, 2002. The memorandum referenced five photographs of the site, showing observations of very wet conditions, including flowing and standing water, and wetland vegetation (**Exhibit 16**). The TRA memorandum notes observations of "water at and above the surface of the Bowl site as well as the Fish parcel" during field visits and "evidence of potentially saturated soils, as suggested by surface water lingering for a stretch of multiple days" on sloped areas on days when it had not rained immediately prior to observation. The photos referenced in the memorandum, provided to Commission staff by TRA, show some of the inundated areas. The TRA memorandum also notes the presence of "multiple hydrophytic species (including FACW and OBL based on the USFWS plant list) in the area dominated by the arroyo willow, including rushes and California blackberry." The TRA memorandum concludes that, while these observations alone do not determine whether LCP wetlands are present, "the possibility for LCP wetlands [on the project site and adjoining Edgemar parcel] should be re-evaluated." Noting that the LCP wetland definition is broader than the Army Corps definition, TRA further concludes that, in the absence of analysis by a wetland delineator, the EIR "must assume that limited LCP wetlands may be present given [TRA's] recent observations."

The applicant has refused Commission staff's request to visit the project site. As a result, the Commission biologist has been unable to view any of the areas first-hand. Because the applicant has denied the Commission access to the project site, the Commission infers that evidence of LCP wetlands may be present on the site because the applicant apparently believes a site visit would uncover evidence supporting the existence of wetlands. Even without drawing this inference from North Pacifica's reluctance to provide information about the property, the evidence supports a finding that wetlands are present on and adjacent to the project site. Nonetheless, the foregoing inference bolsters such a finding. In the absence of complete information, the Coastal Act requires the Commission to act in a manner protective of coastal resources. See, e.g., Public Resources Code § 30009 (the Coastal Act "shall be liberally construed to accomplish its purposes and objectives").

As discussed below, WRA's conclusion that the areas associated with what WRA refers to as the unmaintained "drainage ditch" are not LCP wetlands is based on an apparent misunderstanding or misapplication of the provisions of the Coastal Act, 14 CCR Section 13577(a), and the City's certified LCP. In determining whether a wetland is protected under the Coastal Act or an LCP, the quality of the wetland is legally irrelevant (*Kirkorowicz v. California Coastal Commission*, 83 Cal. App. 4th 980 (2000)). The fact that certain areas exhibiting wetland criteria may be the result of man-made conditions is therefore not relevant in applying this definition.

Each of these areas, the evidence showing them to be wetlands under the City of Pacifica's certified LCP, and the applicant's contentions that they are not wetlands, are discussed in sequence below:

Wetland Area 1

The area that WRA refers to as a "drainage ditch" in its March 2000 delineation of the Edgemar Road Parcel qualifies as a wetland under City of Pacifica's certified LCP. The March 2000 WRA delineation found that all three wetland criteria were present in this area, but that the area was exempt as a drainage ditch excavated in uplands (**Exhibit 12**).[1] The copy of the WRA March 2000 delineation provided to the Commission by the City is missing the wetland map on page 7 of the report. (The City has advised that it does not have a copy of the map.) However, based on the description of this area in the delineation and in WRA's March 19, 2002 letter to the City of Pacifica, this area lies within the public right-of-way on the eastern edge of the approximately 50-foot wide Edgemar Road, which straddles the boundary of the Bowl and Edgemar parcels, and is located less than 100 feet from the approved development.

The March 2000 WRA delineation determined that "[a]ll three wetland criteria are present" in this area, based on field work performed on June 11, 1999, but that the area is exempt as a drainage ditch. WRA's March 19, 2002 letter states that other than a greater prevalence of invasive plants, "the site conditions have remained unchanged" since the date of WRA's earlier site observations in connection with the delineation.

Hydrology

The applicable data sheet (Plot 2A) attached to WRA's March 2000 delineation records that "[h]ydrologic indicators [are] present" in this area, including the primary indicators of inundation and saturation of the upper 12 inches of soil (**Exhibit 12**).

WRA's March 19, 2002 letter to the City acknowledges that, although this area may be man-made, it exhibits "prolonged hydrology" (**Exhibit 14**). WRA additionally notes in its March 19, 2002 letter to the City of Pacifica that "[v]egetation and silt has accumulated in the ditch and its drainage has been impaired. Following storm events, water flows over the paved portion of Edgemar Road towards the Bowl parcel downslope of Edgemar Road." WRA further notes that this area "receives water from areas upslope of Edgemar Road including runoff from storm drains along the Pacific Coast Highway" and noted observations of ponding on Edgemar Road from water overflowing from the blocked ditch.

Therefore, the Commission finds that Wetland Area 1 is a wetland as defined by the Pacifica LCP because the area exhibits wetland hydrology.

TRA's March 11, 2002 memorandum notes field observations of water flowing across Edgemar Road made on March 27, 2001, January 23, 2002, and February 5, 2002 and of standing water on both sides of the paved portion of the road on February 5, 2002 (**Exhibit 16**). While the memorandum does not pinpoint the exact location of the water observed, the standing water observed "on both sides of the paved road" on February 5, 2002 indicates observations of standing water in Wetland Area 1, which is located immediately adjacent to Edgemar Road.

[1] The DEIR concluded based on this information that two, small areas south of Edgemar Road "meet Corps wetland criteria and are thus considered wetlands under the City of Pacifica's [LCP] criteria" (DEIR, IV-B-2) and that these areas are "within 100 feet of the site" (DEIR, IV-B-13).

Photo 4, in particular, referenced in the TRA memorandum, "shows ponding along Edgemar Road on the Fish parcel" that was also observed by TRA staff in March 2000 (**Exhibit 16**).

Vegetation

The data sheet for Plot 2A attached to WRA's March 2000 delineation states that the "[s]ite is dominated by hydrophytic vegetation" and lists the dominant plant species as Arroyo willow *(salix lasiolepsis)* (FACW) (**Exhibit 12**). Therefore, the Commission finds that the area adjacent to Edgemar Road is a wetland as defined by the City's LCP because the area supports the growth of hydrophytes.

Soils

The area also has hydric soils. The data sheet for Plot 2A attached to WRA's March 2000 delineation states, "Hydric soil indicators are present" in this area, including an aquic moisture regime and gleyed or low-chroma colors after sampling of 12-inch soil profiles (**Exhibit 12**). Therefore, the Commission finds that Wetland Area 1 is a wetland as defined by the Pacifica LCP because the area has hydric soils.

Conclusion—Wetland Area 1

In June 1999, WRA conducted a wetland delineation of the Edgemar Road Parcel that was described in a March 2000 report. All three wetland criteria were found to be present in this area. Arroyo willow (FACW) made up 100% of the dominant species present, demonstrating a preponderance of hydrophytic vegetation. The soil was characterized as having low chroma colors and an aquic moisture regime (saturated and reduced soils) which are both demonstrative of hydric soils. Finally, wetland hydrology was apparent because the soil was covered with water and saturated in the upper 12 inches. Therefore, since wetland hydrology, wetland vegetation, and hydric soils were present, the Commission finds that this area is a wetland under the Pacifica LCP.

No Exception for Agricultural Ponds and Reservoirs or Drainage Ditches

As noted above, WRA found that all three wetland criteria are present at Wetland Area 1, but concluded that the area is not a wetland. In its analysis, WRA erroneously concludes that man-made features, even if satisfying wetland criteria, are exempt from the LCP definition of wetlands.

However, the Pacifica LCP does not contain such exemptions from the definition of wetlands. In addition, the Section 13577(a) wetland definition contains only one exception for man-made features, specifically for "wetland habitat created by the presence of and associated with agricultural ponds and reservoirs" under certain conditions. The fact that certain areas exhibiting wetland features may be the result of man-made conditions is therefore not relevant in applying this definition unless these conditions relate to agricultural ponds and reservoirs. In concluding that the area along the Edgemar right-of-way does not constitute a wetland, WRA relies on Appendix D of the Commission's 1981 Statewide Interpretive Wetland Guidelines, which includes an exception for drainage ditches:

> For purposes of identifying wetlands using technical criteria contained in this guideline, one limited exception will be made. That is, drainage ditches as defined herein will not be considered wetlands under the Coastal Act. A drainage ditch shall be defined as a narrow (usually less than 5 feet wide), man-made non-tidal ditch excavated from dry land.

WRA states that since the area was once a drainage ditch, it falls within the 1981 Guidelines drainage ditch exception. However, the 1981 Guidelines were intended as guidance in applying the policies of the Coastal Act prior to LCP certification. Coastal Act Section 30620(a)(3) provides:

> Interpretive guidelines designed to assist local governments, the commission, and persons subject to this chapter in determining how the policies of this division shall be applied in the coastal zone *prior to the certification of local coastal programs*. However, the guidelines *shall not supersede, enlarge, or diminish the powers or authority of the commission* or any other public agency. [Emphasis added.]

Section 30620(a)(3) of the Coastal Act expressly states that the guidelines are designed to provide assistance in applying the policies of the Coastal Act prior to LCP certification. For purposes of authorizing development consistent with the certified LCP, the 1981 Guidelines accordingly do not supersede, enlarge or diminish the Commission's authority to evaluate the presence of wetlands under the Pacifica LCP. Moreover, the Pacifica LCP was certified after the 1981 guidelines and does not contain an exclusion for drainage ditches. To read an additional exception into the certified LCP would narrow the scope of the definition and contradict its plain wording.

Notably, the applicant's biological consultant, while applying the 1981 Guidelines exception, himself acknowledges that due to lack of maintenance and siltation the area no longer effectively functions as a drainage ditch. For example, as WRA notes in its March 19, 2002 letter, "Vegetation and silt has accumulated in the ditch and its drainage has been impaired. Following storm events, water flows over the paved portion of Edgemar Road towards the Bowl parcel downslope of Edgemar Road." WRA further notes that the area it refers to as the drainage ditch area "receives water from areas upslope of Edgemar Road including runoff from storm drains along the Pacific Coast Highway" and notes observations of ponding on Edgemar Road from water overflowing from the blocked ditch. These observations indicate that, even if the area in question was originally excavated as a drainage ditch, long neglect has caused it to lose its function as such. Therefore, even if the 1981 Guidelines were applicable in evaluating the presence of wetlands under the Pacifica LCP, it is highly questionable whether as a factual matter the exception referenced in the Guidelines would apply to the area in question because through long lack of maintenance and siltation the area's function as a drainage ditch has been compromised.

In correspondence to Commission staff, the applicant has also argued that the drainage ditch cannot qualify as a wetland under the holding of *Beach Colony II v. California Coastal Commission*, 151 Cal. App. 3d 1107 (1984). According to the applicant, this decision provides authority for the rule that wet areas that are the result of human activity or man-made structures do not qualify as wetlands under the Coastal Act. However, *Beach Colony II* addresses the relationship of the common law doctrine of avulsion to the Coastal Act and applies to the limited circumstance of land that becomes inundated as the result of a sudden, violent event. That decision is not applicable to the conditions on this project site. While the wetland characteristics

of certain portions of the project site, including the area characterized by WRA as a drainage ditch, may be the direct or indirect result of human activities, these conditions did not come about as the result of a sudden, violent event and do not come within the sole exception for agriculturally-related constructed features specified in Section 13577(a)(2).

Therefore, as discussed above and based on the presence of all three wetland criteria in this location, the Commission finds that the area characterized by the applicant's biological consultant as a "drainage ditch" along the eastern edge of the Edgemar Road right-of-way is a wetland within the meaning of the Pacifica LCP as well as 14 CCR Section 13577.

Wetland Area 2

WRA's March 2000 wetland delineation of the Edgemar Road Parcel, located adjacent to the project site, indicates the presence of a second wetland area exhibiting all three wetland criteria located within 100 feet of the approved development (**Exhibit 12**). WRA's May 22, 2002 comment letter on the DEIR contends that this area is man-made and has low biological value, but does not contradict the results of its earlier delineation (**Exhibit 15**). For the reasons discussed below, the Commission finds that this area is a wetland under 14 CCR Section 13577.

According to information provided by WRA, this second wetland area lies within 100 feet of Edgemar Road. The WRA May 22, 2002 letter attaches a figure showing the wetland area in relation to Edgemar Road and the graded portion of the site and acknowledges that a 100-foot distance, measured from the "center of this pit", intersects Edgemar Road (**Exhibit 15**).

The Edgemar Road right-of-way intersects with Palmetto Avenue and divides the two undeveloped "Fish" and "Bowl" sites. Presently, although some remnants of pavement remain within the right-of-way, Edgemar Road is essentially an unimproved public right-of-way and does not function as a travel way. The entire alignment of Edgemar Road would be improved as part of the development approved by the City on the Bowl site. Improvement of Edgemar Road is necessary to serve the approved development. At this time, no development has been approved on the "Fish" site. Thus, unless development on the "Fish" site is approved in the future, the sole function of Edgemar Road would be to serve the development that is the subject of this dispute.

The applicant argued in comments on the DEIR that the improvement of Edgemar Road was not part of the project. However, the improvement of Edgemar Road is required solely for the purpose of providing access to the proposed development. Accordingly, the FEIR responded that the proposed improvements to Edgemar Road by any entity, public or private, came within the CEQA Guidelines' definition of "project" (FEIR, III-17). Based on this information and the results of WRA's March 2000 delineation, the approved development is located within 100 feet of the boundaries of Wetland Area 2.

The wetland delineation prepared by WRA dated March 2000 for the "Edgemar Road Parcel," based on data collected on June 11, 1999, recorded field observations indicating this area is characterized by the presence of all three wetland criteria.

Hydrology

The data sheet for Plot 1A attached to WRA's March 2000 delineation states that hydrologic indicators and algal mats are present, including sediment deposits as a primary indicator of

wetland hydrology (**Exhibit 12**). Therefore, the Commission finds that Wetland Area 2 is a wetland as defined by the Pacifica LCP because the area exhibits wetland hydrology.

Vegetation

The data sheet for Plot 1A attached to WRA's March 2000 delineation states that the "[s]ite is dominated by hydrophytic vegetation" and lists the dominant wetland plant species as *Rumex crispus* (FACW-), *Hordeum brachyantherum* (FACW), *Juncus balticus* (OBL) and *Lotus comiculatus* (FAC) (**Exhibit 12**). Therefore, the Commission finds that the Wetland Area 2 is a wetland as defined by the Pacifica LCP because the area has a predominance of wetland vegetation.

Soils

The data sheet for Plot 1A attached to WRA's March 2000 delineation states that hydric soil indicators are present in this area, including gleyed or low-chroma colors based on sampling of 12-inch soil profiles (**Exhibit 12**). Therefore, the Commission finds that the Wetland Area 2 is a wetland as defined by the Pacifica LCP because the area has hydric soils.

The Army Corps determined that wetlands identified in Wetland Area 2 did not come under its jurisdiction because of their isolated nature (**Exhibit 13**). The fact that the Army Corps did not find wetlands on the project site that are subject to its jurisdiction under Section 404 of the Clean Water Act is not dispositive of the question, since the definition contained in the Pacifica LCP is broader than the Corps applicable Section 404 definition. The DEIR concluded based on the information in the wetland delineation that two small areas south of Edgemar Road "meet Corps wetland criteria and are thus considered wetlands under the City of Pacifica's [LCP] criteria" (DEIR, IV-B-2) and that these areas are "within 100 feet of the site" (DEIR, IV-B-13). After the applicant submitted "extensive correspondence" arguing that these wet areas did not qualify as LCP wetlands, the FEIR concluded specifically with respect to this wetland area that "[t]he City *has not made a determination as to whether this wet area meets the jurisdictional definition of an LCP wetland* and does not need to make such a determination for the EIR" because the area is upslope from the graded area of the project and would not be affected (FEIR, I-4) [emphasis added].

Conclusion—Wetland Area 2

WRA delineated this area as part of its June 1999 fieldwork. The depression at least periodically ponds water and all three wetland criteria are present. The dominant species present were meadow barley (FACW), Baltic rush (OBL), bird-foot trefoil (FAC), and curly dock (FACW). Thus, there was a prevalence of hydrophytic vegetation. The soils had low chroma coloration in association with abundant, distinct mottles (a redoximorphic feature), which satisfies the hydric soil criterion. Hydrology was demonstrated by the presence of sediment deposits, which indicates previous inundation.

Because this area exhibits all 3 wetland criteria as documented in WRA's March 2000 delineation, the Commission finds that it qualifies as a wetland within the meaning of the Pacifica LCP and is located within 100 feet of the approved development and shown on the attachment to WRA's May 22, 2002 comment letter.

Wetland Area 3

The April 1997 TRA initial biological survey concluded, without specifying its exact location, that central coast riparian scrub habitat, that "may be characterized as a wetland," covered approximately 1.1 acres of the site and adjoining parcel, and determined that wetland species including arroyo willow, twinberry, rushes, sedges, and English ivy were present along with at least "one small pool approximately 4 feet wide x 10 feet long x 1 foot deep" in the riparian scrub habitat. The TRA initial survey, while it did not include a scaled map showing the exact location of this area, described it as being located on the project site. The TRA initial survey recommended a wetland delineation to determine the presence of other wetland criteria (**Exhibit 5**). WRA's April 30, 1997 letter to the Syndicor Real Estate Group, documenting WRA's April 28, 1997 site visit also notes areas of central coast riparian scrub habitat on the site that "are dominated by wetland plants and therefore warrant a more in-depth inspection to determine the presence of the other two criteria [hydric soils and wetland hydrology] necessary for a federal jurisdictional wetland" and concludes that wetland hydrology may also be present on the site (**Exhibit 6**). WRA's August 1999 wetland delineation for the Pacifica Cove Parcel makes no mention of this area.

WRA's December 27, 1999 letter recognized one area dominated by arroyo willow and one area dominated by twinberry on the project site, but erroneously concluded that the site did not contain LCP wetlands because both of these species are classified as facultative (FAC) species, equally likely to occur in uplands and wetlands, and only secondary indicators of wetland hydrology and no hydric soils were present (**Exhibit 9**). (Secondary indicators of wetland hydrology are not as significant an indication as primary indicators.) In fact, arroyo willow is a facultative wet (FACW) species, found 67% to 99% of the time in wetlands, and not a FAC species as stated by WRA. The Army Corps determined that no Corps jurisdictional wetlands were present on the project site (**Exhibit 10**). However, the fact that the Army Corps did not find wetlands on the project site that are subject to its jurisdiction under Section 404 of the Clean Water Act is not dispositive of the question, since the definition contained in the Pacifica LCP is broader than the Corps applicable Section 404 definition.

TRA's January 24, 2000 peer review of the December 27, 1999 WRA LCP wetland delineation letter documents several discrepancies in WRA's application of the LCP definition. The peer review notes that WRA's LCP analysis ignores evidence of hydric soils found by the July 1999 WRA delineation. The TRA peer review also observes that WRA's LCP analysis finds only the facultative species willow and twinberry to be dominant in areas on the site, where the July 1999 WRA delineation had found several obligate and facultative plant species to be dominant. The Commission has been unable to obtain a copy of the referenced July 1999 WRA delineation as the applicant has refused to allow its wetland consultants to provide Commission staff with documentation and the City did not have a copy of this delineation (**Exhibit 18**).

The March 11, 2002 TRA memorandum includes extensive observations of wet conditions and wetland vegetation in Wetland Area 3 made by TRA staff during visits to the proposed project site on March 27, 2001, January 23, 2002, February 5, 2002, and March 8, 2002 (**Exhibit 16**). The TRA memorandum notes observations of "evidence of potentially saturated soils, as suggested by surface water lingering for a stretch of multiple days" on days when it had not rained immediately prior to observation in this area. Photographs of the site, referenced in the memorandum, show observations of very wet conditions, including flowing and standing water, and wetland vegetation (**Exhibit 16**). The TRA memorandum concludes that, while these

observations alone do not determine whether LCP wetlands are present, "the possibility for LCP wetlands should be re-evaluated."

Hydrology

As noted above, TRA's April 1997 initial biological survey recorded observations of at least "one small pool approximately 4 feet wide x 10 feet long x 1 foot deep" in the riparian scrub habitat on the project site, without specifying its exact location. The August 1999 WRA wetland delineation included no discussion of this area. The observations noted in TRA's initial survey indicate areas that were inundated or saturated for periods of long duration, which are primary indicators of wetland hydrology. The March 11, 2002 TRA memorandum includes extensive observations of wet conditions in Wetland Area 3 made by TRA staff during visits to the proposed project site on March 27, 2001, January 23, 2002, February 5, 2002, and March 8, 2002. This memorandum recounts that on March 27, 2001, the TRA field investigator "observed water seeping across the portion of Edgemar Road that winds into the willow/riparian area, and noted that water had pooled in small depressions in this sloped area. Photo 1 shows some dark streaks on Edgemar Road." On January 23, 2002, TRA staff "observed very wet conditions in the riparian scrub area. Photo 2 shows sheet water flowing across Edgemar Road . . ." On February 5, 2002, TRA staff "observed wet conditions, including water flow across the same part of Edgemar Road, and standing water on both sides of the paved road. Photo 3 shows the same sheet flow as that observed on 1/23/02 . . . " On March 8, 2002, TRA staff "noted saturation of soil on the up-slope side of arroyo willows on the Bowl site." These observations that the area is subject to inundated or saturated for periods of long duration are primary indicators of wetland hydrology. Therefore, the Commission finds that Wetland Area 3 is a wetland as defined by the Pacifica LCP because the area exhibits wetland hydrology.

Vegetation

TRA's April 1997 initial biological survey determined that wetland species including arroyo willow, twinberry, rushes, sedges, and English ivy were present in this area (**Exhibit 5**). In addition, WRA's April 30, 1997 letter to the Syndicor Real Estate Group, documenting WRA's April 28, 1997 site visit also notes areas of central coast riparian scrub habitat on the site that "are dominated by wetland plants . . ." (**Exhibit 6**). The TRA January 24, 2000 peer review notes that WRA's December 27, 1999 LCP analysis found only the facultative species willow[2] to be dominant in this area on the site, where the July 1999 WRA delineation had found several obligate and facultative plant species to be dominant. The Commission has been unable to obtain a copy of the referenced July 1999 WRA delineation.[3] The March 11, 2002 TRA memorandum notes observations of wetland vegetation in Wetland Area 3 made by TRA staff during visits to the proposed project site in 2001 and 2002. The TRA memorandum notes the presence of "multiple hydrophytic species (including FACW and OBL based on the USFWS plant list) in the area dominated by the arroyo willow, including rushes and California blackberry." On their March 5, 2002 site visit, TRA staff noted the obligate wetland species

[2] Arroyo willow *(salix lasiolepsis*) is classified as FACW not FAC.

[3] The applicant has refused to allow its wetland consultants to provide the Commission with copies of the July 1999 delineation, and the City did not have a copy of this delineation in its files. The August 1999 delineation of the project site does not record any observations of obligate wetland species, and does not explain the reason for revisions deleting such observations contained in the earlier July 1999 delineation.

Juncus effusus "in areas just upslope as well as adjacent to the willows on the Bowl site." Based on the available evidence, the Commission finds that Wetland Area 3 is a wetland as defined by the Pacifica LCP because the area has a predominance of wetland vegetation.

Soils

The TRA January 24, 2000 peer review makes reference to evidence of hydric soils found by the July 1999 WRA delineation. As noted, the Commission has been unable to obtain a copy of the referenced July 1999 WRA delineation, but assumes in the absence of any contradictory evidence that the reference is accurate. Because the applicant has refused to allow the Commission's Biologist to examine WRA's July 1999 Wetland Delineation and to visit the site, the Commission relies on the January 24, 2000 TRA Review. Therefore, the Commission finds that Wetland Area 3 is a wetland as defined by the Pacifica LCP because available evidence indicates that the area meets the hydric soils criteria.

Conclusion—Wetland Area 3

The available evidence weighs in favor of a finding that portions of the riparian scrub habitat on the site qualify as wetlands under the Pacifica LCP because of the presence of wetland vegetation and wetland hydrology and the likely presence of hydric soils. As noted above, the fact that the Army Corps did not find wetlands on the project site that are subject to its jurisdiction under Section 404 of the Clean Water Act is not dispositive of the question, since the definition contained in the Pacifica LCP is broader than the Corps' applicable Section 404 definition. The fact that the applicant has denied the Commission access to the project site further supports the Commission finding that evidence of LCP wetlands exists on the site because the applicant apparently believes a site visit would provide additional evidence that wetlands are present on the site. In the absence of complete information, the Coastal Act requires the Commission to act in a manner protective of coastal resources.

The April 1997 TRA initial biological survey identified a wetland area in the stand of willows that extends from the southeastern portion of the Pacifica Cove parcel across Edgemar Road onto the eastern portion of the Edgemar property. The exact location was not specified and no map was provided in the report. This area meets at least two of the standard wetland criteria. Arroyo willow (FACW) was the only dominant plant species. Thus, hydrophytes are predominant at the site. Associated species included twinberry (FAC), rushes and sedges (generally FACW or OBL), and English ivy (not listed). Although the Commission's Biologist has not been afforded the opportunity to review the supporting evidence, the only information available to the Commission at the time supports the determination that hydric soils are present at the area. A pond about 4 ft x 10 ft x 1-ft deep was present, which meets the hydrology criterion. The Commission finds that both a preponderance of hydrophytic vegetation and wetland hydrology were present and that this area is a wetland under the Pacifica LCP. Therefore, based on the available evidence, the Commission accordingly finds that central coast riparian scrub and willow habitat described in the April 1997 TRA initial biological survey, located on the project site, is a wetland within the meaning of the Pacifica LCP and is located within 100 feet of the approved development.

Wetland Area 4

WRA's August 1999 report based on data collected on June 11, 1999 identified a wetland area on the west side of the site that met all three standard wetland criteria. The wetland delineator recorded the presence of oxidized rhizospheres and algal mats, which are demonstrative of wetland hydrology; the presence of low chroma colors associated with redoximorphic features and organic streaking, which are demonstrative of hydric soils; and a single dominant plant, twinberry (FAC), which is demonstrative of a predominance of hydrophytic vegetation. WRA's August 1999 wetland delineation of the Pacifica Cove parcel, based on field information collected on June 11, 1999, identified a wetland area on the west side of the site meeting all three ACOE jurisdictional criteria that "had two secondary hydrology indicators, oxidized root channels and algal mats" present, was "dominated by hydrophytic vegetation," particularly, twinberry (*Lonicera invulcrata*) (FAC), and "had hydric soils indicators present."

However, when wetland delineators from the Army Corps of Engineers visited the site on November 29, 1999, they found no field evidence of any one of the standard wetland criteria. The Army Corps concluded, despite WRA's initial observations indicating the presence of all three wetland indicators, that this area did not qualify as a wetland for purposes of Army Corps jurisdiction (**Exhibit 10**). To resolve this discrepancy, the Commission Biologist discussed the matter with Dan Martel, a senior delineator for the Corps who was present on the November site visit. Mr. Martel found that the soil colors were higher in chroma than those characteristic of hydric soils and that redoximorphic features were not present in the soils. Similarly, he could find no evidence of the hydrology indicators that had previously been reported, despite the fact that algal mats are persistent and relatively obvious features. Mr. Martel did find that twinberry was present, but that the community character of the vegetation was upland, although small patches may have been dominated by twinberry. The Commission Biologist concluded that the initial reporting of hydrology and hydric soil indicators was probably due to inexperience on the part of the delineator and was in error (**Exhibit 19**). Although small patches may be mostly twinberry, this indicator species is in the frequency class FAC, which means that it is expected to occur in uplands and wetlands with equal probability. Given the site characteristics described by Mr. Martel, the small depression appears to be upland and twinberry is apparently not acting as a hydrophyte in this situation.

TRA's January 24, 2000 peer review of the December 27, 1999 WRA LCP wetland delineation letter, however, documents several discrepancies in WRA's application of the LCP definition. Although it accepts WRA's premise that areas considered "drainage ditches" are not wetlands falling within ACOE's jurisdiction, the peer review notes that WRA's LCP analysis ignores the hydric soils found by the July 1999 WRA delineation. The TRA peer review also observes that WRA's LCP analysis finds only the facultative species willow and twinberry to be dominant in areas on the site where the July 1999 WRA delineation had found several obligate and facultative plant species to be dominant. Without a site visit by Commission staff, the Commission cannot rule out the possibility that the area is a wetland under the Pacifica LCP.

Hydrology

Field observations noted in the August 1999 WRA wetland delineation record the presence of secondary indicators of hydrology, including oxidized root channels in the upper 12 inches of soil. As discussed above, the Commission biologist's conversations with the Army Corps wetland specialist who visited the site call these observations into question.

Vegetation

Field observations recorded in the August 1999 WRA wetland delineation indicate a predominance of hydrophytic vegetation, specifically, twinberry (*Lonicera invulcrata*) (FAC) (Plot 1A).

The TRA January 24, 2000 peer review notes that WRA's December 27, 1999 LCP analysis found only the facultative species twinberry to be dominant in areas on the site, where the July 1999 WRA delineation had found several obligate and facultative plant species to be dominant. The Commission has been unable to obtain a copy of the referenced July 1999 WRA delineation to explain this inconsistency. Without the July 1999 WRA delineation, the Commission is unable to verify these conclusions.

Soils

Field observations recorded in the August 1999 WRA wetland delineation state the presence of hydric soil indicators, including gleyed or low chroma colors, organic streaking in sandy soils, and common, faint mottles in 12-inch soil profiles (Plot 1A). As discussed above, the Commission biologist's conversations with the Army Corps wetland specialist who visited the site call these observations into question.

Conclusion—Wetland Area 4

As noted, the applicant has denied Commission staff the opportunity to visit the site. A site visit by the Commission Biologist would be desirable to resolve inconsistencies in the evidence contained in the file documents and independently confirm the wetland status of this area under the Pacifica LCP.

2.2.2 Wetland Fill

Wetland Area 1 is characterized in the applicant's March 2000 wetland delineation as a drainage ditch that lies along the edge of the Edgemar Road right-of-way. The precise location of Wetland Area 1 in relation to the proposed development is not clear based on the City's administrative record for the proposed development, but it appears to be located just outside of the limits of grading for the construction of Edgemar Road (**Exhibit 20**). Thus, it appears that the proposed development would not directly impact Wetland Area 1, but that grading and road construction would occur within a few feet of this wetland. It also appears that two of the approved detached single-family homes would be located within 100 feet of Wetland Area 1. Wetland Area 2 is located approximately 80 feet south of the approved Edgemar Road on the adjacent "Fish" parcel and would not be directly impacted by the proposed development. However, the grading and road construction for Edgemar Road would occur within approximately 80 feet of Wetland Area 2 (**Exhibit 20**). Wetland Area 3 comprises approximately 1.1 acres of riparian scrub located in the southeast corner of the bowl parcel. The proposed development would result in fill of a portion of Wetland Area 3 for the construction of detached single-family homes and related development and would also include substantial grading, road construction and construction of additional residential units within 100 feet of Wetland Area 3 (**Exhibit 20**).

Pacifica LUP Policy 14 closely follows Coastal Act Policy 30233 stating in relevant part:

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this policy, where there is no feasible less environmentally damaging alternative and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(l) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.

(2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

(3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland; provided, however, that in no event shall the size of the wetland area used for such boating facility, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, be greater than 25 percent of the total wetland area to be restored.

(4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities.

(5) 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.

(6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.

(7) Restoration purposes.

(8) Nature study, aquaculture, or similar resource dependent activities.

(b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable longshore current systems.

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game shall be limited to very minor incidental public facilities, restorative measures, nature study.

Zoning Code Section 9-4.4403(e) specifies in relevant part:

(1) No new development shall be permitted within a recognized wetland habitat area;

(2) Limited new development may be permitted within a recognized wetland habitat buffer area subject to the following standards:

> . . .
>
> (ii) All diking, dredging, and filling activities shall comply with the provisions of the California Coastal Act, Sections 30233 and 30607.1;
>
> . . .
>
> (v) Alteration of the natural topography shall be minimized;
>
> . . .
>
> (vii) Alteration of landscaping shall be minimized unless the alteration is associated with restoration and enhancement of the wetlands;

The proposed development would fill a portion of Wetland Area 3 for the construction of residential development in conflict with LUP Policy 14 and Zoning Code Section 9-4.4403(e)(1), which expressly prohibit wetland fill for residential development. Therefore, the Commission finds that the proposed development is inconsistent with the Pacifica LCP.

2.2.3 Wetland Buffers

The proposed project would also include substantial development adjacent to Wetland Areas 1, 2, and 3 and must therefore be evaluated for consistency with the LCP wetland buffer policies. As discussed below, the Commission finds that a 100-foot buffer is necessary under the LCP to protect Wetland Area 3 from adverse impacts of the proposed development and that a reduced buffer would be allowable under the LCP for Wetland Areas 1 and 2.

Zoning Code Section 9-4.4302(f) establishes the LCP wetland buffer as follows:

> (f) "Buffer" shall mean an area of land adjacent to primary habitat, which may include secondary habitat as defined by a qualified biologist or botanist, and which is intended to separate primary habitat areas from new development in order to ensure that new development will not adversely affect the San Francisco garter snake and wetlands habitat areas.

Because neither this policy nor any other policies in the Pacifica LCP prescribe a specific wetland buffer distance, the width of wetland buffers under the Pacifica LCP must to be determined on a case-by-case basis.

Wetland buffer areas are undeveloped areas surrounding wetlands that act to protect the wetlands from the direct effects of nearby disturbance (both acute and chronic), and provide necessary habitat for organisms that spend only a portion of their life in the wetlands such as amphibians, reptiles, birds, and mammals.

Although not a standard under either the Coastal Act or the Pacifica LCP, the Commission usually considers a 100-foot buffer to be the minimum distance necessary to protect wetland habitat from adverse impacts related to development such as polluted runoff from developed areas, construction related erosion and sedimentation, and disturbance from noise, light, traffic and other activities related to increased human use and development, and to provide upland habitat areas. One hundred feet is by far the most common wetland buffer distance imposed by the Commission and local governments throughout the Coastal Zone. However, in some cases

substantially greater wetland buffers are required when a wetland supports species that are particularly sensitive to disturbance impacts such as nesting birds or species that need large upland habitat areas near wetlands such as the California red-legged frog or San Francisco garter snake. Buffers of less than 100 feet are generally allowed only in cases where a wetland provides very limited habitat value and where restoration or enhancement of the wetland habitat is infeasible. Reduced buffers may also be necessary in cases where no feasible alternative exists that would allow a private property owner a reasonable economic use.

In this case, the most sensitive of the three wetland areas appears to be Wetland Area 3. Wetland Area 3 is described in the Environmental Impact Report (EIR) for the project as comprising approximately 1.1 acres of central coast riparian scrub dominated by arroyo willow and containing other wetland indicator plants. The EIR states that the project site does not provide habitat for any federally protected species, including the California red-legged frog or San Francisco garter snake, and that "[n]o sensitive or protected species were observed on the site during biological surveys." However, the EIR also states with respect to Wetland Area 3 that:

> The riparian habitat at the site provides potential nesting and foraging habitat for several unlisted, but potentially sensitive species that are designated as California Species of Special Concern. Coopers hawk (*Accipiter cooperii)*, sharp-shinned hawk *(Accipiter striatus)*, northern harrier hawk (*Circus cyaneus)*, merlin (*Falco columbrius)*, saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*), and yellow warbler (*Dendroica petechia*) could utilize the site. The initial biological survey of the site was done in the nesting season, and no nesting activity was observed for these species. The project will remove much of the riparian/wetland vegetation, and will greatly reduce the function and availability of the site for these bird species. The project is also likely to greatly reduce the value of the site for other more common bird species (DEIR pg. IV-B-10).

Thus, while Wetland Area 3 is identified as *potential* nesting and foraging habitat for several sensitive bird species, the local administrative record does not provide evidence of actual use of this area by particularly sensitive species. Rather, the evidence shows that Wetland Area 3 provides wetland habitat functions and values typical of coastal riparian wetlands. As such, the Commission finds that neither an increased buffer based on use by highly sensitive species, nor a decreased buffer based on severely limited habitat value would be justified for Wetland Area 3. The Commission therefore finds that a 100-foot buffer should be provided to protect Wetland Area 3 from adverse impacts of the proposed development.

Wetland Areas 1 and 2 are smaller than Wetland Area 3 and, based on the information contained in the EIR, do not provide the same habitat values. As such, a somewhat reduced wetland buffer may be appropriate under the LCP for these wetlands and the approximately 80-foot distance between the proposed development and Wetland Area 2 would likely meet the requirements of the LCP buffer policies. However, little or no buffer is provided between the proposed development and Wetland Area 1.

Substantial grading, residential development and road construction would occur within 100 feet of Wetland Area 3 in conflict with Zoning Code Sections 9-4.4302(f) and 9-4.4403(e). The proposed grading and road construction for Edgemar Road would occur within a few feet of Wetland Area 1. Although a somewhat reduced buffer may be permissible under the LCP's case-by-case wetland buffer policy, the proposal to provide essentially no buffer between the development and Wetland Area 1 would not meet the requirements of Zoning Code Sections 9-

4.4302(f) and 9-4.4403(e). Given the limited habitat values of Wetland Area 2, the approximately 80-foot distance between the proposed development and this wetland would meet the LCP habitat buffer policies. Thus, the proposed development would be located within the habitat buffers of Wetland Areas 1 and 3 but outside of the buffer of Wetland Area 2 if reduced to 80 feet.

In accordance with Zoning Code Section 9-4.4403(e), development may only be located in wetland buffer areas if alteration of the natural topography and landscaping are minimized. The proposed development would include substantial grading and removal of existing vegetation within the buffer areas of Wetland Areas 1 and 3 in conflict with these requirements. Therefore, the Commission finds that the proposed development would be inconsistent with Pacifica LCP Zoning Code Sections 9-4.4302(f) and 9-4.4403(e) because the development would be located with the wetland habitat buffers of Wetlands 1 and 3 and would involve significant alteration of the natural topography and landscaping.

2.3 Water Quality

Polluted runoff is a significant issue in Pacifica that threatens the health of the City's popular beaches and leads to beach closures. The San Francisco Bay Regional Water Quality Control Board lists the Pacific Ocean at Linda Mar, San Pedro, and Rockaway Beaches in Pacifica as impaired water bodies due to high coliform counts from urban runoff/storm sewers and nonpoint source pollution (RWQCB 2002). Linda Mar beach, which is a popular Bay Area surfing beach, has frequently exceeded the State's standards for beach water quality during wet weather periods.

Pacifica LUP Policy 12 closely follows Coastal Act Policy 30231 stating:

> The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

According to the project EIR, the proposed development would increase storm water runoff from the site by approximately 70% due to increased impervious surface coverage, and would substantially decrease the infiltrative function and capacity of the site (DEIR pg. II-14). Pollutants commonly found in runoff associated with residential use include petroleum hydrocarbons including oil and grease from vehicles, heavy metals, synthetic organic chemicals including paint and household cleaners, soap and dirt from washing vehicles, dirt and vegetation from yard maintenance, litter, fertilizers, herbicides, and pesticides, and bacteria and pathogens from animal waste. The discharge of these pollutants to coastal waters can cause cumulative impacts such as: eutrophication and anoxic conditions resulting in fish kills and diseases and the alteration of aquatic habitat, including adverse changes to species composition and size, excess nutrients causing algae blooms and sedimentation increasing turbidity which both reduce the penetration of sunlight needed by aquatic vegetation which provide food and cover for aquatic species, disruptions to the reproductive cycle of aquatic species, and acute and sub-lethal toxicity

in marine organisms leading to adverse changes in reproduction and feeding behavior. These impacts reduce the biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes, reduce optimum populations of marine organisms, and have adverse impacts on human health.

To minimize impacts to the biological productivity and quality of coastal waters, development should be designed and carried out in a manner that controls the volume, velocity and pollutant load of storm water leaving the developed site. Critical to the successful function of post-construction structural Best Management Practices (BMPs) in removing pollutants in storm water to the maximum extent practicable, is the application of appropriate design standards for sizing BMPs. The Commission finds that sizing post-construction structural BMPs to accommodate (infiltrate, filter or treat) the runoff from the 85th percentile storm runoff event, in this case, is equivalent to sizing BMPs based on the point of diminishing returns (i.e. the BMP capacity beyond which, insignificant increases in pollutants removal (and hence water quality protection) will occur, relative to the additional costs.

The proposed development is not designed or conditioned to control the volume or pollutant load of storm water leaving the project site or to infiltrate, filter or treat the runoff from the 85th percentile storm runoff event. As proposed, runoff from the project site would be directed to a 54-inch diameter, 180-foot storm drainpipe with a 24-inch outlet pipe and a 22-inch restrictor plate. This drainpipe would connect to the City's existing storm water system, which discharges untreated storm water to the ocean. The proposed storm water detention system is designed to attenuate the rate of storm water discharge to the City's storm water system at peak flow during a 100-year storm event to less than the pre-development peak flow. Thus, the project would control the velocity of runoff from the site meeting one of the above-stated storm water pollution prevention goals. However, the proposed development does not include measures to control either the volume or pollutant load of the runoff leaving the site. Thus, the proposed development would result in a significant increase in polluted runoff from the project site, which would be discharged, without treatment to marine waters.

In order to meet the requirements of LUP Policy 12, the project should incorporate site design and source control BMPs to reduce the volume of runoff and pollutants from the site such as:

- Reducing total impervious surface coverage
- Using permeable materials for driveways and walkways
- Minimizing directly connected impervious surfaces
- Directing rooftop and driveway runoff to onsite pervious areas such as landscaped areas, and avoiding routing rooftop runoff to the roadway, drainage ditches, or other storm water conveyance systems
- Minimizing vegetation clearing and grading
- Maximizing canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native, drought tolerant trees and large shrubs
- Using infiltration basins to increase infiltration
- Using cisterns to collect and store runoff for use in landscaping irrigation

Such measures would decrease the volume of runoff and pollutants from the project site and are required in order to protect the biological productivity and quality of coastal waters pursuant to LUP Policy 12. In addition, given the significant increase in offsite runoff resulting from the proposed development, structural or treatment control BMPs to remove pollutants from the storm water prior to discharge to marine waters are necessary to meet the requirements of the City's LCP.

As proposed however, runoff from the development site would be directed to a detention system to reduce the rate of discharge at peak flow. This system would serve only to attenuate the velocity of runoff discharged from the site. However, all of the increased runoff from the development would be discharged, without treatment to remove pollutants, into the ocean. Thus, the proposed development would unnecessarily result in a significant increase in storm water pollution.

The proposed development does not include feasible site design and source control measures to reduce the volume of runoff and pollutants from the project site. In addition, a project of this scale should include structural BMPs adequately sized and designed to accommodate (infiltrate, filter or treat) the runoff from the 85th percentile storm runoff event consistent with the Commission's implementation of the State's Coastal Nonpoint Source Pollution Control Program.

Failure to include feasible site design and source control BMPs to reduce the volume of runoff and pollutants from the site, and to provide treatment controls to remove pollutants before discharging runoff to the ocean is inconsistent with the requirements of LUP Policy 12 to protect the biological productivity and quality of coastal waters. Therefore, the Commission finds that the proposed development is inconsistent with the water quality protection policies of the Pacifica LCP.

2.4 ESHA

Grading associated with the proposed development would directly impact coastal terrace prairie habitat on the adjacent "Fish" parcel. As further discussed below, grading in coastal terrace prairie habitat would conflict with the certified LCP because coastal terrace prairie meets the LCP definition of *environmentally sensitive habitat*, and LUP Policy 18 prohibits development in environmentally sensitive habitat areas.

LCP Zoning Code Section 9-4.4302 defines environmentally sensitive habitat as follows:

> "Environmentally sensitive habitat" shall mean an area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem, and which would be easily disturbed or degraded by human activities or development.

Pacifica LUP Policy 18 closely tracks Coastal Act Policy 30240 stating:

> Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas. Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would

> significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

The project EIR identifies an area as coastal terrace prairie located within the limits of the grading area for the proposed development on the "Fish" parcel adjacent to the project site (**Exhibit 21**). The EIR includes a list of plants identified on (and adjacent to) the site corresponding with different identified habitat types. Three of the plant species listed as within the coastal terrace prairie habitat area are considered diagnostic species of this rare native grassland. The administrative record does not contain a vegetation survey indicating the relative abundance of these species or other information necessary to fully evaluate the quality of the identified coastal terrace prairie. However, the vegetation data contained in the EIR does not contradict the conclusion reached in the EIR that this area has been properly identified as coastal terrace prairie. In the absence of any evidence to the contrary, the Commission finds that the area indicated in the EIR as coastal terrace prairie is correctly identified.

Coastal terrace prairie is dense, tall grassland dominated by both sod and tussock forming perennial grasses. The distribution of coastal terrace prairie is discontinuous from Santa Cruz County north into Oregon, and may include different combinations of associated plant communities depending on the conditions at a particular location. The diversity of plant species in coastal terrace prairie is among the highest in grasslands of North America (Stohlgren et al. 1999). Coastal terrace prairie contains more plant species per square meter than any other grassland in North America. In addition, there are numerous rare, threatened, and endangered species associated with this habitat type. The California Native Plant Society (CNPS) reports:

> "…prairie habitats support as many as 250 species of native wildflowers. For Santa Cruz County, the CNPS lists 13 species of concern in their Inventory of Rare and Endangered Plants of California (1995). The diversity of these prairie wildflower species, in turn, supports an even greater diversity of insect species, many of which are severely reduced in numbers (e.g., Schinia sp.- a genus of colorful diurnal noctuid moths; and solitary bees such as in the families Andrenidae and Anthophoridae) and some of which teeter on the verge of extinction (e.g., Cicindela Ohlone, Ohlone Tiger Beetle and Adela oplerella, Opler's long horned moth). Some known species have already been lost (e.g., Lytta molesta, molestan blister beetle) and, undoubtedly, others have disappeared before even being described. The reduction in numbers of plant species and numbers of populations of insects leads to a collapse in the prey base for many other species- birds, shrews, and bats, for instance." (CNPS, www.cruzcnps.org/CoastalTerracePrairie.html)

As such, coastal terrace prairie is an especially valuable habitat because of its special nature and role in the ecosystem.

A recently completed study by Defenders of Wildlife ranked twenty-one United States ecosystems as the nation's most endangered; California's native grasslands ranked as the fifth most endangered ecosystem (Noss and Peters, 1995). Other studies have found that California has lost over 99% of its native grasslands, including 90 percent of the north coastal bunchgrass (Sierra Club, 2004, Noss and Peters, 1995). The loss of coastal terrace prairie has continued over the years due to development, conversion of habitat to agricultural uses, exotic weed invasion, habitat fragmentation, and erosion. The loss of coastal terrace prairie habitat over time has not been quantified, but is considered significant by researchers in the field. Thus, the available evidence demonstrates that coastal terrace prairie is a rare habitat.

The California Department of Fish and Game has identified coastal terrace prairie as rare habitat. Additionally, other local governments in the Central Coast area of California have recognized the need to protect remaining coastal terrace prairie habitat. The City of Carmel-by-the-Sea has included coastal terrace prairie as an Environmentally Sensitive Habitat Area (ESHA) under the City's General Plan/Coastal Land Use Plan that includes policies for protection of the City's coastal environmental resources.

As discussed above, coastal terrace prairie is a rare and especially valuable native grassland habitat that supports several rare and endangered species and plays an important role in the ecosystem. The importance of coastal terrace prairie habitat is widely recognized by both government and non-government organizations, including the California Department of Fish and Game. As such coastal terrace prairie is an environmentally sensitive habitat (ESHA) as defined in LCP Zoning Code Section 9-4.4302.

The City did not evaluate the proposed grading of coastal terrace prairie identified in the EIR for conformity with LUP Policy 18. As such, the local administrative record provides little information about this impact and does not quantify the loss of coastal terrace prairie habitat that would result from the proposed development. Nonetheless, the area is clearly shown as located within the "grading line" in Figure IV-B-1 of the EIR (**Exhibit 21**).

Grading for road construction and residential development is not a use that is dependent on coastal terrace prairie habitat and is therefore prohibited in such areas pursuant to LUP Policy 18. Therefore, the Commission finds that the proposed development is inconsistent with LUP Policy 18.

2.5 Alternatives

Denial of the proposed permit will not eliminate all economically beneficial or productive use of the applicant's property or unreasonably limit the owner's reasonable investment backed expectations of the subject property. Denial of this coastal development permit application would still leave the applicant available alternatives to use the property in a manner that would be consistent with the policies of the LCP.

First, as discussed earlier, although the site is zone for 10 to 15 units per acre, the LCP is clear that the specific density of a site shall be determined by existing site constraints:

> Site conditions will determine specific density and building type. Site conditions include slope, geology, soils, access, available utilities, public safety, visibility, and environmental sensitivity.

This provision was certified in 1980. Thus, it is clearly reasonable that this applicant should not expect the allowable density of the site to exceed that which could be accommodated consistent with existing site constraints, such as the presence of wetlands and sensitive habitat.

Nevertheless, it appears likely that a project density similar to that proposed by the applicant could be accommodated while respecting the requirements of the LCP. For example, since the wetlands are all located on or near the southeastern boundary of the project site, development could be more tightly clustered in the northwestern portion of the site, allowing a similar number of residential units as approved by the City to be developed while avoiding the wetlands. Because Wetland Area 3 is located between the proposed development and Wetland Area 1, a

100-foot buffer from Wetland Area 3 would also serve as an adequate buffer for Wetland Area 1. Changes to the grading plan and realignment of Edgemar Road could also avoid impacts to Coastal Terrace Prairie ESHA.

A clustered design would also reduce impervious surface coverage, which, along with other feasible site design, source control, and treatment control BMPs to increase onsite infiltration and reduce the volume of runoff and the pollutant load of storm water leaving the project site, would allow the site to be developed consistent with the water quality requirements of the LCP.

Project revisions necessary to bring the development into conformity with the certified LCP while feasible, would involve substantial site design and engineering work. For example, to avoid wetland fill and provide adequate buffers between the development and Wetland Areas 1 and 3, it appears that at least five of the proposed detached single-family homes and two of the proposed triplex townhouse buildings would need to be either eliminated or relocated and Edgemar Road would need to be realigned. Avoiding wetland fill and providing adequate habitat buffers would also require significant changes to the proposed site grading. Realignment of a portion of Edgemar Road and changes to the grading plan would also be necessary to avoid impacts to coastal terrace prairie ESHA on the adjacent "Fish" parcel. Such fundamental project revisions are beyond the scope of project changes typically achieved through Commission-imposed conditions of approval on a permit application. Rather, it is the project applicant's responsibility to revise the project plans to address the issues that the Commission has identified.

2.6 Alleged Violation

In November 2003, the applicant undertook development consisting of clearing and grubbing the project site. Because the City-approved CDP has been suspended pending the outcome of the Commission's determination of appealability and final resolution of any appeals, the clearing and grubbing constituted unpermitted development. Although development has taken place prior to Commission action on the CDP, consideration of the CDP on appeal by the Commission has been based solely upon the policies of the certified LCP. Commission action on the appeal does not constitute a waiver of any legal action with regard to the alleged violation, nor does it constitute an admission as to the legality of any development undertaken on the site without a coastal development permit.

2.7 California Environmental Quality Act (CEQA)

Section 13096 of the California Code of Regulations requires Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, as conditioned 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 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 Commission incorporates its findings on LCP policies at this point as if set forth in full. For the reasons described in the Commission findings above, the Commission finds that there are feasible mitigation measures and alternatives that would substantially lessen the significant adverse impacts of the development on the environment. Feasible alternatives to the proposed development include clustering the development in the northern two-thirds of the site to avoid the wetlands, coastal terrace prairie ESHA, and reduce impervious surface coverage. By incorporating site design, source control

and treatment control BMPs to increase onsite infiltration and to reduce the volume of runoff and the pollutant load of storm water leaving the project site, the water quality requirements of the LCP could be feasibly met. The Commission thus finds that the proposed project cannot be found to be consistent with the requirements of the Coastal Act and does not conform to the requirements of CEQA.

Appendix A–Substantive File Documents

California Department of Fish and Game, September 2004, Natural Diversity Database: Rarefind 2 Database, California Department of Fish and Game, Sacramento, California.

California Native Plant Society, Santa Cruz Chapter, Plant Communities of Santa Cruz County, Coastal Terrace Prairie, http://www.cruzcnps.org/CoastalTerracePrairie.html

City of Pacifica, Pacifica Bowl Development Project Environmental Impact Report, Public Review Draft, March 2002.

City of Pacifica, Pacifica Bowl Development Project, Response to Comments and Final Environmental Impact Report, June 2002.

Hayes, Grey, 2003. Conservation Strategy for Coastal Prairie Conservation

Holland, Robert F., Ph. D., California Department of Fish and Game, October 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California.

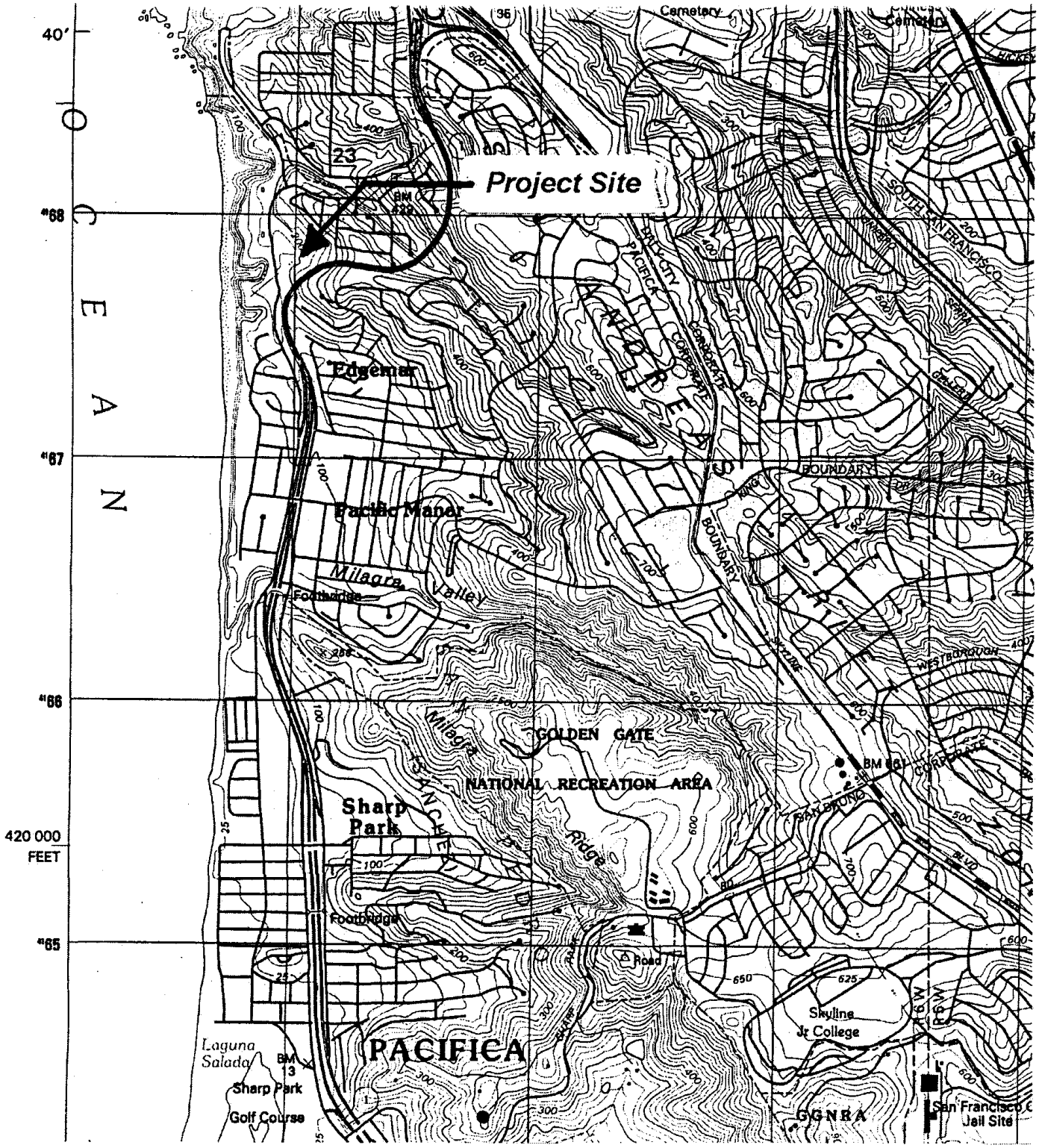
Natural Resources Defense Council, Testing the Waters, 2005.

Reed Noss and Robert L. Peters, Endangered Ecosystems: A Status Report on America's Vanishing Habitat and Wildlife, (Washington, D.C.: Defenders of Wildlife, 1995.

San Francisco Bay Regional Water Quality Control Board, CWA Section 303(d) List of Water Quality Limited Segment, 2002.

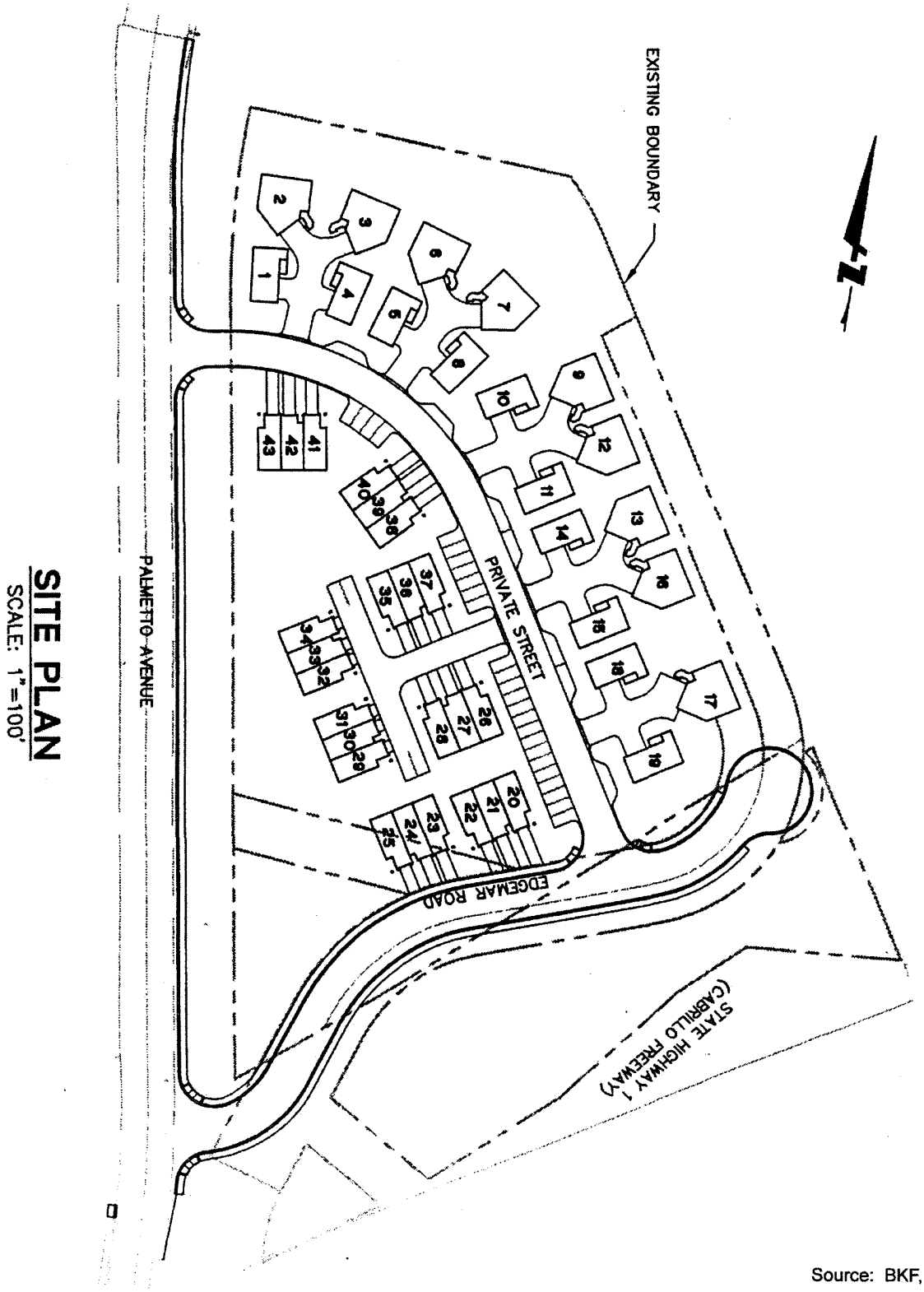
Stohlgren, T. J., D. Binkley, G. W. Chong, M. A. Kalkhan, L. D. Schell, K. A. Bull, Y. Otsuki, G. Newman, M. Bashkin, and Y. Son. 1999. Exotic plant species invade hot spots of native plant diversity. Ecological Monographs 69:25-46.

"The State of Disappearing Species and Habitat: A Sierra Club Report." Sierra Club. May 19 2004.



Source: USGS, San Francisco South Quadrangle, 1993

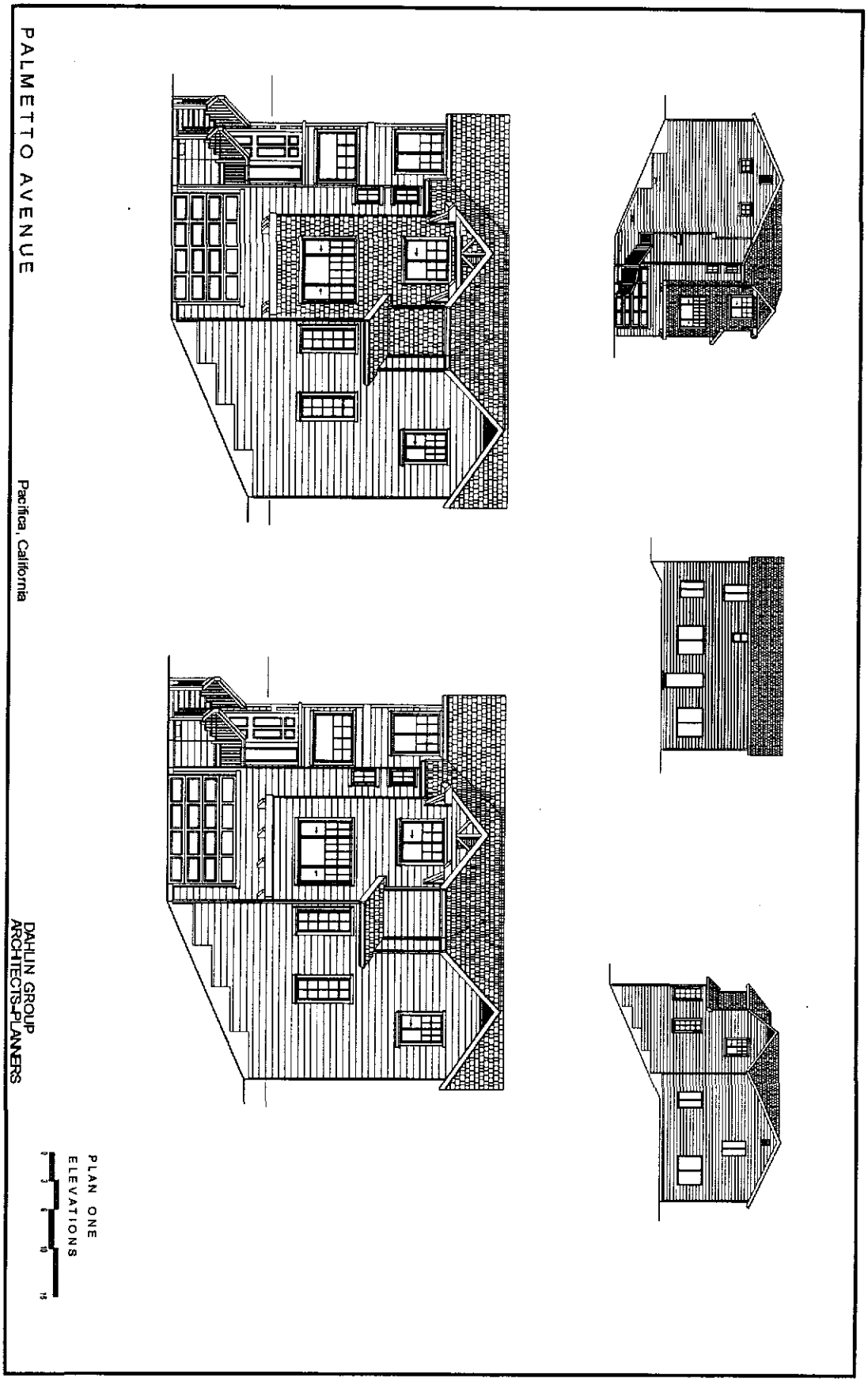
A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 1



Source: BKF, 20001

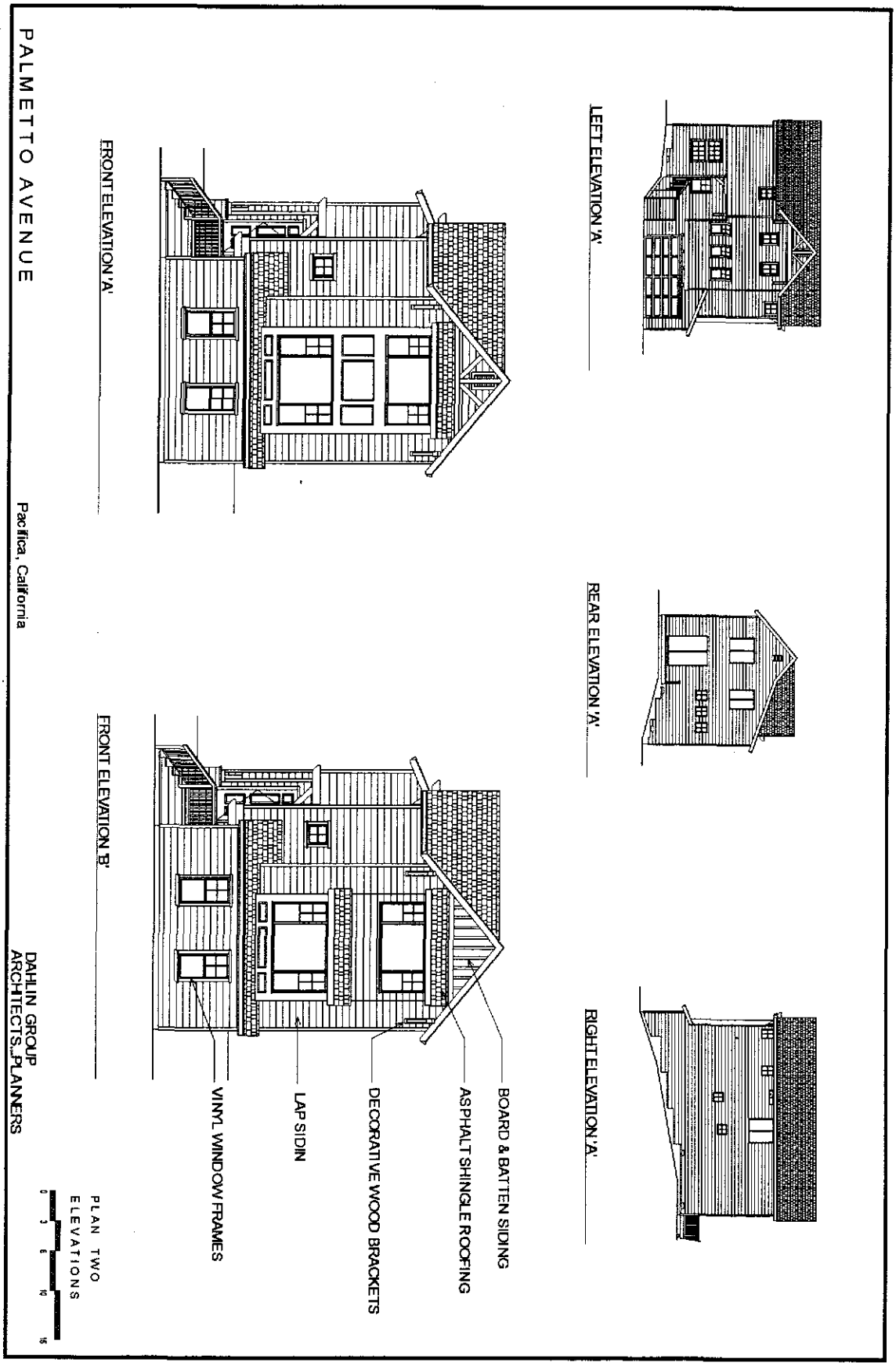
A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 2

Building Elevations



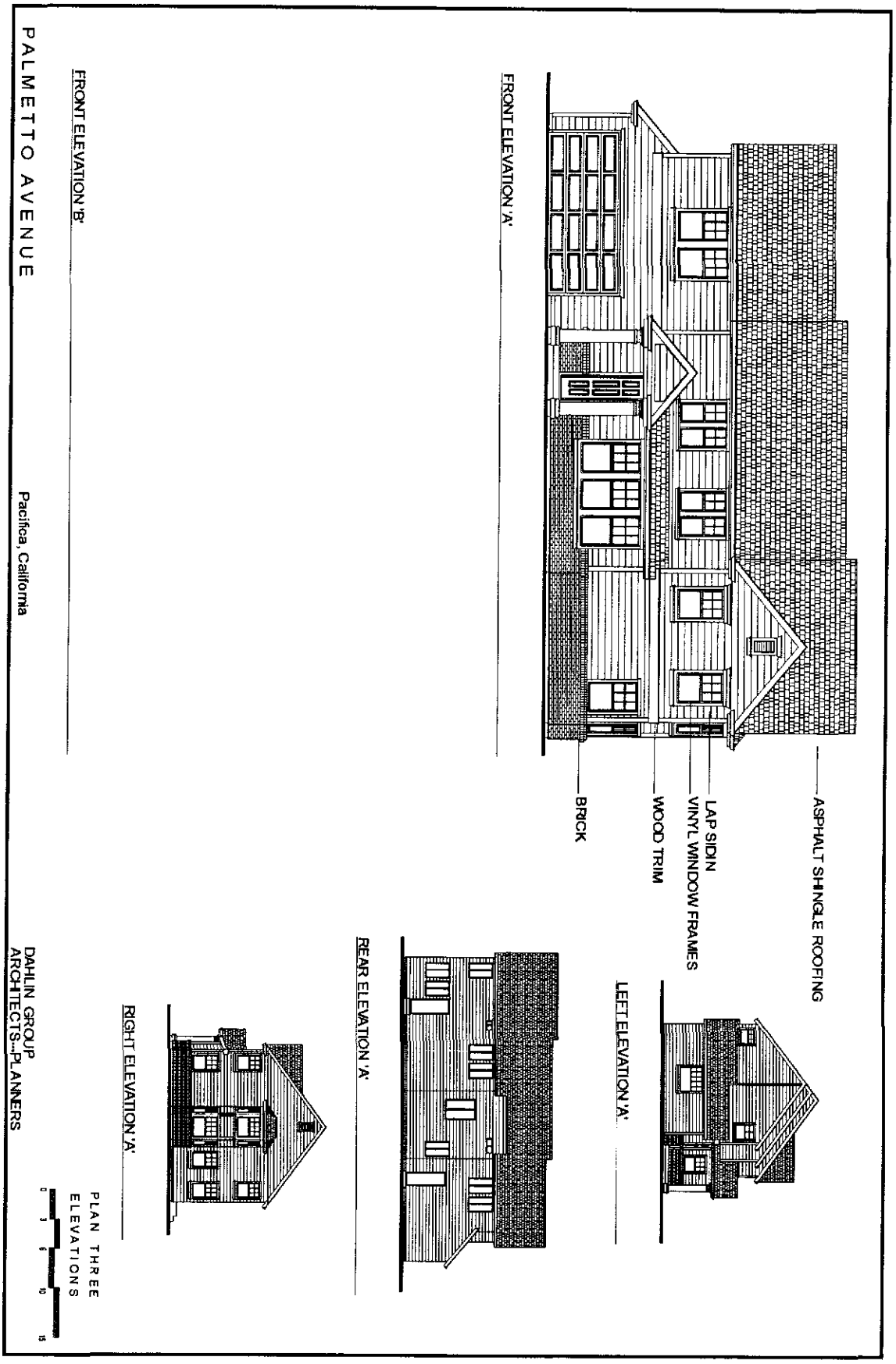
A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 3

Building Elevations Single-Family Homes



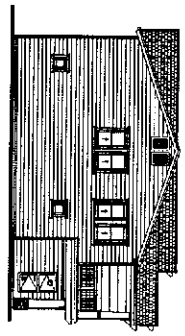
A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 3

Building Elevations Multi-Family Homes

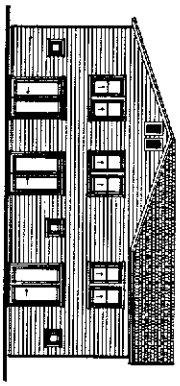


A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 3

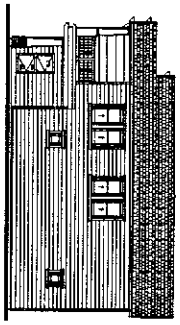
Building Elevations Multi-Family Homes



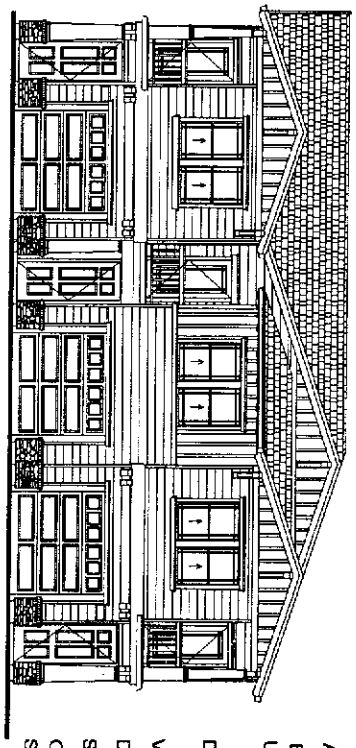
LEFT ELEVATION 'A'



REAR ELEVATION 'A'



RIGHT ELEVATION 'A'



FRONT ELEVATION 'A'

ASPHALT SHINGLE ROOFING
BOARD & BATTEN SIDING
LAP SIDING
DECORATIVE WOOD BRACKETS
VINYL WINDOW FRAMES
DECORATIVE WOOD CORBELS
SECTIONAL GARAGE DOOR
COLUMNS
STONE

PALMETTO AVENUE

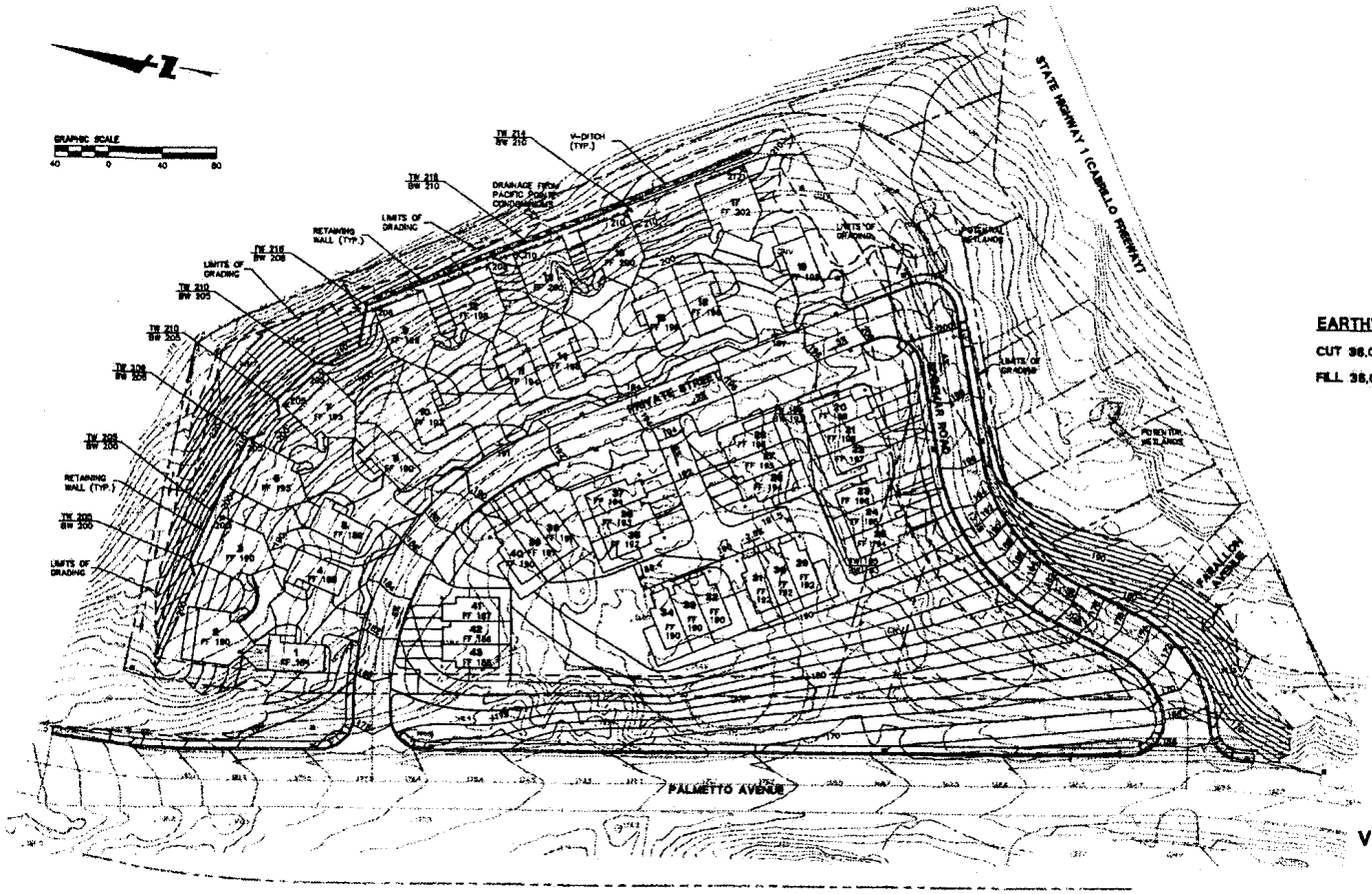
Pacifica, California

DAHLIN GROUP
ARCHITECTS • PLANNERS

PLAN FOUR
ELEVATIONS

SHEET 15A

A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 3



EARTHWORK

CUT 36,000 CY

FILL 36,000 CY

VESTING TENTATIVE MAP

FOR CONDOMINIUM PURPOSES

PACIFIC COVE SUBDIVISION

GRADING PLAN

VESTING TENTATIVE MAP OF THE LANDS OF ARMANINO, ET AL BEING A RESUBDIVISION OF THE LANDS DESCRIBED IN THAT CERTAIN DEED RECORDED ON MARCH 26, 1999 AS DOCUMENT NUMBER 99-053757, SAN MATEO COUNTY RECORDS.

CITY OF PACIFICA | SAN MATEO COUNTY | CALIFORNIA

SCALE: 1"=40' | FEBRUARY, 2001

Brian Kangas Foulk

ENGINEERS - SURVEYORS - PLANNERS

240 PRICE AVENUE
REDWOOD CITY, CA 94063

JOB NO. 20010029-10

SHEET 4 OF 5

A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 4

TH[redacted]OMAS REID A[redacted]SOCIATES
560 WAVERLEY ST., SUITE 201 (BOX 880), PALO ALTO, CA 94301
Tel: 415-327-0429 Fax: 415-327-4024 tra@igc.org

Robert Kalmbach
Syndicor Real Estate Group, Inc.
914 Westwood Blvd., Suite 500
Los Angeles, CA 90024

April 29, 1997

Dear Mr. Kalmbach,

At your request, I have conducted a biological survey and prepared a report for the property in the City of Pacifica commonly referred to with the following parcel nos:

009-031-010
009-035-010, 020, 030, 040, 050, 120, and 130
009-402-250 and 260

If you have any questions or require any further information, please don't hesitate to call.

Sincerely,

Patrick Kobernus
Associate

Biological Assessment Report
for Palmetto Avenue Parcel in Pacifica

On Thursday April 17, and Friday April 25, 1997, the unimproved land in the City of Pacifica, County of San Mateo, commonly referred to as assessors parcel nos. 009-031-010 and 009-035-010, 020, 030, 040, 050, 120, 130 and parcel nos. 009-402-250 and 260 and the land appurtenant thereto, was surveyed for biological resources by Patrick Kobernus, staff biologist for Thomas Reid Associates. Mr. Kobernus is familiar with each of the habitats found on the site, having conducted biological surveys and habitat restoration activities in these types of habitats for the past two years. The surveys were conducted in the afternoon on both occasions, and consisted of walking the site slowly for approximately two and a half hours (total time).

1) Description of Habitats

The site consists of northern coastal scrub, central coast riparian scrub, and coastal terrace prairie plant communities (CDFG, 1986). The site is dominated by northern coastal scrub which occupies most of the interior "bowl" portion of the site. Second in areal extent is central coast riparian scrub which extends along the eastern boundary of the site and partially into the interior bowl. And along the southern portion of the site on the cut slopes below Highway 1, on the property area known as the "fish" there are patches of coastal terrace prairie habitat.

The site is currently dominated by native plant habitats but is being overtaken in some areas by exotic pest plants. The western boundary of the site along Palmetto Avenue, has extensive iceplant (*Carpobrotus edulis*) covering the sand dunes. German ivy *(Senecio mikanioides*) is invading the northern coastal scrub habitat in several areas, and is most dense on the southwest corner of the site where it is proliferating under the canopy of Monterey cypress trees (*Cupressus macrocarpa*). And along the eastern boundary of the site, along the cut slopes above the central coast riparian scrub habitat, there is an extensive pampas grass (*Cortaderia jubata*) infestation. Due to the density of the riparian scrub habitat, this native habitat appears to be the least compromised by exotic pest plants.

The central coast riparian scrub habitat is the only habitat on the site that may be characterized as wetland, and covers approximately 1.1 acres of the site. Further surveying is recommended. Arroyo willow *(Salix lasiolepis*) is the dominant species. Other species include: twinberry (*Lonicera involucrata)*, rushes (*Juncus sp.*), sedges (*Carex sp.)*, and English ivy (*Hedera helix*). One small pool approximately 4 feet wide x 10 feet long x 1 foot deep was observed in the riparian scrub habitat. There may be additional small intermittent pools scattered beneath the dense riparian canopy.

2) Special Status Species

A search of the California Natural Diversity Database (CNDDB) revealed seven sensitive species within a 2 mile radius of the site. These are: bumblebee scarab beetle (*Lichnanthe ursina*), Tomales isopod (*Caecidotea tomalensis*), San Bruno elfin butterfly (Incisalia mossii bayensis), Mission blue butterfly (*Icaricia icarioides missionensis*), saltmarsh common yellowthroat (Geothlypis trichas sinuosa), San Francisco garter snake (*Thamnophis sirtalis tetrataenia)*, and California red-legged frog (*Rana aurora draytonii*).

Species federally and/or state listed as threatened or endangered which could potentially use the site based on habitat type are listed and discussed below.

Species	Status
Mission blue butterfly (*Icaricia icarioides missionensis*)	Federally Endangered
San Bruno elfin butterfly (*Incisalia mossii bayensis*)	Federally Endangered
San Francisco garter snake (*Thamnophis sirtalis tetrataenia)*	Federally Endangered
California red-legged frog (*Rana aurora draytonii*)	Federally Threatened

Mission Blue Butterfly: The Mission blue butterfly's distribution is closely associated with it's larval host plants *Lupinas varricolor, L. albifrons*, and *L. formosus*. Although the site does contain a few *Lupinus variicolor* plants, it is very unlikely that the mission blue could survive on such a sparse patch. In addition, the climate at this location is likely to be too cool and moist for the Mission blue to survive here.

San Bruno Elfin Butterfly: The San Bruno elfin butterfly's distribution is closely associated with it's larval host plant, pacific stonecrop (*Sedum spathulifolium*). The site survey did not find the host plant for the San Bruno Elfin butterfly and it is highly unlikely that the butterfly could survive at the site.

San Francisco Garter Snake: The San Francisco Garter snake requires pond and/or marsh habitat with deep pools and extensive emergent vegetation. Due to the lack of any significant pools or marshy areas with emergent vegetation, the site is unlikely habitat for the San Francisco garter snake.

California Red-legged Frog: Adult California red-legged frogs require dense, shrubby or emergent riparian vegetation closely associated with deep (>.7 meters) still or slow moving water (Federal Register Listing, 1996). Due to the lack of deep pools at the project site, the riparian habitat here presents unlikely habitat for the California red-legged frog.

The riparian habitat at the site provides potential nesting and foraging habitat for several unlisted, but potentially sensitive species that are designated as California Species of Special Concern. Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), northern harrier hawk (*Circus cyaneus*), merlin (*Falco columbrius*), saltmarsh common yellowthroat (Geothlypis trichas sinuosa), and yellow warbler (*Dendroica petechia*) could utilize the site. It is unlikely that any of these species are using the site for nesting, since this survey was done in the nesting season, and no nesting activity was observed for these species.

3) Plant and Animal species identified on site

The following table lists all plant and animal species identified at the site on April 17, 1997. Habitats found at the site are known to support additional species than those listed here, and this list should not be considered a complete inventory of all species utilizing the site.

Habitat	Common Name	Species
Northern Coastal Scrub	Coyote brush	*Bacharis pilularis*
	Lizardtail	*Eriophyllum staechadifolium*
	California blackberry	*Rubus ursinus*
	California sagebrush	*Artemisia californica*
	Poison oak	*Toxicodendron diversilobum*
	Coffeeberry	*Rhamnus californica*
	California bee plant	*Schrophularia californica*
	Bracken fern	*Pteridium aquilinum*
	Sticky monkeyflower	*Mimulus aurantiacus*
	Yerba-buena	*Satureja douglasii*
	Beach strawberry	*Fragaria chiloensis*
	Biennial Evening Primrose	*Oenothera Glazioviana*
	California everlasting	*Gnaphalium californicum*
	Coast honeysuckle	*Lonicera Hispidula*

Habitat	Common Name	Species
Central Coast Riparian Scrub	Arroyo willow	*Salix lasiolepis*
	Twinberry	*Lonicera involucrata*
	Rush	*Juncus sp.*
	Sedge	*Carex sp.*
Coastal Terrace Prairie	Yarrow	*Achillea millefolium*
	Varied lupine	*Lupinus variicolor*
	Sanicle	*Sanicula sp.*
	California buttercup	*Ranunculus sp.*
	California polypody	*Polypodium californicum*
	Soap plant	*Chlorogalum pomeridianum*
	Blue-eyed grass	*Sisyrinchium californicum*
	California acaena	*Acaena californica*
	Brownie thistle	*Cirsium quercetorum*
	Hedgenettle	*Staches sp.*
	Purple Needle grass	*Nassella pulchra*
	Suncup	*Camissonia ovata*
	Indian paint brush	*Castelleja sp.*
Exotic Plant Species	German ivy	*Senecio mikanioides*
	English ivy	*Hedera helix*
	Pampas grass	*Cortaderia jubata*
	Monterey cypress	*Cupressus macrocarpa*
	Cotoneaster	*Cotoneaster sp.*
	Ripgut brome	*Bromus diandrus*
	Soft chess	*Bromus secalinus*

Habitat	Common Name	Species
Exotic Plant Species (continued)	Wild oat	*Avena sp.*
	Cutleaf plantain	*Plantago coronopus*
	Wild radish	*Raphanus sativus*
	Iceplant	*Carpobrotus edulis*
	Bristly Ox-tongue	*Picris echiodes*
	Sweet alyssum	*Lobularia maritima*
	Curly dock	*Rumex crispus*
	Wild onion	*Allium sp.*
	Field Mustard	*Brassica rapa*
***Animals - Birds**	White crowned sparrow	*Zonotrichia leucophrys*
	Song sparrow	*Melospiza melodia*
	Anna's hummingbird	*Calypte anna*
	Bushtit	*Psaltriparus minimus*
	American goldfinch	*Carduelis tristis*
	Killdeer	*Charadrius vociferus*
Animals - Mammals	Bottha's pocket gopher	*Thomomys bottae*
	California meadow vole	*Microtus californicus*
	Gray fox	*Urocyon cinereoargenteus*
	Domestic cat	*Felis catus*

* No reptiles or amphibians were observed at the site on the day of survey.

4) Heritage trees on site

Five Monterey pine trees are located on the southwest corner of the site. The trees are approximately 20 to 30 feet in height and range from approximately 1 to 3 feet in diameter breast height (DBH). The city of Pacifica criteria for heritage trees is that any tree with a circumference over 50" is considered a heritage tree. Four of the five trees on the site meet this criteria.

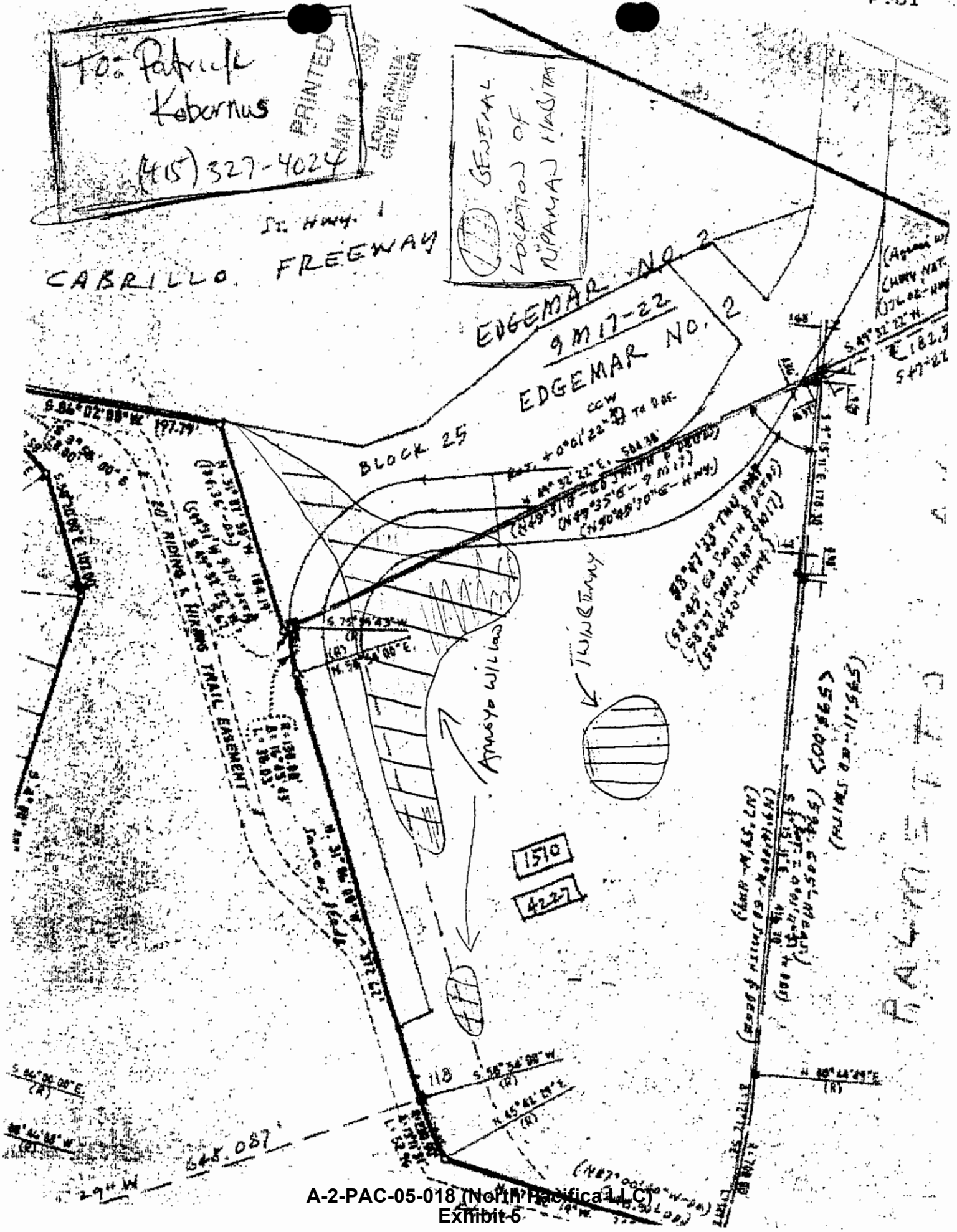
5) Recommendations

1) Federal and/or State requirements for the site should be ascertained and met including any applicable requirements of the US Fish and Wildlife Service and the California Department of Fish and Game.

Sources

CDFG, 1986. Natural Community Descriptions for the California Natural Diversity Database.

Federal Register, May 23, 1996 (Volume 61, number 101). Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the California Red-Legged Frog. Department of the Interior, US Fish and Wildlife Service, 50 CFR Part 17.


To: Patrick Kobernus
(415) 327-4024
PRINTED
GENERAL LOCATION OF NIPOMO HIGHLANDS
CABRILLO FREEWAY
EDGEMAR NO. 2
9 M 17-22
EDGEMAR NO. 2
BLOCK 25
TWIN CREEKS
Arroyo Willow
20' RIDING & HIKING TRAIL EASEMENT
1510
4227

** California Department of Fish and Game ***** Natural Diversity Data Base **

CAECIDOTEA TOMALENSIS
Tomales Isopod

Status		NDDB Element Ranks		Other Lists	
Federal:	Sp of Concern (C2)	Global:	G2	CDFG:	
State:	None	State:	S2	Audubon:	
				CNPS List:	
				CNPS RED Code:	

---Habitat Associations---
General: INHABITS LOCALIZED FRESH-WATER PONDS OR STREAMS WITH STILL OR NEAR-STILL WATER IN SEVERAL BAY AREA COUNTIES.
Microhabitat: Not available at this time.
*** Element ID: ICMAL01220 **********

Occurrence Number: 2
Quality: Poor
Type: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown
Main Info Source: SERPA, L. 1984 (PERS)

--Dates Last Seen--
Element: 1984/01/26
Site: 1984/01/26

Quad Summary: San Francisco South (3712264)
County(ies): San Francisco

Location: LAKE MERCED, NE SIDE OF NORTH LAKE.

Lat/Long: 37d 43m 37s / 122d 29m 04s
UTM: Zone-10 N4175439 E545433
Mapping Precision: NON-SPECIFIC (1/5 Mile)
Symbol Type: POINT
Group Number: 08626 More Information? N
Map Index Number: 08626 More Map Detail? N

Township: 02S
Range: 06W
Section: UN XX Qtr
Meridian: M
Acres: 0
Elevation: 50 ft

Threats:

Comments: Ecological Notes - OCCURS IN WATER AMONG CATTAILS. General Notes - ONLY 3 INDIVIDUALS FOUND DURING A 45-MINUTE COLLECTION. A SINGLE SPECIMEN WAS COLLECTED BY BOGATIN IN 1971 (CAS, #UNKNOWN). Owner/Manager - SFO CITY/COUNTY

** California Department of Fish and Game ***** Natural Diversity Data Base **

LICHNANTHE URSINA
Bumblebee (=pacific Sand Bear) Scarab Beetle

---------Status----------	NDDB Element Ranks	--------Other Lists---------
Federal: Sp of Concern (C2)	Global: G2	CDFG:
State: None	State: S2	Audubon:
		CNPS List:
---Habitat Associations---		CNPS RED Code:

General: INHABIT COASTAL SAND DUNES FROM SONOMA COUNTY SOUTH TO SAN MATEO COUNTY.

Microhabitat: USUALLY FLY CLOSE TO SAND SURFACE NEAR THE CREST OF THE DUNES.

*** Element ID: IICOL67020 **********

Occurrence Number: 4
Quality: Unknown
Type: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown
Main Info Source: CARLSON, D. C. 1980 (LIT)

--Dates Last Seen--
Element: XXXX/XX/XX
Site: XXXX/XX/XX

Quad Summary: San Francisco South (3712264), Montara Mountain (3712254)
County(ies): San Mateo

Location: LAGUNA SALADA, JUST W OF PACIFICA.

Lat/Long: 37d 37m 31s / 122d 29m 39s
UTM: Zone-10 N4164188 E544621
Mapping Precision: NON-SPECIFIC (1 Mile)
Symbol Type: POINT
Group Number: 08569 More Information? N
Map Index Number: 08569 More Map Detail? N

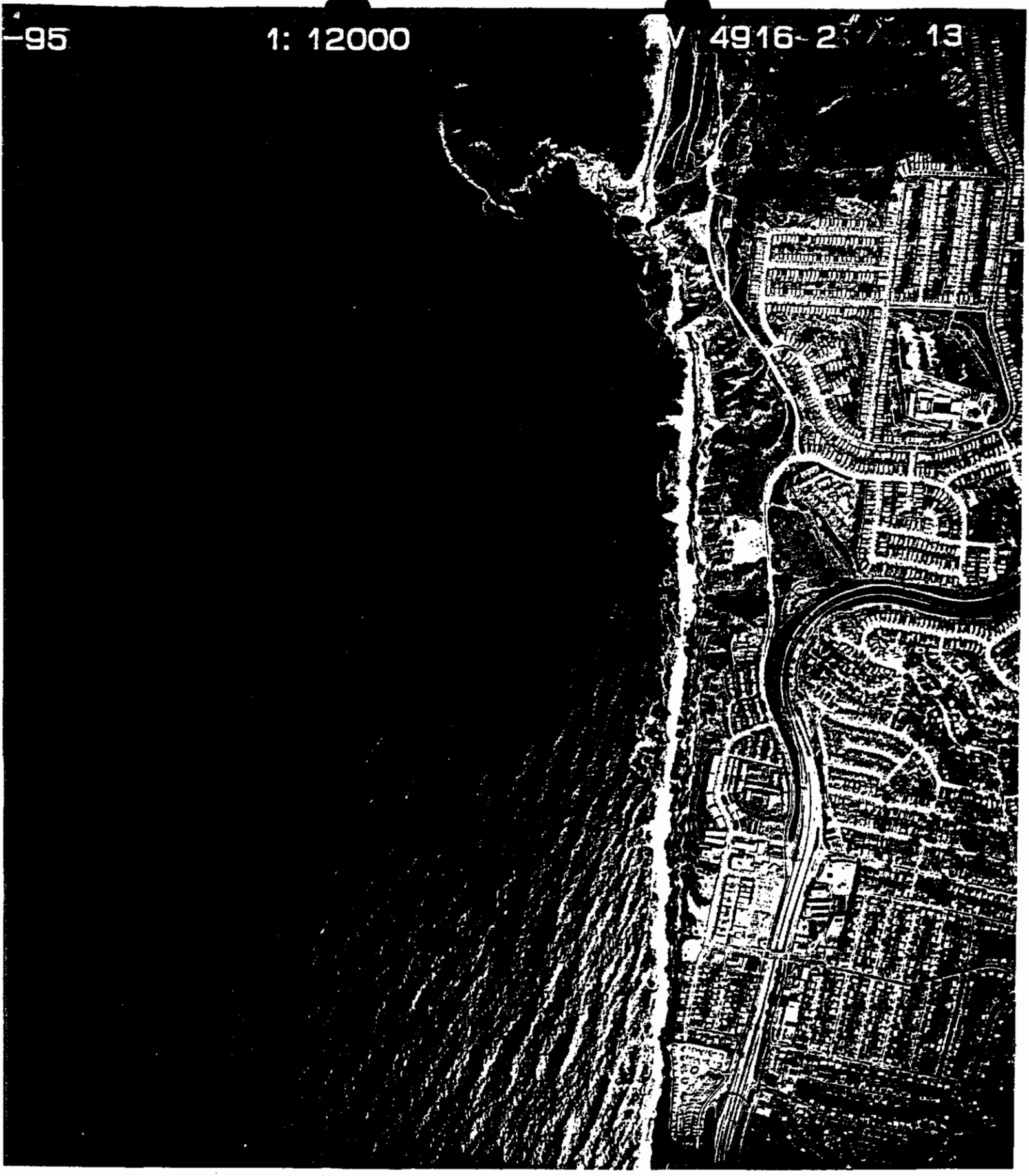
Township: 03S
Range: 06W
Section: UN XX Qtr
Meridian: M
Acres: 0
Elevation: 15 ft

Threats: A PORTION OF THE HABITAT IS A GOLF COURSE.

Comments: Distribution Notes - COLLECTED FROM THE DUNES AT SALADA BEACH. Ecological Notes - SPECIMENS COLLECTED FROM SAND DUNES, FROM APRIL TO AUGUST, WITH A PEAK IN MAY/JUNE. General Notes - COLLECTION DATE UNKNOWN. Owner/Manager - DPR

A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 5

9/7/95



A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 5

Wetlands Research Associates, Inc.

April 30, 1997

Robert Kalmbach
Syndicor Real Estate Group, Inc.
914 Westwood Blvd. Suite 500
Los Angeles, CA 90024

RE: Unimproved land in the City of Pacifica, County of San Mateo, commonly referred to as assessors parcel nos. 009-031-010 and 009-035-010, 020, 030, 040, 050, 120, 130 and parcel nos. 009-402-250 and 260 and land appurtenant thereto

Dear Bob:

Pursuant to your request, I conducted a site reconnaissance on April 28, 1997 on unimproved land in the City of Pacifica, County of San Mateo, commonly referred to as assessors parcel nos. 009-031-010 and 009-035-010, 020, 030, 040, 050, 120, 130 and parcel nos. 009-402-250 and 260 and land appurtenant thereto for the purposes of (1) determining the presence of any federal §404 jurisdictional wetlands and (2) the presence of habitat suitable for any federal or state protected species. In addition, I reviewed the draft report prepared by Thomas Reid Associates concerning their evaluation of the subject parcels.

Federal jurisdictional wetlands

I conducted a reconnaissance survey to determine if any portions of the project site are "waters of the United States" and, in particular, wetlands subject to federal jurisdiction under Section 404 of the Clean Water Act. As stated in the federal regulations, wetlands are defined as:

> *Those areas that are inundated or saturated by surface or ground waters at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.*

The three criteria used to delineate wetlands stated in the *Corps of Engineers Wetlands Delineation Manual* (1987) are the presence of (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. According to the manual:

> *The three technical criteria specified are mandatory and must all be met for an area to be identified as wetland. Therefore, areas that meet these criteria are wetlands.*

The subject parcels are primarily dominated by northern coastal scrub with patches of coastal terrace prairie habitat (Thomas Reid and Associates, 1997). These areas are dominated by upland plants, have non-hydric soils, and do not have wetland hydrology. Areas identified as

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central coast riparian scrub habitat on the site are dominated by wetland plants and therefore warranted a more in-depth inspection to determine the presence of the two other parameters necessary for a federal jurisdictional wetland.

The County Soil Survey for these parcels describes the soils as Orthents:

> *Orthents are very shallow to very deep, very poorly drained to excessively drained soils on uplands including hills and ridgetops; alluvial fans; coastal terraces; flood plains; and tidal flats. These soils formed in alluvium derived from various kinds of rock; sandy coastal deposits; hard and soft sandstone, shale, siltstone, serpentine, and volcanic rock; and various manmade fill material.*

These soils are not listed as hydric soils by the County Soil Survey. However, given their variable nature, they can have isolated areas of soils formed under wetland conditions called hydric inclusions.

In my survey of the areas designated by Thomas Reid and Associates as central coast riparian scrub habitat, I observed that the soils consisted of sandy loam, were dark in color (chroma 2), and were not mottled. The latter is necessary in order for the soils to be considered hydric in nature.

Furthermore, much of the arroyo willow habitat is higher on the site, has a slope exceeding 15% (except on a former asphalt road surface), and does not possess wetland hydrology indicators. Therefore, I would conclude that this area does not meet the wetland definition used by the Corps to establish federal jurisdiction under the Clean Water Act.

On a portion of the site lying along the western boundary and separated from the roadway by a series of coastal sand dunes, a small patch of *Lonicera involucrata* (twinberry) was observed. This species is also a wetland species found 33-66% of the time in wetlands. The soil here was fine sand; however, there were inclusions of clay that may hold water sufficiently for hydric soil conditions to develop. In addition, the low-lying nature of the site suggests that wetland hydrology may be present. In the absence of additional hydrologic information, I conclude that this area (approximately 4-5,000 sq ft) *may* be a jurisdictional wetland as defined by the Corps of Engineers. Additional observations are warranted to verify this determination.

<u>Federal or State protected species</u>

Three potential protected species were listed by Thomas Reid and Associates as potentially occurring on the site based on habitat types observed. They concluded that no habitat was present for the Mission Blue Butterfly and San Bruno Elfin Butterfly. They further conclude that the site is unlikely habitat for the San Francisco Garter Snake and California red-legged frog. I concur with that opinion. The California red-legged frog requires similar habitat as the San

Francisco Garter Snake, including significant areas of shallow seasonal pools with emergent vegetation. In its February 18, 1997 guidance on the red-legged frog, the US Fish and Wildlife Services stated that suitable habitat consisted of:

> *All life history stages are most likely to be encountered in and around breeding sites, which are known to include coastal lagoons, marshes, springs, permanent and semipermanent natural ponds, ponded and backwater portions of streams, as well as artificial impoundments such as stock ponds, irrigation ponds, and siltation ponds.*

None of these habitats are present on the site and therefore, I conclude that this site is unsuitable habitat for the red-legged frog and the San Francisco garter snake.

My opinion is based on 20 years of experience in wetland and endangered species biology as a Professor of Biology at San Francisco State University and President of Wetlands Research Associates, Inc., an environmental consulting firm dealing with wetland and endangered species ecology. Our firm has completed over 150 wetland delineations in the Bay area and has experience in a wide variety of habitats. In addition, we have evaluated sites for potential endangered species including those known for this region. I have prepared Section 7 consultations and Habitat Conservation Plans for the federally threatened red-legged frog for coastal properties in San Mateo and Monterey Counties.

Please call if you have any further questions on this preliminary survey.

Sincerely yours,

Michael Josselyn, Ph.D.
Professional Wetland Scientist

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CALIFORNIA
COASTAL COMMISSION

Delineation of Potential Jurisdictional Wetlands

Pacific Cove Parcel
Pacifica, California

PREPARED FOR:

Trumark Companies
4135 Blackhawk Plaza Circle, Suite 280
Danville, California 94506
Contact: Jason Kliewer
(925) 648-8300

PREPARED BY:

Wetlands Research Associates, Inc.
2169 East Francisco Blvd., Suite G
San Rafael, California 94901
Contact: Tom Fraser
(415) 454-8868

August 1999

1.0 INTRODUCTION

Wetlands Research Associates, Inc. was requested by Trumark Companies to determine the presence of wetlands subject to federal jurisdiction under Section 404 of the Clean Water Act on a parcel of land in Pacifica, San Mateo County. The Study Area covers approximately 4.7 acres and is located on a parcel that lies northwest of Highway 1 and east of Palmetto Avenue in Pacifica (Figure 1).

As stated in the federal regulations for the Clean Water Act, wetlands are defined as:

> *"Those areas that are inundated or saturated by surface or ground waters at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."*
> (EPA, 40 CFR 230.3 and CE, 33 CFR 328.3)

During June 1999, Wetlands Research Associates, Inc. biologists conducted a wetland delineation study within the Study Area. The delineation study determined the presence or absence of wetland indicators used by the U.S. Army Corps of Engineers in making a jurisdictional determination. The three criteria used to delineate wetlands are the presence of: (1) hydrophytic vegetation, (2) wetland hydrology, and (3) hydric soils. According to the *Corps of Engineers Wetlands Delineation Manual* (1987):

> *"....[E]vidence of a minimum of one positive wetland indicator from each parameter (hydrology, soil, and vegetation) must be found in order to make a positive wetland delineation."*

2.0 METHODS

The methods used in this study to delineate potential jurisdictional wetlands of the U.S. are based on the *U.S. Army Corps of Engineers Wetlands Delineation Manual* (Corps 1987). The routine method for wetland delineation described in the *Corps Manual* (1987) was used to identify areas subject to Corps Section 404 jurisdiction within the Study Area.

Prior to conducting field surveys, the Soil Survey of San Mateo County, Eastern Part, and San Francisco County, California (USDA Soil Conservation Service 1991) and the U.S. Fish and Wildlife Wetland Inventory Maps (U.S. Fish and Wildlife Service 1987, San Mateo quadrangle) were reviewed. Field studies to examine vegetation, hydrology, and soils were conducted during June 1999.

The Corps requires that data on vegetation, hydrology, and soil be recorded on standard forms. Completed data forms for this study are provided in Appendix A. For purposes of this study the

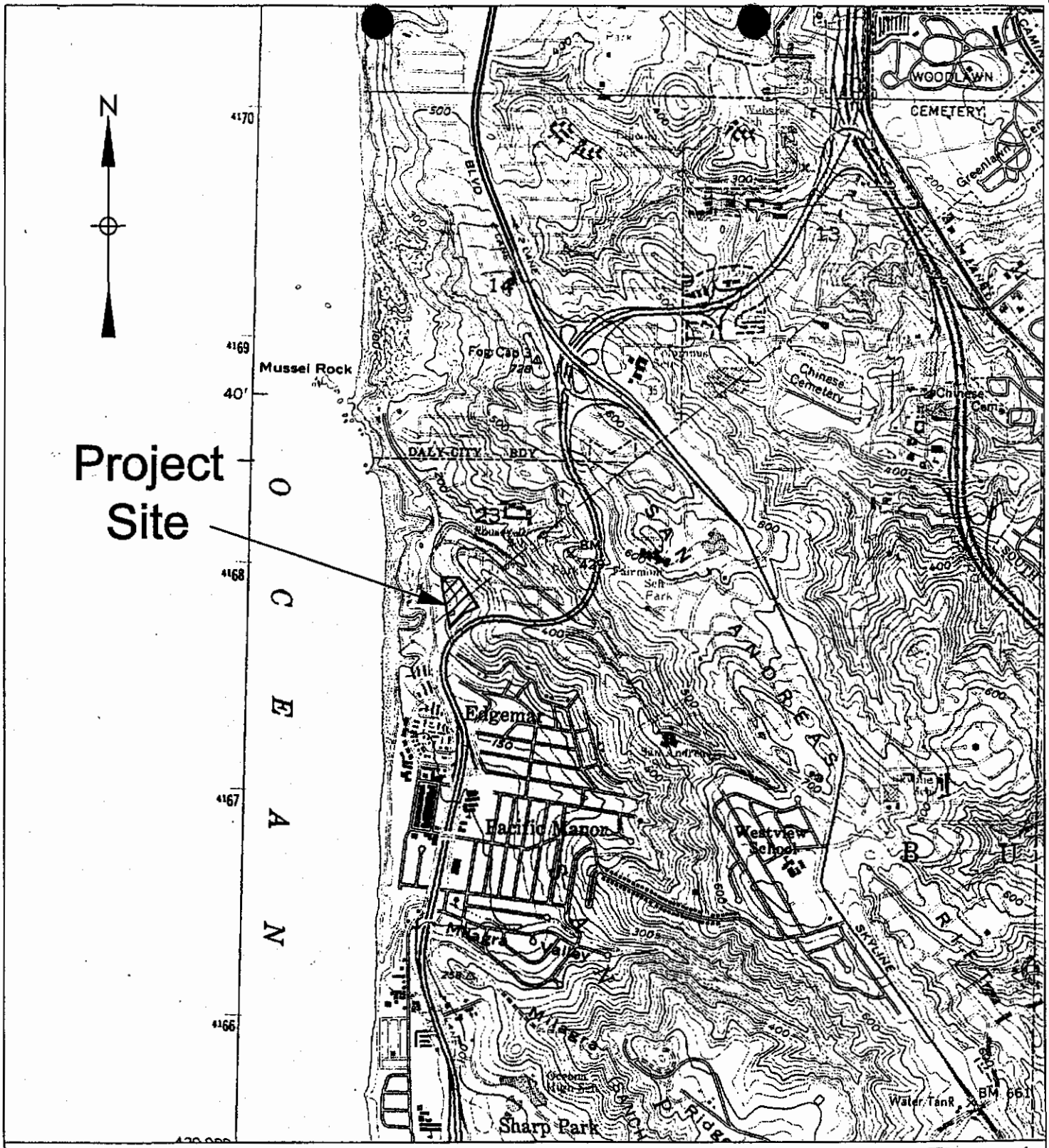


Figure 1

PURPOSE: Delineation of Jurisdictional Wetlands and Waters of the United States (Section 404 of the Clean Water Act) USGS San Francisco South Quadrangle, 1980, showing location of Pacific Cove Parcel	LOCATION MAP 1000 0 1000 2000 FEET SCALE 1:24,000 Trumark Companies 4135 Blackhawk Plaza Circle, Suite 280 Danville, California 94506 Contact: Jason Kilewer Phone: 925-648-8300	Jurisdictional Wetland Delineation LOCATION: Pacifica, California COUNTY: San Mateo APPLICATION BY: Trumark Company SHEET: 1 of 3 DATE: AUGUST 1999

vegetated wetland areas were considered seasonal wetlands and, therefore, meet the criteria as "Problem Areas" as defined in the Corps Manual. Once a sampling area was determined to be either a potential wetland or upland, a 1 inch = 40 feet Topographic vesting tentative map (Tronoff Engineers, Surveyors, Planners; 1997) was used to draw boundaries between potential wetland and upland areas based on data collected. The sizes of potential jurisdictional areas were measured using AutoCAD 14.

The vegetation, hydrology, and soil criteria used to make wetland determinations in wetland areas are summarized below.

Vegetation

Plant species identified in the Study Area were assigned a wetland status according to the U.S. Fish and Wildlife Service (Reed 1988) list of plant species that occur in wetlands. This wetland classification system is based on the expected frequency of occurrence in wetlands as follows:

OBL	Always found in wetlands	>99% frequency
FACW	Usually found in wetlands	67-99%
FAC	Equal in wetland or non-wetlands	34-66%
FACU	Usually found in non-wetlands	1-33%
NL	Not listed (upland)	<1%

Plants with OBL, FACW, and FAC classifications are classified as hydrophytic vegetation in the *Corps Manual* (1987) methodology. If more than 50 percent of the dominant plants (dominant is ≥20 percent of the cover) are wetland plants, the area is considered to have met the hydrophytic vegetation criterion.

Hydrology

The jurisdictional wetland hydrology criterion in a non-tidal area is satisfied if the area is inundated or saturated for a period (minimum of five percent of the growing season or 18 days in the San Francisco Bay Area) sufficient to create anoxic soil conditions during the growing season. Evidence of wetland hydrology can include direct evidence (primary indicators), such as visible inundation or saturation, surface sediment deposits, and drift lines, or indirect indicators (secondary indicators), such as oxidized root channels and algal mats. If secondary indicators are used, at least two secondary indicators must be present to conclude that an area has wetland hydrology.

Soils

Hydric soils formed under wetland (anaerobic) conditions have characteristic low chroma colors and an associated quantity of redox concentrations (mottles) near the surface, typically within the upper 12 inches (USDA, NRCS 1998). Chroma designations are determined by comparing a soil sample with a standard Munsell soil color chart (Kollmorgen 1975). Various combinations of low chroma

colors and quantities of redox concentrations can be used as field indicators of hydric soils and associated anaerobic conditions. Hydric soils formed under continuous saturation, typically have a gleyed (grayish) matrix color in surface horizons as a result of removal or transformation (reduction) of iron. Hydric soils formed under a seasonal hydrology may accumulate dark organic matter at the surface and have oxidized iron deposited in masses or along pores as a result of alternating saturation and drying. These soils are considered hydric if the following indicators of hydric conditions are present; (1) chroma 1 or less or (2) chroma 2 and distinct or prominent redox concentrations.

3.0 STUDY AREA DESCRIPTION

The Study Area covers approximately 4.7 acres and lies in a bowl that slopes from east to west with elevations ranging from 170 feet to 240 feet mean sea level. The Study Area is currently an undeveloped vacant lot. A culvert at the western edge of the site conveys stormwater runoff from the site under Palmetto Avenue to the west. Portions of an abandoned asphalt roadway (Edgemar Road) cross the site.

The principal hydrological sources for the Study Area are precipitation, groundwater, surface run-off, and seasonal water flow in drainages from off-site sources. The Study Area is primarily a moderately sloped parcel with sheet runoff during heavy rainfall and winter months. Surface flow on the site is carried toward the lowest portion of the site and then conveyed off-site in an existing culvert.

The Soil Survey of San Mateo County, Eastern Part, and San Francisco County, California (SCS 1991) indicates that the Study Area has two soil types: Orthents, cut and fill-Urban land complex 5 to 75 percent slopes and Rock outcrop-Orthents complex, 30 to 75 percent slopes (Figure 2). The County Soil Survey describes Orthents as very shallow to very deep, very poorly drained to excessively drained soils on uplands including hills and ridgetops; alluvial fans; coastal terraces; floodplains; and tidal flats. These soils formed in alluvium derived from various kinds of rock; sandy coastal deposits; hard and soft sandstone, shale, siltstone, serpentine, and volcanic rock; and various manmade fill material. Orthents soils are extremely variable. They consist of areas of undisturbed loamy material on coastal terraces; areas that have been mechanically altered for residential and other urban uses and have cuts that have slopes of 3:1 to 1.5:1 and fills that are 0 to 75 feet deep or more; smoothed areas on alluvial fans and plains; reclaimed areas near San Francisco Bay; and areas on the margins of the bay that consist of earthy material, rock fragments, plant matter, and manmade debris. Runoff is medium to very rapid, and the hazard of water erosion is moderate to very high. The soils of the Study Area appear to match the mapped soil type.

The Study Area is dominated by northern coastal scrub with small areas of coastal terrace prairie habitat. These areas are dominated by upland plants such as slender wild oat (*Avena barbata*), coyote brush (*Baccharis pilularis*), black mustard (*Brassica nigra*), and poison oak (*Toxicodendron diversilobum*). Large patches of fig-marigold (*Carpobrotus edulis*) occur along the western edge of

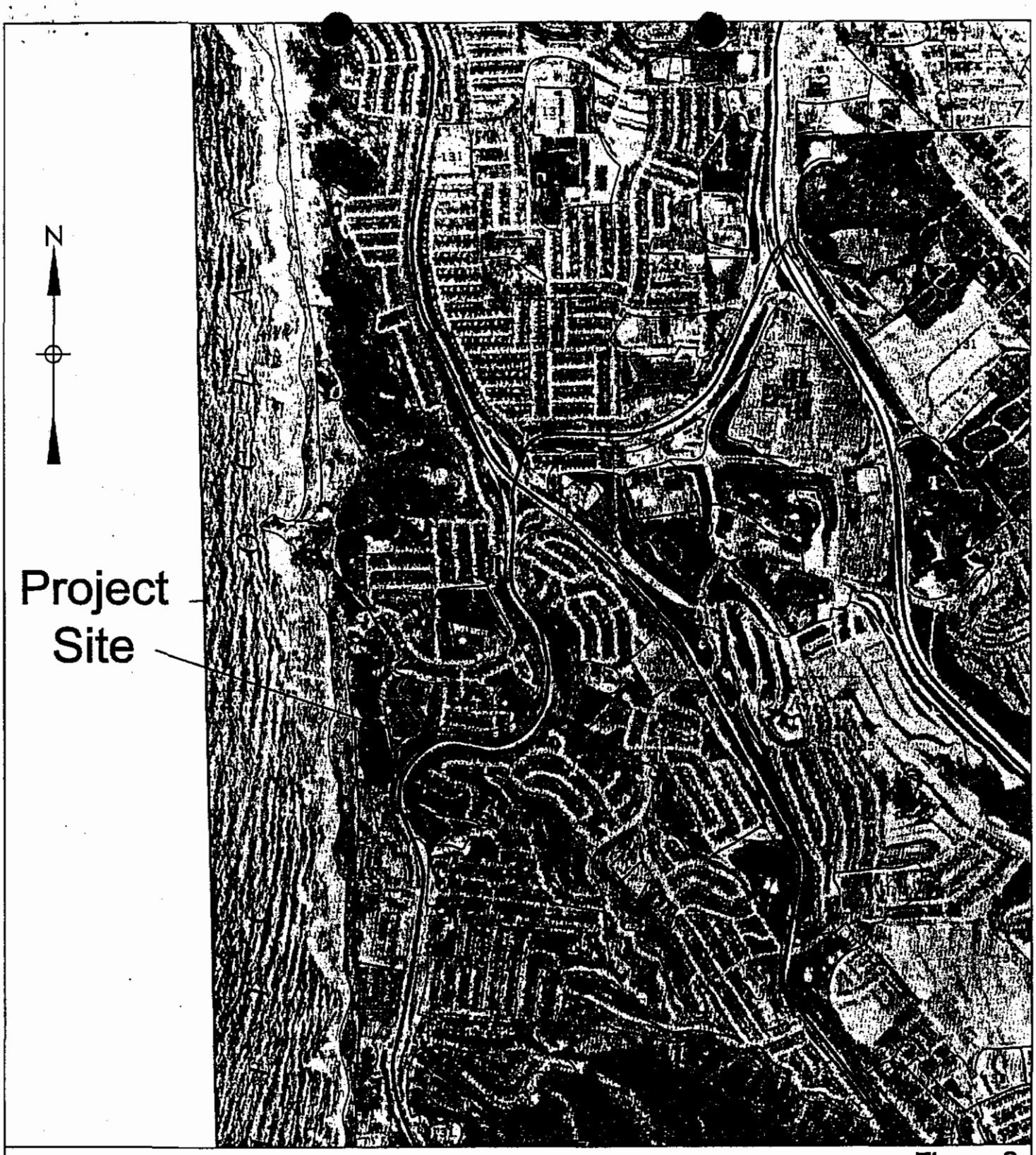


Figure 2

PURPOSE: Delineation of Jurisdictional Wetlands and Waters of the United States (Section 404 of the Clean Water Act) USDA SCS Soil Survey, San Mateo County Soils Map, 1991	SOILS MAP 1000 0 1000 2000 FEET SCALE 1:24,000 Trumark Companies 4135 Blackhawk Plaza Circle, Suite 280 Danville, California 94506 Contact: Jason Kilawee Phone: 925-648-8300	Jurisdictional Wetland Delineation LOCATION: Pacifica, California COUNTY: San Mateo APPLICATION BY: Trumark Companies SHEET: 2 of 3 DATE: AUGUST 1999

the site. The wetland area identified on the site is dominated by wetland plant species.

4.0 RESULTS

A routine level wetland delineation was conducted at the Pacific Cove Study Area in June 1999. The site was field reviewed for potential jurisdictional wetland areas, and sampling points were established to determine whether areas met the Corps' wetland criteria. Field data collected at sampling points are shown on Corps data sheets in Appendix A. From this sampling, potential jurisdictional wetlands and waters were identified. Potential jurisdictional areas are described in the following sections and depicted on the enclosed site map (Figure 3).

Potential jurisdictional wetlands were identified within the Study Area in a low area on the west side of the site.

4.1 Wetland Criteria

Vegetation

Dominant vegetation in the potential Section 404 wetland consisted of a single hydrophytic species, twinberry (*Lonicera involucrata*, FAC). Dominant plants in upland areas included coyote brush (*Baccharis pilularis*, NL), black mustard (*Brassica nigra*, NL), coffeeberry (*Rhamnus californica*, NL), blackberry (*Rubus* sp.), arroyo willow (*Salix lasiolepis*), and cape ivy (*Senecio mikanioides*, NL).

Hydrology

The principal hydrological sources for the potential jurisdictional wetland appears to be seasonal surface flow and direct precipitation. Wetland conditions appear to occur where microtopography and clay soils inclusions result in surface ponding. At the time of the field visit, which was approximately two months since the last rain, neither ponding nor saturation existed in the wetland on the site.

Wetland plot 1A had two secondary hydrology indicators, oxidized root channels and algal mats were present at this location. The upland plots did not possess any wetland hydrology indicators.

Soils

Soils in the Study Area corresponded fairly well to the mapped soil types (Orthents). Saturated soil conditions that resulted in the formation of hydric soil indicators observed at wetland sampling points are seasonal, as evidenced by the lack of groundwater to 18 inches in all soil pits dug during

the site delineation.

Soils in the potential jurisdictional wetland area had a low chroma matrix (10YR 4/2) within the upper 12 inches with mottles (7.5YR 5/6). Soils in upland areas had soils with matrix chroma of 2 or 3, but lacked mottles. Certain upland areas were dominated by hydrophytic vegetation such as arroyo willow, and appeared to carry surface flow during winter storms, but the well-drained nature of most of the soils on this site and the steep slopes over much of the site apparently prevent the long-term saturation of these soils which would lead to the development of hydric soil characteristics.

5.0 AREA OF POTENTIAL CORPS OF ENGINEERS JURISDICTION

A potential jurisdictional wetland within the Pacific Cove Study Area is characterized by seasonal soil saturation in a single isolated area of the site that apparently has slightly higher clay content in the subsurface soils. The depression on the site which contains wetlands appears to be naturally occurring. The potential jurisdictional wetland area within the site covers 0.03 acre (1,257 ft^2).

6.0 REFERENCES

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Department of the Army, Waterways Experiment Station, Vicksburg, Mississippi 39180-0631.

Kollmorgen Corporation. 1975. Munsell Soil Color Charts. Kollmorgen Corporation, Baltimore.

Reed, P. B., Jr. 1988. National list of plant species that occur in wetlands: California (Region 0). U. S. Fish and Wildlife Service Biological Report 88 (26.10).

Tronoff Engineers, Surveyors, Planners. 1997. A 1 inch = 40 feet topographic vesting tentative map of the Pacific Cove site.

U.S. Geological Survey. 1980. San Francisco South quadrangle. 7.5 minute (topographic).

U.S. Soil Conservation Service. 1991. Soil Survey of San Mateo County, Eastern Part, and San Francisco County, California. In cooperation with the University of California Agricultural Experiment Station; 120 pp. + appendices.

APPENDIX A - Corps Delineation Data Sheets

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: **Pacific Cove - Fish and Bowl Parcel**	Date: 6/11/99
Applicant/Owner: Trumark Companies	County: San Mateo
Investigator: Wetlands Research Associates, Inc.	State: CA
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID:
Is the site significantly disturbed (Atypical Situation)? ☐ Yes ☒ No	Transect ID:
Is the area a potential Problem Area? seasonal wetland ☒ Yes ☐ No (if needed explain on reverse.)	Plot ID: 1A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Lonicera involucrata	S	FAC	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW and/or FAC: (excluding FAC-) 100%

Remarks: Site is dominated by hydrophytic vegetation.

HYDROLOGY

Recorded Data
- ☐ Stream, Lake or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth To Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 Inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage patterns in Wetlands

Secondary Indicators (2 or more required):
- ☒ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral test
- ☒ Other (Explain in Remarks)

Hydrology Remarks: Algal mats and oxidized root channels present.

Plot ID: 1A

SOILS

Map Unit Name
(Series and Phase): Rock outcrop-Orthents complex, 30-75% slopes

Drainage Class: Poorly- to well-drained

Taxonomy (Subgroup) : Orthents

Field Observations
Confirm Mapped Type? ☐ Yes ☐ No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance / Contrast	Texture, Concretions, Structure, etc.
0-12"	A	10YR 4/2	7.5YR 5/6	common, faint	sandy loam

Hydric Soil Indicators :

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☒ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content In Surface Layer In Sandy Soils
- ☒ Organic Streaking In Sandy Soils
- ☐ Listed On Local Hydric Soils List
- ☐ Listed On National Hydric Soils List
- ☐ Other (Explain In Remarks)

Profile Remarks: Hydric soil indicators present.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☒ Yes ☐ No	
Wetland Hydrology Present?	☒ Yes ☐ No	
Hydric Soil Present ?	☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No

Remarks : All three wetland criteria are present.

Approved By HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: **Pacific Cove - Fish and Bowl Parcel**	Date: 6/11/99
Applicant/Owner: Trumark Companies	County: San Mateo
Investigator: Wetlands Research Associates, Inc.	State: CA
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID:
Is the site significantly disturbed (Atypical Situation)? ☐ Yes ☒ No	Transect ID:
Is the area a potential Problem Area? seasonal wetland ☒ Yes ☐ No (if needed explain on reverse.)	Plot ID: 1B

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Senecio mikanioides	H	NL	9.		
2. Baccharis pilularis	S	NL	10.		
3. Rubus sp.	H	FAC	11.		
4. Brassica nigra	H	NL	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW and/or FAC: (excluding FAC-) 25%

Remarks: Site is not dominated by hydrophytic vegetation

HYDROLOGY

Recorded Data
- ☐ Stream, Lake or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth To Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 Inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral test
- ☐ Other (Explain in Remarks)

Hydrology Remarks: No hydrologic indicators present.

Plot ID: 1B

SOILS

Map Unit Name
(Series and Phase): Rock outcrop-Orthents complex, 30-75% slopes

Drainage Class: Poorly- to well-drained

Taxonomy (Subgroup) : Orthents

Field Observations
Confirm Mapped Type? ☐ Yes ☐ No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance / Contrast	Texture, Concretions, Structure, etc.
0-12"	A	10YR 4/3			sandy loam

Hydric Soil Indicators :

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content In Surface Layer In Sandy Soils
- ☐ Organic Streaking In Sandy Soils
- ☐ Listed On Local Hydric Soils List
- ☐ Listed On National Hydric Soils List
- ☐ Other (Explain In Remarks)

Profile Remarks: No hydric soil indicators present.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☐ Yes ☒ No	
Wetland Hydrology Present?	☐ Yes ☒ No	
Hydric Soil Present ?	☐ Yes ☒ No	Is this Sampling Point Within a Wetland? ☐ Yes ☒ No

Remarks : None of the three wetland criteria are present.

Approved By HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: **Pacific Cove - Fish and Bowl Parcel**	Date: 6/11/99
Applicant/Owner: Trumark Companies	County: San Mateo
Investigator: Wetlands Research Associates, Inc.	State: CA
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID:
Is the site significantly disturbed (Atypical Situation)? ☐ Yes ☒ No	Transect ID:
Is the area a potential Problem Area? seasonal wetland ☒ Yes ☐ No (If needed explain on reverse.)	Plot ID: 2

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Salix lasiolepis	T	FACW	9.		
2. Baccharis pilularis	S	NL	10.		
3. Rhamnus californica	S	NL	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW and/or FAC: (excluding FAC-) 33%

Remarks: Site is not dominated by hydrophytic vegetation

HYDROLOGY

_____ Recorded Data
- ☐ Stream, Lake or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

_____ No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth To Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 Inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral test
- ☐ Other (Explain in Remarks)

Hydrology Remarks: No hydrologic indicators present.

Plot ID: 2

SOILS

Map Unit Name
(Series and Phase): Rock outcrop-Orthents complex, 30-75% slopes

Drainage Class: Poorly- to well-drained

Taxonomy (Subgroup) : Orthents

Field Observations
Confirm Mapped Type? ☐ Yes ☐ No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance / Contrast	Texture, Concretions, Structure, etc.
0-12"	A	10YR 2/2		no mottles present	

Hydric Soil Indicators :

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content In Surface Layer In Sandy Soils
- ☐ Organic Streaking In Sandy Soils
- ☐ Listed On Local Hydric Soils List
- ☐ Listed On National Hydric Soils List
- ☐ Other (Explain In Remarks)

Profile Remarks: No hydric soil indicators present.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☐ Yes ☒ No

Wetland Hydrology Present? ☐ Yes ☒ No

Hydric Soil Present ? ☐ Yes ☒ No

Is this Sampling Point Within a Wetland? ☐ Yes ☒ No

Remarks : None of the three wetland criteria are present.

Approved By HQUSACE 3/92

Wetlands Research Associates, Inc.

Transmittal

To:	Ms. Angie Wulfow
From:	Tom Fraser
Date:	November 30, 1999
Subject:	Pacific Cove parcel revised delineation map

Angie:

Please find enclosed a revised version of the jurisdictional wetlands map for the Pacific Cove parcel in Pacifica, California. This revised map shows no jurisdictional wetlands on the parcel as determined by Dan Martel of the U.S. Army Corps of Engineers during a site visit yesterday.

The landowner would like to receive a letter and map indicating the lack of Corps jurisdiction at the site. Call me if you have any questions.

Thank you very much for your assistance with this project.

Sincerely,

Thomas E Fraser

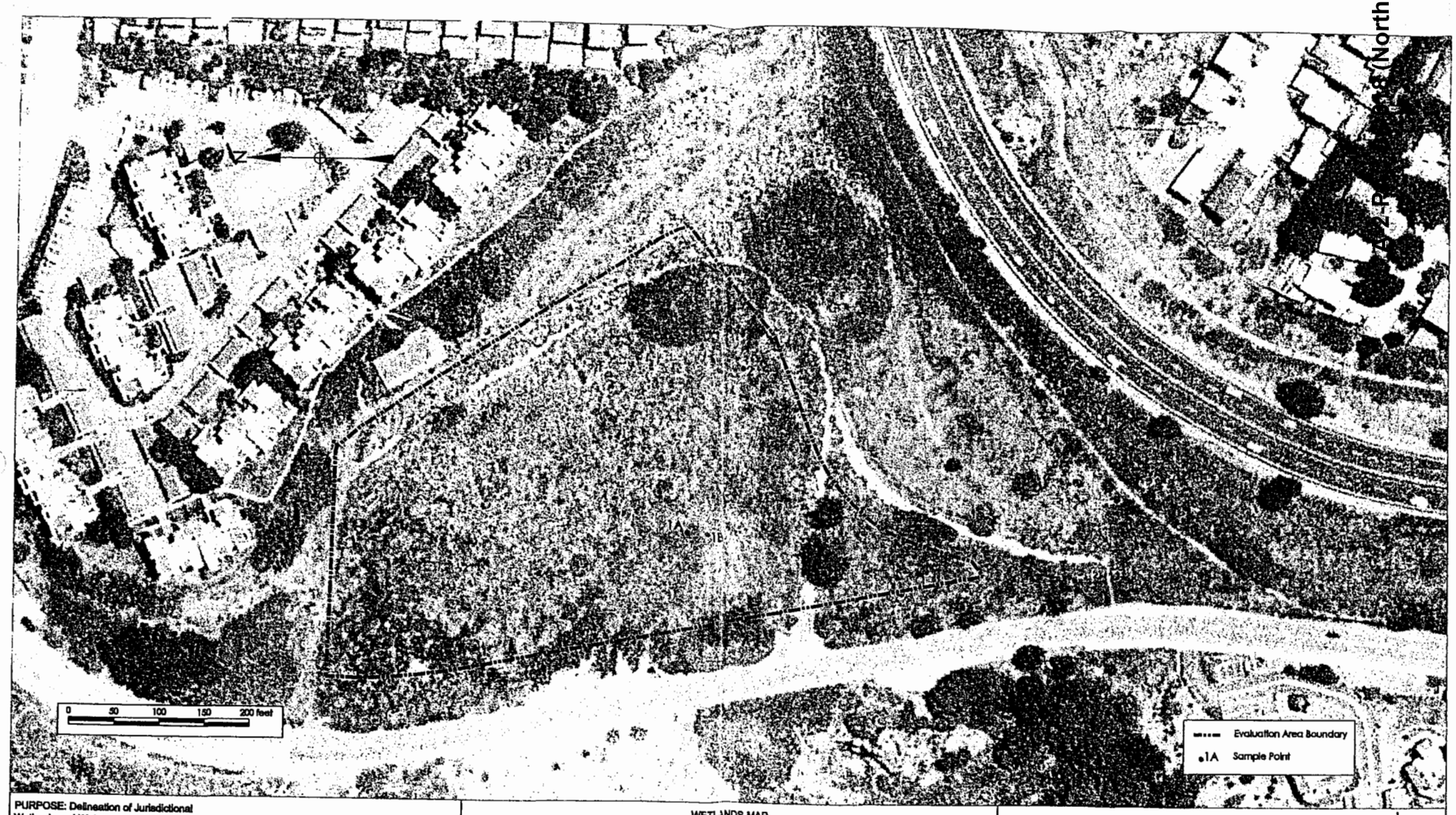
Tom Fraser
Associate

encl.

cc: Jason Kliewer, Trumark Company

A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 8

2169-G East Francisco Blvd., San Rafael, CA 94901 (415) 454-8868 / FAX (415) 454-0129



PURPOSE: Delineation of Jurisdictional Wetlands and Waters of the United States (Section 404 of the Clean Water Act)

SOURCE: Aerotopia Air Photo

WETLANDS MAP

80 0 80 160 FEET

SCALE 1:1200

Trumark Companies
4135 Blackhawk Plaza Circle, Suite 260
Danville, California 94506
Contact: Jason Kliewer
Phone: 925-846-8300

Jurisdictional Wetland Delineation

LOCATION: Pacific Cove Site, Pacifica, CA

COUNTY: San Mateo

APPLICATION BY: Trumark Company

SHEET: 3 of 3 DATE: AUGUST 1999

7031\7031LCPletter.wpd

Wetlands Research Associates, Inc.

December 27, 1999

City of Pacifica
Planning Department
Attn: Mike Crabtree
170 Santa Maria Ave.
Pacifica, CA 94044

Re: Pacific Cove Development
Local Coastal Program jurisdictional wetlands

Dear Mr. Crabtree:

On behalf of the landowner, Trumark Companies, Wetlands Research Associates, Inc. (WRA) conducted a wetland study to determine whether any areas on the Pacific Cove site meet the wetland definition utilized by the City of Pacifica in its certified Local Coastal Program, which implements the California Coastal Act. The project site is located in Pacifica, California (Figure 1) west of Route 1 and east of Palmetto Avenue. The site covers approximately 4.7 acres.

A wetland delineation report was also submitted to the Army Corps of Engineers, San Francisco District using their methodologies and wetland definition. The Corps (Angie Wulfow: 415-977-8452) determined that the Pacific Cove site did not contain any wetlands subject to federal jurisdiction following a site visit on November 29, 1999.

The City of Pacifica Local Coastal Plan (LCP), which has been certified by the Coastal Commission to implement the Coastal Act, defines wetlands as follows:

> *"A wetland is defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes."*
>
> (City of Pacifica Local Coastal Program, Land Use Plan: See Plan Conclusions, subsection Rare and Endangered Species: Habitat Protection, Recreational use of Wetlands and Development near Wetlands and Creeks, page C-99.)

2169-G East Francisco Blvd., San Rafael, CA 94901 (415) 454-8868/FAX (415) 454-0129

The primary difference between the definition used by the City of Pacifica and the Corps of Engineers is that the former requires only two criteria in order to define a wetland: hydrology is one and *either* the presence of hydric soils *or* the presence of hydrophytes must be found. The Corps of Engineers requires that *all three* parameters be present to identify a wetland under federal jurisdiction. The two parameter LCP approach could therefore potentially result in the determination of more areas as wetlands than the Corps of Engineers three parameter approach. The Land Use Plan portion of the City of Pacifica's LCP was certified by the Coastal Commission as in conformity with Coastal Act policies (including wetland protection policies) on March 4, 1980.

There are no specific methodologies designated by the City of Pacifica to determine wetland hydrology, hydric soils, or hydrophytes. Because of the significant research conducted by the Corps of Engineers on wetland boundary determination and the preparation of a manual to delineate wetlands (Corps Manual, 1987), the Corps guidance was used in this study with the exception that only two parameters were necessary to designate a wetland as defined in the City's LCP.

In June 1999, a study of vegetation, hydrology, and soils was conducted. Vegetation, hydrology, and soils were examined at sampling points in depressions or other areas that exhibited the potential for meeting wetland criteria. The results were recorded on standard *1987 Corps Manual* data sheets which can be used to elucidate the criteria necessary to meet the LCP wetland definition. These data sheets were submitted to the Corps in a delineation report in August 1999. Corps project manager Angie Wulfow and Corps wetlands specialist Dan Martel visited the site on Monday November 29, 1999 and determined that there are no wetlands on the Pacific Cove site that meet the criteria to be classified as jurisdictional wetlands under Section 404 of the Clean Water Act.

Vegetation

Most of the site is dominated by a mix of coastal scrub vegetation including coyote brush (*Baccharis pilularis*), coffeeberry (*Rhamnus californica*), and poison oak (*Toxicodendron diversilobum*). All of these shrub plant species are classified as non-wetland plants. There is one area dominated by willow (*Salix* sp.), and another small area dominated by twinberry (*Lonicera involucrata* var. *ledbourii*). These two species are classified by the U.S. Fish and Wildlife Service as facultative hydrophytic vegetation and would meet one of the parameters used by the City of Pacifica's LCP. However, the fact that these species are not obligate wetland species means that they may also be found in upland conditions and therefore the presence of positive indicators of wetland hydrology would also be required.

Hydrology

An area exhibits wetland hydrology if it is inundated or if the soil is saturated for at least five percent of the growing season or approximately 18 days in the maritime climate of Pacifica. Because observations were made at a time of year when surface water, ground water or saturated soils are generally not apparent (e.g. seasonal wetlands), evidence of wetland hydrology can be determined based on the observation of hydrologic indicators as described in the 1987 *Corps Manual.* Wetland hydrology indicators include: oxidized root channels, surface sediment deposits, drift lines, and others. On the Pacific Cove site, all depressions, topographic low areas, and the two areas

dominated by hydrophytic vegetation were examined for these hydrological indicators. No primary hydrology indicators were present. Oxidized root channels (a secondary hydrologic indicator) were faint and not "reasonably abundant" as required by the Corps manual to meet the hydrology criteria. This observation was confirmed by the Corps staff during their site visit. Therefore, the hydrologic criteria, which is essential to the determination of a "wetland" under the City of Pacifica's LCP, was not present on the site.

The USGS topographic map for this area (San Francisco South quadrangle, 1980) shows no marsh symbols or "blue-line streams" on the project site (Figure 1). Based on this evidence, WRA and the Corps concluded that the sandy soils on the site were too well drained to support wetland hydrology.

Soil

The Natural Resource Conservation Service defines a hydric soil as:

> *"A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part."*
>
> (Federal Register July 13, 1994, U.S. Department of Agriculture, Natural Resource Conservation Service.)

All hydric soils must satisfy requirements of the definition. Because it is difficult to determine whether or not a soil develops anaerobic conditions without direct measurement of soil oxygen levels or redox potential, the Natural Resource Conservation Service has issued guidance for the observation of indicators in soils that can be used to determine whether or not the soils are hydric (USDA 1998). These indicators are generally formed by biological or chemical reactions in anaerobic soils and therefore act as surrogates for actual observations of anaerobic conditions. Indicators are primarily morphological indicators used for field identification of hydric soils. Accordingly, a hydric soil is a soil that meets the definition, and the presence of one (or more) of the indicators is evidence that the definition has been met.

In the field, a shovel was used to collect soil samples (between 12 and 18 inches deep). Soil profiles were described using terminology contained in *Field Book for Describing and Sampling Soils* (Schoeneberger et al, 1998) including horizon depths, color, redoximorphic features, texture, structure, and consistence. Soils were examined for hydric indicators contained in the *Field Indicators of Hydric Soils in the United States* (USDA, 1998). Soil color was determined using a Munsell soil color chart (Kollmorgen Corporation 1990).

The Soil Survey of San Mateo County, Eastern Part, and San Francisco County, California (SCS 1991) indicates that the Study Area has two soil types: Orthents, cut and fill-Urban land complex 5 to 75 percent slopes and Rock outcrop-Orthents complex, 30 to 75 percent slopes (Figure 2). The County Soil Survey describes Orthents as very shallow to very deep, very poorly drained to excessively drained soils on uplands including hills and ridgetops; alluvial fans; coastal terraces; floodplains; and tidal flats. These soils formed in alluvium derived from various kinds of rock; sandy coastal deposits; hard and soft sandstone, shale, siltstone, serpentine, and volcanic rock; and

various manmade fill material. Orthents soils are extremely variable. They consist of areas of undisturbed loamy material on coastal terraces; areas that have been mechanically altered for residential and other urban uses and have cuts that have slopes of 3:1 to 1.5:1 and fills that are 0 to 75 feet deep or more; smoothed areas on alluvial fans and plains; reclaimed areas near San Francisco Bay; and areas on the margins of the bay that consist of earthy material, rock fragments, plant matter, and manmade debris. Runoff is medium to very rapid, and the hazard of water erosion is moderate to very high.

Field observations confirmed the soil type. The soil is a sandy loam and appears to be well-drained. Soil mottling was absent throughout most of the site. In the area of the *Lonicera involucrata*, soil mottling was variable and faint (less than 1%). Because the soil color was light (chroma=2), consistent mottling greater than 2% is required in order for the soil to be considered hydric (NTCHS Field Indicators, 1998).

Discussion

The City of Pacifica has adopted a Land Use Plan, Local Coastal Program ("LCP"), to implement the provisions of the California Coastal Act. The LCP contains a definition of wetlands that has been used to identify any possible wetlands on the Pacific Cove site. This definition is identical to the definition of wetlands contained in the LCP of the County of San Mateo, which was certified by the CCC in 1982.

Based on the observations made in this study, hydrologic indicators were not present as required to meet the LCP definition that " the water table is at, near, or above the land surface". Furthermore, the site did not support hydric soils. The presence of *Lonicera involucrata*, a hydrophyte that is listed as a facultative species, does not necessarily mean that the site has wetland hydrology since this plant is found equally in either wetlands or uplands.

Based on these observations, there are no areas on the subject parcel that meet the City of Pacifica LCP definition of wetlands. Furthermore, the Corps has confirmed that there are no areas that meet the federal definition of wetlands.

Sincerely,

Thomas Fraser
Associate Wetland Scientist

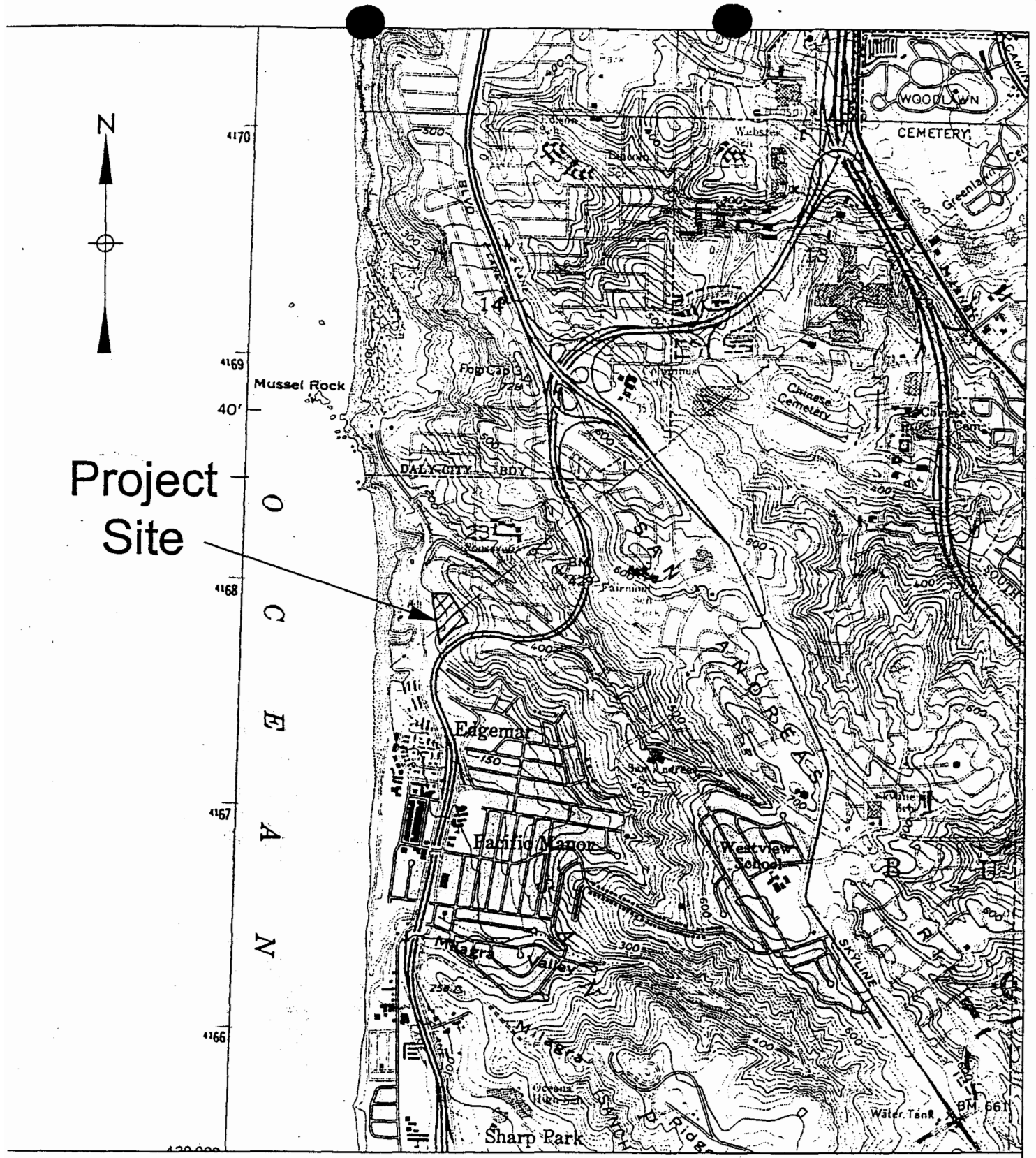


Figure 1

PURPOSE: Delineation of Jurisdictional Wetlands and Waters of the United States (Section 404 of the Clean Water Act)

USGS San Francisco South Quadrangle, 1980, showing location of Pacific Cove Parcel

LOCATION MAP

1000 0 1000 2000 FEET

SCALE 1:24,000

Trumark Companies
4135 Blackhawk Plaza Circle, Suite 280
Danville, California 94506
Contact: Jason Kelley
Phone: 925-648-8300

Jurisdictional Wetland Delineation

LOCATION: Pacifica, California

COUNTY: San Mateo

APPLICATION BY: Trumark Company

SHEET: 1 of 3 DATE: AUGUST 1999

A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 9

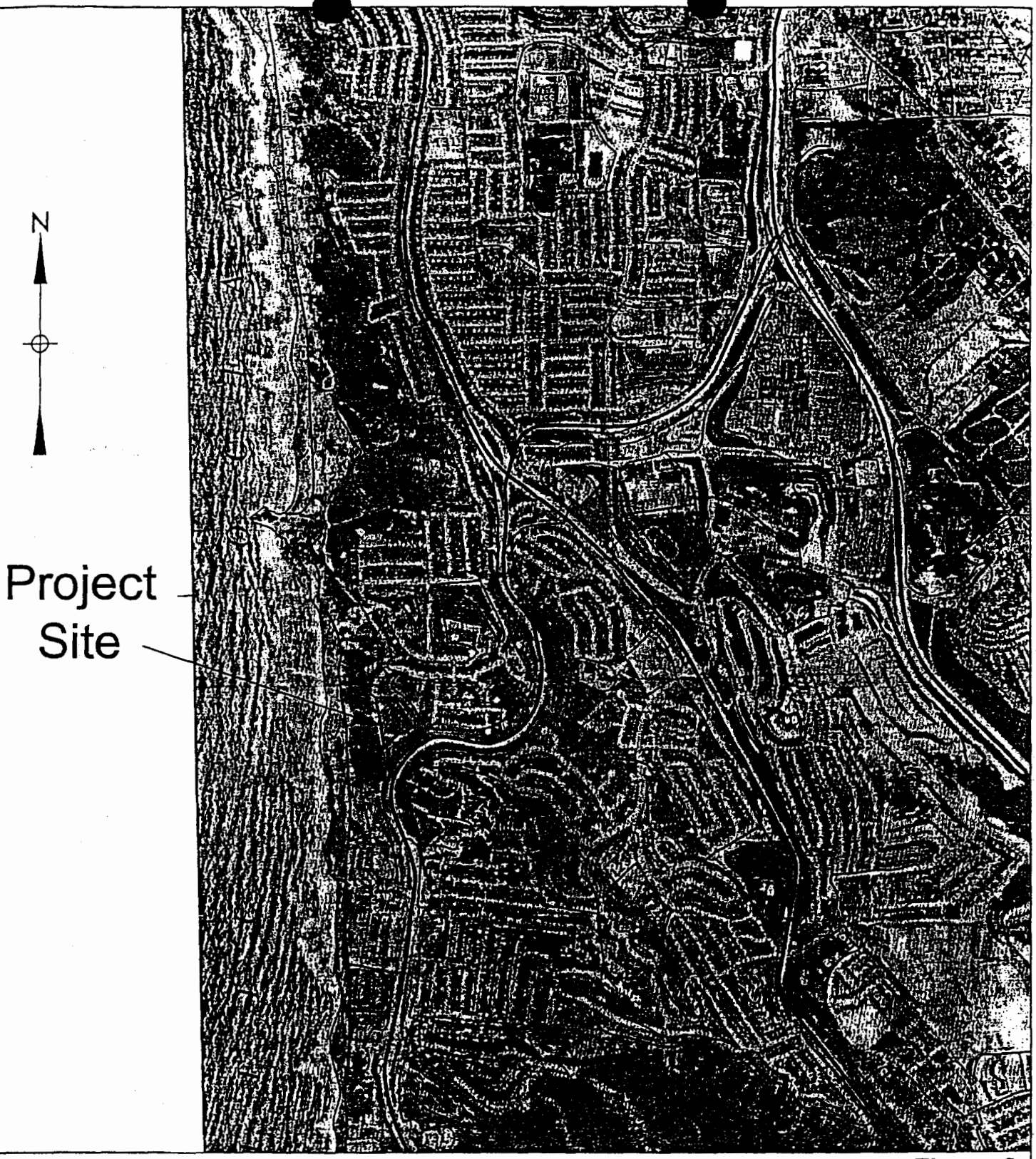


Figure 2

PURPOSE: Delineation of Jurisdictional Wetlands and Waters of the United States (Section 404 of the Clean Water Act) USDA SCS Soil Survey, San Mateo County Soils Map, 1991	SOILS MAP 1000 0 1000 2000 FEET SCALE 1:24,000 Trumark Companies 4135 Blackhawk Plaza Circle, Suite 280 Danville, California 94506 Contact: Jeff Kilgore Phone: 925-648-8300	Jurisdictional Wetland Delineation LOCATION: Pacifica, California COUNTY: San Mateo APPLICATION BY: Trumark Companies SHEET: 2 of 3 DATE: AUGUST 1999

A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 9

References

Department of the Army. 1987. Corps of Engineers Wetlands Delineation Manual. Department of the Army, Waterways Experiment Station, Vicksburg, MS 39180-0631.

Federal Register July 13, 1994, US Department of Agriculture, Natural Resource Conservation Service.

Kollmorgen Instrument Corporation. 1990. Munsell Soil Color Charts. Baltimore, MD.

National Technical Committee for Hydric Soils (NTCHS), 1986. Definition of Hydric Soils.

Reed, P.B., 1988. National list of plant species that occur in wetlands: California (Region 0). U.S. Fish and Wildl. Serv. Biol. Rep. 88(26.10). 135 pp.

Schoeneberger PJ, Wysocki DA, Benham EC, and Broderson WD. 1998. Field Book for Describing and Sampling Soils, Natural Resources Conservation Service, USDA, National Soil Survey Center, Lincoln, NE.

US Fish and Wildlife Service. 1985. National wetland inventory map. Half Moon Bay quadrangle. U.S. Fish and Wildlife Service, Corvallis, OR.

US Department of Agriculture, Soil Conservation Service. 1961. Soil Survey of San Mateo Area. In cooperation with the University of California Agricultural Experiment Station.

USDA, Soil Conservation Service. 1992. Field Office Official List of Hydric Soil Map Units of San Mateo Area, California. USDA, Soil Conservation Service. Davis, Calif.

USDA, Natural Resources Conservation Service. 1998. Field Indicators of Hydric Soils in the United States, Version 4.0. Hurt GW, Whited PM and Pringle RF, eds. USDA, NRCS, Ft. Worth, TX.

ARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, CORPS OF ENGINEERS
333 MARKET STREET
SAN FRANCISCO, CALIFORNIA 94105-2197

REPLY TO
ATTENTION OF:

JAN 3 2000

Regulatory Branch

Subject: File Number 24709S

Mr. Tom Fraser
Wetlands Research
2169-G East Francisco Blvd.
San Rafael, California 94901

Dear Mr. Fraser:

Thank you for your submittal of September 24, 1999, requesting confirmation of the extent of Corps of Engineers jurisdiction at the Pacific Cove parcel in the City of Pacifica, San Mateo County, California. Enclosed is a map showing that there are no areas that meet the criteria for waters of the U.S., including wetlands, within the study boundary of this parcel. This determination is based on a field visit by Corps staff on November 29, 1999.

We have based this jurisdictional delineation on the current conditions of the site. A change in those conditions may also change the extent of our jurisdiction. This jurisdictional delineation will expire in five years from the date of this letter. However, if there has been a change in circumstances which affects the extent of Corps jurisdiction, a revision may be done before that date.

If you have any questions, please call Angie Wulfow of our Regulatory Branch at telephone 415-977-8452. All correspondence should reference the file number at the head of this letter.

Sincerely,

Edward A. Wyle

for Calvin C. Fong
Chief, Regulatory Branch

Enclosure

MEMORANDUM

SUBJECT: Bowl Project Wetland Peer Review
TRA FILE: epbp
DATE: January 24, 2000
FROM: Taylor Peterson
TO: Allison Knapp, City of Pacifica
cc: Michael Crabtree, City of Pacifica

Christine Schneider of our staff asked me to complete a peer review of wetland data on the Pacific Cove or "Bowl" Project in Pacifica. I am a senior biologist at Thomas Reid Associates, I have completed several courses with the Wetland Training Institute in wetland delineation techniques, and have done a number of wetland delineations. I have been an environmental consultant since 1980. The information I have reviewed includes the following:

1. A draft of the biology section of the project EIR;

2. "Delineation of Potential Jurisdictional Wetlands Pacific Cove Parcel Pacifica, California" by Tom Fraser of Wetlands Research Associates, July 1999;

3. Letter to Michael Crabtree, City of Pacifica Planning Department, from Tom Fraser of Wetlands Research Associates, Inc., dated December 27, 1999 regarding LCP jurisdictional wetlands;

4. Letter to Tom Fraser, Wetlands Research Associates, dated January 3, 2000 from the Department of the Army, San Francisco District, Corps of Engineers; and

5. Excerpts of Pacifica's zoning code related to wetlands and biology, including pages 462-4, 462-11, 462-12, and 462-13.

My understanding of the chain of events is that Patrick Kobernus of our staff visited the site and identified that the central coast riparian scrub habitat on the "fish" portion of the site could potentially be characterized as wetland, based on the presence of willow, rushes, sedges and standing water. Following that, Wetlands Research Associates (WRA) was hired to prepare a wetland delineation at the site. Tom Fraser of WRA did a delineation in July 1999, in which he determined that there was an area of 0.03 acre on the site that was potential jurisdictional wetland. Jurisdictional wetland is wetland that meets the federal government's definition of this habitat and thus falls under the jurisdiction of the Army Corps of Engineers through section 404 of the Clean Water Act. Tom subsequently had the Army Corps of Engineers verify his wetland delineation, and the US ACE determined that in fact there are no jurisdictional wetlands on the project site. In December 1999, Tom Fraser also completed an analysis of whether the project site contains wetland as defined in the City of Pacifica LCP, and found that it does not.

I have reviewed the delineation methodology and whether the conclusions are logical, based on the data provided. The methodology used by WRA follows that in the 1987 manual published by the USACE, and is in keeping with current practice. The area which Patrick identified as possible wetland was found by WRA to be a drainage ditch which does not fall

Thomas Reid Associates | 560 Waverley Street, Suite 201 (Post Box 880) | Palo Alto, CA 94301
Tel: 650-327-0429 Fax: 650-327-4024

within USACE jurisdiction. [illegible] Fraser's conclusions in the delineat[illegible] are conservative, meaning he delineated the ar[illegible] which had any chance at all of being considered a wetland under the federal definitions. In fact, the USACE made its own determination, based on a site visit, that the site does not currently support federal jurisdictional wetland. I consider that to be definitive, unless conditions at the site change significantly.

The City of Pacifica Local Coastal Plan (LCP), defines wetlands as, "land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes." In his analysis, Tom Fraser of WRA found that hydrophytic vegetation is present, but that wetland soils are not. The particular species of plants he names in this analysis are facultative, meaning they occur equally in wetland situations and upland situations. That is, they do not require saturated soils in order to grow, like an obligate wetland plant does. Thus, he reasoned that it was important to find hydric soils in concert with this vegetation to meet the LCP definition.

I found two discrepancies between the original delineation and this LCP analysis, but in the end I would agree with the conclusion that the site does not contain a wetland as defined in the LCP.

The first discrepancy is related to soils. Hydric soils are found in the delineation, then, based on his visit to the site with the USACE, he states in the LCP analysis that the site does not contain hydric soils. I am assuming that the USACE disagreed with the original wetland delineation which found small pockets of possibly hydric soil, and that the US ACE finding overrides the conclusion in the delineation.

The second discrepancy is related to vegetation. In the original delineation, several species of plants are found to be dominant, including plant species that are obligate or facultative-wet (that is, they require wetter conditions to grow). These plants are left out of the LCP analysis, which states the dominant species are willow and twinberry (both facultative species). I find, however, that this does not affect the results. In reviewing the species in the delineation and comparing it to my personal field knowledge, these additional plants are species that often grow outside of wetlands in areas that are just damp enough to support them. On the coast side, these plants are probably more dependent on moisture from fog drip than from the water table. Since hydric soils are not found on the site, I suspect this vegetation does not represent habitat that is functioning as a wetland.

In looking at the definitions of wetland in the zoning code, and comparing it to the data at hand, I find no evidence that this site supports saltwater marsh, freshwater marsh, stream, creek, open or closed brackish water marsh, swamp, mudflat or fen habitat, and thus does not contain wetland as defined in the zoning code.

This brings me to my last comment, which is about functions and values. The project site does not contain federal jurisdictional wetlands, as determined by the US ACE, so there is no permitting concern there. The project site also does not contain wetlands as defined in the LCP or the zoning code. That is not to say, however, that developing the site will not have significant biological impacts. This still needs to be addressed in the EIR, which should look at the site in relation to off-site areas, and determine its biological functions and values and whether there are significant cumulative impacts related to biology. The California Department of Fish and Game

should also be invited to visit the site during the EIR process to discuss any concerns the Department may have related to development of this site.

Please do not hesitate to telephone if there are any questions regarding this analysis. I am best reached at (650) 917-0913.

MEMORANDUM

SUBJECT: Visit to Fish/Bowl site w/ CDFG
TRA FILE: G:\BIO\CDFGMemo.wpd
DATE: 2/2/00
FROM: Patrick
TO: Christine

I visited the Fish/Bowl project site in Pacifica with Jeanine Dewald of CDFG on 2/2/00. We walked the site for approximately 30 minutes and I discussed with her the biological issues of the site and the development plans. Ms. Dewald had the following recommendations:

1) The willow area of the site should be more thoroughly surveyed in the spring for any nesting neo-tropical migrant songbird species (i.e. saltmarsh common yellowthroat, yellow warbler).

2) The site should be controlled for invasive exotic species, in particular iceplant (*Carpobrotus edulis*), pampas grass (*Cortaderia jubata*), and cape ivy (*Delairea odorata*).

3) The western portion of the parcel that is made up of sand dunes and coastal dune scrub vegetation should be controlled of iceplant and restored to coastal dune scrub habitat.

Ms. Dewald would like copies of the biological assessment(s), wetland delineation, and any other information that is pertinent to the biological resources of the site.

If you have any questions regarding her recommendations, give her a call. I think it would be good to clarify with her what she recommends (in reference to #1 above) what should be done if any sensitive neotropical songbirds are found on the site.

Thomas Reid Associates | 560 Waverley Street, Suite 201 (Post Box 880) | Palo Alto, CA 94301
Tel: 650-327-0429 --- Fax: 650-327-4024

Delineation of Potential Jurisdictional Wetlands

Edgemar Road Parcel
Pacifica, California

PREPARED FOR:

North Pacifica, LLC
914 Westwood Blvd., Suite 500
Los Angeles, California 90024
Contact: Robert Kalmbach
(510) 655-5780

PREPARED BY:

Wetlands Research Associates, Inc.
2169 East Francisco Blvd., Suite G
San Rafael, California 94901
Contact: Tom Fraser
(415) 454-8868

March 2000

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1.0 INTRODUCTION

Wetlands Research Associates, Inc. was requested by North Pacifica, LLC to determine the presence of wetlands subject to federal jurisdiction under Section 404 of the Clean Water Act on a parcel of land in Pacifica, San Mateo County. The Study Area covers approximately two acres and is located on a parcel that lies northwest of Highway 1 and east of Palmetto Avenue in Pacifica (Figure 1).

As stated in the federal regulations for the Clean Water Act, wetlands are defined as:

> *"Those areas that are inundated or saturated by surface or ground waters at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."*
> (EPA, 40 CFR 230.3 and CE, 33 CFR 328.3)

During June 1999 and March 2000, Wetlands Research Associates, Inc. biologists conducted a wetland delineation study within the Study Area. The delineation study determined the presence or absence of wetland indicators used by the U.S. Army Corps of Engineers in making a jurisdictional determination. The three criteria used to delineate wetlands are the presence of: (1) hydrophytic vegetation, (2) wetland hydrology, and (3) hydric soils. According to the *Corps of Engineers Wetlands Delineation Manual* (1987):

> *"....[E]vidence of a minimum of one positive wetland indicator from each parameter (hydrology, soil, and vegetation) must be found in order to make a positive wetland delineation."*

2.0 METHODS

The methods used in this study to delineate potential jurisdictional wetlands of the U.S. are based on the *U.S. Army Corps of Engineers Wetlands Delineation Manual* (Corps 1987). The routine method for wetland delineation described in the *Corps Manual* (1987) was used to identify areas subject to Corps Section 404 jurisdiction within the Study Area.

Prior to conducting field surveys, the Soil Survey of San Mateo County, Eastern Part, and San Francisco County, California (USDA Soil Conservation Service 1991) and the U.S. Fish and Wildlife Wetland Inventory Maps (U.S. Fish and Wildlife Service 1987, San Mateo quadrangle) were reviewed. Field studies to examine vegetation, hydrology, and soils were conducted during June 1999. This site was also visited on several occasions in March 2000.

The Corps requires that data on vegetation, hydrology, and soil be recorded on standard forms. Completed data forms for this study are provided in Appendix A. For purposes of this study the vegetated wetland areas were considered seasonal wetlands and, therefore, meet the criteria as

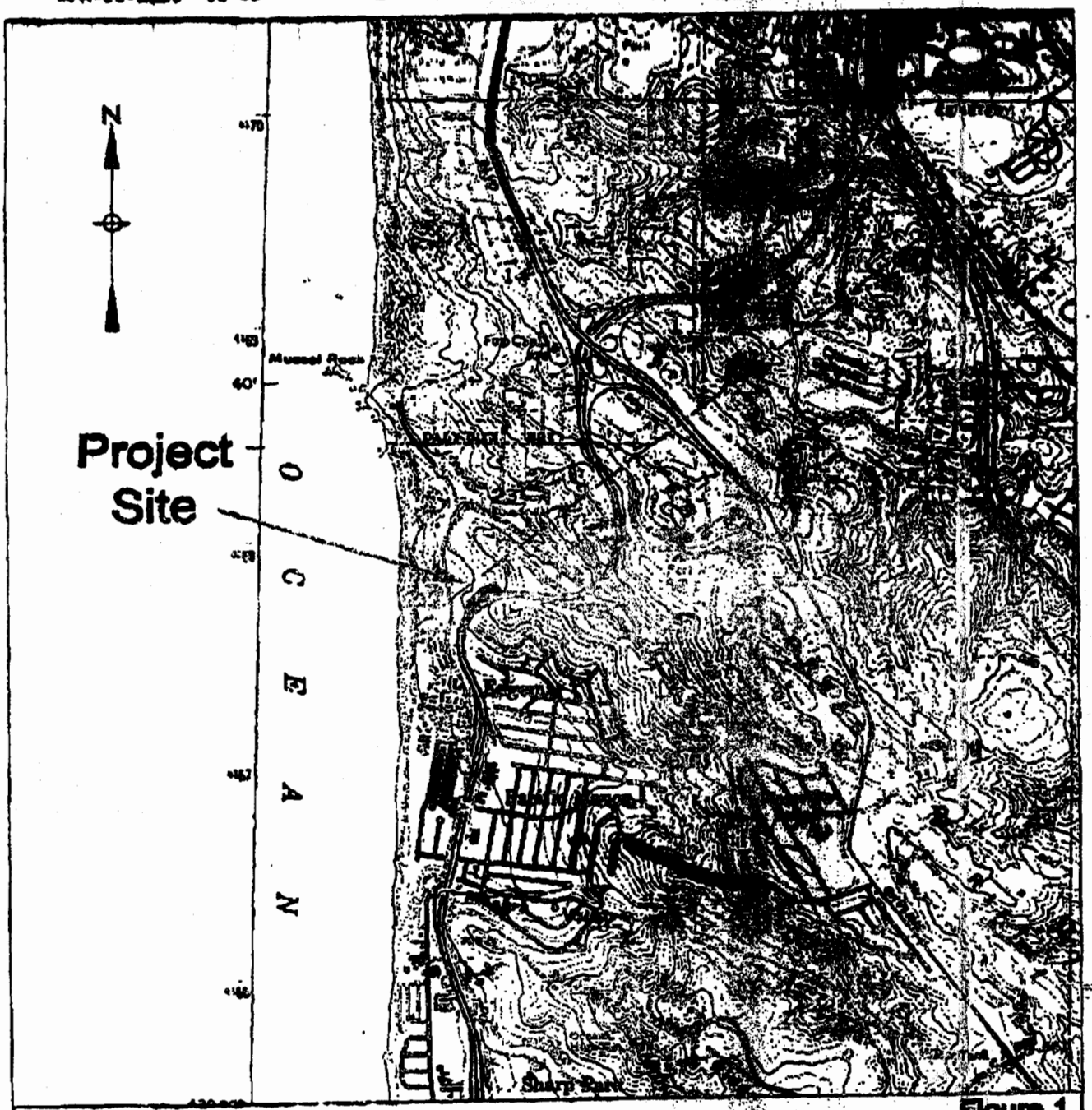

Figure 1

PURPOSE: Delineation of Jurisdictional Wetlands and Waters of the United States (Section 404 of the Clean Water Act) USGS San Francisco South Quadrangle, 1980, showing location of Pacific Cove Parcel	LOCATION MAP SCALE 1:24,000 North Pacifica, LLC 914 Westwood Blvd., Suite 500 Los Angeles, California 90024 Contact: Robert Kalmbach Phone: 310-655-6780	Jurisdictional Wetland Delineation LOCATION: Sharp Park Road Parcel, Pacifica, CA COUNTY: San Mateo APPLICATION BY: North Pacific, LLC SHEET: 1 of 3 DATE: March 2000

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"Problem Areas" as defined in the Corps Manual. Once a sampling area was determined to be either a potential wetland or upland, a 1 inch = 40 feet topographic mapping tentative map (Tronoff Engineers, Surveyors, Planners; 1997) was used to draw boundaries between potential wetland and upland areas. The sizes of potential jurisdictional areas were measured using AutoCAD 14.

The vegetation, hydrology, and soil criteria used to make wetland determinations in wetland areas are summarized below.

Vegetation

Plant species identified in the Study Area were assigned a wetland status according to the U.S. Fish and Wildlife Service (Reed 1988) list of plant species that occur in wetlands. This wetland classification system is based on the expected frequency of occurrence in wetlands as follows:

OBL	Always found in wetlands	>99% frequency
FACW	Usually found in wetlands	67-99%
FAC	Equal in wetland or non-wetlands	34-66%
FACU	Usually found in non-wetlands	1-33%
NL	Not listed (upland)	<1%

Plants with OBL, FACW, and FAC classifications are classified as hydrophytic vegetation in the *Corps Manual* (1987) methodology. If more than 50 percent of the dominant plants (dominant is ≥20 percent of the cover) are wetland plants, the area is considered to have met the hydrophytic vegetation criterion.

Hydrology

The jurisdictional wetland hydrology criterion in a non-tidal area is satisfied if the area is inundated or saturated for a period (minimum of five percent of the growing season or 18 days in the San Francisco Bay Area) sufficient to create anoxic soil conditions during the growing season. Evidence of wetland hydrology can include direct evidence (primary indicators), such as visible inundation or saturation, surface sediment deposits, and drift lines, or indirect indicators (secondary indicators), such as oxidized root channels and algal mats. If secondary indicators are used, at least two secondary indicators must be present to conclude that an area has wetland hydrology.

Soils

Hydric soils formed under wetland (anaerobic) conditions have characteristic low chroma colors and an associated quantity of redox concentrations (mottles) near the surface, typically within the upper 12 inches (USDA, NRCS 1998). Chroma designations are determined by comparing a soil sample with a standard Munsell soil color chart (Kollmorgen 1975). Various combinations of low chroma colors and quantities of redox concentrations can be used as field indicators of hydric soils and associated anaerobic conditions. Hydric soils formed under continuous saturation, typically have

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Exhibit 12

a gleyed (grayish) matrix color in surface horizons as a result of removal or transformation (reduction) of iron. Hydric soils formed under a seasonal hydrology may accumulate dark organic matter at the surface and have oxidized iron deposited in masses or along pores as a result of alternating saturation and drying. These soils are considered hydric if the following indicators of hydric conditions are present: (1) chroma 1 or less or (2) chroma 2 and distinct or prominent redox concentrations.

3.0 STUDY AREA DESCRIPTION

The Study Area covers approximately 1.5 acres and lies on a hillside that slopes from east to west with elevations ranging from 185 feet to 240 feet mean sea level. The Study Area is currently an undeveloped vacant lot. Portions of an abandoned asphalt roadway (Edgemar Road) crosses the lower edge of the site.

The principal hydrological sources for the Study Area are precipitation, groundwater, surface run-off, and seasonal water flow in drainages from off-site sources. The Study Area is primarily a steep to moderately sloped parcel with sheet runoff during heavy rainfall and winter months. Surface flow on the site is generally carried toward the adjacent and lower vacant Pacific Cove parcel.

The Soil Survey of San Mateo County, Eastern Part, and San Francisco County, California (SCS 1991) indicates that the Study Area has two soil types: Orthents, cut and fill-Urban land complex 5 to 75 percent slopes and Rock outcrop-Orthents complex, 30 to 75 percent slopes (Figure 2). The County Soil Survey describes Orthents as very shallow to very deep, very poorly drained to excessively drained soils on uplands including hills and ridetops; alluvial fans; coastal terraces; floodplains; and tidal flats. These soils formed in alluvium derived from various kinds of rock; sandy coastal deposits; hard and soft sandstone, shale, siltstone, serpentine, and volcanic rock; and various manmade fill material. Orthents soils are extremely variable. They consist of areas of undisturbed loamy material on coastal terraces; areas that have been mechanically altered for residential and other urban uses and have cuts that have slopes of 3:1 to 1.5:1 and fills that are 0 to 75 feet deep or more; smoothed areas on alluvial fans and plains; reclaimed areas near San Francisco Bay; and areas on the margins of the bay that consist of earthy material, rock fragments, plant matter, and manmade debris. Runoff is medium to very rapid, and the hazard of water erosion is moderate to very high. The soils of the Study Area are sandy loams on coastal terraces and show the impacts of disturbance related to highway development and on-site construction.

The Study Area is dominated by northern coastal scrub with small areas of coastal terrace prairie habitat. These areas are dominated by upland plants such as slender wild oat (*Avena barbata*), coyote brush (*Baccharis pilularis*), black mustard (*Brassica nigra*), poison oak (*Toxicodendron diversilobum*). A sloped area on the eastern end of the project site is dominated by arroyo willow (*Salix lasiolepis*). The wetland area identified on the site is dominated by wetland plant species.

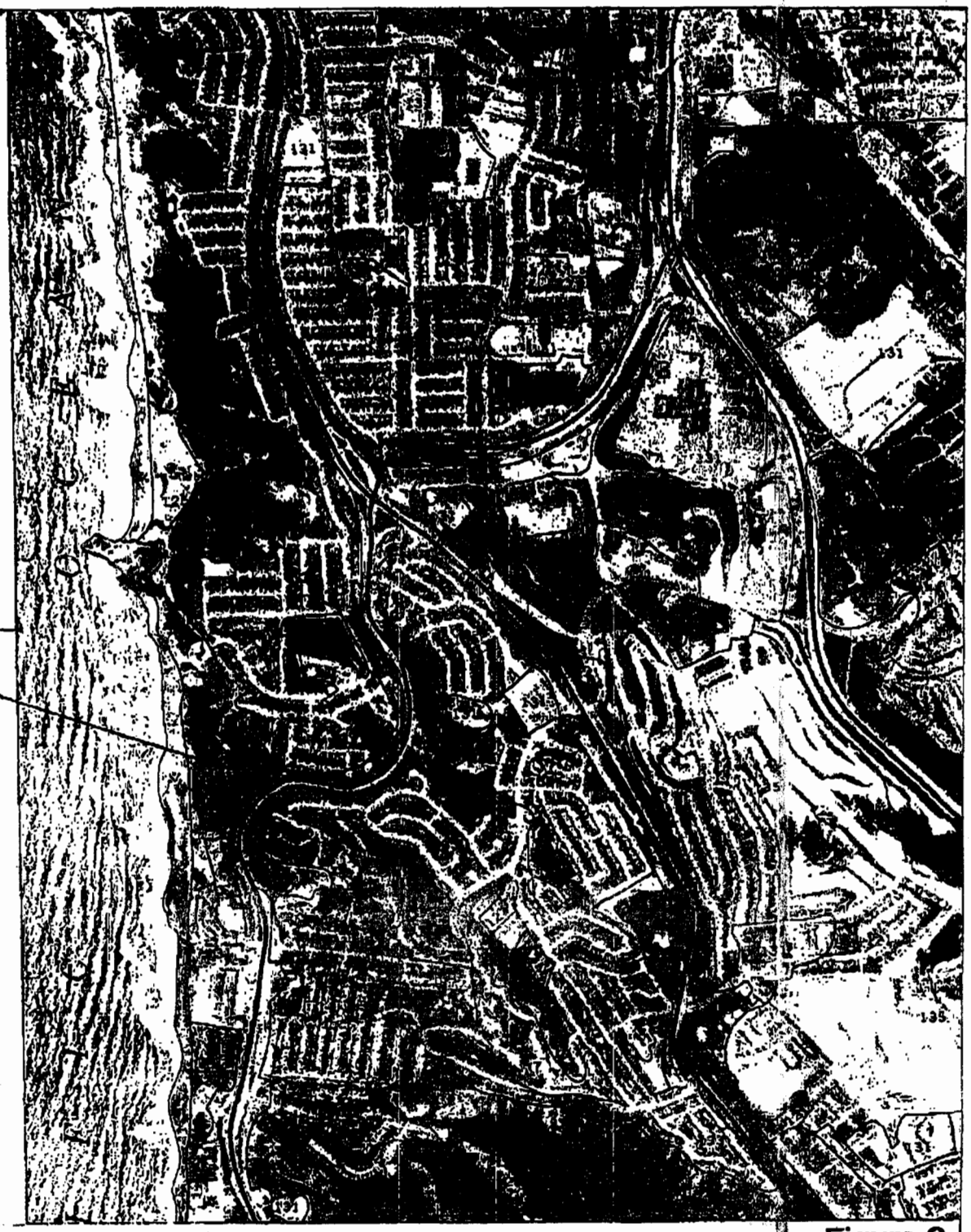

Figure 2

lineation of Jurisdictional Waters of the United States the Clean Water Act)	SOILS MAP 1000 0 1000 2000 FEET	Jurisdictional Wetland Delineation
Survey, San Mateo County Soils	SCALE 1:24,000	LOCATION: Edgemar Road Parcel, Pacifica, CA
	North Pacifica, LLC 814 Westwood Blvd., Suite 500 Los Angeles, California 90024 Contact: Robert Keinbach Phone: 510-655-6760	COUNTY: San Mateo
		APPLICATION BY: North Pacifica, LLC
		SHEET: 2 of 3 DATE: MARCH 2000

4.0 RESULTS

A routine level wetland delineation was conducted at the Edgemar Road Parcel Study Area in June 1999. The site was field reviewed for potential jurisdictional wetland areas, and four sampling points were established to determine whether areas met the Corps wetland criteria. Field data collected at sampling points are shown on Corps data sheets in Appendix A. From this sampling, a potential jurisdictional wetland was identified. The potential jurisdictional area is described in the following sections and depicted on the enclosed site map (Figure 3).

Potential jurisdictional wetlands were identified within the Study Area in a small depression at the south end of the site that appears to pond water seasonally. The site indicates a drainage ditch dug in uplands that lies along the edge of the abandoned Edgemar Road.

4.1 Wetland Criteria

Vegetation

Dominant vegetation in the potential Section 404 wetland consisted of hydrophytic species including meadow barley (*Hordeum brachyantherum*, FACW), Baltic rush (*Juncus balticus*, OBL), bird-foot trefoil (*Lotus corniculatus*, FAC), and curly dock (*Rumex crispus*, FACW). Dominant plants in upland areas included slender wild oat (*Avena barbata*, NL), coyote brush (*Baccharis pilularis*, NL), black mustard (*Brassica nigra*, NL), small quaking grass (*Briza minor*, FACW), coffeeberry (*Rhamnus californica*, NL), and arroyo willow (*Salix lasiolepis*).

Hydrology

The principal hydrological sources for the potential jurisdictional wetland appears to be seasonal surface flow and direct precipitation. The wetland is the result of excavation into a man-made terrace used for access to the site. At the time of the June 1999 field visit, neither ponding nor saturation existed in wetlands on the site. A subsequent site visit on March 10, 2000 indicated that the excavated area was ponded with rainwater.

In June 1999, wetland plot 1A had a single primary wetland hydrology indicator of sediment deposits. The upland plots did not possess any wetland hydrology indicators.

Soils

Soils in the Study Area corresponded fairly well to the mapped soil types (Orthents). Saturated soil conditions that resulted in the formation of hydric soil indicators observed at the wetland sampling point are seasonal, as evidenced by the lack of groundwater to 18 inches in all soil pits dug during the site delineation.

Soils in the potential jurisdictional wetland areas have a low chroma matrix (10YR 3/2) with mottles

within the upper 12 inches with mottles (7.5YR 5/8). Soils in upland areas had soils with matrix chroma of 2 or 3, but lacked mottles. Certain upland areas were dominated by hydrophytic vegetation such as arroyo willow, and appeared to carry surface flow during winter storms, but the well-drained nature of most of the soils on this site and the steep slopes over much of the site apparently prevent the long-term saturation of these soils which would lead to the development of hydric soil characteristics.

5.0 AREA OF POTENTIAL CORPS OF ENGINEERS JURISDICTION

The potential jurisdictional wetland within the Edgemar Road Parcel Cove Study Area is characterized by seasonal soil saturation in an excavated area that allows for local ponding. The potential jurisdictional wetlands area on the site is 0.005 acre (215 ft^2).

The ditch along the eastern edge of Edgemar Road is an artificial feature that should not be considered a Section 404 jurisdictional water of the United States. The ditch was created by excavation on dry uplands. This exclusion from jurisdiction is described in the preamble to the November 13, 1986 Federal Register publication 33 C.F.R. part 320 in which the present jurisdictional definitions were set forth (see 51 F.R. 41217). The preamble states: "For clarification it should be noted that we generally do not consider the following waters to be 'Waters of the United States', (a) Non-tidal drainage and irrigation ditches excavated on dry land."

The area of arroyo willow on the northeastern portion of the site was examined and determined not to be a "water of the United States". The soils are well drained and the surface slope is steep allowing for rapid runoff. No running water was observed in March 2000 despite very heavy rainfall in February 2000. On several visits to the site following rainstorms, no surface water was observed flowing within the willow area. The soils did not meet hydric soil criteria. Therefore, this area was not mapped as a potential jurisdictional area.

6.0 REFERENCES

Aerotopia. Aerial photograph of the project area in Pacifica, California.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Department of the Army, Waterways Experiment Station, Vicksburg, Mississippi 39180-0631.

Kollmorgen Corporation. 1975. Munsell Soil Color Charts. Kollmorgen Corporation, Baltimore.

Reed, P. B., Jr. 1988. National list of plant species that occur in wetlands: California (Region 0). U. S. Fish and Wildlife Service Biological Report 88 (26.10).

Tronoff Engineers, Surveyors, Planners. 1997. A 1 inch = 40 feet topographic vesting tentative map of the Edgemar Road site.

U.S. Geological Survey. 1980. San Francisco South quadrangle. 7.5 minute (topographic).

U.S. Soil Conservation Service. 1991. Soil Survey of San Mateo County, Eastern Part, and San Francisco County, California. In cooperation with the University of California Agricultural Experiment Station; 120 pp. + appendices.

APPENDIX A • Corps Delineation Data Sheets

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Pacific Cove - Fish and Sewer Parcel	Date: 6/11/99
Applicant/Owner: Trumark Companies	County: San Mateo
Investigator: Wetlands Research Associates, Inc.	State: CA
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID:
Is the site significantly disturbed (Atypical Situation)? ☐ Yes ☒ No	Transect ID:
Is the area a potential Problem Area? ☒ Yes ☐ No (if needed explain on reverse.)	Plot ID: 1A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Rumex crispus	H	FACW-	9.		
2. Hordeum brachyantherum	H	FACW	10.		
3. Juncus balticus	H	OBL	11.		
4. Lotus corniculatus	H	FAC	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW and/or FAC (excluding FAC-): 100%

Remarks: Site is dominated by hydrophytic vegetation.

HYDROLOGY

Recorded Data
- ☐ Stream, Lake or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: not reached (in.)

Depth To Saturated Soil: not reached (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 18 Inches
- ☐ Water Marks
- ☐ Drift Lines
- ☒ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 18 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Hydrology Remarks: Algal mats present - Hydrologic indicators present.

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Exhibit 12

SOILS

Map Unit Name
(Series and Phase): Orthents, cut and fill-Urban land complex 5-75% Drainage Class: well-drained
Field Characteristics
Taxonomy (Subgroup): Orthents Confirm Mapped Type? ☐ Yes ☐ No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance / Contrast	Texture, Concretions, Structure, etc.
0-12'	A	10YR 3/2	7.5YR 5/8	abundant, distinct	

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☒ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed On Local Hydric Soils List
- ☐ Listed On National Hydric Soils List
- ☐ Other (Explain in Remarks)

Profile Remarks: Hydric soil indicators present.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☒ Yes ☐ No	
Wetland Hydrology Present?	☒ Yes ☐ No	
Hydric Soil Present?	☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No

Remarks: All three wetland criteria are present.

Approved By NCUSACE 3/92

A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 12

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Pacific Cove - Fish and Bowl Parcel	Date: 9/11/99
Applicant/Owner: Trumark Companies	County: San Mateo
Investigator: Wetlands Research Associates, Inc.	State: CA
Do Normal Circumstances exist on the site? ■ Yes ☐ No	Community ID:
Is the site significantly disturbed (Atypical Situation)? ☐ Yes ■ No	Transect ID:
Is the area a potential Problem Area? ☐ Yes ☐ No (if needed explain on reverse.)	Plot ID: 1B

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Baccharis pilularis	S	NL	9.		
2. Avena barbata	H	NL	10.		
3. Briza minor	H	FACW-	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW and/or FAC (excluding FAC-): 33%

Remarks: Site is not dominated by hydrophytic vegetation

HYDROLOGY

Recorded Data
- ☐ Stream, Lake or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth To Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 Inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Hydrology Remarks: No hydrologic indicators present.

A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 12

SOILS

Map Unit Name (Series and Phase): Orthents, cut and fill-Urban land complex 5-75%

Drainage Class: well-drained

Field Observations Confirm Mapped Type? ☐ Yes ☒ No

Taxonomy (Subgroup): Orthents

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance / Contrast	Texture, Concretions, Structure, etc.
0-12"	A	10YR 3/2		no mottles present	

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content In Surface Layer In Sandy Soils
- ☐ Organic Streaking In Sandy Soils
- ☐ Listed On Local Hydric Soils List
- ☐ Listed On National Hydric Soils List
- ☐ Other (Explain In Remarks)

Profile Remarks: No hydric soil indicators present.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☐ Yes	☒ No
Wetland Hydrology Present?	☐ Yes	☒ No
Hydric Soil Present ?	☐ Yes	☒ No

Is this Sampling Point Within a Wetland? ☐ Yes ☒ No

Remarks: None of the three wetland criteria are present.

Approved By HQUSACE 3/92

A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 12

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: **Pacific Cove - Fish and Bowl Parcel**	Date: 9/11/99
Applicant/Owner: Trumark Companies	County: San Mateo
Investigator: Wetlands Research Associates, Inc.	State: CA
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID:
Is the site significantly disturbed (Atypical Situation)? ☐ Yes ☒ No	Transect ID:
Is the area a potential Problem Area? seasonal wetland ☒ Yes ☐ No (if needed explain on reverse.)	Plot ID: 2A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Salix lasiolepis	T	FACW	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW and/or FAC: (excluding FAC-) 100%

Remarks: Site is dominated by hydrophytic vegetation.

HYDROLOGY

Recorded Data
- ☐ Stream, Lake or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth To Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☒ Inundation
- ☒ Saturation in Upper 12 Inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Hydrology Remarks: Hydrologic indicators present.

A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 12

SOILS

Map Unit Name (Series and Phase): Rock outcrop-Orthents complex, 30-75% slopes

Drainage Class: Poorly to well-drained

Field Observations Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Orthents

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance / Contrast	Texture, Concretions, Structure, etc.
0-12"	A	10YR 2/1			

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☒ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☒ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed On Local Hydric Soils List
- ☐ Listed On National Hydric Soils List
- ☐ Other (Explain in Remarks)

Profile Remarks: Hydric soil indicators present.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☒ Yes ☐ No	
Wetland Hydrology Present?	☒ Yes ☐ No	
Hydric Soil Present ?	☒ Yes ☐ No	Is this Sampling Point within a Wetland? ☐ Yes ☒ No

Remarks: All three wetland criteria are present, but area is exempt as a ditch [illegible]

Approved by HQUSACE 3/92

A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 12

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Pacific Cove - Fish and Game Parcel
Date: 6/11/99
Applicant/Owner: Trumark Companies
County: San Mateo
Investigator: Wetlands Research Associates, Inc.
State: CA

Do Normal Circumstances exist on the site? ☒ Yes ☐ No
Community ID:
Is the site significantly disturbed (Atypical Situation)? ☐ Yes ☒ No
Transect ID:
Is the area a potential Problem Area? seasonal wetland ☒ Yes ☐ No
(If needed explain on reverse.)
Plot ID: 28

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Salix lasiolepis	T	FACW	9.		
2. Baccharis pilularis	S	NL	10.		
3. Rhamnus californica	S	NL	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW and/or FAC: (excluding FAC-) 33%

Remarks: Site is not dominated by hydrophytic vegetation

HYDROLOGY

Recorded Data
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs
☐ Other
No Recorded Data Available

Wetland Hydrology Indicators:
Primary Indicators:
☐ Inundation
☐ Saturation in Upper 12 Inches
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
☐ Oxidized Root Channels in Upper 12 Inches
☐ Water-Stained Leaves
☐ Local Soil Survey Data
☐ FAC-Neutral Test
☐ Other (Explain in Remarks)

Field Observations:
Depth of Surface Water: _____ (in.)
Depth to Free Water in Pit: _____ (in.)
Depth To Saturated Soil: _____ (in.)

Hydrology Remarks: No hydrologic indicators present.

A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 12

SOILS

Map Unit Name (Series and Phase): Rock outcrop-Orthents complex, 30-75% slopes

Drainage Class: Poorly- to well-drained

Field Observations Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Orthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance / Contrast	Texture, Concretions, Structure, etc.
0-12"	A	10YR 2/2		no mottles present	

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed On Local Hydric Soils List
- ☐ Listed On National Hydric Soils List
- ☐ Other (Explain in Remarks)

Profile Remarks: No hydric soil indicators present.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☐ Yes ☒ No	
Wetland Hydrology Present?	☐ Yes ☒ No	
Hydric Soil Present ?	☐ Yes ☒ No	Is this Sampling Point within a Wetland? ☐ Yes ☒ No

Remarks: None of the three wetland criteria are present.

Approved By HQUSACE 3/92

A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 12

DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, CORPS OF ENGINEERS
333 MARKET STREET
SAN FRANCISCO, CALIFORNIA 94105-2197

REPLY TO

MAY 11 2001

Regulatory Branch

Subject: File Number 25142S

Mr. Michael Josselyn
Wetland Research Associates, Inc.
2169-G East Francisco Blvd.
San Rafael, California 94901

Dear Mr. Fraser:

Thank you for your submittal of February 19, 2001 requesting a reevaluation of the extent of Corps of Engineers jurisdiction at the Edgemar parcel located in Pacifica, San Mateo County, California

Based on the current conditions of the site, we have determined that the wetlands identified on the site in our July 21, 2000 delineation are isolated, non-navigable, intrastate waters, and are therefore not subject to regulation under Section 404 of the Clean Water Act (33 U.S.C. 1344). A change in the conditions on the site may also change the extent of our jurisdiction. This jurisdictional determination will expire in five years from the date of this letter. However, if there has been a change in circumstances that affects the extent of Corps jurisdiction, a revision may be done before that date.

This determination does not obviate the need to obtain other Federal, State or local approvals required by law, including compliance with the Endangered Species Act (16 U.S.C. 1531 et seq.).

If you have any questions, please call Bob Smith of our Regulatory Branch at telephone 415-977-8450. All correspondence should reference the file number at the head of this letter.

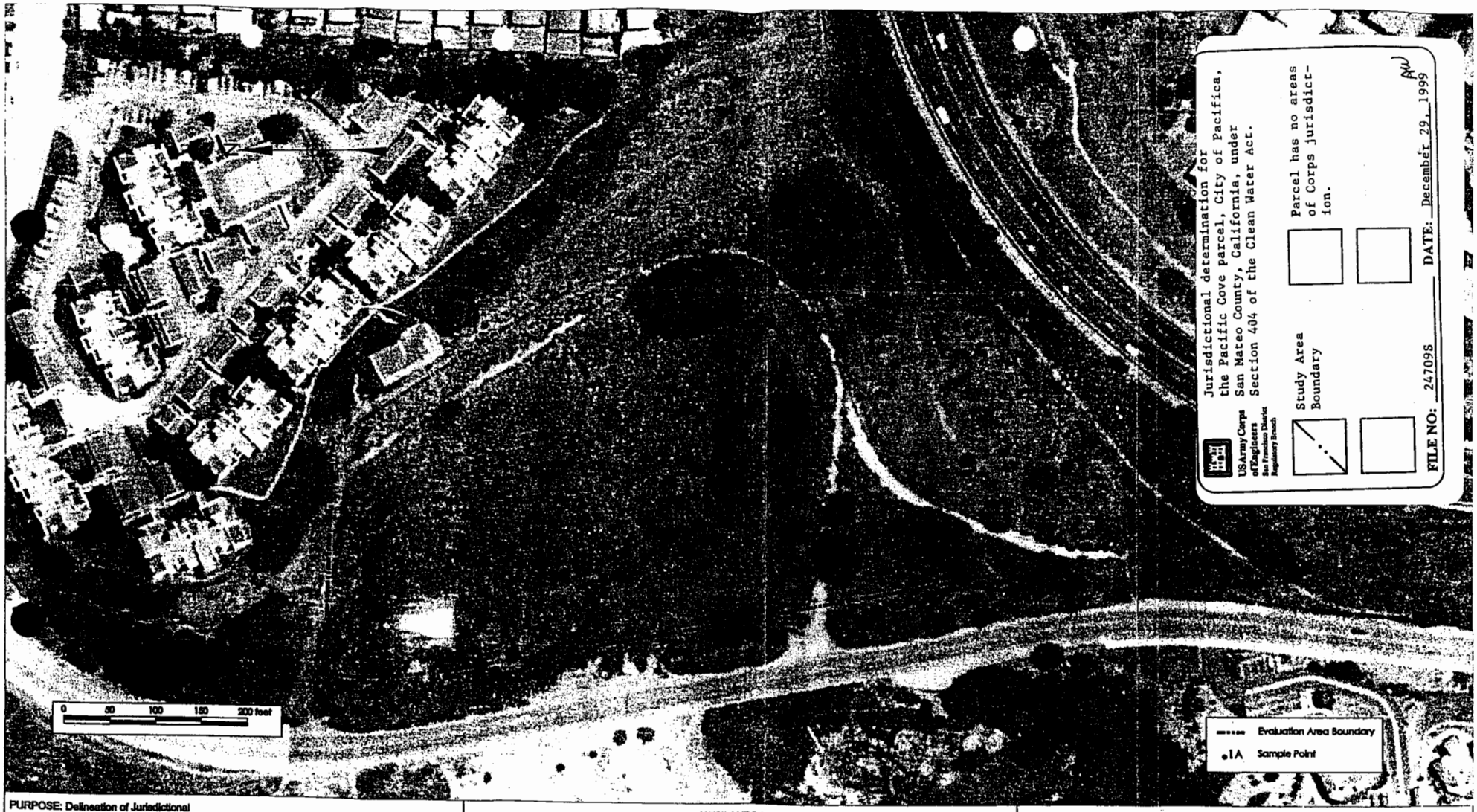
Sincerely,

Calvin C. Fong
Chief, Regulatory Branch

Copy furnished:

US EPA, San Francisco, CA
RWQCB, Oakland , CA

A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 13



PURPOSE: Delineation of Jurisdictional Wetlands and Waters of the United States (Section 404 of the Clean Water Act)

SOURCE: Aerotopia Air Photo

WETLANDS MAP

SCALE 1:1200

Trumark Companies
4135 Blackhawk Plaza Circle, Suite 280
Danville, California 94506
Contact: Jason Kliewer
Phone: 925-648-8300

Jurisdictional Wetland Delineation

LOCATION: Pacific Cove Site, Pacifica, CA

COUNTY: San Mateo

APPLICATION BY: Trumark Company

SHEET: 3 of 3 DATE: AUGUST 1999

Wetlands Research Associates, Inc.

March 19, 2002

City of Pacifica
Planning Department
170 Santa Maria Avenue
Pacifica, CA 94044

RE: Pacific Cove Development

Dear Sirs:

The City has asked that our firm provide a confirmation on its determination as to the absence of any LCP wetlands on the subject property. Prior to conducting a site visit, I reviewed our delineation report dated August 1999, the Corps of Engineers determination dated January 3, 2000, a letter prepared by Tom Fraser of my staff on his analysis of the absence of LCP wetlands on the site, and a peer review summary prepared by Christine Schneider of TRA.

I walked the project site on March 11, 2002. I did not observe any standing water within the portion referred to as the Bowl parcel in our previous reports. The site has remained unchanged in use. I inspected those areas where we took data for our previous analyses and observed no hydrologic indicators. Invasive plant species are more prevalent than reported previously. Otherwise, the site conditions have remained unchanged and the conclusion reached in the above mentioned reports that no LCP wetlands are present within the Bowl parcel remains valid.

In our delineation report to the Corps of Engineers on the Fish parcel (March 2000), we noted the presence of two areas that exhibited prolonged hydrology. One was a man-made excavation that is outside the current proposed project covered by this EIR. The second was a drainage ditch within the City right-of-way for Edgemar Road (along a portion of the upper edge of Edgemar Road). This area is also outside the grading area proposed under this EIR. We noted that this feature is a drainage ditch that had been dug on uplands and receives water from areas that are upslope of Edgemar Road including runoff from storm drains along the Pacific Coast Highway. Vegetation and silt has accumulated in the ditch and its drainage has been impaired. Following storm events, water flows over the paved portion of Edgemar Road towards the Bowl parcel downslope of Edgemar Road. Some temporary puddles have formed on the asphalt; however, I did not observe on March 11 nor have I ever observed during numerous site visits to the Bowl parcel, any ponding downslope of Edgemar Road within the Bowl parcel itself.

As this area is a public street, I understand that the City of Pacifica is charged with the maintenance of this road and its drainage ditch. Under routine maintenance, this roadside ditch would carry storm runoff to the City's drainage system. The Corps of Engineers concluded that they did not have jurisdiction over this ditch or any other portion of the Fish parcel.

The City of Pacifica LCP does not consider drainage ditches to be environmentally sensitive areas or wetlands. In addition, the California Coastal Commission determined that ditches were not considered wetlands in the Commission adopted *Statewide Interpretive Guideline for Wetlands and Other Wet Environmentally Sensitive Habitat Areas* (Adopted on February 4, 1981). In its determination, the Commission stated in Appendix D:

> For the purposes of identifying wetlands using technical criteria contained in this guideline, one limited exception will be made. That is, drainage ditches as defined herein will not be considered wetlands under the Coastal Act. A drainage ditch shall be defined as a narrow (usually less than 5 feet wide), man-made non-tidal ditch excavated from dry land.

The feature along the upper edge of Edgemar Road meets the definition of a drainage ditch and is subject to maintenance under the City's standards. It does not qualify as a LCP wetland.

Please call with any questions on this matter.

Sincerely yours,

Michael Josselyn, PhD
Certified Professional Wetland Scientist

cc. Robert Kalinbach
Keith Fromm

Wetlands Research Associates, Inc.

May 22, 2002

City of Pacifica
Planning Department
170 Santa Maria Avenue
Pacifica, CA 94044

RE: Pacific Cove Development

Dear Sirs:

I have been requested by Thomas Reid Associates, the consultant preparing the DEIR for the proposed Pacific Cove Development to provide further information about the presence of any jurisdictional wetlands (both federal and LCP) within property that is off-site from the proposed project.

My March 19, 2002 letter to the City provided my opinion on the absence of any Clean Water Act (as administered by the Corps of Engineers) or LCP (as administered by the City of Pacifica) wetlands within the proposed grading footprint of the project. This opinion covered the proposed grading footprint of the project as outlined in the attached map.

My March 19, 2002 letter also dealt with my opinion on the drainage ditch that exists along Edgemar Road. Because it is a drainage ditch, it is exempt from jurisdiction as a wetland under the Statewide Interpretative Guidelines.

TRA also requested my opinion on the presence of an excavation that now supports certain wetland vegetation. I have attached a figure that shows the location of this excavated pit and a distance of 100 ft from the center of this pit to the grading area of the project[1]. This excavation was determined to be non-jurisdictional by the Corps of Engineers on the basis that it is an 'isolated' feature that is not connected to any "waters of the United States". While there is no specific exclusion for excavated pits in the Coastal Act, it is nonetheless the result of man-made activities and was excavated out of dry upland. It contains no fish and is too small to be used by waterbirds. Given its small size and disturbed nature, it has low biological values. As a result, a 100 ft buffer is not necessary to protect its current or likely future values. While this letter is not intended to

[1] The portion of the project site intersected by the 100 ft buffer distance is Edgemar Road, a public street. Edgemar Road currently exists within 100 ft of the excavated feature and to the extent that grading occurs in this area, it is that necessary to repair an existing public facility.

2169-G East Francisco Blvd., San Rafael, CA 94901 (415) 454-8868/FAX (415) 454-0129

provide a detailed analysis of buffer issues related to this feature, it is likely that only a minimal buffer, if any, is necessary since it is currently contained within a disturbed area on the site.

The 100 ft distance from this feature encompasses an existing public street that will be repaired. The 100 ft distance does not affect any proposed portion of the development itself outside of the existing public street. In addition, the grading is proposed down slope from the excavated area and therefore neither sediments nor runoff from the grading or completed project will affect its quality. Therefore, it seems reasonable to expect that grading within this distance will have no effect on the excavated pit.

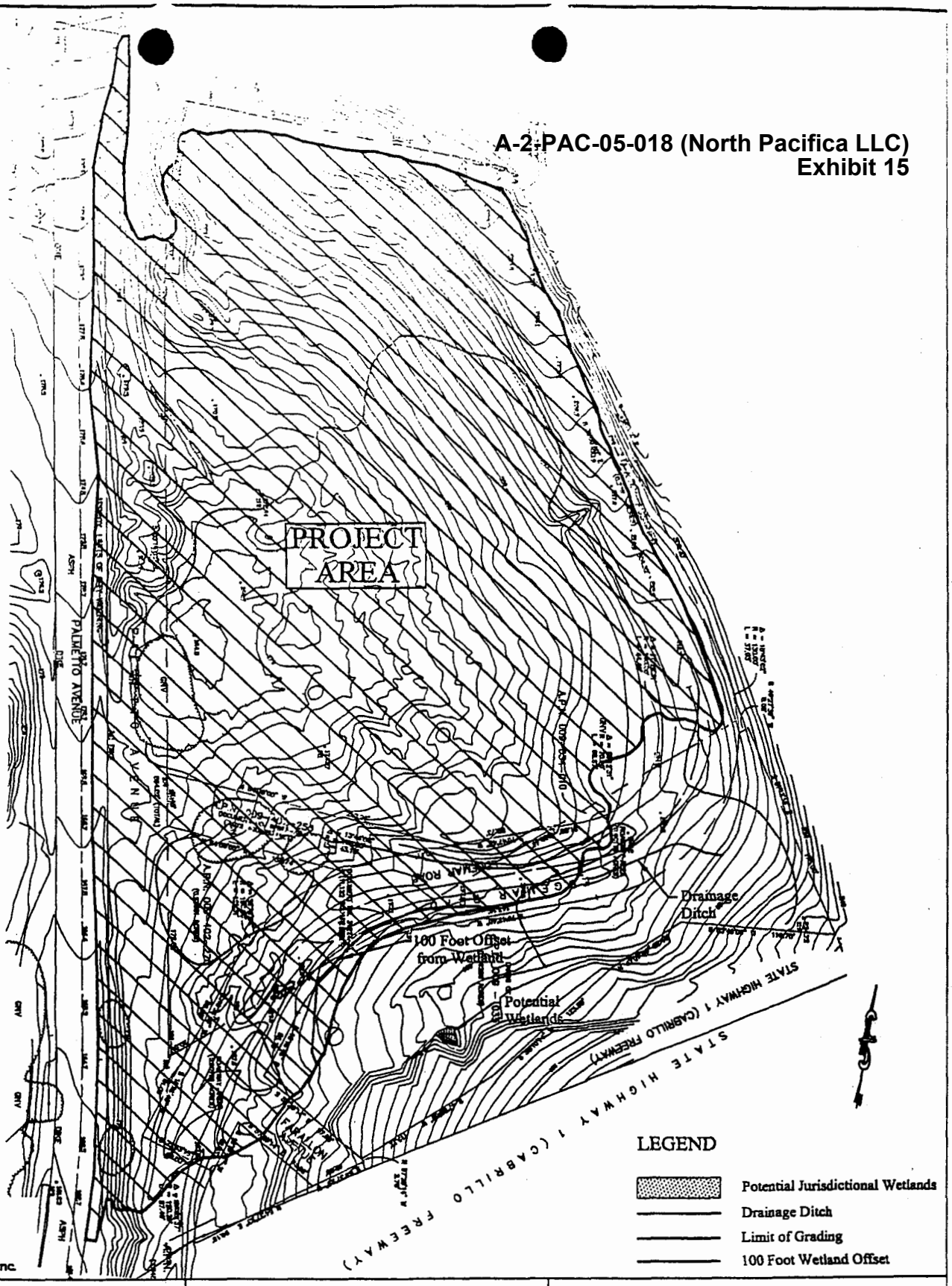
Please call me with any questions.

Sincerely yours,

Michael Josselyn, PhD
Certified Professional Wetland Scientist

cc. Robert Kalmbach
Keith Fromm
Thomas Reid

A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 15



Wetlands Research Associates, Inc.

Figure 1

OFFSITE POTENTIAL WETLAND

DATUM: UTM-INTL., NAD 83 10N

55 0 55 110

SCALE: 1"=110'

Wetlands Research Associates, Inc.
2169-G East Francisco Blvd.
San Rafael, CA 94901
Contact: Michael Josselyn
Phone: 415-454-8868
Fax: 415-454-0129

PACIFICA BOWL

PROJECT: 7031
DATE: May 21, 2002
FILE: 7031\dwg\wra\pacifica_grad.dwg

THOMAS REID ASSOCIATES
560 WAVERLEY STREET, SUITE 201
P.O. BOX 880 PALO ALTO, CA 94301
Tel: 650-327-0429
Fax: 650-327-4024
Environmental Impact Analysis • Ecological Studies • Resource Management

FACSIMILE TRANSMITTAL COVER SHEET

RECEIVED
NOV 26 2002
CALIFORNIA
COASTAL COMMISSION

DATE: November 26, 2002

JOB CODE: epbp

TO: Peter Imhof, Ca. Coastal Commission

FAX NUMBER: 415.904.5400

FROM: Christine Schneider

Number of Pages Transmitted (including cover): 4

COMMENTS: Peter, please find attached in this fax a letter dated 3/11/02 that lists our observations of the Pacifica Bowl site regarding wetlands. This letter was sent to Michael Josselyn, of Wetlands Research Analysis (WRA), the applicant's wetland consultant. This memo was prepared at the time that we were preparing the Draft EIR.

Attached below in this fax cover sheet is the summary of our Biology section of the Draft EIR. The analysis in this section of the EIR uses data from WRA to reach its conclusions:

"The assessment of biotic resources is based on Wetland Research Associates (WRA) and Thomas Reid Associates (TRA) surveys.

The site is covered with low, dense vegetation comprising a mix of native coastal species and heavy invasion by non-natives such as iceplant, pampas grass, and English and German ivy. The native species present are typical components of such communities as Northern Coastal Scrub, Central Dune Scrub, Central Coast Riparian Scrub, and Coastal Terrace Prairie, but the high cover of non-native species and the low diversity of native species prevents strict classification. There are five mature Monterey cypress on site, but these too are not native to this stretch of coast and were planted here.

Please call 650-327-0429 with any problems receiving this facsimile.

The riparian scrub contains arroyo willow, twinberry, rush, and sedge, species also associated with wetlands. WRA prepared a wetland delineation of the project site (the "Bowl") and of the adjacent "Fish" parcel. Upon field review by U.S. Army Corps of Engineers (Corps), which included a site visit in November 1999, it was concluded that the project site contains no jurisdictional wetlands, and no areas that meet the Corps wetland criteria. A portion of the site within the riparian scrub habitat is wet on a seasonal basis. WRA has concluded that the seasonally wet conditions in the riparian scrub habitat on site do not constitute wetlands based on the City of Pacifica's Local Coastal Plan (LCP) criteria because the standing water is found in a un-maintained drainage ditch and because neither Corps jurisdictional wetlands nor City LCP wetlands are considered to be on the site or within proposed grading limits.

The riparian vegetation on and adjacent to the site may serve as habitat for certain riparian species, including some species of birds. The areas are not considered to have significant function or habitat value; their loss or degradation is not considered a significant biological impact.

Central dune scrub is considered a sensitive and rare plant community by the California Department of Fish and Game. The site has a patch of heather goldenbush (Ericameria ericoides), one of the diagnostic species of central dune scrub, but the other components of this community, including shrubs and understory plant species, are no longer present, and the area is heavily invaded by iceplant. At best it can be considered a remnant community and no longer has the values that make it sensitive to loss. What value is represented can be mitigated by planting and exotic species control.

The project would remove five Monterey cypress trees, four of which meet the definition of "heritage" in the City's Heritage Tree Ordinance. This is a potentially significant impact that can be mitigated by replacement. Eighteen Monterey Cypress trees are shown in the proposed landscape plan, thus mitigating the loss of Heritage Trees.

During the course of biological surveys and wetland delineation on the site, it was confirmed through correspondence with the US Fish and Wildlife Service that the site does not serve as habitat for any federally protected species, including California red-legged frog (Rana auroroa draytonii) or San Francisco garter snake (Thamnophis sirtalis tetrataenia)."

Please call me if you have further questions, at 650.463.1684.

Please call 650-327-0429 with any problems receiving this facsimile.

TRA THOMAS REID ASSOCIATES
ENVIRONMENTAL CONSULTANTS
560 Waverley Street, Suite 201, P.O. BOX 880, Palo Alto, CA 94301
Tel: (650) 327-0429 ❑ Fax: (650) 327-4024 ❑ www.TRAenviro.com

Memo

To: Michael Josselyn

CC: Lee Diaz, Ben Stock, Robert Kalmbach

From: Eben Polk

Subject: Pacifica Bowl hydrology observations

Date: 3/11/02

Dr. Josselyn, thank you for your questions and input last Friday, March 8, at the City of Pacifica. In preparing the Pacifica Bowl site EIR for the City of Pacifica, we have been relying on the wetland delineations completed by WRA. In our meeting on March 8, you noted that the WRA delineation of the Bowl site concluded that in the area dominated by arroyo willow, facultative hydrophytic vegetation was present and the other two components of Corps-jurisdictional wetlands, hydrology and hydric soils, were not. In some of our field visits in 2001 and 2002, we observed water at and above the surface on the Bowl site as well as the Fish parcel. In our meeting on March 8, you also noted that arroyo willow, the dominant plant in that area, may be supported by groundwater rather than "wetland hydrology," and that the hydrological indicators we observed may not constitute wetland hydrology.

In hopes that WRA will be able to provide some analysis of the apparent hydrology we observed in the field in 2001 and 2002, I'm sending you a brief summary of our visits to the site and our reasoning in raising the issue of LCP wetlands, along with some photos that show the area in question. We will incorporate any additional analysis that you provide into the EIR. Please address these field observations, their potential to occur over sufficient durations to result in wetland hydrology, the context of prior rainfall events, and whether you believe LCP wetlands are present on the Bowl site given these observations.

We did not complete a rigorous review of the site's hydrology or soils because we were not hired to do a wetland delineation at the site. However, we have concluded that the possibility for LCP wetlands on the site should be re-evaluated, knowing that a) there are multiple hydrophytic species (including FACW and OBL based on the USFWS plant list) in the area dominated by arroyo willow, including rushes and CA blackberry, and b) seeing evidence of potentially saturated soils, as suggested by surface water lingering for a stretch of multiple days. These soils are in an area with an overall slope, and were observed on days when it had not rained immediately prior to the observation. This area is a subset of the area dominated by arroyo willow. The pictures show where these observations have been made, during the course of our

various site visits.

In March 2000, Tom Fraser of your office completed a delineation of the Fish parcel (immediately adjacent to the site), and found areas that meet Corps criteria for wetlands. We do not know if hydrological indicators were observable at that time anywhere on the Bowl site. They may have been, since presumably that portion of the Bowl site shares hydrology with the portion of the Fish parcel where the hydrological parameter was met. Although the March 2000 delineation report does not make reference to this, perhaps some observations were made. It is possible that a March 2000 delineation of the Bowl site might have picked up on otherwise missing seasonal hydrology.

The Corps rescinded their jurisdiction of these areas on the Fish parcel because they are isolated. However, they should be considered LCP wetlands because they met the more stringent Corps criteria. The EIR makes reference to these areas.

My understanding is that seasonal wetlands are defined as problem areas by the Corps of Engineers because they may not exhibit hydric soils characteristics or often lack the necessary hydrology, yet are inundated or saturated during a sufficient portion of the growing season for the hydrology and/or soils parameters to be met. For example, NRCS criteria consider soils to be hydric when frequently flooded for long duration or very long duration during the growing season, meaning seven days to one month or more. The potential for these conditions on the site to occur frequently from year to year during wet seasons should be considered.

The EIR addresses TRA's observations of water on the site, as they are part of the conditions on the site. The observations alone do not determine whether LCP wetlands are present; consequently, we are hoping that you can provide additional analysis as to the potential or lack thereof for the more broadly-defined LCP wetlands (as opposed to the already-determined absence of Corps-jurisdictional wetlands). The EIR must state our observations, and without analysis by a wetland delineator, must assume that limited LCP wetlands may be present given these recent observations. We will adhere to the verbal agreement reached last Friday, that Corps criteria for each of the three parameters are the most sensible to use, and that what is required for LCP wetlands to be deemed present is an area with either hydrophytic vegetation or hydric soils, with the necessary hydrology.

A few individuals from our firm have been to the site and observed varying degrees of wetness in the area dominated by arroyo willows. The following is a chronology of our visits:

3/27/01. I visited the site to complete a noise monitoring study and observed water seeping across the portion of Edgemar Road that winds into the willow/riparian area, and noted that water had pooled in small depressions in this sloped area. Photo 1 shows some dark streaks on Edgemar Road.

1/23/02. Patrick Kobernus visited the site and observed very wet conditions in the riparian scrub area. Photo 2 shows water sheet flowing across Edgemar Road (this is something that has also likely been noticed by locals).

2/5/02. Tom Reid and Christine Schneider visited the site to take photos for the visual simulation of the proposed project and observed wet conditions, including water flow across the

same part of Edgemar Road, and standing water on both sides of the paved road. Photo 3 shows the same sheet flow as that observed on 1/23/02 (the water is reflecting the sunlight). Photo 4 shows the ponding along Edgemar Road on the Fish parcel that was also noticed by Tom Fraser in March 2000. Photo 5 shows what is probably *Juncus effusus* (OBL?) in areas just upslope as well as adjacent to the willows on the Bowl site.

3/8/02. Tom Reid and I visited the site after our meeting on March 8, and noted saturation of soil on the up-slope side of arroyo willows on the Bowl site.

I hope the photos are helpful.

Eben Polk

A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 16

CARR, MCCLELLAN, INGERSOLL, THOMPSON & HORN
PROFESSIONAL CORPORATION

ATTORNEYS AT LAW
216 PARK ROAD, POST OFFICE BOX 513
BURLINGAME, CALIFORNIA 94011-0513

LISA H. STALTERI
lstalteri@cmithlaw.com

TELEPHONE (650) 342-9600
FACSIMILE (650) 342-7685
www.cmithlaw.com

November 26, 2002

RECEIVED
DEC 02 2002
CALIFORNIA
COASTAL COMMISSION

Mr. Peter Imhof
Coastal Planner
California Coastal Commission
45 Fremont, Suite 2000
San Francisco, CA 94105-2219

Re: Denial of Your Request of the Armanino Family for Access to Their Property at 4000 Palmetto Avenue, Pacifica, CA (San Mateo APNs 009-402-250 & 260)
File No. 17526.00001

Dear Mr. Imhof:

As John Uccelli of the Armanino Family informed you, I represent the family with regard to their property in Pacifica. I received your voicemail message of this morning requesting that the Armanino Family grant to the Coastal Commission's representatives permission to enter their property for a site inspection. The members of the Armanino Family who own the property do not consent to entry onto the property by any person on behalf of the Coastal Commission for a site inspection or for any other purpose. Any entry onto the property by any such person will constitute an unlawful trespass onto the property.

Very truly yours,

Lisa H. Stalteri

Lisa H. Stalteri

LHS:scf
Cc: Client (via facsimile)
Robert Kalmbach (via facsimile)

NORTH PACIFICA LLC
914 Westwood Blvd., Suite 500,
Los Angeles, CA 90024
(310) 556-0202 FAX (310) 556-8282

November 22, 2002

Mr. Peter Imhof, Coastal Planner
California Coastal Commission
45 Fremont, Suite 2000,
San Francisco, CA 94105-2219

Re: Coastal Development Permit for Development at 4000 Palmetto Avenue (the "Property" or "Project"), Pacifica, CA

Dear Mr. Imhof:

This letter is in response to your telephone call to me of this morning and your phone call to Keith Fromm of North Pacifica LLC, in the afternoon, in which you indicated you were assembling documentation in preparation for proceedings that the Coastal Commission has proposed it will conduct on December 11, 2002 regarding North Pacifica's Coastal Development Permit.

In your conversation with Mr. Fromm, he did point out to you there is currently outstanding a valid and non-vacated "Alternative Writ of Mandate" issued by the Superior Court of San Mateo County on October 9, 2002 expressly prohibiting you from doing exactly what you are doing.

The Writ reads in pertinent part:

> "...this Court finds good cause to order an alternative writ of Mandate and to require you, the respondent Coastal Commission, ***its officers and agents, and all persons acting by and through its orders*** to:
>
> VACATE and retract the Coastal Commission's order of August 23, 2002 and/or September 17, 2002 and/or any order and/or other action purporting to suspend said Coastal Development Permit approved and issued by the City of Pacifica to North Pacifica LLC, on or about August 12, 2002, CDP No. 203-01, ***and further desist and refrain absolutely and forever from taking any further actions or proceedings regarding or concerning in anyway the aforesaid Coastal Development Permit, CDP No. 203-01***", or
>
> IN THE ALTERNATIVE, to show cause before this Court on October 31,

> 2002...why a peremptory Writ of Mandate ordering you to do so should not issue."

While a hearing was held on October 31, 2002, no order or judgment was entered therefrom and, thus, the prohibition in the Alternative Writ is still in effect. As you can see, such prohibition applies to you, personally, as one of the Coastal Commission's ***"officers and agents, and all persons acting by and through its orders"***. The Court order expressly requires you to: ***"further desist and refrain absolutely and forever from taking any further actions or proceedings regarding or concerning in anyway the aforesaid Coastal Development Permit, CDP No. 203-01"***.

There is yet another problem with the proceeding which you propose to conduct. In addition to the Alternative Writ, on October 9, 2002 the Court also issued a "Stay Order" The Stay Order ordered, in pertinent part:

> "IT IS HEREBY ORDERED that the action taken by the respondent herein, the California Coastal Commission, purporting to suspend the Coastal Development Permit approved and issued by the City of Pacifica to petitioner, North Pacifica LLC, CDP No. 203-01, shall be stayed until 15 days after the Court issues a final decision on the Petition for Writ of Mandate and/or Prohibition herein".

Thus, even if, for the sake of argument, as you contend, the Alternative Writ does not prevent you from holding these proceedings, a determination at the proposed Coastal Commission proceedings on or about December 11, 2002, that the Permit was appealable and, therefore, was suspended, would be in direct violation of the Stay Order, since, under no scenario, prior to your proposed December 11, 2002 proceedings, will a final court decision on the Petition for Writ of Mandate and/or Prohibition be rendered and fifteen days have elapsed thereafter. For your convenience, we include true copies of the Court's orders, referenced hereinabove.

Thus, the actions you are currently taking in preparation for these proceedings you propose to conduct are clearly in violation of these Court orders and, in fact, are in contempt of court. We must, therefore, echo the words of the Court and demand that you desist and refrain absolutely from taking any further actions or proceedings regarding or concerning in anyway the aforesaid Coastal Development Permit, CDP No. 203-01, including your proposed December 11, 2002 proceedings, unless and until the Court has lifted its prohibitions there against.

In response to your request for documentation, co-operation and/or access to the property for the purposes of conducting such unauthorized and prohibited proceedings, please be advised that as such proceedings are illegal and prohibited by the Court, North Pacifica LLC will not, in any way, assist you to violate the court's orders by conducting such illegal and unauthorized proceedings. Therefore, so as to be perfectly clear, North Pacifica will provide you with no documentation, information or assistance for these

prohibited proceedings and we absolutely refuse to permit and do hereby forbid any person on behalf of the Coastal Commission to inspect or enter upon our property for any reason whatsoever. Any attempt to enter upon such property for the purpose of assembling evidence or support for your illegal proposed December 11, 2002 proceedings shall constitute an unlawful trespass and illegal search of North Pacifica's property.

Should you or any representative of the Commission violate said prohibition and enter upon our property to conduct a search, inspection or to seek to obtain evidence or support for presentation to the Coastal Commission in these wholly unauthorized proceedings, or for any other purpose whatsoever, in defiance of both the court orders and our express prohibitions, North Pacifica shall alert the Court and the police as to such trespass and unauthorized activities for the purpose of pursuing all appropriate enforcement proceedings and sanctions, including, but not limited to, enforcement orders, contempt of court proceedings, monetary sanctions and the invalidation of any administrative proceedings seeking to make use of any alleged evidence which has been illegally obtained and/or obtained in violation of North Pacifica's constitutional rights. Such conduct may additionally constitute grounds for an action by North Pacifica LLC against the Coastal Commission, its Executive Director, each of its members and you personally, for violation of North Pacifica LLC's civil rights. We think it is incumbent upon you to advise the Commission that these Court orders are outstanding and that the proceedings you and it proposes to conduct on December 11, 2002 in relation to North Pacifica's Coastal Development Permit are in violation of such pending court orders and may subject the Commission members, personally, to liability and sanctions for wilfully defying such court orders.

We cannot emphasize too strongly how egregious and contemptuous is your conduct in purporting to conduct these proceedings in blatant defiance of the Court's pending and unequivocal orders to desist from doing so.

Yours very truly,

Robert J. Kalmbach
Member

cc. Peter Douglas, Executive Director, California Coastal Commission
Joel Jacobs, Esq., Attorney General's Office,
Jaquelynn Pope, Esq.
Keith M. Fromm, Esq.

CALIFORNIA COASTAL COMMISSION
45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE AND TDD (415) 904-5200
FAX (415) 904-5400

M E M O R A N D U M

FROM: John Dixon, Ph.D.
Ecologist / Wetland Coordinator

TO: Peter Imhof, Chris Kern, Ann Cheddar, Amy Roach

SUBJECT: Wetlands on or adjacent to the Pacifica Bowl property

DATE: November 20, 2002

Documents reviewed:

1. P. Kobernus (Thomas Reid Associates (TRA)). 1997. Biological Assessment Report for Palmetto Avenue Parcel in Pacifica. A report dated April 1997 transmitted with a letter to R. Kalmbach (Syndicor) dated April 29, 1997.

2. M. Josselyn (Wetland Research Associates (WRA)). 1997. Letter report to R. Kalmback (Syndicor Real Estate Group) dated April 30, 1997 concerning a wetland reconnaisance of the Palmetto Avenue parcels in Pacifica (Parcels 009-031-010, etc).

3. WRA (Contact: T. Fraser). 1999. Delineation of Potential Jurisdictional Wetlands, Pacific Cove Parcel, Pacifica, California. A report to Trumark Companies dated August 1999.

4. T. Fraser (WRA) letter report on behalf of Trumark Companies to Mike Crabtree (City of Pacifica Planning Department) dated December 27, 1999 re: Pacific Cove Development Local Coastal Program jurisdictional wetlands.

5. C. Fong (Army Corps of Engineers, S.F. District) letter to T. Fraser (WRA) dated January 3, 2000 concerning jurisdictional delineation of the Pacific Cove parcel.

6. WRA (Contact: T. Fraser). 2000. Delineation of Potential Jurisdictional Wetlands, Edgemar Road Parcel, Pacifica, California. A report to North Pacifica, LLC dated March 2000. (The reviewed copy was incomplete – only Figures 1 & 2, text pages 3 & 9, and data sheets for plots 1A, 1B, 2A, & 2B were included)

7. T. Peterson (TRA). 2000. Memo report to A. Knapp (City of Pacifica) dated January 24, 2000, subject: Bowl Project Wetland Peer Review.

8. M. Josselyn (WRA). 2002a. Letter to City of Pacifica dated March 19, 2002 re: Pacific Cove Development. (Confirms prior determination that there are no LCP wetlands on subject property).

9. M. Josselyn (WRA). 2002b. Letter to City of Pacifica dated May 22, 2002 re: Pacific Cove Development. (Discusses potential wetlands on adjacent property).

10. City of Pacifica. 2002. Pacifica Bowl Development Project Environmental Impact Report. A public review draft report dated March 2002.

The initial biological assessment of the site identified an area of central coast riparian scrub that was mostly arroyo willow, but contained other wetland species, such as rushes and sedges, and a 4 ft x 10 ft pond 1 ft deep. At about the same time, WRA visited the site and concluded that there were no indicators of wetland soil or hydrology in the area of the willows, but that a patch of twinberry in a depressional area warranted additional study. There was no mention of the ponded area, although WRA was in possession of the biological assessment.

In June 1999, WRA conducted a wetland delineation on the site and concluded that the patch of twinberry (*Lonicera involucrata*) was a potential Corps jurisdictional wetland because there was positive evidence of hydric soils (chroma 2 with common mottles, and organic streaking), of wetland hydrology (oxidized rhizospheres and algal mats), and of a prevalence of hydrophytic vegetation (twinberry, a wetland indicator species, was the only dominant plant listed in the August 1999 report). However, in November, 2002, the Corps field checked the delineation and concluded that there were "no areas that meet the criteria for waters of the U.S., including wetlands, within the study boundary of this parcel." In December, 2002, WRA acknowledged the Corps' determination and provided a new analysis of LCP wetlands. Without referencing or explaining their June findings, WRA asserted that there were no primary hydrological indicators present (although algal mats are generally considered a primary indicator under the category of sediment deposits) and that the oxidized rhizospheres did not meet the Corps criteria because they were not "reasonably abundant." Similarly, the earlier evidence of hydric soils was discounted. WRA explained that, "Soil mottling was absent throughout most of the site. In the area of the *Lonicera involucrata*, soil mottling was variable and faint (less than 1%)[1]. Because the soil color was light (chroma=2), consistent mottling greater than 2% is required in order for the soil to be considered hydric...." Yet, in the earlier report, mottles were described as "common," which is a cover class where mottles occupy 2-20%.of the exposed surface of the soil sample. In order to resolve these apparent discrepancies, I spoke to Dan Martel,[2] the Army Corps of Engineers wetland specialist who visited the site on November 29, 1999. Mr. Martel, who is a very experienced wetland delineator, remembered the site visit and also referred to field notes compiled during the course of his field investigation. He found no surface or soil indicators of wetland hydrology. Algal mats are relatively persistent

[1] This description confuses mottle contrast (faint, distinct, prominent) with mottle abundance.
[2] Telephone conversation on October 29, 2002.

features and would still have been apparent had they been present in June. He recorded soil colors with chromas greater than 2 (between 2 and 3) and found no mottles or other redoximorphic features. Mr. Martel stated that the site is far too dry to produce "organic streaking," which is a characteristic of sandy soils in wet areas with a fluctuating water table. Mr. Martel also found that twinberry was mixed with coyote bush and other upland plants. For the patch as a whole, the vegetation did not have a wetland character, although within small areas twinberry may have been predominant. Based on Mr. Martel's observations, I conclude that the small depression with twinberry is probably not a wetland under Section 13577 of the California Code of Regulations. Although small patches may be mostly twinberry, this indicator species is in the frequency class "FAC," which means that, in the absence of additional species-specific data, it is expected to occur in uplands and wetlands with equal probability. Given the site characteristics described by Mr. Martel, the small depression appears to be "upland" and twinberry is apparently not acting as a hydrophyte in this situation. In any event, Mr. Martel's observations do not support a finding that the vegetation community may be characterized as having "predominantly hydrophytic cover". I conclude that WRA's June 1999 observations of positive indicators for all three wetland criteria for the patch of twinberry in the depressional area were inaccurate for unknown reasons, possibly an inexperienced delineator. Although it seems unlikely that there are LCP wetlands present, it would be necessary to make a site visit to verify this conclusion.

There appear to be a least two, perhaps three, other areas either on or adjacent to the subject parcel that do qualify as wetlands under Section 13577 of the California Code of Regulations. The first area is the ponded area within the stand of central coast riparian scrub identified in the 1997 Biological Assessment. It had positive indicators of both hydrology and hyrophytic vegetation. The ponded area was not mapped but appeared to be within the dense stand of willows that extends from the southeast corner of the subject property to the northeast corner of the adjacent Edgemar property. In the Thomas Reid "Peer Review," Taylor Peterson[3] states that, "...Patrick Kobernus of our staff visited the site and identified that the central coast riparian scrub habitat on the "fish" [4] portion of the site could potentially be characterized as wetland, based on the presence of willow, rushes, sedges and standing water." and "[t]he area which Patrick identified as possible wetland was found by WRA to be a drainage ditch...." The Draft EIR (p. IV-B-2) states that "In December 1999 WRA completed an analysis...and concluded the LCP wetlands also are not present on the Bowl site. After a portion of the site in the riparian scrub habitat was observed to be wet on a recurring basis during the rainy season, WRA revisited the site, addressing these observations, concluding that the wet areas were due to faulty drainage along the trace of Edgemar Road and did not qualify as wetlands under California Coastal Commission criteria." I do not have a document that contains this discussion. However, the EIR appears to be referring to the area that Patrick Kobernus originally described. Based on the original description

[3] Mr. Peterson states that he reviewed various excerpts of Pacifica's zoning code and reports 3-5 & 20 in my citation list. The 1999 WRA delineation report is cited as dated July 1999 vice August 1999. However, the title is identical and I assume it is the same report as item 3 in the documents I cite.

[4] Although I have not seen a map showing an area designated "Fish," it appears to refer to the Edgemar property, based on descriptions in the Draft EIR.

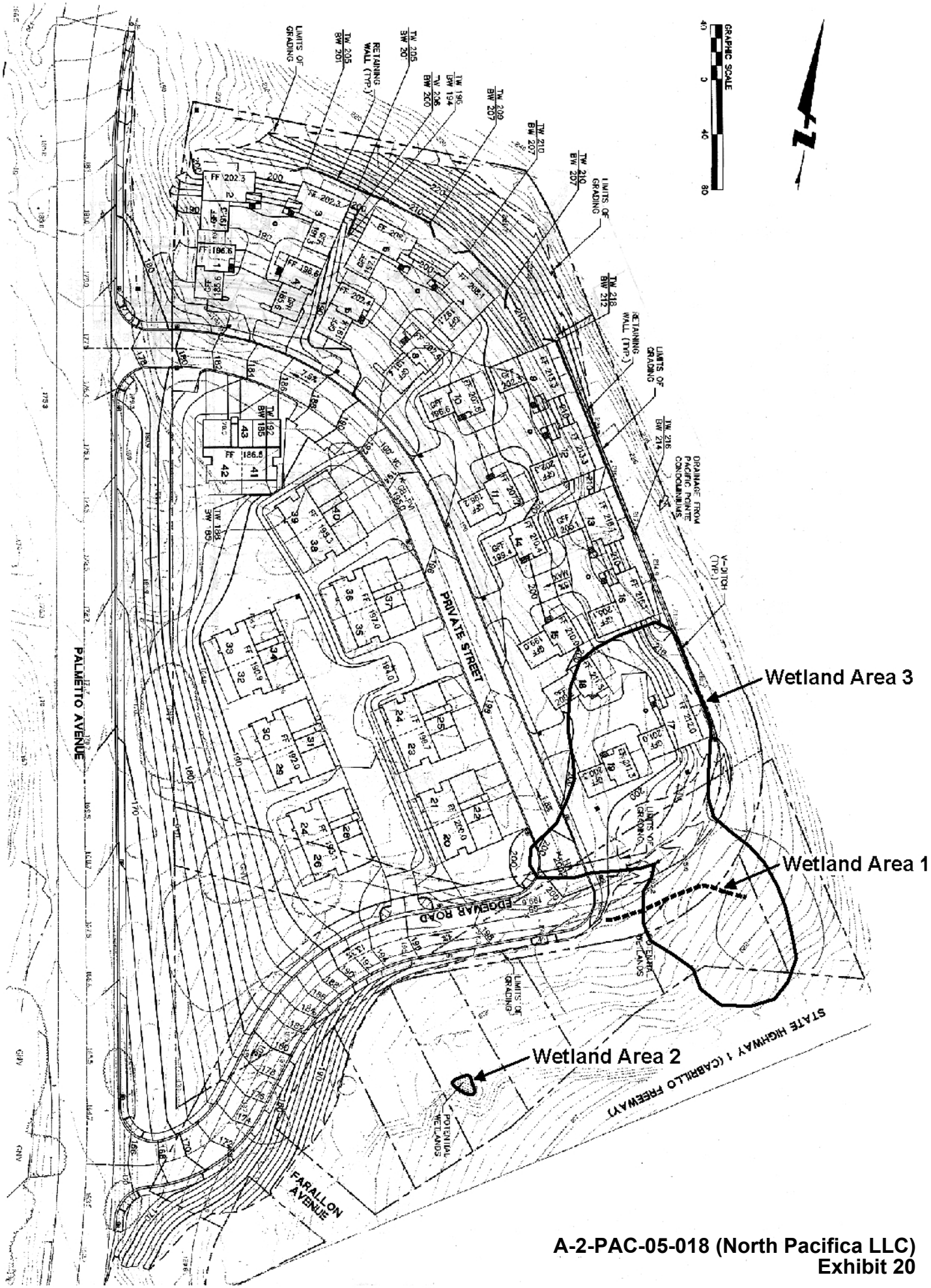
(Document 1, above) and the description in the EIR, at least a portion of the area of central coast riparian scrub qualifies as a wetland under Section 13577 of the California Code of Regulations (WRA's assertions notwithstanding) because it has positive indicators of both hydrology and wetland vegetation. The exact location is not specified, but (despite Mr. Peterson's reference to the "Fish" property) may be on the subject ("Bowl") property, because the EIR continues (emphasis added), "WRA also completed a wetland delineation of the adjacent Fish parcel, in March 2000. The Corps initially verified two small areas of wetlands on the Fish parcel that met Corps criteria. Corps jurisdiction was appealed by the applicant on the basis of their isolation, and the Corps withdrew regulation of these areas. Although the Corps does not have jurisdiction over these adjacent wetlands, they meet Corps wetland criteria and are thus considered wetlands under the City of Pacifica's Local Coastal Plan (LCP) criteria." These two areas would also be considered wetlands under Section 13577 of the California Code of Regulations. I do not have a map showing these wetlands, however the EIR states (p. IV-B-13), "There are probable LCP wetlands on the adjoining parcel within 100 feet of the site."

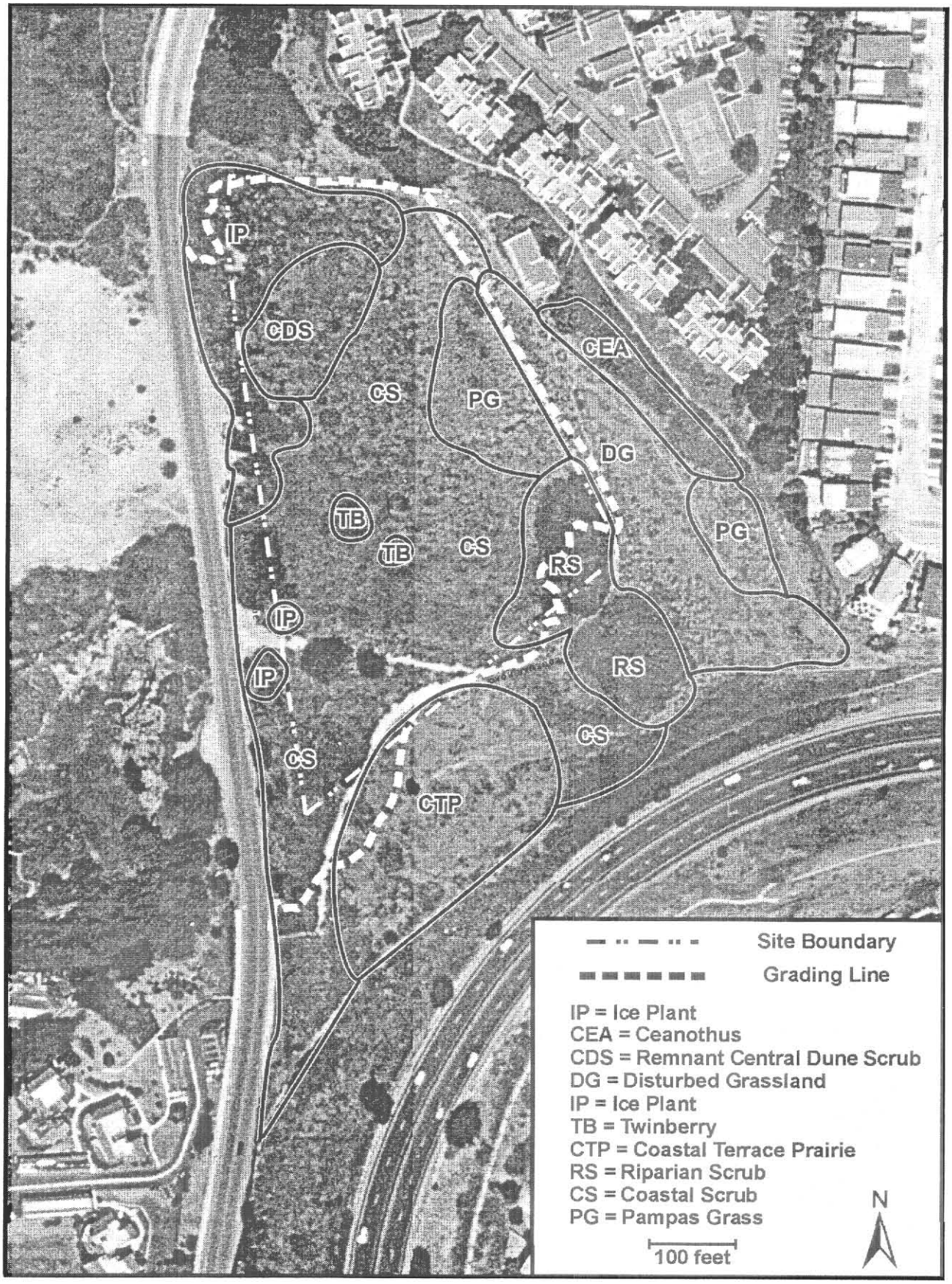
WRA's comments in Documents 8 & 9, above, suggest that the ponded area identified in the 1997 Biological Assessment and the area WRA identified in their delineation of the Edgemar property as a "ditch" may be the same. Dr. Josselyn (2002a, above) referring to this area states that "The Corps of Engineers concluded that they did not have jurisdiction over this ditch...." This is confusing because the draft EIR states that the Corps originally asserted jurisdiction over two areas on the Edgemar property but later concluded that they did not have jurisdiction because the wetlands were isolated. The Corps never takes jurisdiction of "ditches." So, it is not clear if there are a total of two or three wetland areas on or adjacent to the subject property. One wetland is in a depression about 100 feet south of Edgemar Road. A second wetland appears to be immediately adjacent to Edgemar Road in the northeastern portion of the Edgemar property. There may be a third LCP wetland adjacent to Edgemar Road on the Pacifica Bowl property.

We are missing a number of important documents that could further substantiate the existence of wetlands under CCR Section 13577 either on or adjacent to the subject site. We should have a complete copy of Document 3, above (we are missing page 7 (map of wetlands)). We should have a complete copy of Document 6, above (we are missing pages 1 & 7 (map of wetlands)). We should also have WRA's assessment of the ponded area (that was first described in the Biological Assessment) referenced in the draft EIR, if different from Document 6. We should have the Thomas Reid field observations of hydrology on March and April 2001 and January 2002 mentioned in the draft EIR and we should have the correspondence with the Corps regarding their jurisdiction over wetlands on the "Fish" or Edgemar property, including the Corps' initial and final assessments. We should also have a map showing these three wetland areas.

Finally, there is a puzzling reference in the "peer review." It states that, "In the original delineation, several species of plants are found to be dominant, including plant species

that are obligate or facultative-wet.... These plants are left out of the LCP analysis...." The documents listed by the reviewer are two WRA reports: 1. "Delineation of Potential Jurisdictional Wetlands Pacific Cove Parcel Pacifica, California" dated July 1999, and 2. Letter to Michael Crabtree, City of Pacifica dated December 27, 1999 regarding LCP jurisdictional wetlands. The second document appears to be Document 4 above. The first document is apparently the "original delineation" referred to and has the same title as Document 3 above but is dated July instead of August. The August report has no reference to dominant obligate or facultative-wet species in the delineated area. We should have the document referred to by the reviewer in order to properly assess the potential wetland area.



A-2-PAC-05-018 (North Pacifica LLC)
Exhibit 20

Existing Vegetation Communities