

CALIFORNIA COASTAL COMMISSION

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Hearing Date: 9/9-13/02
Commission Action:

STAFF REPORT: REGULAR CALENDAR**APPLICATION NUMBER: 5-02-135****APPLICANT: Balboa Bay Club Inc.****AGENT: Lisa Miller, Shellmaker Inc.****PROJECT LOCATION: 1221 West Coast Highway, Newport Beach, Orange County**

PROJECT DESCRIPTION: Remove an existing 18-slip marina (slip sizes ranging from 80' to 98') and replace with a new 16-slip marina (slip sizes ranging from 88' to 98'). The existing marina includes 33 10" and 12" steel piles which are proposed to be removed. The proposed marina will include 15 new epoxy coated 18½" diameter, 46' long steel piles and 10 new epoxy coated 143/8" diameter, 34' long steel piles. The three existing gangways will be replaced with two new gangways that attach to pile supported platforms. A 10' x 10' harbormaster building will be replaced in kind.

LOCAL APPROVALS RECEIVED: City of Newport Beach Harbor Resources Division Approval in Concept Harbor Permit No. 129-1221.

SUBSTANTIVE FILE DOCUMENTS: Coastal Development Permit No. 5-94-265 (Balboa Bay Club); Coastal Development Permit Amendment 5-94-265 A1 (Balboa Bay Club); Coastal Development Permit No. 5-01-319 (Balboa Bay Club); City of Newport Beach certified Local Coastal Program Land Use Plan; Balboa Bay Club Dock Replacement Eelgrass Habitat (Zostera Marina) and Caulerpa Taxifolia Surveys Newport Bay, CA, prepared by Coastal Resources Management, dated April 29, 2002.

SUMMARY OF STAFF RECOMMENDATION:

Staff recommends approval of the proposed amendment subject to five special conditions which are necessary to assure that marine resources, water quality and public access are protected. Special Condition No. 1 requires that the applicant dispose of all demolition and construction debris at an appropriate location. Special Condition No. 2 requires the applicant to follow Best Management Practices to ensure the continued protection of water quality and marine resources. Special Condition No. 3 requires that a pre-construction

survey for *Caulerpa taxifolia* be done and if its presence is discovered, the applicant shall not proceed with the project until 1) the applicant provides evidence to the Executive Director that all *Caulerpa taxifolia* within the project and buffer areas have been eliminated or 2) the applicant has revised the project to avoid any contact with *Caulerpa taxifolia*. Special Condition No. 4 requires an eelgrass survey to be completed within 120 days prior to commencement of construction and, if eelgrass is discovered within the project vicinity, that impacts be avoided and, if unavoidable, mitigated pursuant to the "Southern California Eelgrass Mitigation Policy" revision 8. Special Condition No. 5 requires that the public access walkway remain free of any development which would obstruct or limit public use and be available to the general public at any time the club facilities are available to members of the private club.

STAFF RECOMMENDATION:

I. MOTION, STAFF RECOMMENDATION AND RESOLUTION FOR 5-02-135:

Staff recommends that the Commission make the following motion and adopt the following resolution:

MOTION: *I move that the Commission approve Coastal Development Permit #5-02-135 pursuant to the staff recommendation.*

STAFF RECOMMENDATION OF APPROVAL:

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

RESOLUTION TO APPROVE THE PERMIT:

The Commission hereby approves a permit, subject to the conditions below, for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the provisions of Chapter 3 of the California Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a local coastal program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/ or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternative that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS:

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

III. SPECIAL CONDITIONS

1. Pre-construction *Caulerpa Taxifolia* Survey

- A. Not earlier than 90 days nor later than 30 days prior to commencement or re-commencement of any development authorized under this coastal development permit (the "project"), the applicants shall undertake a survey of the project area and a buffer area at least 10 meters beyond the project area to determine the presence of the invasive alga *Caulerpa taxifolia*. The survey shall include a visual examination of the substrate.
- B. The survey protocol shall be prepared in consultation with the Regional Water Quality Control Board, the California Department of Fish and Game, and the National Marine Fisheries Service.
- C. Within five (5) business days of completion of the survey, the applicants shall submit the survey:
 - i. for the review and approval of the Executive Director; and

- ii. to the Surveillance Subcommittee of the Southern California Caulerpa Action Team (SCCAT). The SCCAT Surveillance Subcommittee may be contacted through William Paznokas, California Department of Fish & Game (858/467-4218) or Robert Hoffman, National Marine Fisheries Service (562/980-4043).

- D. If *Caulerpa taxifolia* is found within the project or buffer areas, the applicants shall not proceed with the project until 1) the applicants provide evidence to the Executive Director that all *C. taxifolia* discovered within the project area and all *C. taxifolia* discovered within the buffer area have been eliminated in a manner that complies with all applicable governmental approval requirements, including but not limited to those of the California Coastal Act, or 2) the applicants have revised the project to avoid any contact with *C. taxifolia*. No revisions to the project shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

2. Pre-Construction Eelgrass Survey

- A. Pre Construction Eelgrass Survey. A valid pre-construction eelgrass (*Zostera marina*) survey shall be completed during the period of active growth of eelgrass (typically March through October). The pre-construction survey shall be completed prior to the beginning of construction and shall be valid until the next period of active growth. The survey shall be prepared in full compliance with the "Southern California Eelgrass Mitigation Policy" Revision 8 (except as modified by this special condition) adopted by the National Marine Fisheries Service and shall be prepared in consultation with the California Department of Fish and Game. The applicants shall submit the eelgrass survey for the review and approval of the Executive Director within five (5) business days of completion of each eelgrass survey and in any event no later than fifteen (15) business days prior to commencement of any development. If the eelgrass survey identifies any eelgrass within the project area which would be impacted by the proposed project, the development shall require an amendment to this permit from the Coastal Commission or a new coastal development permit.
- B. Post Construction Eelgrass Survey. If any eelgrass is identified in the project area by the survey required in subsection A of this condition above, within one month after the conclusion of construction, the applicants shall survey the project site to determine if any eelgrass was adversely impacted. The survey shall be prepared in full compliance with the "Southern California Eelgrass Mitigation Policy" Revision 8 (except as modified by this special condition) adopted by the National Marine Fisheries Service and shall be

prepared in consultation with the California Department of Fish and Game. The applicants shall submit the post-construction eelgrass survey for the review and approval of the Executive Director within thirty (30) days after completion of the survey. If any eelgrass has been impacted, the applicants shall replace the impacted eelgrass at a minimum 1.2:1 ratio on-site, or at another location, in accordance with the Southern California Eelgrass Mitigation Policy. All impacts to eelgrass habitat shall be mitigated at a minimum ratio of 1.2:1 (mitigation:impact). The exceptions to the required 1.2:1 mitigation ratio found within SCEMP shall not apply. Any off-site mitigation shall require an amendment to this permit or a new coastal development permit unless the Executive Director determines that no amendment or new permit is required.

3. CONSTRUCTION RESPONSIBILITIES AND DEBRIS REMOVAL

The permittee shall comply with the following construction-related requirements:

- (a) No construction materials, equipment, debris, or waste shall be placed or stored where it may be subject to tidal and wave erosion and dispersion.
- (b) Any and all debris resulting from construction activities shall be removed from the site within 10 days of completion of construction.
- (c) Machinery or construction materials not essential for project improvements shall not be allowed at any time in the intertidal zone.
- (d) Sand from the beach, cobbles, or shoreline rocks shall not be used for construction material.
- (e) If turbid conditions are generated during construction a silt curtain shall be utilized to control turbidity.
- (f) Measures shall be taken to ensure that barges do not ground and impact eelgrass sites.
- (g) Floating booms shall be used to contain debris discharged into coastal waters and any debris discharged shall be removed as soon as possible but no later than the end of each day.
- (h) Non-buoyant debris discharged into coastal waters shall be recovered by divers as soon as possible after loss.
- (i) Reasonable and prudent measures shall be taken to prevent all discharge of fuel or oily waste from heavy machinery, pile drivers, or construction equipment or power tools into coastal waters. The applicant and applicant's contractors shall have adequate equipment available to contain any such spill immediately.
- (j) All stock piles and construction materials shall be covered, enclosed on all sides, shall be located as far away as possible from drain inlets and any waterway, and shall not be stored in contact with the soil.
- (k) All debris and trash shall be disposed of in the proper trash and recycling receptacles at the end of each construction day.

- (l) The applicant shall use the least damaging alternative for the construction of pilings and any other activity that will disturb benthic sediments. The applicant shall limit, to the greatest extent practicable, the suspension of benthic sediments into the water column.

4. Best Management Practices Program

By acceptance of this permit the applicant agrees that the long-term water-borne berthing of boat(s) in the approved dock and/or boat slip will be managed in a manner that protects water quality pursuant to the implementation of the following BMPs.

(a) Boat Cleaning and Maintenance Measures:

1. In-water top-side and bottom-side boat cleaning shall minimize the discharge of soaps, paints, and debris.
2. In-the-water hull scraping or any process that occurs under water that results in the removal of paint from boat hulls shall be prohibited. Only detergents and cleaning components that are designated by the manufacturer as phosphate-free and biodegradable shall be used, and the amounts used minimized.
3. The applicant shall minimize the use of detergents and boat cleaning and maintenance products containing ammonia, sodium hypochlorite, chlorinated solvents, petroleum distillates or lye.

(b) Solid and Liquid Waste Management Measures:

1. All trash, recyclables, and hazardous wastes or potential water contaminants, including old gasoline or gasoline with water, absorbent materials, oily rags, lead acid batteries, anti-freeze, waste diesel, kerosene and mineral spirits shall be disposed of in a proper manner and shall not at any time be disposed of in the water or gutter.

(c) Petroleum Control Management Measures:

1. Oil absorbent materials shall be examined at least once a year and replaced as necessary. The applicant shall recycle the materials, if possible, or dispose of them in accordance with hazardous waste disposal regulations. The boaters shall regularly inspect and maintain engines, seals, gaskets, lines and hoses in order to prevent oil and fuel spills. Boaters shall also use preventive engine maintenance, oil absorbents, bilge pump-out services, or steam cleaning services as much as possible to clean oily bilge areas and shall not use detergents while cleaning. The use of soaps that can be discharged by bilge pumps is prohibited.

5. Public Access Walkway

The 10 foot wide public access walkway shall remain free of any development which would obstruct or limit public use.

The public access walkway shall be available to the general public at any time the club facilities are available to members of the private club.

Construction activity and/or placement of construction material within the public access walkway is prohibited.

The applicant shall ensure that these requirements are carried out.

IV. FINDINGS AND DECLARATIONS:

The Commission hereby finds and declares:

A. Project Description

The applicant proposes to remove an existing 18 slip, wooden marina (slip sizes ranging from 60' to 98') and replace with a new 16 slip, concrete marina (slip sizes ranging from 88' to 98'). The existing marina includes a total of 33 10" and 12" diameter steel piles which are proposed to be removed. The proposed marina will include 15 new epoxy coated 18½" diameter, 46' long steel piles and 10 new epoxy coated 143/8" diameter, 34' long steel piles. The existing marina's 33 10" and 12" diameter steel piles will be removed. No sewer facilities are proposed in conjunction with this project.

A harbormaster building is proposed to be replaced in kind. The existing and proposed harbormaster building is 15' high and consists a 10' x 10' office area with storage above. No plumbing or sewer facilities are proposed to be provided to this building.

The three existing gangways are proposed to be replaced with two new. One 5' x 36' gangway will extend from a 5'6" square platform at the top of the bulkhead to a 12½' x 70' platform on the water. The platform on the water will connect to an 8 ½' x 37' float, which then connects to a 25' square float on the water. The floats on the water make up two fingers of the 90' boat slip. The harbormaster building will sit on the 25' square float. A 25' x 20' swim float is proposed to be attached to the harbormaster float by a removable 8' x 10' float. The floats between the gangway and the harbormaster float will provide side ties for small boats/dinghies. This proposed configuration remains the same as the existing configuration of this portion of the dock system, except that the proposed gangway will be longer to better accommodate tidal fluctuations.

A new 5' x 42' gangway at the other end of the marina is proposed to extend from a 6' x 8'3" gangway platform at the top of the bulkhead to a 6' x 18' float on the water attached to the rest of the marina dock system.

Plans depicting the above described marina layout are attached as exhibits C and D.

The existing marina dock configuration extends to the US Pierhead line and the replacement configuration is also proposed to extend to the US Pierhead line. The project has been reviewed by the California Regional Water Quality Control Board (RWQCB) and has received a Waiver of discharge Requirements contingent upon compliance with conditions identified in their letter dated July 30, 2002 (see exhibit E). The demolished wooden docks will be taken to the Puente Hills landfill in Whittier (outside the coastal zone).

B. Project Location and Permit History

1. Projects Previously Approved at the Site

The landward side of the subject site is developed with the Balboa Bay Club. Renovations to the Bay Club were approved under coastal development permit 5-94-265. The renovations approved included a major remodel and expansion and some demolition. The resultant project included 189,000 square feet of facilities, a parking structure and an increase in guest rooms from 128 to 144.

Prior to approval of coastal development permit 5-94-265 all use of the site was private, available only to club members and their guests. As approved under 5-94-265 by the Commission, the project at the site will provide some public uses, although some areas on site will remain available to club members only. The club renovation project includes a ten-foot wide public access walkway extending from Coast Highway through the entry area of the club to the bulkhead adjacent to the bay and along the bulkhead to the southern edge of the property. An amendment to coastal development permit 5-94-265 was approved by the Commission on February 15, 2000. The amendment to 5-94-265 allowed an increase in square footage of the facilities, partially to correct an error in the previous square footage calculation.

In addition, in November of 2001 the Commission approved a bulkhead replacement project at the site pursuant to coastal development permit 5-01-319. Coastal development permit 5-01-319 was approved subject to four special conditions which required: 1) adherence to specific marine resources best management practices; 2) eel grass mitigation requirements; 3) continued availability of the public access walkway as described in coastal development permit 5-94-265 and 5-94-265 A1; and 4) evidence of Regional Water Quality Control Board approval.

No changes to the project approved under coastal development permit 5-94-265 or 5-94-265 A1 are proposed. The proposed project will retain the 10-foot wide public access walkway along the bulkhead.

2. Project Location

The subject site is located on West Coast Highway and fronts on Lido Channel in Newport Harbor. Thus, the site is between the sea and the first public road paralleling the sea.

In 1919, the State granted all tide and submerged lands to the City. In 1952 the subject site was determined to be State tide and submerged land. Prior to that determination, in 1948, the City leased the site to a private entity. The private entity constructed what is now the Balboa Bay Club. The lease covering the site was extended in 1986 subject to a requirement that the availability of current and potential public facilities for public trust purposes be dramatically improved.

The project approved under coastal development permit 5-94-265 significantly increased public access at the subject site, consistent with the requirement that public access be dramatically improved. As conditioned, the proposed development will not interfere with the approved public access on site.

C. Marine Resources

The proposed project, replacement of an existing marina, is located in and over the coastal waters of Newport Harbor (Lower Newport Bay). Newport Bay is on the federal Clean Water Act 303(d) list of "impaired" water bodies. The designation as "impaired" means that water quality within the harbor does not meet State and Federal water quality standards designed to meet the 1972 Federal Clean Water Act goal established for this water body. The listing is made by the California Regional Water Quality Control Board, Santa Ana Region (RWQCB), and the State Water Resources Control Board (SWRCB), and confirmed by the U.S. Environmental Protection Agency. Further, the RWQCB has targeted the Newport Bay watershed, which would include Newport Harbor, for increased scrutiny as a higher priority watershed under its Watershed Initiative. The standard of review for development proposed in coastal waters is the Chapter 3 policies of the Coastal Act, including the following water quality policies. Sections 30230 and 30231 of the Coastal Act require the protection of biological productivity, public recreation, and marine resources.

Construction of any kind adjacent to or in coastal waters has the potential to impact marine resources. The Bay provides an opportunity for water oriented recreational activities and also serves as a habitat for marine plant and animal species. Because of the coastal recreational activities and the sensitivity of the Bay habitat, potential water quality issues must be examined as part of the review of this project.

1. Water Quality

Section 30230 of the Coastal Act states:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 of the Coastal Act states:

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.

a) Construction Impacts to Water Quality

Storage or placement of construction materials, debris, or waste in a location subject to erosion and dispersion or which may be discharged into coastal water via rain, surf, or wind would result in adverse impacts upon the marine environment that would reduce the biological productivity of coastal waters. For instance, construction debris entering coastal waters may cover and displace soft bottom habitat. In addition, the use of machinery in coastal waters not designed for such use may result in the release of lubricants or oils that are toxic to marine life. Sediment discharged into coastal waters may cause turbidity, which can shade and reduce the productivity of foraging avian and marine species ability to see food in the water column. In order to avoid adverse construction-related impacts upon marine resources, Special Condition No. 3 outlines construction-related requirements to provide for the safe storage of construction materials and the safe disposal of construction debris.

Special Condition No. 3 requires that the applicants dispose of all demolition and construction debris at an appropriate location. This condition requires the applicant to incorporate silt curtains and/or floating booms when necessary to control turbidity and debris discharge. The condition also includes a requirement that divers remove any non-floatable debris not contained in such structures that sink to the ocean bottom as soon as possible.

b) Best Management Practices

The proposed marina replacement project will allow for the long term berthing of boats. Some maintenance activities if not properly regulated could cause adverse impacts to the marine environment. Certain maintenance activities like cleaning and scraping of boats, improper discharges of contaminated bilge water and sewage waste, and the use of caustic detergents and solvents, among other things, are major contributors to the degradation of water quality within boating facilities. As mentioned above, Lower Newport Bay provides a home for marine habitat and also provides opportunities for recreational activities. The Bay eventually drains into the Pacific Ocean through tidal flushing.

To minimize the potential that maintenance activities would adversely affect water quality, the Commission imposes Special Condition No.4 that requires the applicant to follow Best Management Practices to ensure the continued protection of water quality and marine resources. Best management practices identified in the condition require proper boat cleaning and maintenance, management of solid and liquid waste, and management of petroleum products, all of which are associated with the long term berthing of the boats (more thoroughly explained in Special condition No. 4 of this permit).

c) *Caulerpa taxifolia*

Recently, a non-native and invasive aquatic plant species, *Caulerpa taxifolia* (herein *C. taxifolia*), has been discovered in parts of Huntington Harbor (Emergency Coastal Development Permits 5-00-403-G and 5-00-463-G). Huntington Harbor provides similar habitat to that found in Newport Harbor.

C. taxifolia is a tropical green marine alga that is popular in the aquarium trade because of its attractive appearance and hardy nature. In 1984, this seaweed was introduced into the northern Mediterranean. From an initial infestation of about 1 square yard it grew to cover about 2 acres by 1989, and by 1997 blanketed about 10,000 acres along the coasts of France and Italy. Genetic studies demonstrated that those populations were from the same clone, possibly originating from a single introduction. This seaweed spreads asexually from fragments and creates a dense monoculture displacing native plant and animal species. In the Mediterranean, it grows on sand, mud and rock surfaces from the very shallow subtidal to about 250 ft depth. Because of toxins in its tissues, *C. taxifolia* is not eaten by herbivores in areas where it has invaded. The infestation in the Mediterranean has had serious negative economic and social consequences because of impacts to tourism, recreational diving, and commercial fishing¹.

¹ References

Meinesz, A. (Translated by D. Simberloff) 1999. Killer Algae. University of Chicago Press

Chisholm, J.R.M., M. Marchioretto, and J.M. Jaubert. Effect of low water temperature on metabolism and growth of a subtropical strain of *Caulerpa taxifolia* (Chlorophyta). Marine Ecology Progress Series 201:189-198

Ceccherelli, G. and F. Cinelli. 1999. The role of vegetative fragmentation in dispersal of the invasive alga *Caulerpa taxifolia* in the Mediterranean. Marine Ecology Progress Series 182:299-303

Because of the grave risk to native habitats, in 1999 *C. taxifolia* was designated a prohibited species in the United States under the Federal Noxious Weed Act. In addition, in September 2001 the Governor signed into law AB 1334 which made it illegal in California for any person to sell, possess, import, transport, transfer, release alive in the state, or give away without consideration various *Caulerpa* species including *C. taxifolia*.

In June 2000, *C. taxifolia* was discovered in Aqua Hedionda Lagoon in San Diego County, and in August of that year an infestation was discovered in Huntington Harbor in Orange County. Genetic studies show that this is the same clone as that released in the Mediterranean. Other infestations are likely. Although a tropical species, *C. taxifolia* has been shown to tolerate water temperatures down to at least 50°F. Although warmer southern California habitats are most vulnerable, until better information is available, it must be assumed that the whole California coast is at risk. All shallow marine habitats could be impacted.

In response to the threat that *C. taxifolia* poses to California's marine environment, the Southern California *Caulerpa* Action Team, SCCAT, was established to respond quickly and effectively to the discovery of *C. taxifolia* infestations in Southern California. The group consists of representatives from several state, federal, local and private entities. The goal of SCCAT is to completely eradicate all *C. taxifolia* infestations.

The applicant has submitted a *Caulerpa Taxifolia* survey dated April 29, 2002. The survey found that no *Caulerpa* was present in the project vicinity. A coastal development permit is valid for two years from the date of Commission action. In addition, the life of the permit may be extended beyond that. There is no guarantee that the project will commence immediately upon receipt of the coastal development permit. *Caulerpa Taxifolia* could establish within the project vicinity between the time of the last survey and commencement of construction. For this reason the Commission requires a survey to be conducted prior to commencement of construction.

If *C. taxifolia* is present, any project that disturbs the bottom could cause its spread by dispersing viable tissue fragments. In order to assure that the proposed project does not

Smith C.M. and L.J. Walters. 1999. Fragmentation as a strategy for *Caulerpa* species: Fates of fragments and implications for management of an invasive weed. *Marine Ecology* 20:307-319.

Jousson, O., J. Pawlowski, L. Zaninetti, A. Meinesz, and C.F. Boudouresque. 1998. Molecular evidence for the aquarium origin of the green alga *Caulerpa taxifolia* introduced to the Mediterranean Sea. *Marine Ecology Progress Series* 172:275-280.

Komatsu, T. A. Meinesz, and D. Buckles. 1997. Temperature and light responses of the alga *Caulerpa taxifolia* introduced into the Mediterranean Sea. *Marine Ecology Progress Series* 146:145-153.

Gacia, E. C. Rodriguez-Prieto, O. Delgado, and E. Ballesteros. 1996. Seasonal light and temperature responses of *Caulerpa taxifolia* from the northwestern Mediterranean. *Aquatic Botany* 53:215-225.

Belsher, T. and A. Meinesz. 1995. Deep-water dispersal of the tropical alga *Caulerpa taxifolia* introduced into the Mediterranean. *Aquatic Botany* 51:163-169.

cause the dispersal of *C. taxifolia*, the Commission imposes Special Condition No. 1. Special Condition No. 1 requires the applicant, prior to commencement of development, to survey the project area for the presence of *C. taxifolia*. If *C. taxifolia* is present in the project area, no work may commence and the applicants shall seek an amendment or a new permit to address impacts related to the presence of the *C. taxifolia*, unless the Executive Director determines that no amendment or new permit is required.

2. Eel Grass

Eelgrass (*Zostera marina*) is an aquatic plant consisting of tough cellulose leaves which grows in dense beds in shallow, subtidal or intertidal unconsolidated sediments. Eelgrass is considered worthy of protection because it functions as important habitat and foraging area for a variety of fish and other wildlife, according to the Southern California Eelgrass Mitigation Policy (SCEMP) adopted by the National Marine Fisheries Service (NMFS), the U.S. Fish and Wildlife Service (USFWS), and the California Department of Fish and Game (CDFG). For instance, eelgrass beds provide areas for fish egg laying, juvenile fish rearing, and waterfowl foraging. Sensitive species, such as the California least tern, a federally listed endangered species, utilize eelgrass beds as foraging grounds.

The eel grass survey prepared by Coastal Resources Management, dated April 29, 2002, states that no eelgrass is located in the project area. Due to the ephemeral nature of eelgrass, however, an eelgrass certification is only valid for 120 days. More than 90 days have elapsed since the project site was surveyed. Even though the eelgrass inspection indicates that eelgrass is not present and so will not be impacted by the proposed project, eelgrass may have established within the project vicinity between the time the survey was conducted and commencement of construction. If eelgrass is present in the project area, adverse impacts from the proposed project could result. Therefore, measures to avoid or minimize such potential impacts must be in place in order for the project to be found consistent with Section 30230 of the Coastal Act. Therefore, the Commission imposes Special Condition No. 2 which requires that a current pre-construction eelgrass survey be conducted within the boundaries of the proposed project be undertaken during the period of active growth of eelgrass (typically March through October). The pre-construction survey shall be completed within 120 days prior to the beginning of construction and shall be valid until the next period of active growth. The pre-construction survey will identify any eelgrass beds which could be impacted and which must be avoided. If the eelgrass survey identifies any eelgrass within the project area which would be impacted by the proposed project, the development shall require an amendment to this permit from the Coastal Commission or a new coastal development permit. An amendment or new permit is required in order to address any eelgrass impacts. In addition, if there are any impacts upon eelgrass, the applicant will be required to prepare appropriate surveys and mitigation plans in consultation with the California Department of Fish & Game and in conformance with the *Southern California Eelgrass Mitigation Policy* (Exhibit F).

The Commission previously imposed similar conditions for pre-construction eelgrass surveys on Coastal Development Permits 5-97-230 and 5-97-230-A1 (City of Newport

Beach), 5-97-231 (County of Orange), 5-97-071 (County of Orange), 5-99-244 (County of Orange-Goldrich-Kest-Grau), 5-98-179 (Kompaniez), 5-98-2(1 (Anderson), 5-98-443 (Whyte), 5-98-444 (Barrad), 5-99-005 (Dea), 5-99-006 (Fernbach & Holland), 5-99-007 (Aranda et al.), 5-99-008 (Yacoel et. al.), 5-99-030 (Johnson), 5-99-031 (Lady Jr., et. al.), 5-99-032 (Appel et. al.), 5-99-108 (Pineda), 5-98-471 (Maginot), 5-99-472 (Bjork), 5-99-473 (Gelbard), 5-00-389 (Ashby et. al.), 5-00-390 (Burggraf et. al.), 5-00-401 (Baghdassarian et. al.), 5-00-402 (Buettner et. al.) and 5-01-358 (Rayhanabad).

3. Fill of Coastal Waters

Section 30233 of the Coastal Act addresses fill of open coastal waters:

(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 division, 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:

(4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.

The Coastal Act limits the fill of open coastal water to specific, enumerated uses and also requires that any project which results in fill of open coastal waters provide adequate mitigation and that the project be the least environmentally damaging alternative. The proposed project includes replacement of an existing marina, including placement of a total of 25 piles. The proposed pile replacement constitutes fill of coastal waters.

a. Allowable Use

Section 30233(a)(4) of the Coastal Act allows fill of open coastal waters, such as Newport Harbor, for recreational boating purposes. The proposed project, a marina, constitutes a recreational boating facility. Thus, the project is an allowable use under Section 30233(a)(4).

b. Least Environmentally Damaging Alternative

The proposed project will result in the replacement of an existing marina including removal 33 guide piles and replacing them with a total of 25 guide piles and reconstruction of the floating dock system. The proposed piles are necessary to anchor the replacement marina dock system securely. The piles proposed are the minimum size and amount necessary to withstand the loads created by tides and currents. The proposed project will use the minimum number and size of piles necessary to adequately support and secure the marina dock system. Thus the amount of fill needed to support the proposed

allowable use is minimized. Therefore the project as proposed is the least environmentally damaging alternative.

c. Adequate Mitigation

Section 30233 also requires that any project which results in fill of open coastal waters also provide adequate mitigation. Placement of the proposed piles in conjunction with the proposed project will displace bottom habitat. However, the pilings will provide new vertical habitat for marine organisms such as mussels, barnacles, limpets, littorine snails, red and brown seaweed, surfgrass, anemones, and polychaetes. Thus, adequate mitigation is provided by the proposed project in that the loss of bottom habitat is offset by the fact that the pilings themselves will provide new vertical intertidal habitat for marine organisms.

For the reasons discussed above, the Commission finds that the proposed project is consistent with Section 30233 of the Coastal Act.

4. Conclusion

To minimize adverse impacts upon the marine environment, three Special Conditions have been imposed. Special Condition No. 3 requires that the applicant dispose of all demolition and construction debris at an appropriate location. Special Condition No. 4 requires the applicant to follow Best Management Practices to ensure the continued protection of water quality and marine resources. Special Condition No. 1 requires that a pre-construction survey for *Caulerpa taxifolia* be done and if its presence is discovered, the applicant shall not proceed with the project until 1) the applicant provides evidence to the Executive Director that all *Caulerpa taxifolia* within the project and buffer area has been eliminated or 2) the applicant is required to conduct a caulerpa taxifolia survey prior to commencement of construction and to take specific steps to halt its spread if discovered. Special condition No. 2 requires a pre-construction eel grass survey to identify whether eel grass has established between the time of the last survey and commencement of construction and provides steps to follow if eel grass is found within the project site. As conditioned, the Commission finds that the proposed project is consistent with Sections 30230 and 30231 of the Coastal Act, which require protection of water quality and marine resources. In addition, the Commission finds that the proposed project, as conditioned, is consistent with Section 30233 of the Coastal Act which limits the types of fill allowed within coastal waters.

D. Public Access

Section 30210 of the Coastal Act states:

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public

safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

The Balboa Bay Club project previously approved under coastal development permit No. 5-94-265 included a minimum 10-foot wide public access walkway extending from Coast Highway to the bulkhead and along the bulkhead to the southern edge of the property. The public walkway is adjacent to the area of the proposed marina replacement project. The walkway allows members of the general public to stroll along the edge of the bay and experience unobstructed views of the harbor.

The findings for approval of coastal development permit 5-94-265 state:

"In order for the walkway to be useful, a minimum of ten feet of clear passage must be devoted exclusively to the public access walkway. The walkway must be adjacent to the bulkhead to assure that the public viewing of the marina and bay from the walkway will not be impinged upon."

In addition, Section 30210 of the Coastal Act requires that public access be maximized. The marina replacement project does not propose any reduction or limitation in the size, location or use of the public access walkway approved under coastal development permit 5-94-265. Thus, the proposed marina replacement project will not lessen the public benefits of the walkway approved by the Commission under coastal development permit 5-94-265. However, construction activity or placement of construction material within the public access walkway would adversely impact public access. It must be clarified that no construction activity or construction material are allowed within the public access walkway. Because maximizing public access is an extremely high priority under the Coastal Act and because the proposed project is located adjacent to the public access walkway, an informational special condition is included as part of the approval of this project. This special condition restates and re-imposes the conditions of coastal development permit 5-94-265 regarding the public access walkway. In addition, this special condition includes language specifically prohibiting construction activity and placement of construction material within the public access walkway. This special condition requires that the 10 foot wide public access walkway remain free of any development which would obstruct or limit public use and that the public access walkway be available to the general public at any time the facility is available to the private club members. Therefore, as conditioned, the Commission finds the proposed project is consistent with Section 30210 of the Coastal Act which requires that public access be maximized.

E. Local Coastal Program

The LUP for the City of Newport Beach was effectively certified on May 19, 1982. The certified LUP was updated on January 9, 1990. As conditioned, the proposed development is consistent with Chapter 3 of the Coastal Act and with the certified Land Use Plan for the area. Approval of the project, as conditioned, will not prejudice the ability of the local government to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3 of the Coastal Act.

F. California Environmental Quality Act

As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, is the least environmentally damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.

31

SEE MAP 27

31



SITE

EXHIBIT NO. A
APPLICATION NO.
5-02-135
California Coastal Commission

VICINITY MAP

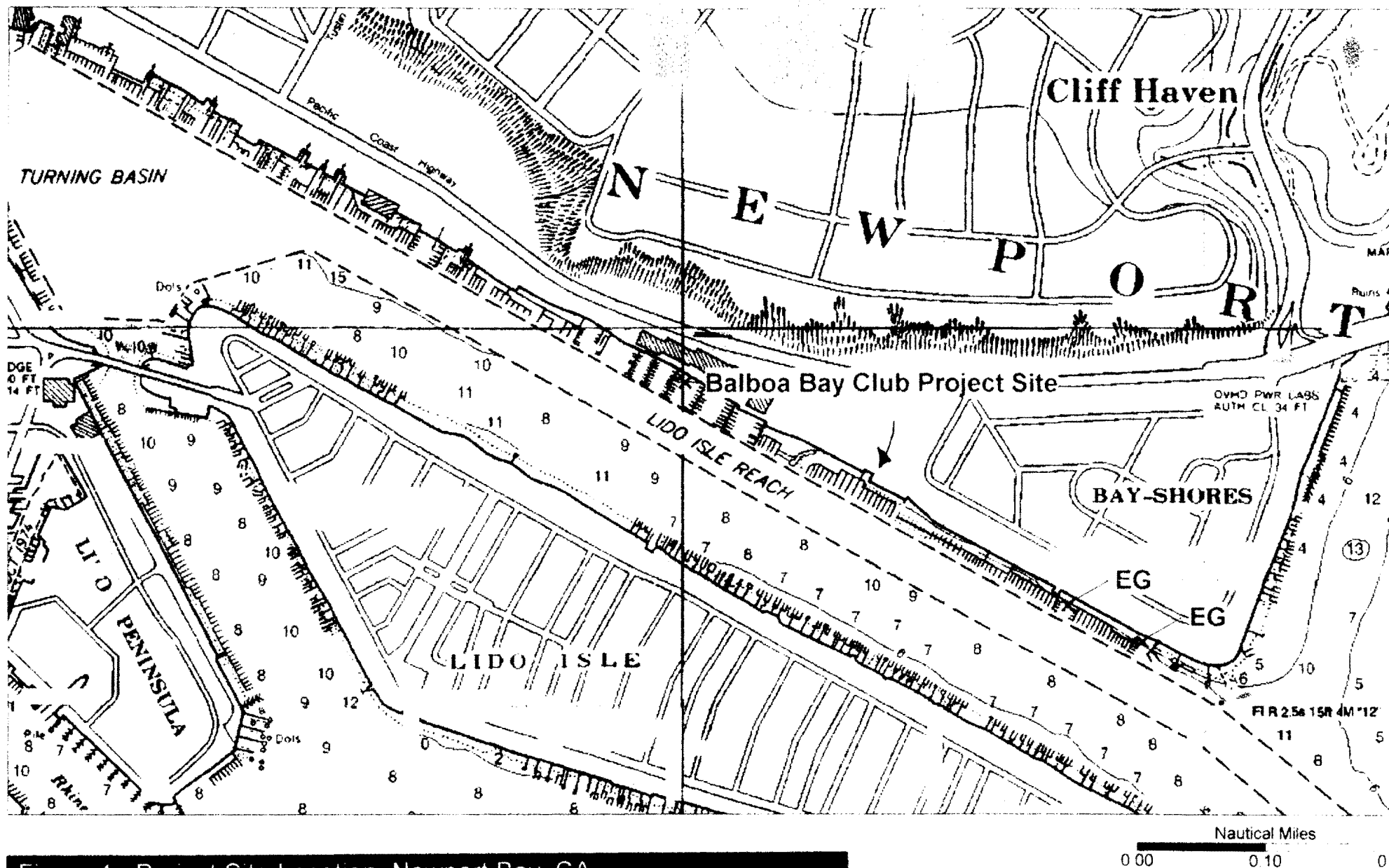
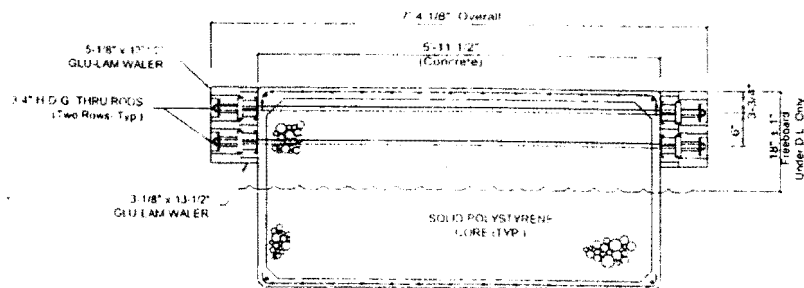
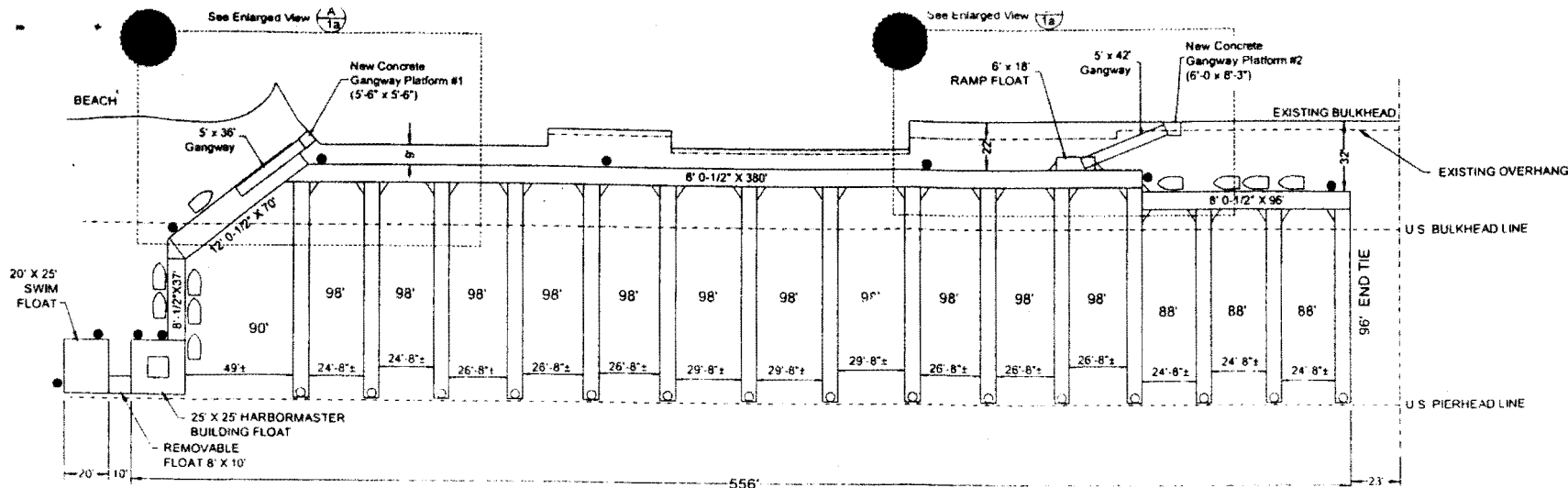


Figure 1. Project Site Location, Newport Bay, CA

Source: NOAA Chart 1874



TYP FINGER SECTION
NOT TO SCALE

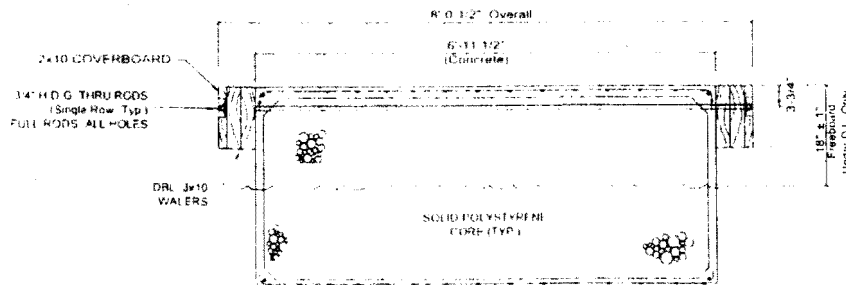
Fingers are calculated to support a live load of 4.75 pounds per square foot of deck area per inch of fingerboard thickness.

SLIP MIX		
LENGTH	TOTAL NO	LINEAL FT
88'	3	264'
90'	1	90'
98' X 25'	2	196'
98' X 27'	6	588'
98' X 30'	3	294'
96'	1	96'
TOTALS	16	1528'

16,085 TOTAL CONCRETE FLOAT SQ FT

NOTE: THIS DRAWING DERIVED FROM INCOMPLETE INFORMATION. ALL INFORMATION ON THIS DRAWING TO BE VERIFIED BY OWNER.

EEL GRASS INSPECTION
☐ NO EEL GRASS WITHIN 15' OF PROJECT
☒ EEL GRASS IN THE PROJECT AREA
 SIGNATURE: *Tony Meli*
 129-1221 PERMIT #
 4/18/02 DATE



TYP MAINWALK SECTION
NOT TO SCALE

Fingers are calculated to support a live load of 4.75 pounds per square foot of deck area per inch of fingerboard thickness.

BALBOA BAY CLUB

Overall Dock Layout

Revisions

Drawn by: D DeCaro
 Scale: NONE
 Date: 4-16-02
 Sheet: 1 of

4/18/02
 HARBOR RESOURCES CO.,
 CITY OF NEWPORT BEACH

Tony Meli

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 South Coast Region

MAY 1 2002

CALIFORNIA
 COASTAL COMMISSION

COASTAL COMMISSION

5-02-125

EXHIBIT #

PAGE 1 OF 5

Project Plans

37

BEACH

Enlarged View

A
1a

New Concrete
Gangway Platform #1

5' x 36'
Gangway

12' 0-1/2" X 70'

37'

Enlarged View

B
1a

6' x 18'
RAMP FLOAT

5' x 42'
Gangway

New Concrete
Gangway Platform #2

EXISTING BULKHEAD

8'-3"
6'

32'

2" X 380'

8' 0-1/2" X 96'

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**BALBOA BAY
CLUB**

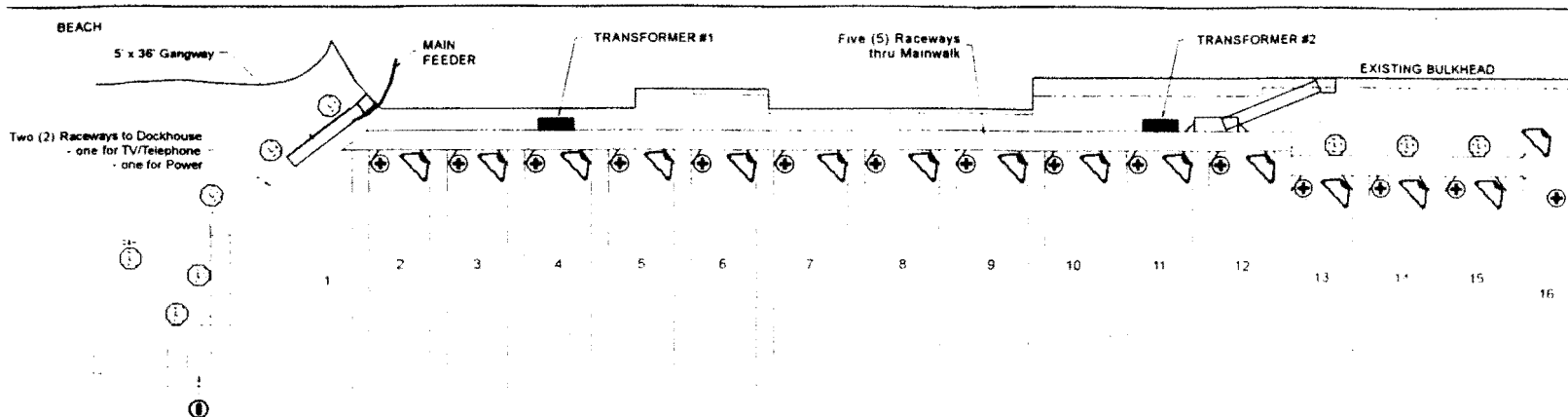
Enlarged Views

Revisions

Drawn by: D. DeCaro
Scale: NONE
Date: 4-16-02
Sheet: 1a Or

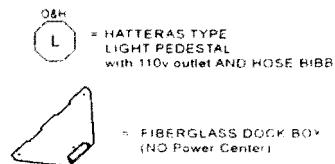
U

E



Locate Handholes as Needed to Facilitate Transformer & Slip Feeds

ELECTRICAL LAYOUT



- Ⓜ = POWER PEDESTAL @ Harbormaster Bldg with 2 ea. 50a Power Centers (240v)
* Light Meter TV & Telephone for each
- ⊕ = POWER PEDESTAL (TYPICAL) with 100a + 50a + 50a Power Centers (Light Meter TV & Telephone for each)
** All Receptacles are 240v

* 1/4" HOSE BIBBS @ ALL POWER PEDESTALS

Secondary Feeder Schedule

Primary Feeder Schedule

Power Feeder #1 (Transformer #1)
300 Amp, 3 Phase 480 Volt
4- 1/0 Copper Conductors, 1- #2 Ground
in 2-1/2" PVC Conduit

Power Feeder #2 (Transformer #2)
300 Amp, 3 Phase 480 Volt
5- 2/0 Copper Conductors, 1- #2 Ground

Transformer #1

Circuit #1 Slips 1-4
400 Amp, 3 Phase 208 Volt
8- 3/0 Copper Conductors, 1- #2 Ground
in 2-1/2" PVC Conduit

Circuit #2 Slips 5-8
400 Amp, 3 Phase 208 Volt
2 each- 2" PVC Conduits each containing
4- 3/0 Copper Conductors, 1- #2 Ground

Transformer #2

Circuit #1 Slips 9-12
400 Amp, 3 Phase 208 Volt
2 each- 2" PVC Conduits each containing
4- 3/0 Copper Conductors, 1- #2 Ground

Circuit #2 Slips 13-16
400 Amp, 3 Phase 208 Volt
2 each- 2" PVC Conduits each containing
4- 3/0 Copper Conductors, 1- #2 Ground

Landside Requirements

- 2- 300 Amp, 3 Phase 480 Volt Circuits
- 1- 100 pair Telephone Feed
- 1- TV Feed
- 1- 100 Amp Single Phase feed for Dockhouse

Power Feeder #3 to Dockhouse

200 Amp, Single Phase 240 Volt
3- 3/0 Copper Conductors, 1- #2 Ground

- ALL CONDUCTORS TO BE COPPER -
(Handholes as Needed to Facilitate)
Transformer & Slip Feeds

Transformers

- 2- 225 KVA, 3 Phase each with
 - 2- 400Amp 3 pole Breakers and one 1 pole 20Amp.
- Each Transformer will need a 300Amp main breaker on the primary side

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BALBOA BAY CLUB DOCK 'A'

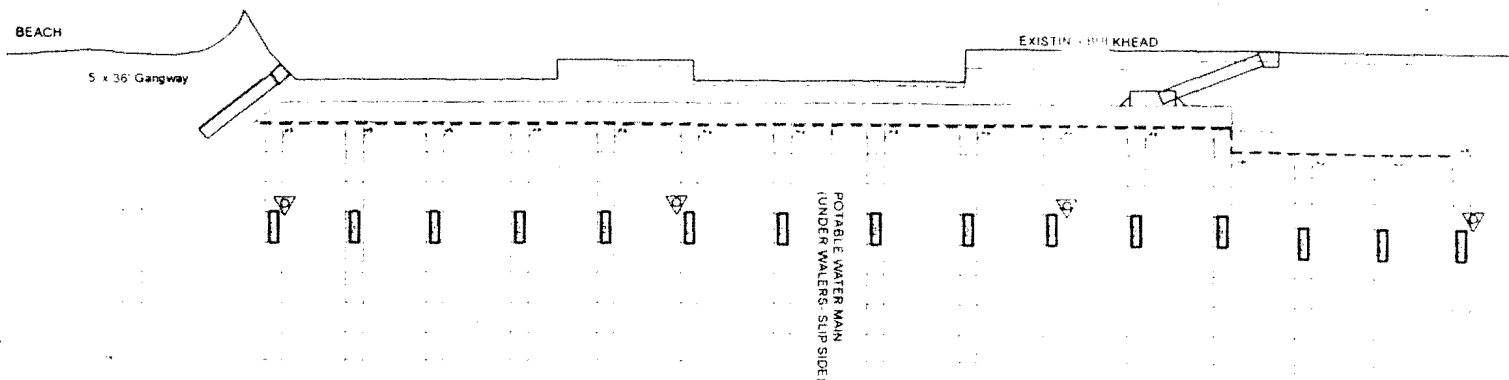
Electrical Service
Layout

Electrical Feeder
Schedules

Revisions

Drawn by D. DeCaro
Scale NONE
Date 4-16-02
Sheet 2 of
Filename

BASE
Proposal



FHC

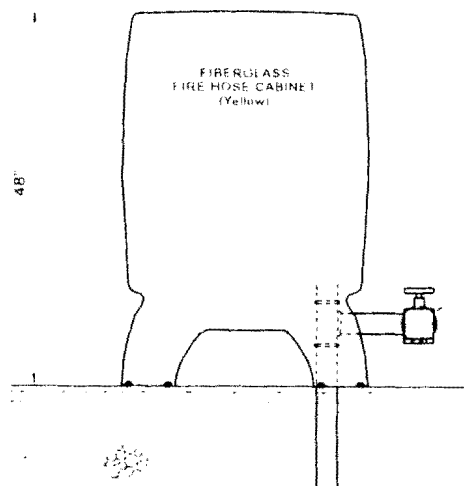
FIRE HOSE CABINET
(FRP YELLOW)
with 125' Hose & Extinguisher

HB = Hose Bibb Location

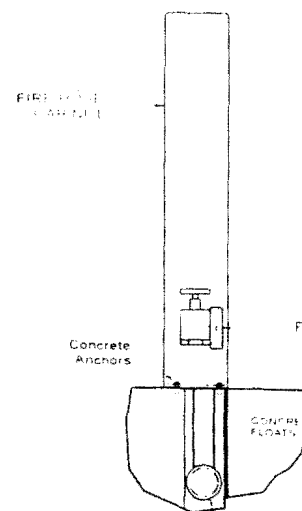
3/4" HOSE BIBBS TO BE LOCATED
AT ALL POWER PEDESTALS



NEW 2-1/2" FIRE DEPT. CONNECTION
(ANGLE BRASS VALVE - per AISC STANDARD)



Front Elevation



Side Elevation

FIRE HOSE CABINET
and FDC CONNECTION
(Backside of Mainwalk)

Fire Line with
Reducing Tee

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**BALBOA BAY CLUB
DOCK 'A'**

Mechanical
(Fire/Water System)
Layout

Fire Hose Cabinet
Detail

Revisions

Drawn by D. DeCaro

Scale NONE

Date 4-16-02

Sheet 3 Of

Filename

**BASE
Proposal**

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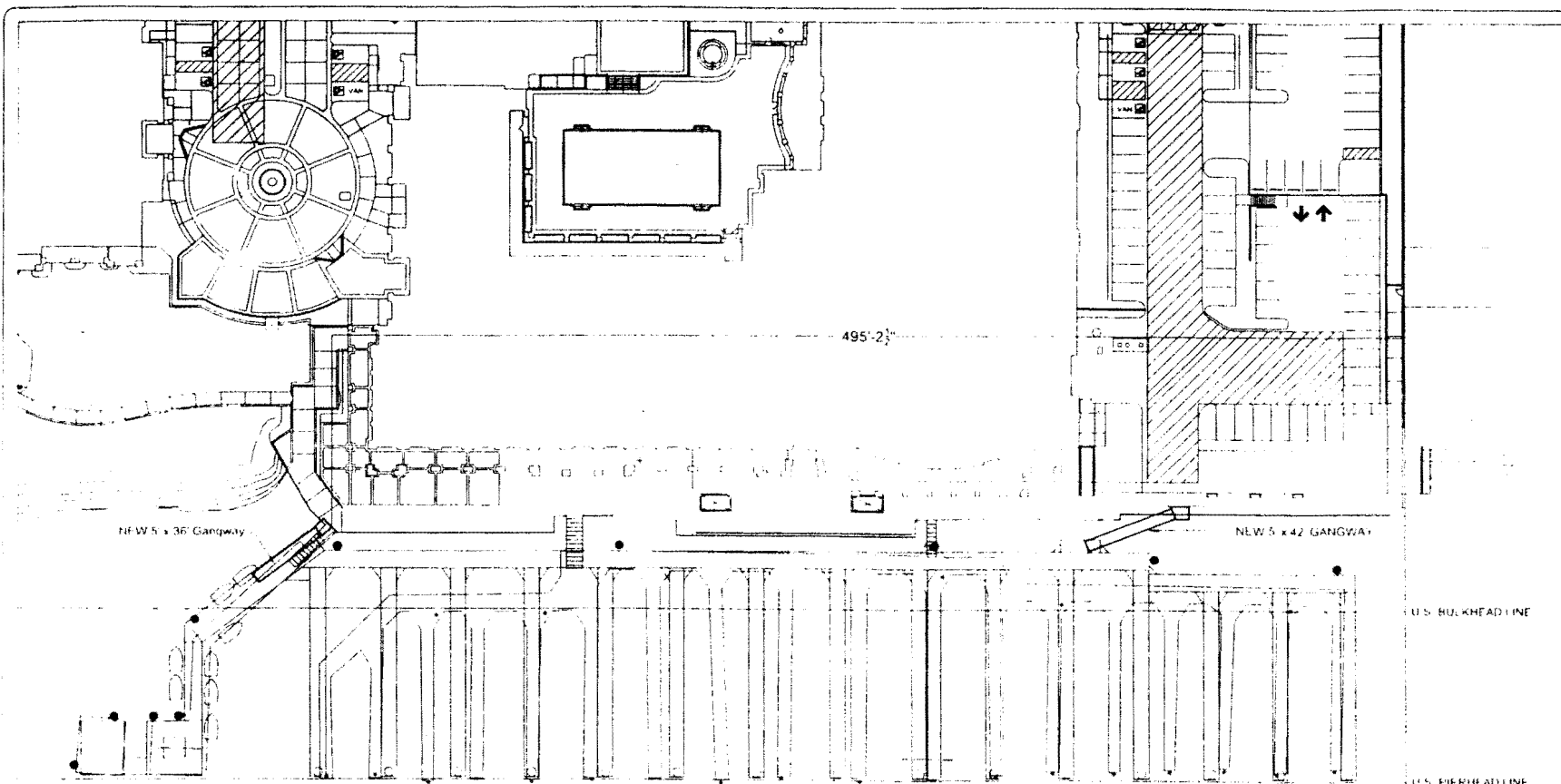
**BALBOA BAY CLUB
DOCK 'A'**

**OVERLAY with
NEW GANGWAY
LOCATION**

Revisions

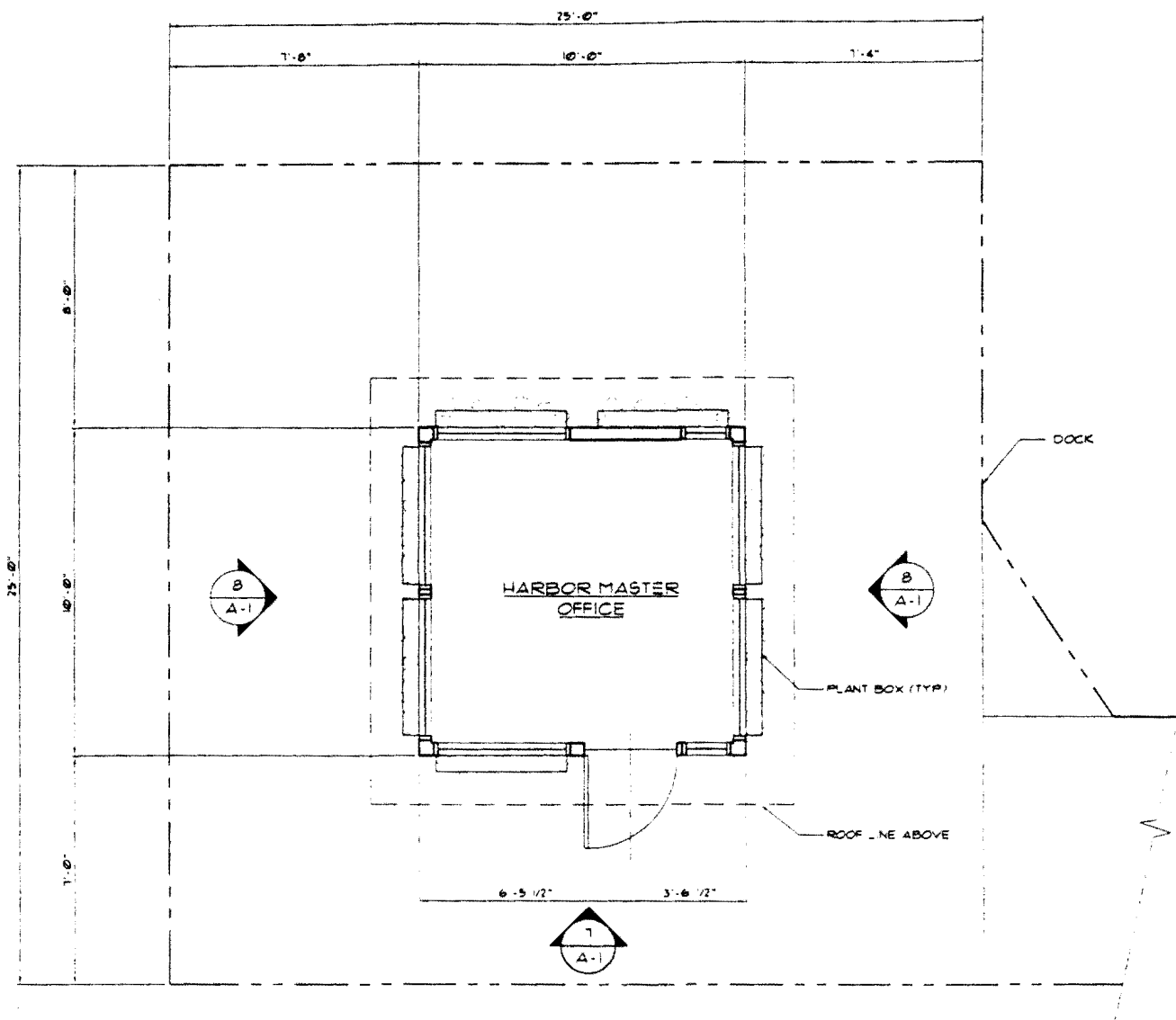
Drawn by: D. DeCario
Scale: 1"=60' 0"
Date: 4-16-02
Sheet: 01 of 01

Filename:



Overlay Layout- with Proposed New Gangway Configuration

Path C Projects / Minn / 5836



FLOOR PLAN

SCALE 3/8" = 1'-0"

A	8/01/02	ISSUED FOR COASTAL REVIEW	RLR
NO	DATE	DESCRIPTION	BY
REVISIONS			

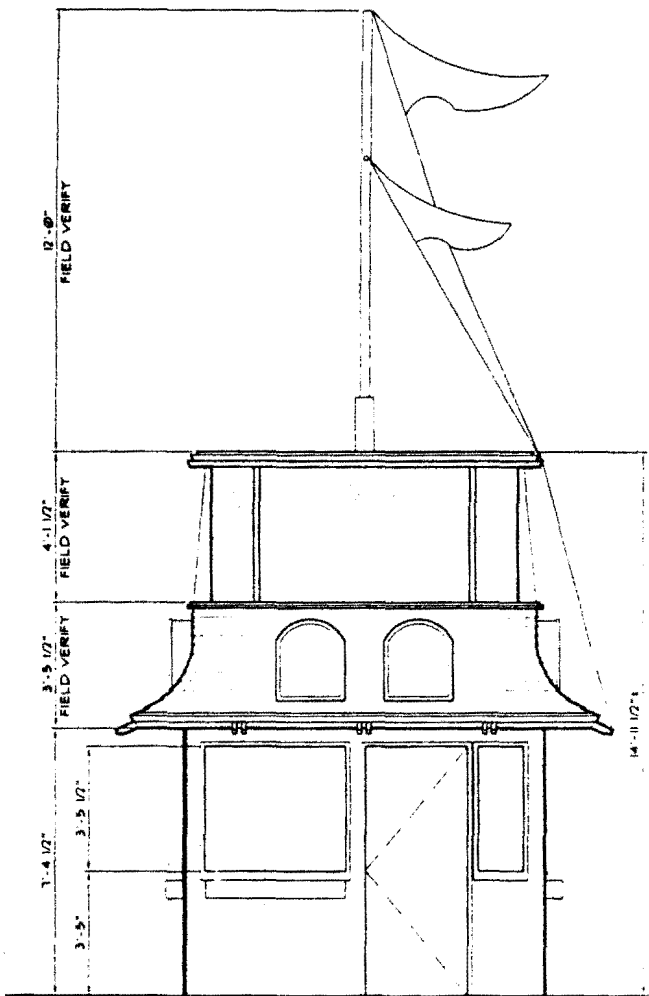
COASTAL COMMISSION

5-02-135

EXHIBIT #

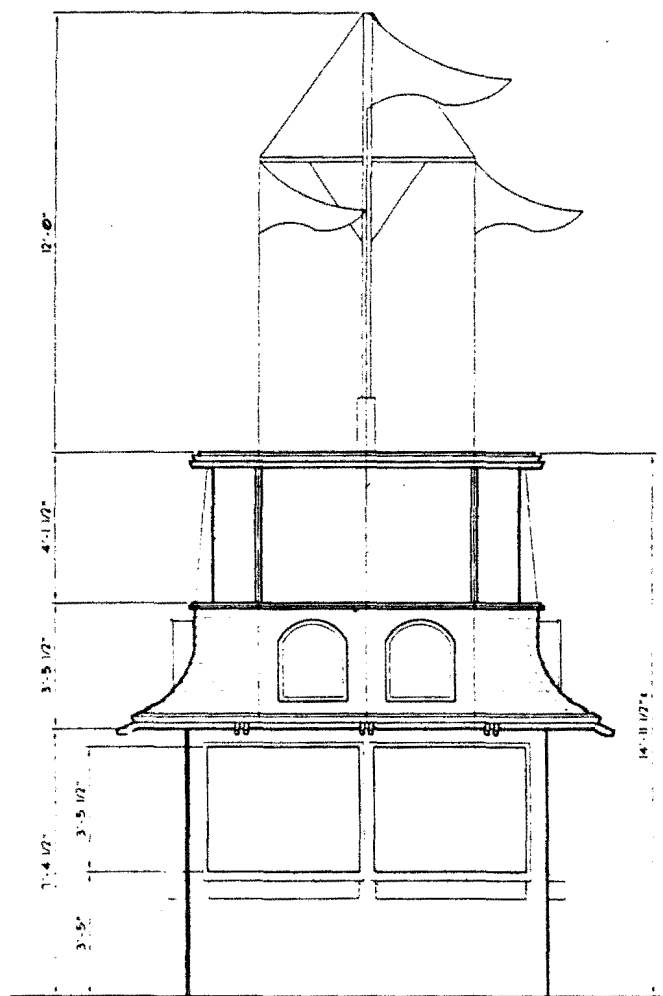
PAGE 1 OF 2





EAST ELEVATION

SCALE: 3/8" = 1'-0"



NORTH & SOUTH ELEVATION

SCALE: 3/8" = 1'-0"



CASH & ASSOCIATES
ENGINEERING AND ARCHITECTURE

(714) 895-2072

ENGINEER	RHM
DESIGNER	
DWG OPERATOR	RLR
CHECKER	RHM
PROJECT MANAGER	RHM

HARBOR MASTER OFFICE
BALBOA BAY CLUB, NEWPORT BEACH
BY BELLINGHAM MARINE, INC.

**FLOOR PLAN
ELEVATIONS &**

SCALE	3/8" = 1'-0"
PROJECT NUMBER	5838 00
DRAWING NUMBER	A-1



California Regional Water Quality Control Board

Santa Ana Region



Winston H. Hickox
Secretary for
Environmental
Protection

Internet Address: <http://www.swrcb.ca.gov/rwqcb8>
3737 Main Street, Suite 500, Riverside, California 92501-3348
Phone (909) 782-4130 - FAX (909) 781-6288

Gray Davis
Governor

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption.
For a list of simple ways you can reduce demand and cut your energy costs, see our website at www.swrcb.ca.gov/rwqcb8.*

July 30, 2002

Dave Wooten
Balboa Bay Club
1221 W. Coast Highway
Newport Beach, CA 92663

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South Coast Region

JUL 31 2002

CALIFORNIA
COASTAL COMMISSION

**REQUEST FOR CLEAN WATER ACT SECTION 401 WATER QUALITY STANDARDS
CERTIFICATION; WAIVER OF WASTE DISCHARGE REQUIREMENTS, BALBOA BAY
CLUB, 1221 WEST PACIFIC COAST HIGHWAY, NEWPORT BEACH, ORANGE COUNTY (NO
ACOE REFERENCE NUMBER) 302002-17-DGW**

Dear Mr. Wooten:

On May 6, 2002 we received a request for Clean Water Act Section 401 water quality standards certification dated April 22, 2001, for the above referenced project. Included with the application was documentation that applications for both an U.S. Army Corps of Engineers permit and a Coastal Development Permit had been filed. In addition, the City of Newport Beach Harbor Resources Division declared that the project had been determined to be categorically exempt in accordance with Section 15302 of the California Environmental Quality Act.

We have been informed by the United States Army Corps of Engineers' (ACOE) representative Corice Farrar, that a Clean Water Act Section 404 permit will not be required for this project. Consequently, you will not need coverage under Clean Water Act Section 401. However, this activity is still subject to State regulation pursuant to California Water Code Section 13260.

1. Project Description: This project consists of the removal and replacement of a wooden floating dock system with a concrete system in a slightly modified configuration. Impacts to the waters of the State will include the removal of 33 steel pilings and the installation of 25 new epoxy coated piles.
2. Receiving Waters: Newport Beach Harbor, California
3. Fill/excavation area: 648 square feet (estimated area of the piles that will be removed and installed)

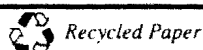
COASTAL COMMISSION

5-02-135

EXHIBIT # E

PAGE 1 OF 3

California Environmental Protection Agency



July 30, 2002

4. Dredge volume: Minor – the placing of 25 new pilings and the removal of 33 pilings.
5. Federal permit: U. S. Army Corps of Engineers (USACOE) Section 10, Letter of Permission (Rivers and Harbors Act)
6. Fill/excavation and dredge mitigation: None
7. Water quality impacts: Applicant will comply with Coastal Commission requirements for storage of construction materials and debris disposal.

There is no wetland vegetation in the project area. There will be no direct or indirect loss of eelgrass as a result of this project, the new dock construction. Eelgrass that had been present at the site was destroyed during the demolition of the existing bulkhead at the site during earlier renovation projects. The loss of the eelgrass is being mitigated following guidelines specified in the *Southern California Eelgrass Mitigation Policy* and under the coordination of the Army Corps of Engineers and the National Marine Fisheries Service. The proposed project is not expected to impact state or federally listed endangered species or their habitat.

A waiver of waste discharge requirements for the proposed project is contingent upon compliance with the following conditions. Board staff believes that the proposed project will comply with State water quality standards outlined in the Water Quality Control Plan Santa Ana Basin 1995 (Basin Plan), provided that these conditions are satisfied.

1. The excavation of material shall not cause the turbidity 100 feet from the dredging site to be increased by more than twenty percent (20%);
2. All debris and trash shall be collected in suitable trash containers and must be disposed of appropriately at the end of each construction day;
3. There shall be no discharge of wastes, including construction-related refuse, to waters of the State.

Documentation submitted with the certification application demonstrates that a survey for the presence of *Caulerpa taxifolia*, an invasive algae, has been conducted.

Santa Ana Regional Water Quality Control Board (SARWQCB) Resolution No. 96-9 provides that waste discharge requirements for minor dredging projects, which we consider this project to be, and certain types of other discharges may be waived provided that criteria and conditions specified in the Resolution are met. Provided that the conditions listed above are met, waste discharge requirements are waived for this project.

Although we anticipate no further regulatory involvement, if the above conditions are changed, any of the criteria or conditions as previously described are not met, or new information becomes available that indicates that water quality standards are not being complied with, we may formulate waste discharge requirements for the project. Please notify our office (5) days before construction begins on this project.



E₂

Dave Wooten
Balboa Bay Club

July 30, 2002

If you have any questions, please call David G. Woelfel at (909) 782-7960, or Mark Adelson at (909) 732-3234.

Sincerely,



GERABD J. THIBEAULT
Executive Officer

cc: U.S. Environmental Protection Agency, Director of Water Division (WTR-1) – Alexis Strauss
U.S. Army Corps of Engineers, Los Angeles District – Corice Farrar
California Coastal Commission, Long Beach Branch – Karl Schwing
Shellmaker Inc. – Lisa Miller



E-3

SOUTHERN CALIFORNIA EELGRASS MITIGATION POLICY

(Adopted July 31, 1991)

Eelgrass (Zostera marina) vegetated areas function as important habitat for a variety of fish and other wildlife. In order to standardize and maintain a consistent policy regarding mitigating adverse impacts to eelgrass resources, the following policy has been developed by the Federal and State resource agencies (National Marine Fisheries Service, U.S. Fish and Wildlife Service, and the California Department of Fish and Game). This policy should be cited as the Southern California Eelgrass Mitigation Policy (revision 8).

For clarity, the following definitions apply. "Project" refers to work performed on-site to accomplish the applicant's purpose. "Mitigation" refers to work performed to compensate for any adverse impacts caused by the "project". "Resource agencies" refers to National Marine Fisheries Service, U.S. Fish and Wildlife Service, and the California Department of Fish and Game.

1. Mitigation Need. Eelgrass transplants shall be considered only after the normal provisions and policies regarding avoidance and minimization, as addressed in the Section 404 Mitigation Memorandum of Agreement between the Corps of Engineers and Environmental Protection Agency, have been pursued to the fullest extent possible prior to the development of any mitigation program.

2. Mitigation Map. The project applicant shall map thoroughly the area, distribution, density and relationship to depth contours of any eelgrass beds likely to be impacted by project construction. This includes areas immediately adjacent to the project site which have the potential to be indirectly or inadvertently impacted as well as areas having the proper depth and substrate requirements for eelgrass but which currently lack vegetation.

Protocol for mapping shall consist of the following format:

1) Coordinates

Horizontal datum - Universal Transverse Mercator (UTM), NAD 83, Zone 11

Vertical datum - Mean Lower Low Water (MLLW), depth in feet.

2) Units

Transects and grids in meters.

Area measurements in square meters/hectares.

All mapping efforts must be completed during the active growth phase for the vegetation (typically March through October) and shall be valid for a period of 120 days with the exception of surveys completed in August - October.

A survey completed in August - October shall be valid until the resumption of active growth (i.e., March 1). After project construction, a post-project survey shall be completed within 30 days. The actual area of impact shall be determined from this survey.

3. Mitigation Site. The location of eelgrass transplant mitigation shall be in areas similar to those where the initial impact occurs. Factors such as, distance from project, depth, sediment type, distance from ocean connection, water quality, and currents are among those that should be considered in evaluating potential sites.

4. Mitigation Size. In the case of transplant mitigation activities that occur concurrent to the project that results in damage to the existing eelgrass resource, a ratio of 1.2 to 1 shall apply. That is, for each square meter adversely impacted, 1.2 square meters of new suitable habitat, vegetated with eelgrass, must be created. The rationale for this ratio is based on, 1) the time (i.e., generally three years) necessary for a mitigation site to reach full fishery utilization and 2) the need to offset any productivity losses during this recovery period within five years. An exception to the 1.2 to 1 requirement shall be allowed when the impact is temporary and the total area of impact is less than 100 square meters. Mitigation on a one-for-one basis shall be acceptable for projects that meet these requirements (see section 11 for projects impacting less than 10 square meters).

Transplant mitigation completed three years in advance of the impact (i.e., mitigation banks) will not incur the additional 20% requirement and, therefore, can be constructed on a one-for-one basis. However, all other annual monitoring requirements (see sections 8-9) remain the same irrespective of when the transplant is completed.

Project applicants should consider increasing the size of the required mitigation area by 20-30% to provide greater assurance that the success criteria, as specified in Section 9, will be met. In addition, alternative contingent mitigation must be specified, and included in any required permits, to address situation where performance standards (see section 9) are not met.

5. Mitigation Technique. Techniques for the construction and planting of the eelgrass mitigation site shall be consistent with the best available technology at the time of the project. Donor material shall be taken from the area of direct impact whenever possible, but also should include a minimum of two additional distinct sites to better ensure genetic diversity of the donor plants. No more than 10% of an existing bed shall be harvested for transplanting purposes. Plants harvested shall be taken in a manner to thin an existing bed without leaving any noticeable bare areas. Written permission to harvest donor plants must be obtained from the California Department of Fish and Game.

Plantings should consist of bare-root bundles consisting of 8-12 individual turions. Specific spacing of transplant units shall be at the discretion of the project applicant. However, it is understood that whatever techniques are employed, they must comply with the stated requirements and criteria.

6. Mitigation Timing. For off-site mitigation, transplanting should be started prior to or concurrent with the initiation of in-water construction resulting in the impact to the eelgrass bed. Any off-site mitigation project which fails to initiate transplanting work within 135 days following the initiation of the in-water construction resulting in impact to the eelgrass bed will be subject to additional mitigation requirements as specified in section 7. For on-site mitigation, transplanting should be postponed when construction work is likely to impact the mitigation. However, transplanting of on-site mitigation should be started no later than 135 days after initiation of in-water construction activities. A construction schedule which includes specific starting and ending dates for all work including mitigation activities shall be provided to the resource agencies for approval at least 30 days prior to initiating in-water construction.

7. Mitigation Delay. If, according to the construction schedule or because of any delays, mitigation cannot be started within 135 days of initiating in-water construction, the eelgrass replacement mitigation obligation shall increase at a rate of seven percent for each month of delay. This increase is necessary to ensure that all productivity losses incurred during this period are sufficiently offset within five years.

8. Mitigation Monitoring. Monitoring the success of eelgrass mitigation shall be required for a period of five years for most projects. Monitoring activities shall determine the area of eelgrass and density of plants at the transplant site and shall be conducted at 3, 6, 12, 24, 36, 48, and 60 months after completion of the transplant. All monitoring work must be conducted during the active vegetative growth period and shall avoid the winter months of November through February. Sufficient flexibility in the scheduling of the 3 and 6 month surveys shall be allowed in order to ensure the work is completed during this active growth period. Additional monitoring beyond the 60 month period may be required in those instances where stability of the proposed transplant site is questionable or where other factors may influence the long-term success of transplant.

The monitoring of an adjacent or other acceptable control area (subject to the approval of the resource agencies) to account for any natural changes or fluctuations in bed width or density must be included as an element of the overall program.

A monitoring schedule that indicates when each of the required monitoring events will be completed shall be provided to the resource agencies prior to or concurrent with the initiation of the mitigation.

Monitoring reports shall be provided to the resource agencies within 30 days after the completion of each required monitoring period.

9. Mitigation Success. Criteria for determination of transplant success shall be based upon a comparison of vegetation coverage (area) and density (turions per square meter) between the project and mitigation sites. Extent of vegetated cover is defined as that area where eelgrass is present and where gaps in coverage are less than one meter between individual turion clusters. Density of shoots is defined by the number of turions per area present in representative samples

within the control or transplant bed. Specific criteria are as follows:

- a. a minimum of 70 percent area of eelgrass bed and 30 percent density after the first year.
- b. a minimum of 85 percent area of eelgrass bed and 70 percent density after the second year.
- c. a sustained 100 percent area of eelgrass bed and at least 85 percent density for the third, fourth and fifth years.

Should the required eelgrass transplant fail to meet the established criteria, then a Supplementary Transplant Area (STA) shall be constructed, if necessary, and planted. The size of this STA shall be determined by the following formula:

$$STA = MTA \times (|A_t + D_t| - |A_c + D_c|)$$

MTA = mitigation transplant area.

A_t = transplant deficiency or excess in area of coverage criterion (%).

D_t = transplant deficiency in density criterion (%).

A_c = natural decline in area of control (%).

D_c = natural decline in density of control (%).

Four conditions apply:

- 1) For years 2-5, an excess of only up to 30% in area of coverage over the stated criterion with a density of at least 60% as compared to the project area may be used to offset any deficiencies in the density criterion.
- 2) Only excesses in area criterion equal to or less than the deficiencies in density shall be entered into the STA formula.
- 3) Densities which exceed any of the stated criteria shall not be used to offset any deficiencies in area of coverage.
- 4) Any required STA must be initiated within 120 days following the monitoring event that identifies a deficiency in meeting the success criteria. Any delays beyond 120 days in the implementation of the STA shall be subject to the penalties as described in Section 7.

10. Mitigation Bank. Any mitigation transplant success that, after five years, exceeds the mitigation requirements, as defined in section 9, may be considered as credit in a "mitigation bank". Establishment of any "mitigation bank" and use of any credits accrued from such a bank must be with the approval of the resource agencies and be consistent with the provisions stated in this policy. Monitoring of any approved mitigation bank shall be conducted on an annual basis until all credits are exhausted.

11. Exclusions.

1) Placement of a single pipeline, cable, or other similar utility line across an existing eelgrass bed with an impact corridor of no more than $\frac{1}{2}$ meter wide may be excluded from the provisions of this policy with concurrence of the resource agencies. After project construction, a post-project survey shall be completed within 30 days and the results shall be sent to the resource agencies. The actual area of impact shall be determined from this survey. An additional survey shall be completed after 12 months to insure that the project or impacts attributable to the project have not exceeded the allowed $\frac{1}{2}$ meter corridor width. Should the post-project or 12 month survey demonstrate a loss of eelgrass greater than the $\frac{1}{2}$ meter wide corridor, then mitigation pursuant to sections 1-11 of this policy shall be required.

2) Projects impacting less than 10 square meters. For these projects, an exemption may be requested by a project applicant from the mitigation requirements as stated in this policy, provided suitable out-of-kind mitigation is proposed. A case-by-case evaluation and determination regarding the applicability of the requested exemption shall be made by the resource agencies.

(last revised 2/2/99)

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