

**CALIFORNIA COASTAL COMMISSION**

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(619) 521-8036

**RECORD PACKET COPY**

March 30, 2000

**Mon 20a**

**TO:** COMMISSIONERS AND INTERESTED PERSONS

**FROM:** CHARLES DAMM, SENIOR DEPUTY DIRECTOR  
DEBORAH LEE, SOUTH COAST DEPUTY DIRECTOR  
SHERILYN SARB, DISTRICT MANAGER, SAN DIEGO AREA OFFICE  
DIANA LILLY, COASTAL PROGRAM ANALYST, SAN DIEGO AREA OFFICE

**SUBJECT:** COASTAL COMMISSION ADVISORY REVIEW REQUESTED BY THE  
SAN DIEGO UNIFIED PORT DISTRICT ON PROPOSED LAND AND WATER USE  
CHANGES FOR CAMPBELL SHIPYARD AND THE SOUTH BAY BOAT YARD

**Staff Notes**

The Port of San Diego is requesting a preliminary advisory review by the Coastal Commission of proposed land and water use changes from "marine related industry" and "specialized berthing" to "commercial recreation" and "recreational boat berthing" for the Campbell Shipyard/Fifth Avenue Landing site and the South Bay Boat Yard site. Also proposed for review is redesignation of a recently acquired 15 acre upland site adjacent to the National City Marine Terminal from "general industrial" to "marine related industry". This informal review is being requested by the Port to allow for Coastal Commission input prior to completion of the CEQA document for the Port Master Plan amendment and pursuant to Section 13629 of the California Code of Regulations. Staff has prepared a brief summary of the studies which have been submitted to date, followed by a list of questions requiring further consideration prior to submittal of the Port Master Plan amendment.

**Procedure**

Pursuant to Section 13629 and 13218 of the Commission's Code of Regulations, the Commission will grant a request for a preliminary advisory review as time allows, provided such review will not adversely limit Commission time required for the review of other agenda items. Any such advisory review shall be conducted at a properly noticed public hearing of the Commission. The chairperson shall establish predetermined time limits for testimony by the Port and interested persons. Individual members of the Commission may ask questions and make statements but no vote shall be taken.

The staff of the San Diego Unified Port District (Port) has prepared the attached Executive Summary of the Port's request with several maps and aerial photos. Also, several studies have been completed for purposes of determining the future demand for marine related industrial land area within the San Diego Port District's jurisdictional

limits. Port staff will make a brief presentation at the hearing. Public comments and Commission questions or comments may follow the Port's presentation.

The public hearing and advisory review will occur at the following date and location:

DATE and TIME: Monday, April 10, 2000 10:00 A.M. LOCATION: The Queen Mary  
1126 Queens Highway  
Long Beach, CA

If you have any questions or need additional information regarding this item, please contact Diana Lilly at the above office.

### Coastal Act Policies

The following sections of Chapter 8 of the Coastal Act are applicable to the potential change in land use designation from "marine-related industrial" to "commercial recreation", and change in water use designation from "specialized berthing" to "recreational boat berthing". Section 30708(c) gives the highest priority to the use of existing land space within harbors for port purposes, such as navigational facilities, shipping industries, and necessary support and access facilities. Section 30708(d) provides for the accommodation, to the extent possible, of other public trust uses such as recreation and wildlife habitat. Section 30708(d) requires all port-related development to minimize significant adverse environmental effects. All three of the above policies should be considered along with the underlying objectives of Sections 30705 and 30706 which are to minimize fill of coastal waters to only that necessary for specific port-related uses and to minimize harmful effects to coastal resources. Therefore, adequate existing land area should be reserved for port-related purposes so as to avoid the need for additional fill of coastal waters to accommodate future demand for such facilities. The Chapter 8 Coastal Act policies state:

#### Section 30705

(a) Water areas may be diked, filled, or dredged when consistent with a certified port master plan only for the following:

(1) Such construction, deepening, widening, lengthening, or maintenance of ship channel approaches, ship channels, turning basins, berthing areas, and facilities as are required for the safety and the accommodation of commerce and vessels to be served by port facilities.

(2) New or expanded facilities or waterfront land for port-related facilities.

(3) New or expanded commercial fishing facilities or recreational boating facilities.

(4) Incidental public service purposes, including, but not limited to, burying cables or pipes or inspection of piers and maintenance of existing intake and outfall lines.

(5) Mineral extraction, including sand for restoring beaches, except in biologically sensitive areas.

(6) Restoration purposes or creation of new habitat areas.

(7) Nature study, mariculture, or similar resource-dependent activities.

(8) Minor fill for improving shoreline appearance or public access to the water.

(b) The design and location of new or expanded facilities shall, to the extent practicable, take advantage of existing water depths, water circulation, siltation patterns, and means available to reduce controllable sedimentation so as to diminish the need for future dredging.

(c) Dredging shall be planned, scheduled, and carried out to minimize disruption to fish and bird breeding and migrations, marine habitats, and water circulation. Bottom sediments or sediment elutriate shall be analyzed for toxicants prior to dredging or mining, and where water quality standards are met, dredge spoils may be deposited in open coastal water sites designated to minimize potential adverse impacts on marine organisms, or in confined coastal waters designated as fill sites by the master plan where such spoil can be isolated and contained, or in fill basins on upland sites. Dredge material shall not be transported from coastal waters into estuarine or fresh water areas for disposal.

(d) For water areas to be diked, filled, or dredged, the commission shall balance and consider socioeconomic and environmental factors.

(Amended by Ch. 310, Stats. 1984.)

#### Section 30706

In addition to the other provisions of this chapter, the policies contained in this section shall govern filling seaward of the mean high tide line within the jurisdiction of ports:

(a) The water area to be filled shall be the minimum necessary to achieve the purpose of the fill.

(b) The nature, location, and extent of any fill, including the disposal of dredge spoils within an area designated for fill, shall minimize harmful effects to coastal resources, such as water quality, fish or wildlife resources, recreational resources, or sand

transport systems, and shall minimize reductions of the volume, surface area, or circulation of water.

(c) The fill is constructed in accordance with sound safety standards which will afford reasonable protection to persons and property against the hazards of unstable geologic or soil conditions or of flood or storm waters.

(d) The fill is consistent with navigational safety.

#### Section 30708

All port-related developments shall be located, designed, and constructed so as to:

(a) Minimize substantial adverse environmental impacts.

(b) Minimize potential traffic conflicts between vessels.

(c) Give highest priority to the use of existing land space within harbors for port purposes, including, but not limited to, navigational facilities, shipping industries, and necessary support and access facilities.

(d) Provide for other beneficial uses consistent with the public trust, including, but not limited to, recreation and wildlife habitat uses, to the extent feasible.

(e) Encourage rail service to port areas and multicompany use of facilities.

Chapter 3 policies of the Coastal Act would be the applicable standard of review for the change in water use designations proposed with this Port Master Plan amendment.

#### Proposed Changes to Land and Water Uses

##### South Embarcadero (Planning District 3) - Campbell/Fifth Avenue Landing Parcels

The proposed use changes would redesignate 15 ac. of land and 15 ac. of water area occupied by the former Campbell Shipyard and R.E. Staité marine construction yard located between the Tenth Avenue Marine Terminal on the south and the Convention Center expansion on the north. The land area would change from "marine related industry" which pursuant to the Port Master Plan includes ship building and repair, storage and maintenance of marine machinery and construction equipment and marine related support and transportation facilities. The water use classification is "specialized berthing" which is the water use classification that corresponds to the marine related industry classification. The water area has a typical depth of 20 to 25 feet or less.

The Port Master Plan amendment would change the use designations to "commercial recreation" and "recreation boat berthing". The purpose of the Port Master Plan

amendment would be to allow the Campbell Industries site to be developed with a hotel and related facilities and the Fifth Avenue Landing to be developed with restaurants and other retail facilities.

#### Chula Vista Bayfront (Planning District 7 - South Bay Boat Yard)

The proposed use changes would redesignate 9.45 ac. of land and 8.52 ac. of water area currently occupied by the South Bay Boat Yard and located on the Chula Vista Bayfront south of the Sweetwater Marsh from "marine related industry" and "specialized berthing" to "commercial recreation", "park/plaza" and "recreational boat berthing". The boat yard site was created in its present form by a combination of dredging of intertidal mudflats and filling of tidelands in 1968, adjacent to an earlier fill site south of G Street that was created in 1960. Recent navigational charts show a dredged water depth of the near-shore water area between F and G Streets to be -15 ft. MLLW. The Chula Vista boat navigational channel, located immediately to the west of the boatyard was dredged to -16 ft. MLLW in 1989.

#### Planning District 5 (National City Bayfront) - National City Marine Terminal

The proposed Port Master Plan amendment would also include redesignation of a recently acquired 15 acre upland area adjacent to the historic mean high tide line and the National City Marine Terminal from "general industrial" to "marine related industry". This site would serve expanding automobile, lumber, and other bulk cargo storage and handling. A boundary map amendment to include the parcel within the Port's jurisdictional boundaries will also be required.

#### Summary of Studies

The following studies which are attached to this staff report have been prepared in order to address the issues raised by potential conversion of land and water areas designated for marine industrial uses to other uses of less priority under the Coastal Act. One purpose of the advisory review is to give the Coastal Commission the opportunity to provide input as to what additional information should be provided in the environmental document or through supplemental studies to support a Commission decision on the proposed use redesignations.

The Marine Related Land Study - Campbell Industries/Fifth Avenue Landing dated 12/15/97 prepared by Gray, Cary, Ware & Freidenrich examines the current and future demand for identified port purposes and the suitability of the Campbell and Fifth Avenue Landing parcels for those purposes. The identified uses include:

1. Ship Building and Repair
2. Marine Terminal/Shipping
3. Aquaculture
4. Boat and Marine Equipment Sales and Repair

5. Commercial Fishing
6. Fishing Piers
7. Boat Launching Ramps
8. Recreational Marinas
9. Mooring Buoys
10. Navigation
11. Sportfishing and Related Retail Activities
12. Vessel Charter/Water Taxi/Ferries
13. Naval Station
14. Cruise Ships
15. Misc. Marine-related Uses
16. China Ocean Shipping Co.

Due to the site's location immediately adjacent to the Tenth Avenue Marine Terminal and its former use as a shipyard, greater emphasis has been put on analyzing the present and future demand for Ship Building and Repair and Marine Terminal/Shipping within the Port of San Diego, and the need for the Campbell site to meet the demand for these uses.

There are three large ship building and repair facilities within the Port of San Diego including National Steel & Shipbuilding Co. (NASSCO), Southwest Marine, Inc. (SWM) and Continental Maritime of San Diego, Inc. According to the study, there are numerous other smaller shipyards, such as the one located on the subject site, that are dependent on and parallel the fortunes of the larger shipyards. The study indicates the determination of need for the Campbell/Fifth Avenue Landing site for a shipyard pursuant to Section 30708(c) can be adequately addressed by examining the trends of the larger shipyards and the Navy.

San Diego is home port of the United States Navy's Pacific Fleet, and has one of the largest concentrations of U.S. Navy vessels in the country. Consequently, the U.S. Navy is the predominant influence on the ship building and repair industry in San Diego. The study indicates, there is currently little significant construction of new ships for the private sector. Of all the shipyards, only NASSCO is currently engaged in construction of new ships, and approximately 90-95% of new ship construction at NASSCO is for the Navy. Ship repair work is also dominated by work for the Navy.

The study gives several reasons why it is very difficult for San Diego shipyards to compete for either new construction or repair work for the private sector. While there is a distinct advantage in San Diego for Navy construction and repair work, the competition in the private sector is hampered by the cost of labor, insurance costs and regulation in California. Also, the availability of work has decreased with the loss of the tuna fleet. The study indicates private work on west coast shipyards continues at unhealthy levels and that even the Navy presence has not been able to adequately compensate for the lack of private work. Most of the larger shipyards are operating well below capacity and there

is an expectation that the general leveling off or downward trend in overall Navy work in San Diego will continue.

The study identifies the factors which limit the amount of Navy work available to any shipyard occupying the Campbell site to include a) the property is not large enough to build Navy ships greater than 500 ft. in length which is the size being built today; b) to compete for repair work of Navy vessels on site, longer piers would be required with extensive dredging and interference with navigation to and from the Tenth Avenue Marine Terminal (TAMT); c) most Navy contracts are "womb to tomb", so if the shipyard can't build the ship, it won't get the job to repair it. The study also cites conflicts with neighboring land uses, along with the above constraints, to conclude the Campbell/Fifth Avenue Landing site is not physically suitable for a competitive shipyard, and there is no demand now or in the reasonably foreseeable future for a shipyard at the site.

Marine terminal activities and shipping on San Diego Bay are currently located at two facilities owned by the Port District, the Tenth Avenue Marine Terminal (TAMT) in San Diego and the 24<sup>th</sup> Street Terminal in National City (NCMT). In 1995, the Port retained a consultant team to develop a strategic plan to address the nature of the Port's maritime business and identify specific opportunities for increasing traffic at the two marine terminals. The study discusses different scenarios based on historical trends and projected forecasts. In attempting to implement the strategic plan, the study indicates the Port has begun an aggressive marketing campaign to increase the Port District's revenue from the marine terminals and accommodate additional traffic in containerized cargo.

The Campbell Industries portion of the Campbell/Fifth Avenue Landing site borders the northwest boundary of the TAMT. The water element associated with the Campbell Industries parcel adjoins two of the berths serving the TAMT. Therefore, use of the Campbell site to expand the TAMT is an obvious possibility. However, the study concludes that before any additional land is needed for the TAMT, an extraordinary increase in business would be required. The TAMT is presently operating significantly under capacity. Even under the most aggressive scenario, the throughput at the Port District's two marine terminals is forecast to reach approximately 3 million tons in fiscal year 2015. The projected cargo capacity of the two terminals is calculated to exceed 5 million tons. Additionally, approximately 40 acres of the 60 acres designated as marine related industry at the TAMT are presently utilized for purposes other than marine terminal, which could be provided elsewhere. Many of the existing facilities are currently underutilized. Therefore, the study concludes there is no present or foreseeable future demand for the use of the Campbell/Fifth Avenue Landing parcels for shipping and/or a marine terminal.

Regarding sale or repair of small boats and equipment, because these uses are not water-dependent, the study concludes there is no shortage of suitable land for such use. However, boatyards which construct, sell or repair larger boats are water-dependent because such boats cannot be readily transported to a location distant from the waterfront

for repair or display. This study indicates a survey of various boatyards in San Diego County indicates that most, if not all, of the boatyards operating on San Diego Bay which specialize in the construction and repair of larger boats are operating, in many cases, at or below 50% of peak capacity. This conclusion is contrary to the findings of a more specific study done to analyze the boat repair market, the America's Cup Harbor Usage Study, which will be discussed later in this report.

Addendum to Marine Related Land Study dated 2/27/98 prepared by Gray, Cary, Ware & Freidenrich LLP was prepared to address additional issues raised in connection with the original study. Specifically, the addendum addresses the need for additional land at the 24<sup>th</sup> Street Marine Terminal to accommodate the recent and projected growth in cargo throughput which is occurring. The principal growth area is in the import of automobiles. The study clarifies that this increase in land area needed at the NCMT does not translate to a need for additional land at the TAMT. The import of automobiles at NCMT does not displace other cargo that can be handled at the TAMT, thereby creating the need for additional land at TAMT. Nor can automobile cargo be easily shifted to the TAMT because, among other limitations, it does not have the necessary rail facilities to handle this cargo.

The addendum also dismisses the possibility of creating necessary additional land through filling in portions of the bay as cost prohibitive. Related to this concern, the subject Port Master Plan amendment includes redesignation of a recently-acquired 15 acre parcel upland of the NCMT from "general industrial" to "marine related industry" to address this shortage of land area to serve expanding automobile, lumber and other bulk cargo storage and handling.

Second Addendum to Marine Related Land Study dated 2/27/98 prepared by Port of San Diego Land Use and Planning Department was completed to address the recent increases in the maritime cargo business and to re-evaluate the conclusions of the Study and first Addendum. The second addendum indicates that, as of August 1999, both of the District's marine terminals were operating at higher capacities than previously stated. However, the 96 acre terminal at TAMT is adequate in size to accommodate existing bulk cargoes and container cargoes.

The NCMT with 125 acres is currently (11/99) operating at full capacity with automobile, truck and lumber cargoes. Additional upland property is being acquired at the NCMT to meet the land-intensive automobile storage needs in National City. Marine terminal expansion planned at NCMT includes a wharf extension and acquisition of upland parcels. Filling the bay for marine related industrial use is not anticipated in the foreseeable future beyond the existing NCMT wharf extension project, nor is it an economically or environmentally viable option for marine terminal expansion. Because NCMT is landlocked by the U.S. Navy property to the north and environmentally sensitive habitat to the south, acquisition of upland property is the only viable means to meet the expansion needs for automobile cargo. The study concludes land associated

with the Campbell Industries/Fifth Avenue Landing parcels is not necessary for marine terminal/shipping uses now or for the foreseeable future.

America's Cup Harbor Usage Study dated 11/30/99 prepared by M.J. Barney Associates analyzed the boat repair market in San Diego to determine how the dynamics of this market affect the current and projected usage of the immediate land and resources around Shelter Island, and in particular, America's Cup Harbor. Two general categories of vessels were examined in the study. These included "boats" with tonnage or weight up to 400 tons, and "ships" with weight over 400 tons. The information contained in this study is relevant to the proposed Port Master Plan amendment because part of the proposal would redesignate the existing South Bay Boat Yard (SBBY) from "marine related industrial" to "commercial recreation" thereby allowing for the eventual closure of this facility which currently is the only boat yard which serves south San Diego Bay.

The study contains numerous statistics addressing existing boat and boatyard usage and capacity, marina usage and capacity, business outlooks, and existing supply and projected demand for boat yard repair facilities in San Diego Bay. There are seven boat yard repair facilities in North and South San Diego Bay. Of these facilities, South Bay Boat Yard and Knight & Carver are considered to be primarily industrial facilities. The Shelter Island boat yards cater primarily to pleasure craft. A reported 4,250 to 4,550 boats are repaired by these boat yards annually.

The following general conclusions resulted from the study: a) Boat yards are now at or near capacity in San Diego. Future growth of 4% to 6% is projected through 2003; growth should remain steady or continue to slightly increase during the following two years to 2005; b) San Diego is now losing profitable boat and ship repair business serving the larger yacht and superyacht market which is expected to continue increasing. This is due to lack of high tonnage lifting capacity over 300 tons, and particularly, the lack of a Syncrolift capable of lifting more than 150 tons; c) San Diego boat yards will continue to fulfill demand in the foreseeable future over the next 10 to 20 years provided upgrades and improvements are made as dictated by market dynamics; d) San Diego is at or near practical capacity for marina slips; e) Boat yards need to be allowed to perform upgrades on current facilities with an easy approval process; f) America's Cup Harbor became a vital asset to the community as a commercial, or working harbor. As such, it has been the lifeline for many boat yards, marine services, sport fishing, commercial fishing and commercial recreation. Its main functions and attributes should not be drastically altered.

Addendum to America's Cup Harbor Usage Study dated 2/11/00 prepared by M.J. Barney Associates was prepared to expand comparison information to include two additional boat yards in Oceanside and Mission Bay. This study contains detailed information comparing boat yard operation statistics for all of the boat yards in San Diego County. Additional conclusions reached in this report include that boat yards will likely reach capacity between 2003 and 2006 provided the world's economic system remains relatively stable. Growth will primarily be generated by the number of new

builds entering the market, the refurbishing, extensions and improvements for resold boats, and the maintenance of charter and for sale boats.

South Bay Boat Yard: Preliminary Marine Related Land and Water Study dated 2/14/00 prepared by the Port of San Diego contains a preliminary analysis of the potential use of the South Bay Boat Yard site for eight uses including:

1. Boat yard uses
2. Shipbuilding, repair and maintenance
3. Marine terminal
4. Aquaculture
5. Commercial and sport fishing
6. Fishing piers
7. Boat launching ramps
8. Passenger ferries and water taxis

The analysis is preliminary with minimal supporting documentation and no conclusions are presented at this time. It is anticipated the environmental impacts associated with retention and/or upgrade of the existing boat yard use and the alternative commercial recreational uses will be thoroughly analyzed in the environmental document currently being prepared for the Port Master Plan amendment.

#### Questions for Further Consideration and Analysis

The purpose of this advisory review is to generate questions and identify additional information which must be addressed during the environmental review stage to support the future Port Master Plan amendment. This report and review is limited to the question of whether or not the land and water use designations for the subject properties should be changed from "marine related industrial" to "commercial recreation" and specialized berthing" to recreational boat berthing". Other issues associated with future potential redevelopment of either the Campbell/Fifth Avenue Landing parcels or the South Bay Boat Yard, should the use designations be changed, are separate and distinct from the land use question and are not addressed in this review. The following is to identify questions and issues raised by the information the Port has submitted to accompany this request for advisory review.

1. Given the fact that the existing boat repair market is now at or near capacity, what options are there to provide additional boat sales and repair yards within the Port of San Diego? This question should be addressed for the full range of boat and ship sizes requiring repair yards in close proximity to the water.
2. If closure of any existing boat yard is permitted through the change in land/water use designations in the Port Master Plan amendment, should the amendment also include designation of alternative sites for marine-related industrial use to compensate for the loss?

3. What are the environmental impacts associated with both the retention and/or upgrading or expansion of the existing boat yards on the Campbell/Fifth Avenue Landing and South Bay Boat Yard sites, compared to establishing new boat yards within San Diego Bay? This question should be addressed for the full range of boat and ship sizes requiring repair yards in close proximity to the water.
4. What are the potential impacts to water quality associated with both on-land and in-water boat repair activity?
5. Where are the known areas of in-water repair activity, and what effect would providing additional on-land facilities have on reducing in-water repair work? Is there any correlation between lack of haul out facilities and in-water repair work?
6. What are the potential conflicts with activities at the Tenth Avenue Marine Terminal associated with conversion of the Campbell site to non-port purposes?
7. Given the fact that an additional marina is contemplated in the South Bay and a marina exists at Chula Vista, where will boat repair facilities for larger boats be provided to serve the South Bay?
8. Given the Port's land use analysis is based on market projections and assumptions, is the data and information continually updated to address potential changes in commercial fishing opportunities, upgrades to rail improvements or linkages, or potential increases in Navy or other ship building and repair work?
9. What is the effect, if any, of removal of the deepwater berthing area adjacent to the Campbell shipyard site on navigation to and berthing at the Tenth Avenue Marine Terminal?
10. Will the boundary map amendment and redesignation of the parcel in National City upland of the 24<sup>th</sup> Street Marine Terminal be completed concurrent with the redesignations of the Campbell/Fifth Avenue Landing parcels and the South Bay Boat Yard site? If not, why not?

**RECEIVED**

FEB 15 2000



# Port of San Diego

and Lindbergh Field Air Terminal

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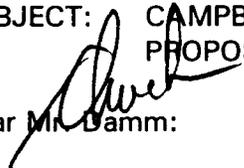
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CALIFORNIA  
COASTAL COMMISSION  
SAN DIEGO COAST DISTRICT

February 15, 2000

# Mon 20a

Mr. Charles Damm  
Senior Deputy Director, San Diego District  
California Coastal Commission  
3111 Camino del Rio North, Suite 200  
San Diego, CA 92108-1725

SUBJECT:  CAMPBELL SHIPYARD/SOUTH BAY BOAT YARD  
PROPOSED LAND-USE CHANGES

Dear Mr. Damm:

The following information is provided, as requested by Coastal Commission staff, in order to make an informational presentation to the Coastal Commission regarding the Port's proposed land use re-designations at Campbell Shipyard and South Bay Boat Yard of the following land and water areas: from "Marine Related Industry" to "Commercial Recreation" in the cities of San Diego and Chula Vista; from "General Industrial" to "Marine Related Industry" in National City. Attached for your review are 35 copies of the following:

1. Executive Summary of Port's Request;
2. Port Master Plan Jurisdiction Map;
3. Port Master Plan Land & Water Use Element Map;
4. Port Master Plan Mylars, Planning Districts 3 & 7;
5. Tenth Avenue Marine Terminal Maritime Plan, Aerials to 2020;
6. National City Aerial, National City Distribution Center Site;
7. Chula Vista Aerial with South Bay Boat Yard and National Wildlife Refuges;
8. Campbell Shipyard/5<sup>th</sup> Avenue Landing Aerial;
9. Letters (3) from Audubon, EHC, and SWIA (November, 1999);
10. District Open Space and Developed Parks Booklet (3 copies);
11. South Bay Boat Yard Marine Related Land Study, Feb 14, 2000 (3 copies).

Sincerely,

A handwritten signature in black ink, appearing to read "Dan E. Wilkens".

Dan E. Wilkens  
Senior Director  
Strategic Planning Services

Attachments

DEW:WBC:jla

cc: Bill Chopyk

## Exhibit A

## Port's Submittal

**SUMMARY**

**INFORMATIONAL PRESENTATION: SAN DIEGO UNIFIED PORT DISTRICT DRAFT PORT MASTER PLAN AMENDMENT NO. 28 (Preliminary Land and Water Use Changes Only)**

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**1. PROCEDURAL NOTE**

The San Diego Unified Port District ("SDUPD" or "Port") has requested to make an informational presentation to the California Coastal Commission ("CCC") and to receive such preliminary guidance from the CCC as it may deem appropriate, regarding the Port's proposed re-designation of the following land and water areas, principally from "Marine Related Industry" to "Commercial Recreation" in the cities of San Diego and Chula Vista, and from "General Industrial" to "Marine Related Industry" in National City. (Exhibit 1, Letter from Dan E. Wilkens, February 15, 2000)

Such preliminary review and guidance, prior to formal submittal of a Port Master Plan ("PMP") or PMP Amendment ("PMPA"), is authorized by the Coastal Commission's regulations to further consultative coastal zone management, especially for Port matters of greater than local significance, such as in SDUPD's request (14 CCR §13629).

The Port is scheduled to make its presentation at the April, 2000 Coastal Commission meeting in Long Beach. Public notice of this matter has been provided, consistent with the CCC's regulations. Although Commissioners and staff may provide direction to the Port following the presentation, no formal Commission action is scheduled at this meeting. The Port anticipates returning to the Coastal Commission with a formal PMPA late in 2000 or early in 2001, following completion of the local PMPA and environmental review processes.

**2. SDUPD BACKGROUND**

SDUPD was formed in 1962 as a "landlord," rather than "operating," port authority to govern the use of State-granted tidelands at San Diego Bay within the cities of Coronado, Chula Vista, National City, Imperial Beach, and San Diego. The Commission effectively certified the PMP in January, 1981. In 1999, the State legislature conveyed an additional 410 acres of tide- and submerged lands, including a municipal pier, along Imperial Beach's Pacific Ocean shoreline, to the Port. (Exhibit 2, SDUPD jurisdictional map.)

The certified PMP, as amended, provides the 20-year conservation and development plan, as well as the coastal development regulatory framework, for the Port's ten planning districts. Although the Coastal Act contains an important separate set of policies in Chapter 8 for coastal resource governance of most areas within the four southern California coastal ports, designation of San Diego Bay as "wetland" or "estuary," when combined with the Port's focus during the past

20 years on commercial recreational redevelopment, has resulted in many developments within its jurisdiction being reviewed pursuant to the more stringent standards of Coastal Act Chapter 3.

SDUPD is unique among California's coastal ports in that it encompasses some 14 miles of urban commercial and recreational waterfront, much of it in the process of redevelopment; the San Diego International Airport; a nearly continuous public access system of promenades and bikeways along its Bayfront; and 27% (1450 acres) of its area in "Conservation" water and land use designations, including the San Diego Bay National Wildlife Refuge. The Port, with the approval of the State Lands Commission, acquired over 800 acres of formerly privately owned salt ponds along South San Diego Bay and conveyed them to the US Fish and Wildlife Service for inclusion in the refuge. The Port also includes three large commercial shipyards, seven Bayside boatyards, a cruiseship terminal and two maritime cargo terminals. A recently adopted business plan for the latter three marine terminals proposes significant incremental modernization to meet evolving market demands, while avoiding or minimizing new filling of San Diego Bay. (Exhibit 3, certified SDUPD principal land and water use designations .)

### 3. Land and Water Use Re-designations - Overview

The Port proposes a comprehensive and interrelated update of three Port planning districts to (i) designate additional commercial recreational and public recreational areas; (ii) stabilize and expand, respectively, the boundaries of the Tenth Avenue (San Diego) and National City Marine Terminals; and (iii) remove two presently certified marine related industrial area designations that are considered to be operationally unnecessary or environmentally inappropriate. By Port planning district, the proposed land and water uses changes involve the following areas and PMP use classifications:

- In Planning District 3 (Centre City-Embarcadero, San Diego), re-designate 15 acres of land and 15 acres of water area from "Marine Related Industry" to "Commercial Recreation," "Public Park/Plaza," and "Public Facility/Water Transit Center." (Exhibit 4, South Embarcadero: Existing and Proposed Land/Water Use Map and Mylar Overlay.)

The purpose of this amendment would be to redevelop the former Campbell Shipyard and R. E. Stait marine construction yard, which are considered environmentally adverse, with new uses that are now in design, including (i) two hotels; (ii) Embarcadero shoreline and Eighth Avenue public park, plaza, and accessways; (iii) a ferry/remote airport check-in terminal; and (iv) a recreational boat marina.

- In Planning District 5 (National City Bayfront), incorporate the recently acquired 15-acre upland area, adjacent to the historic Mean High Tide Line and the Port's National City Marine Terminal, and re-designate the parcel from "General Industrial" to "Marine Related Industry" to serve expanding automobile, lumber, and other bulk cargo storage and handling (Exhibit 6, National City Marine Terminal Plan.)
- In Planning District 7 (Chula Vista Bayfront), re-designate the South Bay Boat Yard, which is located between the Sweetwater Marsh and San Diego Bay National Wildlife Refuges, from "Marine Related Industry" and "Specialized Berthing" to "Commercial Recreation," "Park/Plaza," and "Recreational Boat Berthing." (Exhibit 7, Chula Vista Bayfront Plan)

Each of these proposed land and water use re-designations is further described and preliminarily analyzed in Section 4, below. The Port has indicated to CCC staff that following the

informational presentation, Port staff in consultation with the various stakeholders will prepare a PMPA and Draft Environmental Impact Report ("DEIR") for public and public agency review and comment. The PMPA is expected to list specific development projects and be accompanied by a detailed "PMPA Coastal Act Consistency Analysis."

The Commission's regulations (14 CCR § 13059) provide for a copy of the complete PMPA and DEIR to be sent by the Port to Commissioners, as well as staff, for review prior to Board of Port Commissioner action. Although staffing limitations in the past have precluded Commission staff from commenting on many draft environmental documents, given the regional and Coastal Act significance of the anticipated dPMPA, Commissioners may wish to consider reviewing the DEIR through the public hearing process provided in Commission Regulation 14 CCR 13645(c).

#### 4. PRELIMINARY ANALYSIS

The Coastal Act in §30708(c) assigns highest priority to the use of Port areas to maritime industry and to associated navigational or land-based infrastructure support facilities. §30708(d), in addition, provides for the accommodation, to the extent feasible, of such other public trust uses as recreation and wildlife habitat. Both provisions should be read in the context of §30708(a), which requires all port-related development to minimize significant (adverse) environmental effects. All three provisions derive from, and have as their underlying objective, the policy of §30705 and 30706 that filling of waters within ports be limited, including through optimization of existing land for diverse harbor purposes.

##### a. South Embarcadero (Centre City-Embarcadero Planning District 3)

Implementation of the Port's proposal would remove the last vestiges of maritime industry from the South Embarcadero planning subareas, while allowing completion of their redevelopment as a major commercial and public recreational urban waterfront.

Studies of the Port marine terminals find that (i) the Tenth Avenue Marine Terminals ("TAMT") planned future use as the San Diego Bay container facility does not require reservation of the former Campbell Shipyard (which is in process of closing) and the adjacent R. E. Stait/Carpenter waterfront construction (pile-driving, etc.) yard in Planning District 3 to be able to handle projected cargo volumes through the year 2020, and (ii) TAMT would not feasibly serve as a second San Diego cruiseship terminal.

Two "Marine Related Land Studies" that were prepared for the Port and the maritime industrial tenants in 1997-1999 concluded, moreover, that due to relatively small parcel size, inadequate water depths to accommodate contemporary naval vessel sizes, and changed boat and ship building and repair market conditions, the two yards, individually or together, do not constitute feasible marine-related industrial sites either for their existing, or a broad range of conceptually alternative, uses.

The removal of the Campbell yard would, if its piers are removed and adequate water areas are reassigned to TAMT, facilitate improved tug and ship navigational access to TAMT Berths 10-1 and 10-2 through a widening of the berth and ship navigational corridor from the Main Ship Channel. These berths, which represent 25% of the berths at TAMT, are presently significantly constrained by the proximate Campbell Shipyard pier. (Exhibit 8, aerial photograph of existing marine related industrial uses.) In addition, removal of the yards would facilitate development of a ferry landing/water transit terminal near the foot of Eighth Avenue, which, in conjunction with modern high-speed passenger ferries, may create an important alternative transportation mode to the automobile on routes to the Airport and other San Diego Bay population centers.

Removal of the two yards would also (i) likely effectuate the full or partial remediation of contaminated land and benthic areas, (ii) preclude further industrially-polluted runoff to the Bay, (iii) provide the opportunity for extension of the Port's shoreline public accessway ("Embarcadero Promenade"), and (iv) allow creation of a new shoreline park/plaza.

b. Tenth Avenue Marine Terminal (Planning District 4)

In addition to the effects relative to TAMT discussed above, the Port's proposed land and water use re-designations in Planning District 4 would relocate the secondary truck access route into the marine terminal away from the present Gull Street, and thereby beneficially affect Harbor Drive/Eighth Avenue intersection traffic.

c. National City Bayfront (Planning District 5)

At the Port's marine cargo terminal at National City ("NCMT"), the addition of 15 acres of new upland cargo storage and handling area to the Port's inventory of "Marine Related Industrial" lands constitutes a clear indication of the Port's commitment to implementation of its marine terminal consolidation and modernization business plan, without placement of new fill in Bay waters, and compliance with the Coastal Act's land use priorities.

d. Chula Vista Bayfront (Planning District 7)

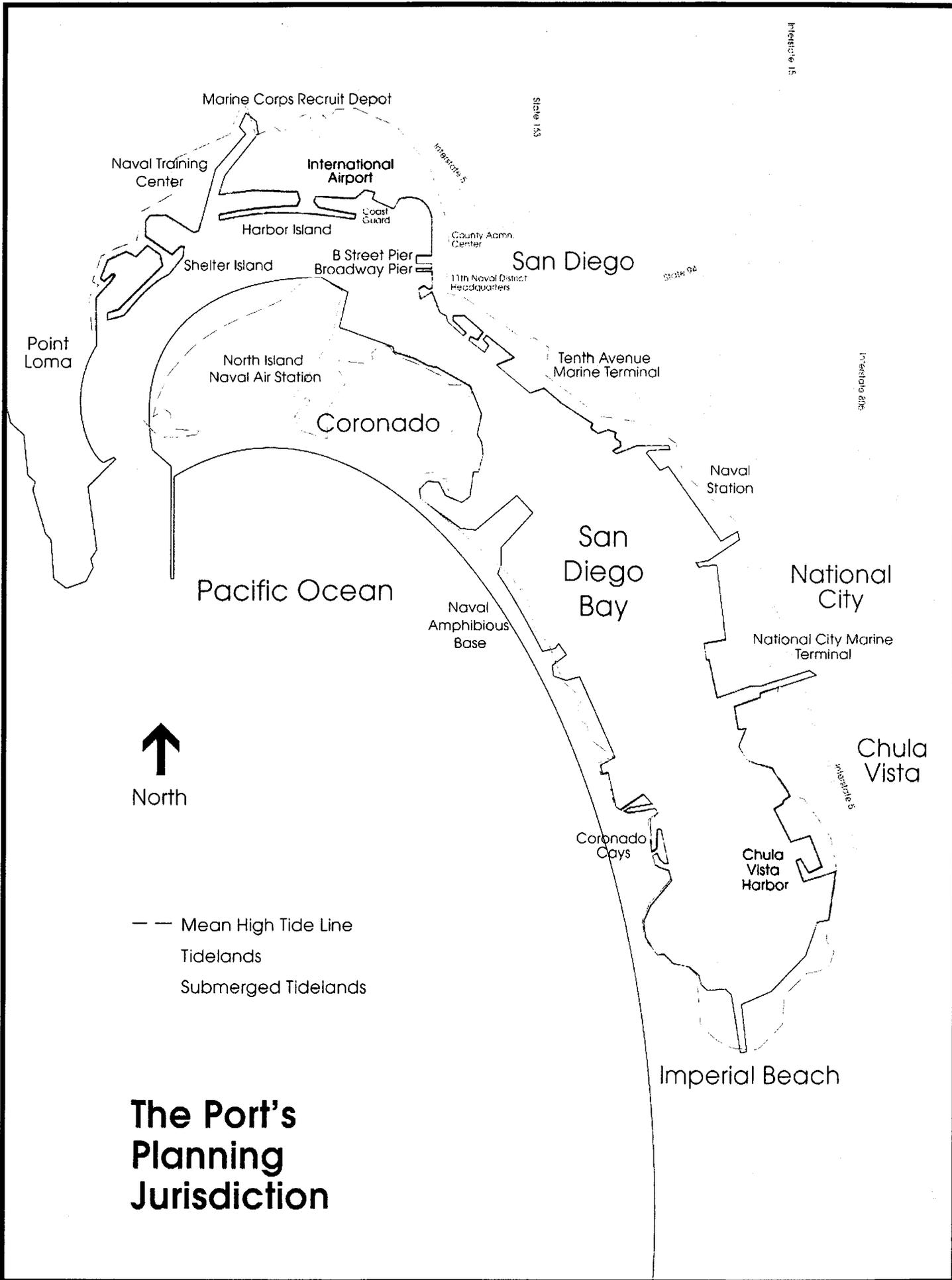
The Port proposes the reallocation of the 18-acre South Bay Boat Yard ("SBB") from "Marine-Related Industry" to "Commercial Recreation" in response to petitions from three major San Diego Bay environmental organizations. (Exhibit 9, letters from EHC, Audubon, and SWIA.)

Although SBB has the largest land (9.45-acre) and water (8.52-acre) area of any boatyard on San Diego Bay, and also benefits from having a large enclosed work space (hangar), a draft preliminary "Marine Related Land Study" prepared by SDUPD (February 14, 2000) finds that this facility may be significantly handicapped with (i) the lowest work-to-capacity ratio of any boatyard on the Bay, (ii) an \$2.5 million capital investment demand to acquire modern boat lifting equipment or alternately dredge a new basin for a major floating/submersible dry dock, (iii) a likely requirement for additional non-point polluted runoff and airborne emissions controls, and (iv) a location in the South Bay that is at once removed from the concentration of recreational boats in North Bay, proximate to the heightened environmental objectives of two proximate national wildlife refuges that were created to protect listed endangered species, and limited by the relatively shallow and contorted Chula Vista boat channel, which deeper draft power and sail boats prefer to avoid. (Exhibit 10, SDUPD, "Preliminary SBB Marine Related Land Study")

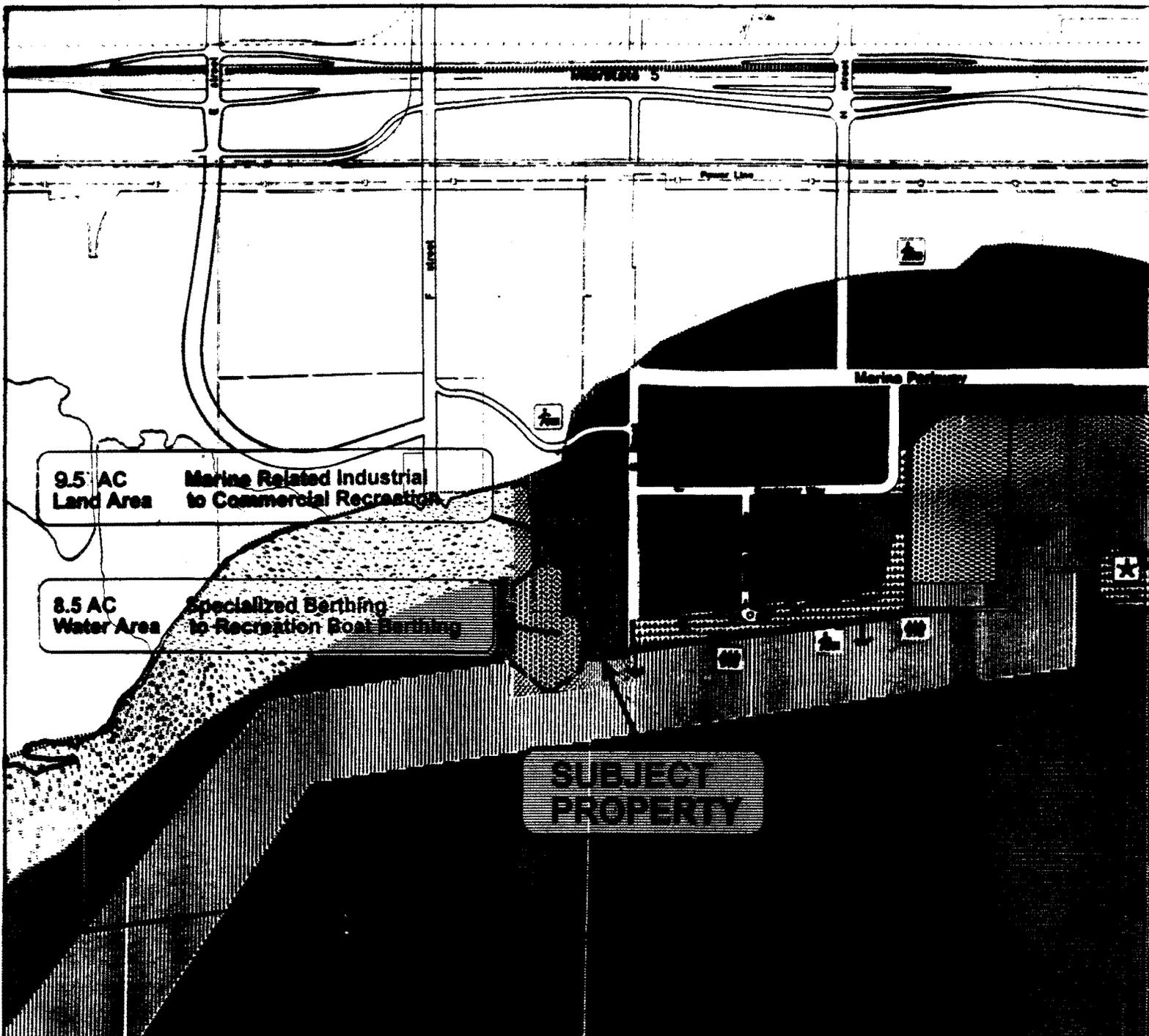
SDUPD initially created the site now occupied by SBB in the 1960's to provide, through dredging and filling of inter-tidal mudflats, a man-made ship-building and launching site for Rohr Industries' proposed Cold War-era missile "surface effects ships." That naval construction program failed to materialize, and although the SBB has played an important and innovative role in boat construction, maintenance, and repair on San Diego Bay for the past 16 years, the Port deems replacement of the already constrained boatyard with a habitat-consistent commercial recreational and shoreline public recreational use the preferred public trust alternative at this location in the South Bay.

5. LIST OF EXHIBITS

- 5.1. Transmittal Letter from Dan E. Wilkens, Senior Director, SDUPD, to Charles Damm, California Coastal Commission, February 15, 2000.
- 5.2. SDUPD Jurisdictional Map
- 5.3. Exhibit 3, Certified SDUPD Principal Land and Water Use Designations
- 5.4. South Embarcadero Existing Land/Water Use Map, and Proposed Mylar Overlay Amendments
- 5.5. Tenth Avenue Marine Terminal Plan
- 5.6. National City Marine Terminal Plan
- 5.7. Chula Vista Bayfront Plan
- 5.8. Aerial photograph(s) of existing marine related industrial uses.
- 5.9. Letters from Audubon, EHC, and SWIA, November, 1999.
- 5.10. SDUPD, "Preliminary SBB Marine Related Land Study", February 14, 2000.



# The Port's Planning Jurisdiction



**SUBJECT  
PROPERTY**

**9.5 AC Land Area** Marine Related Industrial to Commercial Recreation

**8.5 AC Water Area** Specialized Berthing to Recreation Boat Berthing

Land		Water	Land		Water
<b>COMMERCIAL</b>			<b>PUBLIC RECREATION</b>		
Commercial Recreation	Recreational Boat Berthing	Marine Sales & Services	Park	Promenade	Boat Launching
Marine Related Industrial Business Park	Specialized Berthing	Marine Services Berthing	Public Access	Wetlands	Estuary
<b>INDUSTRIAL</b>			<b>CONSERVATION</b>		
			Wetlands	Habitat Replacement	Estuary
			<b>PUBLIC FACILITIES</b>		
			Vote Area	Comfort Station	Boat Navigation Canal
			Wetlands	Harbor Police Station	Ship Navigation Canal

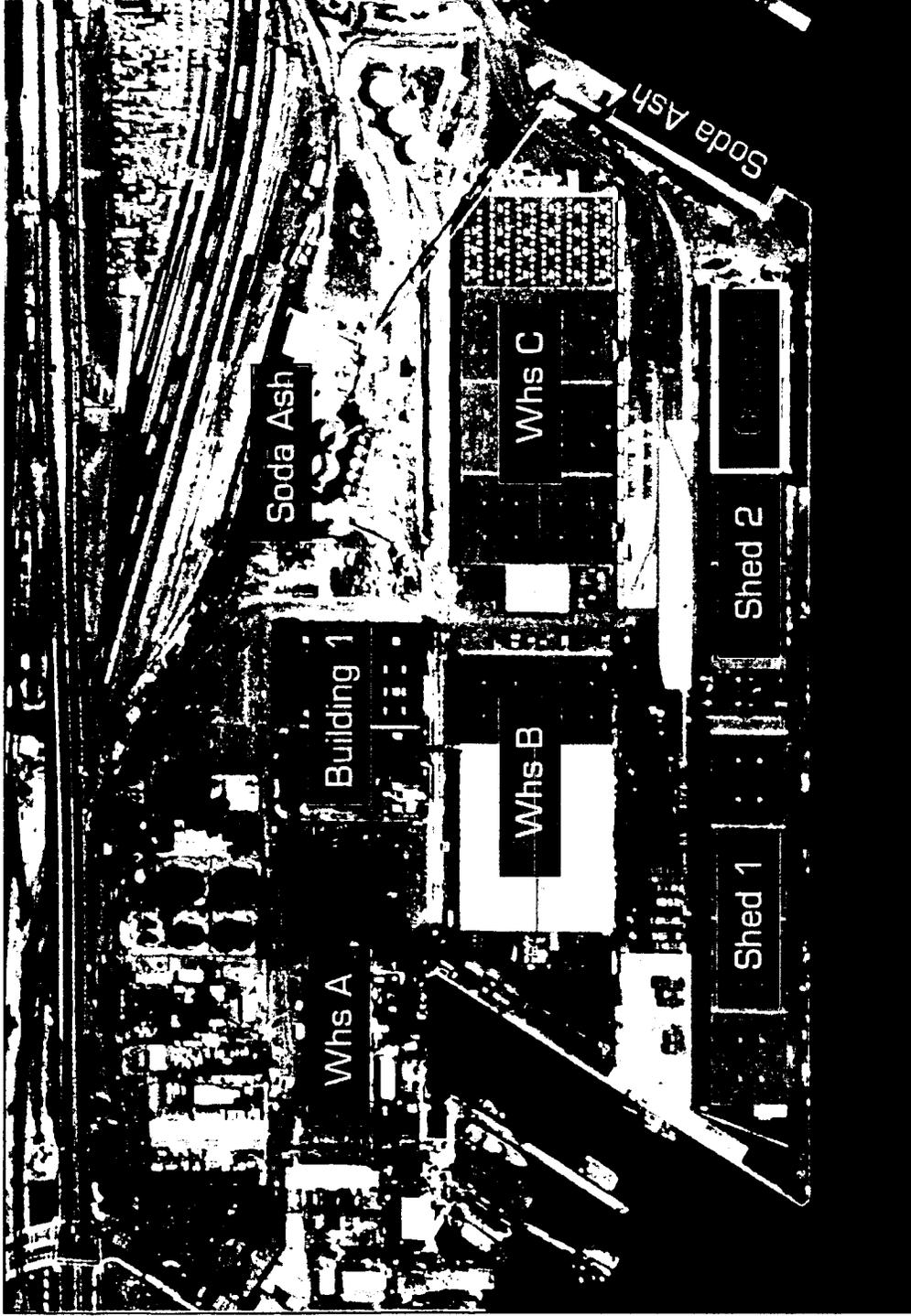
OF NATIONAL CITY  
OF SAN DIEGO  
OF CORONADO

Planning District 7  
**CHULA VISTA BAYFRONT**  
Land Use Planning Department

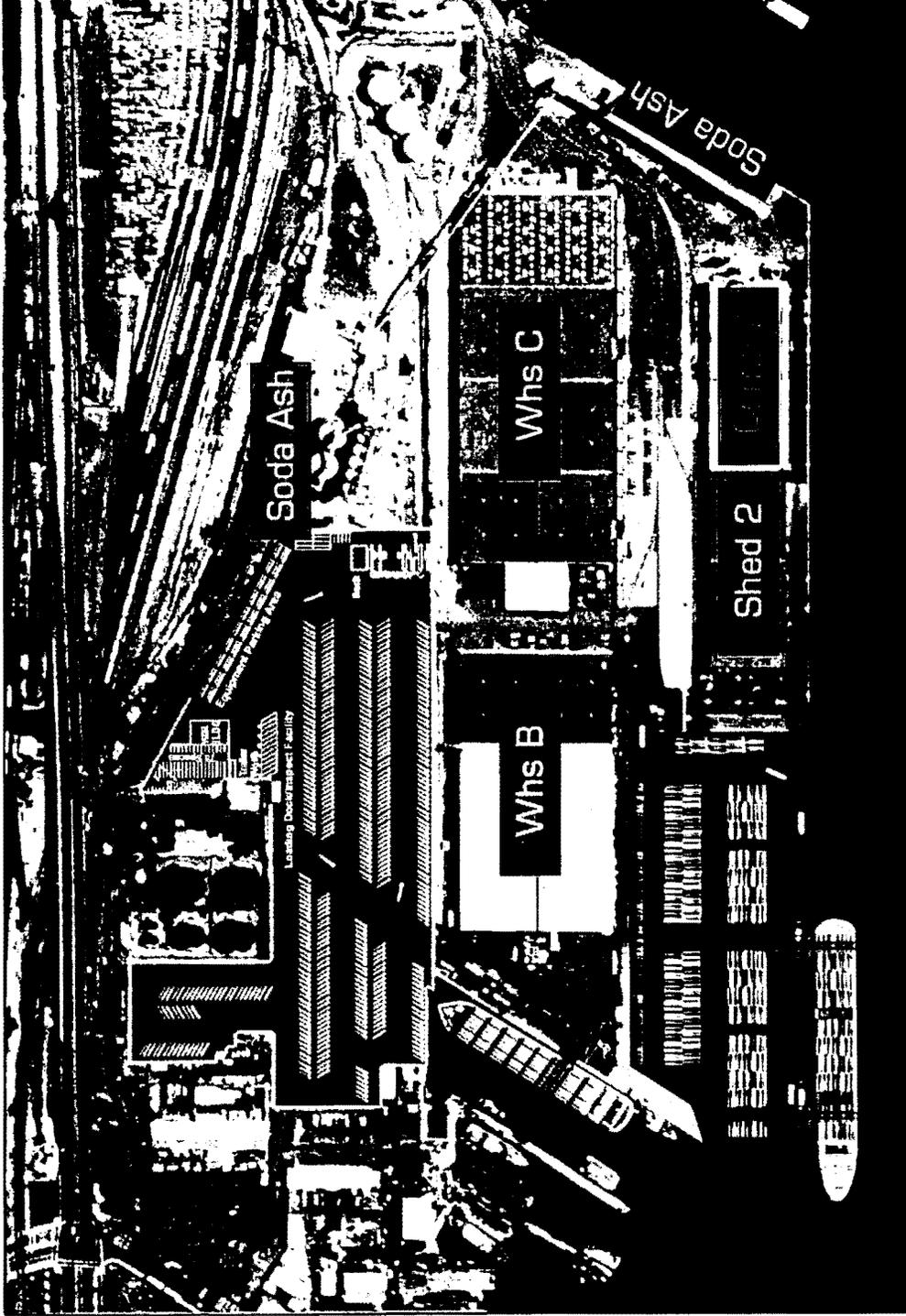
**PRECISE PLAN**

MASTER PLAN REVISION

# Tenth Avenue Marine Terminal Existing Conditions

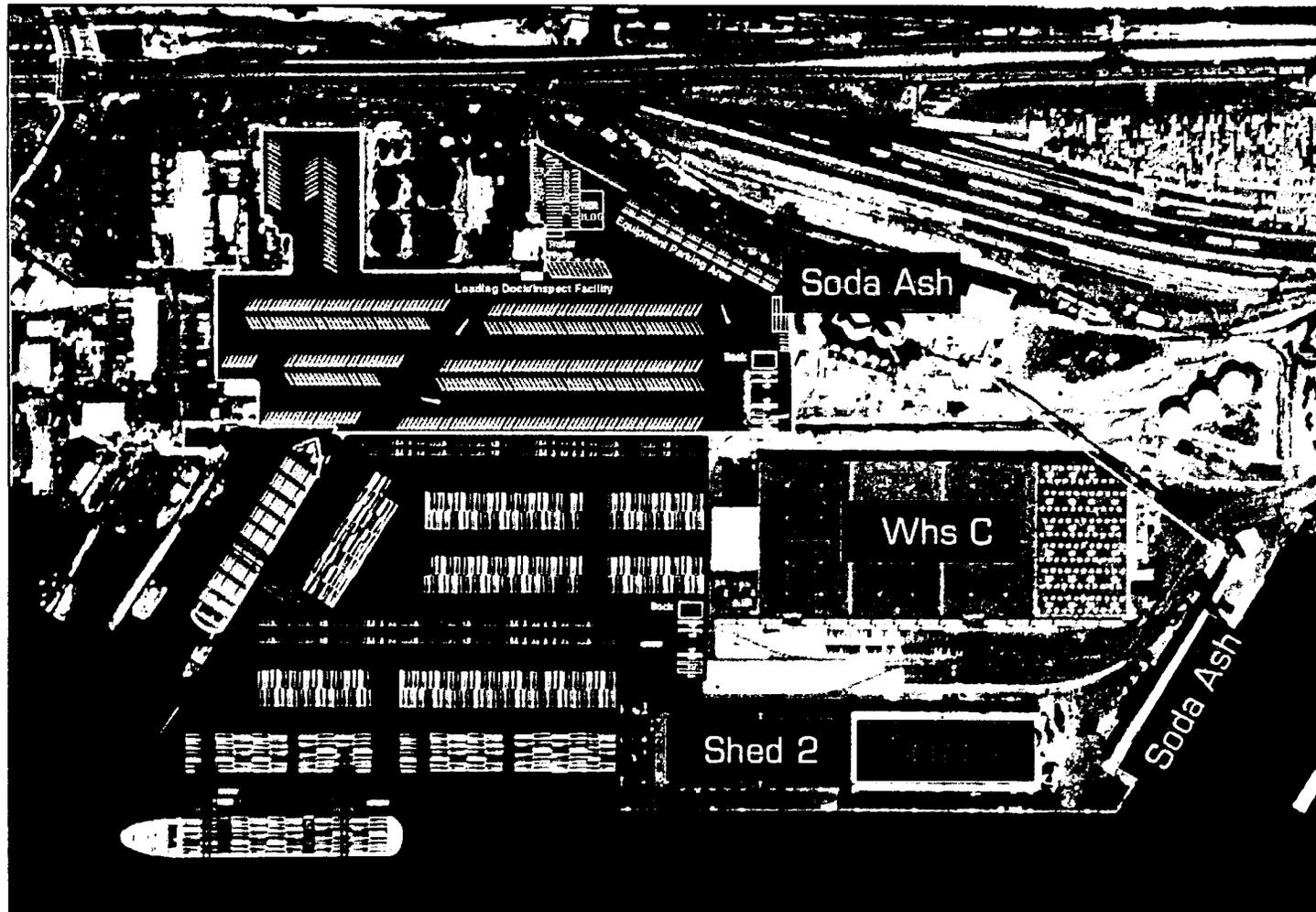


# 2000 - 2005



<b>Cost</b>	<b>\$48.7 million</b>	<b>Demand</b>	<b>50,147 teus</b>
<b>Annual revenue</b>	<b>\$5.1 million</b>	<b>Capacity</b>	<b>83,958 teus</b>

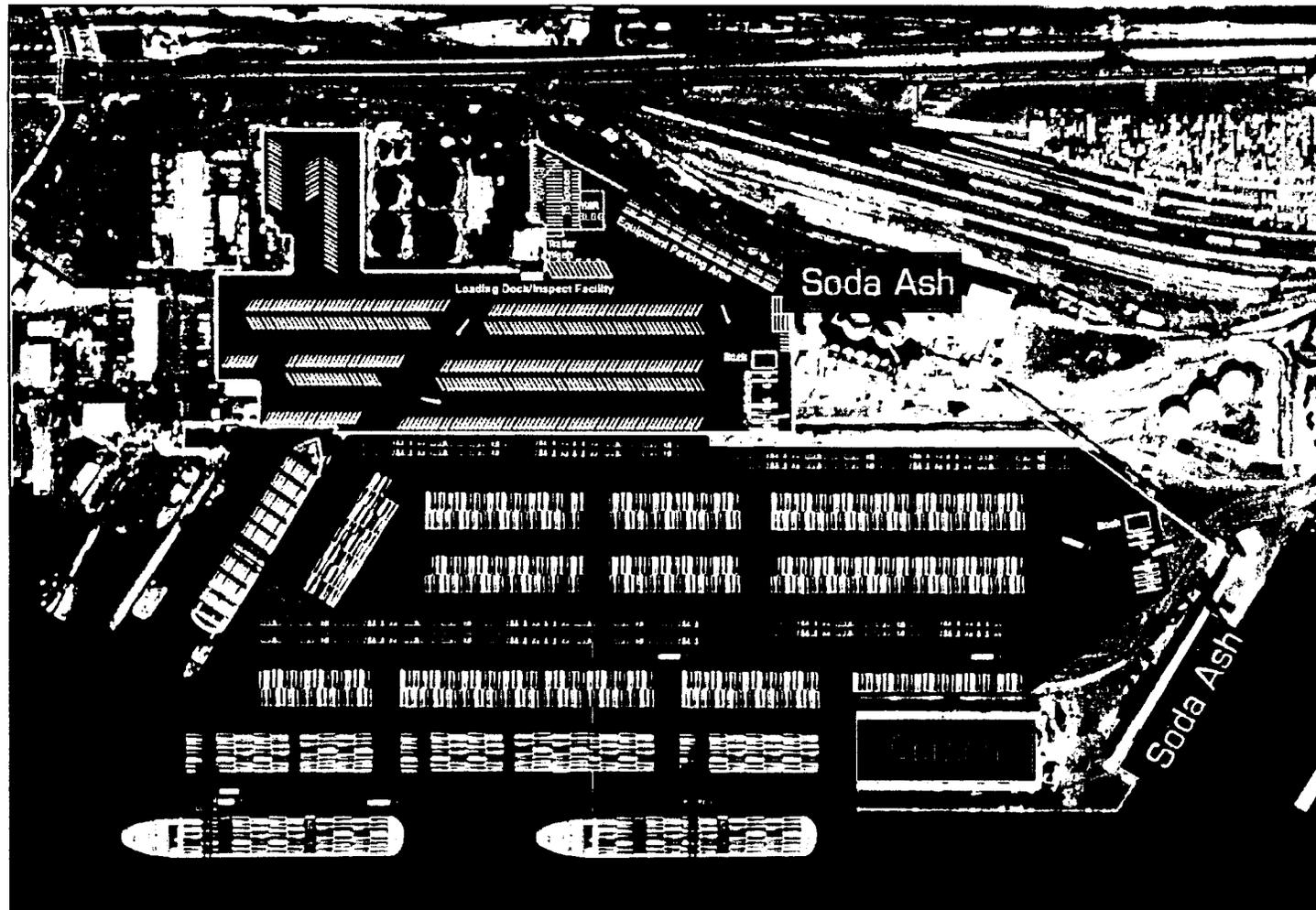
# 2005 - 2010



Cost **\$5.5 million**  
Annual revenue **\$8.8 million**

Demand **80,849 teus**  
Capacity **115,721 teus**

# 2010 - 2015 Total Cost \$60.3 million



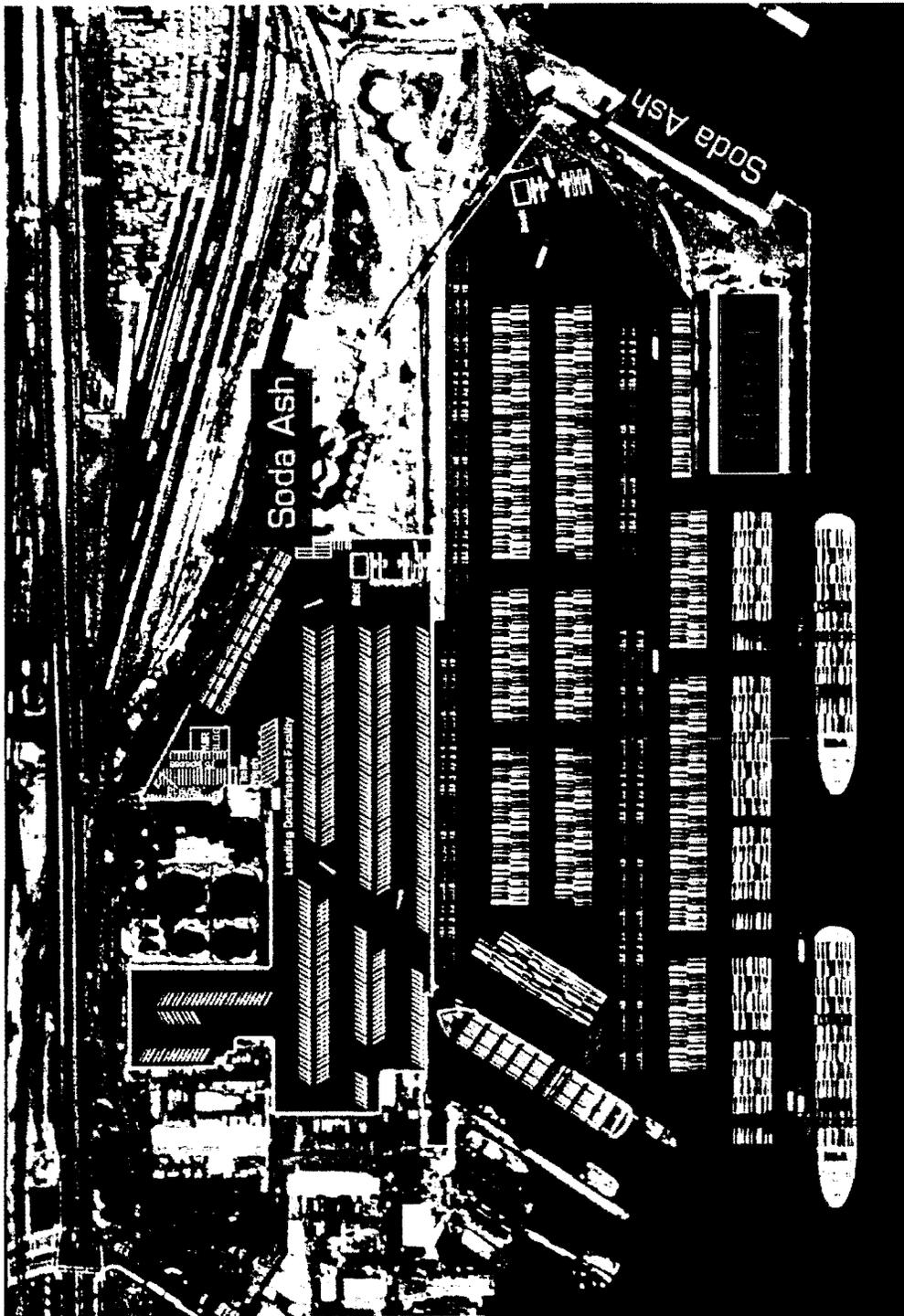
Cost **\$6.1 million**

Annual revenue **\$14 million**

Demand **143,567 teus**

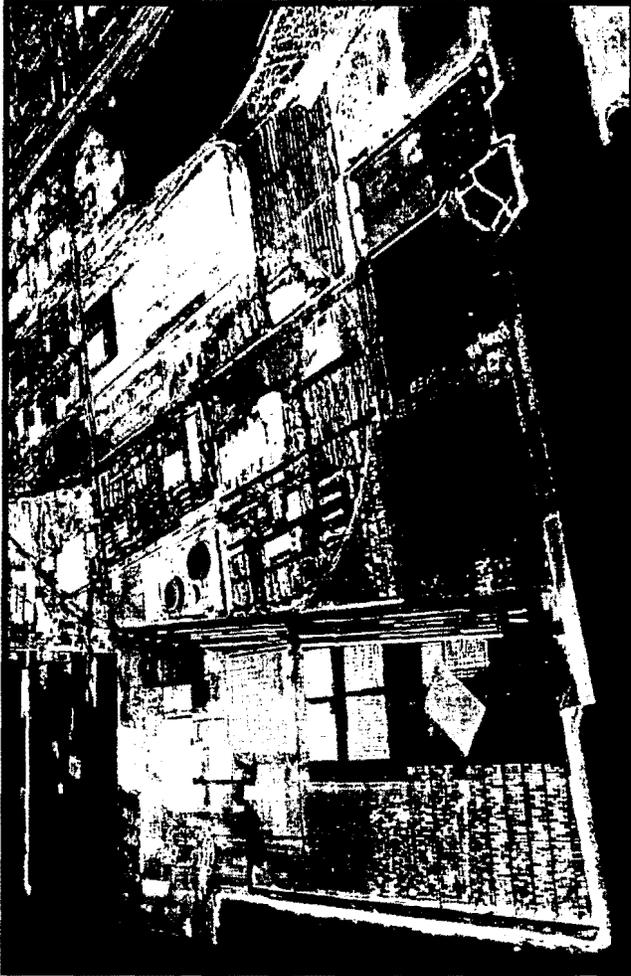
Capacity **181,034 teus**

# 2020 PLAN



Total Cost  
**\$60.3 million**

# National City Marine Terminal

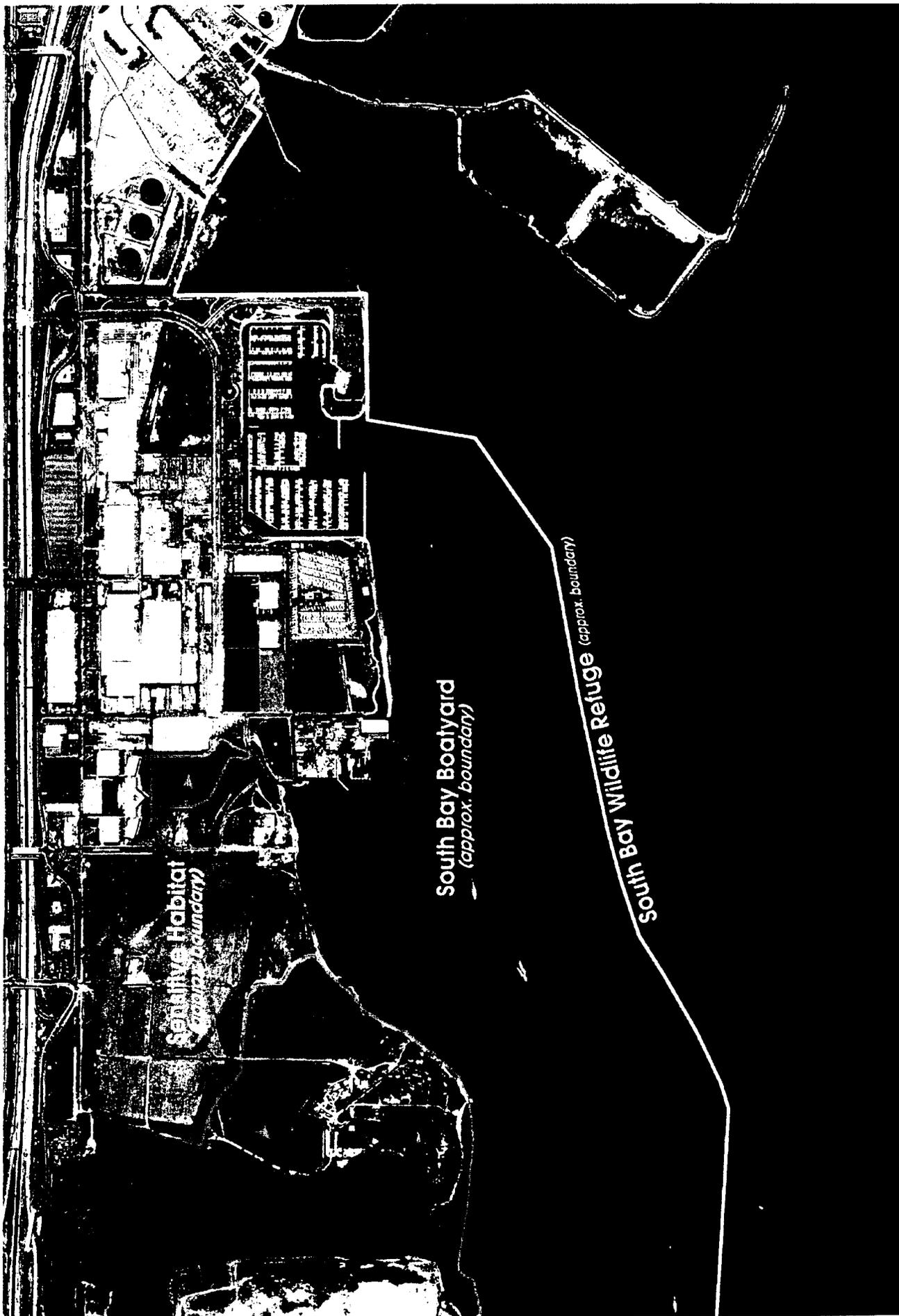


Continue expanding **automobile**  
and **lumber** operations

Suspend Phase II dredging,  
saving \$32 million

National City Bayfront - Planning District 5  
National Distribution Center - 22.14 Acres  
Marine Related Industrial

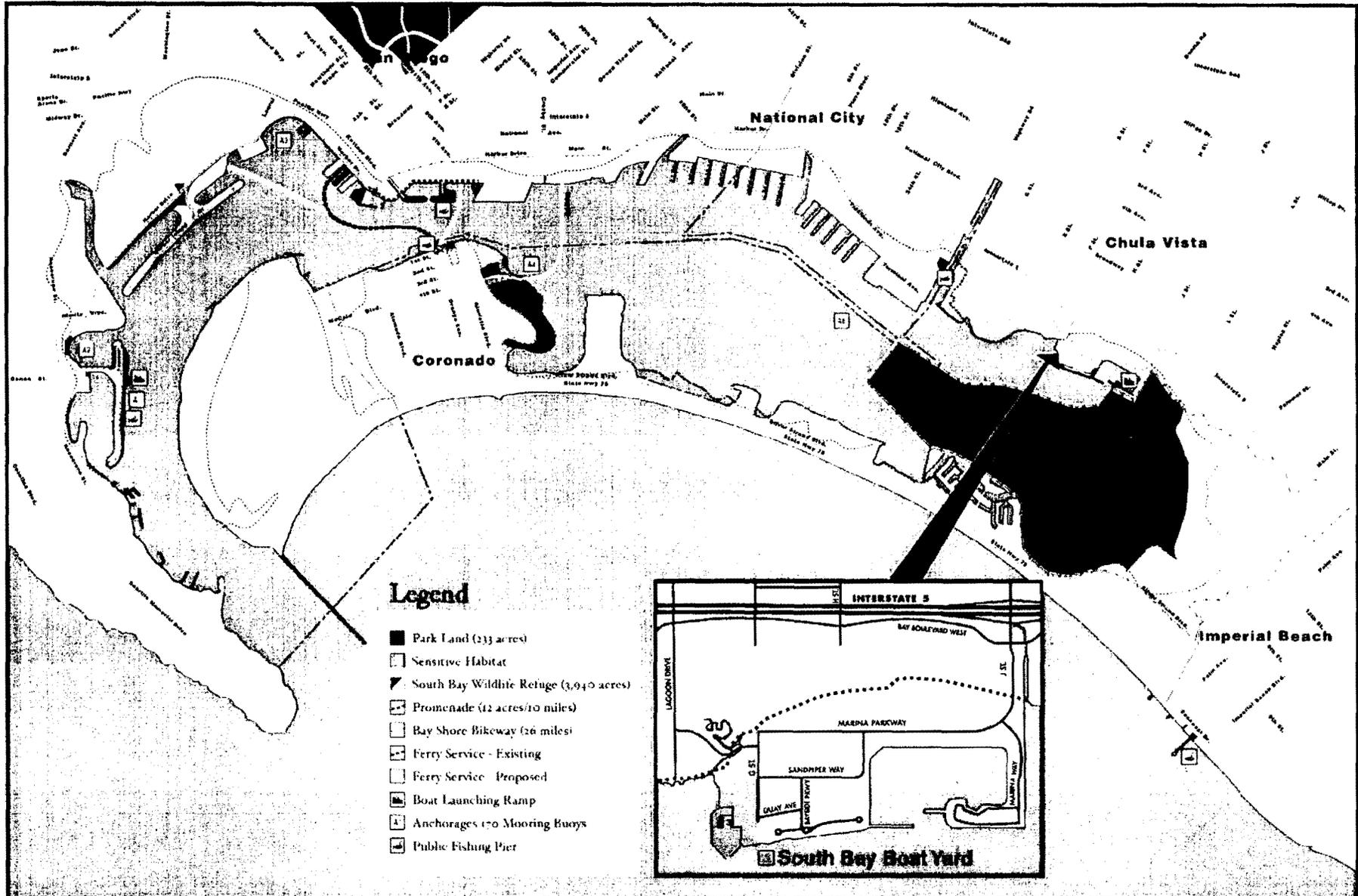




Sensitive Habitat  
*(approx. boundary)*

South Bay Boatyard  
*(approx. boundary)*

South Bay Wildlife Refuge  
*(approx. boundary)*



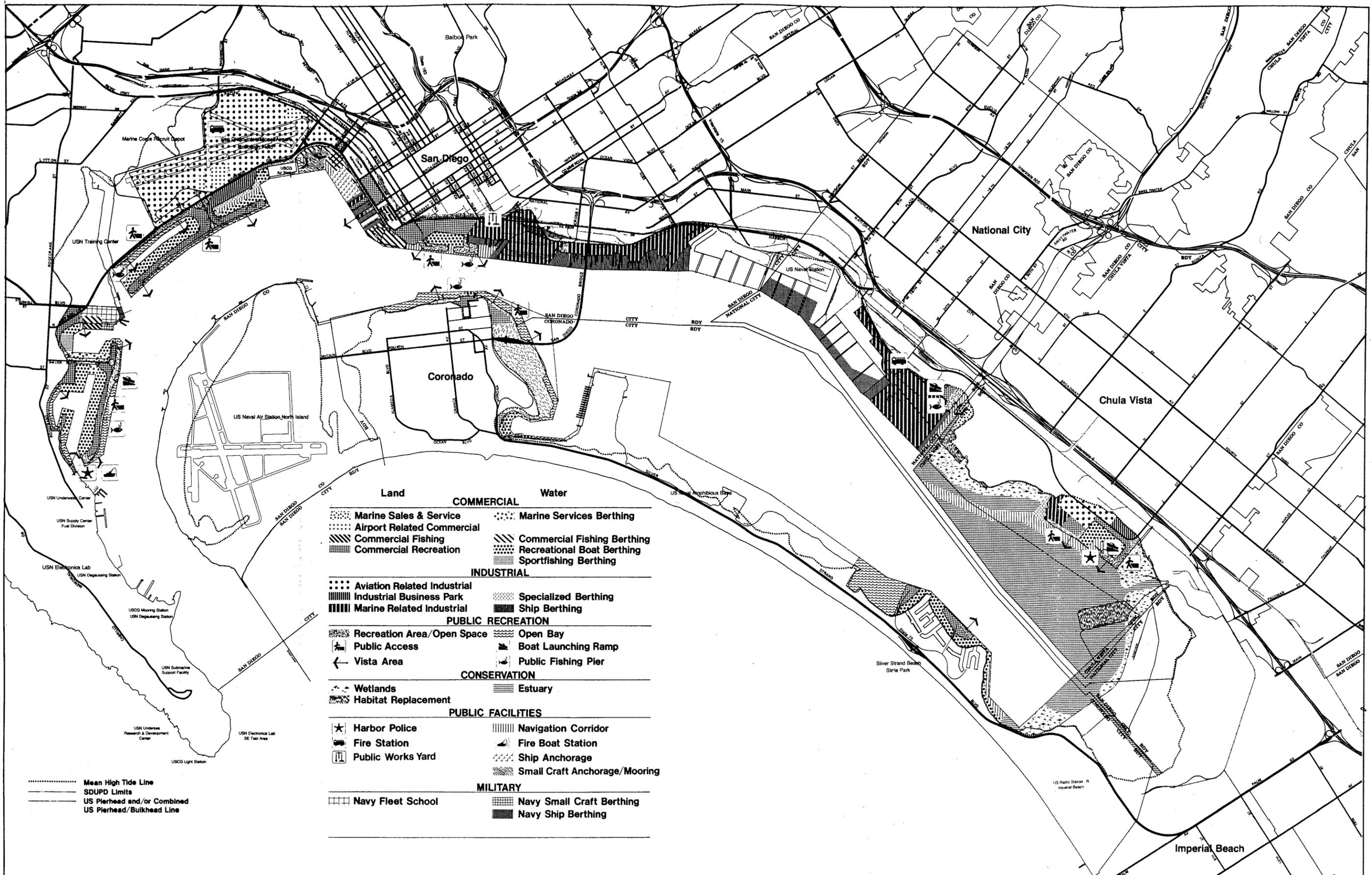
**Scale**  
 0 2000ft 4000ft  
 Land Use Planning

# Public Access and Recreation Map

Revised	Date
Nov. 99	Drawn Check
	Base
	No.

ii





Land	COMMERCIAL	Water
<ul style="list-style-type: none"> <li>Marine Sales &amp; Service</li> <li>Airport Related Commercial</li> <li>Commercial Fishing</li> <li>Commercial Recreation</li> </ul>	<ul style="list-style-type: none"> <li>Marine Services Berthing</li> <li>Commercial Fishing Berthing</li> <li>Recreational Boat Berthing</li> <li>Sportfishing Berthing</li> </ul>	
<b>INDUSTRIAL</b>		
<ul style="list-style-type: none"> <li>Aviation Related Industrial</li> <li>Industrial Business Park</li> <li>Marine Related Industrial</li> </ul>	<ul style="list-style-type: none"> <li>Specialized Berthing</li> <li>Ship Berthing</li> </ul>	
<b>PUBLIC RECREATION</b>		
<ul style="list-style-type: none"> <li>Recreation Area/Open Space</li> <li>Public Access</li> <li>Vista Area</li> </ul>	<ul style="list-style-type: none"> <li>Open Bay</li> <li>Boat Launching Ramp</li> <li>Public Fishing Pier</li> </ul>	
<b>CONSERVATION</b>		
<ul style="list-style-type: none"> <li>Wetlands</li> <li>Habitat Replacement</li> </ul>	<ul style="list-style-type: none"> <li>Estuary</li> </ul>	
<b>PUBLIC FACILITIES</b>		
<ul style="list-style-type: none"> <li>Harbor Police</li> <li>Fire Station</li> <li>Public Works Yard</li> </ul>	<ul style="list-style-type: none"> <li>Navigation Corridor</li> <li>Fire Boat Station</li> <li>Ship Anchorage</li> <li>Small Craft Anchorage/Mooring</li> </ul>	
<b>MILITARY</b>		
<ul style="list-style-type: none"> <li>Navy Fleet School</li> </ul>	<ul style="list-style-type: none"> <li>Navy Small Craft Berthing</li> <li>Navy Ship Berthing</li> </ul>	

..... Mean High Tide Line  
 - - - - - SDUPD Limits  
 - - - - - US Pierhead and/or Combined  
 - - - - - US Pierhead/Bulkhead Line

**scale**  
 0 2000 feet  
 0 500m 1km  
**Planning Department**

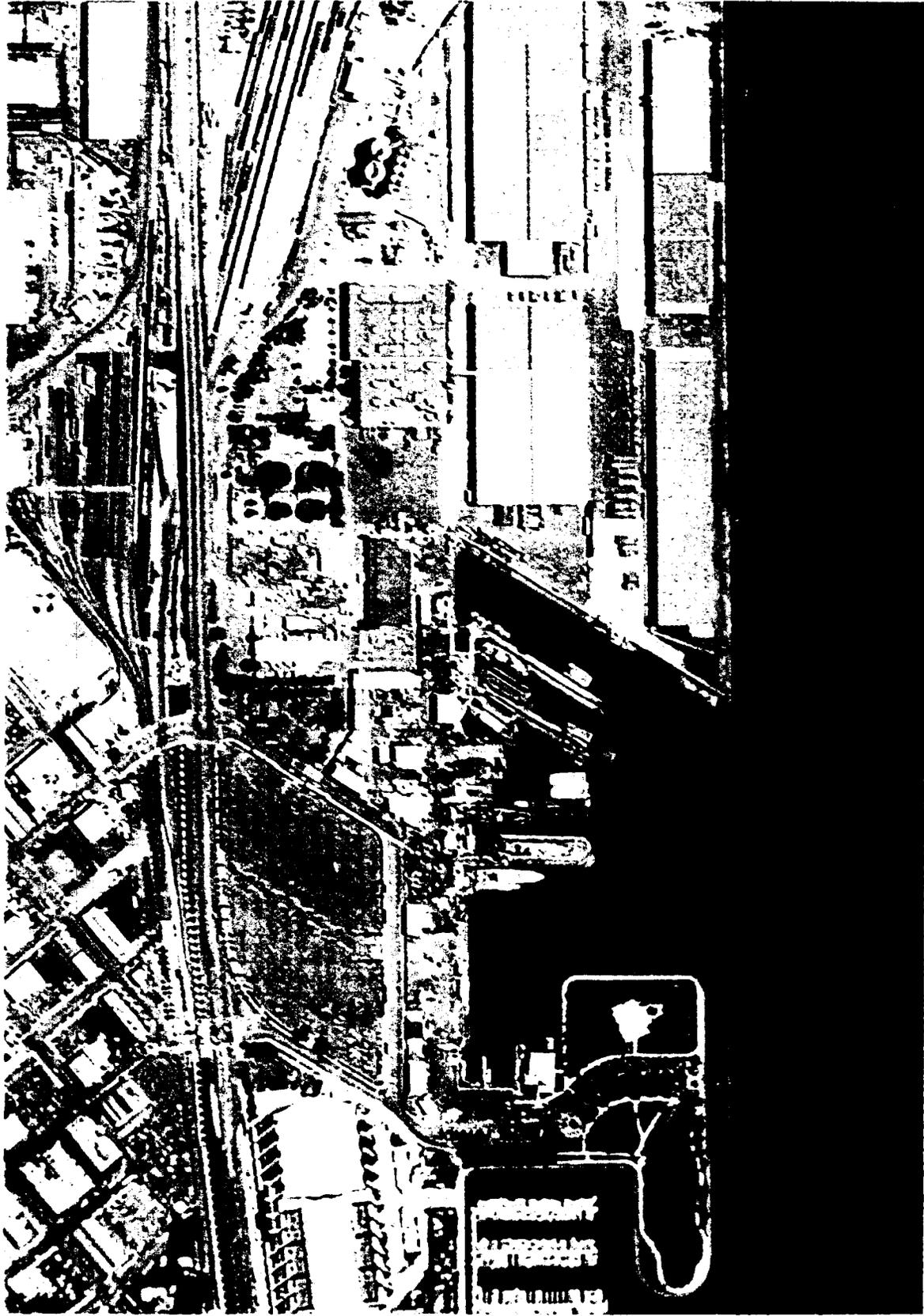
# LAND AND WATER USE ELEMENT

Rev	Date
P. 18 Dec. 74 - K5	17 DEC. 79
P. 17 July 85 - K6	Dm. CRK
P. 12 Aug. 92 - MMW	Base
	No

**Master Plan**



# Campbell and Fifth Avenue Landing Aerial



THE CITY OF  
IMPERIAL  
BEACH

(619) 423-8300  
FAX (619) 429-9770

825 IMPERIAL BEACH BOULEVARD • IMPERIAL BEACH, CALIFORNIA 91932



November 13, 1999

Dennis Bouey  
San Diego Unified Port District  
P.O. Box 120488  
San Diego, CA 92112

Dear Mr Bouey:

I am writing as a member of the Imperial Beach City Council and Vice President of the Southwest Wetlands Interpretive Association (SWIA) to voice my concern about the possible re-location of marine industrial uses at the South Bay Boatyard from the Campbell's Shipyard site.

It would be deleterious to allow this type of polluting use near the planned Chula Vista tourist oriented Bayfront development, particularly in view of the Port's expenditure of millions for protection of South Bay's sensitive and valuable natural resources.

None of the sanding, blasting and other ship building and repair operations should be allowed over water in any part of San Diego Bay. This type of pollution of air and water are avoidable and most certainly cannot be entertained in South Bay. Further loss of deep-water facilities in the North Bay should not result in floating dry docks, deepening or other expansions in the Southbay Boatyard. It does not make good sense for Chula Vista, neighboring cities such as Imperial Beach, and definitely not to habitat and wildlife resources of the area.

It is my belief that you should include a prohibition on expansion and intensification of uses at the Southbay Boatyard in tandem with your request to the California Coastal Commission to remove marine industrial capacity on tidelands around San Diego Bay.

Thank you for your consideration in this matter.

Sincerely,

  
Councilmember Patricia McCoy



**SAN DIEGO AUDUBON SOCIETY**  
2321 Morena Boulevard, Suite D • San Diego CA 92110 • 619/275-0557

November 15, 1999

Port Commissioners  
San Diego Unified Port District  
P.O. Box 120488  
San Diego, California 92112

Dear Commissioners:

**SUBJECT: Changing Land Use of Campbell's Shipyard with respect to South Bay Boatyard**

The San Diego Audubon Society is very concerned about the potential environmental impacts of the shift of the Campbell's Shipyard site to commercial uses. We are very concerned that if the Campbell's Shipyard is disbanded, additional shipyard activity might be moved to the south part of the Bay, which is currently designated the Wildlife Conservation Area in the Port's Master Plan. In particular there have been conversations about increasing the size of the South Bay Boatyard and moving the large floating drydock to South Bay Boatyard as a result of the elimination of Campbell's. Such a change would be inappropriate as:

- additional boat traffic would interfere with the wildlife support value of South Bay,
- increased emissions of copper from additional boat bottoms and the likelihood of incidental and major spills will have higher impacts on water quality because of the substantially reduced tidal flushing in South Bay, and
- additional industrialization will interfere with the scenic value and the wildlife oriented recreational value of South Bay.

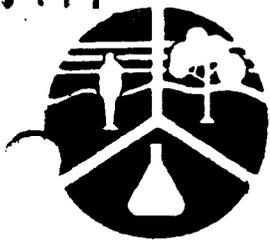
The South Bay Boatyard is at the corner of the largest saltmarsh habitat remaining in San Diego Bay. This area includes the F & G Street marsh and the marshes surrounding the Chula Vista Nature Center. Boat work in the floating drydock would have a significantly higher likelihood of contaminating the bay's water than work done in an upland boat yard. Additional boat work on the site will also provide more risk of contamination. The wildlife that reside there, especially the threatened and endangered species, should not be exposed to such increased risks. Industrial uses at this site should be phased out, not increased.

We strongly urge the Port to include in its action a designation that the land use at the South Bay Boatyard site be changed to commercial, and the existing boatyard use be conditionally and temporarily grandfathered, a floating drydock not be moved to the South Bay Boatyard, and that no expansion of the boatyard be permitted. These conditions would remove the potential for the negative impact to South Bay of the change in land use for the Campbell's site.

Respectfully,

A handwritten signature in black ink that reads "James A. Peugh". The signature is written in a cursive, flowing style.

James A. Peugh  
Coastal and Wetlands Conservation Chair



# ENVIRONMENTAL HEALTH COALITION

1717 Kettner Boulevard, Suite 100 • San Diego, CA 92101 • (619) 235-0281 • Fax (619) 232-3670  
ehc@environmentalhealth.org • www.environmentalhealth.org

November 4, 1999

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Community Organizer  
Jay Powell  
Michael Shames  
Utility Consumers Action Network

*Affiliations noted for identification  
purposes only*

**Executive Director**  
Diane Takvorian

## Mission Statement

Environmental Health Coalition is dedicated to the prevention and cleanup of toxic pollution threatening our health, our communities, and the environment. We promote environmental justice, monitor government industry actions that cause pollution, educate communities about toxic hazards and toxics use reduction, and empower the public to join our cause.

 Printed on recycled paper  
with unbleached inks. 

Mr. Dennis Bouey  
San Diego Unified Port District  
P.O. Box 120488  
San Diego, CA 92112

RE: EHC request that prohibition on future expansion of activity at South Bay Boatyard be included in request to Coastal Commission to remove marine industrial capacity on tidelands around San Diego Bay

Dear Dennis:

Environmental Health Coalition understands that the Port District will soon request that the California Coastal Commission remove the existing Marine Industrial designation for Campbell's Shipyard. While EHC has a long-standing objection to losing existing deep water, marine industrial property, we will not oppose such a request only if it is coupled with a commitment that marine industrial uses will not be expanded elsewhere, most notably, at the South Bay Boatyard. If marine industrial tidelands are over capacity there is no need to expand this activity at South Bay Boatyard and the Port should have no problem affirming that as part of its action.

Pollution from drydocks and shipyard operations is legendary, or should we say notorious. As you know, San Diego Bay has been found by the National Oceanic and Atmospheric Administration (NOAA) to be the second most toxic bay of 18 bays studied in the nation. Commercial and naval shipyards were referenced in the study as the areas of highest concern. Adding a dry dock to South Bay Boatyard will mean that the very polluting and hazardous operations of sanding, blasting, and other ship building and repair operations would now occur over the water, instead of on land where they currently are located and more easily contained. This is **environmentally unacceptable.**

The Port District has spent millions of public dollars promoting and planning for development of a people-friendly Chula Vista Bayfront. It has spent (and we would add, well-spent) additional millions protecting the valuable and sensitive natural resources in South San Diego Bay. If the District were now to allow South Bay Boatyard to expand into more polluting operations, this would be in direct contrast to its own investment in the area. Increased air and bay pollution should not be part of the long-term plan for

the Chula Vista Bayfront

Our concerns that these activities may be moved further south are also heightened by the proposal to lose even more deep water berthing capacity to the proposed USS Midway project which seems to be contrary to the Port's intended expansion of shipping and harbor commerce as well as recent news accounts of increased shipping to San Diego (attached).

We formally request that a prohibition on the expansion of activity at the South Bay Boatyard, especially the addition of a floating dry dock or other intensification of uses or deepening, be part of the recommendation of staff, either as a concurrent or separate action, when the Campbell's item goes before the Port Commissioners and the Coastal Commission for decision. This could be accomplished through an underlying change of land use at the South Bay Boatyard or by some other mechanism.

Please contact me with any questions at 235-0281.

Sincerely,

Laura Hunter  
Director, Clean Bay Campaign

cc.  
Mr. Dan Wilkens  
Mr. David Merk

**RECEIVED**

MAR 27 2000

# *Port of San Diego*

CALIFORNIA  
COASTAL COMMISSION  
SAN DIEGO COAST DISTRICT



1. *Campbell Industries/Fifth Avenue Marine-Related Land Study – December 15, 1997*  
*1<sup>st</sup> Addendum – February 27, 1998*  
*2<sup>nd</sup> Addendum – October 29, 1999*
  
2. *South Bay Boatyard Marine-Related Land Study*  
*-- February 14, 2000*
  
3. *America's Cup Harbor Usage Study*  
*-- November 30, 1999*  
*Addendum – January 11, 2000*

# MARINE RELATED LAND STUDY

CAMPBELL INDUSTRIES/FIFTH  
AVENUE LANDING  
SAN DIEGO, CALIFORNIA

December 15, 1997

Prepared By

GRAY CARY WARE & FREIDENRICH,  
a Professional Corporation

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12. Chart -- Current Throughput of Terminals

## LIST OF ATTACHED ADDENDA

- A. Master Plan Description of Marine Related Industry Land Use Classification
- B. Master Plan Description of Commercial Recreation Land Use Classification
- C. Scope of Work
- D. Bibliography

**MARINE RELATED LAND STUDY**  
**CAMPBELL INDUSTRIES/FIFTH AVENUE LANDING**  
**SAN DIEGO, CALIFORNIA**

**I**

**EXECUTIVE SUMMARY**

Two separate lessees of adjoining parcels owned by the San Diego Unified Port District propose developing the parcels for uses which are not presently consistent with the existing land and water use classifications of the Port District's Master Plan. In order to allow the development, the Port District must satisfy the requirement of California Public Resources Code Section 30708(c) which provides that all port related developments shall be located, designed and constructed to give highest priority to the use of existing land space for port purposes. This report examines the port purposes to which the site could be put and assesses the actual present and reasonably foreseeable future demand at the site for each of those port purposes. The report also examines the suitability of the site to accommodate each of the identified port purposes.

The report extensively examines the demand for ship building and repair and the need to expand the 10th Avenue Marine Terminal immediately adjacent to the site, as well as the suitability of the site for each of those purposes. The report identifies these two proposed uses as the most likely proposed uses

because (i) the site is presently used for ship building and repair and (ii) the site is immediately adjacent to the 10th Avenue Marine Terminal and the Port District has made known its desire to increase activity at the terminal. The report concludes, however, that the site is not necessary for either of these uses since no demand for those uses can be demonstrated now or at any time in the foreseeable future. Moreover, the Campbell site appears to be relatively unsuitable for ship building and repair, notwithstanding its current use for that purpose.

All other conceivable port purposes ranging from aquaculture, fishing piers and boat launching ramps to cruise ship berthing and an extension of the 32nd Street Naval Station were examined. None of these port purposes were found to present an existing or reasonably foreseeable demand for use of the site. The site was further found to be incompatible for many of those port purposes.

Finally, although there was not a quantifiable need for a small boat marina or a water transportation center, it was noted that each of these uses was incorporated into the proposed plan of development of the site. Although a need cannot be demonstrated for a marina, certain benefits from incorporating a marina into the proposed development (especially a marina with facilities for large ocean going yachts) were noted and the use of part of the site as a marina should not be precluded.

## II

### INTRODUCTION

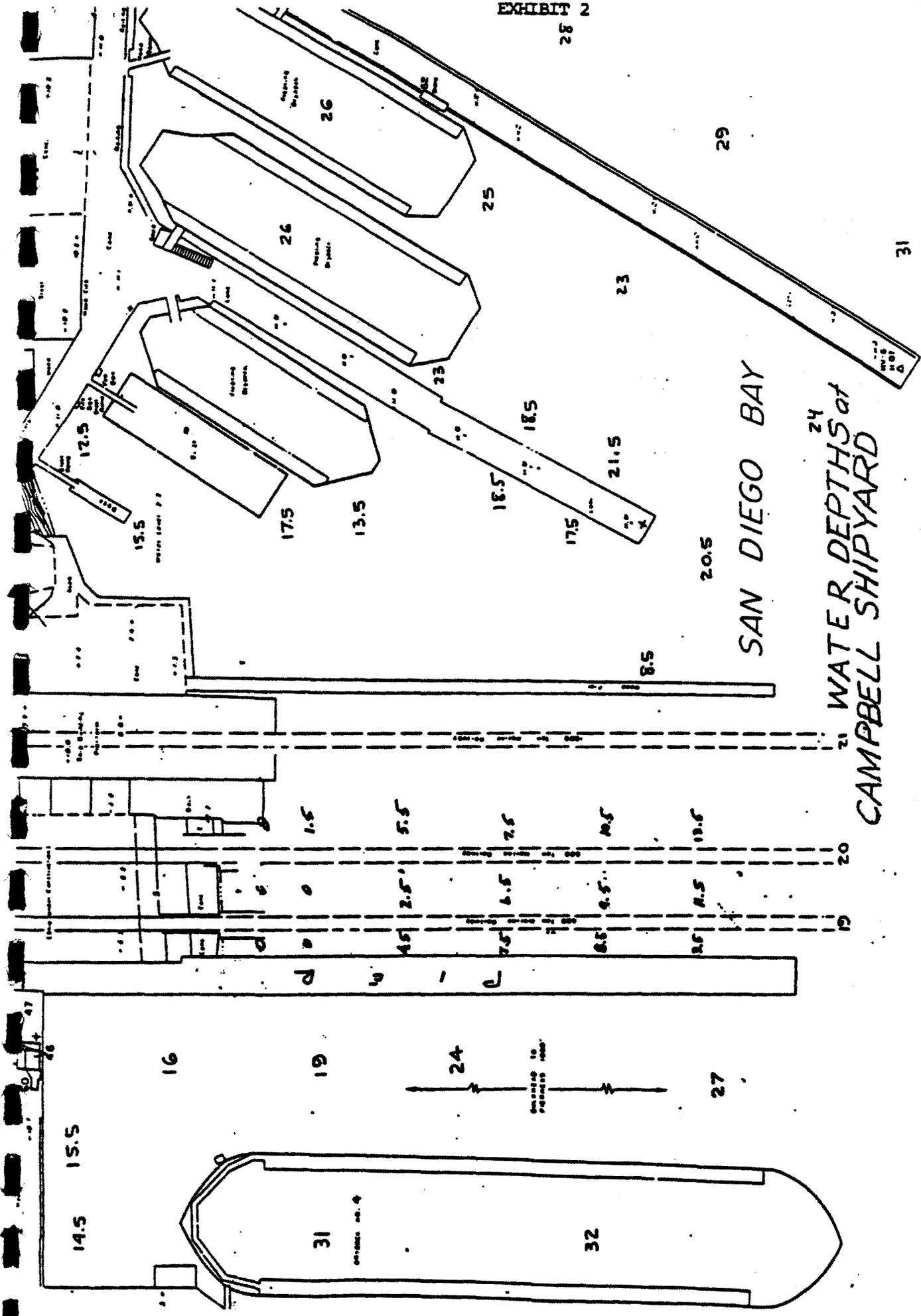
Campbell Industries and Fifth Avenue Landing lease from the San Diego Unified Port District, under separate leases, the tidelands and adjoining water areas depicted on Exhibit 1. Although Campbell Industries and Fifth Avenue Landing presently lease their respective parcels separately, and they each propose to separately develop their parcels independently in the manner discussed below, because common issues are presented by the proposals, they will be discussed for purposes of this report as though they were one entity and the parcels will be treated as though they were a single parcel, except to the extent separate discussion is warranted by specific circumstances.

The Campbell/Fifth Avenue Landing Parcels comprise approximately 15 acres of land area (including the existing parking area which Campbell Industries uses under a Tidelands Use and Occupancy Permit) and approximately 14.5 acres of water area. As shown on Exhibit 2, the water area has a typical depth of 20 to 25 feet or less.<sup>1</sup>

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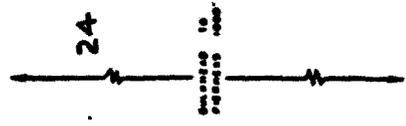
<sup>1</sup> The depth chart on Exhibit 2 was prepared by Campbell Industries from readings originally taken in February 1986 and updated in February 1996. Not all depths were reconfirmed in 1996, and certain depths may be inaccurate due to siltation or other reasons.





SAN DIEGO BAY

WATER DEPTHS of  
CAMPBELL SHIPYARD



The land use classification for the land element of each of the Campbell/Fifth Avenue Landing Parcels as set forth in the Port District's Master Plan (the "Master Plan") is "marine related industry." (See Exhibit 3.) The Master Plan includes in the marine-related industry uses classification, among other things, ship building and repair, storage and maintenance of marine machinery and construction equipment, and marine related support and transportation facilities. The water use classification for the water element of each of the Campbell/Fifth Avenue Landing Parcels as set forth in the Master Plan is "specialized berthing." (See Exhibit 3.) The Master Plan designates specialized berthing as the water use classification corresponding to the marine related industry land use classification.<sup>2</sup>

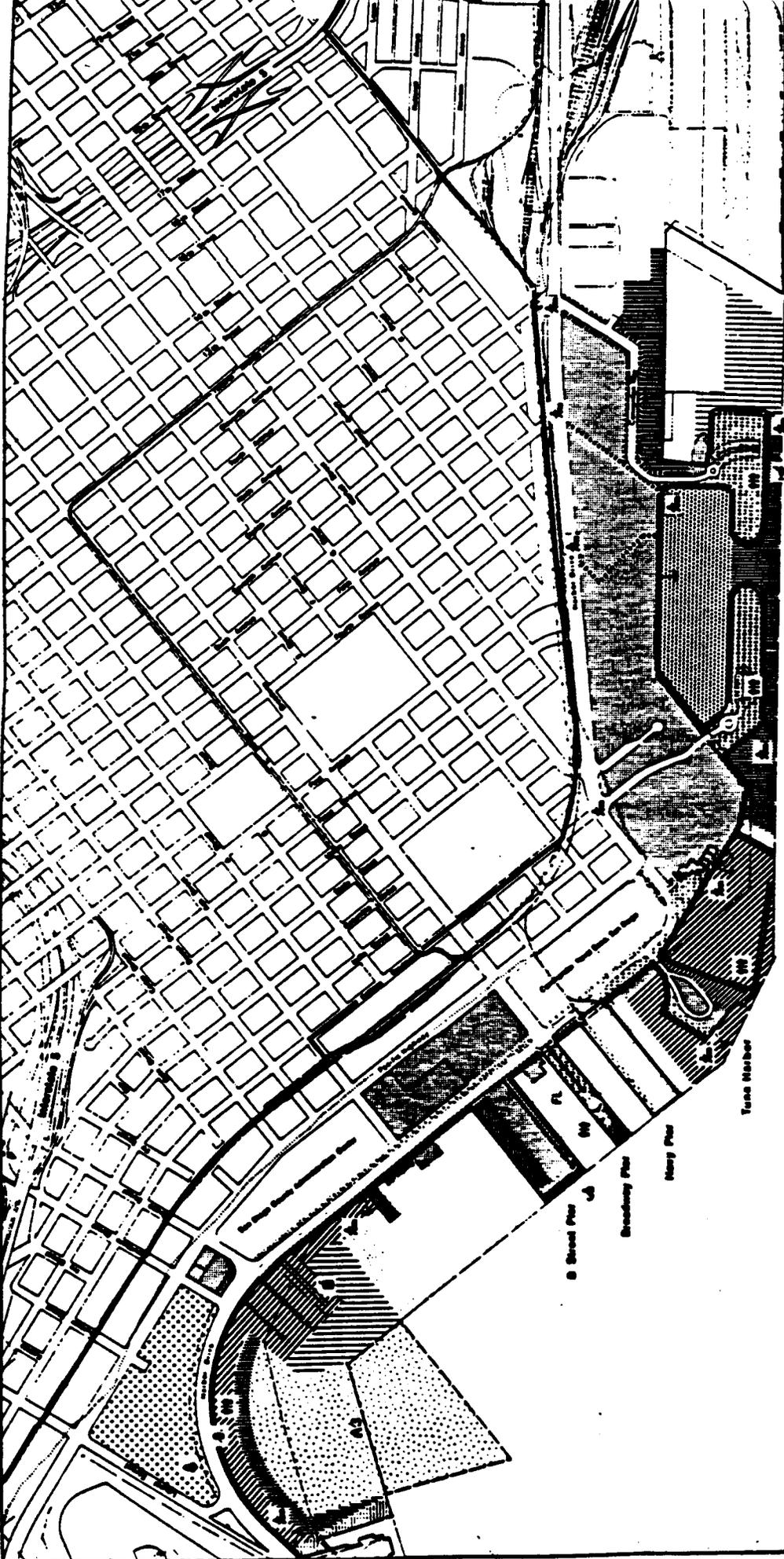
The actual current use of each of the Campbell/Fifth Avenue Landing Parcels is consistent with the current land and water use classifications. Campbell Industries operates a ship building and repair yard on its part of the Campbell/Fifth Avenue Landing Parcels. R.E. Staite Engineering operates a construction business specializing in marine projects (including pier building and pile driving) on its part of the property.<sup>3</sup>

Campbell/Fifth Avenue Landing desires to obtain a change in the land and water use classifications for the Campbell/Fifth Avenue Landing Parcels under

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<sup>2</sup> Master Plan, Page 31.

<sup>3</sup> R.E. Staite Engineering is currently in the process of relocating its marine construction activities to another parcel near the 24th Street Marine Terminal.



10th Avenue Marine Terminal

**Legend**

**COMMERCIAL**

- Commercial Fishing
- Commercial Fishing Berthing
- Commercial Recreation
- Marina Terminal
- Marina Related
- Aviation Related

**INDUSTRIAL**

- Fuel Dock
- Recreation Boat Berthing
- Terminal Berthing
- Specialized Berthing

**PUBLIC RECREATION**

- Park Plaza
- Promenade
- Open Space
- Public Access
- Vista Area
- Historic Feature

**PUBLIC FACILITIES**

- Comfort Station
- Customs
- Anchorage Landing
- FL Ferry Landing
- Boat Navigation Corridor
- Ship Navigation Corridor
- Ship Anchorage
- Boat Anchorage

**Other**

- Coastal Zone Boundary
- Mean High Tide Line
- US Pierhead Line
- US Subhead Line
- Combined US Pierhead/Subhead Line
- Lease Line
- State Lands Leased to Port District

Scale: 1" = 200'

Figure 11

**PRECISE PLAN**

Planning District 3  
CENTRE CITY EMBARCADERO

the Port District's Master Plan from "marine related industry" and "specialized berthing," respectively, to "commercial recreation" and "recreation boat berthing." Upon receipt of such change in use classifications, Campbell Industries proposes to develop on its parcel a hotel and related facilities. Fifth Avenue Landing intends to develop restaurants and other retail facilities. For purposes of this report, it is assumed the proposed developments are not allowable under the marine related industry and specialized berthing use classifications of the Master Plan, but are allowed under the "commercial recreation" use classification of the Master Plan.<sup>4</sup>

The proposed use classification changes which would facilitate the intended development of the Campbell/Fifth Avenue Landing Parcels require a formal amendment to the Master Plan. In order to adopt a Master Plan amendment for the use classifications of the Campbell/Fifth Avenue Landing Parcels, the Port District must first find that the proposed change in use classifications complies with California Public Resources Code Section 30708(c). That section requires that "[a]ll port-related developments shall be located, designed, and constructed so as to ... [g]ive highest priority to the use of existing land space within harbors for port purposes, including, but not limited to, navigational facilities, shipping industries, and necessary support and access facilities."

The Public Resources Code does not define either "port-related developments" or "port purposes," as those terms are used in Section 30708(c).

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<sup>4</sup> See Addenda A and B.

Therefore, this report assumes that the proposed change in use classifications and the proposed developments described above are "port-related developments" for purposes of Public Resources Code Section 30708(c).

Also, for lack of a better definition, this report assumes that "port purposes" as used in Public Resources Code Section 30708(c), encompasses all those uses which are related to deep water ports. These include uses for which harbor frontage is essential, such as ship building, as well as uses for which harbor frontage is not essential but which nevertheless indirectly or directly rely on the harbor, such as small boat sales and subcontractors to the ship repair industry.

Uses which are often located on the water's edge, but which are not directly related to the water, such as hotels, restaurants and general retail shopping facilities, are not deemed to be port purposes for this study. Although these uses can be and often are enhanced by being on the waterfront, and the presence of these uses may in turn enhance the waterfront, a waterfront location is not essential and the uses do not depend or rely on the water.

The Port District's Master Plan itself recognizes this distinction between uses which are inextricably related to the water and those which are merely enhanced by the waterfront. As stated in the Master Plan:

The marine-related industry land use classification and the specialized berthing water use classification presently applicable to the Campbell/Fifth Avenue Landing Parcels fall within the "water dependent" category described in the Master Plan.<sup>6</sup>

The third category of uses identified in the Master Plan, "waterfront enhancing uses," do not require waterfront sites. Although, as noted in the Master Plan, these uses can "lend enhancement to the waterfront,"<sup>7</sup> such uses are not by necessity dependent upon or linked to the waterfront. The Master Plan lists as examples of such waterfront enhancing uses restaurants, hotels, and public recreation areas providing facilities for golf, field sports and passive recreation. The principal new land uses proposed by Campbell Industries and Fifth Avenue Landing generally fall into this third category. (Elements of the proposed development, such as the marina, the water transportation center and the recreational pier/breakwater, would seem to fall within the category of water dependent, but for purposes of this report, it is assumed that the major land use elements are the defining uses of the parcels.)

The Port District's own Master Plan recognizes, consistent with Public Resources Code Section 30708(c), that the first two broad categories of water

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<sup>6</sup> The Master Plan arguably treats as "water dependent" or "water linked" certain uses which might not be "port purposes" under Public Resources Code Section 30708(c). "Port purposes" are limited to navigation

<sup>7</sup> "Water dependent uses require waterside sites and direct access to the water to function. For such uses, the land activity is directly related to a water activity and requires navigable channels and specialized facilities at the land-water interface. Examples of these include boat and ship building and repair

dependent and water linked uses are to be given priority over the third category of waterfront enhancing uses because of the short supply of developable waterfront sites.<sup>8</sup> This report was prepared to assess the current and perceived future demand for any port purposes to which the Campbell/Fifth Avenue Landing Parcels can reasonably be put so that the Port District can, pursuant to its Master Plan and Public Resources Code Section 30708(c), give priority to those port purposes in connection with the proposed change in land use classification for, and development of, the Campbell/Fifth Avenue Landing Parcels.

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<sup>8</sup> See Master Plan, Page 18.

### III

#### PROCEDURE

The first step in preparing this report was to identify all port purposes to which the Campbell/Fifth Avenue Landing Parcels could possibly be put. Each of the uses contained in the scope of work provided by the Port District (a copy of which is attached as Addendum C), was assumed to be a potential port purpose. Input as to other potential port purposes was sought from various members of the staff of the Port District and members of the staff of the California Coastal Commission at meetings held with those persons. The Port District's Master Plan was also reviewed to determine if there were other port purposes allowable on the Port District's tidelands which had not yet been identified by the foregoing methods.

After identifying the potential port purposes to which the Campbell/Fifth Avenue Landing Parcels might conceivably be put, an assessment was made of the actual current and reasonably foreseeable future demand<sup>9</sup> for the use of the Campbell/Fifth Avenue Landing Parcels for those port purposes. This assessment was made because the Port District must give priority under Public Resources Code Section 30708(c) to the use of the Port District's tidelands for port

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<sup>9</sup> It is, of course, increasingly difficult to assess future demands as one projects further in the future. For purposes of this report, the attempt to assess future demand was limited to a period not greater than twenty years in the future -- the point at which any further projection is deemed meaningless.

purposes. Although, the Public Resources Code does not elaborate on what this requirement means, it was assumed for this report that priority need only be given under Section 30708(c) for port purposes for which there is an actual current or reasonably foreseeable future demand.<sup>10</sup> For example, if there presently exists an overabundance of fish processing facilities on San Diego Bay, and the projected growth in demand for fish processing facilities on San Diego Bay is such that there will be a more than ample supply of such facilities on San Diego Bay for the foreseeable future, Public Resources Code Section 30708(c) would not require that the Campbell/Fifth Avenue Landing Parcels be set aside and held for use as a fish processing facility.

In making the assessment of current and reasonably foreseeable future demand for the identified port purposes, the suitability of the Campbell/Fifth Avenue Landing Parcels to accommodate each identified port purpose was also examined. Even if there is a well documented demand for a particular port purpose, if the parcels in question are not suitable for that particular purpose, there is, as to those parcels, no real demand for that specific purpose, and there should be no need to give priority under Public Resources Code Section 30708(c) for a use that cannot be accommodated. For example, if there were a need in San Diego for large scale fish processing facilities, there would nevertheless be no need to give priority under Public Resources Code Section 30708(c) to the use of the Campbell/Fifth Avenue

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<sup>10</sup> This definition appears to be consistent with the decisions set forth in administrative cases dealing with issues related to future demand.

CURRENT AND FUTURE DEMAND FOR  
IDENTIFIED PORT PURPOSES AND THE SUITABILITY OF  
CAMPBELL/FIFTH AVENUE LANDING PARCELS FOR THOSE PURPOSES

1. Ship Building and Repair.

The most obvious port purpose for the Campbell/Fifth Avenue Landing Parcels is ship building and repair since that is the current use of the largest portion of the property.

San Diego Bay is home to a number of ship building and repair facilities, including the shipyards operated by National Steel & Shipbuilding Co. ("NASSCO"), Southwest Marine, Inc. ("SWM"), and Continental Maritime of San Diego, Inc., as well as the shipyard operated by Campbell Industries on a part of the Campbell/Fifth Avenue Landing Parcels.<sup>11</sup> In terms of total employment, San

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<sup>11</sup> There are numerous other smaller shipyards and subcontractors as well. This report does not examine the smaller shipyards or subcontractors, either individually or as a whole. To varying degrees, the smaller shipyards are dependent on the larger yards, or their fortunes are parallel to the fortunes of the larger yards. The determination of the need for the Campbell/Fifth Avenue Landing Parcels for a shipyard for purposes of Public Resources Code Section 30708(c) can be adequately addressed by examining the trends of the larger yards and of the U.S. Navy.

Diego is the largest ship building and repair port on the Pacific Coast of the United States and is one of the largest in the entire United States.

San Diego is the home port of the United States Navy's Pacific Fleet, and has one of the largest concentrations of U.S. Navy vessels in the country. Consequently, the U.S. Navy is the predominant influence on the ship building and repair industry in San Diego. Although San Diego's shipyards have historically been involved in new construction and repair for both the Navy and the private sector, there is currently, and there has been in the recent past, little significant construction of new ships for the private sector. Of all the shipyards, only NASSCO is currently engaged in the construction of new ships, and approximately 90-95% of new ship construction at NASSCO is for the Navy. Ship repair work in San Diego is likewise dominated by work for the Navy. Of the approximately 3,900 people who have, on average, been employed in recent years in San Diego on ship repair work, approximately 3,500 are employed in connection with repair work on Navy ships.<sup>12</sup>

It is very difficult for San Diego shipyards to compete for either new construction or repair work for the private sector. Commercial ship repair and construction operates in a national, and in many cases a worldwide, market. San Diego shipyards compete not only with each other but with other shipyards on the Pacific Coast of the United States, as well as shipyards on the Gulf Coast and the East

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<sup>12</sup> Department of the Navy, Supervisor of Shipbuilding, Conversion and Repair, San Diego.

Coast of the United States and with shipyards in other countries.<sup>13</sup> San Diego shipyards have had trouble competing as a result of the higher cost of doing business in San Diego. Among other factors, (i) the cost of labor is higher in San Diego than in many other states or countries; (ii) insurance costs are higher in California than in many other locations; and (iii) shipyards in San Diego are often subject to more intense regulation and scrutiny with regard to environmental issues than shipyards in foreign countries or even in some other states (for example, with respect to local air or water pollution control standards). There is no reason to believe that these relative disparities in the cost of doing business will change in the reasonably foreseeable future.

Other elements have also reduced the amount of private sector shipbuilding and repair work available to San Diego shipyards. For example, the Campbell shipyard was quite busy in the 1980's building and repairing state-of-the-art purse seiners for the U.S. tuna fleet. At that time, much of the U.S. tuna fleet was homeported in San Diego and operated in the eastern Pacific. However, the U.S. government took steps beginning in the early 1970s to strictly regulate the number of dolphin that could be killed in connection with the netting of tuna by U.S. tuna boats. At that time, the purse seiner tuna fleet relied upon the principle that, in the

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<sup>13</sup> San Diego shipyards can more easily compete for Navy construction and repair work. New ship construction for the U.S. Navy must take place in a shipyard in the United States. Therefore, there is no competition from foreign shipyards. The situation with Navy repair work is even more favorable to San Diego shipyards. Preference is given to shipyards at the ship's home port. San Diego shipyards therefore have a distinct advantage with respect to the large fleet of ships homeported in San Diego.

eastern Pacific, schools of dolphin swim above large schools of yellow fin tuna. This allowed the purse seiners to easily locate the tuna and to set their nets by surrounding the dolphin. Unfortunately, this also resulted in the death of some of the dolphins regardless of the efforts made to prevent such deaths. In 1990, the United States banned imported tuna caught by the encirclement of dolphin. As a result, the tuna fleets began operating in the western Pacific where dolphin do not swim with the tuna. It was no longer as convenient for the seiners to return to San Diego. The demand for construction and repair of tuna purse seiners in San Diego evaporated with the departure of the fleet.<sup>14</sup> Although various legislative efforts are underway to try to make it possible to again fish for yellow fin tuna in the eastern Pacific (by, among other things, allowing the importation of "dolphin safe" tuna if it can be shown that the encirclement nets no longer seriously injure or kill dolphins), the effect of any legislation in returning the tuna industry to San Diego, and the resulting effect on the shipbuilding and repair business in San Diego is speculative at this time.<sup>15</sup>

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<sup>14</sup> Prior to constructing purse seiners in the 1980's, Campbell Industries constructed river patrol boats for the U.S. Navy during the Vietnam war. The demand for such vessels no longer exists. Since the early 1980s, Campbell has sought out other private sector work, perhaps the most notable of which was the construction of a state-of-the-art ocean going mega-yacht tender. The amount of work of this nature has been sporadic and limited.

<sup>15</sup> As discussed in more detail in Section 5 below dealing with commercial fishing, the net effect of any legislative effort to return the tuna industry to San Diego is predicted to be minimal. The effect on shipbuilding and repair should therefore be negligible. Even if the tuna fleet were to return to San Diego, there would be little increase in shipbuilding activity in San Diego. As discussed above, shipbuilding for the private sector in San Diego is noncompetitive. Any increase in ship repair as a result of the return of the tuna fleet could be more than adequately handled by the remaining shipyards.

Private work at west coast shipyards continues at unhealthy levels; each year shipyards go out of business, declare bankruptcy or consolidate.<sup>16</sup> Although construction of new double hull oil tankers required by the Jones Act will provide additional new construction work to U.S. Shipyards, NASSCO is the only San Diego shipyard capable of such construction.<sup>17</sup>

Even the large Navy presence in San Diego has not been able to adequately compensate for the lack of private work. Most of the larger shipyards are operating, to various degrees, well below capacity. NASSCO's new construction work, which presently comprises about 75% of its total work in progress, is operating at a pace equal to about 60% of new construction capacity. NASSCO's repair work is operating at about only 35% of repair capacity. Continental Maritime and SWM are reported to be operating at or below 60% of total capacity. The Campbell shipyard is operating at even more severely reduced levels – between 10% and 20% of peak capacity.

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<sup>16</sup> See "West Coast Shipyards Annual Survey" published yearly in March by Pacific Maritime magazine.

<sup>17</sup> As will be discussed further below, the Campbell/Fifth Avenue Landing Parcels are not large enough to accommodate the construction of large ships, such as new oil tankers. Campbell Industries has, however, recently completed construction of a state of the art yacht tender (approximately 250 feet in length), and has tried to develop business constructing and/or repairing large yachts. This is, however, a small niche market which is seasonal in nature, and as such, it is not enough, alone, to make a shipyard in this location profitable.

Because work for the U.S. Navy comprises 90% or more of the total work done in San Diego shipyards, any increase in the amount of Navy work at San Diego shipyards will result in a much greater reduction in the underutilization of the shipyards than will a dramatically larger percentage increase in work for the private sector. However, for a number of reasons, it is also unlikely that there will be a significant increase in the amount of Navy work available to shipyards in San Diego in the foreseeable future. Indeed, it is likely that the amount of Navy work available to the San Diego shipyards will decrease.

Although the total value of U.S. Navy "progress payments"<sup>18</sup> to San Diego based repair firms has increased somewhat since the early 1990s, as shown in Exhibit 4, progress payments for repair work has remained level or decreased slightly. As demonstrated in Exhibit 5, the total number of shipyard jobs associated with Navy construction and repair contracts is likewise projected to remain fairly constant or even decrease somewhat for the foreseeable future. Several factors strongly indicate that this general leveling off or downward trend in overall Navy work in San Diego will continue:

As older ships are decommissioned, the relative age of the fleet drops. Newer ships generally require less maintenance than older ships: newer ships have propulsion systems that require less maintenance; hulls of the new ships

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<sup>18</sup> Progress payments include the initial contract award, contract modifications, retention payments, annual maintenance contract payments and service contracts.

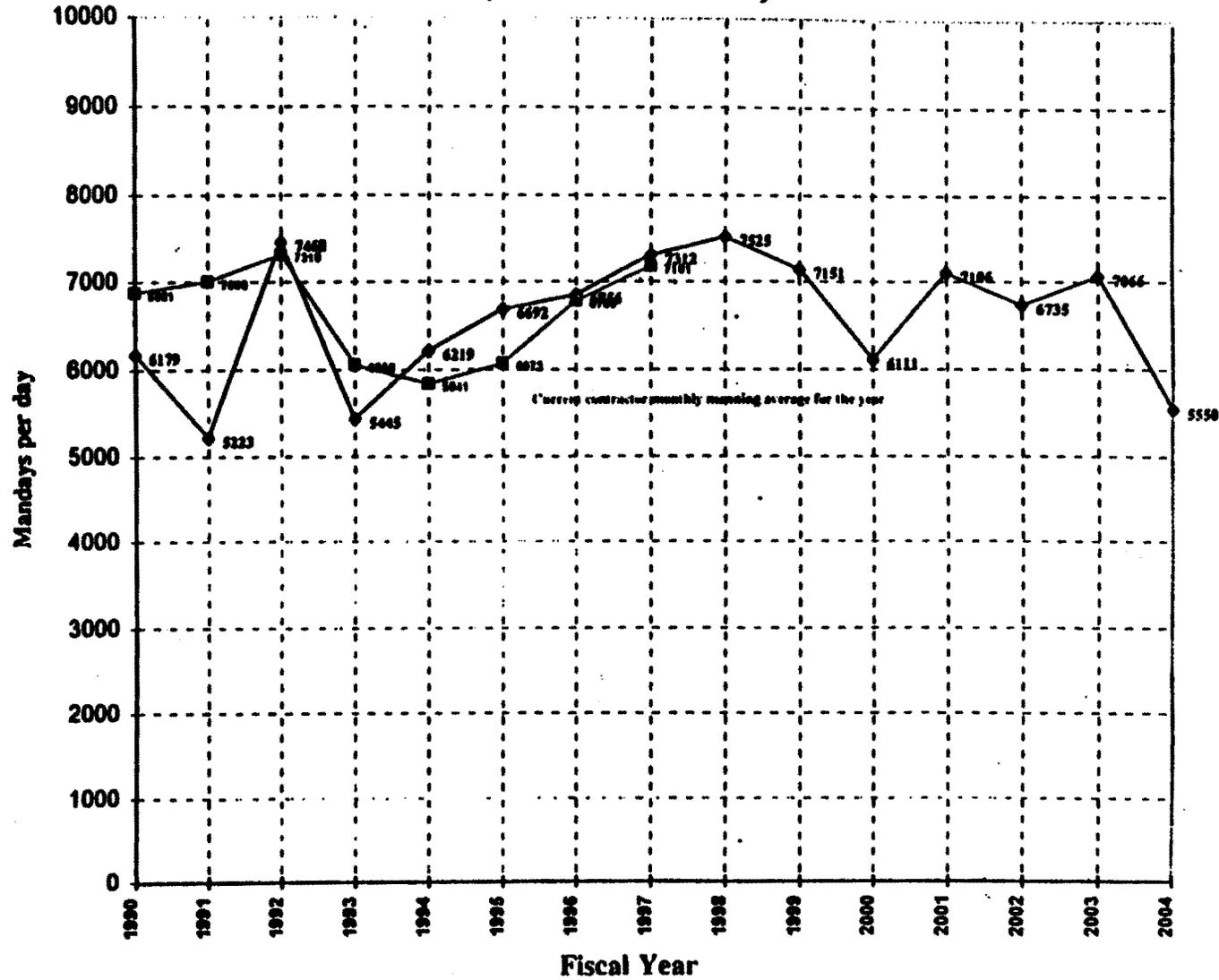


SUPSHIP San Diego  
MSR/ABR Progress Payments

In \$ Millions

	<u>FY91</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u> (Est)
New Construction	274	173	121	459	387	429	500
Repair	234	375	234	183	195	229	210
(Decoms)	(0)	(13)	(1)	(12)	(3)	(1)	(0)

# COMPARISON CHART (ANNUAL AVERAGE)



Prepared by:  
Workload Forecasting Branch  
SSD Code 213

◆ Navy Manpower Projection  
■ Contractor Actual Manning

Process Date/Time: 4/9/97 at 1:35 PM

Exhibit 5

require less maintenance and therefore less time in a drydock; and many parts of the newer ships are "modular" and are more easily and quickly replaced.

- Federal law limits allocation by the Navy of maintenance funds to private shipyards to 40% of the total maintenance funds available. The amount of work available to private shipyards, therefore, cannot increase unless the total ship repair budget increases.
- The Department of Defense budget continues to undergo tight scrutiny by both the United States Congress and the Executive Branch.<sup>19</sup>
- The size of the U.S. fleet continues to shrink<sup>20</sup>, and San Diego will not be immune from the effects of fleet downsizing indefinitely. For the period from fiscal year 1991 through fiscal year 1997, a total of 30 ships were decommissioned in San Diego. (See Exhibit 5)

These trends will continue to place downward pressure on the total amount of Navy work available to San Diego shipyards. Moreover, additional

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<sup>19</sup> House Concurrent Resolution No. 84, passed by the U.S. House of Representatives and the U.S. Senate on June 5, 1997, establishes a level defense spending budget through the fiscal year 2002.

<sup>20</sup> Due to decommissionings, approximately 9-10 new ships must be built each year to maintain a steady fleet size. Only 4-5 new ships are being built currently due to budgetary constraints.

Factors will also severely limit the amount of Navy work available to any shipyard located at the Campbell shipyard site even if the total amount of Navy work available in San Diego does not decrease. In recent years, the Campbell shipyard has been able to capture only a few Navy contracts, obtaining less than 1% of the total dollar value of Navy repair contracts awarded from November 1, 1994, through October 31, 1995, and approximately 5% of the total number of Navy contracts for that same period.<sup>21</sup> Factors limiting the amount of Navy work available to any shipyard occupying the Campbell site include:

The property is not large enough to build the Navy ships being built today. Few, if any, Navy ships smaller than 500 feet in length are being constructed today.<sup>22</sup>

The current Campbell shipyard does not have sufficient facilities to compete for repair work of Navy vessels on site.<sup>23</sup> To compete for these contracts, any

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<sup>21</sup> Department of the Navy, Supervisor of Shipbuilding, Conversion and Repair, San Diego.

<sup>22</sup> The NASSCO shipyard is the only San Diego shipyard engaged in new construction for the Navy. The latest contracts for new construction/refurbishment of Navy ships at the NASSCO shipyard involves ships of a size much larger than can be handled at Campbell. The most recent ship launched, the USNS Watson, measured 950 feet in length. See Exhibit 6.

<sup>23</sup> Campbell, or a successor at the site, could, of course, limit its repair work to pier-side repair work done on ships at the 32nd Street Naval Station or the North Island Naval Base, or could utilize the Navy's graving dock or the Port District's berth 24-10 at the 24th Street Terminal. Neither of these alternatives would require a waterfront site, however, and would therefore not justify the continued use of the Campbell site as a shipyard.

other shipyard operator seeking to conduct a successful business at the site of the present Campbell shipyard would be required to construct new, longer piers to accommodate Navy ships (with extensive dredging to accommodate Navy ships with drafts deeper than the present water depth at the site), yet solve the problem of interference by such piers with navigation to and from the 10th Avenue Marine Terminal.<sup>24</sup>

- The Navy has begun awarding "womb to tomb" contracts for some of its ships. The shipyard that builds a ship is given the contract to service it throughout its life. The Campbell/Fifth Avenue Landing Parcels are not large enough for construction of new ships. Therefore, because the shipyard will be incapable of building the ships, this policy will prevent the shipyard from repairing them.<sup>25</sup>

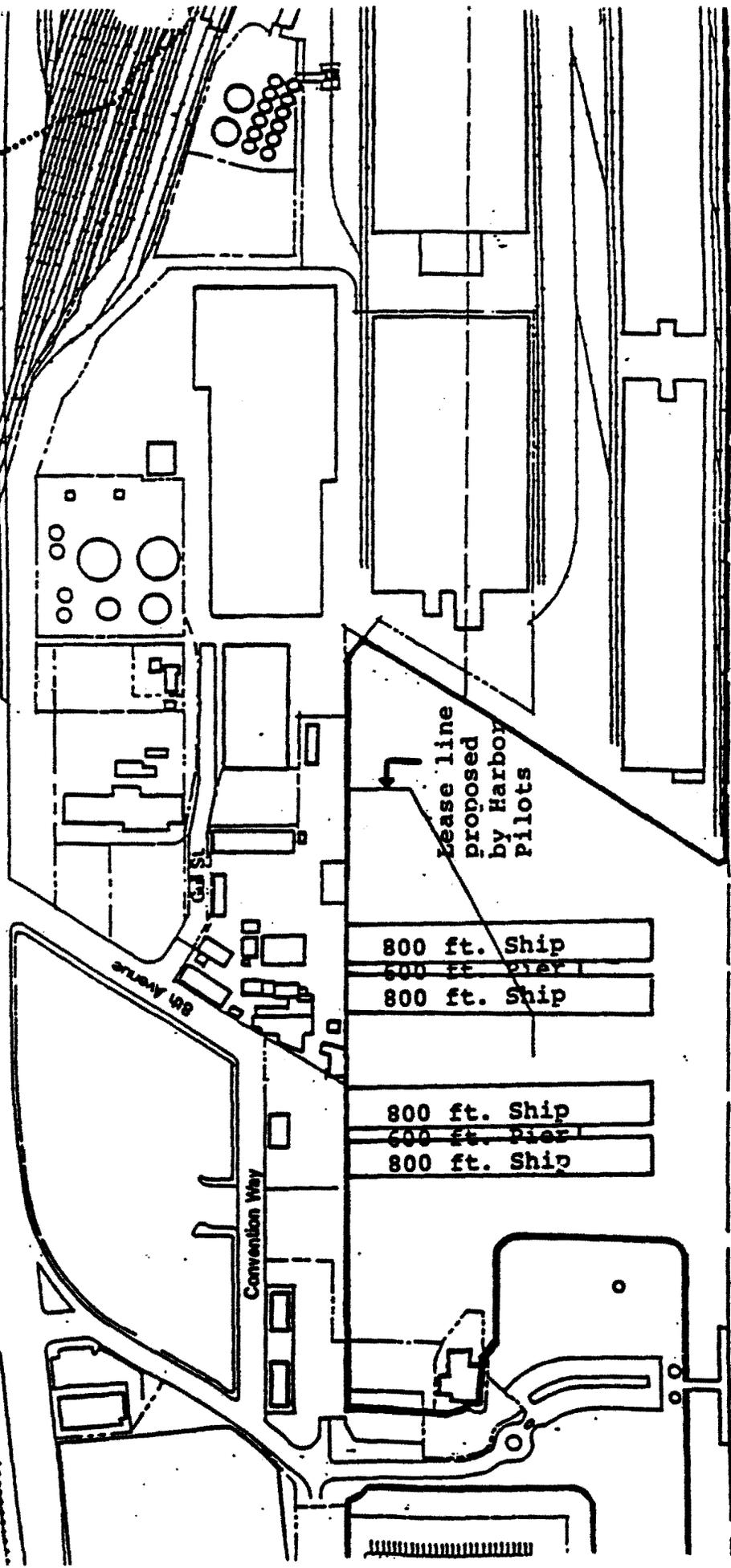
The closure of the Long Beach Naval Shipyard has not had a dramatic effect on demand at San Diego's shipyards, nor is it expected to do so. Although the closure was estimated to result in a transfer of up to 1,000 jobs to San Diego, no additional facilities were necessary because of the tremendous excess capacity at the San Diego shipyards. Although work has flowed to San Diego as a

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<sup>24</sup> See Exhibit 6, showing the effect on navigation of two new piers at the Campbell site together with two 800 foot vessels at each pier.

<sup>25</sup> See footnote 23.

10th Avenue Marine Terminal



scale approx.



result of this closing, such work was offset, at least in part, by a reduction in the total number of ships stationed in San Diego.<sup>26</sup>

The Marine Industrial Assessment previously commissioned by the Port District and prepared by Booz-Allen & Hamilton, dated May 1996, to assess the demand for and the supply of "marine industrial capacity," recommended that any proposed use change of the Campbell shipyard should be "carefully reviewed" by the Port District. The reason given in the Booz-Allen report for expressing caution concerning a change of use at the site was that certain Navy ships homeported in San Diego cannot be repaired at existing facilities. These ships are identified in the Booz-Allen report as the CV (aircraft carrier) and LHA/LHD (amphibious assault) class vessels, as well as the SSN attack submarines. The Booz-Allen report, in fact, acknowledges that there is excess ship repair capacity, in general, in San Diego. The problem is that there are not adequate facilities in San Diego to repair these two particular types of vessels. Although NASSCO is currently upgrading its drydock facilities to enable it to repair amphibious assault ships, there are no drydocks in San Diego, and none planned, large enough to service aircraft carriers.<sup>27</sup>

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<sup>26</sup> See Exhibit 4 showing that 30 Navy ships have been decommissioned in San Diego in the last 6 years. Exhibit 5 also shows a relatively steady employment level for Navy repair work in San Diego notwithstanding the closing of Long Beach Naval Shipyard.

<sup>27</sup> Repair work on aircraft carriers, to the extent performed in San Diego, is currently done only at the Naval Air Station in Coronado. A new nuclear repair facility is currently being constructed at the Naval Air Station in order to service the nuclear carriers to be stationed in San Diego. Such facilities will not include a drydock. Newport News Shipbuilding, Inc., a large east coast  
(continued...)

Preserving the Campbell/Fifth Avenue Landing Parcels for use as a shipyard cannot change this situation. The Campbell/Fifth Avenue Landing Parcels are not large enough to service either amphibious assault ships or aircraft carriers. A drydock capable of serving either type of ship at the location of the Campbell/Fifth Avenue Landing Parcels would seriously interfere with navigation at the adjoining 10th Avenue Marine Terminal.<sup>28</sup>

Finally, a shipyard located at the site of the current Campbell shipyard will find itself increasingly at odds with neighboring land uses. The noise, dust, paint overspray and other byproducts associated with many of the activities of a traditional shipyard will be even more incompatible with the new San Diego

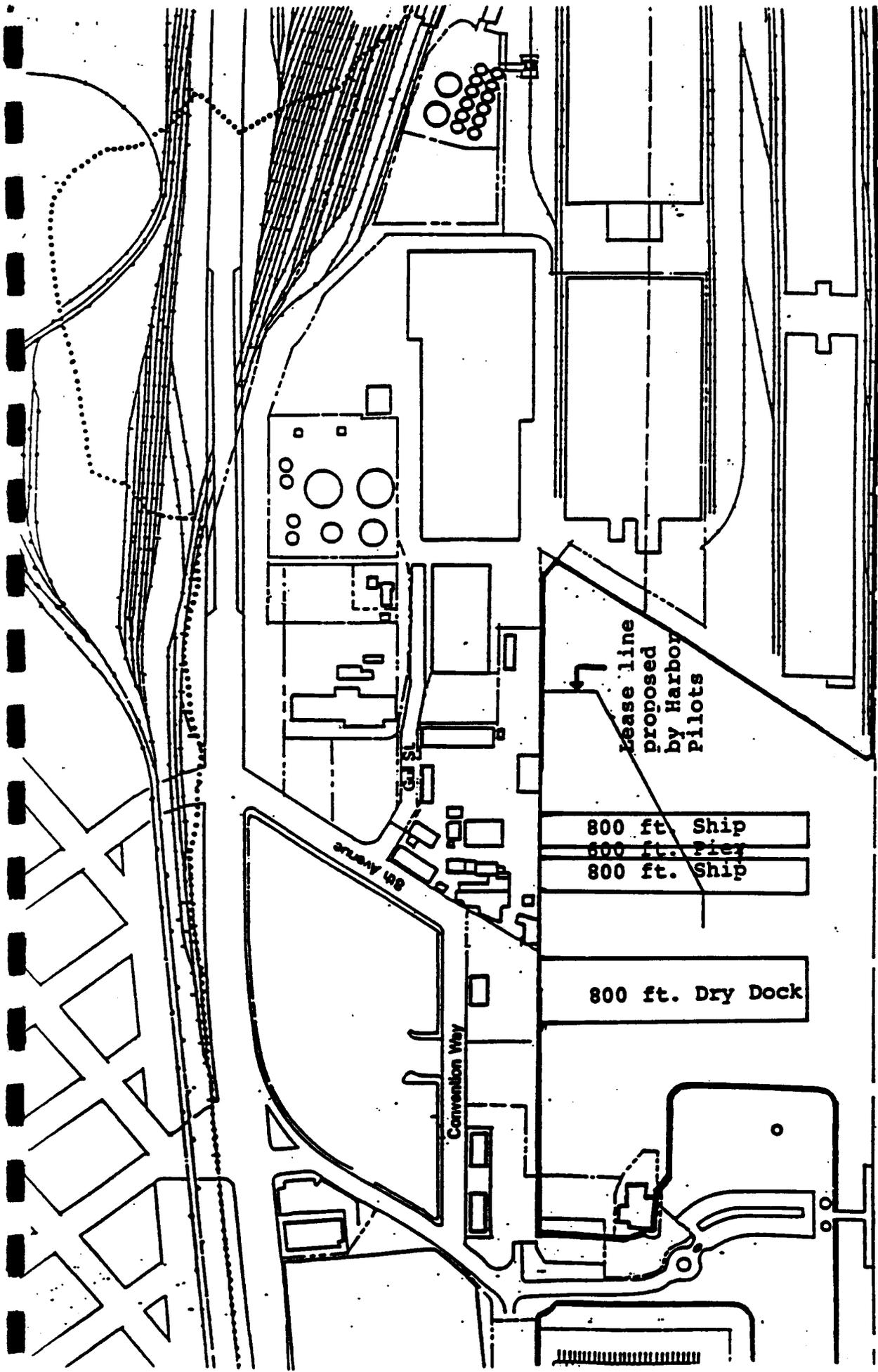
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<sup>27</sup>(...continued)

shipbuilding and repair company is reportedly in the process of purchasing controlling interest in Continental Maritime, a local ship repair facility. Although Newport News has carrier repair capabilities on the east coast, the Continental Maritime facility is not large enough for carrier repairs on site.

<sup>28</sup> See Exhibit Z, showing the effect on navigation of a 800 foot long drydock and a single pier. LHA/LHD class ships are in excess of 825 feet in length; a typical carrier is 1000 feet or more in length. NASSCO's drydock, when completed, will measure 820 feet in length and 170 feet in width. Although the water depth at the site is far too shallow for a drydock of this size, and is therefore also a limiting factor, it is unnecessary to examine the feasibility of dredging the site since the effect on navigation at the 10th Avenue Marine Terminal makes such use unfeasible.

10th Avenue Marine Terminal



scale approx.



Convention Center expansion to be constructed immediately across the street from the site.<sup>29</sup>

For all of the foregoing reasons, notwithstanding the fact that a shipyard currently operates on a portion of the Campbell/Fifth Avenue Landing Parcels, there is no demand now or in the reasonably foreseeable future for a shipyard at that site, and the site is, in many ways, physically unsuitable for a competitive shipyard. There is, therefore, no need to give priority to the continued use of the site as a shipyard under California Public Resources Code Section 30708(c).

## 2. Marine Terminal/Shipping.

Marine terminal activities and shipping on San Diego Bay are currently located at two facilities owned by the Port District – the 10th Avenue Marine Terminal in San Diego adjacent to the Campbell/Fifth Avenue Landing Parcels, and the 24th Street Terminal in National City. The 10th Avenue Marine Terminal is configured as a bulk and break bulk cargo facility and contains cold

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<sup>29</sup> Paint overspray, for example, is already a problem for Campbell Industries and the other San Diego shipyards, even though they are all, to varying degrees, in neighborhoods which are primarily industrial. As a result, painting of ship superstructures requires expensive and time consuming efforts at controlling overspray onto adjoining properties by the use of "shrink wrap," tenting and other efforts to keep the paint spray from blowing. Despite these efforts, the shipyards report that they have had to pay to repair cars parked nearby which were damaged by paint overspray. This situation can only worsen with the increase in activity which will be associated with the proposed convention center expansion.

storage facilities, warehouses, office space and a dry-bulk cargo loading device. The 24th Street Terminal has a container crane and warehouse and office facilities, and handles containerized cargo as well as roll-on/roll-off cargo, and bulk and neo-bulk cargos. Each of the terminals is equipped to handle multiple carriers. There are no privately owned and operated shipping facilities on San Diego Bay which are dedicated exclusively to a single ocean going carrier.

As shown in Exhibit 7, during the period from 1981 through 1987, throughput at the two terminals averaged in excess of 1.5 million tons per year. By contrast, from 1991 through 1995, throughput ranged from 0.5 million tons to 1 million tons per year.

In 1995, the Port District retained a consulting team to develop a strategic plan to provide guidance to the Port District for its various operations. Among other issues, the Strategic Plan dated June 1996 prepared by Booz-Allen & Hamilton Inc., John Burnham & Co., Landrum & Brown Inc. and KH Consulting (the "Strategic Plan") addressed the nature of the Port District's maritime business and identified specific opportunities for increasing traffic at the two maritime terminals.

The Strategic Plan projected the amount of growth in maritime commerce that might be possible under three different scenarios: (i) the "business as usual" scenario, which projected the rate of growth which might occur if the Port District took no action to increase business at the terminals; (ii) the "target" scenario,

which projected the amount of business which might result if the District aggressively marketed its services and facilities, and (iii) the "stretch" scenario, which forecasted the business volume that might result from a combination of a very aggressive marketing program by the Port District and "some dislocation" at the ports of Los Angeles and Long Beach. These forecasts are set forth in Exhibit 8. The consultant preparing the Strategic Plan opined that the "target" scenario is the most probable scenario.<sup>30</sup> The target scenario projects total throughput at 1.9 million tons in the year 2005, 2.2 million tons in 2010 and 2.5 million tons in 2015.<sup>31</sup>

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<sup>30</sup> Strategic Plan at Page IV-36.

<sup>31</sup> See also Exhibit 9 setting forth the projected throughput of the terminals as set forth in the Developmental Plan for National City Marine Terminal dated December 1995 prepared for the Port District by Atkinson Johnson & Spurrier, Inc. and BERGER/ABAM Engineers Inc. (the "24th Street Developmental Plan"). The 24th Street Developmental Plan forecasts a combined throughput of 3.5 million tons at both terminals, far in excess of the projections of the Strategic Plan. But the 24th Street Developmental Plan also calculates the presently existing cargo capacity of the terminals to be in excess of 5.1 million tons -- almost 50% greater than the forecasted throughput.

Exhibit 8  
Historical Trends -- the Port of San Diego

Year	Millions of Tons
1981	2.3
1982	1.8
1983	1.7
1984	1.3
1985	1.6
1986	1.7
1987	1.5
1988	1.2
1989	1.3
1990	0.9
1991	0.6
1992	0.5
1993	0.9
1994	1.0
1995	1.1
1996	1.5
1997	

Source: Port District

EXHIBIT 9

Forecast of Port of San Diego Maritime Tonnage

(Tonnage in Thousands)

Fiscal Year	"Business as Usual" Case	Target Case	Stretch Case
1998	1,304	1,516	1,649
1999	1,314	1,636	1,780
2000	1,326	1,722	1,878
2005	1,389	1,940	2,181
2010	1,445	2,201	2,555
2015	1,525	2,508	3,003

Source: Strategic Plan

In attempting to implement the proposals of the Strategic Plan, the Port District has begun an aggressive marketing campaign to increase the Port District's revenue from the marine terminals and has begun investigating ways to accommodate additional traffic in containerized cargo.<sup>32</sup>

The Port District has also recently taken steps to increase the utilization of the port for cold storage shipments. The Port District has entered into a new contract with an experienced cold storage operator to operate the existing cold storage facility at the 10th Avenue Marine Terminal. This facility is the only dockside facility of its kind south of Port Hueneme. Notwithstanding this fact, the facility has been severely underutilized and has been used recently primarily for shipments of fresh fruit from Chile in the winter. The Port District is seeking to expand usage of the cold storage facility year round, and is exploring other cargo, including the export of frozen poultry and the import of meat and produce which does not require fumigation.

The Port District's efforts in these and other manners to increase business at its terminals, if successful, would result in a need to handle the expanded operations. A suggestion to use all or a portion of the Campbell/Fifth Avenue Landing Parcels to expand the 10th Avenue Marine Terminal is an obvious

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<sup>32</sup> Among other things, the Port District is exploring dredging portions of the harbor to allow larger ships to load and unload at one or both terminals. Whether this dredging will occur, and the effect, if any, it will have on maritime traffic at the terminals is, at present, too speculative to take into consideration.

possibility. The Campbell Industries portion of the Campbell/Fifth Avenue Landing Parcels borders the northwest boundary of the 10th Avenue Marine Terminal. The water element associated with the Campbell Industries parcel adjoins two of the berths serving the 10th Avenue Marine Terminal.<sup>33</sup>

Before any additional land is needed for the 10th Avenue Terminal, however, an extraordinary increase in business will be required. The 10th Avenue Marine Terminal is presently operating significantly under capacity.<sup>34</sup> At present the 10th Avenue Marine Terminal has eight berths. It is unusual for more than one, or at most two, ships to call at the terminal at the same time. There is no shortage, now or in the foreseeable future, of berth space at the terminal. Likewise, there is no shortage of capacity in the transit sheds or warehouses at the 10th Avenue Terminal. Transit Shed No. 1 is virtually always empty. The warehouses are also severely underutilized. It will, therefore, be a great number of years, if ever, before any additional transit shed or warehouse space is needed at the 10th Avenue Terminal. As shown in , under the most optimistic "stretch" scenario, throughput at

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<sup>33</sup> The Land Use Plan of the National City Local Coastal Plan, certified by the Coastal Commission in 1988, provides as follows: "The National City Marine Terminal is one of only two terminals within the Port, and is the only one capable of expansion." (Land Use Plan, at page 41.) Nevertheless, it was assumed for purposes of this report that expansion of the 10th Avenue Marine Terminal was a possible port purpose for the Campbell/Fifth Avenue Landing Parcels.

<sup>34</sup> See Exhibits 10 and 11. Although the 24th Street Developmental Plan asserts that the forecasted demand for bulk cargo will exceed capacity, this is due solely to inadequacies of the antiquated bulk loading machinery which is presently being upgraded.

the Port District's two marine terminals is forecast to reach approximately 3 million tons in fiscal year 2015. As shown on Exhibit 10, the projected cargo capacity of the two terminals is calculated to exceed 5 million tons. Therefore, even under the optimistic "stretch" scenario of the Strategic Plan, cargo forecast to flow through the terminals through the fiscal year 2015 will barely reach 60% of the capacity of the terminals.<sup>35</sup>

Even if there were a need for more land, there is already a great deal of extra space at the 10th Avenue Marine Terminal in which to expand. Approximately 40 acres of Port District property classified for marine related industry use immediately adjacent to the terminal (which is, itself, approximately 60 acres in size) are presently utilized for purposes other than a marine terminal, including the Port District's maintenance yard and a longshoreman's hall. These uses could be better accommodated elsewhere. In addition, many of the existing transit sheds, warehouses and other facilities at the terminal are presently severely underutilized. The Port District is considering whether some or all of these facilities could be removed or relocated to make better and more efficient use of the terminal.<sup>36</sup>

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<sup>35</sup> See Exhibits 8 and 9.

<sup>36</sup> The Port District is reportedly undertaking a study of whether, and how, to reconfigure the facilities at the 10th Avenue Marine Terminal, but no decisions have yet been made.



BERTH	CLASS	BERTH LENGTH (FEET)	BERTH OCCUP RATE	WORK TIME (HOURS)	WORK DAYS	SUSTAINED HANDLERATE (TONS/DAY)	LIQUID BULK TOTALS (TONS)	DRY BULK TOTALS (TONS)	BREAK BULK TOTALS (TONS)	NECBULK TOTALS (TONS)	CONTAINER TOTALS (TONS)	PORTO TOTALS (TONS)	TOTAL CARGO (TONS)					
<b>10th Avenue Marine Terminal</b>																		
10-1	Neobulk	540	0.15	16	350	200				160,000			160,000					
10-2	Neobulk	540	0.10	16	350	240				134,400			134,400					
10-3	Container		0.10	16	350	150					84,000		84,000					
10-4	Break Bulk	645	0.09	16	350	30			100,800				100,800					
10-5	Break Bulk	645	0.09	16	350	30			100,800				100,800					
10-6	Break Bulk	645	0.09	16	350	30			100,800				100,800					
10-7	Bulk Cement	645	0.40	16	300	200		440,000					440,000					
10-8	Dry Bulk	400	0.40	24	300	200		620,500					620,500					
10-9	Liquid Bulk	400	0.10	16	300	75	42,000						42,000					
<b>National City Marine Terminal</b>																		
20-1	Break Bulk	650	0.40	16	300	30			100,800				100,800					
20-2	Break Bulk	650	0.40	16	350	30			87,200				87,200					
20-3	Liquid Bulk		0.20	16	350	75	84,000						84,000					
20-4	Neobulk	500	0.40	16	350	500				1,120,000			1,120,000					
20-5	Container	500	0.10	24	350	350					294,000		294,000					
20-6	PORTO		0.10	16	350	500						280,000	280,000					
20-10	Neobulk	750	0.50	16	350	200				560,000			560,000					
20-11	Neobulk	750	0.50	16	350	200				560,000			560,000					
SUBTOTAL =												2,167,300						
ESTIMATED PRACTICAL BERTH CARGO CAPACITY =												125,000	1,378,500	470,400	2,542,400	378,000	280,000	5,173,300
SUBTOTAL =												3,046,000						



*Table—Estimated Existing Berth Cargo Capacity*

Commodity	81/82	82/83	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	% Total
Molasses & Palm Oil	1,491	54,132	52,292	65,992	10,822						2,001	4,011	0.73%
Petroleum	376,124	342,540	59,389	133,879	293,671	177,524	88,941	171,472	129,828	79,258	39,415	41,969	7.68%
Lumber	104,558	143,508	192,112	193,951	220,710	320,856	374,876	431,242	290,168	166,002	118,912	122,592	22.45%
Newsprint	37,386	37,207	43,124	51,730	54,481	63,187	54,028	66,592	57,549	50,462	34,888	35,791	6.55%
Automobiles	-	-	-	-	-	-	-	-	-	34,305	52,612	53,111	9.72%
Fruit	-	-	-	-	-	-	-	-	-	-	-	1,174	0.21%
Commodities	-	-	-	-	74,238	83,480	107,302	110,445	119,145	93,110	100,500	79,896	14.63%
Miscellaneous	207,688	154,837	203,291	208,441	41,180	21,133	110	31,800	16,068	42,876	5,665	5,135	0.94%
	-	-	-	-	41,210	32,388	30,120	30,825	30,210	26,779	30,929	20,896	3.83%
	39,928	34,344	24,118	66,087	62,910	74,123	105,840	83,306	82,934	77,463	81,389	97,283	17.81%
Engineering Components	41,858	9,823	26,619	73,851	89,913	120,207	54,383	43,549	43,051	8,901	-	-	0.00%
Chemicals	128,662	224,108	122,040	38,472	45,375	254	72	-	-	-	-	6,277	1.15%
Copper Concentrate	457,179	293,605	178,425	203,370	237,937	128,463	44,385	-	-	-	-	-	0.00%
Machinery	12,731	18,008	8,413	7,816	2,345	3,331	5,049	5,337	5,023	7,162	1,155	532	0.10%
Cement	49,407	56,589	189,822	386,716	342,137	306,122	245,472	320,243	374,186	266,121	35,600	63,752	11.67%
Scrap Metal	24,805	155,887	89,869	55,872	46,572	-	-	-	-	-	-	-	0.00%
Grain	286,635	143,578	80,036	79,567	54,163	44,685	58,997	26,598	114,247	31,822	42,889	13,753	2.52%
<b>TOTALS</b>	<b>1,778,381</b>	<b>1,859,982</b>	<b>1,259,548</b>	<b>1,568,350</b>	<b>1,827,464</b>	<b>1,383,751</b>	<b>1,189,585</b>	<b>1,331,599</b>	<b>1,262,408</b>	<b>884,387</b>	<b>555,955</b>	<b>546,172</b>	<b>100.00%</b>

From BST Cargo Analysis Report

## Table-Historical Commodity Throughput Analysis



Exhibit 12

Railroad access for the terminal is also a problem. Only one railroad serves San Diego -- the Burlington Northern and Santa Fe Railroad. All freight leaving San Diego must first travel a substantial distance toward Los Angeles before moving eastward. This results in increased cost and a decreased level of service. The increased competition that would result from more than one railroad serving the port would directly correlate to the success of the port.<sup>37</sup> Although there are hopes to reopen the old San Diego and Arizona Eastern Railroad, this remains only a hope. And even if this railroad line were reopened, it is uncertain whether an increase in cargo would result because the cost of shipping cargo over the line to and from locations east of the Imperial Valley would be greater than the cost to ship those cargos to the Port of Long Beach.<sup>38</sup>

A different limitation on increased throughput at the terminal is also imposed by the railroad. All trains to and from the terminal must travel through downtown San Diego. This limits the hours at which trains can operate, which in turn limits the service to the terminal. This limitation would likewise affect a reopened SD&AE Railroad, although for a different reason. Since the SD&AE

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<sup>37</sup> See Strategic Plan, Page IV-44.

<sup>38</sup> See Strategic Plan, Pages IV-45-46. In addition, even if this line were to reopen, there would be other obstacles to overcome before this rail link to the east provided any benefit. The SD&AE Railroad right of way is the right of way presently used by the San Diego Trolley. Operation of the railroad would therefore be limited to hours when the trolley is not operating. Moreover, the SD&AE right of way is not directly adjacent to the 10th Avenue Terminal. In fact, the railroad must gain access to the 10th Avenue Terminal over the Burlington Northern right of way. This would probably entail a fee, again resulting in increased costs which limit the competitiveness of the railroad.

Railroad right of way is currently used by the San Diego Trolley, and a reopened railroad would need to share that right of way, the railroad would need to operate only during off hours.

The residential neighborhood adjoining the 10th Avenue Terminal may also limit the increased use of the terminal, as evidenced by the recent decision of the Port District to cease fumigation of Chilean fruit at the cold storage facility in response at least, in part, to the demands of the residents of Barrio Logan. As a result, the Port District will no longer accept produce that routinely needs fumigation, limiting, somewhat, the products which can be imported through the 10th Avenue Terminal. Should the residents of Barrio Logan decide to oppose further expansion of the facility (and any attendant noise, traffic, dust or other by products of such expansion) the Port District might again find its options somewhat limited.

For the foregoing reasons, on balance, there appears to be no demand at the present or in the reasonably foreseeable future for the use of the Campbell/Fifth Avenue Landing Parcels for shipping and/or a marine terminal.

### 3. Aquaculture.

Aquaculture is the cultivation, or growing, of things that live in the water. (Mariculture is salt water aquaculture.) There is little aquaculture activity of any nature occurring in or along San Diego Bay at the present time. The Hubbs

Sea World Research Institute is presently raising white sea bass on a small portion of the Southwest Yacht Club near Shelter Island. San Diego State University is also reportedly in the process of establishing an aquaculture research facility on San Diego Bay. Information provided by the Port District indicates that there has historically been very little aquaculture activity in the past. This lack of activity, or even interest, has been confirmed by a survey of various companies and research facilities engaged in aquaculture.

Of those persons contacted, most indicated that, in their opinion, the Campbell/Fifth Avenue Landing Parcels may not be suitable for commercial aquaculture purposes for two reasons. First, there was concern that the site may be too polluted for raising invertebrates (e.g., abalone, mussels and shrimps) for human consumption.<sup>39</sup> In order to raise invertebrates for human consumption, the water in which they are raised must be certified as meeting certain quality standards by the U.S. Food and Drug Administration and the California Department of Health Services. (The costs associated with such certification can be quite high.) The aquaculture companies contacted in connection with this report and researchers at the U.C. Davis Aquaculture Extension Office each expressed skepticism as to the quality of the water of San Diego Bay at the location of the Campbell/Fifth Avenue Landing

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<sup>39</sup> In fact, the Regional Water Quality Board's Cleanup and Abatement Order No. 95-21 issued in June 1995 indicates copper and other heavy metals present in the sediment at the Campbell shipyard site well in excess of the background levels at reference stations elsewhere in San Diego Bay.

Parcels and the ability to obtain the necessary certifications due to, among other things, possible human pollution and pesticide contamination of the bay.

Those same persons also expressed concern about the possibility of contamination of the site by copper or by cleaning agents that are used on U.S. Navy vessels. Both substances can be deadly to invertebrates. Although the persons contacted acknowledged that they did not know of the actual existence of any of these substances at the site in quantities that would make the site unusable, their concern over even the possibility of the presence of the substances has been sufficient to make the site undesirable for their purposes. They have been able to find other properties from which to operate which are not burdened by concern over the possibility of contamination.

Another factor cited by the aquaculture companies in voicing their opinion that the Campbell/Fifth Avenue Landing Parcels are unsuitable for commercial aquaculture is the size of the site. According to those contacted, in order to be profitable a commercial aquaculture facility which raises fish, as opposed to invertebrates, must be of a certain minimum size which is larger than the land area of the Campbell/Fifth Avenue Landing Parcels. This amount of land is necessary because of the waste water which is created. Large settling ponds are necessary to sufficiently cleanse the water before it can be discharged.<sup>40</sup> Filtration and other

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<sup>40</sup> Aquaculture generates significant waste. Intensive use of the water element of the site for raising invertebrates (if feasible) would raise concerns regarding  
(continued...)

cleaning systems are too expensive to be profitable. The Campbell/Fifth Avenue Landing Parcels are felt to be much too small for a commercially profitable operation.

At present, other than invertebrates, the only commercial aquaculture "crops" presently raised in California are fresh water fish. The Campbell/Fifth Avenue Landing Parcels would not be suitable for this purpose because a plentiful, inexpensive supply of fresh water suitable for raising fresh water fish is not available.

Although it cannot be categorically concluded that the Campbell/Fifth Avenue Landing Parcels in particular, or the Port District's tidelands in general, are, in fact, unsuitable for commercial aquaculture purposes because the requisite studies have not been conducted to determine the absence of pollutants or the economic feasibility of raising saltwater fish in the bay, those in the industry at the present time do believe that the Campbell/Fifth Avenue Landing Parcels are undesirable. This has resulted in a lack of interest in the site. The perception of those contacted is also consistent with the Port District's report of a general lack of inquiries by aquaculture companies in obtaining sites for conducting their

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<sup>40</sup>(...continued)

contamination by the aquaculture facility itself if sufficient tidal action were not present to remove the wastes.

operations.<sup>41</sup> There is therefore no need to give priority under Public Resources Code Section 30708(c) to the use of this site for aquaculture purposes.

4. Boat and Marine Equipment Sales and Repair.

Although a waterfront location might be desirable for a company engaged in the sale and repair of small boats and related marine equipment, a location on the waterfront is not actually necessary. The Master Plan recognizes this fact and classifies these uses as being "water linked" (which do not require a waterside site but must be located in close proximity to the water) and not water dependent uses (which require waterside sites and direct access to the water to function). Small boats can easily be moved on trailers to the water and can easily be stored and displayed out of the water. The same is also true for marine equipment sales. In truth, dealers selling and servicing small boats and related marine equipment are often not even located near the water. In the San Diego area, boat dealers are in such diverse locations as El Cajon and Poway.

Because these uses need not be on the water, there is no shortage of suitable land for the sale or repair of small boats and equipment. There are many other sites which are at least as suitable for boat sales and repair, including sites near the Shelter Island and the Chula Vista marinas, on or near Mission Bay, and even

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<sup>41</sup> The Port District was recently contacted by a prospective tenant seeking to obtain a small site for raising fish in the bay. The proposed small scale venture is apparently experimental in nature.

distant from the water. Therefore, demand for the use of the Campbell/Fifth Avenue Landing Parcels for the sale and repair of small boats and marine equipment does not justify that priority be given to that use.

Boatyards constructing, selling and repairing larger boats are, however, a water dependent use. Larger recreational or commercial boats must be built at boatyards on the water. Likewise, these larger boats cannot be economically or readily transported to a location distant from the waterfront for repair or display.

The greatest concentrations of boatyards constructing, selling and repairing on San Diego Bay are at Shelter Island and Chula Vista. Although these locations are near the greatest concentrations of marinas in San Diego Bay, these boatyards compete not only for the construction or repair of local boats; like shipyards, they compete in a much wider market. They compete with boatyards in Newport Beach, San Pedro and Ensenada (Mexico) for the construction and repair of larger boats. Moreover, boatyards on San Diego Bay, like the shipyards, have been much less successful in obtaining work from boat owners in other locales, than they have been in holding off the loss of repair or construction work to other boatyards outside San Diego.

A survey of various boatyards in San Diego indicates that most, if not all, of the boatyards operating on San Diego Bay which specialize in the construction and repair of larger boats are operating substantially below capacity --

in many cases at or below 50% of peak capacity. As with the shipyards there is no indication that this situation will reverse at any time in the foreseeable future. In addition to competing in an increasingly competitive environment, the number of large recreational and commercial boats needing boatyards for repair, and the number of boats of this type being built, are not significantly increasing. There is sufficient capacity in the existing boatyards to handle any increase in construction or repair activity that could reasonably be expected to occur. As with the shipyards, therefore, the Campbell/Fifth Avenue Landing Parcels are not needed for this port purpose.

#### 5. Commercial Fishing.

Commercial fishing vessels use the marinas at the G Street Mole (Tuna Harbor) and the Shelter Island commercial basin (America's Cup Harbor) for berthing. Although the America's Cup Harbor marinas are approximately 96% occupied, the marina at Tuna Harbor has an occupancy level of only approximately 50%.<sup>42</sup> At no time in the past has there been a shortage of berths available for commercial fishing boats. The number of fishing boats in San Diego is not increasing, and there is no reason to expect this to change. There are more than an adequate number of berths for commercial boats for the foreseeable future.

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<sup>42</sup> Source: Port District.

This conclusion will not be changed by the effect of any pending legislation concerning the tuna industry. As noted above in the discussion concerning shipyards, a large fleet of commercial tuna purse seiners was once homeported in San Diego. These purse seiners now rarely visit San Diego. As discussed in the section concerning shipyards, although various legislative efforts are being made to mitigate the effect of the legislation that caused the seiners to leave San Diego, the success of the new legislation in returning the tuna fleet to San Diego is far from certain. Many factors which contributed to the tuna fleet's being homeported in San Diego have changed since the departure of the fleet. Perhaps most significantly, there is no longer a cannery operating in San Diego; the boats therefore will not come to San Diego to unload their catch. Other obstacles to the return of the tuna fleet also exist. As noted above with respect to shipbuilding, the boats can be repaired more cheaply elsewhere. Environmental compliance and regulations concerning repairs are more strictly enforced in San Diego, also making San Diego a less desirable port for their repair work.

Even if the entire tuna fleet were to return, there would be no problem accommodating the boats. Prior to the departure of the fleet, there were adequate facilities to accommodate all of the boats. The purse seiners would stay at sea for months at a time. When they did come to San Diego to unload their catch or for other reasons, they would stay for relatively brief periods. They would tie up at the bulkhead along the Embarcadero north of Ash Street, alongside the breakwater at Tuna Harbor, and at the finger piers at the end of Grape Street. These berths are still

generally available. Therefore, even if the tuna fleet were to return to San Diego en masse, there should be sufficient space for the boats and all of the other commercial fishing vessels, and the Campbell/Fifth Avenue Landing Parcels would not be needed for this use.

#### 6. Fishing Piers.

Five public fishing piers are located in San Diego Bay, including one at South Embarcadero Park at the foot of Eighth Avenue near the Campbell/Fifth Avenue Landing Parcels. According to the operators of the fishing piers, they are greatly underutilized. With the exception of the Fourth of July and periods when the fishing is especially good, the piers generally operate from 10% to 50% of capacity, depending on the particular pier, the time of day, and the season. At no time is capacity reached.

Even if the demand for fishing piers were to increase, the present usage is at such a low level that more piers would not be needed for the reasonably foreseeable future; the present piers could handle any foreseeable increase in usage. Moreover, if more piers were found to be desirable at some point in the future, the Campbell/Fifth Avenue Landing Parcels would not be the likely place for a new pier. For one thing, the site is too near the existing fishing pier at South Embarcadero Park. For another, the site has historically been an industrial site -- it

may not be prudent to promote fishing at a site that has historically been put to industrial uses.

If it were decided that the Campbell/Fifth Avenue Landing Parcels should be utilized for a pier, the construction of a fishing pier would still not justify setting aside the entire site for a pier. The combined parcels encompass approximately 15 acres of land and approximately 14.5 acres of water. A fishing pier, alone, would not be an economically sensible use of a site of this size unless it were incorporated into a larger development with other significant features. The present proposal by Campbell Industries for the development of its site, for example, includes a public walkway extending into the bay and serving as a wave and surge barrier for the proposed marina. If a fishing pier was felt to be desirable in this area, this walkway could easily incorporate fishing without impacting the other proposed development on the property. For the foregoing reasons, there is no demand which requires that priority be given to the use of the site for a fishing pier.

#### 7. Boat Launching Ramps.

Four boat launching ramps are located in San Diego Bay -- at Shelter Island, Coronado, National City, and Chula Vista. Mission Bay also provides boat launching facilities. Information provided by the Port District indicates that, while these ramps are well used (especially at peak times during summer holidays and weekends), there is more than sufficient capacity for boat launching at present,

and there appears to be no need for another boat ramp at any time in the foreseeable future. At present, the maximum waiting time at peak periods is estimated by the Port District to be between 5 and 10 minutes. The Port District estimates that any increase in use in the foreseeable future can be met by the present boat launching ramps.

If for some unforeseen reason a need for more boat launching

ramps developed, the Campbell/Fifth Avenue Landing Parcels would be one of the

least likely or desirable locations for a ramp. A boater would have to contend with

downtown traffic and the congestion of the proposed convention center expansion in

order to use a ramp at that location. Once a boater arrived at the site through the

congestion, it would be undesirable for other reasons. For example, the location is

also farther from the mouth of the harbor and the main boating areas of San Diego

Bay. Water skiers and personal watercraft users prefer the waters of Mission Bay

where areas of the bay are set aside for their particular activities. Finally, a large

number of small boats launching at the site may pose navigational dangers for the

ships docking at the 10th Avenue Marine Terminal and the adjacent ship channel.

Therefore, not only is there no current or reasonably foreseeable demand for this use

at the site, the site is not well suited for such use.

#### 8. Recreational Marinas.

Currently there are approximately 7,500 marina slips in San Diego Bay. Accurate information concerning the overall occupancy level of these marina slips is difficult to obtain. Estimates of occupancy by the individual marina operators differ from the estimates provided by the harbor police. Occupancy levels also fluctuate with the seasons; many of the boats can be and are removed from the water in the winter, and the marinas report lower occupancy levels in the winter. Representative estimated occupancy rates reported by marina operators include Chula Vista RV Park and Marina (with 552 slips) at a 77% occupancy level (estimated to drop to 55% in winter), California Yacht Marina (with a 354 slips) at a 75% occupancy level, Harbor Island West Marina (with 620 slips) at 83% occupancy now (estimated to drop to 78% in the winter), San Diego Marriott Marina (with 446 slips) at a 96% occupancy (expected to drop to 90% in winter), and Shelter Island Marina (with 188 slips) currently at 98% occupancy. All persons contacted reported that they were not aware of any time when vacant boat slips were not available.

Although overall slip occupancy levels have risen somewhat from the lower levels of the early 1990s, this rise may be somewhat misleading. According to Port District records, revenue from marina operations is continuing to drop. This

is apparently indicative of a softness in demand for slips and a resulting overall decrease in the rates that can be charged for those slips.<sup>43</sup>

For the foregoing reasons, there does not appear to be a need for an additional marina now or in the foreseeable future; existing and proposed marinas certified by the Master Plan have more than sufficient capacity to meet present and reasonably foreseeable future demand.

#### 9. Mooring Buoys.

In San Diego Bay there are currently 437 mooring buoys owned by the Port District. (There are also 184 owned by the Navy but these are limited to Navy personnel.) The Port District's moorings are located at the center of America's Cup Harbor, just north of the western end of the Coronado Bridge, and next to the Coast Guard station along the Laurel Street crescent.

The Port District's moorings can be used on a short term basis by boats in transit or by local boaters seeking either a cheaper alternative to the marinas or a more convenient alternative to putting the boat on a trailer each time it is used.

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<sup>43</sup> Nationwide, sales of marina-sized boats remains relatively flat. (National Marine Manufacturers Association.) There is no hard evidence of the trend in ownership of marina-sized boats in San Diego, although empirical evidence cited by marina operators, boatyard operators, boat retailers and others suggests that the actual number of marina-sized boats in San Diego is not rising. This is also consistent with the downward trend in slip rental rates.

According to the records of the Port District, however, the vast majority of the users are long term users. The moorings were originally installed by the Port District to bring order to the free anchorages of the bay. By constructing the moorings, the Port District is more easily able to exercise its police power over the boaters. Without moorings these same boaters might attempt to freely anchor in the Bay, and the Port District might have a more difficult time exercising control over them.

Although the current vacancy rate of the moorings is low, the reason for this is that the Port District's rates are unusually low. (The rates charged by the Port District barely cover the cost to maintain the moorings.) The demand for the moorings is therefore artificially high.

It cannot be said, therefore, that there is a demand for moorings that requires that priority be given to such use at the Campbell/Fifth Avenue Landing Parcels pursuant to Section 30708(c) of the Public Resources Code.

#### 10. Navigation.

This use category includes ship channels, ship anchorage areas, and derelict craft storage areas. The Campbell/Fifth Avenue Landing Parcels are not needed, or suitable, for navigational facilities. The water portion of the site is well outside the main ship channel. The site also does not appear to be suitable for ship anchorage. The site adjoins the most northerly berths of the 10th Avenue Marine

Terminal. Because of the small size of the water area, ships anchored in the area could interfere with the adjoining berths of the marine terminal. Water depths may also be a problem. The site is generally 20 to 25 feet deep, and shallower in spots. This also does not lend itself well to an anchorage facility. Ship anchorage is better, and adequately, accommodated in its present location south of the Coast Guard station. Finally, the site is not appropriate for derelict craft storage. Such use could present a danger to the ship traffic at the 10th Avenue Marine Terminal.

#### 11. Sportfishing and Related Retail Activities.

Sportfishing operators in San Diego Bay have historically chosen to operate out of America's Cup Harbor from where the vast majority of the boats still operate. Although a few sportfishing vessels have recently begun operating from the Imperial Beach Pier, and a few small charters operate from locations near the Campbell\Fifth Avenue Landing Parcels, America's Cup Harbor is still the location of choice because of the proximity to the mouth of the harbor. Operators of the various sportfishing facilities report an occupancy rate for sportfishing slips ranging from approximately 50% in the winter to approximately 80-90% in the summer. These occupancy levels include slips occupied by boats other than sportfishing vessels. The Campbell/Fifth Avenue Landing Parcels are an additional 30 minutes travel time from the mouth of the harbor. An operator located at the Campbell/Fifth Avenue Landing Parcels would therefore operate at a competitive disadvantage. Either the range of the sportfishing trip would be shortened due to the added travel

time, or the number of trips would be decreased. There is therefore little or no demand for this site for sportfishing operations.

A number of retail operations sell fishing tackle, clothing and other supplies near the sportfishing bases in America's Cup Harbor. Fishing supplies are also sold at sport shops and other outlets throughout San Diego. Such facilities need not be located at the harbor, but may certainly be enhanced by being near the sportfishing boats. They in turn enhance the sportfishing facilities. A location near the sportfishing boats would likewise dictate that America's Cup Harbor is the preferable location for these facilities, and the Campbell/Fifth Avenue Landing Parcels are not necessary to fill a need for these facilities.

Because of the lack of foreseeable demand for this use at the site of the Campbell/Fifth Avenue Parcels, priority need not be given to this use pursuant to Public Resources Code Section 30708(c).

## 12. Vessel Charter/Water Taxi/Ferries.

Currently, various companies operate water taxis, ferries, harbor tours, and vessel charter services on San Diego Bay. These companies report that the facilities on San Diego Bay are currently adequate for their needs. Space is available at the Broadway pier for additional growth of these companies or for future competitors. Some of these operators have expressed an interest in having facilities

at the Fifth Avenue Landing site, particularly if a new hotel, with potential new customers, is developed next door at the Campbell site. However, any such use would occupy only a small portion of the site, most of which would be most likely on a dock on the water. If the Campbell/Fifth Avenue Landing Parcels were felt to be desirable for any of these uses, the uses could easily be incorporated into the site. The proposal for development of the Fifth Avenue Landing portion of the site, in fact, includes excursion operations, a proposed water taxi and ferry landing as part of the water element.

### 13. Naval Station.

San Diego Bay is home to the United States Navy's Pacific Fleet and one of the largest naval ports in the world. Among other facilities on the Bay the Navy operates the 32nd Street Naval Station located approximately two miles south of the Campbell/Fifth Avenue Landing Parcels, and the North Island Naval Air Station and the Naval Amphibious Base, each of which are across the Bay from the site. Several other naval facilities are located along the Bay front.

Notwithstanding this large naval presence, there is no perceived need to use the site for a Navy facility. For a number of years the U.S. armed services have been engaged in "downsizings" and base closings. Although San Diego has thus far escaped most of the severe cuts (and has, in fact, benefitted from some base closings), there is no reason to believe that the Navy will need additional bay

front land at any time in the future. Although the United States Congress recently refused to authorize further base closures at this time, there is no indication that the size of the fleet will significantly increase or that there will be a substantial increase in personnel stationed in San Diego.<sup>44</sup> There is presently a large amount of empty pier space at the 32nd Street Naval Station that could accommodate substantial growth. Even if additional land were desired by the Navy, it is unlikely that this parcel would be suitable. Water depth, averaging from 20 to 25 feet or less, is too shallow for many of the larger Navy ships. The water area is also insufficient to handle many of the larger ships or the facilities needed for them. Entirely new facilities would need to be built, and appropriations for such facilities are difficult to obtain in the current U.S. budget environment. The site is also somewhat remote from other local naval facilities and would suffer from the congestion caused by the convention center expansion across the street. The U.S. Navy's demand for the site is therefore unlikely at any time in the future.

#### 14. Cruise Ships.

Cruise ship activity in San Diego Bay has fluctuated dramatically in recent years. In the past, a number of cruise ships operating on the west coast made stops at San Diego. Smaller ships operated out of San Diego on day trips to Ensenada, Mexico. The operator of the Mexican day trips stopped operating as a

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<sup>44</sup> Thirty ships have, in fact, been decommissioned in San Diego since fiscal year 1991.

result of financial difficulties. The larger cruise ships stopped calling at San Diego when the State of California asserted that gambling was not allowed when a cruise ship was operating between two California ports. Recent legislation solved the problem, so the number of ships calling at San Diego is on the upswing and there is optimism that more ships could be attracted to both call on the port on a regular basis and even to call San Diego their home port.

Any cruise ships which call at San Diego or use San Diego as home port will use the cruise ship facility at the B Street Pier. This pier has more than enough capacity to handle the number of cruise ships now calling at San Diego or expected to do so in the foreseeable future. The B Street pier is capable of handling from two to four cruise ships at any one time, depending on the size of the ship. At present, only one cruise ship, the Viking Serenade, makes weekly stops in San Diego. All other ships stopping in San Diego are "transitional." These are ships which cruise Alaska and the Pacific Northwest in the summer and the Mediterranean or other warmer climates in the winter. Between seasons, they cruise from one location to another. A few world cruises also have called at San Diego. So far this year, 11 transitional or world cruises have stopped in San Diego. Seven more are scheduled to arrive through October. In all of 1997, there will have been only three days when two or more cruise ships were in port.

The Port is also attempting to attract another operator of day cruises. If it is successful in doing so, the ship will probably be located at the Broadway pier.

Even if a time arrives when the B Street pier is insufficient to handle all of the cruise ships calling at San Diego, it is unlikely the Campbell/Fifth Avenue Landing Parcels could provide much relief. The typical cruise ship is 600 to 800 feet in length and over 100 feet in beam. A pier for cruise ships would interfere with navigation to and from the 10th Avenue Marine Terminal. The draft of a typical cruise ship, 25 feet or more, would also require extensive dredging at the site in order for the site to be used for cruise ships. This would present both economic and environmental concerns.

For the foregoing reasons, priority need not be given to the use of the Campbell/Fifth Avenue Landing Parcels for berthing cruise ships.

15. Miscellaneous "Marine Related" Uses.

This category includes port purposes not discussed above, which currently use, or in the past used, the Port District's tidelands and include kelp processing, fish processing and canning, salt extraction, power generation (for the cooling water), marine construction and fish markets. There is no demand for fish processing and canning, or for additional facilities for kelp processing, nor is there a

demand for additional power generation facilities. Salt extraction requires shallow drying ponds with large surface areas, and is suited for the South Bay, not this site.

There is no demand for a large scale commercial fish market; and in any case this site would be unsuitable because of the distance to the main commercial fishing fleet in America's Cup Harbor and the congestion and incompatibility associated with the nearby residential neighborhood and the proposed convention center expansion.

16. China Ocean Shipping Co.

China Ocean Shipping Co. ("COSCO"), the shipping company owned by the government of China, proposes to lease a facility in Long Beach Harbor. The proposed lease has, however, recently been invalidated by the courts. Even if COSCO continues to experience legal and other difficulties at the Port of Long Beach, it is extremely unlikely that COSCO would consider moving to San Diego, much less consider operating from the site of the Campbell/Fifth Avenue Landing Parcels. According to COSCO, COSCO has not even considered the idea. If it did, it would find that the Campbell/Fifth Avenue Landing Parcels, as well as every other site on San Diego Bay, is unsuitable for its needs. Among other things, COSCO's requirements for its facility are (i) at least 150 acres of land, (ii) docks with 50 foot water depth, (iii) on-dock rail, and (iv) "post-panamax" cranes (a crane large enough to service a ship with a beam of 32 - 33 meters). No site in San Diego Bay meets these requirements, especially not the Campbell/Fifth Avenue Landing Parcels with one-tenth the required acreage and half the water depth. The entire 10th

Avenue Marine Terminal has neither the necessary land area, water depth, railroad, nor cranes. The 24th Street Terminal has one crane, but no on-dock railroad, and the water depth of the channel to the terminal, not just at the terminal, is inadequate. COSCO and its eventual success or failure in reaching an agreement at the Port of Long Beach will have no effect on the Campbell/Fifth Avenue Landing Parcels.

## CONCLUSION

California Public Resources Code Section 30708(c), and the certified Port District's Master Plan, require that priority be given to port purposes when locating, designing and constructing port-related developments. This report was prepared to allow the Port District to determine which, if any, port purposes should be given priority in connection with the proposed land use classification change of the Campbell/Fifth Avenue Landing Parcels to a land use classification for non-port purposes. As discussed above, an assessment of the current and perceived future demand for suitable port purposes for the Campbell/Fifth Avenue Landing Parcels indicates there is no existing or foreseeable future demand for any port purpose to which the site should be put such that priority should be given to such purpose under Section 30708(c) of the Public Resources Code. Indeed, as set forth above, many of the port purposes cannot be feasibly accommodated at the site, even if such a need should exist.



Marine Related Industry requires sites within close proximity to water bodies due to functional dependencies on the industrial activity for direct access or for linkages to waterborne products, processes, raw materials or large volumes of water. Prime waterfront industrial sites are in relatively short supply and it is the intent of this Plan to reserve these sites for marine related industry.

The primary users of marine related industrial areas are dependent upon large ships, deep water and specialized loading and unloading facilities, typically

associated with shipbuilding and repair, processing plants and marine terminal operations. Industries linked to these primary industrial activities can be clustered together to capitalize on the benefits of reduced material handling costs, reduced on-site storage requirements, faster deliveries, and a reduction of industrial traffic on public roads.

Existing, established marine oriented industrial areas that have been devoted to transportation, commerce, industry and manufacturing are encouraged to modernize and to construct necessary facilities within these established areas in order to minimize or eliminate the necessity for future dredging and filling in new areas. However, expansion into new areas can be accommodated if existing sites are pre-empted by other uses, alternative locations are infeasible, and a curtailment of the project would adversely affect the public welfare.

Activities suitable for the marine related industrial area include; but are not limited to, marine terminals, passenger terminals; railroad switching and spur tracks; cargo handling equipment such as bulkloader and container crane; berthing facilities; warehouses, silos, fueling facilities, bulk liquid storage tanks and pipelines; shipping offices and custom facilities; power generation plants; ship building, repair and conversion yards; marine rails, lifts and graving docks; steel fabrication and foundry; storage, repair and maintenance of marine machinery and construction equipment; kelp and seafood processing, canning and packaging; aquaculture; and marine related support and transportation facilities.

Although commercial mariculture uses relating to seafood production are not presently established on the bay, research and experimentation which has been conducted in the region as well as on the bay, indicates that warm water stimulates the growth rate of certain marine organisms, such as shrimp and lobster. Assuming that economic viability of mariculture will be achieved, future sites for mariculture activities could be located within close proximity to the existing thermal discharge areas of power generation plants to take advantage of the available warm water. There seems to be some likelihood that future aquaculture activities could be conducted in man-made tanks located in enclosed buildings and in converted salt ponds. Areas of the bay designated on the Master Plan Map as Estuary and Salt Ponds also include aquaculture and resource-dependent uses.

Due to the fact that public access to the bay is necessarily limited in established industrial sectors, it is the intent of this Plan that whenever feasible, industrial land and water users are encouraged to invite the public to view their operations and to share with the public that shoreline area not actually used for industrial purposes by permitting visual access to the bay. The development and redevelopment of marine related industrial areas requires careful consideration involving a balancing of the peculiar needs of the development with the concurrent need for shoreline access.

**MARINE TERMINALS** and the harbor constitute one of the State's primary economic and coastal resources, functions as an essential element of the national maritime industry, and serves as a strategic facility in the national defense system of the United States. This Southern California harbor is located ten miles northwest of the United States-Mexico border, and approximately 95 and 455 nautical

miles southeast of Los Angeles and San Francisco, California, respectively. The Port's location, latitude 32°41'58" north and longitude 117°13'22" west, positions it to be the first and the last major port of call on the Pacific Coast for ships in the intercoastal, South and Central American and around-the-world trade routes.

The Port is charged with the responsibility for providing the facilities for handling, marshalling and unloading/loading the cargo. Cargo storage space includes long and short term dry storage, warehouses, silos, cooler and freezer space, and open public storage areas. Warehouses have railroad connections and all are easily accessible to arterial highways. The Port provides railroad hopper car unloading facilities, a traveling bulk shiploader with conveyor boom, and a 40 long-ton, electric traveling container handling crane with hinged cantilevered boom.

San Diego is a landlord port rather than an operating port. Port, tug and port pilot, and terminal and stevedore services are provided by private companies. Diversified handling equipment is maintained by the operators, and special services are provided including packing and crating, forwarding, pool car distribution, carloading, weighing, stamping, marking and drayage. Port of San Diego operators enjoy a number of existing favorable conditions such as long experience and expertise in distribution, lack of congestion, negligible pilferage, low insurance rates, ample warehousing, and a climate which is ideal for year-round all weather operations. A more detailed description of the marine terminals is provided in Planning Districts 3, 4 and 5.

During the past ten years tonnage has gone from approximately one million to about two million tons. The overall trend has been an increase of about five percent a year during the past twenty years; however, in 1979 cargo vessel calls increased twenty percent and cargo handling increased seventeen percent. Major incoming cargo has been cement, coal coke, molasses, lumber, and newsprint. Major outbound cargo has been grain, soda ash, and copper concentrate. Other cargo handled includes container and conventional cargo, heavy lift items, bulk commodities, submarine cable, fuel oil, kelp, fish, fertilizer, automobiles, steel products, and scrap metal.

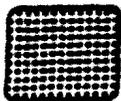
There are several trends that could serve to stimulate more cargo movement through West Coast ports, particularly San Diego. The movement of grain to the Far East is anticipated to remain strong and to possibly sharply increase as a result of diversion from the Gulf Coast due to the possible closure or precipitous increase of tolls through the Panama Canal, and an expected significant increase in oil prices.

The continued increase in the worldwide demand for basic minerals and the potential depletion of land based supplies could stimulate more interest in ocean floor mining beyond that currently under way or that being considered for offshore oil and natural gas. The development of marine mining technology is well under way, although questions as to economic feasibility and national or political jurisdictions are unresolved. The ocean floor contains substantial deposits of manganese, copper, cobalt, nickel, precious metals, and phosphate which, if mined, will need the land base support facilities of ports for the transportation, handling, storage and stockpiling of materials on the way to processing. Land

space needs for these potential users could be provided for in the Expansion Reserve category of the Plan. Planned marine terminal facilities are discussed in the Precise Plans for Planning Districts 3, 4 and 5.

Marine terminal facilities must respond to a number of design criteria, all related to the type of cargo being handled, the minimization of ship in-port time, and the accessibility of other transportation linkages. Two facets of maritime demand are especially pertinent to land and water allocation: ship's characteristics and ship's cargo. Ship's characteristics dictate the location of berthing and terminal facilities. Ship's cargo governs terminal size, design and spatial arrangements.

## Commercial Recreation



Land use demand forecasts have established a basis for anticipating continued demand for commercial recreational type facilities due to trends drawn from the convergence of numerous factors, of which the most significant are expendable income, paid holidays, leisure time, population, education, travel habits, and new modes of transportation. All of these are increasing while the average number of working hours is decreasing. It seems likely that activities associated with water based pursuits will continue to be among the most popular. The trends are almost certain to have considerable repercussions on the full range of leisure services. Tourism in the San Diego Bay region is a significant economic base activity, and at the national level it figures highly in maintaining the balance of payment.

Activities associated with commercial recreation contribute to the economic base of the region with full-time jobs, secondary employment for part-time help, and spin-off employment opportunities in construction, warehousing, trucking, custodial, and personal services. It is the intent of this Master Plan to create attractive destinations in carefully selected locations around the bay to serve the needs of recreationalists for lodging, food, transportation services, and entertainment. Site amenities are to be enhanced and over-commercialization is to be avoided by the balanced development of commercial and public recreational facilities.

Commercial recreation allocations on the Land and Water Use Map include approximately 287 acres of land and about 343 acres of water area, including sportfishing and recreational craft berthing. The Commercial Recreation category includes hotels, restaurants, convention center, recreational vehicle parks, specialty shopping, pleasure craft marinas, and sportfishing which are discussed or illustrated in the various District Plans.

Hotels and Restaurants located on San Diego Bay cater to markets involving leisure recreation, tourism, business travel and specialized conference facilities accommodating conventions, training, seminars and meetings. Of growing importance are the attractions or amenities of the restaurant, which caters to the varied age groups dining for pleasure, and the hotel as a provider of more than just rooms.

Hotels constitute a significant part of the local recreation industry and, as generators of ancillary business such as restaurants and specialty shops, have an important influence on land use. Uses typically associated with hotels, frequently in the same building or on the same site, include lodging; coffee shop; cocktail lounge and restaurant; specialty shops for gifts, sundries, cigarettes, candy, liquor, clothing and sporting goods; tourist information and travel services; auto service station;

personal services such as dry cleaning, barber and beauty shop; convention, banquet and conference rooms; and recreational facilities such as swimming pools, cabanas, game rooms, tennis courts, putting green, boat and bicycle rental or charter, and theatrical entertainment. In addition to the man-made structures and organized sports facilities, hotel locations on the bay feature waterfront locations with easy access to beaches, scuba diving and snorkeling, deep sea fishing, sailing, water skiing, boat rides, and "whale watching" during the whale migration season. New hotel locations are allocated in Planning Districts 2, 3, 6, 7 and possibly 8.

Specialty Shopping involves the planned assembly of stores, frequently operating within a unified building complex, designed to give patrons a varied selection of retail goods, personal services, and entertainment facilities. Activities typically found in specialty shopping areas include restaurants and the retail sale of ice cream, dessert items, beverages and sandwiches; artisan activities associated with the production and sale of handcrafted gift items, and original works of art; professional office space; retail shops handling gifts, novelties, clothing, jewelry, and home furnishings; wholesale and retail fish sales, fish and seafood processing, and unloading docks for vessels and trucks. Characteristic of shopping centers, the specialty shopping developments allocated on tidelands are usually managed and operated as a unit. Shopping areas will feature a major open space format, separate pedestrian traffic from vehicular movement by emphasizing pedestrian mall and plaza developments improved with landscaping, sitting areas, fountains and sculpture. Specialty shopping areas are allocated in Precise Plans for Planning Districts 3 and 6.

Pleasure Craft Marinas are encouraged to provide a variety of services for boats and boat owners. Services could possibly include in-season wet and dry berthing, and dock lockers; boat rental, charter and sales; sailing schools and membership sailing clubs; fueling docks; launching for transients; automobile parking; dockside electricity, fresh water and telephones, holding tank pumpout stations and disposal facilities for waste oil and hazardous substances; restrooms and showers; repairs; maintenance; off-season storage; ice and fuel. Accessory facilities provided as part of a full-service marina or in the commercial recreational areas and within close proximity to the marinas should include shopping areas for groceries, drugs and clothing; restaurants; shoreside living and recreational accommodations for boatmen; marine supplies; boating equipment; navigation instruments; marine electronics; and sailmaking. Users requiring water frontage are given preference because it is desirable to maintain a dynamic waterfront in recreational areas which is functionally sound and capable of providing essential services to the operation of a small craft harbor. Proposed recreational boating facilities, to the extent feasible, are to be designed and located so as not to interfere with the needs of the commercial fishing industry.

In San Diego County, population and registered boat ownership are increasing. The growth rate of registered boats is increasing two and one-half times over the population increase. In 1977, 32,562 boats were in the County. About 21 percent of the total registered boats require wet storage due to their size, weight and difficulties in launching and storage. In 1978, pleasure boat facilities in the County provided over 6,800 slips with access to clean waters. Over 60 percent of the slips were located in San Diego Bay, just under 30 percent in Mission Bay, and a little over 10 percent in Oceanside Harbor. In all of the three County harbors, demand for commercial recreational marinas has far outstripped supply, so that there is no effective slip vacancy. In San Diego Bay alone, a 1979 survey disclosed that marinas had a waiting list of at least 550 separate boat owners. Measuring the waiting list against typical marina slip turnover translates into an aggregate waiting period of about one year.

Since 1960, the three County harbors have been adding an average of approximately 270 slips per year to meet the demand for coastal vessel wet storage. It now appears that San Diego Bay is the only coastal harbor in the County with available slip development sites, as the other harbors have pretty well built to their available planned capacities. The extent to which San Diego Bay can handle the annual county-wide demand for slips is limited by its physical capabilities and the policies that regulate development in the bay. New marina facilities are proposed in Planning Districts 2, 3, 6, and 8. The configurations of the filled peninsulas enclosing the proposed marinas is conceptual in nature as delineated on the Plans.

**Scope of work  
Marine Related Lands Study**

**Introduction**

The Board of Port Commissioners has taken action initiating the preparation of a Port Master Plan Amendment (PMPA) and an Environmental Impact Report for a change of use on District lands leased to Campbell Industries (Shipyard) and Fifth Avenue Landing (Marine Contractor). The land use change is from "Marine related industrial" to "Commercial Recreation" to accommodate the development of a 45-story hotel of 1,006 rooms, supporting meeting rooms, restaurants and retail space, above grade parking structures, a marina of approximately 300 slips a water transportation center, public accessways, and open space. Pursuant to the Coastal Act (Pub. Res. Code) Section 30708(c), the PMPA must document and analyze existing and reasonably potential future port-related maritime uses on the affected site and the Port generally. To efficiently accomplish this mandatory Coastal Act requirement, the Port District proposes that the project applicant, in close consultation with Port staff and staff of the California Coastal Commission, and consistent with the Scope of Work outlined herein, prepare an appropriate draft Marine Related Lands Report to satisfy the informational needs posed by the Coastal Act section. The maritime (port-related) lands and uses to be addressed in the Report include all existing and previous marine-related industrial uses of the Campbell Shipyard and Fifth Avenue Landing sites; existing activities and proposed developments for navigational facilities; vessel charter, ferry and water taxi services; shipping industries; commercial fishing; boat launching; sportfishing; anchorage; boat and ship building, maintenance and repair; maritime cargo terminal operations and storage; the U.S. Navy's regional maintenance, repair and service area; and marine related industry.

**Task 1: Background Review**

- 1-1 Further refine and articulate the priority maritime (port-related) land use framework provided in Coastal Act section 30708(c).
- 1-2 Review the Port District's Master Plan for definition and allocation of space for marine related industrial uses, commercial fishing, marine sales and services, ferry and water taxi services, anchorages, public fishing piers, boat launching ramps, and sportfishing, including all the subcategories and use types.
- 1-3 Consult with Port District staff, Coastal Commission staff, and the public agency and private sector parties at interest referenced in Task 2-1 to fill specific informational gaps. Consult other informational sources, as necessary.

and Coastal Commission staffs.

- 3-2 Within 90 days from the start of the study, prepare a Draft Preliminary Report explaining findings and recommendations, and be available to discuss the preliminary report with the District. Ten (10) copies of this Draft should be delivered to the District.
- 3-3 After consultation with Port District and Coastal Commission staff, a draft final Report shall be prepared by the applicant for submittal to the Port District, which at its discretion may further augment or revise the Report to supplementally address comprehensive Port Master Update or Coastal Act objectives.
- 3-4 Following completion of the Report, and as District and Coastal Commission staff may jointly request, applicant shall be prepared to make a professional multi-media presentation to the Board of Port Commissioners and to the Coastal Commission on the findings and conclusions of the Report.

**Information Sources:**

1. Marine Industrial Assessment Report, Booz, Allen and Hamilton, Inc., May 1996.
2. San Diego Unified Port District Master Plan, SDUPD Planning Department, April 1996.
3. Developers Environmental Assessment, SDUPD Environmental Management Department.  
Campbell Shipyard  
Fifth Avenue Landing
4. Seaport Terminal; SDUPD  
Marine Operations Department  
Trade Development Department
5. Existing Users and Tenants  
Commercial fishing - Tuna Harbor and America's Cup Harbor  
Sportfishing - America's Cup Harbor  
Recreational Piers: Shelter Island, Embarcadero, Crosby Park, National City, and Chula Vista.  
Vessel anchorage and moorings - Anchorage A-1a, 1b & 1c; A-2, A-3, A-4, A-5, A-8, and A-9.  
Boat Landing Ramps - Shelter Island, National City, and Chula Vista.  
Marine related Industrial Users - San Diego and National City.
6. US Naval Bases, San Diego.

**Task 2:** The report should address the specifics of the following outline.

**2-1 Existing conditions.**

- 2.1.01. Campbell Shipyard
- 2.1.02. Fifth Avenue Landing
- 2.1.03. 10th Avenue Marine Terminal
- 2.1.04. SDUPD Planning District 3, 4, and 5
- 2.1.05. US Naval Station, San Diego
- 2.1.06. Boat and Small Shipbuilding/Repair/Maintenance in the San Diego Market Area (Mission/San Diego Bays-Ensenada)
- 2.1.07. Naval and other Vessel Shipbuilding/Repair/Maintenance in the Eastern Pacific Region/World
- 2.1.08. Associated upland uses
  - [a] materials handling/storage
  - [b] transportation
  - [c] other infrastructure
  - [d] Harbor Services
- 2.1.09. Other maritime uses
  - [a] commercial fishing
  - [b] sport fishing
  - [c] boat/vessel anchorage, launching, and mooring
  - [d] public recreational (fishing) piers
  - [e] aquaculture/mariculture

**2-2 Trends (relating to maritime uses [1-5 year, 6-10 year, 11-20+ years], as appropriate)**

- 2.2.1. Campbell Shipyard
- 2.2.2. Fifth Avenue Landing
- 2.2.3. SDUPD Planning Districts 3, 4, and 5, generally
- 2.2.4. 10th Avenue/24th Street Marine Terminals, incl. expansion in area, throughput, cargo types, etc.
- 2.2.5. US Naval Station, San Diego
- 2.2.6. Boat/Small Ship Building/Repair/Maintenance [Market Area]
- 2.2.7. Naval and other Vessel Shipbuilding/Repair/Maintenance [Market Area]
- 2.2.8. Associated upland maritime related uses
- 2.2.9. Other maritime and related uses

**Task 3:** Report Preparation and Review. The preparer of the Report is to:

**3-1 Maintain close liaison and coordination with the District**

## ADDENDUM D

### Bibliography

1. Developmental Plan for National City Marine Terminal dated December 1995 prepared for the San Diego Unified Port District by Atkinson Johnson & Spurrier, Inc. and BERGER/ABAM Engineers Inc.
2. Marine Industrial Assessment dated May 1996, prepared for the San Diego Unified Port District by Booz-Allen & Hamilton, Inc.
3. Strategic Plan dated June 1996, prepared for the San Diego Unified Port District by Booz-Allen & Hamilton Inc., John Burnham & Co., Landrum & Brown Inc., and KH Consulting.
4. Port Master Plan dated January 1980, adopted by the San Diego Unified Port District, as amended.
5. Industrial Land Demand and Absorption Update Report dated March 1995, prepared for the San Diego Unified Port District in connection with the proposed convention center expansion.
6. Economic Feasibility Study of the San Diego & Arizona Eastern Railway dated March 1, 1996, prepared by San Diego Association of Governments.

**ADDENDUM TO  
MARINE RELATED LAND STUDY**

**CAMPBELL INDUSTRIES/FIFTH**

**AVENUE LANDING**

**SAN DIEGO, CALIFORNIA**

**February 27, 1998**

**Prepared By**

**GRAY CARY WARE & FREIDENRICH LLP**

**ADDENDUM TO  
MARINE RELATED LAND STUDY**

**CAMPBELL INDUSTRIES/FIFTH AVENUE LANDING  
SAN DIEGO, CALIFORNIA**

**This Addendum supplements the Marine Related Land Study for Campbell Industries/Fifth Avenue Landing, San Diego, California, dated December 15, 1997, prepared by Gray Cary Ware & Freidenrich, a Professional Corporation, for the San Diego Unified Port District in connection with the proposed change of land and water use classifications of the parcels discussed therein. This Addendum is intended to address additional issues raised in connection with the original study.**

**In order to allow the proposed change in land and water use classifications identified in the study, the Port District must satisfy the requirement of California Public Resources Code Section 30708(c) which provides that all port related development shall be located, designed and constructed to give highest priority to the use of existing land for port purposes. The study examined the various port purposes to which the parcels in question could be put and assessed the actual present and reasonably foreseeable future demand of the parcels for each of those port purposes. The study also examined the suitability of the parcels to accommodate each of the identified port purposes.**

**The study identified the expansion of the 10th Avenue Marine Terminal immediately adjacent to the parcels as one of the most likely proposed uses for the**

parcels. That proposed use was identified as one of the most likely uses for the parcels, in part, because, as discussed in the study, the Port District has stated its desire to increase cargo activity at its two marine terminals. The original study concluded, however, that the parcels were not necessary for such use because no demand for expansion of the 10th Avenue Marine Terminal could be demonstrated now or at any time in the foreseeable future.

As discussed in the study, the 10th Avenue Marine Terminal is presently operating significantly under capacity and there is no projected need for additional land at the 10th Avenue Marine Terminal in which to expand.<sup>1</sup>

Recent and projected growth in cargo through-put at the terminals is occurring at the 24th Street Terminal, not the 10th Avenue Marine Terminal.<sup>2</sup> The principal growth area is in the import of automobiles. The import of automobiles does, indeed, require extensive amounts of land. There is, in fact, a need for additional land near the 24th Street Terminal to accommodate potential future growth in this cargo.<sup>3</sup> This need for additional land near the 24th Street Terminal does not, however, translate to a need for additional land at the 10th Avenue Marine Terminal. The import of automobiles

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<sup>1</sup> Any projected significant growth in through-put at the 10th Avenue Marine Terminal will relate to bulk commodities. Such cargo does not require additional land, and land is not the limiting factor.

<sup>2</sup> See Exhibit 1 (attached hereto).

<sup>3</sup> Dan E. Wilkens, Senior Director, Strategic Planning Services, San Diego Unified Port District.

at the 24th Street Terminal does not displace other cargo which can be handled at the 10th Avenue Marine Terminal, thereby creating a need for additional land at the 10th Avenue Marine Terminal. Nor can automobile cargo be easily shifted to the 10th Avenue Marine Terminal. Among other limitations, the 10th Avenue Marine Terminal does not have the rail facilities necessary to handle this cargo.

This automobile cargo, and any increase in traffic relating thereto, must, therefore, be handled at the 24th Street Marine Terminal, and the need for additional land must be satisfied in the vicinity of the 24th Street Marine Terminal. Although it is theoretically possible that additional land could be created by filling in portions of the bay, there are two primary roadblocks to this theoretical approach. First, the environmental issues associated with any such proposed fill would be substantial.<sup>4</sup> It is not necessary to address these environmental issues, however, since the cost of creating usable land is prohibitive.

At present, vacant land in the vicinity of the 24th Street Terminal ranges in value from \$7.00 to \$9.00 per square foot, or approximately \$305,000 to \$392,000 per acre.<sup>5</sup> In contrast, creating additional land by filling the bay is estimated to cost between

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<sup>4</sup> Among other concerns which would need to be addressed would be the proximity of the terminal to environmentally sensitive areas.

<sup>5</sup> Industrial Benchmark Study prepared by Jean V.G. Catling, MIA, for San Diego Unified Port District, dated January 14, 1997.

\$1 million and \$1.5 million per acre (including the cost of environmental mitigation).<sup>6</sup>

Therefore, even if there were a desire to fill the bay to create additional land, and even if there were a belief that any environmental obstacles could be overcome, there is too great a financial disincentive to create any new land by filling the bay.

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<sup>6</sup> Dan Allen, Chief Engineer of the Port of Long Beach.

### Auto Fever

The Port of San Diego has suddenly snifted into high gear.

Sixteen months after entering into an agreement with National City-based auto importer Pasha Services Inc., the number of Hondas coming into San Diego's waterfront has soared. The port moved 1.4 million tons of autos and trucks between November 1996 and October 1997, up from just 269,224 tons for the same period a year earlier, according to data just prepared by the Pacific Maritime Association.

Port officials had been hopeful that its car business would boom, but they say the volume of autos being shipped has exceeded their expectations. The Honda imports "got us into this niche business, which has proved to be good for us," says Larry Killeen, the port's executive director.

Over the past year, in fact, San Diego has seen its tonnage of autos surpass that being handled in Oakland and Port Hueneme. And it now ships more than half the amount of autos coming through the nation's largest commercial harbor, the

Port of Long Beach.

Meantime, the Burlington Northern-Santa Fe invested \$23 million in infrastructure to better handle the growing number of auto imports in San Diego. In addition, Mr. Killeen says, for the first time in 30 years, longshoremen have been asked to register for additional work at the port; about 160 jobs have been created. "We were considered a low-opportunity port for jobs," Mr. Killeen says. "Now that's changed."

The Port of San Diego expects to import 203,000 autos this year, according to Rita Vandergaw, the port's director of marketing. More than 140,000 of them will be Hondas, the rest a mix of mostly Volkswagens and Isuzus. Last year, there were 84,000 cars imported through San Diego, 60,000 of them Hondas. Besides San Diego, Honda also has a West Coast import center in Portland, Ore.

Here's a look at some of the types of goods that certain California ports handled, and whether they increased or decreased during the same time period:

### Port Power

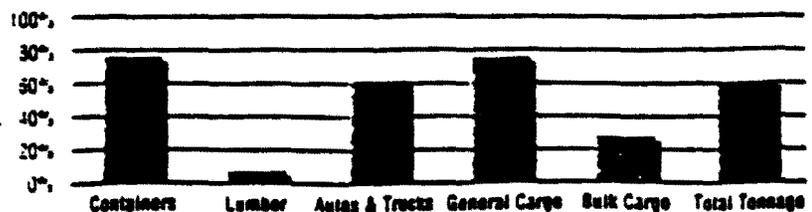
Tonnage moved, Nov. 1996-Oct. 1997

	LONG BEACH	LOS ANGELES	OAKLAND	HUENEME	SAN DIEGO
Containers	2,031,189	2,307,268	1,025,073	1,980,000	1,937,000
Lumber	89,296	18,578	48	71	65,114
Autos & Trucks	2,710,668	2,368,947	616,920	1,304,571	7,937,000
General Cargo	1,725,827	2,688,190	216,839	619,585	89,727
Bulk Cargo	1,856,000	1,195,072	3,740	N/A	7,000
<b>TOTAL TONNAGE</b>	<b>60,524,758</b>	<b>48,404,160</b>	<b>18,262,897</b>	<b>1,951,104</b>	<b>2,443,851</b>

Percent change in tonnage, Nov. 1995-Oct. 1996 vs. Nov. 1996-Oct. 1997

	LONG BEACH	LOS ANGELES	OAKLAND	HUENEME	SAN DIEGO
Containers	+14.5	+10.0	-6.3	+157.9	+52.3
Lumber	-4.0	-39.1	N/A	+12.0	-14.3
Autos & Trucks	+5.3	-5.6	+6.5	+26.8	+12.0
General Cargo	+7.4	+19.5	-7.7	-11.6	+1.2
Bulk Cargo	N/A	-22.6	N/A	N/A	0.0
<b>TOTAL TONNAGE</b>	<b>+11.8</b>	<b>+5.7</b>	<b>-5.9</b>	<b>+12.1</b>	<b>+81.3</b>

California ports as a percentage of West Coast total, Nov. 1996-Oct. 1997



Source: Pacific Maritime Association

**SECOND ADDENDUM TO  
MARINE RELATED LAND STUDY**

**CAMPBELL INDUSTRIES/FIFTH  
AVENUE LANDING  
SAN DIEGO, CALIFORNIA**

**October 29, 1999**

**Prepared By**

**PORT OF SAN DIEGO  
LAND USE & PLANNING DEPARTMENT**

# SECOND ADDENDUM TO MARINE RELATED LAND STUDY

## CAMPBELL INDUSTRIES/FIFTH AVENUE LANDING SAN DIEGO, CALIFORNIA

This Second Addendum supplements the Marine Related Land Study ("Study") for Campbell Industries/Fifth Avenue Landing, San Diego, California, dated December 15, 1997, and its Addendum ("Addendum") dated February 27, 1998, both prepared by Gray Cary Ware & Friedenrich, a Professional Corporation for the San Diego Unified Port District ("District").<sup>1</sup> These reports were prepared in connection with the proposed changes in land and water use classifications of the Campbell Industries/Fifth Avenue Landing parcels.

The Study and Addendum analyzed Port water related uses to which the Campbell Industries/Fifth Avenue Landing Parcels could be utilized, such as: Ship Building and Repair; Marine Terminal/Shipping; Aquaculture; Boat and Marine Equipment Sales and Repair; Commercial Fishing; Fishing Piers; Boat Launching Ramps; Recreational Marinas; Mooring Buoys; Navigation; Sportfishing and Related Retail Activities; Vessel Charter/Water Taxi/Ferries; Naval Station; Cruise Ships; Miscellaneous "Marine Related" Uses; and China Ocean Shipping Company. Each of these uses is addressed in turn, below. A summary of a recent study prepared for SANDAG of the San Diego & Arizona Eastern Railroad is also provided.

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<sup>1</sup>The referenced documents are attached for the reader's convenience.

## 1. Ship Building and Repair

As indicated by the Study, the Campbell/Fifth Avenue Landing Parcels are not suitable for maintaining/repairing/constructing large vessels such as those the U.S. Navy contracts NASSCO to build, maintain, or repair. Questions have arisen as to the demand for megayacht repair and the suitability for the Campbell/Fifth Avenue Landing Parcels to continue this use. To address this question, Campbell Industries has provided a ten year history of its usage and a forecast of the demand for such uses in the future. As indicated by Table 1 below, there is not sufficient demand for boat and megayacht construction, maintenance, or repair at the Campbell Industries/Fifth Avenue Landing Parcels.

**Table 1**

### Campbell Industries Historical and Projected Revenues (\$000s)

Year	Navy	Megayacht		Other Vessels		Total
	Repair	Construction	Repair	Construction	Repair	
1989	8,215	--		33,829	4,290	46,334
1990	9,492	--		38,616	2,347	50,455
1991	5,378	--		23,068	3,252	31,698
1992	20,999	--		2,576	3,080	26,655
1993	2,612	8,026		--	1,332	11,970
1994	1,709	15,030	5,694	--	1,276	23,709
1995	1,243	5,968	5,237	--	732	13,180
1996	493	--	3,632	--	908	5,033
1997	127	--	4,454	--	1,113	5,694
1998	--	--	5,124	--	569	5,693
1999	--	--	3,211	--	357	3,568
<b>Forecasted Revenues</b>						
2005	--	--	3,000	--	--	3,000
2010	--	--	3,000	--	--	3,000
2015	--	--	3,000	--	--	3,000
2020	--	--	3,000	--	--	3,000

Source: Campbell Industries, 1999

Although a shipyard currently (November 1999) operates on a portion of the Campbell Industries/Fifth Avenue Landing parcels, Campbell's data indicates that during the next 20 years there will be no demand for its ship building. The demands for the megayacht and boat repair business does not economically justify continuing operations of this shipyard, repair, and maintenance capabilities. In addition, existing physical limitations of the parcels (limited water depth, relatively small parcel dimensions, soil/sediment contamination) preclude establishment of a market-competitive shipyard for either medium-sized or larger ships. In fact, since Campbell Industries announced its closure, no prospective successor shipyard operator has approached, or has otherwise been identified to assume use of the Campbell Industries leasehold. Thus, there is no viable current or foreseeable shipyard use of the Campbell parcel. It should be noted however, that the southeasterly band of Parcel 019-019, located between the Campbell 550-foot long pier and Tenth Avenue Marine Terminal (TAMT) Berths 1 and 2, is needed for improved ship berthing and maneuvering into and out of Berth 1. Therefore, it is proposed to remove Parcel 019-019 from the Campbell leasehold to enhance the marine industrial capacities of TAMT.

Moreover, the adjoining parcel, Fifth Avenue Landing, is not an appropriate site for construction, repair, or maintenance of large vessels due to its proximity to the Convention Center Expansion and Embarcadero Marina Park South. The size of the parcel is too small and its shape would cause operational difficulties. Thus, similarly to the Campbell parcel, a financially viable shipyard on this parcel would be difficult.

The data and analysis of this Second Addendum, in addition to the continuing relevant information provided in the Study and first Addendum, indicate that there is no

shipyard, operational maritime support facility, or industrial access need to retain the Campbell Industries/Fifth Avenue Landing parcels land areas in their present "Marine Related Industrial" designation. Similarly, the data and analysis indicate that there is no navigational, ship building/repair/maintenance, or other shipping facility need to retain the Campbell Industries/Fifth Avenue Landing water areas, other than those proposed to be TAMT Berth 1 and 2 navigational facilities, in their present "Specialized Berthing" industrial designation.

## **2. Marine Terminal/ Shipping**

### **Conclusions of Prior Studies relating to Marine Terminal / Shipping**

Recent increases in maritime cargo business at the Port District have shown the need to re-evaluate the conclusions of the Study and first Addendum. The first Addendum concluded, as of early 1998:

1. TAMT was operating significantly under capacity;
2. There would be no projected need for additional land at the TAMT for expansion of cargo operations;
3. Any projected significant growth in through-put at the TAMT would relate to bulk commodities not requiring additional land;
4. The principal growth area would be in the import of automobiles at National City Marine Terminal (NCMT); and,
5. Land for automobile expansion must be provided near NCMT which is unrelated to uses at TAMT.

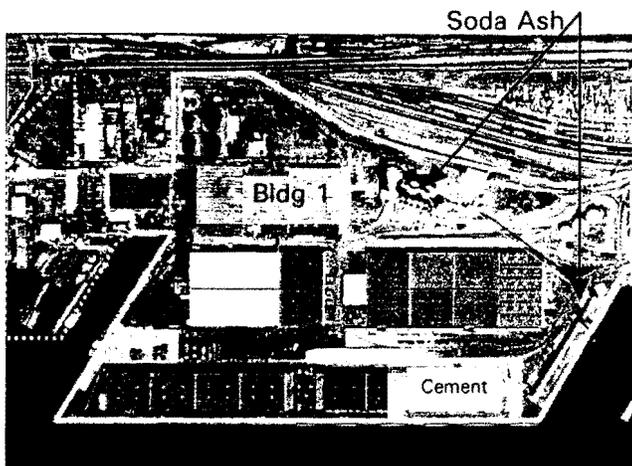
Marine Terminals Existing Conditions

As of August 1999, both of the District's marine terminals are operating at higher capacities than previously stated.<sup>2</sup> Of the 96 acres at TAMT<sup>3</sup>, 28 acres are committed to servicing long-term bulk tenants, soda ash and cement. Currently (November 1999), TAMT's usable warehouse space and laydown areas are full of cargoes most of which do not generate a positive economic return to the District (See Table 2). (Building 1 is not usable – approximately 5 acres; the adjacent 4 acre laydown area is underutilized for a total of approximately 9 acres.) However, as explained below, the 96 acre terminal at TAMT is adequate in size to accommodate existing bulk cargoes and projected container cargoes.

**Table 2**

**Comparison of TAMT  
FY 97/98 Financials by Commodity  
(\$000s)**

Financial Item	Soda Ash	Cold Storage	Containers	Fertilizer	News Print	Cement	Liquid Bulk	Other	Total Facility
Revenues	1,209	390	805	413	226	245	85	239	3,611
Costs	1,265	1,872	349	292	59	84	161	2123	6,205
Net Income (Loss)	(56)	(1,482)	456	121	167	161	(76)	(1,884)	(2,594)



**Figure 1: Tenth Avenue Marine Terminal**

..... Campbell Leasehold



**Figure 2: National City Marine Terminal**

..... Expansion Area

<sup>2</sup> See Table 3 below.

<sup>3</sup> See Figure 1. The area shown is the approximate area which is utilized (or planned to be utilized) for maritime cargo activities.

The NCMT<sup>4</sup>, containing 125 acres, is currently (November 1999) operating at full capacity with automobile, truck and lumber cargoes. Additional upland property is being acquired at the NCMT to meet the land-intensive automobile storage needs in National City.<sup>5</sup> Marine terminal expansion planned at NCMT includes a wharf extension<sup>6</sup> and acquisition of upland parcels. Filling the bay for Marine Related Industrial use is not anticipated in the foreseeable future beyond the existing NCMT wharf extension project nor is it an economically or environmentally viable option for marine terminal expansion. NCMT is landlocked by the U.S. Navy property to the North and environmentally sensitive habitat to the south. Acquisition of upland property is the only viable means to meet the expansion needs for automobile cargo.

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<sup>4</sup> See Figure 2. The area shown is the approximate area currently used (anticipated to be used) for maritime cargoes.

<sup>5</sup> The Board of Port Commissioners approved the acquisition of the National Distribution Co. site, containing 22.5 acres in National City on 10/28/99. This is subject to State Lands Commission approval.

<sup>6</sup> The NCMT wharf extension project is currently in the CEQA analysis phase. An EIR is currently being prepared for public review.

Below is a table of tonnage for District commodities since 1981 to update cargo volumes last reported in the Study as Exhibit 8 on page 34.

**Table 3**

**Port of San Diego  
Historical Cargo Volume**

<b>Year</b>	<b>Millions of Tons</b>
1981	2.3
1982	1.8
1983	1.7
1984	1.3
1985	1.6
1986	1.7
1987	1.5
1988	1.2
1989	1.3
1990	1.3
1991	0.9
1992	0.6
1993	0.5
1994	0.9
1995	1.0
1996	1.1
1997	1.5
1998	1.3
1999	1.8

Source: Port of San Diego, Marine Operations.

This table indicates the past cyclical nature of the District's maritime cargo business.

## Marine Terminals Master Plan

### Booz-Allen Existing Cargoes Forecast

In April, 1999, the District prepared a 2020 Marine Terminals Master Plan ("Master Plan") for both the TAMT and the NCMT. Booz-Allen & Hamilton, Inc. ("Booz-Allen") was retained to assist the District in developing the Master Plan.

As a part of the Master Plan, Booz-Allen re-assessed the District's position in the global market and generated a revised 20-year forecast of District cargo volumes. Booz-Allen concluded that the District's existing cargoes would grow an average 1.5% annually from 1,617,000 metric tons in 2000 to 2,225,000 metric tons in 2020.

**Table 4**

**Port of San Diego  
20-Year Forecast for Existing Commodities  
(Thousands of Tons)**

<b>Commodity</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>AAGR</b>
Soda Ash	621	648	725	811	908	1.8%
Cement	345	385	422	463	509	1.9%
Autos	316	325	326	332	342	0.4%
Fertilizer	116	125	134	144	154	1.3%
Lumber	94	104	113	122	132	1.6%
Newsprint	50	54	57	62	67	1.4%
Bunkers	41	47	55	66	68	2.4%
Cold Storage	33	37	39	42	45	1.5%
<b>Total</b>	<b>1,617</b>	<b>1,726</b>	<b>1,871</b>	<b>2,041</b>	<b>2,225</b>	<b>1.5%</b>

Source: Booz-Allen & Hamilton, 1999.

Booz-Allen Theoretical Container Forecast

After analyzing the District's growth projections of current cargoes, Booz-Allen forecasted the District to be competitively positioned to attract and service approximately 343,000 containers per year by 2020.<sup>7</sup> With containers, the District's average annual growth rate would be 3.4% and the total annual tonnage would rise from 1,638,000 metric tons in 2000 (from existing commodity cargoes) to 4,500,000 metric tons annually by 2020.

**Table 5**

**Port of San Diego  
Total Cargo Forecast  
(Thousands of Tons)**

<b>Commodity</b>	<b>FY 97/98</b>	<b>2000</b>	<b>2010</b>	<b>2020</b>	<b>AAGR (2000-2020)</b>
Soda Ash/Pot Ash	599	621	725	908	1.8%
Cement	26	345	422	509	1.9%
Fertilizer	113	116	134	154	1.3%
Newsprint	14	50	57	67	1.4%
Fresh Fruit	13	33	39	45	1.5%
Petroleum	41	41	55	68	2.4%
Autos	236	316	326	342	0.4%
Lumber	97	94	113	132	1.6%
Containers	64	0	1,294	2,158	16.5%
Miscellaneous	78	22	55	117	8.3%
<b>Total Annual Tonnage</b>	<b>1,281</b>	<b>1,638</b>	<b>3,220</b>	<b>4,500</b>	<b>4.9%</b>
<b>Average Annual Growth Rate (AAGR)</b>	<b>--</b>	<b>8.5%</b>	<b>7.0%</b>	<b>3.4%</b>	

Source: Booz-Allen & Hamilton, 1999.

<sup>7</sup> "Containers" in this report refers to Twenty-Foot Equivalent Units—TEUs.

### District Concerns with Booz-Allen Container Forecast

The District has three primary concerns with Booz-Allen's forecast of 343,000 containers moving through the District by 2020. First, Booz-Allen oversized the District's regional market by including places not realistically served via the Port of San Diego due to transportation and infrastructure limitations. Second, Booz-Allen neglected to match exact shipping line services to container demand, which is critical in providing a reliable forecast. Third, the District's history of not attracting a significant volume of containers to its facilities casts doubt upon the District's ability to attract the 343,000 containers forecasted by Booz-Allen in the future. As will be discussed below, the District is confident that it will attract and service approximately 150,000 containers by 2020 resulting in surplus acreage at TAMT.

#### **I. Booz-Allen Oversized the Port of San Diego's Market**

To produce what it concluded was the District's 2020 forecast, Booz-Allen included geographical areas beyond the realistic reach of the Port of San Diego. Furthermore, Booz-Allen's projection of 343,000 containers by 2020 was based on the following reasons:

1. At the ports of Los Angeles and Long Beach, containers are projected to grow well beyond their acreage capabilities;
2. 2.9 million containers originated in or were destined for locations that Booz-Allen felt could be served by the District in 1997; and,
3. The District's overall costs for containers, within the District's trucking distance market, were estimated to be more competitive than Los Angeles and Long Beach.

## Los Angeles and Long Beach Growth v. Capacity

### Growth

Container volumes at the ports of Los Angeles and Long Beach have grown from 3.2 to 6.5 million containers in the last 10 years, an average of 8.3 percent each year. The transportation consultants Booz-Allen and DRI/Mercer both forecast that container volumes at these ports will continue to grow to over 24 million containers annually by 2020.

### Capacity

The current range of U.S. ports productivity is 2,500 to 4,000 containers per acre. Los Angeles and Long Beach utilize 1,881 acres for containers and achieve an average annual throughput volume of 3,190 containers per acre. By 2005, with their redevelopment projects complete, they will add 712 acres for containers for a total of 2,593 acres. With their 2020 projected growth (24 million containers), Los Angeles and Long Beach will have to achieve a container throughput level of 9,256 containers per acre in order to meet this demand (three times their current productivity.)

Based upon the Los Angeles and Long Beach's current production (3,190 containers/acre) multiplied by their 2005 acreage supply (2,593 acres), Booz-Allen predicts that these ports will service far less than half of the projected demand for approximately 9,000,000 containers. Booz-Allen further concluded that these ports need to dramatically improve container throughput or develop an additional 6,800 acres to service the containers that are projected to come. Ultimately, because only 712 acres are being developed, and it is highly unlikely that the ports of Los Angeles and Long Beach will achieve throughput volumes

of over 9,000 containers per acre, Booz-Allen opined that San Diego could be developed into a container facility as an alternative. The District agreed that San Diego could handle some containers, but differs as to the size of that market.

**Current Container Volumes within Port of San Diego's  
Regional Trucking Distance Market**

Booz-Allen used the Port Import Export Reporting Services (PIERS) database to determine how many containers were destined to or left locations that, in their opinion, were proximate to the District. The following table illustrates the cargo's origin, destination, and the total volume.

Table 6

**North American Container Origins and  
Destinations Accessible via the Port of San Diego  
(FY 97/98; Thousands of Containers)**

World Region	North American Origin/Destination									Total	
	Southern California Counties								Arizona, Nevada, New Mexico		Mexico
	Los Angeles	Orange	San Bernardino	San Diego	Imperial	Riverside	Other Counties				
Northern Asia	1,664	138	71	16	10	14	79	17	109	2,119	
Southern Asia, Australia	375	30	16	22	0	5	19	6	38	512	
Latin America	87	4	2	8	0	0	5	1	18	125	
Other	125	17	5	3	0	2	7	12	5	175	
<b>Total</b>	<b>2,251</b>	<b>190</b>	<b>93</b>	<b>50</b>	<b>10</b>	<b>20</b>	<b>109</b>	<b>37</b>	<b>171</b>	<b>2,931</b>	

Source: Booz-Allen, 1999.

As this table illustrates, a majority of the containers during 1997 originated in or were destined for Los Angeles County. However, Booz-Allen concluded that because 288 thousand containers went to or from counties and states nearby, San Diego could attract some of that container volume so long as the District was cost competitive to shippers.

The District's Maritime Services Division conducted a revised market analysis to verify Booz-Allen's projections. Booz-Allen oversized the District's current market. In

Table 6, Booz-Allen defined the District's market share as the containers moving in the country of Mexico, the states of Nevada, Arizona, and New Mexico and the counties of Los Angeles, Orange, San Bernardino, San Diego, Imperial, Riverside, and other unidentified counties. Booz-Allen found that 2.9 million containers were within range of the Port of San Diego. However, only those containers moving in Northern Mexico, Arizona, San Diego, Imperial, and Riverside counties could be realistically served via the Port of San Diego due to limitations in the transportation system. Using PIERS, the District found that in 1997, instead of the 2.9 million containers, only 147,716 containers came from the revised trucking distance market. Thus, Booz-Allen critically overstated the District's market.

#### **Cost Advantage of Port of San Diego**

The District's lower tariff rates of \$190 per container versus Long Beach's \$270 per container offset higher trucking and sailing costs associated with shipping containers through San Diego. For this reason, Booz-Allen found that bringing containers to the District would be less expensive to shippers than via the Port of Long Beach.

## II. Booz-Allen Neglected to Match Shipping Line Services to Container Demand

Using the numbers reflected in Table 6, Booz-Allen assumed that a certain percentage of existing Los Angeles/Long Beach cargoes could be attracted and serviced by the District.

Table 7

### San Diego's FY 97/98 Container Market Potential

World Region	North American Origin/Destination									Total
	Los Angeles	Orange	San Bernardino	San Diego	Imperial	Riverside	Other Counties	Nevada, New Mexico, Arizona	Mexico	
Number of 1997 Containers via Los Angeles and Long Beach (in thousands)	2,251	190	93	50	10	20	109	37	171	2,931
Assumed Percent of Containers within Trucking Distance Market to Port of San Diego	10%	50%	100%	100%	100%	100%	0%	100%	100%	22%
Assumed Percent of Containers that could have been Captured by Port of San Diego	10%	10%	10%	25%	25%	25%	0%	100%	100%	16%
Potential Volume of Containers for Port of San Diego	22,513	9,515	4,650	12,399	2,559	5,107	0	3,696	42,640	103,078

Source: Booz-Allen, 1999.

This table indicates an assumption by Booz-Allen that if the Port of San Diego had adequate container handling facilities, it would have had a throughput volume of 103,078 containers in 1997. This volume was based upon two percentages which are best guesses about what the District might have captured of the Los Angeles/Long Beach containers.

Booz-Allen multiplied 103,078 containers times the anticipated container growth rate for Southern California to produce the 2020 forecast for the District.

Table 8

**Port of San Diego  
Total Forecasted Container Volumes  
2000 - 2020**

San Diego Market Forecast	2000	2005	2010	2015	2020
Potential Total Container Forecast	117,000	158,000	205,000	274,000	343,000
Actual Container Forecast (Phased-In)	0	79,000	205,000	274,000	343,000

Booz-Allen's mathematically derived capture market, based on assumed percentages, failed to consider where the cargoes are coming from, on which ships they are arriving, and where they are going – all vital links in the supply and logistics chain. Booz-Allen's analysis, therefore, did not adequately assure the District that the projection of 343,000 annual containers by 2020 was attainable.

**III. Booz-Allen's Container Projections are Too High Considering District's History**

The District has had a container terminal at the 24<sup>th</sup> Street Terminal in National City for over 25 years. At no time has the District ever imported or exported a significant volume of containers. Thus, the District's history casts doubt upon the validity of Booz-Allen's high container projection.

## District 2020 Container Forecast

The District's Maritime Trade Development staff developed container market projections using the PIERS data to track every container that left or came into its regional trucking distance market. Ultimately, this more specific container-by-container, port-by-port, shipping line-by-shipping line analysis of the District's trucking distance market revealed that actually only 147,716 containers moved to or from the District's regional trucking distance market in 1997 rather than the 2.9 million (See Table 6) indicated by Booz-Allen.

The District further analyzed the 147,716 containers by targeting the highest volume foreign ports that handled cargo moving to or from the trucking distance market. The District found there are 26 foreign ports having critical mass of cargo originating in or destined to the Port's regional market (See Table 8) sufficient to attract a shipping line to make a port call in San Diego. The total volume of these 26 foreign ports became the District's potential market.

**Table 9**

### **SAN DIEGO FOREIGN PORT MARKET**

<b>Target Ports</b>	<b>To/From Region</b>	<b>20' Containers (TEUs)</b>	<b>Weekly Average</b>
BUENAVENTURA	E	398	8
BUENAVENTURA	I	5	0
BUSAN	E	3,088	59
BUSAN	I	10,881	209
CALLAO	E	835	16
CALLAO	I	70	1
COLON	E	3,558	68
COLON	I	4	0
CHINA P	I	6,427	124
GUAYAQUIL	E	73	1
GUAYAQUIL	I	150	3
HAKATA	E	1,194	23
HAKATA	I	159	3
HONG KONG	E	4,311	83
HONG KONG	I	5,265	101
INCHON	E	1,474	28
IQUIQUE	E	1,471	28

IQUIQUE	I	90	2
KAOHSIUNG	E	948	18
KAOHSIUNG	I	3,480	67
KEELUNG	E	1,641	32
KEELUNG	I	2,832	54
KOBE	E	1,994	38
KOBE	I	3,945	76
MANZANILLO	E	211	4
MANZANILLO	I	8	0
NAGOYA	E	3,930	76
NAGOYA	I	3,233	62
OSAKA	E	2,907	56
OSAKA	I	554	11
PT KELANG	E	971	19
PT KELANG	I	3,998	77
PTO CABELLO	E	285	5
PTO CABELLO	I	17	0
PUNTA MANZANI	E	480	9
PUNTA MANZANI	I	14	0
SAN ANTONIO	E	3,208	62
SAN ANTONIO	I	215	4
SAN JOSE	E	82	2
SAN JOSE	I	359	7
SANTIAGO	E	311	6
SANTIAGO	I	59	1
SHANGHAI	E	634	12
SHANGHAI	I	1,921	37
SINGAPORE	E	830	16
SINGAPORE	I	4,560	88
TOKYO	E	4,468	86
TOKYO	I	2,058	40
VALPARAISO	E	636	12
VALPARAISO	I	2	0
YOKOHAMA	E	2,264	44
YOKOHAMA	I	3,056	59

	<b>Exports</b>	<b>42,202</b>
	<b>Imports</b>	<b>53,362</b>
<b>Potential Container Market Total</b>		<b>95,564</b>

The numbers generated in this table were confirmed by telephone calls and surveys directly to the 16 major shippers who sent their cargoes through these foreign ports. A direct comparison of PIERS data and District survey responses from the 16 major shippers revealed that the shippers were shipping a larger volume of containers than identified in the PIERS database. According to the PIERS data, 16 major shippers moved 28,745 containers.

The District survey responses revealed that 37,181 containers were shipped—8,436 more containers than found in FY1997/98 PIERS data. The District was, therefore, confident that the PIERS data was a conservative tool to assess the District's potential container market.

Having determined that 95,564 containers was a reasonable assumption of the potential 1997 market, the District needed to find a likely capture market. To do that, the District identified transpacific and North-South American trade routes that could best serve the immediate transportation needs for the District's trucking distance market shippers. The District focused on two distinct trade routes currently served by established container lines: Maersk/Sea-Land transpacific service and the CSAV/Chilean Line's Latin America service. The District found that if these two shipping lines called the Port of San Diego, the District would have had a throughput volume of 45,140 containers in 1997. The District therefore used 45,140 containers as its capture market.

The 1997 capture market of 45,140 containers determined the District's baseline number used to develop 2000, 2010 and 2020 container forecasts. The District's forecast is based upon an average annual growth rate of 5.4%, the same rate used by Booz-Allen through the year 2020.

**Table 10**

**District Container Projections**

<b>Year</b>	<b>1997</b>	<b>2000</b>	<b>2010</b>	<b>2020</b>
<b>District Container Forecast</b>	45,140	50,147	84,849	143,567

As this table indicates, the District's market analysis ultimately produced a 2020 forecast of less than half of Booz-Allen's projection. However, unlike Booz-Allen's forecast,

the District's forecast was based upon specific market tested data, giving the District adequate assurance that the container volumes were attainable.

#### Acreage Needs to Meet Container Forecast Demands

TAMT's existing footprint is 96 acres. Approximately 28 of those acres are committed to servicing long-term bulk tenants. Using the District's forecasts, the District would need to supply 18.2 acres in the year 2000 and 52.2 acres by 2020 to meet container demands.<sup>8</sup> The District has adequate existing land to supply a 68-acre container terminal facility at the TAMT, which will meet the District's 2020 forecasted container demand and beyond.<sup>9</sup>

Marine Terminals Master Plan provides a phased approach to develop container operations at TAMT. Currently, TAMT's usable warehouses and laydown area are full. As container terminal development proceeds, it will be difficult to continue providing a location for break bulk products like newsprint, container chassis, bagged fertilizer, bagged cement, and the bulk sand operation. Assuming the actual containers that arrive in the year 2020 are consistent with the District's container forecast, TAMT will have adequate acreage to meet its current long-term bulk tenants needs and container demands.

Based upon the above analysis, land associated with the Campbell Industries/Fifth Avenue Landing Parcels is not necessary for Marine Terminal / Shipping uses now or for the foreseeable future.

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<sup>8</sup> Using the nationwide average of 2,750 containers per acre.

<sup>9</sup> See attached Aerial Photographs.

### 3. Aquaculture

Consistent with the Study, there remains little aquaculture activity of any nature occurring in or along San Diego Bay at the present time. In addition, there is generally a lack of interest in the Campbell Industries/Fifth Avenue Landing parcels for aquaculture uses because of the potential existence of copper contamination and lack of available land for settling ponds. The Campbell Industries/Fifth Avenue Landing parcels are therefore considered to be unsuitable, within the meaning of Public Resources Code Section 30222.5, for aquaculture, and no demand for such coastal-dependent aquaculture use of industrial property such as these parcels has been expressed to the District.

#### 4. Boat and Marine Equipment Sales and Repair

Consistent with the Study, small boat sales and repair is not necessarily a water dependent use. Dealers selling and servicing small boats and related marine equipment are often not located near the water. Because these uses need not be on the water, there is no shortage of suitable land for the sale or repair of small boats and equipment.

For larger commercial or recreational vessels that cannot be economically or readily transported to a location distant from the waterfront for repair or display, there is a question as to whether the Campbell Industries/Fifth Avenue Landing parcels are suitable for or whether a demand now exists for such use. The prior Study indicated that the existing boatyards capable of servicing and displaying such vessels were operating substantially below capacity. The Study therefore concluded there is sufficient capacity in the existing boatyards to handle any increase in construction or repair activity that could reasonably be expected to occur. Based upon the above analysis, the Campbell Industries/Fifth Avenue parcels are not needed for this port purpose.

## 5. Commercial Fishing

The analysis in the Study is still accurate. In sum, the number of fishing boats in San Diego is not increasing, and there is no reason to expect this to change. And, there are more than an adequate number of berths for commercial boats for the foreseeable future even if the entire tuna fleet were to return to San Diego. Because there is sufficient space for the commercial fishing vessels the Campbell Industries/Fifth Avenue Landing parcels would not be needed for this use.

## 6. Fishing Piers

Five public fishing piers are located in San Diego Bay which more than adequately meet the current and foreseeable future demands for this use. Thus, the Campbell Industries/Fifth Avenue Landing parcels would not be needed for this use. See the Study for a more comprehensive evaluation of this use.

## 7. Boat Launching Ramps

Four boat launching ramps are located in San Diego Bay. These launching ramps more than adequately meet the current and foreseeable future demands for this use. In addition, the subject parcels would be a highly undesirable location for a boat launching facility. Therefore, the Campbell Industries/Fifth Avenue Landing parcels would not be needed for this use. See the Study for a more comprehensive evaluation of this use.

## 8. Mooring Buoys

In San Diego Bay, there are currently 437 mooring buoys owned by the District. A proposal to privatize them is currently being considered by the Board of Port Commissioners, which, if approved, would be subject to California State Lands Commission approval as well. The historical vacancy rate of the moorings is low because the District rates were below the cost to maintain the moorings. The demand has been therefore artificially high.

The District recently raised the monthly tariff rates on the mooring balls and it appears from visual inspection that the vacancy rate is climbing. Therefore, there is not a demand for moorings that requires a priority be given to such use for the Campbell Industries/Fifth Avenue Landing parcels.

## 10. Navigation

This use category includes ship channels, ship anchorage areas, and derelict craft storage areas. The water portion of the site is well outside the main ship channel. Also, it is not suitable for ship anchorage because the site adjoins TAMT's northerly berths and has shallow water depths ranging between 20 to 25 feet. Finally, the site is not appropriate for derelict craft storage because of the vessel traffic to TAMT could cause hazards to shipping navigation. For the reasons stated, the Campbell Industries/Fifth Avenue Landing parcels are inappropriate for all of the above uses. Therefore, there is no need to give priority to these uses under the Public Resources Code Section 30708(c).

### **11. Sportfishing and Related Retail Activities**

Sportfishing vessels are located either in Mission Bay or in America's Cup Harbor close to the open ocean. Locating a sportfishing operation and related retail activities at Campbell Industries/Fifth Avenue Landing parcels would place such a business at a competitive disadvantage because of the longer sailing times necessary to reach the mouth of the harbor—approximately 30 minutes. Therefore, the range of the sportfishing trip would be shortened, or the number of trips would be decreased. There is no demand for this site for sportfishing operations and associated retail bait and tackle supplies.

### **12. Vessel Charter / Water Taxi / Ferries**

Such use may accompany a small portion of the site and is anticipated to be incorporated into the design. This use could include excursion operations, a water taxi, and/or a ferry landing most likely in the form of a dock as part of the water element.

### **13. Naval Station**

Consistent with the Study's analysis, there is no reason to believe that the Navy will need additional bay front land at any time in the future. But, assuming the Navy did need additional waterfront land, the Campbell Industries/Fifth Avenue Landing parcels would be an inappropriate location due to the surrounding uses. Thus, the U.S. Navy's demand for the site is unlikely at any time in the future.

#### 14. Cruise Ships

In 1998, Bruno-Elias & Associates, Inc. (BEA) was retained to examine the potential for developing cruise business at the existing North Embarcadero site (B Street/Broadway Piers), the Tenth Avenue Marine Terminal, or some combination of the two. BEA concluded that there would be substantial increases in cruise passenger demand if the District developed new or upgraded its existing cruise terminal.

To meet projected cruise passenger/vessel demands, BEA recommended retaining cruise terminal facilities at the current location along the North Embarcadero for a number of reasons. First, B Street Pier, at the foot of San Diego, provides the best location for the majority of the District's cruise business—ports of call vessels. (Ports of call passengers want to disembark vessels in an attractive location that is within walking distance of shops and scenic attractions because they generally would not have other transportation means. B Street Pier is ideally located near downtown historical landmarks and memorials, shopping, and museums.) TAMT, on the other hand, is an industrial area that does not appeal to the cruise passenger. Second, splitting operations between B Street Pier and TAMT results in an inefficient operation increasing operational costs to the District, the cruise lines, and ultimately the consumer. Third, currents at the narrowing portion of the Bay, near TAMT, would cause the use of tug boats to berth cruise ships; cruise ships are designed to avoid the use of tugs in order to avoid that substantial operational cost. Because of the B Street Pier's location and adequacy to handle projected vessel and passenger demands, BEA recommended B Street Pier as the location for cruise terminal development.

For the reasons described above, the Campbell Industries/Fifth Avenue Landing Parcels are not suitable for cruise terminal development.

**15. Miscellaneous "Marine Related" Uses**

Other port purposes include kelp processing, fish processing and canning, salt extraction, power generation (for the cooling water), marine construction and fish markets.

There is no demand for fish processing and canning, or for additional facilities for kelp processing, nor is there a demand for additional power generation facilities. Because the site does not have shallow water, it is not suitable for salt extraction. Finally, there is no demand for a large scale commercial fish market because of the existing facilities in America's Cup Harbor.

**16. China Ocean Shipping Company**

The District does not meet COSCO's requirements for facilities which are: 150 acres of land, docks with 50 feet of water, on-dock rail, and post-panamex cranes. Per the Maritime Master Plan, the District will be providing post-panamex cranes, but as the analysis above has shown, the demand for a large container terminal operator like COSCO does not exist. The District will likely develop as a smaller, niche container operation. And, as stated, should have adequate acreage to meet its 2020 container demands.

## Railroad Effects on Future Maritime Growth<sup>10</sup>

Modern railroads prosper within sizeable but specific niche markets. The District currently sends water-borne cargo along two niche rail services. One of the niches is service and volume sensitive, namely automobiles and intermodal freight moving in trainload quantities under the railroads' most stringent service and handling specifications. The second niche is the transport of relatively low-value or bulk commodities which are generally dense, large volume commodities—the District's bulk soda ash is an example of this type of commodity.

A factor in the modern railroad's economic efficiency lies in length of haul. On this principle hinges the economics of rail transport: local freight gathering, distribution and train assembly require particularly labor-intensive yard activity (switching, consolidation, billing, and other tasks), while inter-city rail service is a comparatively efficient operation whereby a series of two-person crews can move 10,000 tons of freight for thousands of miles. Common wisdom in the transportation industry maintains that short-haul highway movements are very difficult to convert to rail – even in intermodal service. The average length of haul for rail shipments to or from the San Diego Area is 1,134 miles – three times longer than the average truck haul of 384 miles for the region. The length of the SD&AE from Plaster City to San Diego is only 130 miles, making it very difficult to convert truck-competitive traffic to rail.

An exception to this common wisdom lies in the bulk market niche described above. Many of these commodities are too heavy to move economically, profitably, or legally

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<sup>10</sup> Used by permission from, "An Updated Market Study for the San Diego and Arizona Eastern (SD&AE) Railway, prepared for the San Diego Association of governments, June 1999, by the Kingsley Group.

over the highway system for *any* length of haul. As a result, railroads handle “shuttle” moves of steel slabs, intra-plant moves of bulk chemicals, and other short haul, but profitable, business.

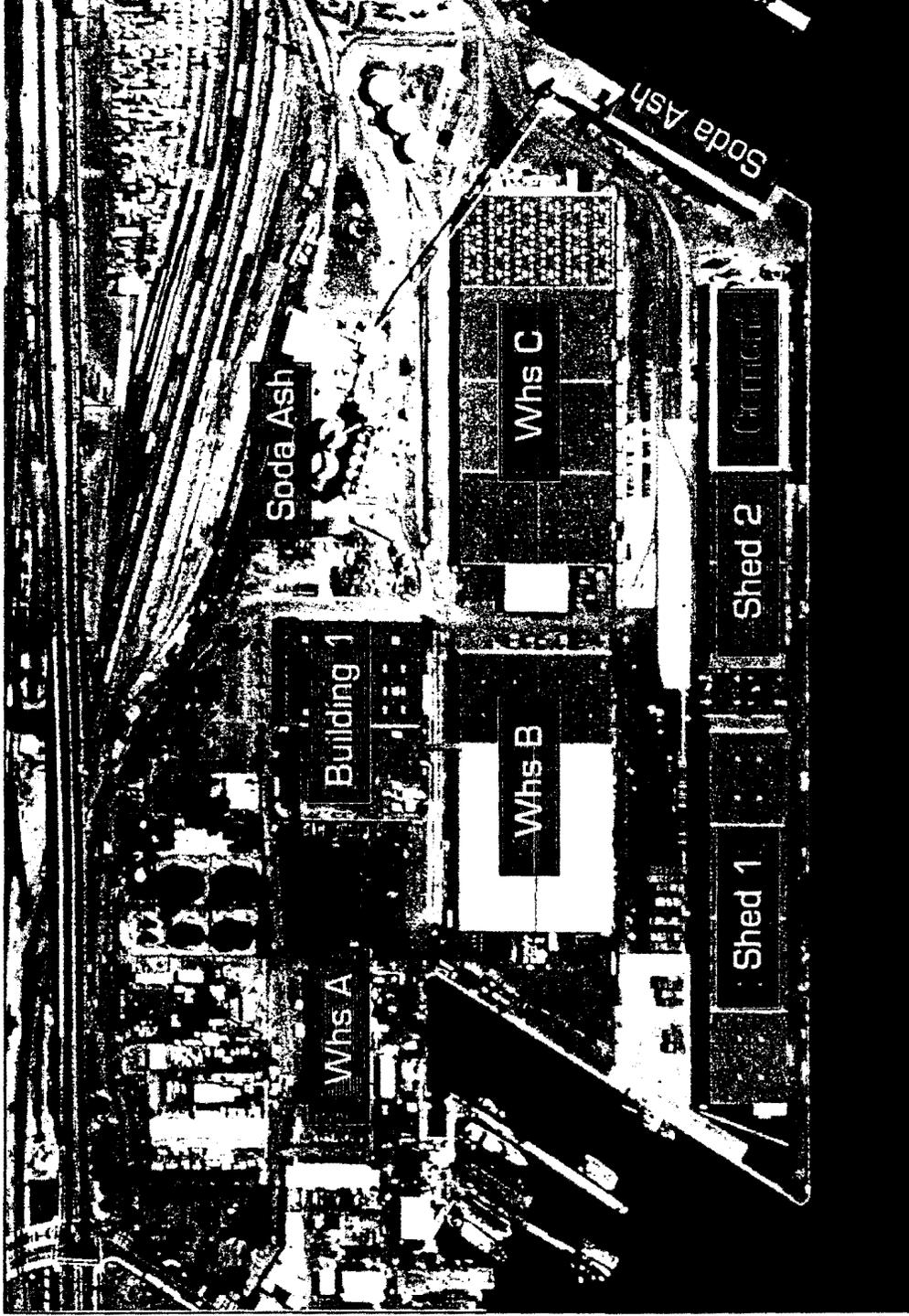
The District currently has rail service which actively participates in these rail “niches”. Soda ash is an example of the bulk niche operation which is moved through TAMT. The District’s automobile operation at NCMT thrives as a result of rail movements.

With these rail successes, however, the District’s 2020 Marine Terminals Master Plan does not anticipate a substantial increase in rail activity. The current rail movements for soda ash and automobiles may increase somewhat through 2020, but the container operation envisioned for TAMT is designed to serve those containers that would travel less than 400 miles – a distance not economically justifiable to be served via rail. This distance is far too short to make container movements by rail economically viable. Therefore, the trends for rail operations for the future to TAMT and NCMT should remain substantially the same as operations today.

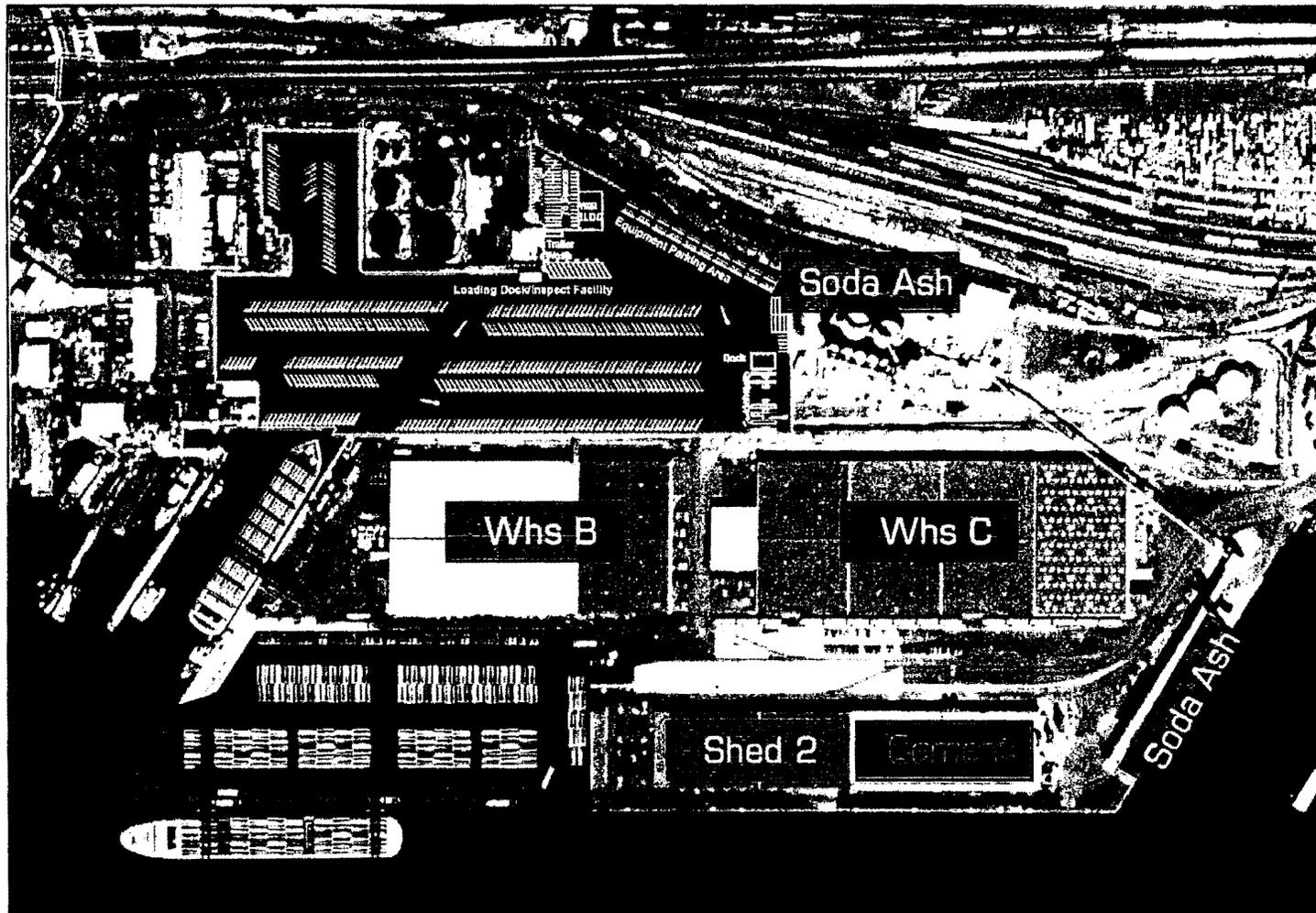
### Conclusion

Based upon the above analysis, this Second Addendum supports the conclusions of the Marine Related Land Study and Addendum that the Campbell Industries/Fifth Avenue Landing parcels are not necessary for water-dependent port purposes now and in the foreseeable future.

# Tenth Avenue Marine Terminal Existing Conditions



# 2000 - 2005



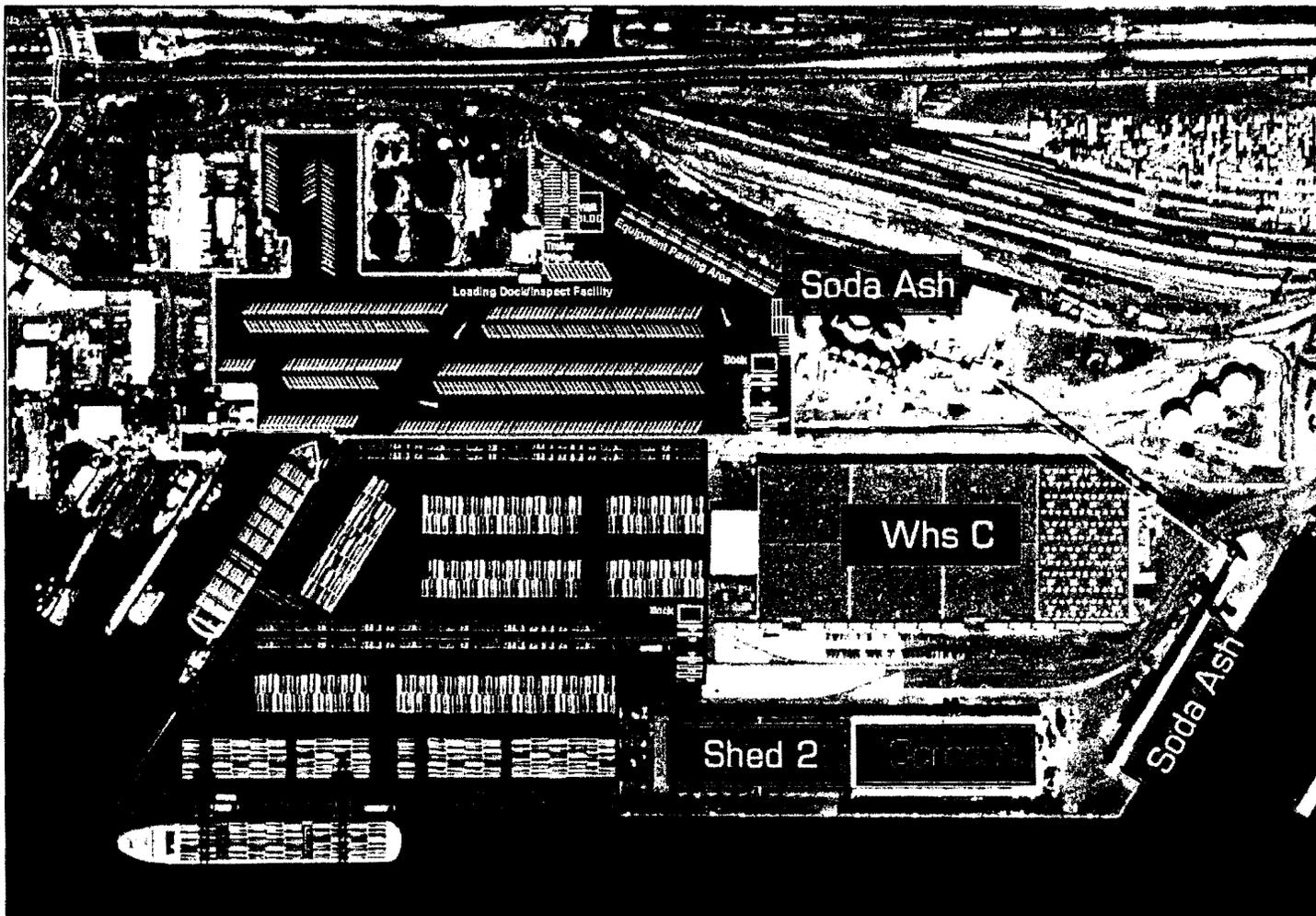
Cost **\$48.7 million**

Annual revenue **\$5.1 million**

Demand **50,147 teus**

Capacity **83,958 teus**

# 2005 - 2010



Cost **\$5.5 million**

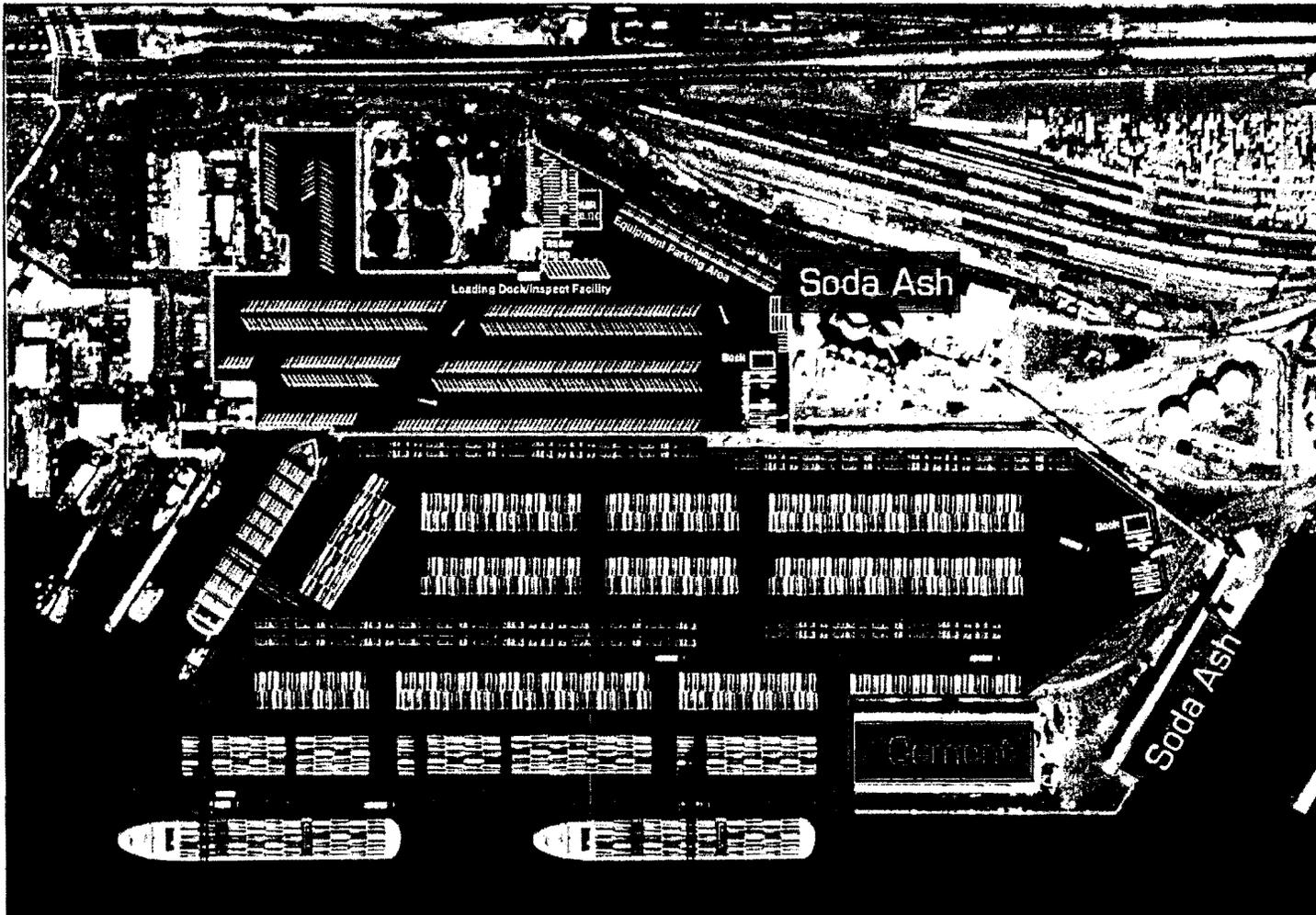
Annual revenue **\$8.8 million**

Demand **80,849 teus**

Capacity **115,721 teus**

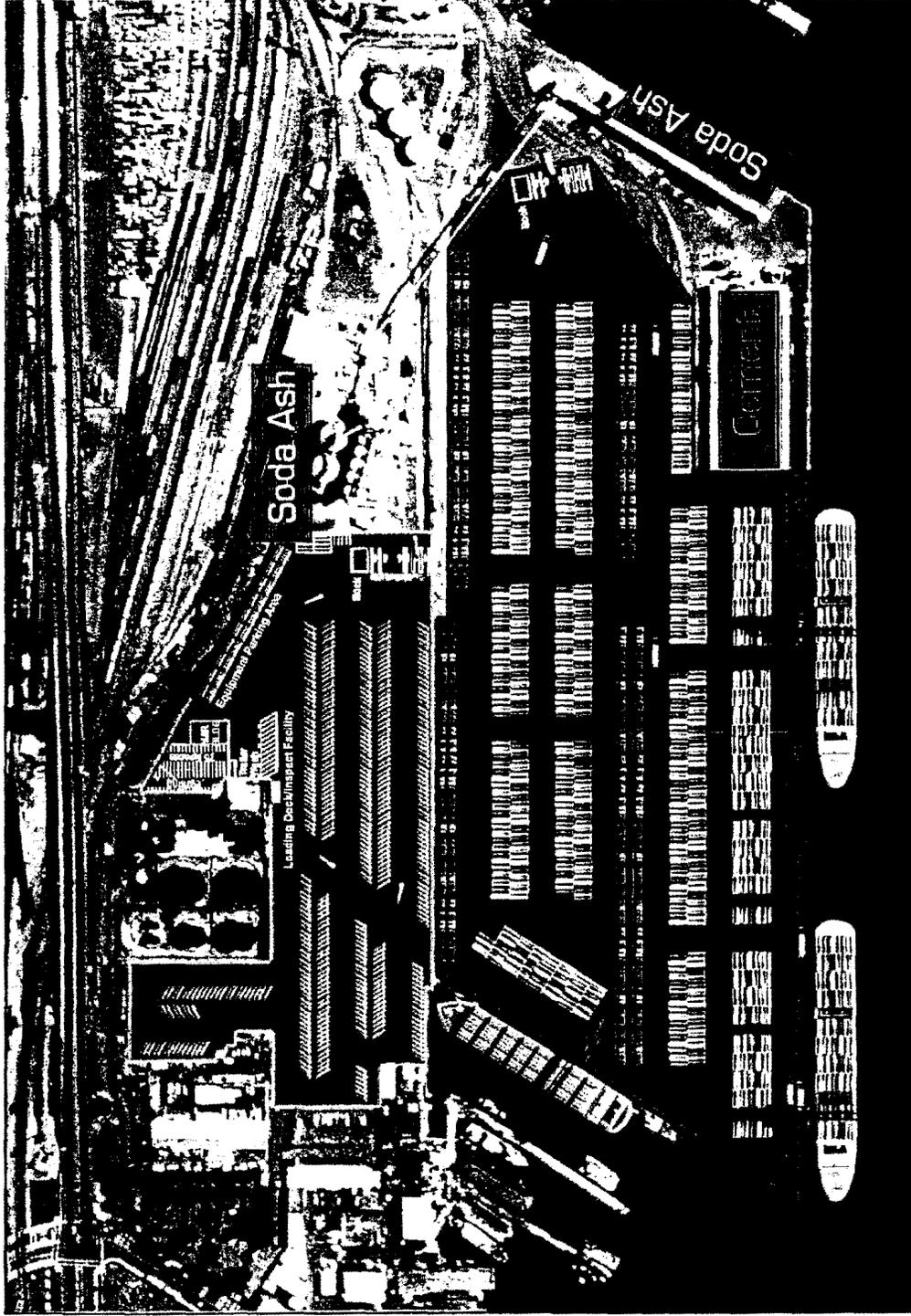
# 2010 - 2015

Total Cost  
**\$60.3 million**



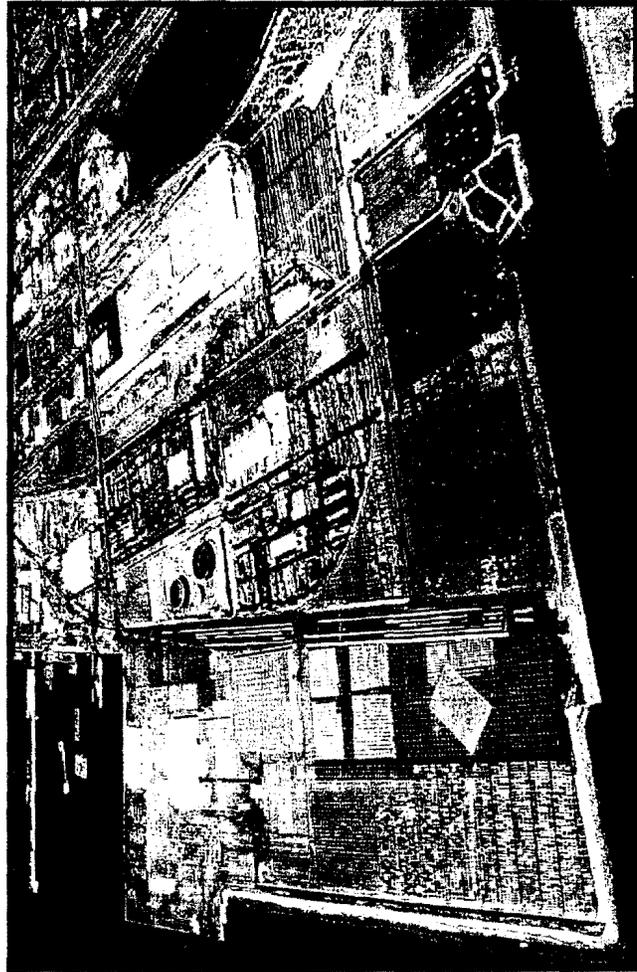
Cost	<b>\$6.1 million</b>	2020 Demand	<b>143,567 teus</b>
Annual revenue	<b>\$14 million</b>	Capacity	<b>181,034 teus</b>

# 2020 PLAN



Total Cost  
**\$60.3 million**

# National City Marine Terminal



Continue expanding **automobile**  
and **lumber** operations

Suspend Phase II dredging  
saving \$32 million



# **SOUTH BAY BOATYARD:**

*Preliminary Marine Related  
Land and Water Study*

**SOUTH BAY BOATYARD:  
PRELIMINARY MARINE RELATED LAND AND WATER STUDY**

**CONTENTS**

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**1. INTRODUCTION**

Three major San Diego Bay environmental organizations – The San Diego Audubon Society, Environmental Health Coalition, and Southwestern Interpretive Association - have recently petitioned the San Diego Unified Port District (“SDUPD” or “Port”) in opposition to expansion or intensification of boatyard facilities at the 16-year old South Bay Boat Yard (“SBB”) on the Chula Vista Bayfront. (Exhibit 1, copies of correspondence.) San Diego Audubon Society, moreover, requests that the Port plan for the removal of SBB and re-designate the site for commercial land uses.

The environmental organizations indicate that their requests are based on the proximity of the existing, and potentially intensified, SBB to valuable and sensitive South San Diego Bay natural resource areas. In their estimation, such boatyard operations as sanding, blasting, and other vessel building or repair operations may deleteriously affect these resource, as well as public access and recreational, values. (Exhibit 2, South Bay regional locational map)

In response to the petitions, the SDUPD Board of Port Commissioners on December 14, 1999, directed Port staff to include re-designation of the SBB Marine Related Industrial land and water parcels to Commercial Recreational uses. This preliminary “Marine Related Land Study” of the SBB site and facility (hereinafter, the “MRLS for the SBB”) has been prepared to implement programmatic guidance by the California Coastal Act (“Coastal Act”) for priority use, and permissible reuse, of Port lands, consistent with presently available information. Future iterations of the MRLS for the SBB may likely be prepared as part of the environmental review of draft PMPA 28 as additional salient technical information is collected.

SDUPD is fully aware of, and through its comprehensive planning and operations supports, the highest priority assigned by the Coastal Act (§30708(c)) to utilization of existing Port land space for such maritime uses as navigational facilities, terminal and shipping industries, and necessary support and access functions, including especially avoiding future filling of San Diego Bay for new marine terminals. Concurrently, SDUPD is mindful of the totality of its public tidelands trust responsibilities, which - consistent with §30708(d) - extends to also include commerce of various types, public recreation, and the conservation of fisheries and other wildlife habitats. The Port further recognizes the companion provision in §30255, which assigns priority (but not an absolute claim to categorical preemption) to coastal-dependent development over other development along the shoreline. As a matter of practice, SDUPD, over the past 38 years, has successfully, comprehensively, and often collaboratively, harmonized each of these public trust purposes, and proposes to continue to do so at the SBB site.

## 2. SBB SITE CHARACTERIZATION

The SBB site is located on the east side of San Diego Bay, along the Chula Vista Bayfront in Port Planning District 7, Subarea 73. (Exhibit 3, Site Aerial Photograph with parcel boundaries) Although the SBB site itself lacks any reported significant environmental habitats or sensitive species, it is adjoined by highly valuable natural resources areas. (Exhibit 4, 1993 biological resources map from Draft Nautical Center EIR.)

To the north is the 316-acre Sweetwater Marsh National Wildlife Refuge (NWR), which was established in 1988 to provide nesting and foraging habitat for more than 100 species, including the listed threatened or endangered California clapper rail, California least tern, Belding's savanna sparrow, and the California brown pelican. An arm of the NWR, the "F-G Street Marsh" is located some 400 feet east of the site and connected to San Diego Bay by a disturbed and degraded tidal channel ("Rohr Marsh") that partly lies on Port lands. (SDUPD FEIR on the Port Master Plan, 1980, Figure 22, "Chula Vista Bayfront Biological Resources, Water/Sediment Quality")

On the waterside to the west and south are the 500-foot wide Chula Vista Recreational Boat Channel, some 1,150 acres of wetlands and estuary designated in the PMP for "Conservation," and the 1,400-acre San Diego National Wildlife Refuge, in whose land acquisition SDUPD was instrumental. On the landward side to the south of SBB, occur (i) the linear Chula Vista Shoreline Park, (ii) the Chula Vista marina, 10-lane boat launching ramp and park, and (iii) 80.6 acres of former aviation-related industrial Port lands that are now designated for Industrial Business Park uses. The SBB and an adjacent 6.3-acre parcel that follows Rohr Marsh and straddles Marina Parkway remain presently designated as "marine related industrial" land. (Exhibit 5, South Bay locational aerial; Planning District 7 precise plan map for the area between E and J Streets.)

The SBB site, which consists of 9.45 acres of land and 8.52 acres of water, was created in its present form by a combination of dredging of intertidal mudflats and filling of tidelands in 1968, adjacent to an earlier fill site south of G Street that was created in 1960. (SDUPD Tidelands Parcel Map Book, page 31; SDUPD Final EIR on the Port Master Plan, 1980, pages 29 and 31) Whereas the 1948 US Coast and Geodetic Survey chart for San Diego Bay shows soundings in the near-shore water area between the foot of F Street and the foot of G Street, as they then existed, to range between -1 foot MLLW and -2 feet MLLW, recent navigational charts depict a previously dredged water depth of -15 feet MLLW, shoaling to -0.7 feet. The Chula Vista Boat Navigational Channel, located immediately to the west of the SBB site, was dredged to -16 feet MLLW in 1989.

## 3. OVERVIEW: BOATING AND BOATYARDS AT SAN DIEGO BAY

Two recent consultant studies, prepared by M. J. Barney Associates for SDUPD, have substantially updated the informational base regarding the status and trends of recreational boating and associated boatyards at San Diego Bay. ("America's Cup Harbor Usage Study," November 30, 1999, hereinafter, "MJBA Study") and "Addendum to America's Cup Harbor Usage Study" (January 11, 2000, hereinafter, "MJBA Addendum") The following paragraphs summarize these studies, as well as pertinent information from other sources.

In 1999-2000, there are an estimated 23,000 registered watercraft in San Diego County, which comprise 35.9% of all such craft in California. Among boats berthed in 8,279 commercial boat slips at San Diego Bay, an estimated 65% are owned by residents of San Diego County. Residents of California, Arizona, other western states, and foreign nationals own the other 35%

of such boats. ("MJBA Addendum", page 15; "MJBA Study", Table 1, and page 3) San Diego Bay contains 437 mooring buoys and some 520 private boat docks at Coronado Cays and 5 docks along the Kellogg-La Playa shoreline of Point Loma. In addition, coastal San Diego County contains 2,649 commercial boat berths in Mission Bay and 854 spaces at Oceanside Harbor Marina, for a comprehensive total of 12,808 boat berthing spaces. Approximately 13,500 registered recreational boats in San Diego County may therefore be considered to be trailerable (less than 30 feet in length), both for purposes of launching as well as for maintenance and repair.

Following a reported downturn in the number of recreational boats and San Diego Bay marina occupancy rates during the recession of the early 1990's, reported boat sales and concomitant demand for boat repair and maintenance at San Diego Bay were robust in the strong economic climate of the final three years of the 20th Century. San Diego Bay recreational boat sales increased by 10-15% per year during this period, while sales of boats 50 feet or longer increased by 400% during the decade of the 1990's. At the same time, a remarkable 66% compound growth rate in worldwide construction of "megayachts" or "superyachts" (recreational boats typically longer than 80 or 110 feet, with displacement up to 500 tons) during the past four years has been reflected in their increasing presence on the Bay, particularly around Shelter Island. ("MJBA Study", pages 15, 18)

In 1999, the 23 marinas (with a total of 6,373 berths) on San Diego Bay had an average occupancy of 95% (range, 80%-100%), and two marinas near the Bay mouth enjoyed a waiting list of 2,500 boat owners seeking berths. ("MJBA Addendum," Table 1, "Number of Boat Slips by Boat Size" and page 3.) Of the 23 marinas, 18 were located in North Bay with 5,209 berths (north of the Coronado Bridge), 1 (with 100 berths) were located in Central Bay (between Glorietta Bay and the mouth of the Sweetwater River), and 4 (with 1,064 berths) were located in South Bay.

MJBA reports the following distribution of boats by hull size in the marinas at San Diego Bay (after "Addendum," Table 1):

116	Under 20 feet:	2%
627	20-30 feet:	11%
1,742	30-35 feet:	26%
1,061	35-40 feet:	17%
1,088	40-45 feet:	17%
594	45-50 feet:	9%
742	50-60 feet:	12%
292	60-100 feet:	5%
66	<u>Over 100 feet:</u>	<u>1%</u>
<b>6,373</b>	<b>Total</b>	<b>100%</b>

Recreational boats are typically hauled out of the water on two-year cycles for major maintenance, with other repairs and maintenance occurring on an as-needed basis, including at dock side.

Seven boat yards were located on the Bay in late 1999, with a total of 184-253 land and water work stations (depending on variable layout in response to boat sizes and type of work performed). These boat yards reportedly contained an average of 10 in-water work stations (with a range of two to 30) and an average of 20 landside work stations (with a range of 6 to 40). Four boatyards also maintained one work station each on the ways. The range of tonnage of boats maintained or repaired at these yards was 35-150 tons and the range of size was 20 to 140+ feet.

All San Diego Bay boatyards performed hull scraping, painting, exterior painting, structural and metal fabrication, engine/mechanical/shaft work, welding, zinc replacement, and fiberglass repair while boats were hauled out. In-water service by these boatyards included, variously, work on decking, plumbing, above-deck painting, electrical and electronics, interiors (including fixtures and upholstery), and engine and mechanical work (excluding through-hull).

In recent years, boat yards at San Diego Bay maintained or repaired a range of 4,250-4,550 boats per year, with an average of 611 boats per yard (range: 100-2,000) and an average 75% of boatyard land area allocated to such work. (MJBA Addendum, Table 4, "Types of Repair Performed with Boat Hauled Out", Table 5, "Types of Repair Performed with Boat in Water", Table 2, "Boat Table 8, "Boat Yard Work Volume Comparisons.")

MJBA projects baywide growth rates in the boat repair market of 4-6% per year through 2003 and perhaps 2005. The consultant determined that "overall San Diego serves its smaller and shorter length boats well," but "boatyards are now at or near capacity in San Diego." However, the consultant also found that, "due to limited lifting capacities, (150 tons at Shelter Island and 300 tons in National City) the larger markets [involving boats] over 80 feet [in length] are believed to be under-served, and the market [involving boats] of 100 feet or more is significantly under-served," with a resultant loss of "profitable boat repair business serving the larger yacht and superyacht market." The consultant noted that if boatyards are "allowed to perform maintenance and upgrades of current facilities with an easy approval process," in the current economic climate, they "will continue to fulfill demand ... over the next 10 to 20 years." ("MJBA Addendum", pages 17, 21, and 23.)

Although five San Diego Bay boatyards (Kettenburg, Knight & Carver, Koehler Kraft, and Shelter Island Boat Yard) informed MJBA that they worked on boats smaller than 40-50 feet in length, it is noteworthy that a search of self-identified boat yard, repair, and maintenance businesses listed in the electronic yellow-pages for San Diego County on February 12, 2000, identified 114 such enterprises, which were distributed by City as follows:

- \* City of San Diego: 87
- \* El Cajon: 7
- \* Santee: 4
- \* Chula Vista: 3
- \* National City: 3
- \* Vista: 3
- \* Imperial Beach: 2
- \* Coronado: 2
- \* Escondido: 1
- \* Lemon Grove: 1
- \* Oceanside: 1

The California Vehicle Code prohibits movement of vehicles that exceed 40 tons (80,000 pounds gross weight) on the state's highways, without special permits and stringent limits on operations, which (together with a higher per mile hauling cost and significant problems with lifting and cradling many longer hulls) effectively precludes most building, maintenance, and repair of larger recreational boats away from the water's edge.

It appears that in San Diego County the building, sales, repair, and maintenance of small boats (generally less than 20-30 feet in size) is typically provided away from the water's edge and may therefore be considered to be a coastal-related, rather than a coastal- (or water-) dependent use that requires a location on or near the water to be able to function at all. Conversely,

construction, repair, and maintenance of boats larger than 30 feet appears to be typically performed in waterfront boatyards, except for minor or incidental work, which can and is allowed pursuant to SDUPD ordinance to be performed on-board.

#### 4. Preliminary Analysis

##### 4.1. Boatyard Uses

In 1980, SDUPD designated the present SBB site, as well as the adjacent 30-acre single development parcel along the shoreline south of present "G" Street, as well as adjacent to Rohr Marsh, for "marine related industry" to "meet demand for waterfront industrial sites, and for port purposes". (PMP, January, 1980, page 121) Consistent with the exigencies of the Cold War, the first West Coast stirrings of a potential aquaculture industry, and an uncertainty about their optimal utilization, the PMP identified "possible activities" on these lands "could include expansion of Rohr's Surface Effect Ship (SES) project, boat or ship building, marine products manufacturing, boat repair, aquaculture facilities, or oceanographic research and development." (Id.) The Rohr missile barges plant was potentially contemplated as a lessee of the "Specialized Berthing" water area immediately adjacent to the present SBB site. (Id.) Dredge spoils from creating appropriately deep marine industrial navigational water adjacent to this land area, as well as from an expanded channel south of "F" Street, were originally proposed to be utilized as part of the mile-long "Chula Vista Peninsula" and its 1,500 additional recreational boat berths in Subarea 77, which the Commission denied at the point of PMP certification. (Draft PMP Precise Plan Figure 19, adopted by SDUPD Resolution No. 80-74, March 18, 1980; Final EIR on the PMP, February, 1980, pages 231, 240; CCC Certification of the SDUPD PMP with Modifications, #4.B.)

However, Congress canceled the SES project, new shipyards at San Diego Bay did not materialize, even at sites with much deeper water in Central Bay, marine products manufacturing facilities located at less costly inland sites, Lockheed's oceanographic facility plans and programs withered with the discovery of less costly terrestrial mining operations, and the vagaries of North American protein diets and the economic as well as biological/ water quality costs of fish farming combined to forestall the projected sweep of aquaculture after the Treaty of Rome as a vital new food source for a hungry world. It was thus not until 1984, or 16 years after its creation, and the opening of the first phase Chula Vista Marina, that SBB leased the vacant shoreline parcels north of "G" Street.

Concurrently, a dearth of industrial - or any other - interest in leasing the shoreline parcel north of "G" Street, which was also designated for "marine related industry" in the 1980 PMP, led to the recommendation that the Chula Vista Bayfront Park be extended in a 200-foot wide band along the shoreline between present Bayside Parkway and G Street. In certifying PMPA No. 8 in August, 1985, the Commission found that:

"Section 30708(c) states that the highest priority to the use of existing land areas shall be given to port purposes, including navigational facilities, shipping industries, and necessary support and access facilities. The proposed amendment changes the existing land and water use designations from two which are port-related (Industrial-Marine Related" and "Industrial-Specialized Berthing") to one which is not port-related ("Public Recreation-Park") and one which is ("Boat Navigation Corridor"). Ordinarily, the highest priority would be given to port-related and water-dependent uses. However, in this instance, sufficient evidence exists to allow a recreational designation. The existing water near the subject site is only a few feet deep; the existing boat channel is 15 feet in depth. Massive dredging would be required to provide the adequate water depth necessary for access by the larger ships which would normally use marine related industrial facilities; these ships would require about 35 feet of

channel and berthing depth. If dredging were to be performed, the Port has no nearby site already approved for disposal of the dredge material." ("Staff Recommendation on the San Diego Unified Port District Port Master Plan Amendment No. 8 (Chula Vista Bayside Park Expansion)", page 4)

The Commission decision, on recommendation of staff, further notes that although the expansion of Chula Vista Bayside Park will retain other areas to the north and east of the park (i.e., the present SBB site) in "marine related industrial" and "specialized berthing" uses, "the areas are not being used for their highest potential in accordance with the current designations; and the existing ["small-craft haul-out, repair, and storage"] uses are an indication of the lack of demand and the underutilized nature of the site. The types of uses associated with the current designations are not present in other nearby locations; the marine related industrial uses are concentrated in areas of the Bay north of the site (National City and San Diego)." (Id., pages 4-5.)

The SBB site use history during the intervening fifteen years unfortunately bears out the Commission's findings and prognosis from 1985 that a boat yard in the South Bay likely would be competitively disadvantaged. Thus, according to the MJBA Study and Addendum, whereas the average work-to-capacity of boat yards at San Diego Bay in recent years has been 84.3%, it is only 70% - the lowest on the Bay - at SBB. (MJBA Addendum, Table 6, "Summary of Boatyard Capacities".) Similarly, whereas the five boatyards in the North Bay on average work on 700-760 boats per year, and all boatyards on San Diego Bay average 611 boats per year, SBB repairs and maintains only 500/year. (Id., Table 8, "Boat Yard Work Volume Comparisons") And while "the overwhelming trend in yacht building is (to a) longer, higher, wider boat, and most importantly heavier tonnage" that is "significantly underserved" on San Diego Bay, the distribution of craft larger than 60 feet in length and berthed in marinas, which are more profitable for a boatyard to service and maintain, falls 13% to South Bay and 87% to Central and North Bay. (Id., Table 1) It is notable in this regard that although SBB's capacity to work on boats ranges between 50 and 90 feet, its boat lifting capacity is limited to one 25-ton and one 70-ton "Travelift," whereas other competing yards are equipped with 150-ton and 300-ton lifts, and 500-ton Syncrolifts are recommended by MJBA.

SBB's environmental and operational constraints provide a stark paradox, however, with MJBA's fundamental finding that boat yards at San Diego Bay "are now at or near capacity" and existing trends, without additional capacity improvements at the existing seven yards, are projected to consume all boatyard capacity on the Bay by the year 2006. (Addendum, page 17.)

#### 4.2. Shipbuilding, Repair, and Maintenance

Since modern commercial (passenger and cargo) ships typically draw in excess of 42 feet of water, and existing water depths along the Chula Vista Boat Channel and in the SBB basin extend to -10 to -17 feet MLLW, the SBB waterside parcel would be inadequate, absent dredging and disposal of a minimum of 4-5 million cubic yards, to accommodate shipbuilding, repair, or maintenance. Given that existing shipbuilding, repair, and maintenance yards are located on San Diego Bay adjacent to the existing Main Ship Channel, with its present depth of between -35 and -50 feet MLLW, and have capacity to accommodate additional demand, such dredging to turn the SBB site into a shipyard would on its face not constitute the preferred least environmentally damaging and sustainable alternative pursuant to §30708(a) and §30705(b). Moreover, Congress has not seen fit to reinvigorate such previous military projects as the "Surface Effect Ship" ("SES"), which might have been built in the South Bay in an earlier time,

and the then-prospective manufacturer, Rohr Industries, has withdrawn as a naval weapons systems manufacturer.

#### 4.3. Marine Terminal

Prior to the enactment of the 1976 Coastal Act, the land and wetlands area of the Chula Vista Midbayfront, located northwest of the SBB site within both the City of Chula Vista and present SDUPD jurisdictional lands, were proposed for a major marine terminal to serve the Pacific Ocean railhead of the AT&SF Railroad. However, the railroad and highway infrastructure, together with the massive dredging, bulkheading, and filling to create such a terminal facility, were not implemented or advanced through either the LCP or PMP. Instead, as noted above, a regionally significant NWR now encompasses the Chula Vista Midbayfront shoreline and would be inimical to development and operation of a marine terminal, if it were otherwise feasible. In any case, the Port's Marine Terminal Business Master Plan (1999) has identified adequate existing and planned terminal facilities at TAMT and NCMT to meet current and projected facilities. Considered by itself, the 18-acre SBB land and water area would be insufficient in size to function as a modern marine terminal.

#### 4.4. Aquaculture

The Port recognizes the priority assigned by § 30222.5 to the use of oceanfront land to support aquaculture and is mindful of the encouragement for this type of use provided in the 1980 PMP. However, the SBB site, because of its location on the "F" Street Crescent in South San Diego Bay, does not have access to high quality and appropriate nutrient-rich ocean waters (e.g., from upwelling), nor to elevated temperature process waters that might support enhanced aquaculture grow-out facilities. The site is therefore not functional as an aquaculture station, as lack of interest in it by the aquaculture industry over the past 20 years indicates.

#### 4.5. Commercial and Sport Fishing

Commercial, as well as sport, fishing berthing and processing facilities are increasingly located, worldwide, as well as in San Diego Bay, at the closest possible distance to the evolving and diminishing ocean fishing grounds, so as to minimize costly unproductive sailing time. Location of a commercial, or sport, fishing boat harbor, or upland support facilities, at the furthest remove from the entrance to San Diego Bay would be inefficient and imprudent. Although prior to 1980, and briefly during the 1980's, there was discussion of creating a second - southern - entrance to San Diego Bay, which might have facilitated location of a South Bay commercial and sport fishing fleet in relative proximity to the Los Coronados Islands and other offshore grounds, neither the Port nor the Coastal Commission chose to certify such a major public works project. (See, e.g., Coastal Commission Certification of the PMP, January, 1981, Modification 9, page 130.)

#### 4.6. Fishing Piers

Although the Port maintains four public recreational fishing piers in San Diego Bay, extant fisheries and water quality data do not support a recreational fishery near the mouth of Rohr Marsh. (Citation: 1986 South Bay Enhancement Study).

#### 4.7. Boat Launching Ramps

The Port maintains four boat launching ramps on San Diego Bay, including the 10-lane ramp at Chula Vista marina, less than one mile from the SBB site. (Exhibit 8: Locational Map of Boat

Launching Ramps at San Diego Bay.) A five-day 1994 study of parked boat trailers near three of the ramps (at Shelter Island, National City, and Chula Vista) indicates that (with allowance for some potential double counting during the study period) 85.5% (1382/1616, with a one-day peak of 552 boats) of the trailered boats were likely launched at Shelter Island in the North Bay, while 5.1 % (83/1616, with a one day peak of 49 boats) were launched at National City adjacent to Central Bay, and 9.3% (151/1616, with a one-day peak of 90 boats) were launched at Chula Vista in the South Bay. (Citation: SDUPD, Planning Department, 1994). The data suggests that recreational boats using trailerable boats by a substantial margin prefer to launch their craft in the North Bay, and that the 125-space boat launching and trailer parking facility at Chula Vista retains adequate unused capacity to meet demand.

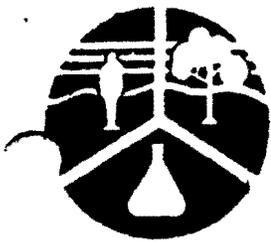
#### 4.8. Passenger Ferries and Water Taxis

Recent consolidation of Port and adjacent upland private parcels inland of the SBB site, in combination with planned and potential redevelopment of the Chula Vista Bayfront between "E" and "J" streets, west of Interstate Highway 5, and additional intensive urban development of areas to the east, may likely create demand for environmentally benign passenger water transportation serving Chula Vista, San Diego, and Coronado, among other destinations. The proposed re-designation and subsequent redevelopment of the SBB site to commercial recreational and public access uses may incorporate a ferry/water taxi terminal appropriate to the market, consistent with the priority allocation of waterfront land to beneficial water-dependent uses (e.g., that reduce automobile traffic and congestion). In addition, interim use of the site may facilitate construction of such modern ferries inside the hangar at SBB.

### 5. EXHIBITS

- 5.1. Copies of Audubon, EHC, and SWIA correspondence
- 5.2. South Bay regional locational map.
- 5.3. Site Aerial Photograph with parcel boundaries.
- 5.4. 1993 biological resources map from Draft Nautical Center EIR.
- 5.5. South Bay locational aerial; Planning District 7 precise plan map for the area between E and J Streets.
- 5.6. Survey of Listings of Boat Yard, Repair, and Maintenance in San Diego County, by City.

# # #



# ENVIRONMENTAL HEALTH COALITION

1717 Kettner Boulevard, Suite 100 • San Diego, CA 92101 • (619) 235-0281 • Fax (619) 232-3670  
ehc@environmentalhealth.org • www.environmentalhealth.org

EXHIBIT 5.1

November 4, 1999

## Board of Directors

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Dana Alexander, Inc.  
Luz Palomino  
Community Organizer  
Jay Powell  
Michael Shames  
Utility Consumers Action Network

*Affiliations noted for identification  
purposes only*

Executive Director  
Diane Takvorian

## Mission Statement

Environmental Health Coalition is dedicated to the prevention and cleanup of toxic pollution threatening our health, our communities, and the environment. We promote environmental justice, monitor government industry actions that cause pollution, educate communities about toxic hazards and toxics use reduction, and empower the public to join our cause.

Mr. Dennis Bouey  
San Diego Unified Port District  
P.O. Box 120488  
San Diego, CA 92112

RE: EHC request that prohibition on future expansion of activity at South Bay Boatyard be included in request to Coastal Commission to remove marine industrial capacity on tidelands around San Diego Bay

Dear Dennis:

Environmental Health Coalition understands that the Port District will soon request that the California Coastal Commission remove the existing Marine Industrial designation for Campbell's Shipyard. While EHC has a long-standing objection to losing existing deep water, marine industrial property, we will not oppose such a request only if it is coupled with a commitment that marine industrial uses will not be expanded elsewhere, most notably, at the South Bay Boatyard. If marine industrial tidelands are over capacity there is no need to expand this activity at South Bay Boatyard and the Port should have no problem affirming that as part of its action.

Pollution from drydocks and shipyard operations is legendary, or should we say notorious. As you know, San Diego Bay has been found by the National Oceanic and Atmospheric Administration (NOAA) to be the second most toxic bay of 18 bays studied in the nation. Commercial and naval shipyards were referenced in the study as the areas of highest concern. Adding a dry dock to South Bay Boatyard will mean that the very polluting and hazardous operations of sanding, blasting, and other ship building and repair operations would now occur over the water, instead of on land where they currently are located and more easily contained. This is **environmentally unacceptable.**

The Port District has spent millions of public dollars promoting and planning for development of a people-friendly Chula Vista Bayfront. It has spent (and we would add, well-spent) additional millions protecting the valuable and sensitive natural resources in South San Diego Bay. If the District were now to allow South Bay Boatyard to expand into more polluting operations, this would be in direct contrast to its own investment in the area. Increased air and bay pollution should not be part of the long-term plan for

the Chula Vista Bayfront

Our concerns that these activities may be moved further south are also heightened by the proposal to lose even more deep water berthing capacity to the proposed USS Midway project which seems to be contrary to the Port's intended expansion of shipping and harbor commerce as well as recent news accounts of increased shipping to San Diego (attached).

We formally request that a prohibition on the expansion of activity at the South Bay Boatyard, especially the addition of a floating dry dock or other intensification of uses or deepening, be part of the recommendation of staff, either as a concurrent or separate action, when the Campbell's item goes before the Port Commissioners and the Coastal Commission for decision. This could be accomplished through an underlying change of land use at the South Bay Boatyard or by some other mechanism.

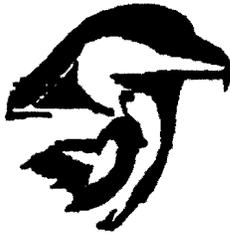
Please contact me with any questions at 235-0281.

Sincerely,

Laura Hunter  
Director, Clean Bay Campaign

cc.  
Mr. Dan Wilkens  
Mr. David Merk

**EXHIBIT 5.1**



**SAN DIEGO AUDUBON SOCIETY**  
2321 Morena Boulevard, Suite D • San Diego CA 92110 • 619/275-0557

November 15, 1999

Port Commissioners  
San Diego Unified Port District  
P.O. Box 120488  
San Diego, California 92112

Dear Commissioners:

**SUBJECT: Changing Land Use of Campbell's Shipyard with respect to South Bay Boatyard**

The San Diego Audubon Society is very concerned about the potential environmental impacts of the shift of the Campbell's Shipyard site to commercial uses. We are very concerned that if the Campbell's Shipyard is disbanded, additional shipyard activity might be moved to the south part of the Bay, which is currently designated the Wildlife Conservation Area in the Port's Master Plan. In particular there have been conversations about increasing the size of the South Bay Boatyard and moving the large floating drydock to South Bay Boatyard as a result of the elimination of Campbell's. Such a change would be inappropriate as:

- additional boat traffic would interfere with the wildlife support value of South Bay,
- increased emissions of copper from additional boat bottoms and the likelihood of incidental and major spills will have higher impacts on water quality because of the substantially reduced tidal flushing in South Bay, and
- additional industrialization will interfere with the scenic value and the wildlife oriented recreational value of South Bay.

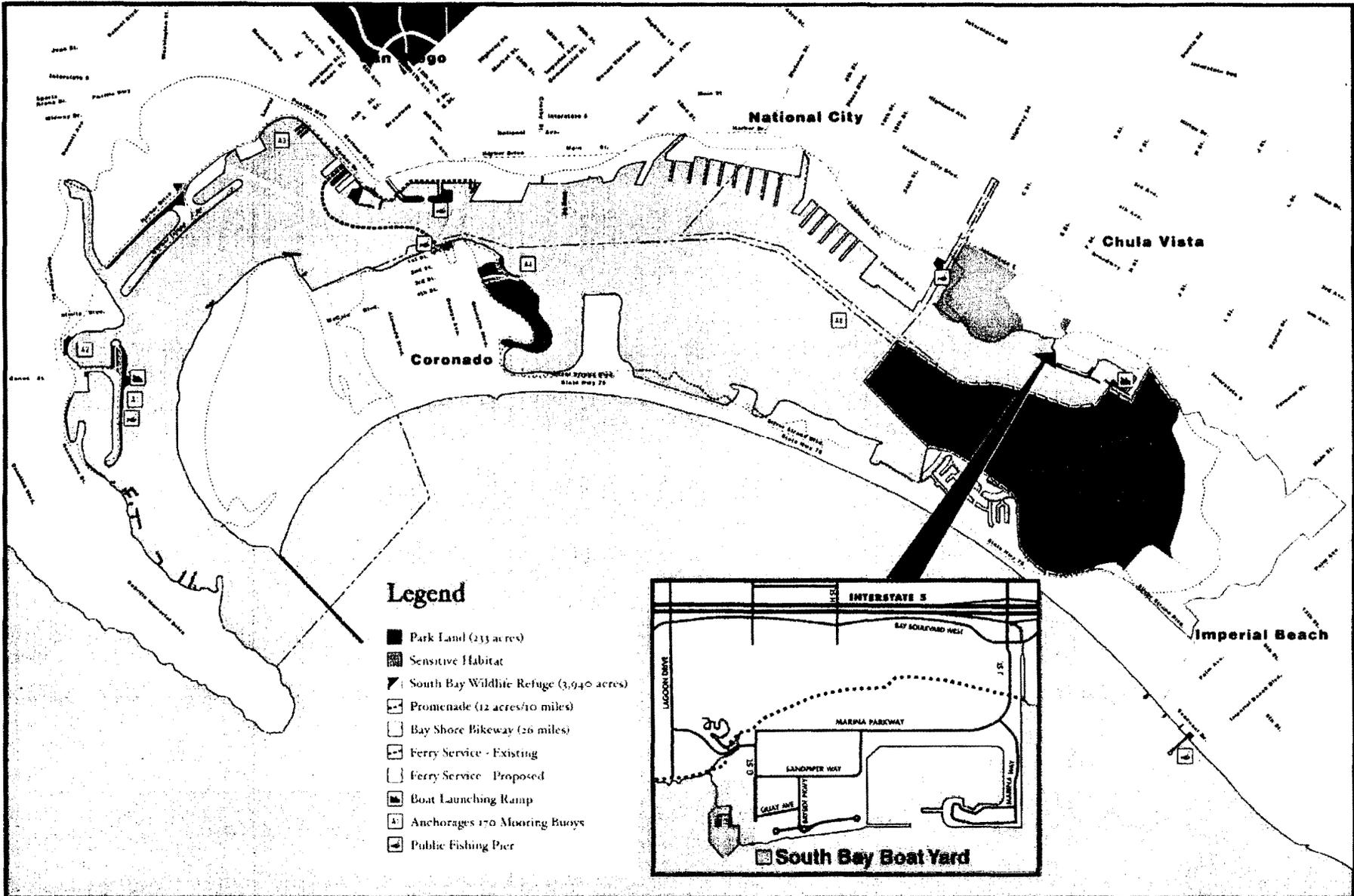
The South Bay Boatyard is at the corner of the largest saltmarsh habitat remaining in San Diego Bay. This area includes the F & G Street marsh and the marshes surrounding the Chula Vista Nature Center. Boat work in the floating drydock would have a significantly higher likelihood of contaminating the bay's water than work done in an upland boat yard. Additional boat work on the site will also provide more risk of contamination. The wildlife that reside there, especially the threatened and endangered species, should not be exposed to such increased risks. Industrial uses at this site should be phased out, not increased.

We strongly urge the Port to include in its action a designation that the land use at the South Bay Boatyard site be changed to commercial, and the existing boatyard use be conditionally and temporarily grandfathered, a floating drydock not be moved to the South Bay Boatyard, and that no expansion of the boatyard be permitted. These conditions would remove the potential for the negative impact to South Bay of the change in land use for the Campbell's site.

Respectfully,

A handwritten signature in black ink that reads "James A. Peugh". The signature is written in a cursive, flowing style.

James A. Peugh  
Coastal and Wetlands Conservation Chair



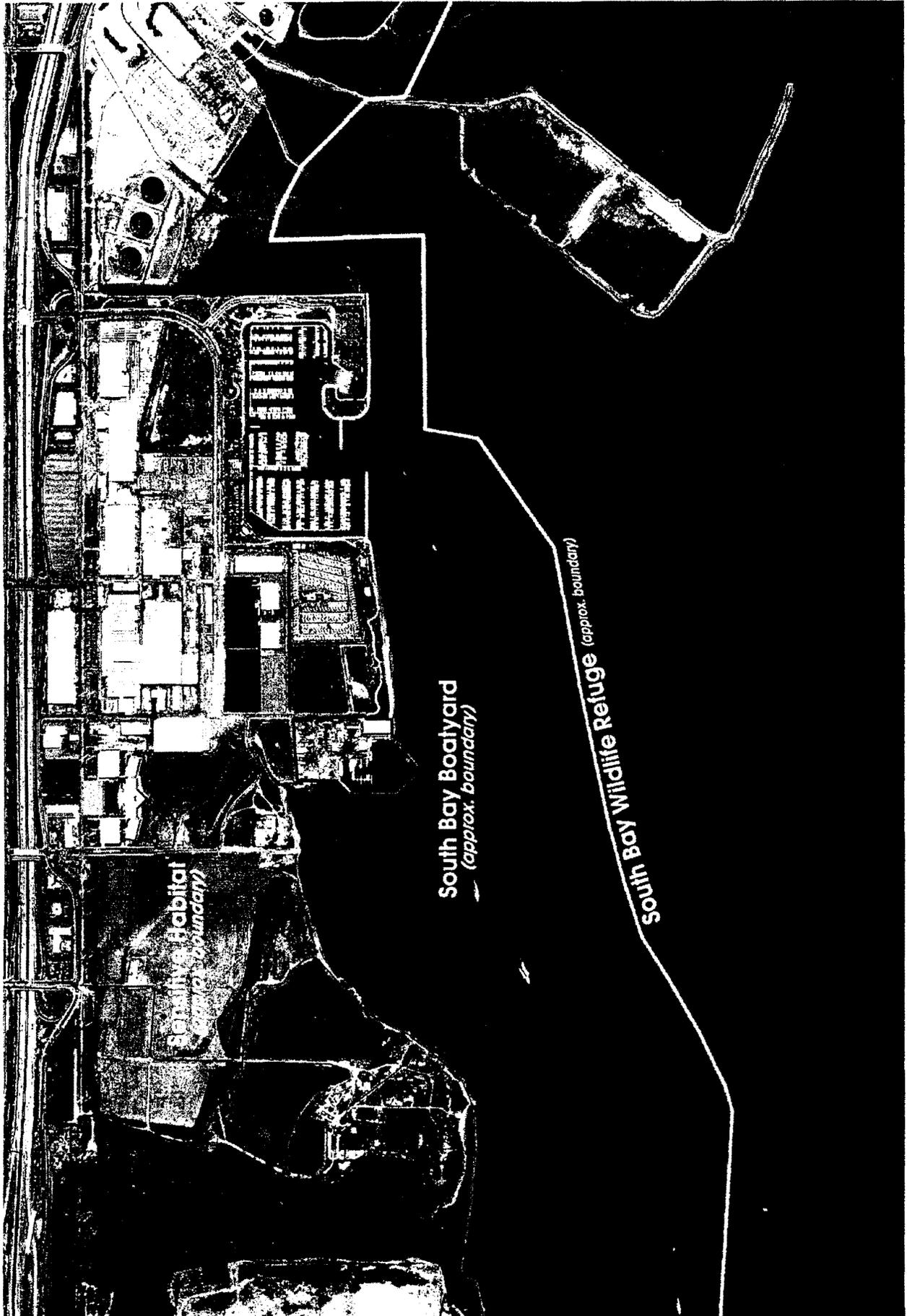
Scale:  
 0 2000ft 4000ft  
 Land Use Planning

# Public Access and Recreation Map

Revised	Date
Nov. 99	Drawn Check
	Scale
	No.

ii





Sensitive Habitat  
*(approx. boundary)*

South Bay Boatyard  
*(approx. boundary)*

South Bay Wildlife Refuge  
*(approx. boundary)*



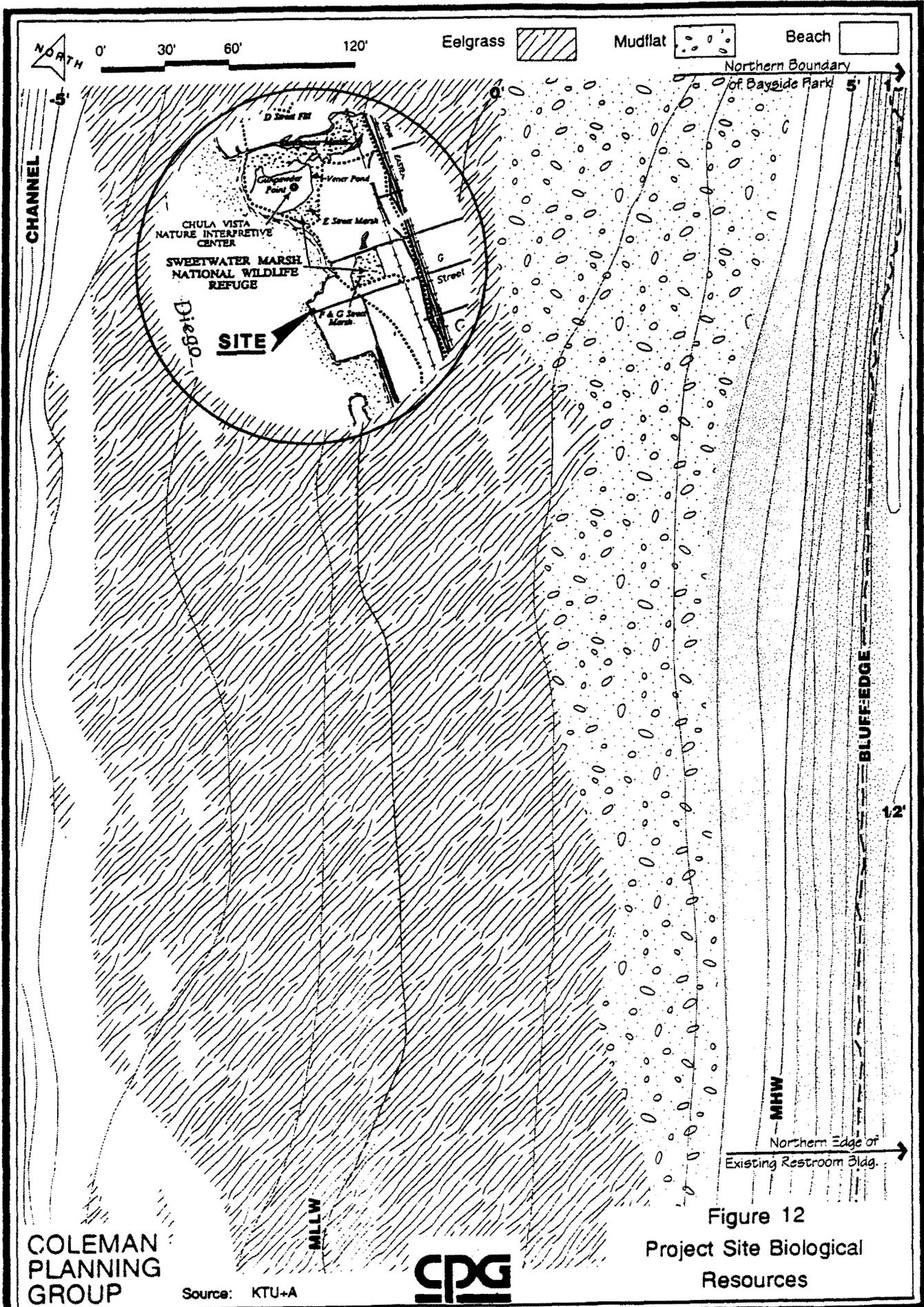


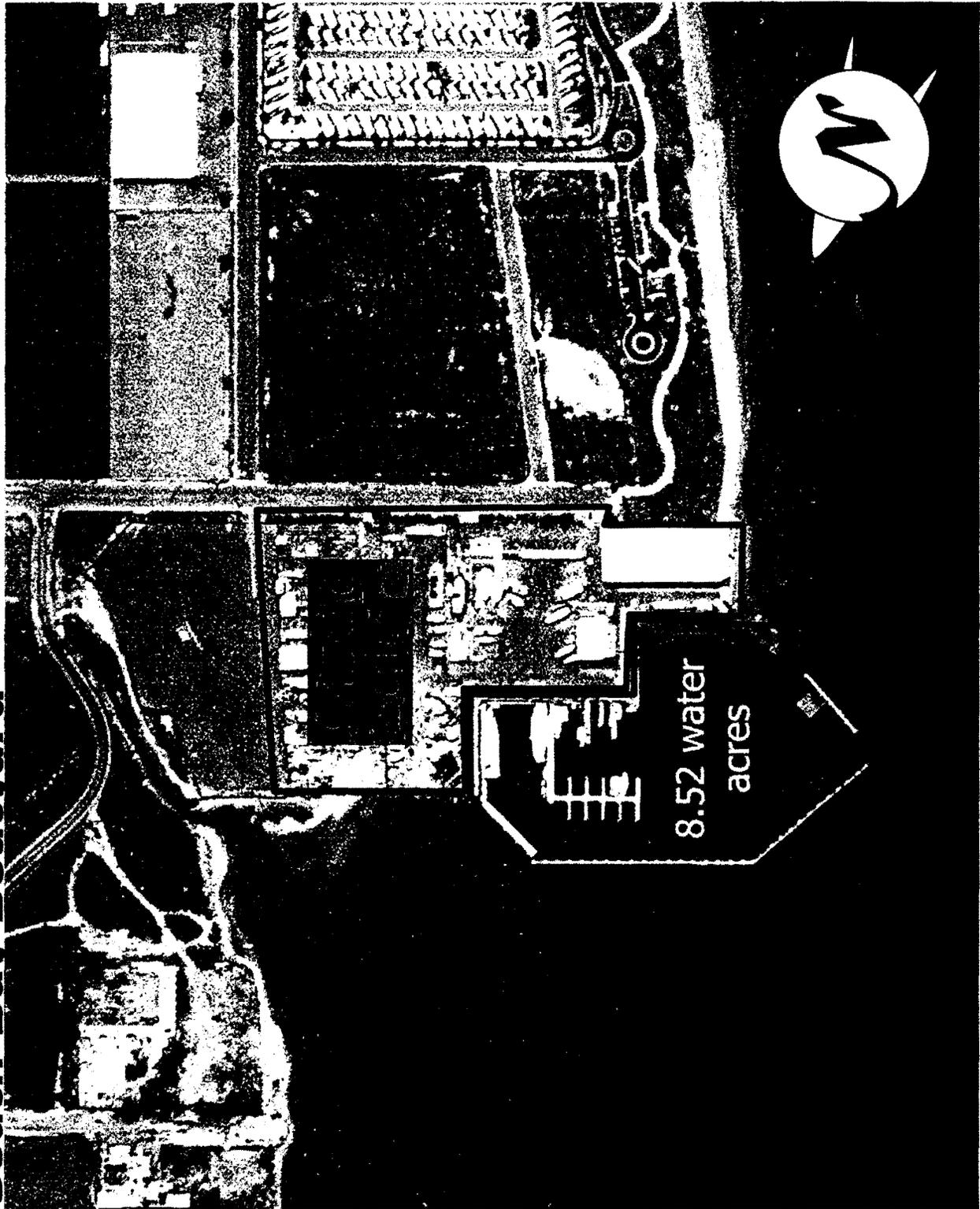
Figure 12  
Project Site Biological Resources

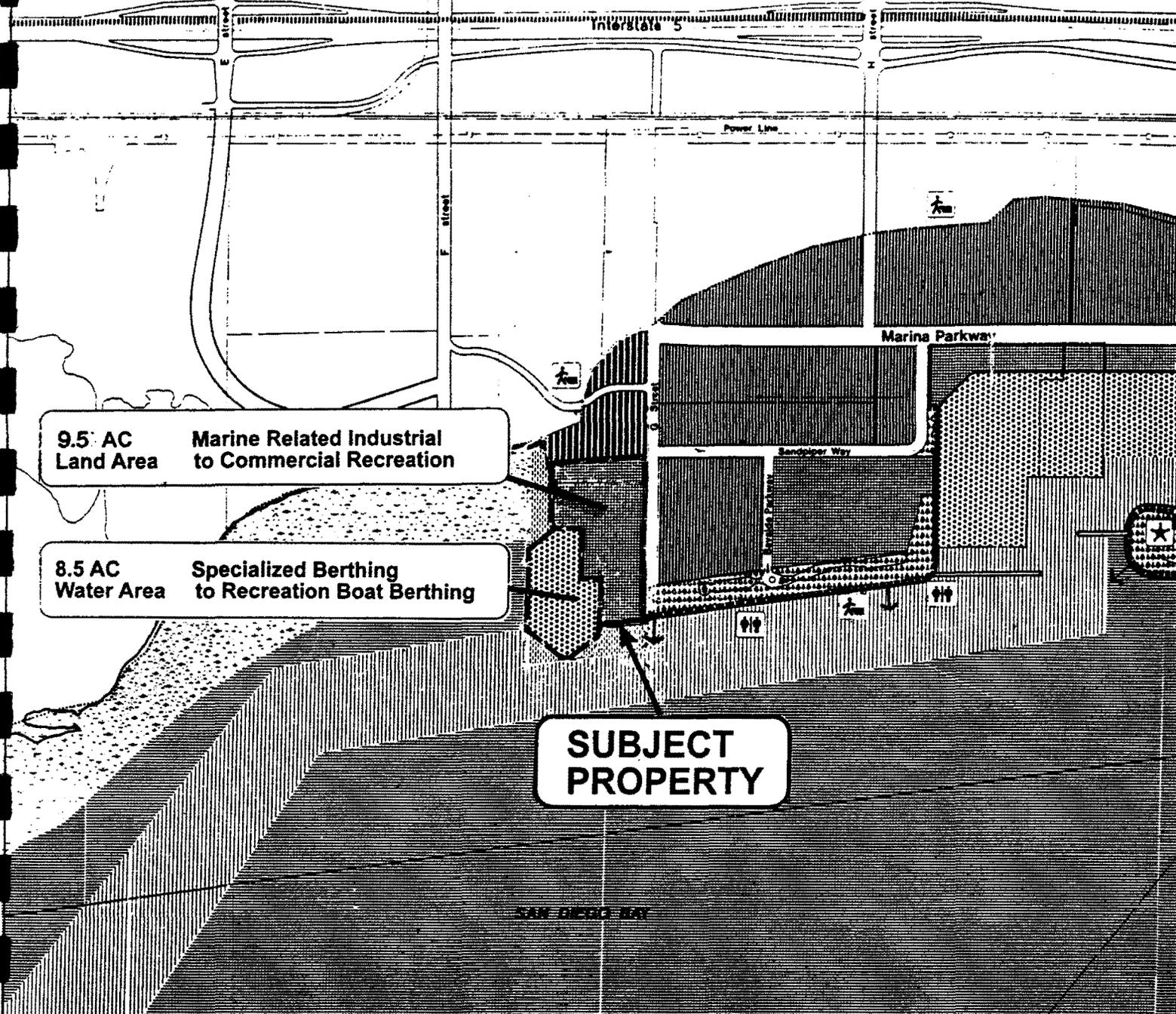
COLEMAN  
PLANNING  
GROUP

Source: KTU+A



**South Bay Boatyard**





**SUBJECT PROPERTY**

Land		Water		Land		Water		
<b>COMMERCIAL</b>				<b>PUBLIC RECREATION</b>				
Commercial Recreation	Marine Sales & Services	Recreational Boat Berthing	Marine Services Berthing	Park	Promenade	Public Access	Boat Launching	
<b>INDUSTRIAL</b>				<b>CONSERVATION</b>				
Marine Related	Industrial Business Park	Specialized Berthing		Wetlands	Habitat Replacement	Estuary		
				<b>PUBLIC FACILITIES</b>				
				Vista Area	Comfort Station	Harbor Police Station	Boat Navigation Corridor	Ship Navigation Corridor

OF NATIONAL CITY  
OF SAN DIEGO  
OF CORONADO



Planning District 7  
**CHULA VISTA BAYFRONT**  
Land Use Planning Department

**DRAFT  
PRECISE PLAN**

MASTER  
PLAN  
REVISION



**BOAT YARDS, REPAIR, AND MAINTENANCE  
IN SAN DIEGO COUNTY BY CITY****CHULA VISTA**

Cogswell Marine & Industrial  
865 Stella Street,  
Chula Vista, CA 91911  
(619) 424-7446

South Bay Boat Yard Nautical Hardware Store  
997 G Street,  
Chula Vista, CA 91910  
(619) 427-6767

South Bay Stainless & Machine  
2252 Main Street,  
Chula Vista, CA 91911  
(619) 429-9465

**CORONADO**

Barnacle Buzz Diving Services  
1407 4th Street,  
Coronado, CA 92118  
(619) 435-7325

Ken-Do-It Marine  
Coronado, CA 92118  
(619) 435-8960

**EL CAJON**

Aamco Transmissions  
355 North Johnson Avenue,  
El Cajon, CA 92020  
(619) 442-0404

Attig & Bolger Classic Boats  
1461 Pioneer Way,  
El Cajon, CA 92020  
(619) 588-1876

Infinity Fiberglass Repair  
El Cajon, CA 92020  
(619) 445-0393

Making Way Marine Service  
El Cajon, CA 92019  
(619) 590-1336

Scribs Motorcycles  
1066 Greenfield Drive,  
El Cajon, CA 92021  
(619) 444-1553

Shipwreck Marine  
8119 Wing Avenue,  
El Cajon, CA 92020  
(619) 449-9942

Sunset Marine Inc  
772 Broadway,  
Cajon, CA 92021  
(619) 593-4006

**ESCONDIDO**

Boatland  
116 North Hale Avenue, Escondido, CA 92029  
(760) 735-2909

**IMPERIAL BEACH**

Pacifica Diving Service  
Imperial Beach, CA 91932  
(619) 575-4115  
(619) 860-6400 x2082 Voicemail/Fax  
[divpacific@aol.com](mailto:divpacific@aol.com) Appears in the Categories:  
Boat & Yacht Cleaning & Detailing

Boat Equipment & Services Boat Repairing  
Boat Maintenance  
Divers Services  
Scuba Diving

**LEMON GROVE**

Atlantis Marine Propellers  
3515 Harris Street,  
Lemon Grove, CA 91945  
(619) 286-5300

**NATIONAL CITY**

Fiberglass & Gelcoating Service  
730 West 19th Street, National City, CA 91950  
(619) 474-8382

Futura Surf Skis  
730 West 19th Street, National City, CA 91950  
(619) 474-8382

Knight & Carver Yacht Center  
1313 West 24th Street, National City, CA 91950  
(619) 336-4141

**OCEANSIDE**

Oceanside Marine Centre Inc  
1550 Harbor Drive North, Oceanside, CA 92054  
(760) 722-1833

**SAN DIEGO  
BOATYARD:**

Aquarius Marine  
11388 Sorrento Valley Road, San Diego, CA 92121  
(858) 558-1200

Campland On the Bay Marina  
2211 Pacific Beach Drive, San Diego, CA 92109  
(858) 581-4224

De Anza Assets  
2727 De Anza Road, San Diego, CA 92109  
(858) 274-0361

Lock-It Lockers Self Storage  
1560 Frazee Road, San Diego, CA 92108  
(619) 291-4362

Mission Valley R V Storage  
San Diego, CA 92101  
(619) 280-7300

Rancho Bernardo Mini Warehouse & R V Storage  
10905 Viaduct Frontera, San Diego, CA 92127  
(858) 578-6799

Self Storage of Rancho Bernardo  
San Diego, CA 92126  
(858) 578-6799

**BOAT REPAIR & MAINTENANCE:**

3 D Marine  
San Diego, CA 92101  
(619) 221-8031

A Diving Service  
5055 North Harbor Drive,  
(619) 222-3483

A To Z Marine Services  
2330 Shelter Island Drive,  
San Diego, CA 92106  
(619) 224-1606

Auto Repair  
1330 India Street,  
San Diego, CA 92101  
(619) 231-3456

Affordable Marine Service  
3535 Camino Del Rio West,  
San Diego, CA 92110  
(619) 574-1668

Amadors Marine Woodworks  
2819 Canon Street,  
San Diego, CA 92106  
(619) 222-9628

American Mobile Satellite  
3670 Rosecrans Street,  
San Diego, CA 92110  
(619) 226-0001

Aquarius Marine  
11388 Sorrento Valley Road, San Diego, CA 92121  
(858) 558-1200

Argo Navis Marine  
2726 Shelter Island Drive,  
San Diego, CA 92106  
(619) 696-0341

Artale John Boat Service  
2608 Shelter Island Drive,  
San Diego, CA 92106  
(619) 224-8539

Bay Marine  
9380 Activity Road,  
San Diego, CA 92126  
(858) 635-9096

Blackman Boats  
4925 Market Street,  
San Diego, CA 92102  
(619) 266-8013

Blue Porpoise Marine  
1455 West Morena Boulevard, San Diego, CA 92110  
(619) 276-8862

Boat Depot  
4025 Pacific Highway,  
San Diego, CA 92110  
(619) 296-2866

Boat Store  
3760 Hancock Street,  
San Diego, CA 92110  
(619) 299-4422

Boatyard  
2330 Shelter Island Drive,  
San Diego, CA 92106  
(619) 222-0481

Brewster Boat Works  
2805 Canon Street,  
San Diego, CA 92106  
(619) 222-9805

Brian Thomas Designs  
2835 Canon Street,  
San Diego, CA 92106  
(619) 224-5220

Butler Marine Enterprises  
2608 Shelter Island Drive,  
San Diego, CA 92106  
(619) 226-6131

C & J Marine Engine Repair  
2390 Shelter Island Drive,  
San Diego, CA 92106  
(619) 523-4905

C H S Marine  
San Diego, CA 92101  
(619) 223-0707

Cain Shipwright  
3610 Hancock Street,  
San Diego, CA 92110  
(619) 296-6931

California Marine Services  
5055 North Harbor Drive,  
San Diego, CA 92106  
(619) 222-3483

California Yacht Care  
1450 Harbor Island Drive,  
San Diego, CA 92101  
(619) 688-1709

Captains Crew Yacht Service  
San Diego, CA 92101  
(619) 223-6033

CS Ferguson Woodworking  
2330 Shelter Island Drive,  
San Diego, CA 92106  
(619) 224-7544

Dependable Marine Service  
2819 Canon Street,  
San Diego, CA 92106  
(619) 226-2015

Direct TV Business Accounts By  
3670 Rosecrans Street,  
San Diego, CA 92110  
(619) 226-0001

Douglas Marine Repair Service  
4625 Fargo Avenue,  
San Diego, CA 92117  
(858) 272-8893

Driscoll Boat Works  
San Diego, CA 92101  
(619) 226-2500

Driscoll Marina  
4960 North Harbor Drive,  
San Diego, CA 92106  
(619) 226-2500

Driscoll Marine  
4918 North Harbor Drive,  
San Diego, CA 92106  
(619) 226-2500

Fiberglass Fabricators  
San Diego, CA 92101  
(619) 275-1909

Fonteneau Yacht Repair & Management  
1229 Shafter Street,  
San Diego, CA 92106  
(619) 222-1632

GUMB John  
3027 Jefferson Street,  
(619) 299-7084

Hernandez Miguel Yacht Refinishing  
2390 Shelter Island Drive,  
San Diego, CA 92106  
(619) 223-6651

Hooper Steve Yacht Commissioning  
2390 Shelter Island Drive,  
San Diego, CA 92106  
(619) 222-8435

Horizon Marine Service  
1880 Harbor Island Drive,  
San Diego, CA 92101  
(619) 297-8646

Hypertech Motorsports  
7932 Miramar Road,  
San Diego, CA 92126  
(858) 695-8804

Ivarsson ES Boat Building & Custom Work  
3027 Jefferson Street, San Diego, CA 92110  
(619) 299-7084

J A G Yacht Painting & Repair  
2330 Shelter Island Drive,  
San Diego, CA 92106  
(619) 523-3256

James Thomas Yacht Services  
San Diego, CA 92101  
(619) 226-2695

Jims Marine Service  
San Diego, CA 92101  
(619) 222-5108

Julias Marine  
San Diego, CA 92101  
(619) 523-6841

Kenttenburg Marine  
2500 Shelter Island Drive,  
San Diego, CA 92106  
(619) 221-6930

Koehler Kraft CO Inc  
2302 Shelter Island Drive,  
San Diego, CA 92106  
(619) 222-9051

Larrys Marine Service  
5228 Cushman Place,  
San Diego, CA 92110  
(619) 692-4070

Mariners Fiberglass Repair CO  
San Diego, CA 92101  
(619) 222-2608

Master Marine  
2590 Ingraham Street,  
San Diego, CA 92109  
(619) 223-1154

Neptune Marine Yacht Repair & Refinishing  
San Diego, CA 92101  
(619) 523-4696

Nichols Boat Shop  
2432 Imperial Avenue,  
(619) 238-7306

Nielsen Beaumont Marine Inc  
2420 Shelter Island Drive, San Diego, CA 92106  
(619) 222-4255

Offshore Systems Inc  
2810 Carleton Street, San Diego, CA 92106  
(619) 221-0101

Osco Manifolds by Jims Marine  
San Diego, CA 92101  
(619) 222-5108

Outboard Services  
6156 Fairmount Avenue,  
San Diego, CA 92120  
(619) 281-7790

Pacific Offshore Rigging  
2805 Canon Street,  
San Diego, CA 92106  
(619) 226-1252

Pacifica Diving Service  
1476 Seacoast Drive,  
San Diego, CA 92101

Point Loma Sign Mission Bay  
1500 Quivira Way,  
San Diego, CA 92109  
(619) 222-1148

Precision Paintworks  
6215 Univ Avenue,  
San Diego, CA 92115  
(619) 286-4400

Professional Boat Repair & Refinishing  
2810 Carleton Street,  
San Diego, CA 92106  
(619) 222-1826

R&D  
2107 Woden Street,  
San Diego, CA 92113  
(619) 702-3575

Reynolds Rick Yacht Services  
1500 Quivira Way,  
San Diego, CA 92109  
(619) 523-1297

Rigworks Inc  
2540 Shelter Island Drive,  
San Diego, CA 92106  
(619) 223-3788

Royal Marine  
1330 India Street,  
San Diego, CA 92101  
(619) 231-3456

San Diego Marine Service  
San Diego, CA 92101  
(619) 223-0772

Schlech Peter  
San Diego, CA 92101  
(619) 222-0612

Seaside Marine  
3897 Kearny Mesa Road,  
San Diego, CA 92111  
(858) 495-3202

See Power  
3670 Rosecrans Street,  
San Diego, CA 92110  
(619) 226-0001

Southwest Marine Hardware  
944 K Street,  
San Diego, CA 92101  
(619) 233-4094

Sun & Moon Yacht Service  
2540 Shelter Island Drive,  
San Diego, CA 92106  
(619) 523-0726

Sundown Marine of San Diego  
7145 Mission Gorge Road,  
San Diego, CA 92120  
(619) 287-1361

Sunset Marine Inc  
2330 Shelter Island Drive,  
San Diego, CA 92106  
(619) 222-1634

Universal Hydraulics  
405 17th Street, San Diego, CA 92101  
(619) 230-0149

UT Fibers  
7145 Mission Gorge Road,  
San Diego, CA 92120  
(619) 287-4456

Vons Outboards  
2590 Ingraham Street,  
San Diego, CA 92109  
(619) 223-1154

Western Yacht Commissioning  
2390 Shelter Island Drive,  
San Diego, CA 92106  
(619) 224-1474

Winter Robin Custom Carpentry  
3047 Jefferson Street,  
San Diego, CA 92110  
(619) 299-6744

Yacht Docktor  
2390 Shelter Island Drive,  
San Diego, CA 92106  
(619) 223-9190

Yacht Ways Fiberglass Repair  
2330 Shelter Island Drive,  
San Diego, CA 92106  
(619) 222-4697

Zodiac San Diego  
1919 San Diego Avenue,  
San Diego, CA 92110  
(619) 294-7270

**SANTEE**

Circle Custom Design  
8652 North Magnolia Avenue, Santee, CA 92071  
(619) 562-4133

Custom Auto Marine  
8402 North Magnolia Avenue, Santee, CA 92071

Reflections Painting  
10659 Prospect Avenue, Santee, CA 92071  
(619) 596-0190

Silhouette Boats  
8402 North Magnolia Avenue, Santee, CA 92071  
(619) 596-0053

**VISTA**

AA Marine  
729 Olive Avenue,  
Vista, CA 92083  
(760) 941-5131

Peterson Refinishing  
Vista, CA 92083  
(760) 945-5956

Sea Witch Marine  
1085 South Santa Fe Avenue, Vista, CA 92083  
(760) 724-3323

(760) 945-5956

**AMERICA'S CUP HARBOR  
USAGE STUDY**

*presented to*

**PORT OF SAN DIEGO  
SAN DIEGO, CALIFORNIA**

*November 30, 1999*

**M. J. BARNEY ASSOCIATES  
CERTIFIED PROFESSIONAL CONSULTANTS TO MANAGEMENT**

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## INTRODUCTION

The focus of this study is to analyze the boat repair market in San Diego and to determine how the dynamics of this market affect the current and projected usage of the immediate land and resources around Shelter Island, and in particular, America's Cup Harbor (ACH). This property is generally referred to as "tidelands" which are held in trust, locally administered by the San Diego Unified Port District (District), and certified by the California Coastal Commission. An authorized consultant company, M. J. Barney Associates (MJBA), Certified Professional Consultants to Management, was engaged to conduct this study on behalf of the District. MJBA has previously performed boat yard repair and related market potential studies in San Diego.

Secondary research for this project included review and analysis of local marine, yachting, business and government publications, prior marine and yachting research conducted by MJBA in San Diego, and where appropriate, related maps, data and information from the District. Primary research included direct analysis of the type and volume of local boat repair facilities, based on information provided by the owner, managing principal or qualified general manager of each boat yard in North and South San Diego Bay. This research was conducted by in-person interviews. To obtain maximum candid response from appropriate parties, permission was obtained to utilize the information received albeit without direct quotations by those interviewed.

Additionally, owners and managers of related marine and commercial businesses along Shelter Island and America's Cup Harbor, and Harbor Island were interviewed to obtain related project background information. Businesses included: marinas, fuel docks, sport fishing charters, yacht brokers, related marine and supply firms, as well as pertinent city offices, community development offices and the Port Tenants Association.

Two general categories of vessels were examined in this study. These included "boats" with tonnage, or weight up to 400 tons, and "ships" with weight over 400 tons. It is generally understood that the District will use the information, findings and recommendations of this report, in addition to its other proprietary data and reports to support appropriate decisions regarding the further development and management of America's Cup Harbor and related Shelter Island Port District properties. Overall, the best use of America's Cup Harbor is desired to serve the various marine industries and citizens of the State of California.

## AMERICA'S CUP HARBOR

America's Cup Harbor was formerly called the "Commercial Basin" of Shelter Island. It is a "working" or commercial harbor in that it provides marine service infrastructure and services including marine parts and supplies, mechanical and electrical repair and rebuild services, carpentry and rigging, boat yards for haul-out, repair and refinishing, commercial fishing fleet berths, sport fishing operations, marinas, yacht brokerages, insurance services and other various marine and commercial services.

Although the majority of these commercial marine services remained, the name of the harbor was changed on April 21, 1994, by proclamation of the City of San Diego and the Port District. The new name, America's Cup Harbor, was selected to commemorate the role of the harbor's boat yards who hosted three commercial racing syndicates entering boats in the 1992 America's Cup challenge, and who serviced syndicates in the 1995 races which were again hosted by San Diego. Additionally, it was believed that this name change would provide permanent recognition of San Diego's interest and support for this on-going event, and attract local residents and tourists to the Shelter Island and Point Loma business areas.

Geographically, America's Cup Harbor it is best described as the inlet or harbor area located on the northeast side of the entrance causeway to Shelter Island, along Shelter Island Drive, and extends farther northeast, around to its opposite border along Harbor Drive.

Shelter Island is generally composed of businesses such as hotels, marinas, restaurants and other commercial recreation and entertainment businesses. America's Cup Harbor is primarily composed of businesses including restaurants, commercial fishing, boat building and repair facilities, boat brokerages, marine berthing, and related marine sales, supplies and services.

Increased pressure on the redevelopment of Shelter Island, America's Cup Harbor and the Point Loma "uplands" area has resulted in focusing on the Kettenburg Marine boat yard. The future usage of the Kettenburg yard has been an issue since the previous operators of the yard declared bankruptcy over five years ago. At that time, Driscoll took over the facility and has operated profitably since then.

**AMERICA'S CUP HARBOR USAGE STUDY**  
**PORT OF SAN DIEGO - NOVEMBER 1999**

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**BOATING STATISTICS**

The number of pleasure boats in San Diego has increased dramatically over the past few decades as shown below. Additionally, the number of marina slips has reached a maximum ceiling at approximately 8,300 which is unlikely to change substantially because of the scarcity of waterfront property. Related statistics for marina slip occupancy rates are also contained in the appendices of this report.

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**Table 1 - Boating Statistics**

<b>Factors</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>1999</b>
San Diego County Population	1.4 million	1.9 million	2.5 million	2.9 million
Total State Registered Watercraft	22,800	37,800*	56,400	64,000*
Total North & South Bay Number Slips/Buoys	3,312	5,129	8,301	8,279
San Diego County Wet Storage Slips	5,388	8,495	11,667	11,690

\* Estimated from existing trends

In reviewing the breakdown of boats vs. ships, it was found that there are approximately 20 ships of 400 tons or more, yachts or superyachts, excluding any commercial vessels. Although relatively small in number, it should be noted that this market is increasing as local businesses gear up for it. Less than a decade ago, San Diego could not provide berths or viable repair facilities for the larger yachts. Marinas can now accommodate these larger yachts and some boat yards have found ways to provide the necessary haul-out and servicing.

## **BOAT REPAIR YARDS IN SAN DIEGO**

There are seven boat yard repair facilities in North and South San Diego Bay. Of these facilities, Southbay Boat Yard and Knight & Carver are considered to be primarily industrial facilities. The Shelter Island boat yards cater primarily to pleasure craft.

A reported 4,250 to 4,550 boats are repaired by these boat yards annually. Most of these repair facilities are located in America's Cup Harbor, generally along the east facing side of Shelter Island. Southbay Boat Yard is located in Chula Vista; Knight and Carver is located in National City.

The boat yards are listed on Table 2 (pg. 5). As shown, the Bay City Marine boat yard was closed approximately five years ago. Eichenlaub specializes in marine craft services that normally do not include haul-out services.

The largest boat yards by size are Southbay Boat Yard and Knight & Carver. The largest yards in ACH are Shelter Island Boat Yard (210,014 sq. ft. of land and water) and Kettenburg Marine (207,628 sq. ft.), although Kettenburg has almost double the land space compared to Shelter Island Boat Yard (135,628 sq. ft. vs. 68,992 sq. ft., respectively).

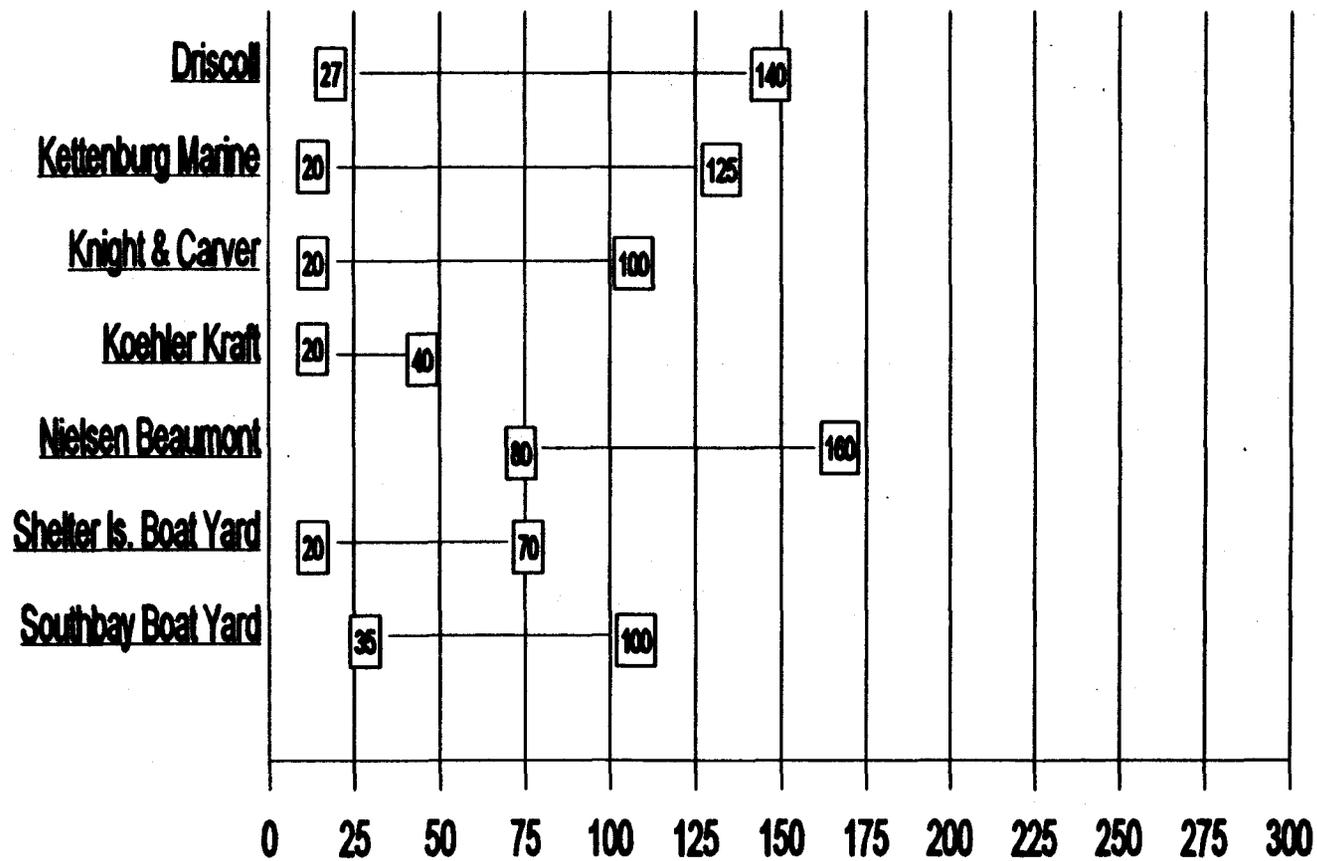
**Table 2 -- Boat Yard Operations Servicing America's Cup Harbor**  
Existing San Diego Bay Boat Yards

<b>Company Name</b>	<b>Number of Years Operating As A Boat Yard</b>	<b>Boat Yard Land Operations Square Footage</b>	<b>Boat Yard Water Operations Square Footage</b>	<b>Total Boat Yard Operations Square Footage</b>
Bay City Marine ( Shelter Island )	closed in 1995	75,644	170,043	245,687
Driscoll Boat Works ( Shelter Island )	47	46,200	94,325	140,522
Eichenlaub ( Shelter Island )	currently provides marine services only	11,400	18,375	29,775
Kettenburg Marine ( Shelter Island )	81 <sup>1</sup>	135,628 <sup>2</sup>	107,000	207,628
Knight & Carver ( National City )	26	172,162	54,779	226,941
Koehler Kraft ( Shelter Island )	20	27,360	48,156	75,516
Nielsen Beaumont ( Shelter Island )	11	24,000	49,000	73,000
Shelter Island Boat Yard ( Shelter Island )	16	68,992	141,022	210,014
Southbay Boat Yard ( Chula Vista )	15	411,758	371,344	783,102

<sup>1</sup> Kettenburg was purchased by Driscoll in 1994 but continues to operate as an independent business unit

<sup>2</sup> Represents current land leases; historically may have included up to 170,000 sq. ft. in combined parcels

# Boat Length (LOA) of Typical Projects



## **BUSINESS TRENDS IN LOCAL BOAT YARDS**

The majority of the boats (45%) are repaired at Shelter Island Boat Yard. It operates primarily as a hauling yard for smaller boats and has approximately 30 marine services sub-tenants who work on boats hauled by Shelter Island Boat Yard.

Driscoll Boat Works and Kettenburg Marine account for 31% of the work. Both yards are operated by Driscoll, and both provide full services to a wide cross section of boats. Southbay and Knight & Carver are also full-service yards; they account for approximately 17%. The balance of work is performed by Nielsen Beaumont, a full-service boat yard, and by Koehler Kraft and Sunset Marine, both servicing primarily the smaller boat markets.

Two boat yards, Kettenburg Marine and Koehler Kraft, provide yard space for the "do-it-yourself" boat owners who are qualified to make boat repairs or perform general maintenance on their own boats. Here, the companies will haul out the boat, block it on land and allow the work to be performed on site by owners.

Most of the boats repaired (70% to 90%) are locally owned; the remainder are primarily from Arizona, Los Angeles, the Pacific Northwest and foreign origin. Where allowed, the boat yards have been improving facilities, such as replacing/repairing docks; improving power supply; adding fencing; painting, etc.

Further improvements, such as replacing major portions of facilities are planned, particularly in anticipation of the continued growth in the sale of new boats, especially megayachts, or superyachts. Here, increased lift capacity is desired by some boat yards to handle the longer, wider, higher and heavier boats in the luxury yacht market.

### **Local Boat Yard Work Capacity**

Table 3 (pg. 10) shows the business work capacities at which the local boat yards are operating. This is based on estimates provided by the boat yard owners and/or general managers. The smaller yards, Koehler Kraft and Sunset Marine, state they are at 100% capacity. Driscoll, Kettenburg and Knight & Carver all state that they are at approximately 90% capacity. Shelter Island Boat Yard states it is at 80% capacity; Nielsen Beaumont and Southbay Boat Yard state they are at 70% capacity. The general sizes of boats repaired are also shown on Page 10.

## **Lifting Devices**

Shown below are the four primary types of boat lifting devices used by boatyard facilities in San Diego. Table 3 (pg. 10) lists the capacities of lifts at the respective boat yards.

**Marine Railway:** This system is a railway line which is laid on land and extends down a ramp into the water. A large "cart" is wheeled down into the water awaiting a boat to be floated above it. The cart is then positioned by divers under the boat, and the boat is secured to the cart. The cart is then pulled up the ramp on the rails by a cable wench into the boatyard. Depending upon size and configuration of the boat yard, multiple side tracks and carts may be utilized to accommodate having several boats out of the water at any given time.

This system generally provides adequate-to-good hull support for most boats. It is useful for older boats and wooden boats whose hulls must be evenly supported without any excessive outside pressure or stress placed on the hull. This system is very functional, but it is considered somewhat old-fashioned in design compared to the more modern Travelifts and Syncrolifts.

**Travelift:** This trademark device is a portable system which is best visualized as a wheeled, four-poster bed frame with straps hanging from the top which can be lowered to pick up and cradle a boat. A Travelift is driven out along the sides of a reinforced concrete slip which is perpendicular to the land abutting the water. The four posts of the Travelift then straddle the slip. The set of two straps from the top of the Travelift are lowered into the water. A boat is then floated into the slip over the straps, facing land. The straps are then tightened, and lifted out of the water to effectively cradle the boat between the four posts, and above ground level.

Once the boat is cradled, the Travelift holding the boat is then pushed or driven to any given spot within a boatyard. The boat is then lowered onto supports. Once the boat is secured on the land supports, the Travelift becomes available to accomplish other work.

The Travelift is efficient and relatively simple to use. However, it has two main limitations. Boat yard space used is limited to the width of the "footprint" of the Travelift (e.g., an approximate space of 35 ft. by 35 ft. for a 150 ton Travelift). There must be enough space left between boats placed in the yard so that the posts of Travelift can physically go between boats while the boat is being placed or removed. Secondly, the size, tonnage or hull composition of the boat may prohibit its use because of the amount of stress on the hull, sides or rails caused by the two straps lifting the boat.

**Travelift (cont')**

Although versatile and easy to use, some specialty hulls (such as wood ) can not tolerate the stress of the Travelift strap pressure, and most yacht owners and/or Captains will not allow the larger and/or high-tonnage boats to be hauled on this device because of potential hull stress and/or other perceived damage which could occur from broken straps or cradling.

**Syncrolift:** This trademark device utilizes a series of carts on a rail line placed in the bottom of a drydock type device to support a boat. The carts are placed in the drydock to support the boat weight evenly, then the drydock is submerged. The boat is floated over the carts and secured. The drydock is then raised to connect to rail lines within the boat yard. The Syncrolift is excellent for lifting virtually any type of boat, regardless of hull or composition, with the infrequent exception of sailboats with specialty keels of excessive depth or complex design. Similar to a marine railway, the number of boats in the yard may be increased by the number of carts and rail spurs available.

This system is considered the most modern lifting system, which can be custom engineered to accommodate almost any boat or heavy ship tonnage. Additionally, its ability to proportionately displace the boat's weight over numerous pre-spaced carts generally creates the least amount of hull stress and pressure of any lifting system.

The Travelift is strongly preferred or required by most larger boat owners and/or the Captains responsible for overseeing the boat's welfare. An initial disadvantage of the Syncrolift is the relatively high cost of overall installation and rail lines. It is considered a major infrastructure improvement, non-movable, and typically must stay in place for 20 to 30 years in order to efficiently amortize costs. Additional carts and rail spurs on land may also be added later when warranted. It is very good to excellent in lifting almost any type of hull.

**Cranes:** Cranes are the most economical, but limited lifting devices in most cases. Tonnage is typically limited to 25 to 40 tons. The length of boat must also be considered due to the type of straps and/or sling devices used to lift and hold the boat from the crane's one initial lifting point.

**Breakdown:** Kettenburg (150 ton Syncrolift) and Driscoll (150 ton Travelift) have the highest lifting capacities in America's Cup Harbor. All remaining boat yards, except Koehler Kraft, have capacities of 70 to 75 tons. Koehler Kraft is limited to a 35 ton marine railway.

**Table 3 -- Boat Yard Repair Capacities & Lifting Devices Used**

<b>Company Name</b>	<b>Typical Percentage Work Capacity</b>	<b>Number Boats Repaired Annually</b>	<b>General Sizes of Boats Repaired</b>	<b>Lifting Capacity in Tons</b>	<b>Type of Lifting Devices Used</b>
Driscoll Boat Works ( Shelter Island )	90%	200 to 500	27' to 140'	150 Tons 50 & 88 Tons	Large Travelift Small Travelift
Kettenburg Marine ( Shelter Island )	90%	1,000	20' to 125'	150 Tons 25 Tons 15 Tons	Syncrolift Marine Railway Small Travelift
Knight & Carver ( National City )	90%	250 <sup>1</sup>	20' to 100+'	300 Tons	Large Travelift
Kochler Kraft ( Shelter Island )	100%	100	under 40'	35 Tons	Marine Railway
Nielsen Beaumont ( Shelter Island )	70%	200	80' to 160'	75 Tons	Marine Railway
Shelter Island Boat Yard ( Shelter Island )	80%	2,000	20' to 70'	70 Tons 25 Tons	Small Travelift Crane
Southbay Boat Yard ( Chula Vista )	70%	500	35' to 100+ <sup>2</sup>	70 Tons <sup>2</sup> 25 Tons	Small Travelift Small Travelift

<sup>1</sup> Represents approx. 1/3 of total Knight & Carver work output -- remaining 2/3 of their work is building new boats

<sup>2</sup> Southbay Boat Yard also utilized a 2,800 ton drydock allowing 200<sup>+</sup> ft. length at Campbell's Shipyard before its closure on 9/30/99

### **Types of Repair Work Performed**

Tables 4 & 5 (pp. 12-13) highlight the types of work performed by the local boat yards. It is shown that while some boat yards may frequently choose to specialize in certain services (such as Shelter Island Boat Yard specializing in fiberglass repair), most boat yards will perform most if not all types of work as needed by market demands. This has arisen from occasional off-peak years where business was scarce due to global and U.S. business economic conditions.

Table 6 (pg. 14) summarizes the key capabilities of the seven functioning boat yards. The number of work stations varies by boat yard. Some of this depends upon the type of lifts available, size of yard and number of boat slips available for in-water repair work. There has been a general assumption made that the boat repair industry as a whole has likely become more efficient, and thus performs more work in shorter periods of time, in smaller total boat yard repair square footage.

Although some merit is given to newer equipment capabilities (such as Travelifts and Syncrolifts), any gains in production are more likely from better time usage of given boat yard repair space. It is generally surmised that during previous uncrowded times, boat yards performed more work while boats were out of the water. Now, at times where the yards are at or near capacity, more work is completed either in-water, at a dock or marina, or performed by owners themselves before haul-out. This makes the time required on land less extensive, and frees up space more quickly. Shelter Island Boat Yard is an example of prudent yard space management, where boats are hauled out of the water for hours, not days of work. All boat yards studied exhibit a strong sense of efficiency in view of given operating conditions.



**Table 5 – Types of Repair Performed with Boat in Water**

<b>Company Name</b>	<b>Decking</b>	<b>Plumbing</b>	<b>Painting Above Deck</b>	<b>Electrical &amp; Electronics</b>	<b>Interior Work, Upholstery &amp; Fixtures</b>	<b>Engine &amp; Mechanical (excluding through-hull)</b>
<b>Driscoll Boat Works ( Shelter Island )</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
<b>Kettenburg Marine ( Shelter Island )</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
<b>Knight &amp; Carver ( National City )</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
<b>Koehler Kraft ( Shelter Island )</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
<b>Nielsen Beaumont ( Shelter Island )</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
<b>Shelter Island Boat Yard ( Shelter Island )</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
<b>Southbay Boat Yard ( Chula Vista )</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>

**Table 6 – Summary of Boat Repair Work Capacities**

<b>Company Name</b>	<b>Maximum Tonnage</b>	<b>General Sizes of Boats Repaired</b>	<b>Number of Work Stations</b>	<b>Typical Percentage Work Capacity*</b>
Driscoll Boat Works ( Shelter Island )	150 Tons	27' to 140'	10 land 12 water	90%
Kettenburg Marine ( Shelter Island )	150 Tons	20' to 125'	20 to 25 land 12 water 1 on the ways	90%
Knight & Carver ( National City )	300 Tons	20' to 100**	30 land 6 to 8 water 1 on the ways	90%
Koehler Kraft ( Shelter Island )	35 Tons	under 40'	6 to 20 land 10 to 30 water	100%
Nielsen Beaumont ( Shelter Island )	75 Tons	80' to 160'	8 land 5-20 water 1 on the ways	70%
Shelter Island Boat Yard ( Shelter Island )	70 Tons	20' to 70'	28 to 40 land 2 to 3 water	80%
Southbay Boat Yard ( Chula Vista )	70 Tons	35' to 100' <sup>2</sup>	25 land 6 water 1 on the ways	70%

\* Indicates estimates by respective boat yard owners or general managers as appropriate

## **CURRENT & FUTURE BUSINESS OUTLOOK**

### **Boat Yards**

Business for boat repair has been steady among the larger boat yards in America's Cup Harbor. Overall, boat yards are operating at close to 90% capacity, and some will frequently have a waiting list. The yards repair approximately 4,250 to 4,550 boats per year. This volume is expected to increase from 4% to 6% per year over the next few years.

Smaller facilities, such as Nielsen Beaumont Marine and Sunset Marine have been realizing an annual growth rate of 15% per year during the past two to three years. Southbay Boat Yard in Chula Vista has reported that business has been consistent, but relatively flat over this period. Knight & Carver in National City has reported that business has been steady during this time. For the most part, boat yards feel that business will continue to increase as the sales of new boats continue to grow.

### **Yacht Brokers**

Boat sales in the harbor have been especially good. Brokers contacted reported annual sales growth of 10% to 15% over the past two to three years. In particular, the sales in boats 50' or longer have been strong; sales in this market have grown by 400% over the past 10 years. Brokers feel these trends will continue over the next two to three years.

However, moorage is seen as a continuing problem. Marinas are viewed as very near or at capacity, a factor which has caused some potential buyers to feel that if a boat were purchased, there would be no place to moor it. Cited also is a general lack of public docking for temporary day and overnight visitors, as is found in most other cities.

### **Marinas**

The marinas in Shelter Island and Harbor Island are experiencing their best business in years. Most marinas have been able to raise rates on slips. There are few or no slips available at most marinas, and many have a waiting list, particularly for live-aboards. All marinas are optimistic about continued high occupancy over the next few years.

### **Marinas (cont.)**

A total of 4,187 boat slips were identified within the areas of the harbor studied. These areas include Shelter Island, Harbor Island, and the Marriot Marina downtown, and account for about one-half of all boat slips in the entire bay. From Port and Harbor Police records, there are approximately 8,279 total available slips in combined north and south bay areas.

Boats in the 30' to 35' category occupy 28% of the slips; those 40' to 45' account for 18% of the slips, and those in the 35' to 40' account for another 15%. In total, boats in these size ranges account for more than half the slips identified. See Tables.

The largest marinas in terms of number of boat slips are: Harbor Island West (620); Sunwood Resort Marina (600); Marina Cortez (530); Cabrillo Isle Marina (450) and the Marriott Marina (447). Collectively, these five marinas account for over 60% of the boat slips studied. See Appendices for additional data on boat slips.

Where allowed, marinas have been tending to their facilities as needed. This includes replacing or repairing docks, painting buildings, electrical work, purchase of equipment and other maintenance and improvement items. However, dredging has become a concern, particularly for the Shelter Island. In numerous cases, the larger boats need to enter and exit only at high tides, in very narrow corridors to avoid scraping bottom. This situation is considered to be noticeably deteriorating.

### **Other Businesses**

Sportfishing is doing well. Lo Preste Dunn Sportfishing and H&M Landing both report an annual growth of 10% for the past three years. Fuel dock sales are mixed. At Shelter Island, Pearson Marine Fuels, the largest fuel dock in the harbor, has had a 10% growth in business over the past two to three years. However, Harbor Island Fuel Dock has experienced a 20% decline in sales due to higher fuel prices.

As for marine and equipment sales, San Diego Marine Exchange has realized an annual growth of 10% in recent years. The same is true for Marine Services which provides varied marine supplies and services to boats in the harbor. Generally speaking, the future looks good to those other business researched. Businesses acknowledge a relatively strong and growing boat market.

## **GENERAL ANALYSIS**

### **Declining Number of Boat Yards**

Within the past ten years several pleasure-craft oriented boat yards in the North and South Bay areas have closed. Primarily, these have included the Rask Boat Yard in Coronado, the ITT site in National City, and recently, Bay City Marine in America's Cup Harbor. Additionally, it is believed that several much smaller operations have ceased to provide services to pleasure craft due to changes in their repair focus to military or commercial vessels.

### **Demand for Boat Yard Services**

Demand for boat yard services remains high, and is expected to continue at or near this rate. Boat yards owners (or managers) state that they are at 70% to 100% of their capacity. These are estimates based primarily on their land and water space available for repair work. The Kettenburg site reports that it is at approximately 90% capacity.

Overall, approximately 4,250 to 4,550 boats are repaired annually. This figure relates primarily to the seven boat yards discussed in this report, in that they are judged to service the repair market generated by the boats in America's Cup Harbor. Based on input from repair yards, boats from the Mission Bay area are serviced primarily by the Driscoll boat yard in Mission Bay.

Boat repair demand will remain strong over the next three years. Based on stated growths and general business environment factors, the boat repair market in San Diego is expected to grow at a rate of 4% to 6% per year. An increasing number of the larger superyachts will further increase this growth at the larger boat yards, provided the requisite lifting capacity to service them is provided.

### **The Superyacht Market and San Diego**

The newly created term, "superyachts" generally refers to luxury boats with length of 80 ft. or more, with a market value of \$1 million or more. These luxury boats continue to increase in length and width; importantly, they are increasing in displacement, or general weight. An increase of 10% in length (LOA, or length overall) and 10% in width (beam) could easily create a 20% to 40% increase in tonnage weight (displacement) due to the increased volume and weight of cabins, bridge

## RECOMMENDATIONS - KETTENBURG SITE

The Kettenburg Boat Yard has been in operation since 1918, and is located near the top, or northeast tip of America's Cup Harbor. It is labeled as Parcel # 003-041. The Kettenburg site comprises approximately 100,000 sq. ft. in land from its lease with the Port District, plus an approximate 35,000 sq. ft. of uplands land leased from the Kettenburg family. At times, this secondary lease may have included up to an additional 70,000 sq. ft. from time to time.

Given that the number of boat yards have declined, it is recommended that Kettenburg Marine be allowed to continue its operation and be encouraged to upgrade the facility to meet future market demand. Its Syncrolift and equipment should be renovated and upgraded for increased lifting capacity. Kettenburg owners have stated that to remain a viable operation, the facility must be renovated.

It has been the general consensus of those groups interviewed (port tenants, marinas, commercial fishermen, etc.) that the Syncrolift capability at this yard is needed for the well being of the marine industry (commercial and pleasure boats) in the harbor.

It is also recommended that the capacity of the lift should be increased to a minimum of 500 tons, and preferably to 800+ tons if possible. This would allow servicing larger pleasure craft, and approximately 65% of worldwide superyachts (at 500 tons) or approximately 90% of worldwide superyachts (at 800 tons). Higher lift capacity is encouraged since trends toward higher tonnage are expected to aggressively continue.

Continued operation of Kettenberg alleviates the downsizing of its labor force. Closing the operation would cause a direct loss of approximately one-third of the combined Driscoll/Kettenberg workforce, or approximately 20 FTE positions. Repair demand indicates that these positions are needed to serve existing and expected future demand. If the Kettenberg facility were not allowed to operate, business for this work may be driven to Los Angeles Area or Mexico, minus any work handled by other local boat yards. Overall, boat yards in Mexico are viewed as a minor, but increasing threat to local boat repair business.

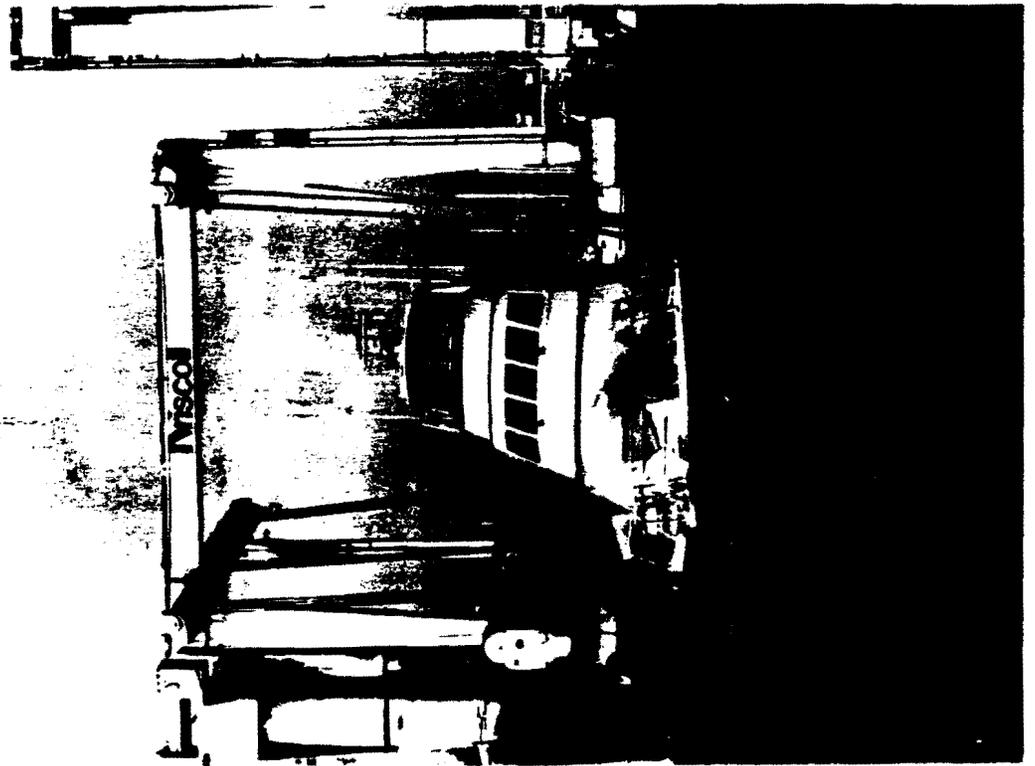
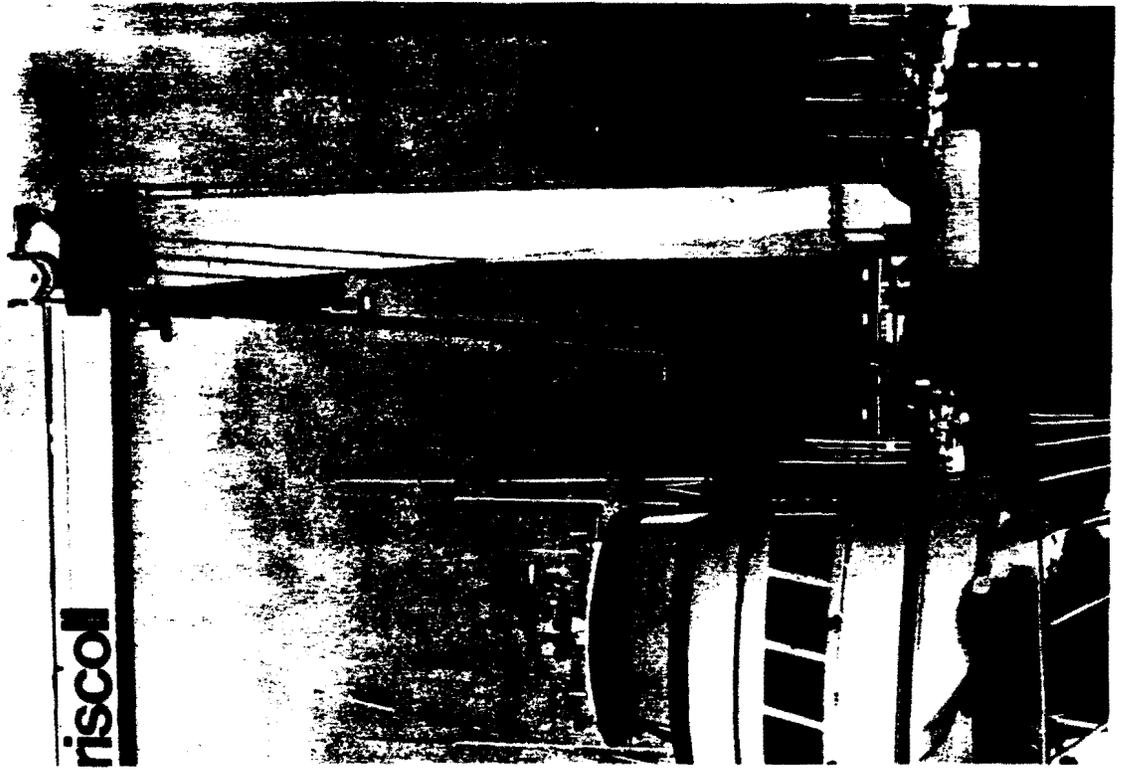
Therefore, it is recommended that Kettenburg be allowed to redesign its boat yard to include an upgraded Syncrolift. The Syncrolift is important because of its use in lifting larger tonnage yachts and certain structural yachts which can not be lifted with a Travelift. This redesign would remain consistent with the general guidelines of the California Coastal Act of 1976.

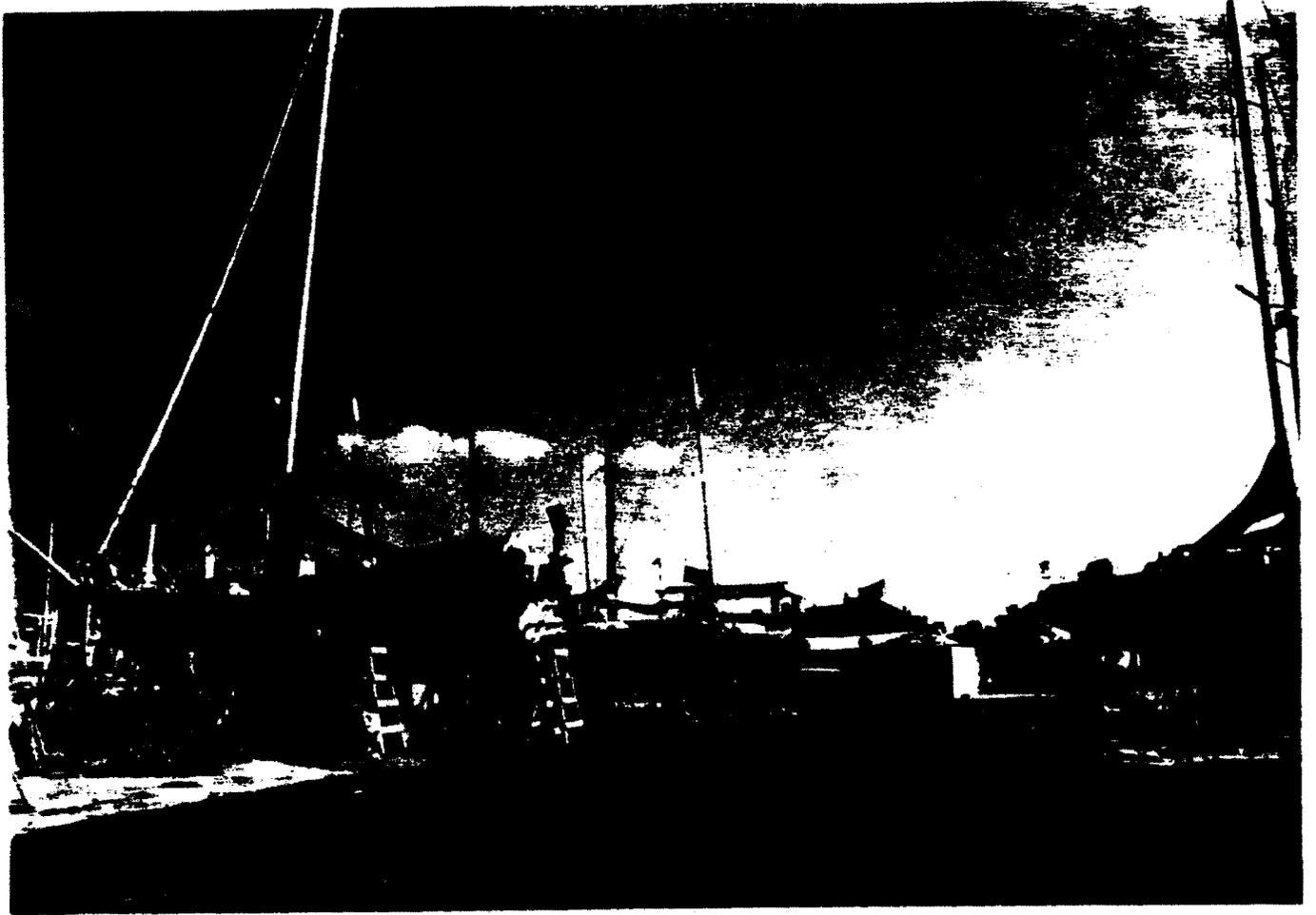
AMERICA'S CUP HARBOR USAGE STUDY  
PORT OF SAN DIEGO - NOVEMBER 1999

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APPENDIX A



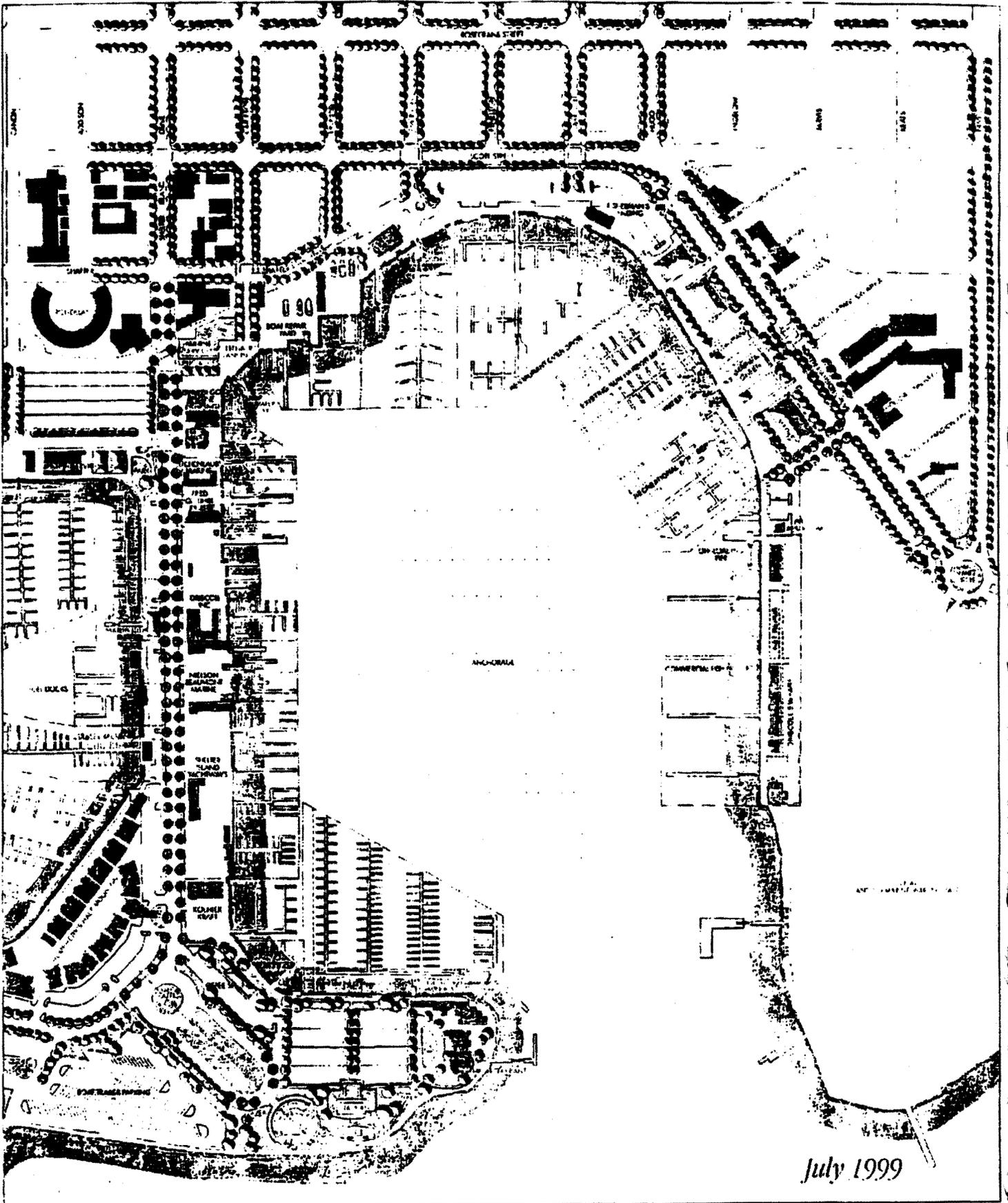




AMERICA'S CUP HARBOR USAGE STUDY  
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APPENDIX B



# Shelter Island Master Plan

*P r e f e r r e d   C o n c e p t*

AMERICA'S CUP HARBOR USAGE STUDY  
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APPENDIX C

## THOSE INTERVIEWED

### Yacht Brokers

Larry Porter  
HS Yacht Sales

Kevin MacDonald  
MacDonald Yachts

David Roscow  
Fraser Yachts

Scott Lampe  
The Crow's Nest

### Other Contacts

Cdr. Mike Riley  
U.S. Coast Guard

Dan Techenoff  
The Log Newspaper

Chris Salomone  
Chula Vista Devlp. Dept.

David Sheldon  
National City Comm. Svcs.

Diane Reichardt  
Peninsula Chamber of Commerce

### Other Businesses

Bill Burkett  
Harbor Island Fuel Dock

Kelly Heldenbrand  
Bay Pacific Marine

Ted Griffith  
Pearson Marine Fuels

Frank Lo Preste  
Lo Preste / Dunn Sports Fishing

Phil Lobred  
H&M Landing

Dale Donnelly  
San Diego Marine Exchange

Rich Rock  
A to Z Marine

Joel King  
King Architects

Richard Cloward  
San Diego Port Tenant's Assoc.

### Pt. Loma Association

Richard Bregante

Hal Sadler

Dan Larsen

Wayne Rafflesberger

## THOSE INTERVIEWED

### Boat Yards

Bill Roberts  
Shelter island Boat Yard

Tom Driscoll  
Driscoll Boat Works

Tom Nielsen  
Nielsen Beaumont

Charles Driscoll  
Kettenburg Marine

Terry Koehler  
Koehler Kraft

Randy Hynd  
Sunset Marine

Jonathan Knight  
Knight & Carver

Lee Hill  
Southbay Boat Yard

### Marinas

Mary Kuhn  
Marriott Hotel & Marina

Gerald Driscoll  
Driscoll Wharf

Deborah Mason  
Shelter Island Marina

Sandy Purdon  
Shelter Cove Marina

Tye Olsen  
Shelter Point Hotel/Marina

Brian Peele  
Sun Harbor Marina

Scott MacLaggan  
Sunroad Resort Marina

Gary Scott  
Sheraton Hotel & Marina

Jerry Green  
Cabrillo Isle Marina

Bruce Barnes  
Marina Cortez

Eric Leslie  
Harbor Island West Marina

Sol Mamrez  
Half Moon Anchorage &  
Bay Club Marina

con't

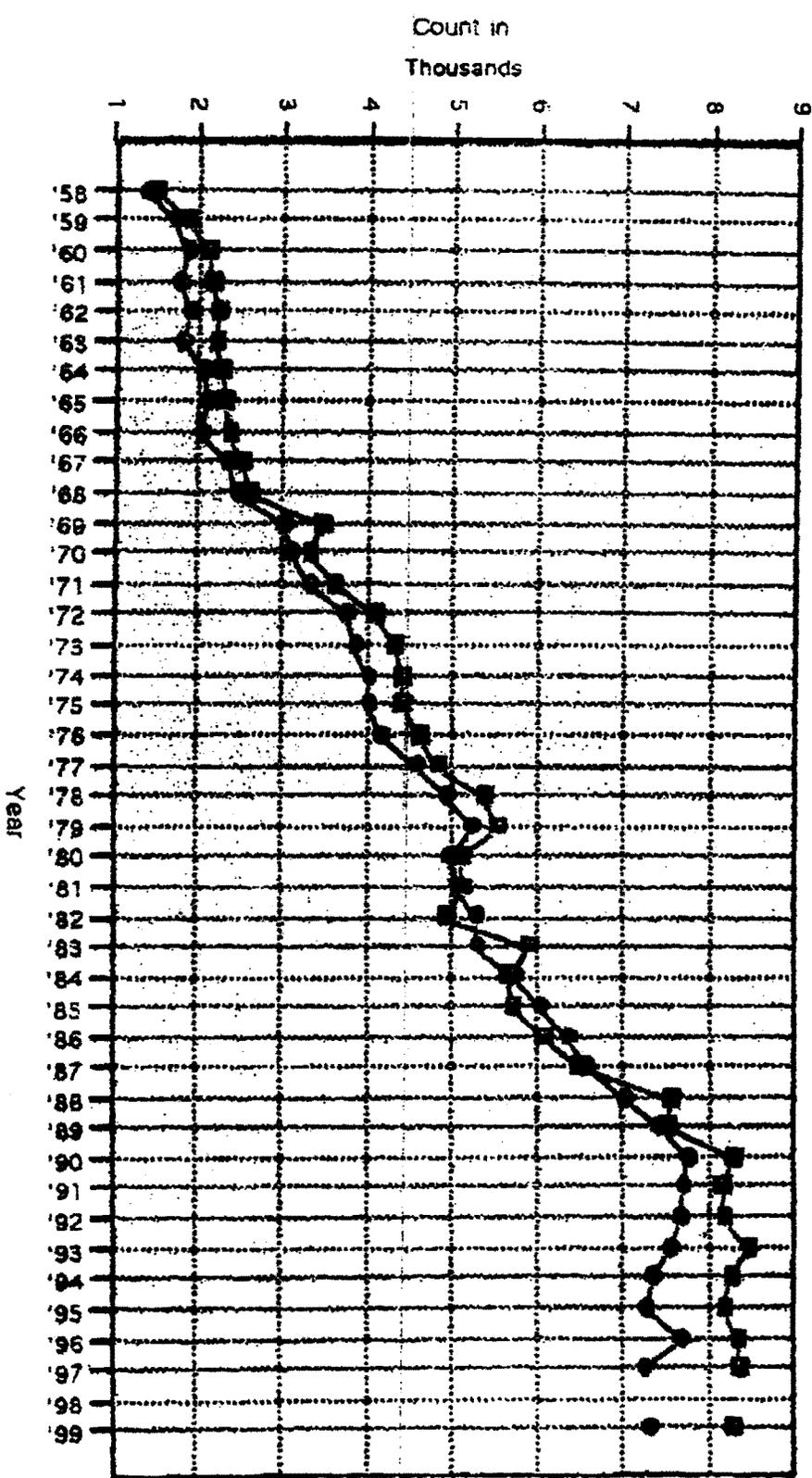
**AMERICA'S CUP HARBOR USAGE STUDY  
PORT OF SAN DIEGO - NOVEMBER 1999**

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**APPENDIX D**

# San Diego Bay Boat and Slip Count

Annual Survey by Port District Harbor Police



■ Slips/Boats/Anchor  
● Number Occupied

Year > > >	<u>'50</u>	<u>'51</u>	<u>'52</u>	<u>'53</u>	<u>'54</u>	<u>'55</u>	<u>'56</u>	<u>'57</u>	<u>'58</u>	<u>'59</u>
Slips/Buoys/@ Anchor									1488	1871
Number Occupied									1396	1708

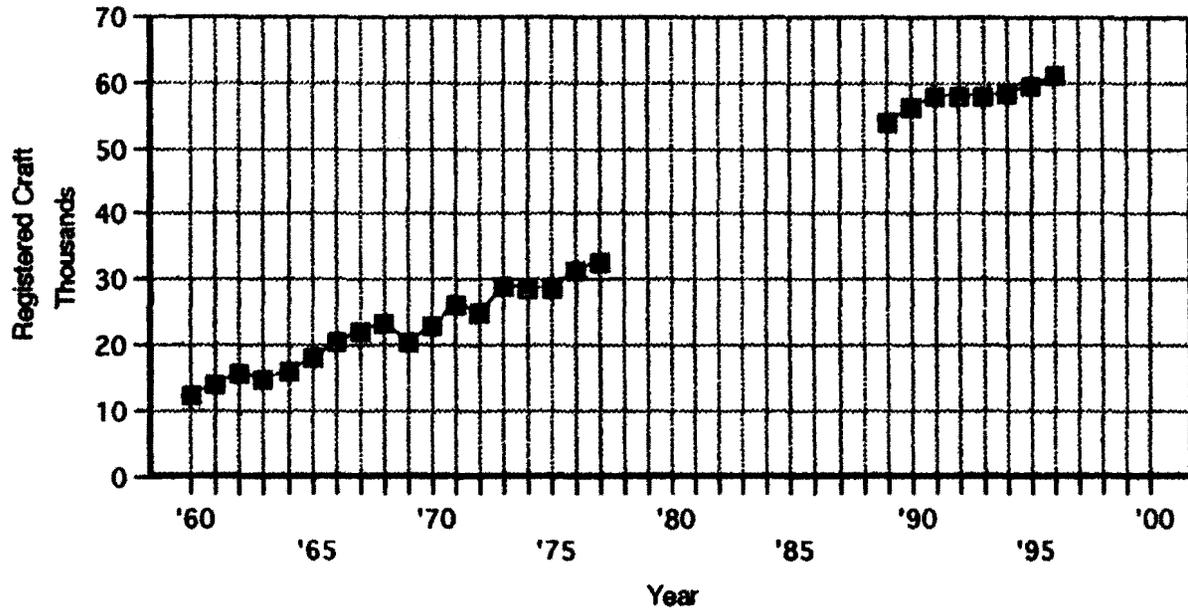
Year > > >	<u>'60</u>	<u>'61</u>	<u>'62</u>	<u>'63</u>	<u>'64</u>	<u>'65</u>	<u>'66</u>	<u>'67</u>	<u>'68</u>	<u>'69</u>
Slips/Buoys/@ Anchor	2101	2152	2213	2201	2246	2315	2349	2516	2611	3440
Number Occupied	1864	1772	1896	1809	2063	2098	2046	2335	2430	3013

Year > > >	<u>'70</u>	<u>'71</u>	<u>'72</u>	<u>'73</u>	<u>'74</u>	<u>'75</u>	<u>'76</u>	<u>'77</u>	<u>'78</u>	<u>'79</u>
Slips/Buoys/@ Anchor	3312	3602	4074	4329	4407	4411	4608	4845	5389	5518
Number Occupied	3088	3318	3745	3867	4018	4014	4164	4576	4934	5252

Year > > >	<u>'80</u>	<u>'81</u>	<u>'82</u>	<u>'83</u>	<u>'84</u>	<u>'85</u>	<u>'86</u>	<u>'87</u>	<u>'88</u>	<u>'89</u>
Slips/Buoys/@ Anchor	5129	5105	4934	5898	5659	5716	6049	6479	7548	7511
Number Occupied	4998	5084	5301	5288	5735	6046	6373	6576	7015	7414

Year > > >	<u>'90</u>	<u>'91</u>	<u>'92</u>	<u>'93</u>	<u>'94</u>	<u>'95</u>	<u>'96</u>	<u>'97</u>	<u>'98</u>	<u>'99</u>
Slips/Buoys/@ Anchor	8301	8154	8194	8474	8252	8195	8344	8368		8279
Number Occupied	7739	7694	7668	7554	7350	7265	7672	7218		7316

## State Registered Water Craft San Diego County

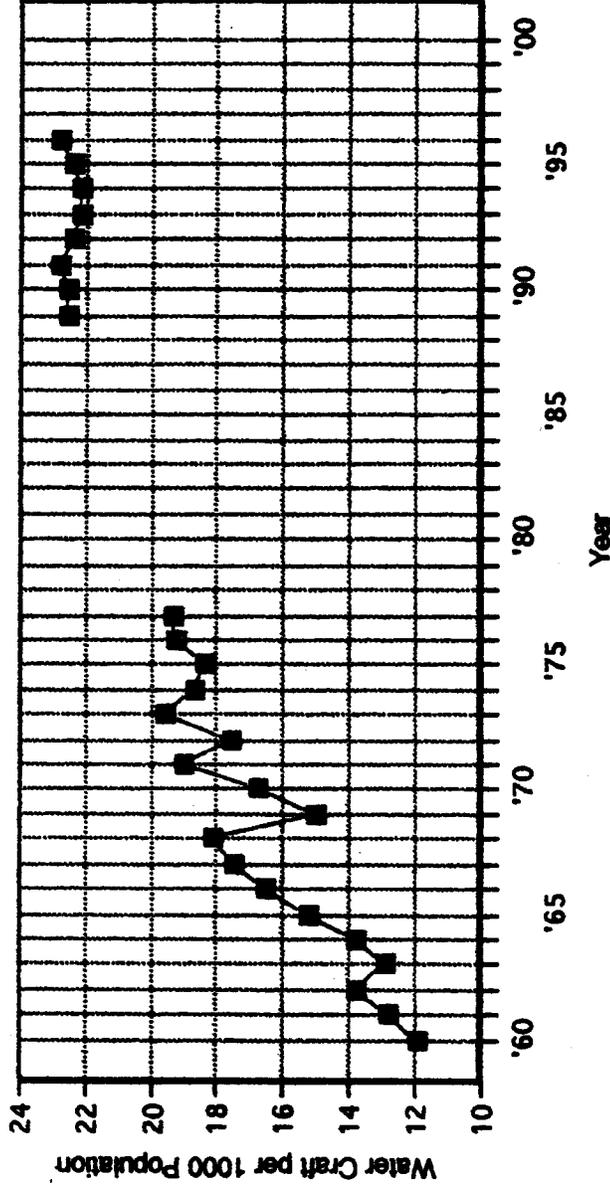


### Registered Craft in 1000's

	<u>'60</u>	<u>'61</u>	<u>'62</u>	<u>'63</u>	<u>'64</u>	<u>'65</u>	<u>'66</u>	<u>'67</u>	<u>'68</u>	<u>'69</u>
Water Craft	12.3	14.1	15.6	14.9	16.1	18.2	20.6	22.2	23.5	20.4
	<u>'70</u>	<u>'71</u>	<u>'72</u>	<u>'73</u>	<u>'74</u>	<u>'75</u>	<u>'76</u>	<u>'77</u>	<u>'78</u>	<u>'79</u>
Water Craft	22.8	26.2	25.1	28.9	28.4	28.6	31.4	32.6		
	<u>'80</u>	<u>'81</u>	<u>'82</u>	<u>'83</u>	<u>'84</u>	<u>'85</u>	<u>'86</u>	<u>'87</u>	<u>'88</u>	<u>'89</u>
Water Craft										53.9
	<u>'90</u>	<u>'91</u>	<u>'92</u>	<u>'93</u>	<u>'94</u>	<u>'95</u>	<u>'96</u>	<u>'97</u>	<u>'98</u>	<u>'99</u>
Water Craft	56.4	58.0	57.9	58.0	58.3	59.6	61.2	62.8	63.7	

# Registered Water Craft / Population

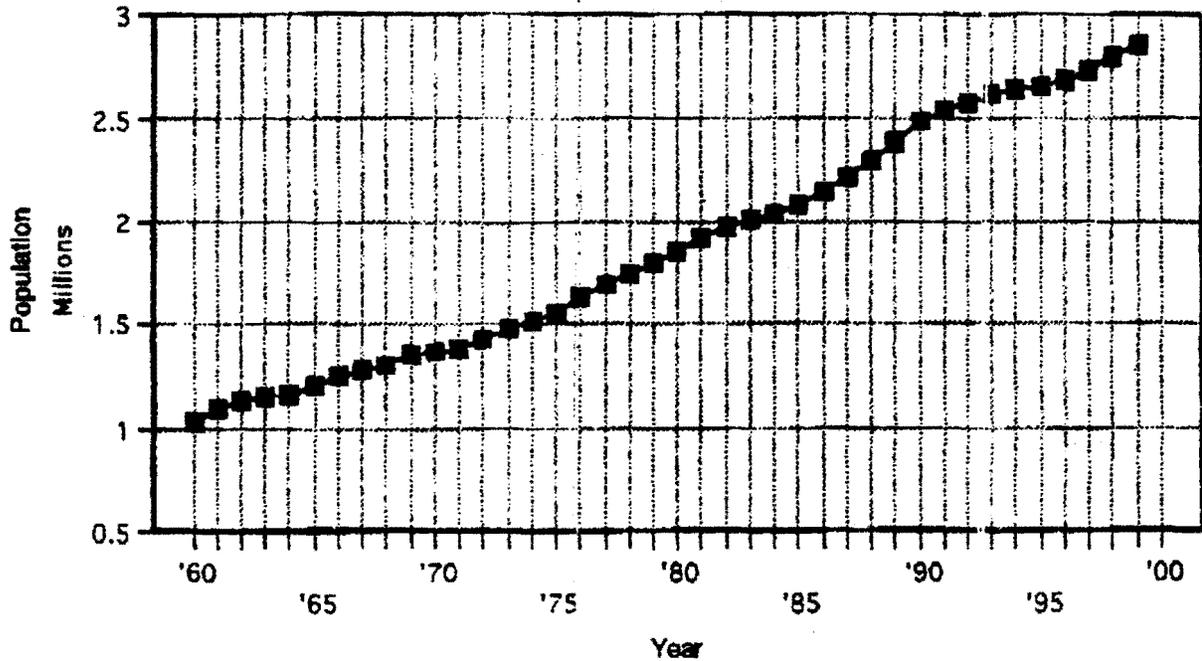
San Diego County



## Registered Water Craft per 1000 Population

'60	'61	'62	'63	'64	'65	'66	'67	'68	'69
11.9	12.8	13.8	12.9	13.8	15.2	16.5	17.5	18.1	15.0
'70	'71	'72	'73	'74	'75	'76	'77	'78	'79
16.8	19.0	17.6	19.6	18.7	18.3	19.2	19.3	17.8	17.9
'80	'81	'82	'83	'84	'85	'86	'87	'88	'89
18.5	18.6	18.7	18.8	18.9	19.0	19.1	19.2	19.3	19.4
'90	'91	'92	'93	'94	'95	'96	'97	'98	'99
22.6	22.8	22.4	22.2	22.1	22.4	22.8	23.0	23.7	23.0

# San Diego County Population



Population in Millions

<u>'60</u>	<u>'61</u>	<u>'62</u>	<u>'63</u>	<u>'64</u>	<u>'65</u>	<u>'66</u>	<u>'67</u>	<u>'68</u>	<u>'69</u>
1.0	1.1	1.1	1.2	1.2	1.2	1.2	1.3	1.3	1.4
<u>'70</u>	<u>'71</u>	<u>'72</u>	<u>'73</u>	<u>'74</u>	<u>'75</u>	<u>'76</u>	<u>'77</u>	<u>'78</u>	<u>'79</u>
1.4	1.4	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.8
<u>'80</u>	<u>'81</u>	<u>'82</u>	<u>'83</u>	<u>'84</u>	<u>'85</u>	<u>'86</u>	<u>'87</u>	<u>'88</u>	<u>'89</u>
1.9	1.9	2.0	2.0	2.0	2.1	2.2	2.2	2.3	2.4
<u>'90</u>	<u>'91</u>	<u>'92</u>	<u>'93</u>	<u>'94</u>	<u>'95</u>	<u>'96</u>	<u>'97</u>	<u>'98</u>	<u>'99</u>
2.5	2.5	2.6	2.6	2.6	2.7	2.7	2.7	2.8	2.9

**AMERICA'S CUP HARBOR USAGE STUDY**  
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**APPENDIX E**

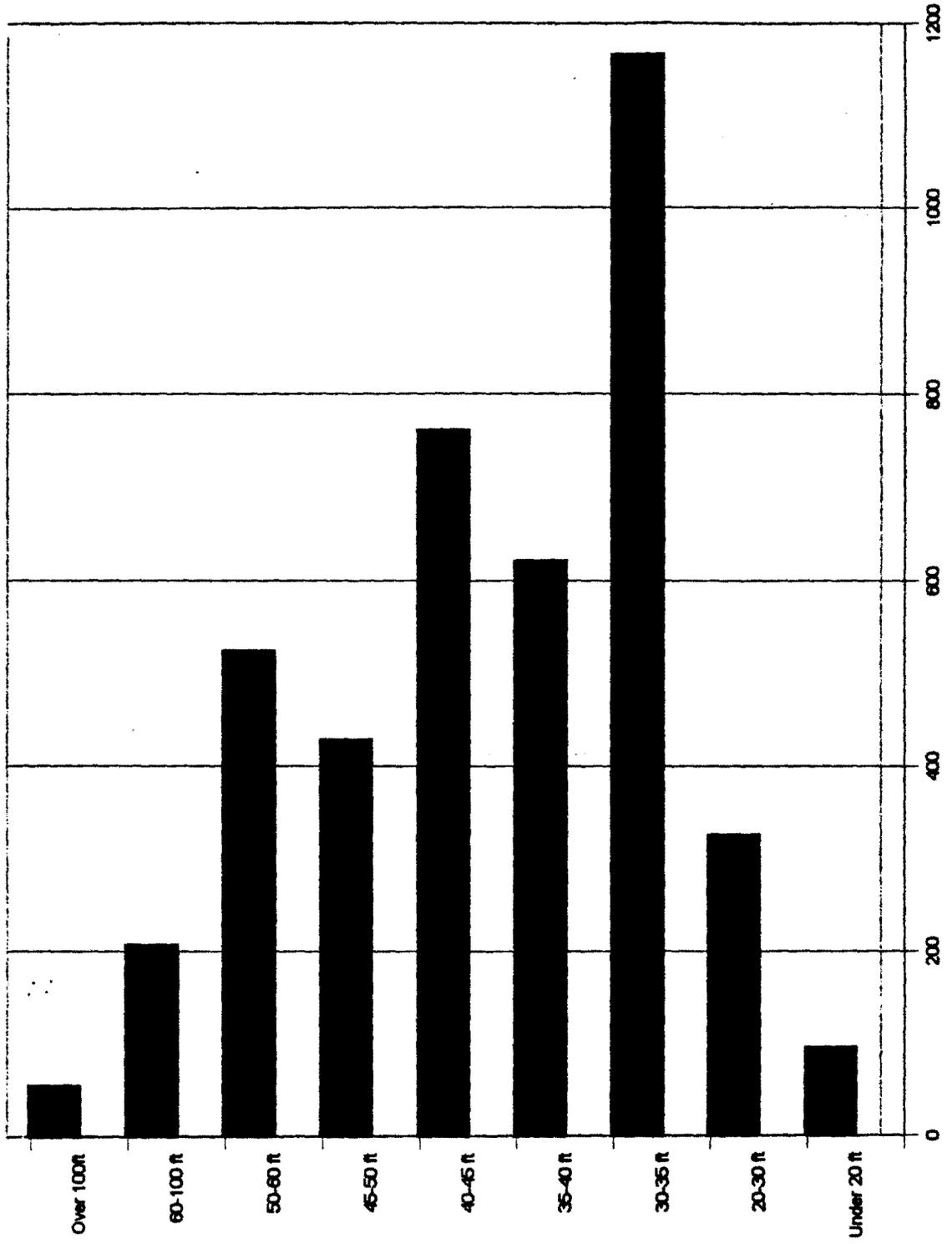
**Marina Share  
of  
Total Boat Slips**

**Percent**

Sheraton Harbor Island	44	1.0
Gold Coast Anchorage	45	1.0
Sun Harbor Marina	120	2.9
Driscoll Wharf	125	3.0
Bay City Marina	160	3.8
Half Moon Anchorage	165	3.9
Shelter Cove Marina	170	4.0
Shelter Island/Island Palms	188	4.5
Kona Kai Marina	261	6.2
Kona Marina	262	6.2
Marriott Marina	447	10.6
Cabrillo Isle Marina	450	10.8
Marina Cortez	530	12.7
Sunroad Resort Marina	600	14.3
Harbor Island West Marina	620	14.8
	4187	100.0

Sizes	Number of Slips by boat size															Total
	Shafter Island Marina	Shafter Cove Marina	Kona Marina	Kona Kai Marina	Bay Club Marina	Half Moon Anchorage	Sunwood Marina	Sharon Marina	Cabrillo Isle Marina	Harbor Island West Marina	Marina Cortez	Oriscoff's Wharf	Sun Harbor Marina	Marriott Marina	Gold Coast Marina	
Under 20 ft								58		40						98
20-30 ft	21	34	37			28		4		57	102		43			328
30-35 ft	54	34	121	115	125	78	43	7	127	185	183	25	24	45		1168
35-40 ft	13	27				25	90	1	115	148	96	28	24	58		622
40-45 ft	70	22	60	47		20	158	2	43	104	63	20	25	120	7	761
45-50 ft		15			27		207	2	47		9	21		94	7	429
50-60 ft	11	14	44		8	14	95	16	41	63	45	34		125	15	525
60-100 ft		19		78			7	15	17	9	41		4	5	14	207
Over 100ft	19	5		23				1		5					2	55
Total	188	170	262	261	160	166	600	44	450	620	530	125	120	447	45	4187

Number of Slips by boat size



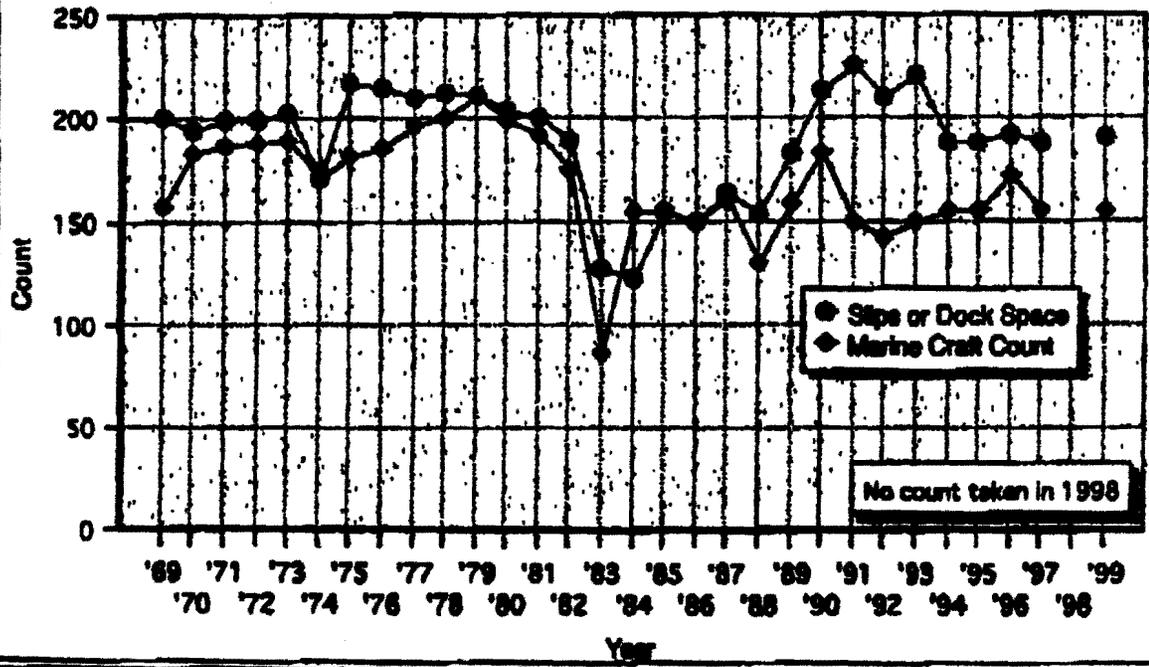
AMERICA'S CUP HARBOR USAGE STUDY  
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APPENDIX F

# Boat Building and Repair Facilities

## San Diego Bay



'95 '96 '97 '98 '99

- no count -

1995 Slips/Dock	1996 Slips/Dock	1997 Slips/Dock	1998 Slips/Dock	1999 Slips/Dock
3	3	3		3
50	50	50		50
13	13	10		10
				2
30	30	30		30
20	20	20		20
36	40	40		40
0				
35	35	35		35

187 191 188 190

1995 Occured	1996 Occured	1997 Occured	1998 Occured	1999 Occured
2	3	3		3
20	30	30		30
13	13	10		10
30	30	30		30
20	20	20		20
34	40	27		27
0				
35	35	35		35

154 171 155 155

'85	'86	'87	'88	'89	'90	'91	'92	'93	'94
1985 Slips/Dock	1986 Slips/Dock	1987 Slips/Dock	1988 Slips/Dock	1989 Slips/Dock	1990 Slips/Dock	1991 Slips/Dock	1992 Slips/Dock	1993 Slips/Dock	1994 Slips/Dock
3	3		1	3	3	3	3	3	3
31	31	31	4	Under Renov	7		AC Syndicate	1	
12	12	12	12	12	26	50	50	50	50
17	18	18	22	15	15	13	13	13	13
8		8	8	8	8				
12	12	36	36	36	36	36	20	26	
16	16	16	16	16	16	16	16	20	30
0	0	4	4	20	20	20	20	20	20
18	58	38	50	50	50	50	50	50	36
38						0		0	0
				22	32	37	37	37	35

155      150      163      153      182      213      225      209      220      187

1985 Occupied	1986 Occupied	1987 Occupied	1988 Occupied	1989 Occupied	1990 Occupied	1991 Occupied	1992 Occupied	1993 Occupied	1994 Occupied
3	3		1	1	0	3	0	2	2
31	31	31	1		7			0	
12	12	12	12	12	22	5	5	20	20
17	18	18	22	15	15	13	13	13	13
8		8	8	8	8				
12	12	36	36	36	36	36	20	20	
16	16	16	16	16	16	16	16	14	30
0	0	2	4	20	20	20	20	20	20
18	58	38	30	50	45	44	38	30	34
38						0		0	0
				0	13	12	30	30	35

155      150      161      130      158      182      149      142      149      154

**AMERICA'S CUP HARBOR USAGE STUDY  
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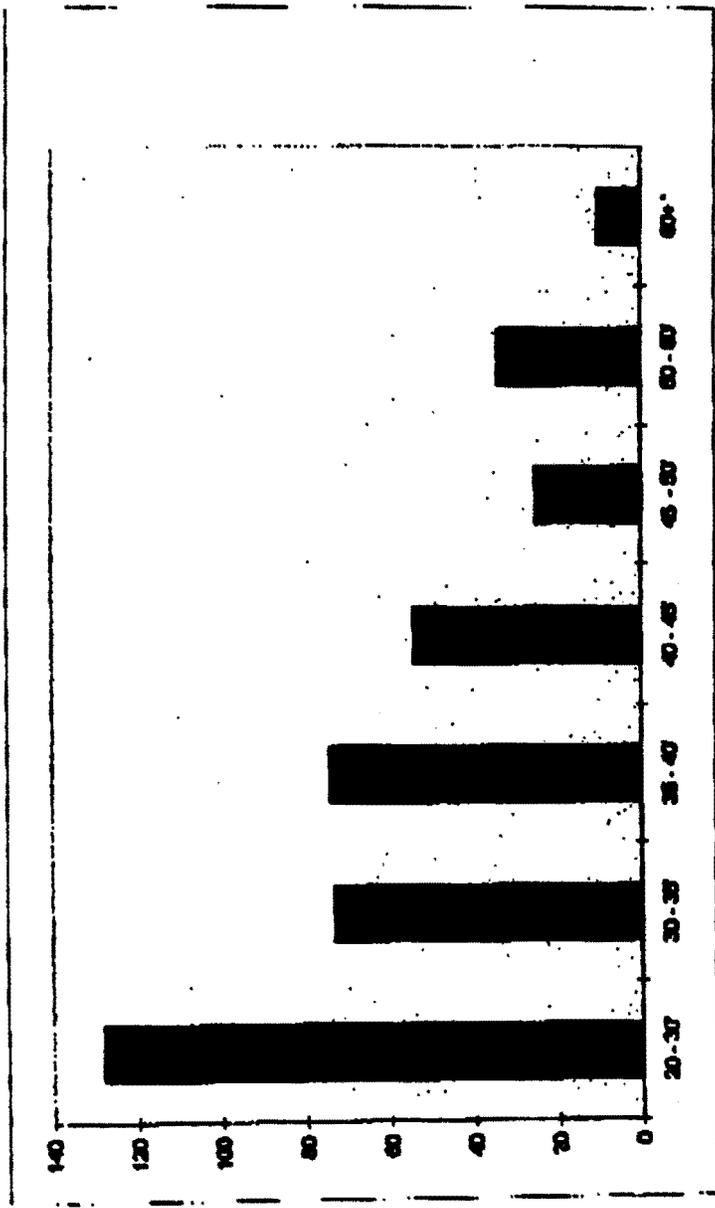
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**APPENDIX G**

<b>Number of Buoys by Location</b>		
<b>Location</b>	<b>Number</b>	<b>Percent</b>
Shelter Island Roadstead	44	10.1
American's Cup Harbor <35'	84	19.2
American's Cup Harbor >35'	80	18.3
American's Cup Harbor >55'	6	1.4
Laurel Street Roadstead	154	35.2
Bay Bridge Roadstead	69	15.8
<b>Total</b>	<b>437</b>	<b>100.0</b>
<b>Source: Port of San Diego Marine Operations, Moorings</b>		

Number of Occupied Buoys by Boat Size *		
Size	Number	Percent
20 - 30'	128	23.0
30 - 35'	73	18.5
35 - 40'	74	19.0
40 - 45'	54	13.9
45 - 50'	26	6.4
50 - 60'	34	5.9
60+'	10	3.0
Total	388	100.0
* As of 11/12/89		
Source: Port of San Diego Marine Operations, Moorings		

**Number of Occupied Buoys  
by Boat Size\***



\* As of 11/12/89  
Source: Port of San Diego  
Marine Operations, Moorings

**AMERICA'S CUP HARBOR USAGE STUDY  
PORT OF SAN DIEGO - NOVEMBER 1999**

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**APPENDIX H**

# 2000

## Reaching for the Stratosphere

Italy is top yacht-building nation • Azimut/Benetti tops the overall builder rankings • Order book rises 65 units over 1999 to 327 projects • Currently 7.6 miles of luxury yachts under construction • Average yacht length now 117 feet

**T**HE LUXURY YACHT INDUSTRY IS ENTERING THE 21st Century riding a tidal wave of new business that has pushed practically every measure of yacht-building activity around the world to dizzying new heights.

The most basic measure of the current strength of the industry, 327 orders reflecting a 15.5% increase in business over 1999 (compared to the 1.4% growth last year), only begins to describe the robustness of the marketplace. Every construction category with the exception of sailing yachts between 90' and 99' feet and motor yachts in the 100' to 119' foot category showed dramatic growth.

While the growth in new construction activity from 1999 to 2000 is dramatic, the growth of the industry over the past four years is nothing short of sensational. From the 1997 Order Book, when we first added yachts from 80' to 89' feet, the industry has grown 35.6%, or an average 11.8% annually. Factoring out industry activity in the 80'-89' foot range, over the past five years the industry has grown 78%, or an average of 15.6% per year.

### U.S. Loses Top Ranking to Italy

While the 2000 Order Book reflects burgeoning growth in almost every sector, it also reflects remarkable changes within

the industry itself. The U.S., long the leading country of origin for luxury yachts, has lost this distinction to Italy, which without question has enjoyed the strongest market share growth of any yacht-building nation. For the first time, Italy outstripped the U.S., both on the basis of individual orders (100 vs. 78), as well as lineal feet of construction (10,653 vs. 9,960). The latter is especially significant considering that much of Italian yacht construction in the past

consisted of smaller GRP production boats.

The dramatic erosion of U.S. market share is shown by the fact that in 1996 America's 68 total luxury yacht orders was 36% larger than Italian and Dutch unit production combined.

Italy's yacht production rose a solid 30 units, or 42% over its 1999 activity. However, in terms of lineal feet under construction, Italian yards have enjoyed a 78% increase over the past three years, compared to 37% for Dutch yards over the same period and a 1% decline in U.S. orders. Much of Italy's growth, both in terms of unit production and lineal feet, is due to the ambitious ac-

tivity of three companies, Azimut/Benetti, SNP Rodriguez Group, which markets semi-custom yachts built at Arno and Overmarine, and Ferretti, which just this year acquired both the Pershing and CRN shipyards. Also, a number of those Italian GRP yards are now building a significant number of yachts greater than 80 feet.

The awakening giant, however, is Canada, now in sixth place in

### Top 15 Builders

Yard Name	Length	Number of Projects	Average Length	1999 Rank
1. Azimut/Benetti*	3,144	26	119	1
2. Feadship*	1,738	10	174	2
3. Oceanco	1,648	8	206	3
4. Ferretti	1,382	16	86	-
5. PR Marine	1,135	11	103	5
6. Overmarine/SNP Rodriguez	1,116	12	93	10
7. Christensen	875	6	149	-
8. Broward Marine	873	8	109	6
9. Notika Teknik	797	7	103	11
10. Intermarine	793	7	113	4
11. Perini Navi*	780	5	156	-
12. Jongert	765	6	127	-
13. Trfnity/Halter*	741	5	148	7
14. Palmer Johnson	735	6	123	8
15. Burger	722	7	103	14

\* Total of all company yards

By the Editors of *ShowBoats International*

our tally of orders by country. Canada's yacht-building industry, located solely in British Columbia, has seen its share increase 200% both in terms of gross orders and in lineal feet (572 vs. 1,719) since the 1997 book was published. Not far behind, New Zealand's increase for the same period is a whopping 111% in terms of the number of lineal feet under construction (901 vs. 1,906) and 112% in terms of projects (8 vs. 17). As the new century opens, there is definite momentum with the Pacific Rim.

## Orders By Length

Sailing Yachts					Motor Yachts				
Length	'97	'98	'99	2000	Length	'97	'98	'99	2000
80'-89'	5	7	7	14	80'-89'	45	75	48	62
90'-99'	7	9	8	4	90'-99'	20	31	38	43
100'-119'	7	7	12	14	100'-119'	71	58	72	71
120'-149'	6	6	12	14	120'-149'	32	41	39	47
150'+	5	4	3	8	150'+	43	41	45	40
<b>TOTAL</b>	<b>39</b>	<b>33</b>	<b>42</b>	<b>54</b>	<b>TOTAL</b>	<b>211</b>	<b>246</b>	<b>241</b>	<b>273</b>

**TOTAL OF ALL ORDERS OVER 80' = 327**

**Total by Year: '97=241 / '98=279 / '99=283 / 2000=327**

## Shakeup in Overall Yard Rankings

The 2000 order book also reflects big changes in the tally of construction-by-builder listings. While the top three slots remain unchanged with Azimut/Benetti, Feadship and Oceanco demonstrating continued market dominance and a total increase of eight projects, an aggressive Ferretti Group now sits at number four in the standings with 1,382 lineal feet under construction or contracted. Last year Ferretti had just three projects on our list. Likewise, Overmarine/SNP Rodriguez moved up four places to sixth in this year's ranking. An indication of the strength of this year's luxury yacht activity is how Feadship managed only to hold onto its second-place ranking despite a solid 11.6% increase in production. Feadship was not alone in this regard. In the case of Heesen-Diaship, that builder's 13% increase in business activity was not enough to keep it on the top 15 builders list. With 696 feet of custom yachts under construction, Heesen now ranks 18th.

Azimut/Benetti's top ranking is particularly interesting considering that in 1993 the company captured the number three position with only 696 lineal feet of production versus today's 3,159 feet.

In the case of Oceanco, with eight orders averaging 208 feet, simply maintaining a strong level of business (no mean feat considering the company launched more than 400 feet of construction in 1999) would have seemed a remarkable achievement. However, Oceanco increased its lineal feet under construction by 7.5%.

## Custom vs. Semi-Custom Rankings

For the second year running, the SBI Order Book divides the industry ranking into custom and semi-custom rankings. This is done to more accurately portray the business activities of these

market segments, as well as to indicate the relative strength of individual companies. In the case of overall ranking leader Azimut/Benetti, dividing it into two categories results in the Azimut division dropping to fourth place in the semi-custom rankings behind Germany's PR Marine, Overmarine and top place finisher Ferretti. It is interesting to note, however, that four of the top 10 semi-custom builders in the world are Italian companies. A student of these pages would note that last year we considered PR Marine a custom builder. PR has since redirected its efforts in the more manageable direction of building semi-custom series yachts.

Much like the case of Heesen-Diaship in the overall rankings, Argentine builder Tarrab — third in last year's list — dropped to eighth in this year's ranking despite an impressive 13.6% increase in orders. Jongert, the only sailboat manufacturer in the top-15 overall builder rankings, maintained its fifth place ranking in the semi-custom list.

## Benetti Top Custom Builder

In the case of custom builders, Benetti's finish represents a jump of four places over last year's ranking. For number two custom builder Feadship, now celebrating its 50th year in business, this order book represents an unbroken string of first or second place rankings since SBI began keeping count in 1991. Brodard Marine, under new ownership, is up one in number of yacht orders while Palmer Johnson and Trinity, both of whom launched several yachts earlier this year, each are down two orders. Italian sailing yacht builder Perini Navi moves onto the list, propelled largely by a spectacular last-minute announcement of a new 206-footer. Intermarine dropped from third place to sixth in the rankings, a loss that reflects a new business strategy to concentrate on sailboat yacht construction and refit work rather than to pursue original custom construction contracts. Heesen-Diaship keeps its tenth place rank for the second consecutive year, while last year's busiest custom yard, Trident, falls off the list to twelfth place behind Royal Huisman.

## Power Versus Sail

If there was any underlying weakness in the industry in previous years, it was the performance of the sailboat construction industry.

## Orders By Country

Country	Number of Projects	Total Length	Average Length	Rank 1999
1. Italy	66	10,325	107	2
2. U.S.	78	9,080	116	1
3. Netherlands	50	7,406	148	3
4. Germany	15	2,289	152	4
5. New Zealand	17	1,906	112	5
6. Canada	16	1,719	107	6
7. Turkey	8	864	108	7
8. France	7	741	106	8
9. Spain	6	648	108	9
10. Argentina	5	540	108	10

The 2000 sailing yacht order book, despite the poor showing of the 90-to-99 foot sector, overall rose 28% from 1999, mostly on doubling 80-to-89 foot sales. Perhaps the most dramatic aspect of this year's Order Book is the resurgence in interest in very large sailing yachts. Orders for 150-foot-plus sailing yachts rose from three orders in 1999 to eight in 2000, an increase of 166%. We also note the first sailing yacht over 200 feet on the tally.

For power yachts, nearly every segment showed robust growth. Countering trends of most segments, the order book reflects a yo-yo pattern for orders of yachts between 80 and 99 feet. While this segment is up 29% from 1999 orders, it is still 17% below 1998's orders. The up and down movement of this sector since we began keeping track with the 1997 book is as reflective of the relative short delivery times for these yachts as it is of economic conditions. Those pinched by 1998's so-called Asian Flu are apparently recovered, and the diversity of the offerings by semi-custom builders are proving attractive.

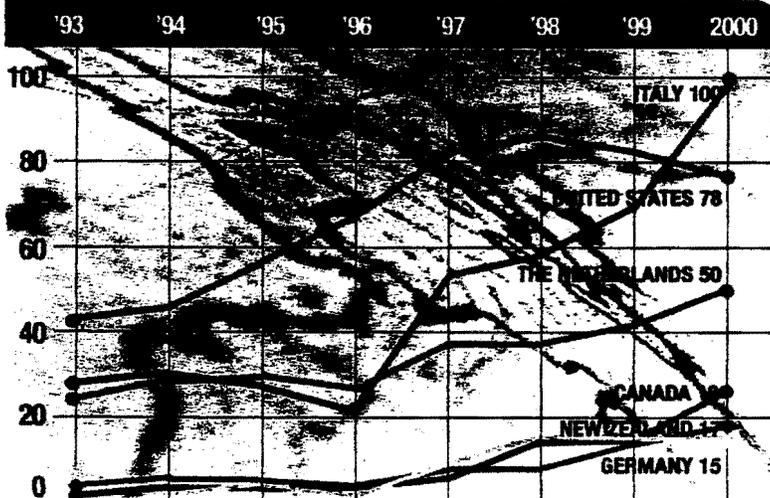
Also noteworthy in this sector is the jump in orders for boats between 120 and 149 feet. Last year's Order Book actually showed a decline in this category. This year, orders jumped 20%, outstripping the 8% growth in the 150-foot-plus segment. This comparison, however, taken on a unit basis, may not reflect actual volume of construction activity because of the spectacular ongoing interest in 300-foot-plus yachts.

### Is There A Down Side?

While many segments of the industry are enjoying an era of unprecedented financial prosperity, the boom times have also raised many areas of difficulty and concern. For one, many subcontractors to the yacht construction industry, especially in places such as Italy and Holland that rely heavily on them, are hard-pressed to fulfill their contracts. Brokers while gloating over the high prices used boats have been fetching, are also limited in their potential to capitalize on the seller's market by the paucity of new listings.

With almost 200 yachts over 80 feet in length being launched each year, the professional crew industry is hard-pressed to find capable staff to man the growing fleet. The order book reflects approximately 1,800 new crew positions, a demand the crew training and recruitment industry is not geared up to fulfill. Too few

### Order Trends of Top Builder Nations



### Top 10 Custom Yards

Yard Name	Number Length	Average of Projects	Length
1. Lürssen	100	8	156
2. Feadship	80	6	148
3. Palmer Johnson	75	5	120
4. Heesen/Diaship	60	6	110
5. Trinity/Hall	55	5	148
6. ...	50	5	148
7. ...	45	5	148
8. ...	40	5	148
9. ...	35	6	120
10. ...	30	6	110

### Top 10 Semi-Custom Yards

Yard Name	Number Length	Average of Projects	Length
1. ...	100	8	156
2. ...	80	6	148
3. ...	75	5	120
4. ...	60	6	110
5. ...	55	5	148
6. C.N. San Lorenzo	50	5	148
7. Westport	45	5	148
8. Tarrab	40	5	148
9. ...	35	6	120
10. ...	30	6	110

builders have followed the lead of Lürssen, Feadship and Palmer Johnson to set up their own crew training programs.

From the owners' point of view, of course, full order books at leading yards reduce substantially their leverage in contract negotiations. The good news, however, is that limited global production facilities — especially at the better yards — combined with relatively few brokerage listings, is resulting in a substantial premium in the value of newly launched yachts.

### How the Data Is Generated

Information in the annual SBI Order Book is gathered from builders under the following guidelines: Yacht manufacturers were asked to submit their construction activity and bona fide orders as of October 1st, 1999. In the tabulations, speculative construction activity is permitted so long as actual construction has started (or, in the case of GRP construction, work on hull and deck tooling has been completed). Orders are considered real when they are accompanied by signed contracts and a minimum deposit of 10% of estimated construction price.

**AMERICA'S CUP HARBOR USAGE STUDY  
PORT OF SAN DIEGO - NOVEMBER 1999**

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**APPENDIX I**

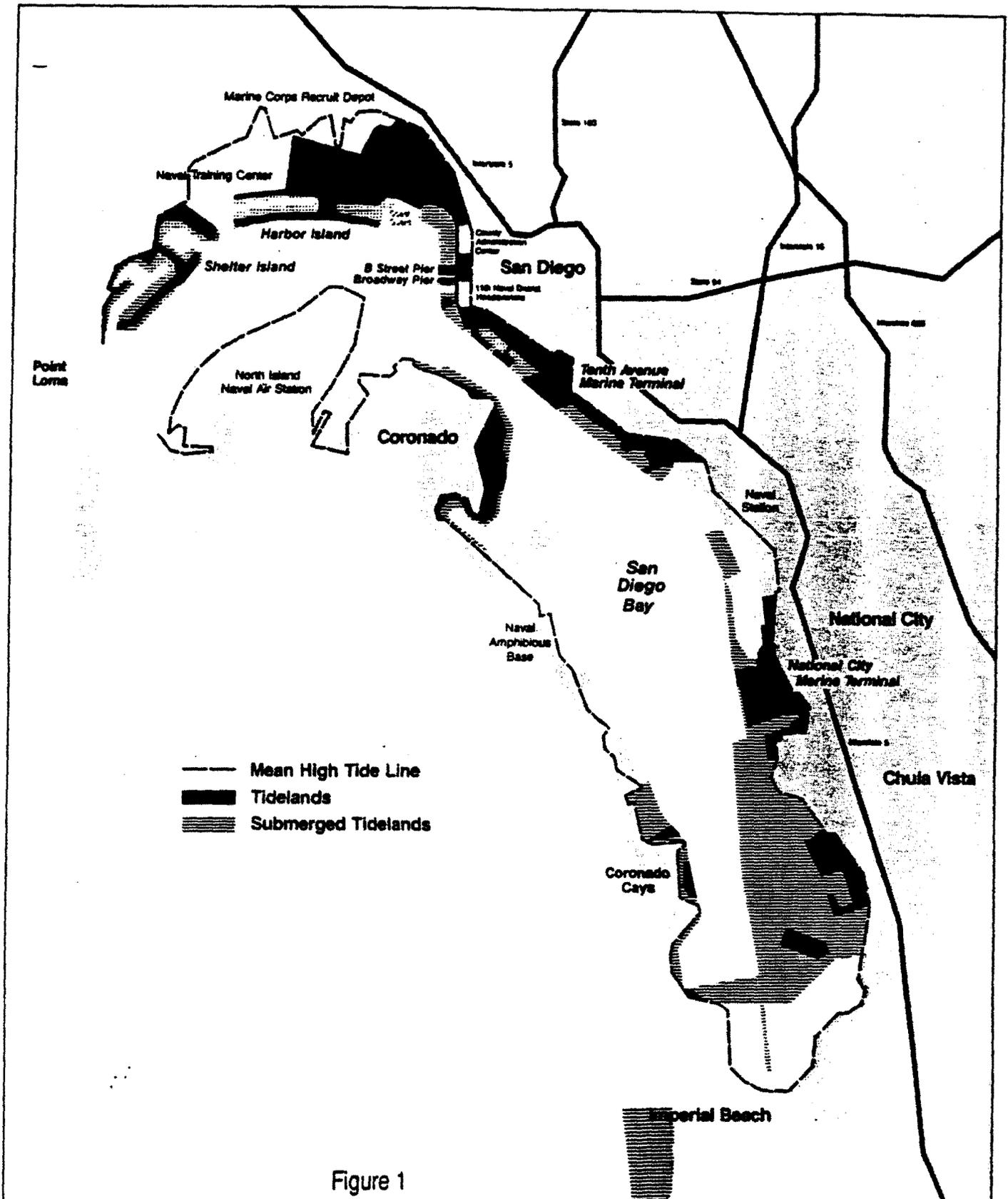
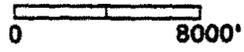
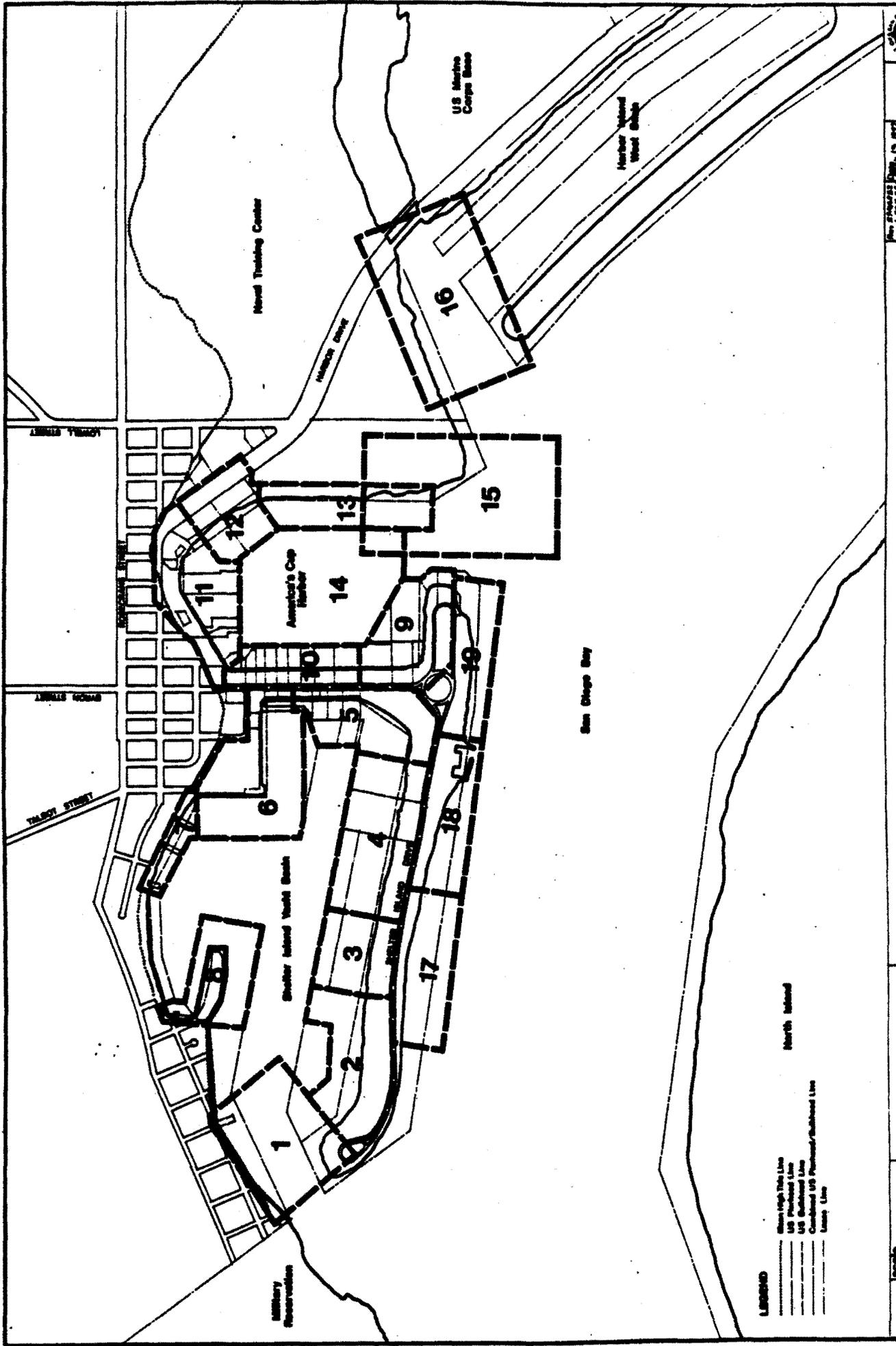


Figure 1

	<b>Scale</b>  0 8000'	<h1>The Port's Planning Jurisdiction</h1>	Revised 2/84 165	Date JUL 18 79	
	Planning Department		Drawn KS	Check  	



DATE: 12/13/77  
 BY: [Signature]  
 NO. 100-100000-100

# Slip and Pier Diagram Locator

Planning District 1  
**SHELTER ISLAND**

**LEGEND**  
 --- Main Slip/Thru Line  
 --- US Federal Line  
 --- US Submerged Line  
 --- Existing US Private/Public Line  
 --- Utility Line  
 North Island



Scale

## Marine Facilities Listed by Planning District

### Planning District 1 SHELTER ISLAND

- 1 Harbor Control Float
- 1 Transient Boat Mooring Facility
- 1 Nicholas Pier
- 2 Kona Kai Club
- 3 Kona Marina
- 4 Shelter Island Inn Marina
- 4 Silver Gate Yacht Club
- 4 Bay Club Hotel and Marina
- 5 Half Moon Yacht Anchorage
- 5 Gold Coast Anchorage
- 5 Pearson Marine Service
- 5 San Diego Marlin Club
- 6 The Crows Nest
- 6 San Diego Yacht Club
- 7 Lacy Pier
- 7 Wyatt Pier
- 7 Donnelley Pier
- 8 LaPlaya Yacht Club
- 8 Southwestern Yacht Club
- 9 Bali Hai Guest Dock
- 9 Shelter Cove Marina
- 9 Koehler Kraft Co.
- 9 Shelter Island Yacht Ways Ltd.
- 10 Shelter Island Yacht Ways Ltd.
- 10 Nielsen Beaumont Marine
- 10 Driscoll Custom Boats
- 10 Eichenlaub Marine
- 10 Red Sails Inn
- 10 San Diego Marine Exchange
- 11 Kettenburg Marine
- 11 Lee Palm's Sportfishing
- 11 H & M Landing
- 11 Point Loma Sportfishing Assn.

- 11 Fisherman's Landing
- 12 Sun Harbor Marina
- 12 Bay City Marine
- 13 San Diego Fisherman's Village
- 13 America's Cup Harbor Shore Facility
- 14 America's Cup Harbor Moorings
- 15 U.S. Naval Training Center
- 16 USNTC/Special Services Sailing Marina
- 17 Shelter Island Pier
- 17 Shelter Island Roadstead Moorings
- 18 Shelter Island Roadstead Moorings
- 19 Shelter Island Roadstead Moorings

### Planning District 2 HARBOR ISLAND

- 1 Harbor Island West Marina
- 2 Marina Cortez
- 3 Cabrillo Isle Marina
- 4 Sheraton Harbor Island Hotel
- 5 Lockheed Engineering & Science Co.
- 6 Sunroad Resort Marina
- 7 General Dynamics
- 8 U.S. Navy Estuary Basin

### Planning District 3 CENTER CITY EMBARCADERO

- 1 Embarcadero Transient Moorings
- 1 Laurel Street Roadstead Moorings
- 2 Anthony's Restaurant Guest Dock
- 2 Maritime Museum Assn. of San Diego
- 2 San Diego Cruise Ship Terminal
- 2 San Diego Harbor Excursion
- 2 Broadway Pier
- 2 Center Bay Control Float
- 2 Navy Pier

- 2 Homblower
- 3 Tuna Harbor
- 3 Harbor Seafood Mart
- 4 Marriott Marina
- 5 Bayside Terminal, Inc.
- 5 Campbell Industries
- 5 Marina Park Fishing Pier
- 5 Ray Carpenter

### Planning District 4 TENTH AVENUE MARINE TERMINAL

- 1 Tenth Avenue Marine Terminal
- 2 Pacific Towboat & Salvage Co.
- 2 Continental Maritime
- 3 Kelco Company
- 3 Southwest Marine Inc.
- 3 SDG&E Power Plant
- 4 National Steel & Shipbuilding Co.

### Planning District 5 NATIONAL CITY BAYFRONT

- 1 National City Marine Terminal
- 1 Sweetwater Channel Wharf
- 2 National City Fishing Pier
- 2 National City Launching Ramp

### Planning District 6 CORONADO BAYFRONT

- 1 The Wharf
- 1 Old Ferry Landing
- 1 Coronado Ferry and Fishing Pier
- 2 Le Meridien Hotel
- 3 Bay Bridge Roadstead Moorings (69)
- 4 Coronado Yacht Club
- 5 Giorletta Bay Marina

### Planning District 7 CHULA VISTA BAYFRONT

- 1 South Bay Boat Yard Inc.
- 2 Chula Vista Marina
- 2 Bayside Park Pier
- 3 Chula Vista Launching Ramp
- 3 California Yacht Marina
- 3 Marina Parkway Pier
- 3 Harbor Police Substation

### Planning District 8 SILVER STRAND SOUTH

- 1 Loews Coronado Bay Resort
- 2 Green Turtle Cay
- 3 Coronado Cays Yacht Club
- 4 Grand Caribe Isle - South
- 5 Blue Anchor Cay

### Planning District 9 IMPERIAL BEACH

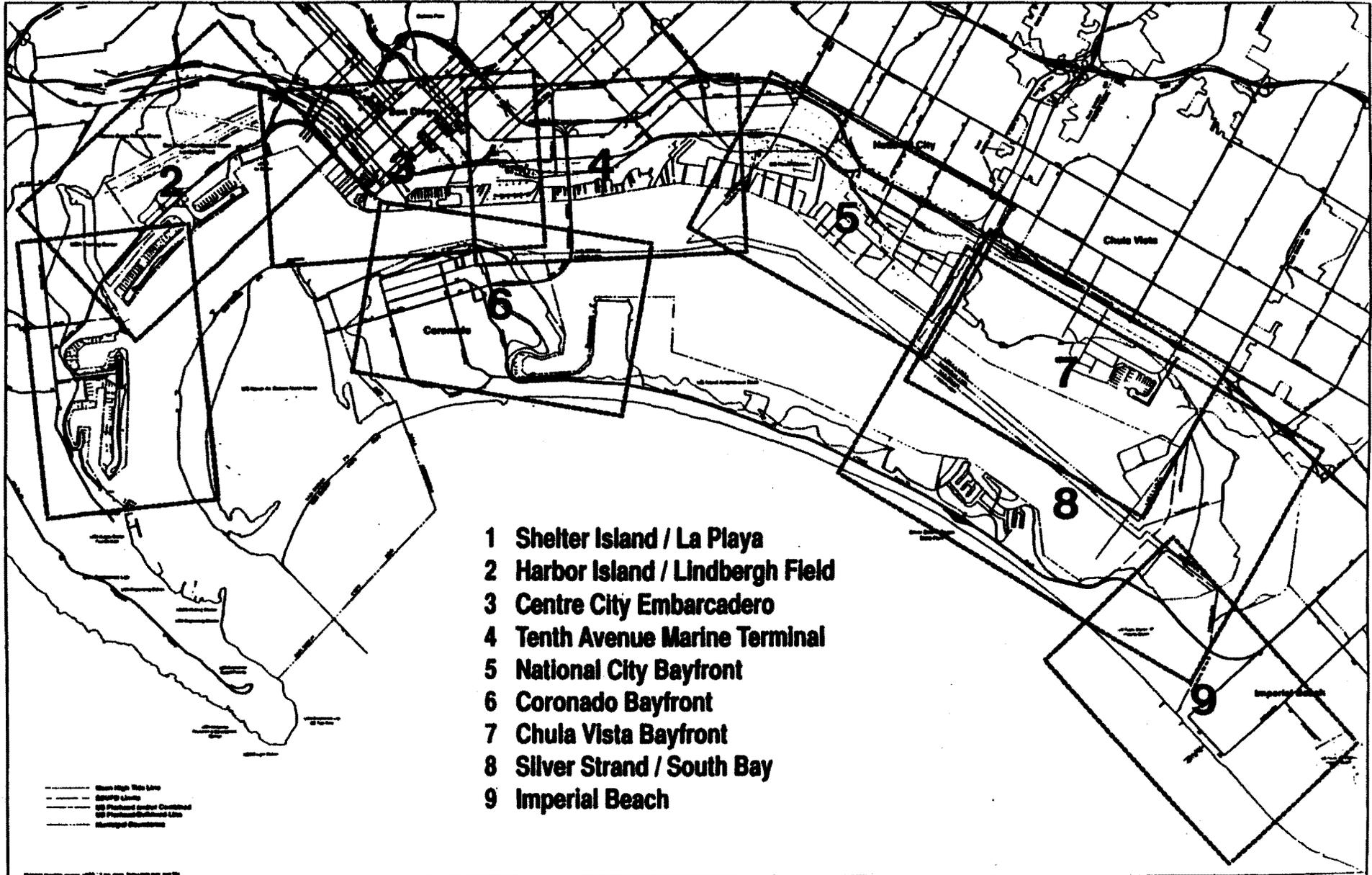
- 1 Imperial Beach Pier

### Silver Strand Navy Housing

- 1 Naval Amphibious Base Marina
- 2 Naval Amphibious Base Moorings

### North Island NAS Piers





- 1 Shelter Island / La Playa
- 2 Harbor Island / Lindbergh Field
- 3 Centre City Embarcadero
- 4 Tenth Avenue Marine Terminal
- 5 National City Bayfront
- 6 Coronado Bayfront
- 7 Chula Vista Bayfront
- 8 Silver Strand / South Bay
- 9 Imperial Beach

- - - - - Shoreline  
 - - - - - Airport  
 - - - - - Waterfront Boundary  
 - - - - - Waterfront Boundary  
 - - - - - Waterfront Boundary

SCALE  
  
 Planning Department

## Planning Districts Map Key

Date: 1/1/00  
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 Title: [Title]

# ***SHELTER ISLAND: Planning District 1***

## ***The Precise Plan Concept***

Shelter Island, as reviewed in this plan concept, is a strong, functional community of importance and value to the San Diego region. The end product of the discussions and evaluations made in the planning process for the area have highlighted the following matters as being of paramount importance.

While there is general satisfaction with the present land use allocations, some improvement can be obtained by extensive renovation of older facilities at the termination of leases. Additional people oriented spaces, providing vistas and accessibility to the water and waterside activities, are felt appropriate. In some subareas, visual clutter in the form of proliferation of signs; disorganized automobile parking layouts on streets, in side yards and setbacks; deteriorated landscape materials; and a lack of continuity in architectural treatment give evidence of some deterioration in the quality of development achieved and maintained in other portions of Shelter Island.

The basic concept of the Shelter Island Precise Plan is found in preserving and retaining flexibility in improving upon the best aspects of this man-made environment which has been developed over the past 25 years.

The character of existing development is to be enhanced by a redevelopment program that emphasizes the continued provision of adequate public service, employment and investment opportunities.

Overall, the planned land and water uses for the Shelter Island area remain essentially unchanged from existing uses. The major emphasis of the development program is directed toward the renovation of obsolete structures and improvement in the quality of landscaping.

## ***Land and Water Use Allocations***

A total of 351.3 acres in the Shelter Island Planning District are tidelands under the jurisdiction of the Unified Port District. A summary, in tabular form, of the planned land and water use allocations is indicated in Table 6.

The following text explains and gives definition to the legend of the Land and Water Use Element Map of the Precise Plan. The map graphically portrays 30 different land or water use designations organized under four major headings—Commercial, Public Recreation, Public Facilities, and Military.

**TABLE 6  
SHELTER ISLAND: PLANNING DISTRICT 1**

<u>LAND USE</u>	<u>ACRES</u>	<u>WATER USE</u>	<u>ACRES</u>	<u>TOTAL ACRES</u>
<b>COMMERCIAL</b>	<b>63.1</b>		<b>135.4</b>	<b>198.5</b>
Marine Sales and Services	11.4	Marine Services Berthing	21.0	
Commercial Fishing	2.9	Commercial Fishing Berthing	5.7	
Commercial Recreation	45.1	Recreational Boat Berthing	98.4	
Sportfishing	3.7	Sportfishing Berthing	10.3	
<b>PUBLIC RECREATION</b>	<b>29.4</b>		<b>51.0</b>	<b>80.4</b>
Open Space	9.8	Open Bay / Water	51.0	
Park	18.4			
Promenade	1.4			
<b>PUBLIC FACILITIES</b>	<b>26.9</b>		<b>10.7</b>	<b>37.6</b>
Harbor Services	1.2	Harbor Master / Trans'nt Berthing	5.2	
Streets	25.7	Boat Navigation Corridor	5.5	
<b>MILITARY</b>	<b>25.9</b>		<b>8.9</b>	<b>34.8</b>
Navy Fleet School	25.9	Navy Small Craft Berthing	6.2	
		Navy Ship Berthing	2.7	
<b>TOTAL LAND AREA</b>	<b>145.3</b>	<b>TOTAL WATER AREA</b>	<b>206.0</b>	
<b>PRECISE PLAN LAND AND WATER ACREAGE TOTAL</b>				<b>351.3</b>

Note: Does not include:  
 Anchorage Area A-1 - 7.3 acres  
 Anchorage Area A-2 - 11.0 acres  
 State tidelands - 106.5 acres

## ***Shelter Island Planning Subareas***

In the following narrative, the Planning District has been divided into seven subareas (Figure 5) to focus attention upon and give expression to the plan concepts that are suggested for the entire Planning District but with an emphasis on the relationship of precise planning proposals and specific sites.

### ***Beach Corridor***

This planning subarea includes a narrow band of shoreline extending from the Port District jurisdictional line bordering the Naval Ocean Systems Center on Point Loma to Canon Street. Two small beach areas, Kellogg and La Playa beaches, are illustrated as open space on the Land and Water Use Map, and are interspersed with two yacht clubs. Limited access to the beaches is to be maintained consistent with the existing isolated and low intensive recreational use orientation, which is geared to serve the immediate neighborhood. Kellogg Beach, subject to erosion, is to be restored by State, Port and City action. The Kellogg Beach replenishment project is intended to control excessive shoreline erosion and to preserve a public beach, street termination and adjacent private property. Some form of quarry rock groin configuration in conjunction with sand backfill appears feasible.

It is recommended that sometime in the future, the beach area be serviced by a pedestrian promenade and bike route to delineate the tideland/upland boundary and to provide access to the beach. Streets which stop at or on tidelands in the area provide excellent points of public access and vista points. Whenever compatible with local community plan goals and traffic circulation and safety, appropriate street endings are to be enhanced by providing landscaped sitting and viewing areas, and rest stops for bicyclists and pedestrians using the trail system. The design of the street ending should be in conformance with any dominant architectural or natural theme of the surrounding area, and be preferably limited to

accommodate passive public recreational activities.

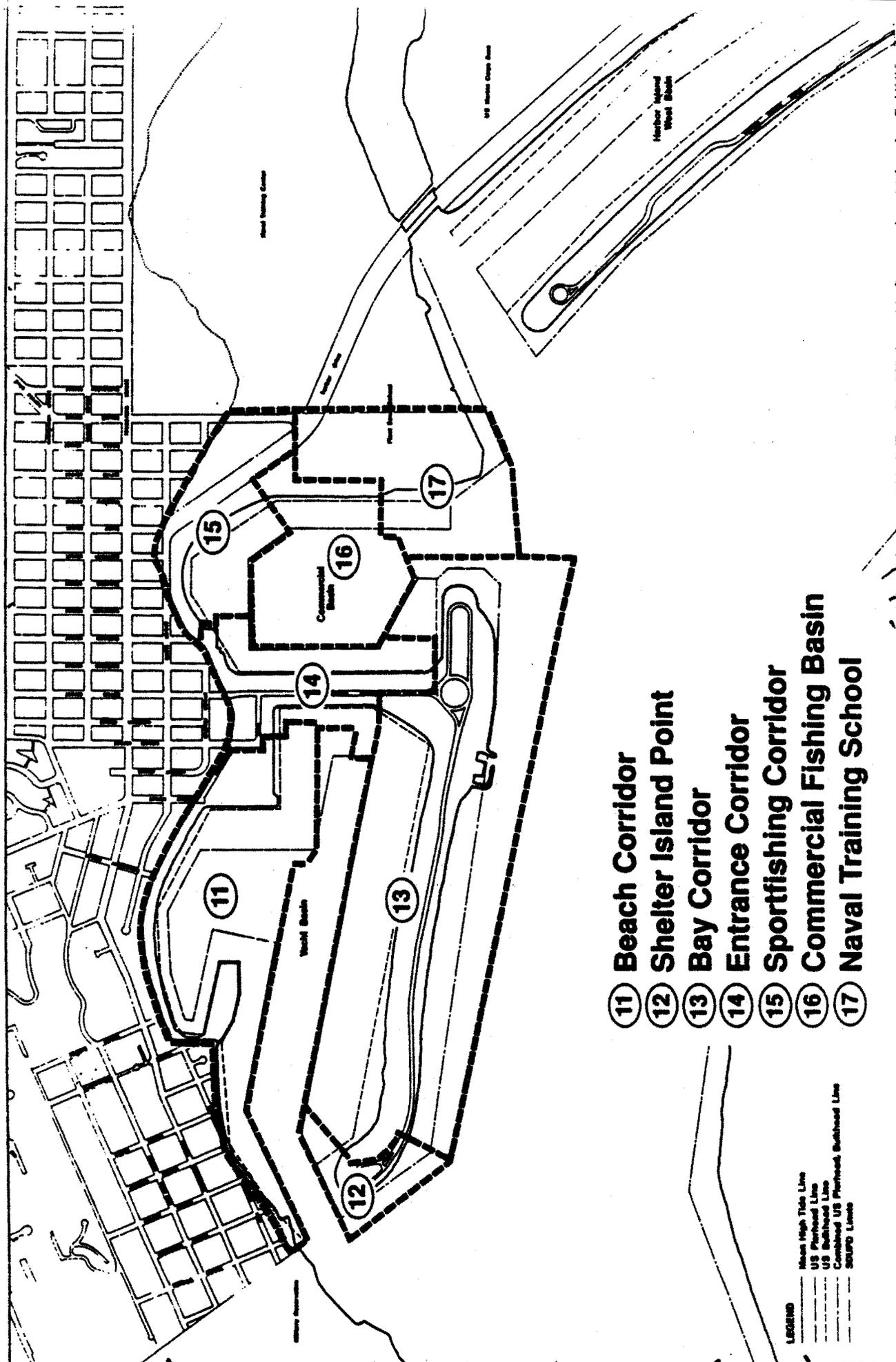
More intensive modes of boating recreation and social activities occur at yacht clubs, shown on the Land and Water Use map under the category of Commercial Recreation, and the associated water use, Recreational Boat Berthing. The land-based activities of these quasi-public centers will continue to be confined to each parcel.

Anchorage A-1, Yacht Basin anchorage, is a special anchorage designated on Bay Charts. Single swing point anchoring will continue to be by vessel ground tackle. The water area allocated for the anchorage occupies approximately 9.4 acres and can accommodate up to about 20 vessels, depending upon their size. A-1 has a low intensity use orientation and no anchoring landing site is proposed. Use is by permit of the Harbor Master. Control over the anchoring of vessels will continue to be exercised by the Port District pursuant to local ordinances. Anchorage A-1 is one of several small craft facilities planned for all of San Diego Bay as discussed in Section III, Water Based Transportation System.

### ***Shelter Island Point***

The southwestern tip of Shelter Island is planned to continue as a center for maritime services and harbor regulatory activities including Harbor Police patrol and fire services, Customs inspection, pilot boat berthing, and limited Coast Guard functions. On the Land and Water Use Map, these public facilities that relate to the public's safety and general welfare are shown by symbol and by the Harbor Services designation.

The Harbor Police Station includes fire boat and patrol boat facilities. It occupies a strategic location on Shelter Island from which to monitor waterborne traffic and to render assistance as required in San Diego Bay. Activities and uses to be retained in the landscaped park and open space around the structures on the point include the Friendship Bell monument, public accessibility to the bay and access to the spectacular vista site overlooking the entrance to San Diego Bay.



- ① Beach Corridor
- ② Shelter Island Point
- ③ Bay Corridor
- ④ Entrance Corridor
- ⑤ Sportfishing Corridor
- ⑥ Commercial Fishing Basin
- ⑦ Naval Training School

LEGEND

- Main High Tide Line
- US Perished Line
- US Bathed Line
- Combined US Perished/Bathed Line
- SOUND Lines

Harbor Master Pier and Transient Berthing is a category used on the Map to indicate the transient berthing space provided by the Port for coastal cruising. The transient berthing is used by vessels under permit of the Harbor Master (i.e., Senior Harbor Police Duty Officer).

The Pumpout Station is a public convenience provided for the drainage of wastes from holding tanks aboard vessels. The service, essential to water quality improvements, is expected to undergo increasing use as time goes by.

Customs services are provided to boaters, upon request, at the Harbor Master Pier. No expansion of this activity is anticipated.

The Coast Guard station, located adjacent to the Harbor Police Station, conducts patrol field work, provides in-service training for reservists, regulates regattas and provides inspections, lectures and classes on boating safety to the general public. No additional Coast Guard associated land use or berthing areas are planned for the district.

### ***Bay Corridor***

This subarea deals with the land mass that separates the open bay from the protected yacht harbor, and is the largest, best developed subarea in the Planning District. The mixed use developments shown as Commercial Recreation and Recreational Boat Berthing on the Land and Water Use Map include hotels, marinas, restaurants and yacht clubs set forth in dramatic private architectural expressions (See Figure 6), balanced by public recreational facilities—park and beach, boat launching ramp, fishing pier, and people oriented spaces—set a standard to be emulated in other areas.

Suggested improvements in this subarea include street tree and landscape programs along Shelter Island Drive and in the Bayside Park, the erection of impressive civic art features in the traffic circle, and the renovation of the fishing pier. A low-cost food restaurant is proposed near the boat launching ramp and a small restaurant north of the traffic circle is

under consideration in the long term future. Approximately 1,300 linear feet of rock revetment is needed as shoreline protection for the lower parking lot located adjacent to the public boat launching ramp basin. The purpose of the project is to prevent undercutting of the parking lot, and to improve the appearance of the bank. The existing shoreline rubble will be broken down and embedded into the slope by means of an impact ram, then filter blanket and revetment stone will be on an alignment generally corresponding to the existing top-of-bank. A continuing effort will be made to upgrade signs in the subarea.

The Shelter Island Roadstead contains about 46 swing moorings. The moorings occupy about 12.8 acres of water in three sites, identified as A-1a, A-1b, and A-1c. The mooring area has been designated to resolve conflicts between anchored vessels and activities on the ship channel, public fishing pier, small craft launching ramp, and submerged pipeline. Although protected from the open areas, the moorings are exposed to the wakes of vessels using the ship channel. It is proposed that mooring users be the larger ocean-cruising and transient vessels for short periods of time. Vessels using the moorings will display anchoring lights at night and day shapes. The boundaries of the mooring areas should be marked by lighted buoys. Shoreside facilities are limited to a beach dinghy landing and adjacent restroom and trash receptacles. Control over the mooring area will be exercised by the Port District.

### ***Entrance Corridor***

This area extends along Shelter Island Drive from the mean high tide line to the traffic circle. The narrow land form is a constraint on development options and by necessity has resulted in numerous smaller parcels, but overall they are economically viable and well balanced in marine oriented uses. The major emphasis of renovation for the entire Planning District is focused here.

Land and water uses for this subarea, which are indicated on the Precise Plan map, include commercial recreation and recreational boat berthing, both categories that have been discussed earlier in the overall plan, and the new category of Marine Sales and Services and associated berthing. Opportunities for private investment in this subarea include the continuous renovation of leaseholds as lease terms expire, and a new development for a small marine service center building, located on the bay side of Anchorage Lane. The plan concept for this facility involves the clustering together of many small marine related space users into one centralized complex in an effort to increase their attraction for marine service purchasers. Some of the small marine sales and service type uses could be relocated from the central portion of the entrance corridor to be closer to the large parking lot at Anchorage Lane and Shelter Island Drive. Relocation of the smaller tenants would facilitate the reutilization of their vacated sites by incorporation into adjacent leases to provide larger sites in the corridor and provide additional area for parking. Direct Port District involvement is proposed to renovate the street area, create a pedestrian promenade, construct a shoreline park, and establish a discernible demarcation between the uplands and tidelands by following a street design that emphasized a sense of entry.

The necessity for marine oriented uses to remain economically viable has moved development trends toward the consolidation of small parcels and mixed use developments. Uses with long dormant periods and short seasonal peaks, such as fish off-loading, have been consolidated with fuel operations and boat repair, to the detriment of none. Major regattas, such as the International America's Cup Class World Championship and the America's Cup competitions, have stimulated renovations and updated marine services and skills to deal with new vessel designs and materials in the boatyards.

### ***Sportfishing Corridor***

This subarea corridor abuts both sides of Scott Street and goes landward to the mean high tide line within an area bounded

approximately by Lowell Street, Carleton Street and the bay. Redevelopment of the sportfishing area, begun several years ago, has proceeded with the renovation of the sportfishing services area by removal of obsolete structures, the consolidation of supportive services into new buildings, the reorganization of the parking area into a manageable efficient parking facility, and expansion of the pedestrian oriented shoreline promenade and sitting area. Boat building and repair, significant employers which serve recreational yachts and moderate size fishing vessels, make use of the dredged channel and waterside sites, and are to be retained, although given appearance treatments. Lodging facilities, restaurants, fresh fish market, cannery and fishing equipment users are to continue in this dynamic waterfront setting. The renovation of the leaseholds are anticipated projects.

### ***Commercial Fishing Basin***

Anchorage A-2, Commercial Basin Anchorage, occupies a total water areas of about 15 acres. The Port District has a long term lease on the submerged lands under the anchorage from the State Lands Commission which prohibits use by any structures that are primarily used for residential purposes. The boundaries of this federally designated anchorage are to continue to be shown on bay charts and marked on site by pole mounted day markers. Control over the anchorage will be exercised by the Port District.

Mooring facilities proposed are marked with and aft mooring buoys to accommodate about 170 vessels. The redevelopment effort will strive to accommodate in A-2 all existing vessels that meet the anchorage regulations. Twenty to thirty percent of the moorings are to be set aside for short-term use by cruising transient vessels. Due to the number of vessels currently using the anchorage area the installation of the mooring system is proposed to be undertaken in phases. The bottom must be cleared of sunken vessel and other debris. Shoreside facilities proposed include pier and float, paved access way, automobile parking, landscaping, trash receptacles and restrooms.

Approximately 1,000 linear feet of rock revetment is to be placed on the shoreline of the Commercial Fishing Marina in order to protect the adjacent parking lot, prevent shoaling of the adjacent commercial fishing berthing, and to improve the appearance of the area. The proposed top-of-bank alignment will follow the existing top-of-bank. Construction activities will be essentially the same as those described for the shoreline protection in the Bay Corridor of Shelter Island. Tenant conducted renovation of the commercial fishing facility is proposed.

### ***Naval Training School***

This subarea adjoins the United States Naval Training Center and the Fleet Anti-Submarine Warfare Training Center Pacific (FLEASWTRACENPAC) San Diego. The Anti-Submarine Warfare Center (A.S.W.) is the Navy's West Coast center for training personnel in the operation, maintenance and tactical use of sonar and other anti-submarine weaponry. Although A.S.W. occupies Port District tidelands, for practical purposes the terms of the lease have excluded the area from Port District jurisdiction. Use of the leased land and water would revert back to the Port District at the Navy's vacating of the premises.

### ***Development Guidelines***

Guideline policies for private development that is located in subareas 12, 13 and 14, geared to architecture, signing, landscaping and parking use and design, are felt in order. Structures located in subareas 12, 13 and 14 are to continue the established marine oriented South Seas atmosphere. This design theme is broad enough as presently construed to include architectural designs frequently expressed as modern Hawaiian or Polynesian. Any design solution has the option of utilizing contemporary building materials and methods in achieving a design that will conform to the overall design theme.

Architectural guidelines encourage structures in which the building materials accent wood, preferably large-scale members, natural stone and earthen colors. The height of all buildings,

except for the triangle-shaped area located on the north side of Harbor Drive in subarea 15, is limited to 41 feet above mean lower low water (approximately 26 feet above ground level). The low-profile building silhouettes can be characterized by sloping roofs of shingle, shake, or metal and soaring gables, structurally integrated, yet decorative (see Figure 6). Entranceways command attention, but maintain an inviting pedestrian scale. The location of all structure on the site should enhance the waterfront by accenting the land-water interface.

The design of signs is to reflect the design theme. Signs shall be constructed of wood finished to resemble a driftwood color tone, with cutout or incised lettering, simply designed without discordant colors and shapes, and without hangers and add-ons (see Figure 7).

The emphasis of landscape design in the Shelter Island Planning District is to be placed on the retention and enhancement of a sense of overall harmony between each parcel. Landscape design concepts are encouraged to use flowing, free form designs with tropical appearing evergreen and flowering plants, water displays, plant containers, and sculpture typically of a Polynesian influence. The selection of landscape material—type, scale, texture and color—should carry out the unified landscape theme, relating and connecting all tenant parcels and structures in the Planning District. A street tree and landscaping master plan (see Figure 8) is proposed to foster a sense of design harmony throughout the Planning District.

Parking spaces are encouraged on each site; employee parking is suggested to be concentrated to the public parking area at either end of the corridor; and a two-hour parking limit is recommended for on-street parking.

TABLE 7

SHELTER ISLAND: PLANNING DISTRICT 1

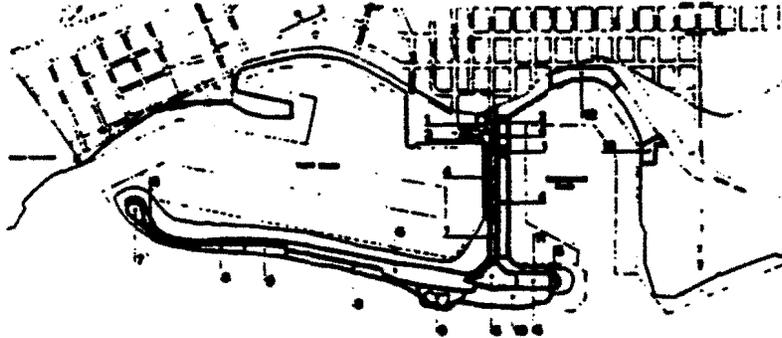
	SUBAREA↓	DEVELOPER↓	APPEALABLE↓	FISCAL YEAR
1. BEACH STABILIZATION AND REPLENISHMENT: (Kellogg Beach) Construct rock groin, backfill with sand	11	P	N	1980-81
2. BEACH CORRIDOR: Install surfaced path and viewing areas; remove obsolete structures	11	T	Y	1987-88
3. PUBLIC FISHING PIER: Reconstruct; install street landscaping	13	P	N	1981-82
4. SHORELINE PROTECTION: Channel side of peninsula; re-contour eroded bank; break up and embed existing rubble; install rip-rap	13	P	N	1980-81
5. SHELTER ISLAND DRIVE: Modify street, curb and gutter; install landscaping, street trees, irrigation, street furnishings, sculpture	14	P	N	1980-81
6. PUBLIC SHORESIDE PARK: Shelter Island Drive at Anchorage Lane; remove paving; install landscaping, irrigation, promenade, park furnishings	14	P	N	1980-81
7. MARINE EQUIPMENT BUILDING: (0303) Renovate building and landscaping	14	T	N	1980-81
8. BOAT BUILDING AND REPAIR: (0327) Renovate and upgrade facilities	14	T	N	1980-81
9. MARINE SERVICE STATION: (0308) Renovate building, pier and landscaping	14	T	N	1980-81
10. FISH TRANSSHIPMENT: (0332) Remove obsolete structures; Construct new facilities; install irrigation and landscaping	14	T	Y	1980-81
11. BOAT SALES: (0333) Renovate structures and piers	14	T	N	1984-85
12. RESTAURANT: (0335) Remove obsolete structures; construct new facilities; install irrigation and landscaping	14	T	Y	1986-87
13. MARINE SERVICE CENTER: (0302) Construct new building for marine related services	14	T	N	1985-86
14. RESTAURANT: (0348) Renovate buildings and piers	15	T	Y	1988-89
15. BOAT YARD: (0350) Renovate building, piers and facilities	15	T	N	1980-81
16. MARINA: (0351) Renovate marina building, piers and grounds	16	T	Y	1982-83
17. SHORELINE PROTECTION: Break up and embed existing rubble; install filter blanket and rock revetment	16	P	N	1982-83
18. MOORING FACILITY: (Commercial Basin) Install mooring buoys; construct landing float and ramp; pave parking, install irrigation and landscaping; construct comfort station	16	P	N	1980-81
19. RESTAURANT: Low-cost food building, plaza, landscaping	14	T	N	1985-86

P- Port District      N- No  
T- Tenant              Y- Yes

**Figure 8  
Street Tree & Landscaping Master Plan**

Area	Major Trees	Min. %	Major Shrubs	Min. %	Major Ground Cover	Min. %
1	<i>Ficus rubiginosa australis</i> <i>Archatophoenix cunninghamiana</i>	70 20	<i>Raphiolepis</i> var. <i>Hibiscus</i> var.	40 20	<i>Hedera helix helveticus</i> var. <i>Agapanthus</i>	50 20
2	<i>Phoenix reclinata</i> <i>Sinocalamus oldhamii</i>	70 20	<i>Raphiolepis</i> var. <i>Hemerochallis</i> var.	50 20	Lawn <i>Hedera helix helveticus</i> var.	50 30
3	<i>Erythrina callosa</i>	70	<i>Raphiolepis</i> var.	50	<i>Hedera helix helveticus</i> var. <i>Agapanthus</i>	50 20
4	<i>Ficus retusa</i>	70	<i>Pittosporum tobira</i> <i>Hibiscus</i> var.	40 30	<i>Hedera helix helveticus</i> var.	50
5	<i>Phoenix reclinata</i>	90			Lawn	50
6	<i>Ficus rubiginosa australis</i> <i>Erythrina callosa</i>	90 5			<i>Hedera helix helveticus</i> var. Lawn	50 10
7	<i>Pinus pinaster</i> <i>Pinus thunbergiana</i>	40 40			Lawn	90
8	<i>Ficus microphylla</i>	90			Lawn	90
9	<i>Archatophoenix cunninghamiana</i>	90			Lawn	90
10	<i>Ficus microphylla</i> <i>Erythrina callosa</i>	60 30			Lawn	90
11	<i>Erythrina callosa</i>	90			Lawn	90
12	<i>Ficus rubiginosa australis</i> <i>Pinus pinaster</i> <i>Erythrina callosa</i>	65 15 10	<i>Phoenix tamaris</i>	90	<i>Class rhombifolia</i>	90
13	<i>Ficus rubiginosa australis</i> <i>Pinus pinaster</i>	80 10	<i>Phoenix tamaris</i>	90	<i>Class rhombifolia</i> Lawn	40 30

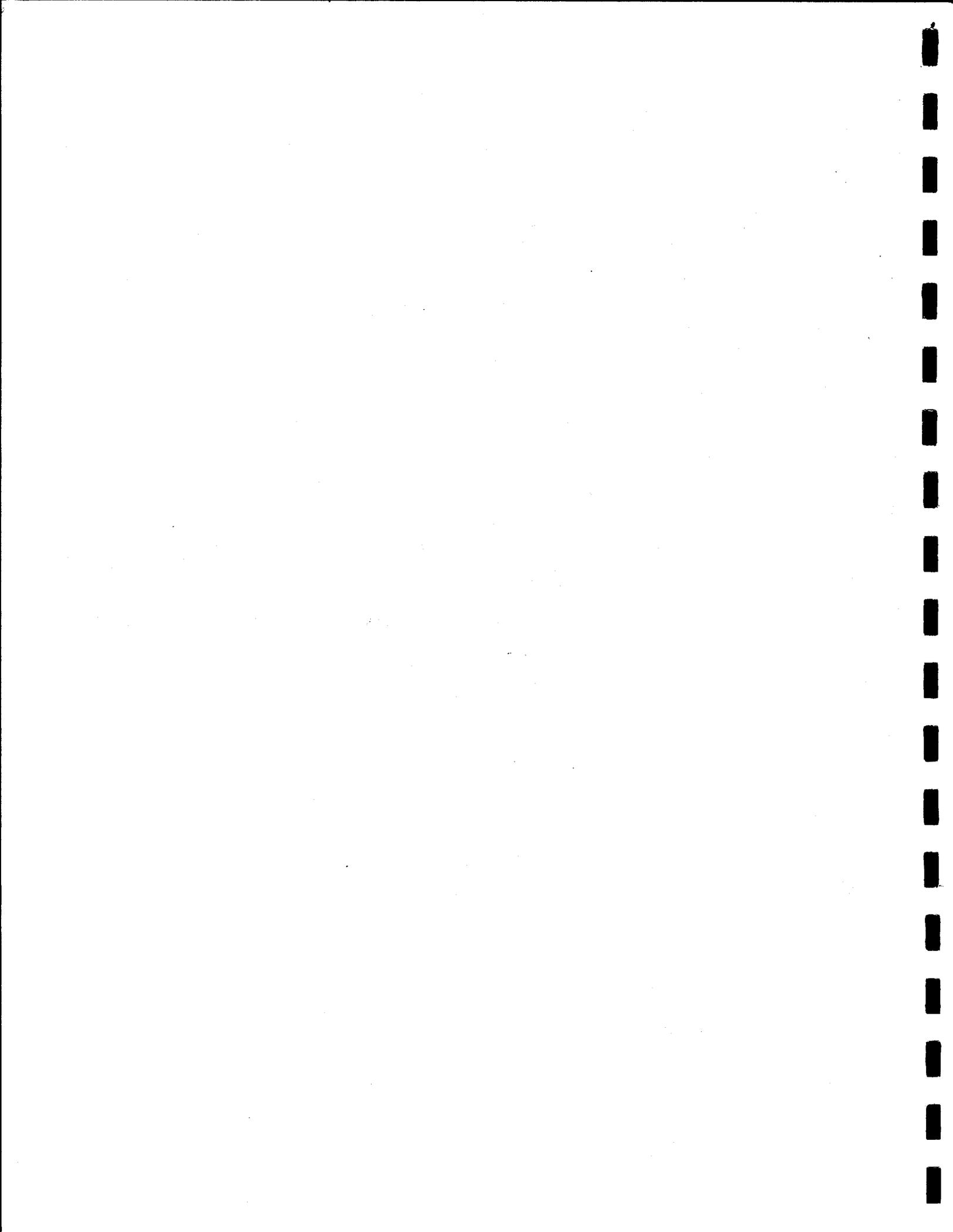
NOTE: Selected existing Canary Island Date Palms, located throughout area, will remain whenever possible.



- Agapanthus*
- Lily-of-the-Valley*
- Archatophoenix cunninghamiana*
- King Palm
- Class rhombifolia*
- Grape Ivy
- Erythrina callosa*
- Kalibrboom Coral Tree
- Ficus microphylla*
- Little Leaf Fig
- Ficus retusa*
- Indian Laurel
- Ficus rubiginosa australis*
- Rusty Leaf Fig
- Hedera helix helveticus* var.
- Needle Point Ivy
- Hemerochallis* var.
- Daylily
- Hibiscus* var.
- Hibiscus*
- Phoenix reclinata*
- Senegal Date Palm
- Phoenix tamaris*
- New Zealand Flax
- Pinus pinaster*
- Cluster Pine
- Pinus thunbergiana*
- Japanese Black Pine
- Pittosporum tobira*
- Tobira
- Raphiolepis* var.
- Hawthorn
- Sinocalamus oldhamii*
- Giant Bamboo

SOURCE: Shuter Island Landscaping Plan, Revised/Updated Planning Plans - Supplementing Landscaping and Commercial Data, Auckland Council, S&P&D Planning Department

The Project List deals with development proposals for the entire Planning District. Both Port District and known tenant projects have been listed and a determination as to whether the project is in an appealable category has been indicated.



**ADDENDUM TO  
AMERICA'S CUP HARBOR  
USAGE STUDY**

*presented to*

**PORT OF SAN DIEGO  
SAN DIEGO, CALIFORNIA**

*January 11, 2000*

**M. J. BARNEY ASSOCIATES  
CERTIFIED PROFESSIONAL CONSULTANTS TO MANAGEMENT**

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**ADDENDUM TO AMERICA'S CUP HARBOR USAGE STUDY  
PORT OF SAN DIEGO – JANUARY 2000**

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<b>Southbay Boat Yard</b>	

**ADDENDUM TO AMERICA'S CUP HARBOR USAGE STUDY  
PORT OF SAN DIEGO – JANUARY 2000**

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**INTRODUCTION**

This report is an addendum to the America's Cup Harbor usage study presented in November 1999. Included is expanded comparison information from two additional boat yards (Oceanside and Mission Bay) which were excluded from the first report because of their overall nature of servicing limited and defined markets.

Additionally, this addendum includes some additional demand analysis of the boat yard repair market in Greater San Diego. Overall, the general research methodology, market studied, findings and conclusions are consistent with that discussed in the original report.

**Table 1 -- Number of Slips By Boat Size**

Marina Name	% Occupied	Under 20'	20' - 30'	30' - 35'	35' - 40'	40' - 45'	45' - 50'	50' - 60'	60' - 100'	Over 100'	TOTAL	%
Bahia Resort Marina	98%	10	15	40	12		5				82	0.9%
Bay Club Marina	100%			125			27	8			160	1.8%
Cabrillo Isle Marina	95%	56	4	127	115	43	47	41	17		450	5.0%
California Yacht Marina	85%		35	108	71	71	35	35			355	3.9%
Campland on the Bay	100%	12	12	20	26						70	0.8%
Chula Vista Marina	99%	8	150	175	50	96	30	42	8	2	561	6.2%
Coronado Cays Yacht Club	100%		30	8	12	8		10			68	0.7%
Dana Inn & Marina	100%	8	100		36	6			3		153	1.7%
Dana Landing Marina	90%		23	15	19	10	17	10			94	1.0%
Driscoll Mission Bay Marina	96%		45	35	23	45	28	40	6		220	2.4%
Driscoll's Wharf	95%			25	25	20	21	34			125	1.4%
Glorietta Bay Marina	100%		25	25	30	2	10	5		3	100	1.1%
Gold Coast Marina	95%					7	7	15	14	2	45	0.5%
Half Moon Anchorage	100%		28	78	25	20		14			165	1.8%
Harbor Island West Marina	96%	40	57	185	148	104	9	63	9	5	620	6.8%
Islandia Marina	100%			60	48	38	30	5	5		186	2.0%
Kona Kal Marina	100%			115		47			76	23	261	2.9%
Kona Marina	100%		37	121		60		44			262	2.9%
Lowe's Crown Isle Marina	100%				10		7	30	30	3	80	0.9%
Marina Cortez	88%		102	183	96	63		45	41		530	5.8%
Marina Village Marina	93%		263	183	55	71	25	37			634	7.0%
Marriott Marina	100%			45	58	120	94	125	5		447	4.9%
Navy Landing Center	85%		12	21	12	12	23				80	0.9%
Oceanside Harbor Marina	100%		350	83	300	107		25			865	9.5%
San Diego Yacht Club	99%	12	45	150	150	53	50	75	38	3	576	6.3%
Sea World Marina	70%	10	110	54	6						180	2.0%
Seaforth Marina	100%		40	120	70						230	2.5%
Shelter Cove Marina	95%		34	34	27	22	15	14	19	5	170	1.9%
Shelter Island Marina	96%		21	54	13	70		11		19	188	2.1%
Sheraton Marina	100%			7	1	2	2	16	15	1	44	0.5%
Southwestern Yacht Club	95%		49	89	104	85	10	20	9		366	4.0%
Sun Harbor Marina	97%		43	24	24	25			4		120	1.3%
Sunroad Marina	80%			43	90	158	207	95	7		600	6.6%
<b>TOTAL</b>	<b>95%</b>	<b>156</b>	<b>1630</b>	<b>2352</b>	<b>1656</b>	<b>1365</b>	<b>697</b>	<b>859</b>	<b>306</b>	<b>66</b>	<b>9087</b>	<b>100.0%</b>
Percentage		1.7%	17.9%	25.9%	18.2%	15.0%	7.7%	9.5%	3.4%	0.7%	100.0%	

## MARINA BOAT SLIPS

Table 1 on the previous page indicates that there are 9,087 commercial boat slips ranging from Chula Vista to Oceanside. These are typically hotel, marina and yacht club slips. Additionally, there are approximately 180 docking slips for boats while being repaired at boat yard facilities, an estimated 100+ miscellaneous slips throughout the area, and approximately 437 mooring buoys in San Diego Bay. These buoys are primarily along or near Shelter Island, America's Cup Harbor, the Laurel Street Roadstead and the Bay Bridge Roadstead.

In total there are approximately 9,624 boat slips and moorings, excluding the temporary berthing at boat yards, available in the Greater San Diego area. Overall usage and occupancy of boat slips is very high. Many marinas are at or very near capacity (90% to 100%, with a 95% average) and some have waiting lists. For example, the Kona Kai and Kona Marina have 100% occupancy at 533 slips and state that they have a waiting list of up to 2,500 people desiring slips. Similarly, the usage of local mooring buoys has been in the 95% or higher range over the past few years.

Overall, 65% of all marina boats are estimated to be owned by San Diego County Residents; 35% are owned by those out of the County, primarily from other California cities, Arizona, other western states and some foreign ownership.

Analysis of Table 1 shows that the 60' to 100' market is somewhat under-served, and that the 100' slip market is significantly under-served.

## **BOAT REPAIR YARDS IN SAN DIEGO**

There are nine boat yard repair facilities in the Greater San Diego Area. Of these facilities, Southbay Boat Yard and Knight & Carver are considered to be primarily industrial facilities. The various Shelter Island boat yards, Driscoll Mission Bay and Oceanside Marine Center cater primarily to pleasure craft.

A reported 5,150 to 5,850 boats are repaired by these boat yards annually. Most of these repair facilities are located in America's Cup Harbor, generally along the east facing side of Shelter Island. Southbay Boat Yard is located in Chula Vista; Knight and Carver is located in National City. Oceanside Marine Centre and Driscoll Mission Bay hail from their respective names. These boat yards are listed in Table 2 on the following page; the lifting capacities of the boat yards are listed on succeeding Table 3.

Both Driscoll Mission Bay and Oceanside Marine Centre allow the "do-it-yourself" work by boat owner or immediate family, similar to Kettenburg Marine and Koehler Kraft. Here, the boat yards will haul out the boat, block it on land and allow the work to be performed on site by boat owners who are qualified to make boat repairs or perform general maintenance on their own boats.

**Table 2 -- Boat Yard Operations Servicing Greater San Diego**  
Existing San Diego Bay Boat Yards

<b>Company Name</b>	<b>Number of Years Operating As A Boat Yard</b>	<b>Boat Yard Land Operations Square Footage</b>	<b>Boat Yard Water Operations Square Footage</b>	<b>Total Boat Yard Operations Square Footage</b>
Bay City Marine ( Shelter Island )	closed in 1995	75,644	170,043	245,687
Driscoll Boat Works ( Mission Bay )	20	175,000	261,000	436,000
Driscoll Boat Works ( Shelter Island )	47	46,200	94,325	140,522
Eichenlaub ( Shelter Island )	currently provides marine services only	11,400	18,375	29,775
Kettenburg Marine ( Shelter Island )	81 <sup>1</sup>	135,628 <sup>2</sup>	107,000	207,628
Knight & Carver ( National City )	26	172,162	54,779	226,941
Koehler Kraft ( Shelter Island )	20	27,360	48,156	75,516
Nielsen Beaumont ( Shelter Island )	11	24,000	49,000	73,000
Oceanside Marine Centre ( Oceanside )	24	90,000	4,000	94,000
Shelter Island Boat Yard ( Shelter Island )	16	68,992	141,022	210,014
Southbay Boat Yard ( Chula Vista )	15	411,758	371,344	783,102

<sup>1</sup> Kettenburg was purchased by Driscoll in 1994 but continues to operate as an independent business unit

<sup>2</sup> Represents current land leases; historically may have included up to 170,000 sq. ft. in combined parcels

**Table 3 -- Boat Yard Repair Capacities & Lifting Devices Used**

Company Name	Typical Percentage Work Capacity	Number Boats Repaired Annually	General Sizes of Boats Repaired	Lifting Capacity in Tons	Type of Lifting Devices Used
Driscoll Boat Works ( Mission Bay )	80%	300	18' to 100'	100 Tons 35 Tons	Large Travelift Small Travelift
Driscoll Boat Works ( Shelter Island )	90%	200 to 500	27' to 140'	150 Tons 50 & 88 Tons	Large Travelift Small Travelift
Kettenburg Marine ( Shelter Island )	90%	1,000	20' to 125'	150 Tons 25 Tons 15 Tons	Syncrolift Marine Railway Small Travelift
Knight & Carver ( National City )	90%	250 <sup>1</sup>	20' to 100+'	300 Tons	Large Travelift
Koehler Kraft ( Shelter Island )	100%	100	under 40'	35 Tons	Marine Railway
Nielsen Beaumont ( Shelter Island )	70%	200	80' to 160'	75 Tons	Marine Railway
Oceanside Marine Centre ( Oceanside )	85%	600 to 1000	10' to 50'	15 Tons	Small Travelift
Shelter Island Boat Yard ( Shelter Island )	80%	2,000	20' to 70'	70 Tons 25 Tons	Small Travelift Crane
Southbay Boat Yard ( Chula Vista )	70%	500	35' to 100+ <sup>2</sup>	70 Tons <sup>2</sup> 25 Tons	Small Travelift Small Travelift

<sup>1</sup> Represents approx. 1/3 of total Knight & Carver work output - remaining 2/3 of their work is building new boats

<sup>2</sup> Southbay Boat Yard also utilized a 2,800 ton drydock allowing 200' ft. length at Campbell's Shipyard before its closure on 9/30/99

## **TYPES OF REPAIR WORK PERFORMED**

Tables 4 & 5 (pp. 8-9) highlight the types of work performed by San Diego boat yards. It is shown that while some boat yards may frequently choose to specialize in certain services (such as Shelter Island Boat Yard specializing in fiberglass repair), most boat yards will perform most if not all types of work as needed by market demands. This has arisen from occasional off-peak years where business was scarce due to global and U.S. business economic conditions.

Table 6 (pg. 10) summarizes the key capabilities of the nine functioning boat yards. The number of work stations varies by boat yard. Some of this depends upon the type of lifts available, size of yard and number of boat slips available for in-water repair work. Repair work in the water is significantly limited to minor work, typically interior carpentry or furnishings, electronics and some engine work. There has been a general assumption made that the boat repair industry as a whole has likely become more efficient, and thus performs more work in shorter periods of time, in smaller total boat yard repair square footage.

Although some merit is given to newer equipment capabilities (such as Travelifts and Syncrolifts), any gains in production are more likely from better time usage of given boat yard repair space. It is generally surmised that during previous uncrowded times, boat yards performed more work while boats were out of the water.

Now, at times where the yards are at or near capacity, more work is completed either in-water, at a dock or marina, or performed by owners themselves before haul-out. This makes the time required on land less extensive, and frees up space more quickly. Shelter Island Boat Yard is an example of prudent yard space management, where boats are hauled out of the water for hours, not days of work.

All boat yards studied exhibit a strong sense of efficiency in view of given operating conditions. All are clearly professional in managing their operations and are close to peak capacity and performance. Additionally, all appear to be managing their resources well.



**Table 5 – Types of Repair Performed with Boat in Water**

<b>Company Name</b>	<b>Decking</b>	<b>Plumbing</b>	<b>Painting Above Deck</b>	<b>Electrical &amp; Electronics</b>	<b>Interior Work, Upholstery &amp; Fixtures</b>	<b>Engine &amp; Mechanical (excluding through-hull)</b>
Driscoll Boat Works ( Mission Bay )	No	No	No	No	No	No
Driscoll Boat Works ( Shelter Island )	No	Yes	Yes	Yes	Yes	Yes
Kettenburg Marine ( Shelter Island )	No	Yes	Yes	Yes	Yes	Yes
Knight & Carver ( National City )	Yes	Yes	No	Yes	Yes	Yes
Koehler Kraft ( Shelter Island )	Yes	Yes	No	Yes	Yes	Yes
Nielsen Beaumont ( Shelter Island )	Yes	Yes	Yes	Yes	Yes	Yes
Shelter Island Boat Yard ( Shelter Island )	Yes	Yes	Yes	Yes	Yes	Yes
Oceanside Marine Centre ( Oceanside )	Yes	Yes	No	Yes	No	Yes
Southbay Boat Yard ( Chula Vista )	Yes	Yes	Yes	Yes	Yes	Yes

**Table 6 – Summary of Boat Repair Work Capacities**

<b>Company Name</b>	<b>Maximum Tonnage</b>	<b>General Sizes of Boats Repaired</b>	<b>Number of Work Stations</b>	<b>Typical Percentage Work Capacity*</b>
Driscoll Boat Works ( Mission Bay )	100 Tons	30' to 40'	15 land n/a water	80%
Driscoll Boat Works ( Shelter Island )	150 Tons	27' to 140'	10 land 12 water	90%
Kettenburg Marine ( Shelter Island )	150 Tons	20' to 125'	20 to 25 land 12 water 1 on the ways	90%
Knight & Carver ( National City )	300 Tons	20' to 100'	30 land 6 to 8 water 1 on the ways	90%
Kochler Kraft ( Shelter Island )	35 Tons	under 40'	6 to 20 land 10 to 30 water	100%
Nielsen Beaumont ( Shelter Island )	75 Tons	80' to 160'	8 land 5-20 water 1 on the ways	70%
Oceanside Marine Centre ( Oceanside )	15 Tons	10' to 50'	15 to 20+ land n/a water	85%
Shelter Island Boat Yard ( Shelter Island )	70 Tons	20' to 70'	28 to 40 land 2 to 3 water	80%
Southbay Boat Yard ( Chula Vista )	70 Tons	35' to 100'+ <sup>2</sup>	25 land 6 water 1 on the ways	70%

\* Indicates estimates by respective boat yard owners or general managers as appropriate

## BOAT YARD MARKET PERFORMANCE ANALYSIS

### General Characterization

Virtually all boat yards can and do provide "full service" repair and maintenance services. Some boat yards maintain the expertise and/or equipment in-house; however, most rely on some degree to utilizing sub-contractors or independent companies for specific services, such as propeller or shaft machining, engine repair, painting, or other specialized and technical work.

However, boat yards tend to gravitate toward broad niches of types of work. Table 7 on the following page indicates the general estimated types of broad niche markets served by the boat yards as annotated. These estimates are based on discussion with boat yard owners and general managers, and provide only a broad characterization; they do not necessary present any particular company's full description of services.

### Work Volume Comparisons

Succeeding Table 8 lists the various indicators of work volume performance. The following averages are noted:

- 84% Estimated work maximum capacity at which San Diego boat yards are performing
- 75% Estimated boat yard land usage dedicated to repair (balance is offices & equipment)
  
- 611 Estimated average number of boats repaired per year, per yard
- 5,499 Estimated average number of total boats repaired per year at combined boat yards
  
- 24 Estimated average number of boats which can be repaired on land at any given time, per yard
- 15 Estimated average number of boats which can receive some low-level technical, mechanical repair or other minor work (excluding bottom work, painting, through-hull work, etc.) on water, per yard. Note: This work on water is highly restricted. Most water work is performed by Shelter Island Boat Yard and Koehler Kraft.
  
- 30 Estimated average number of employees, per yard
- 44 Estimated average number of independents and/or sub-contractors used, per yard

**Table 7 – Estimated Characterization of Types of Repair  
By Boat Yard**

<p>Driscoll Boat Works ( Mission Bay )</p>	<p>Bottom work &amp; painting, fiberglass, major mechanical, some do-it-yourself work Less project work, mostly general maintenance and repair Primarily services Mission Bay area clientele Typical boat sizes: 18' to 50' Capacity boat sizes: 18' to 100'</p>
<p>Driscoll Boat Works ( Shelter Island )</p>	<p>Full service emphasis; one-stop shopping High-end carpentry and bottom blister work Primarily services Shelter Island, America's Cup Harbor and transient clientele Typical boat sizes: 70' to 120' Capacity boat sizes: 27' to 140'</p>
<p>Kettenburg Marine ( Shelter Island )</p>	<p>Longevity and well-established name and reputation Independents / sub-contractors / do-it-yourself work Major machine/mechanical out-of-water services; Syncrolift lifting / specialty hulls Primarily services Shelter Island, America's Cup Harbor and transient clientele Typical boat sizes: 20' to 125' Capacity boat sizes: 20' to 125'</p>
<p>Knight &amp; Carver ( National City )</p>	<p>New builds account for 2/3 labor hours; 1/3 repair Highest lifting capacity in San Diego at 300 tons; higher tonnage lifting Engineering, architecture, hull work, re-powers, shafts, propellers, hydro-dynamic performance. Typical boat sizes: 20' to 100' Capacity boat sizes: 20' to 160'</p>
<p>Koehler Kraft ( Shelter Island )</p>	<p>Custom work, rebuilds, retro-fits, wooden boats, major restoration Do-it-self work; marine railway lifting for specialty hulls Typical boat sizes: under 40' Capacity boat size: 20' to 72'</p>
<p>Nielsen Beaumont ( Shelter Island )</p>	<p>Large projects; full service; one-stop shopping; complete restoration Full machine shop; system and drive train repairs Typical boat sizes: 60' to 100' Capacity boat size: 60' to 160' (within lift limits)</p>
<p>Oceanside Marine Centre ( Oceanside )</p>	<p>Engine installations, fiberglass, top-side painting, do-it-self-work, boat storage Primarily services Oceanside clientele only Typical boat sizes: 10' to 50' Capacity boat sizes: 10' to 50'</p>
<p>Shelter Island Boat Yard ( Shelter Island )</p>	<p>High production in/out operations; high usage tenant independents/sub-contractors Probably the largest bottom/blister repair on west coast Typical boat sizes: 20' to 50' Capacity boat sizes: 20' to 70'</p>
<p>Southbay Boat Yard ( Chula Vista )</p>	<p>Bottom blister paint; complete boat painting Full mechanical &amp; fabricating; some re-fit; no precision work Now limited to 70 tons lift; prior 2,800 ton lift Typical boat sizes: 50' to 80' Capacity boat sizes: 50' to 90'</p>

**Table 8 – Boat Yard Work Volume Comparisons**

	Estimated Typical Work Capacity	Estimated Land Usage	Estimated Number Boats Repaired Yearly	Estimated Number Boats Land Capacity One Time	Estimated Typical Range Boat Length	Estimated Capacity Range Boat Length	Estimated Number Employees	Estimated Number Sub-contractors
		Allocated	Boats	Boats Land	Range	Range		
		For Boat	Repaired	Capacity	Boat	Boat		
		Repair Work	Yearly	One Time	Length	Length		
Driscoll Mission Bay	80%	65%	300	15 to 18	18' to 50'	18' to 100'	8	20
Driscoll Shelter Island	90%	70%	200 to 500	10	70' to 120'	27' to 140'	45	65
Kettenburg Marine	90%	70%	1,000	40	20' to 125'	20' to 125'	20	65
Knight & Carver	90%	88%	250	40 to 45	20' to 100'	20' to 160'	65	45
Koehler Kraft	100%	90%	100	10 to 15	under 40'	20' to 72'	3	14
Nielsen Beaumont	70%	80%	200	12	60' to 100'	60' to 160'	30-35	20
Oceanside Marine Centre	85%	70%	600 to 1000	22	10' to 50'	10' to 50'	9	n/a
Shelter Island Boat Yard	80%	90%	2,000	40	20' to 50'	20' to 70'	30	100*
Southbay Boat Yard	70%	50%	500	20 to 25	50' to 80'	50' to 90'	60	8 to 10
<b>Average</b>	<b>84%</b>	<b>75%</b>	<b>611</b>	<b>24</b>	<b>n/a</b>	<b>n/a</b>	<b>30</b>	<b>44</b>

## **OVERALL GREATER SAN DIEGO WORK VOLUME ESTIMATES**

Throughout the course of research for the related boat yard projects, and through research in prior studies of the consultant company, it has been noted that the boat yard industry worldwide is not a sophisticated or "mature" industry, despite its existence for centuries. This is not a degradation of the industry, rather, it is a qualified operations observation.

The boat repair industry is not yet fully computerized for most production or project schedules, and there is little or no "customer tracking" which exists in many industries. More importantly, the nature of the work performed is highly variable. Estimates and observations of superficial damage often belie structural or other deficiencies found once the boat is out of water.

Additionally, the demands of operating a boat yard are great. Labor is often a key portion of repair work, work volume fluctuates dramatically seasonally, and EPA regulations are extensive in regard to painting, sanding and water drainage. Similarly, proper utilization of space is typically difficult. Boats on land are not easily moved, and managers/foremen must plan this boat moving and placing carefully. Lifts, materials, labor and land usage are key production factors.

It should be noted the usage of any given boat yard land is much more complicated than meets the eye. For example, a 20' boat lifted by a 150 ton Travelift will require a plot of land of approximately 35' by 35' which is known as the "footprint" of the physical Travelift device. Since boats do not have wheels, they can not be parked row by row like automobiles in a parking lot. Sufficient space must be also allowed for the type of work involved, such as tenting for painting (blister painting).

Additionally, to facilitate moving the boats, one or more "runways" are typically required so that lifts may move back and forth to collect and place boat. Depending upon the configuration and land space available at any given yard, as much as 30% to 40% of usable land space must be kept free and clear. While yards can sometimes use these runways for short-duration projects, clogging up the runways typically means finished boats may have to wait to be launched, and waiting boats may have to remain berthed in the water before they can be hauled out.

In determining the capacity of any given boat yard it is critical to take into consideration the amount of open runway space required at most times, the amount of space needed for turning longer boats once in the yard, and the amount of space needed between boats for the specific type of work required. Additionally, the time requirements of any particular job increase this space required almost exponentially. A boat requiring a three-day job parked behind a boat requiring a two-week job will utilize that space for the longer time.

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Also considering the time and labor cost of moving boats, and the limited amount of expensive lifting devices, repeated frequent moving of boats is never possible. Additionally, if a yard has only one Travelift, it is also virtually impossible to take a partially worked-on boat and place it back in the water while pulling out another boat, with the intention of retrieving the first boat to continue work. Time, labor, money and physical limitation would prohibit this type of action.

Thus, given the scenario that a 10' by 40' boat occupies 400 sq. ft. would be false. It would also be false to entertain the notion that a yard of 50,000 sq. ft. could handle 125 such boats (50,000/400). For sake of broad example, it would likely be correct to assume that usable land area would be reduced to roughly 70% with an equation of 35,000/1000 for a capacity result of 35 such boats. Allowing for additional space contingencies, a wide range of boat lengths and widths, turning factors and equipment footprints, the capacity may drop to less than 30 for such a given scenario.

The above comments are provided to establish a correct and logical frame of reference when trying to determine the capacity of any given boat yard. As another example, one large boat of 100' hauled for a major project may require three months of space occupancy. During this time there may have been dozens of smaller projects for dozens of smaller boats that could have occupied the same space -- as much as 50 to 60 smaller boats which could have been handled during that time. Such awkward scenarios and balances must be considered in any determination of overall boat yard capacity.

Thus the following miscellaneous average figures and estimates are presented for analysis:

- 23,000      Estimated registered water craft in San Diego County
- 9,624      Estimated total boat slips and buoys
- 95%        Estimated average occupancy rate of slips and buoys
  
- 65%        Estimated percentage of slips utilized by San Diego County boat owners
- 35%        Estimated percentage of slips utilized by non-San Diego owners
  
- 84%        Estimated work maximum capacity, San Diego boat yards
- 75%        Estimated boat yard land usage dedicated to repair
  
- 24         Estimated average number of boats which can be repaired on land at any given time, per yard
- 611        Estimated average number of boats repaired per year, per yard
- 5,499      Estimated average number of total boats repaired per year at combined boat yards
- 24 mos.    Estimated average haul-out of berthed boats (slightly increasing over time)

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**Estimates of Boat Yard Capacities**

Here, the estimates show that approximately 5,500 boats are repaired yearly, and that repair will grow approximately 5% per year (from prior research). Since the estimates of boat repair are literally a census of data, as opposed to a sampling, this data can be used directly to project future increase in work capacity, albeit with an assumption that the types of boats and work required remains constant. When analysis utilizes the 24-28 month "turnover" of haul-outs for average berthed boats, figures are also generally consistent (but likely somewhat lower).

**Table 9 -- Projections of Boat Yard Repair Capacity  
1999 to 2010**

Year	Number of Boats at 5% Growth	Number of Boats at 2.5% Growth	General Capacity Milestones (at current 84% capacity)
1999	5499	5499	
2000	5774	5636	
2001	6063	5777	
2002	6366	5922	
2003	6684	6070	at 100% capacity (6,546) at 5%
2004	7018	6222	
2005	7369	6377	
2006	7738	6537	at 100% capacity (6,546) at 2.5%
2007	8125	6700	
2008	8531	6867	
2009	8957	7039	
2010	9405	7215	at 100% capacity (7,201) at 2.5% and 10% better land utilization

## **CURRENT & FUTURE BUSINESS OUTLOOK**

### **Demand for Boat Yard Services**

As noted in the original report, the demand for boat yard services remains high, and is expected to continue at or near this rate. Boat repair demand will remain strong over the next three years. Based on stated growths and general business environment factors, the boat repair market in San Diego is expected to grow at a rate of 4% to 6% per year. An increasing number of the larger superyachts will further increase this growth at the larger boat yards, provided the requisite lifting capacity to service them is provided. It is noted also that the increase in demand for larger boat repair will likely supplant some work now performed on the smaller market boats.

Table 9 on the preceding page shows that given the assumptions made, boat yard repair capacity will hit 100% in mid-2003 at a sustained growth rate of 5% per year. However, at a growth rate of 2.5%, capacity is not reached until late 2006. When projecting a 10% better utilization in overall boat yard land resources (considered at about maximum obtainable overall), maximum capacity is reached in late 2009 or early 2010.

It should be noted that there are likely many ways to increase capacity through various means at any individual boat yard; however, the overall averages and dates are appropriate as shown for general analysis. As discussed earlier, trying to maximize boat yard output by utilizing simple multiples of existing square footage for land, and for water where only minor work can be performed, would be highly incorrect and several multiples overstated.

### **Boat Repair Segments**

Overall, San Diego serves its smaller and shorter length boats well. Because of market ownership factors, travel preferences and convenience, Driscoll Mission Bay and the Oceanside Marine Centre handle clientele from their respective areas. Of course, there is always some cross-over, but this is considered negligible from a broad analysis of these two communities.

The smaller boats are also well serviced in North and South Bay areas. However, due to the limited lifting capacities (150 tons at Shelter Island and 300 tons in National City) the larger markets over 80' are believed to be under-served, and the market of 100' or more is significantly under-served. As discussed in the original study, the overwhelming trend in yacht building is longer, higher, wider boat, and most importantly, heavier tonnage. While there are some boats in the 80' to 100' boat range now serviced, the true "superyachts" are significantly under-served.

## **SYNCROLIFT INVESTMENT**

The Syncrolift device utilizes a series of carts on a rail line placed in the bottom of a drydock type structure to support a boat. The carts are placed in the drydock to support the boat weight evenly, then the drydock is submerged. The boat is floated over the carts and secured. The drydock is then raised to connect to rail lines within the boat yard. Similar to a marine railway, the number of boats in the yard may be increased by the number of carts and rail spurs available.

### **Installation Cost**

For general analysis purposes, the installation of a 500 ton Syncrolift was used in the following example. In comparison, a smaller 300 ton Syncrolift would require marginally less equipment and structural work which would reduce expenditures by approximately 10% to 15%.

The Syncrolift involves several different cost variables as shown. Note: these figures represent average estimates as reasonable guidelines. For continued analysis an experienced marine engineering firm must be contacted to obtain a physical site survey, soil composition samples, piling and bulkhead strength requirements, and related civil and marine structural engineering requirements.

The estimated cost of developing a 500 ton Syncrolift at the Kettenburg Marine site is shown below. It should be noted that efforts have been made to include allowance for usage of some portion of the existing facilities which now include an older Syncrolift. Additionally, it is estimated that Kettenburg staff may assist in some of the preliminary site preparation. It is believed that Kettenburg may also be able to utilize some portions of the existing cradles and/or fabricate its own cradles according to Syncrolift specifications. Installation is estimated as follows:

\$ 880,000	500 ton Syncrolift and nominal shore engineering
\$ 525,000	Installation materials, transportation and labor
\$ 300,000	Additional shore civil work (prepare old site)
\$ 200,000	Additional water civil work (piles, reinforced bulkheads, dredging)
\$ 380,000	Transfer system & cradles
<u>\$ 30,000</u>	<u>Recommended spare parts &amp; supplies</u>
<b>\$ 2,315,000</b>	<b>TOTAL ESTIMATE</b>

### **Land Requirements**

Sufficient land is required for a Syncrolift to be cost effective, i.e., once the lift is built, the number of boats that can be repaired at any one given time is simply limited by the amount of square footage available. Since the lift system utilizes a series of carts on rails (similar to railroad track), any number of side rails may be adjoined to the system.

Side rails are then considered to be the "work station" for any particular project. Additionally, depending upon the land layout and system configuration, boats with work in progress may be shuffled to a limited extent, unlike other types of lifts.

Kettenburg currently occupies approximately 136,000 sq. ft. along America's Cup Harbor. Many variables must be taken into account in determining the amount of land required for any given configuration of a boat yard utilizing a Syncrolift. This includes not only easy water access with proper draft, but efficient layout of rail sidings which maximize the number of boats which can be dry berthed on land at any given time. Additionally, there must be enough room to allow a minimum number of boats so that sufficient revenue is generated to justify the expense of the lift.

Estimates of land requirements were generated with information obtained from a marine engineering firm and the Syncrolift corporation. Based on rough data, two general scenarios were developed as follows:

- A. 120,000 sq. ft.: This will allow a boat yard of roughly 300 ft. wide by 400 ft. deep. This configuration will handle up to 8 dry berth boats each with a maximum LOA of 125'.
- B. 81,000 sq. ft.: This will allow a boat yard of roughly 270 ft. wide by 30 ft. deep. This configuration will handle up to 4 dry berth boats each with a maximum LOA of 125'.

### **Amortization of Costs**

The Syncrolift will generally finance its equipment only (no civil work expenses). Its terms include a typical interest rate of approximately 10% APR for a period of five years. Other lending institutions will finance capital improvements for a period of up to 20 years. Currently it is estimated that a lending institution would provide financing at the prime rate plus 1.5 to 3 points depending upon the credit and cash flow history of the corporate borrower. The loan is viewed most favorably when a 20% "down payment" is provided.

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**Amortization of Costs (con'd)**

For general cost analysis, a cost of funds rate of 11% APR was used to generate the following quarterly repayment schedule:

<u>Total Financed is \$1,852,000</u>	<u>( \$2,315,000 minus \$463,000 down payment )</u>
@ 25 years, quarterly pmts.	\$55,000 quarterly est.
@ 20 years, quarterly pmts.	\$57,500 quarterly est.
@ 15 years, quarterly pmts.	\$63,250 quarterly est.
@ 10 years, quarterly pmts.	\$76,500 quarterly est.

It should be noted that the various lending institutions may have certain requirements and payment terms relating to the type of financing for various components such as equipment, land improvements, contracted services, etc. Additionally, as a customer service, Syncrolift will sometimes provide equipment leasing at rates near but typically less favorably than that of financial institutions.

As noted, the difference in cost between a 300 ton lift and a 500 ton is relatively marginal. The lift itself is approximately \$70,000 less, and there would be some reduction in various engineering weight/stress structural requirements. However, most of the overall system remains the same. Total development cost would be approximately 10% to 15% less for the smaller 300 ton system.

It is believed that a minimum capacity of hauling up to four large boats up to 125' should be established. Depending upon work volume and sizes of other boats, somewhat larger boats may also be serviced. Although numerous smaller boats may utilize the excess space when available, it is believed that a capacity of four large boats is most likely to offer a favorable ROI. Although a small boatyard in Florida currently provides capacity for only three similar type boats, its overall market is significantly larger and typically "wait listed."

Adding additional rail sidings to increase the number of boats is suggested where feasible. It is also possible that a qualified engineering firm may be able to justify land use configurations other than the basic design to provide a more favorable design scenario.

## **CONCLUSIONS & RECOMMENDATIONS**

### **Summary of Full Report Conclusions**

The following points summarize the conclusions which were presented in the original, full report. These conclusions have remained consistent with the expanded findings developed during the addendum to the study.

- ◆ Boat yards are now at or near capacity in San Diego. Future growth of 4% to 6% is projected through 2003; growth should remain steady or continue to slightly increase during the following two years to 2005. Growth will be primarily generated by the number of new builds entering the market, the refurbishing, extensions and improvements for resold boats, and the maintenance of charter and for sale boats.
- ◆ San Diego is now losing profitable boat repair business serving the larger yacht and superyacht market which is expected to continue increasing. This is due to the lack of general high tonnage lifting capacity over 300 tons, and particularly, the lack of a Syncrolift capable of lifting more than 150 tons.
- ◆ San Diego boat yards will continue to fulfill demand in the foreseeable future over the next 10 to 20 years provided prudent upgrades and improvements are made as dictated by market dynamics.
- ◆ San Diego is at or near practical capacity for marina slips. More marina slips will be needed over the next few years to meet demand.
- ◆ Boat yards need to be allowed to perform maintenance and upgrades on current facilities with an easy approval process. Economic times are good and tenants have cash and/or funding for needed improvements.
- ◆ America's Cup Harbor became a vital asset to the community as a commercial, or working harbor. As such, it has been the lifeline for many boat yards, marine services, sport fishing, commercial fishing and commercial recreation. Its main functions and attributes should not be drastically altered.

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**Full Report Conclusions (con'd)**

- ◆ The Kettenburg Boat Yard has been in operation since 1918. Given that the number of boat yards has declined over the past few years, it is recommended that Kettenburg Marine be allowed to continue its operation and be encouraged to upgrade the facility to meet upcoming market demand. Its Syncrolift and equipment should be renovated and upgraded for increased lifting capacity. It is also recommended that the capacity of the lift should be increased to a *minimum of 500 tons*. Higher lift capacity is encouraged since trends toward higher tonnage are expected to aggressively continue.
- ◆ Continued operation of Kettenberg alleviates the downsizing of its labor force. Closing the operation would cause a direct loss of approximately one-third of the combined Driscoll/Kettenberg workforce, or approximately 20 FTE positions. Repair demand indicates that these positions are needed to serve existing and expected future demand.
- ◆ It is recommended that Kettenburg be allowed to redesign its boat yard to include an upgraded Syncrolift. The Syncrolift is important because of its use in lifting larger tonnage yachts and certain structural yachts which cannot be lifted with the strap-type, Travelift device.

**Conclusions From Addendum To Report**

The following general conclusions have resulted from the additional work performed in generating the addendum to the original study.

- ◆ Prior findings and recommendations of the original report remain consistent in view of the additional material.
- ◆ Boat yards will likely reach capacity between 2003 and 2006, provided the world's economic system remains relatively stable. Growth will be primarily generated by the number of new builds entering the market, the refurbishing, extensions and improvements for resold boats, and the maintenance of charter and for sale boats.

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**Addendum Conclusions (con'd)**

- ◆ The demand for marina slips and buoys is expected to rise, similar to that of demand for boat repair. There is some chance that boat repair demand may be artificially and unnecessarily limited if the normal increase in dockage is not allowed to occur after the general 2003 timeframe.
- ◆ San Diego is now losing profitable boat repair business serving the larger yacht and superyacht market which is expected to continue increasing. Typical boat yard visits for a superyacht range from \$50,000 for a small project to \$350,000 or more for larger projects, per visit.

**Summary of Total Project Conclusions**

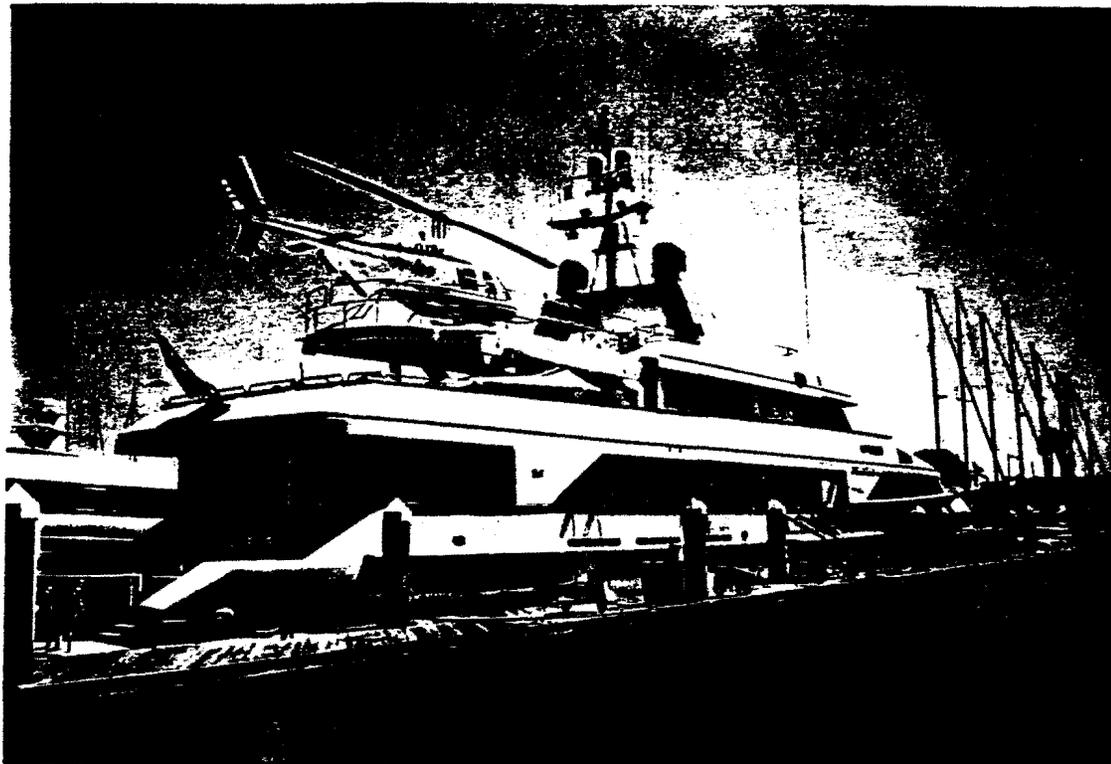
- ◆ The increasing demand for boat repair indicates that the current boat yard repair capacity in San Diego will be reached in the time period of 2003 to 2006.
- ◆ Because of existing and projected growth in boat yard repair demand through 2010, it is recommended that Kettenburg Marine should remain in operation, and that it should be allowed to upgrade its operations and repair capacities.
- ◆ If the Kettenburg boat yard were to be closed, its workload would likely be distributed among existing boatyards, with most work being transferred to other boat yards in America's Cup Harbor. This would likely bring the current boat repair workload to full capacity in America's Cup Harbor and it would then not be able to meet overall boat yard demand in the immediate future following Kettenburg's closure.
- ◆ Additionally, if Kettenburg were to close, while some additional demand from America's Cup Harbor could be forced to use less convenient, alternate boat yards in other locations throughout Greater San Diego, it is believed that the overall, *cumulative demand* throughout San Diego would not be met within 12 to 18 months of Kettenburg's closure. Its is projected that some of this immediate future demand would then be fulfilled by locations outside of San Diego, causing lost revenues to local marine businesses including boat yards, marinas, marine parts and supplies, marine subcontractors and general marine services.

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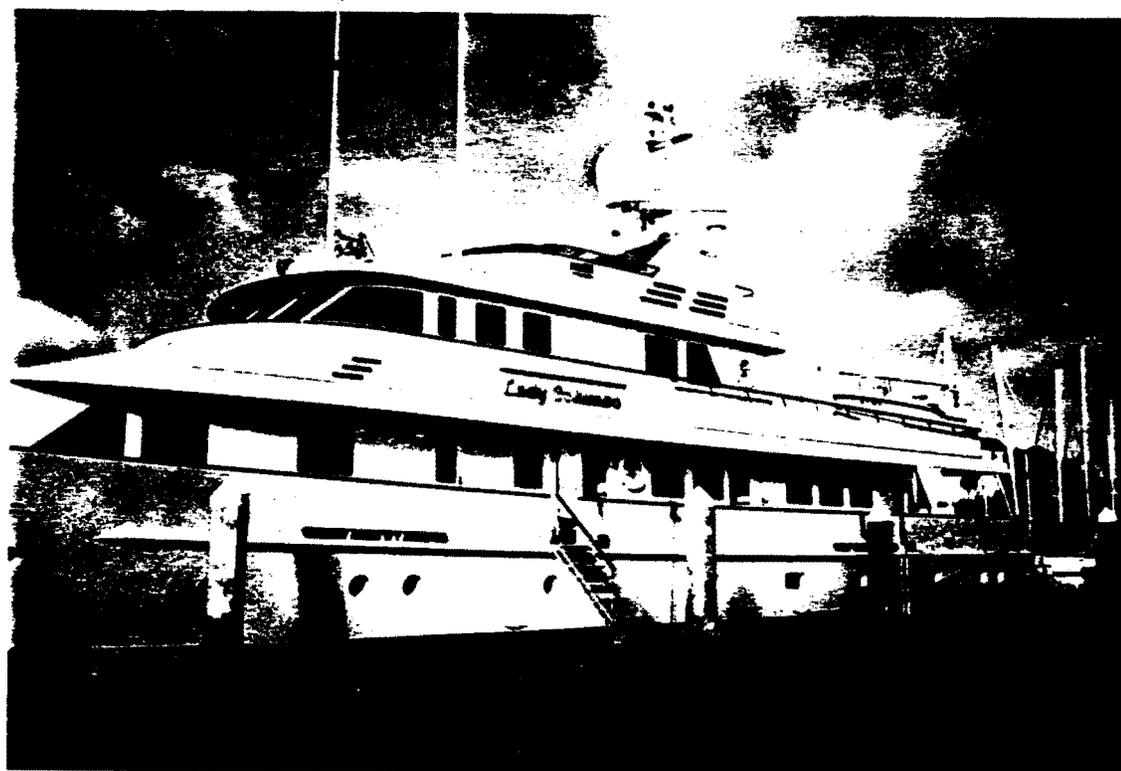
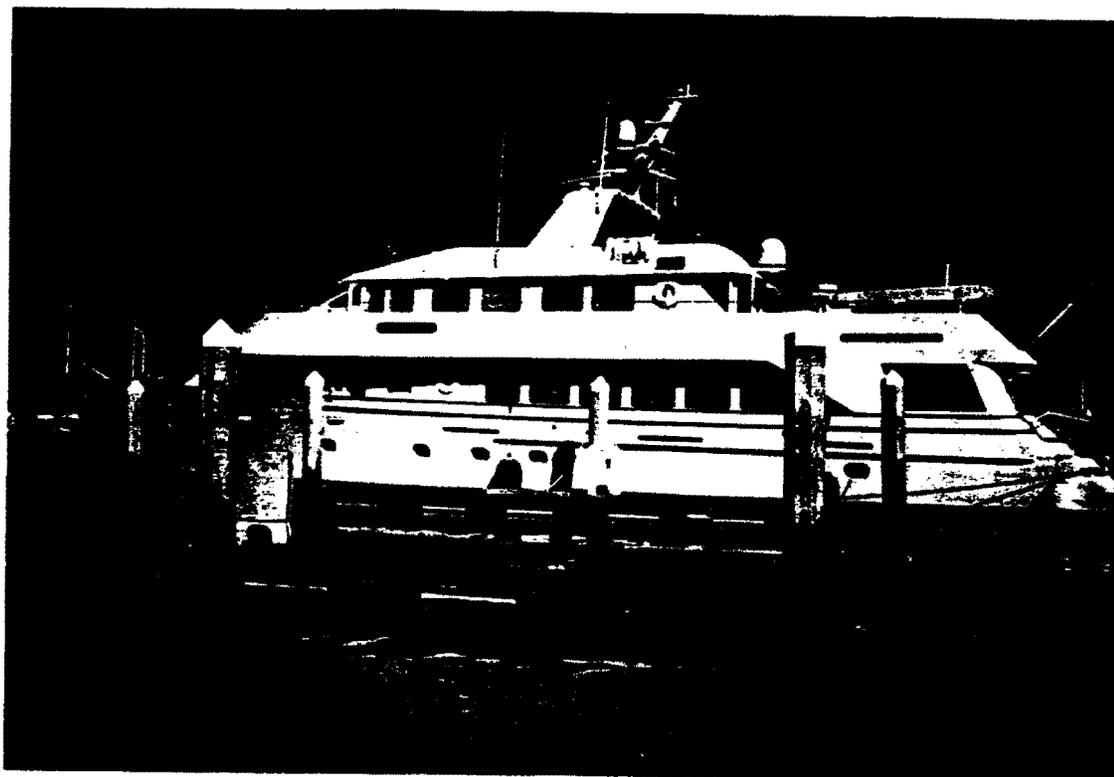
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**APPENDIX**

SUPERYACHT BERTHS AT SHELTER ISLAND MARINA (160' & 152')



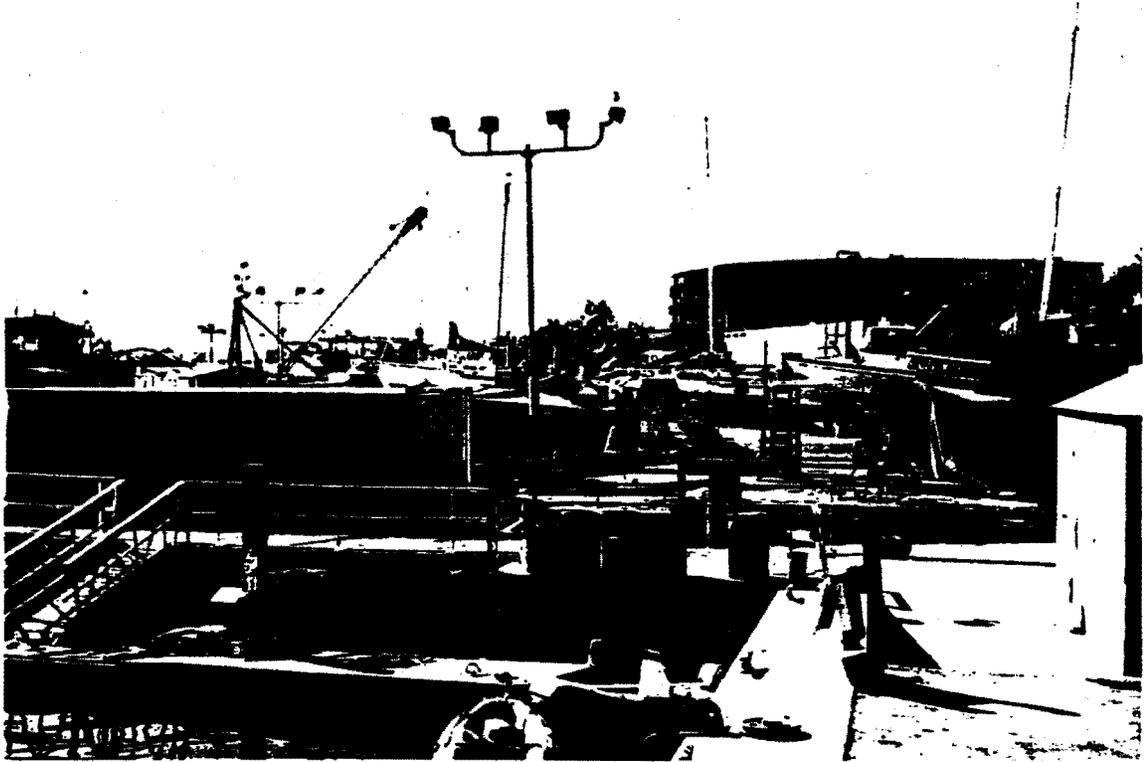
SUPERYACHT BERTHS AT SHELTER ISLAND MARINA (120' & 125')



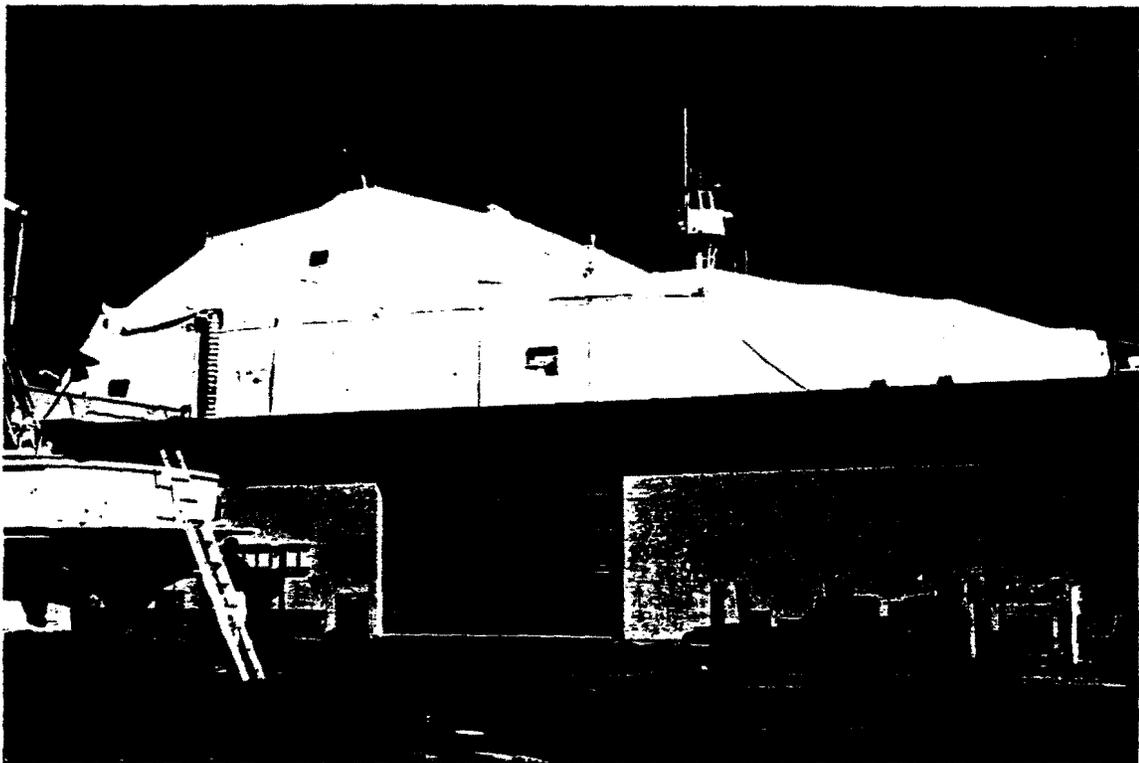
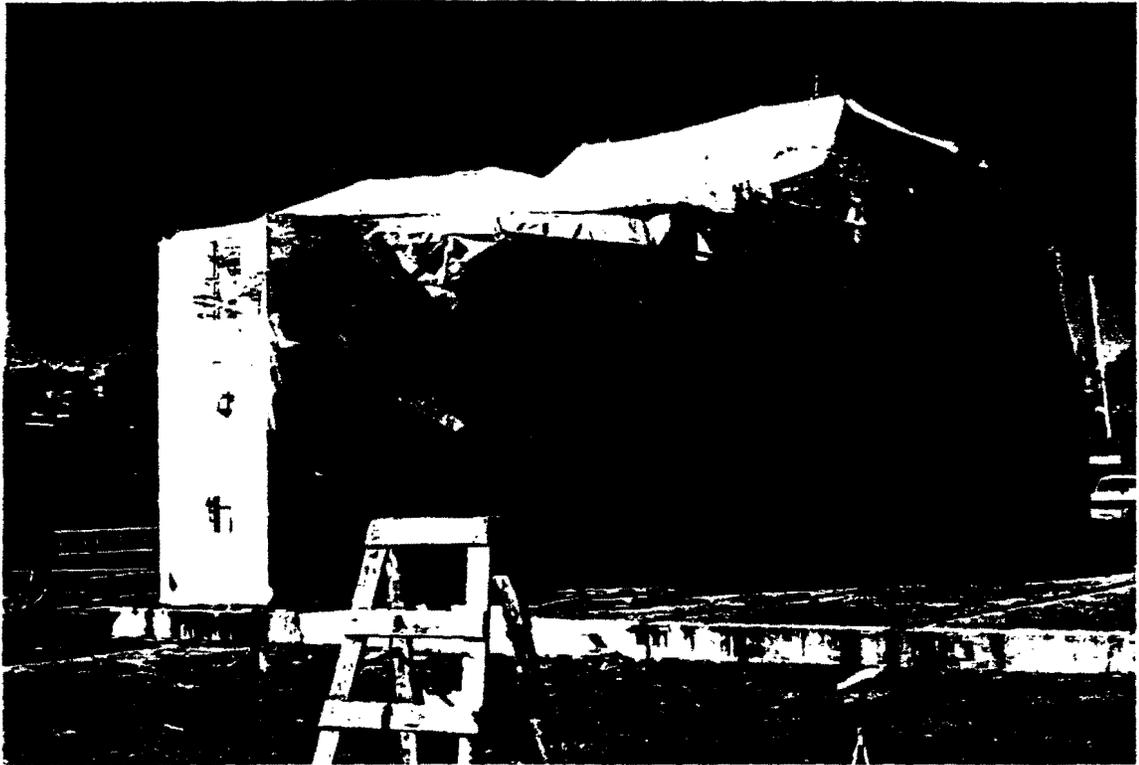
KETTENBURG MARINE (SHELTER ISLAND)



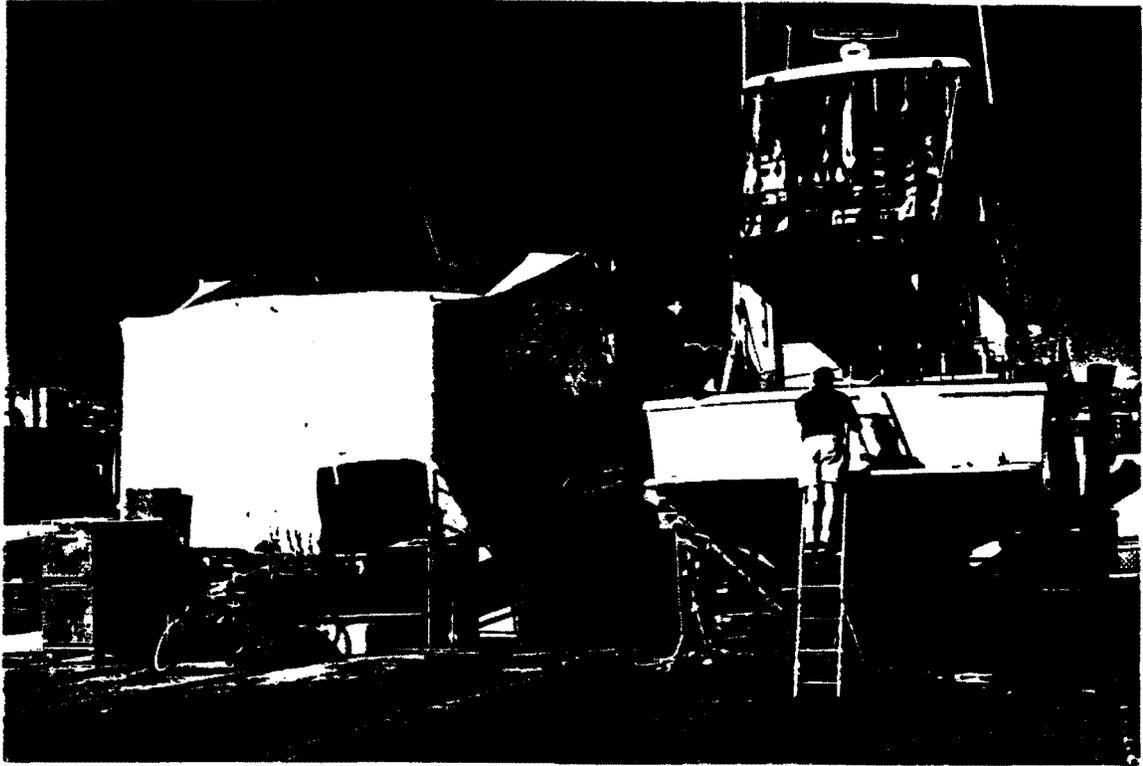
KETTENBURG MARINE (SHELTER ISLAND)



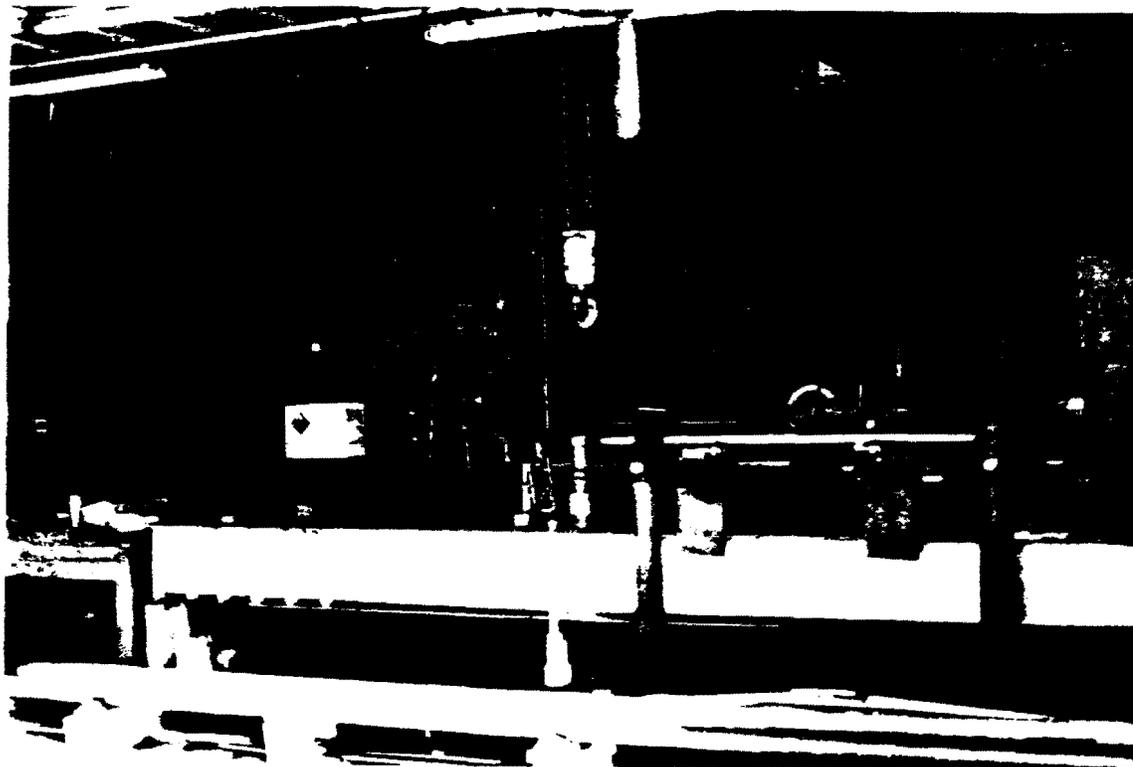
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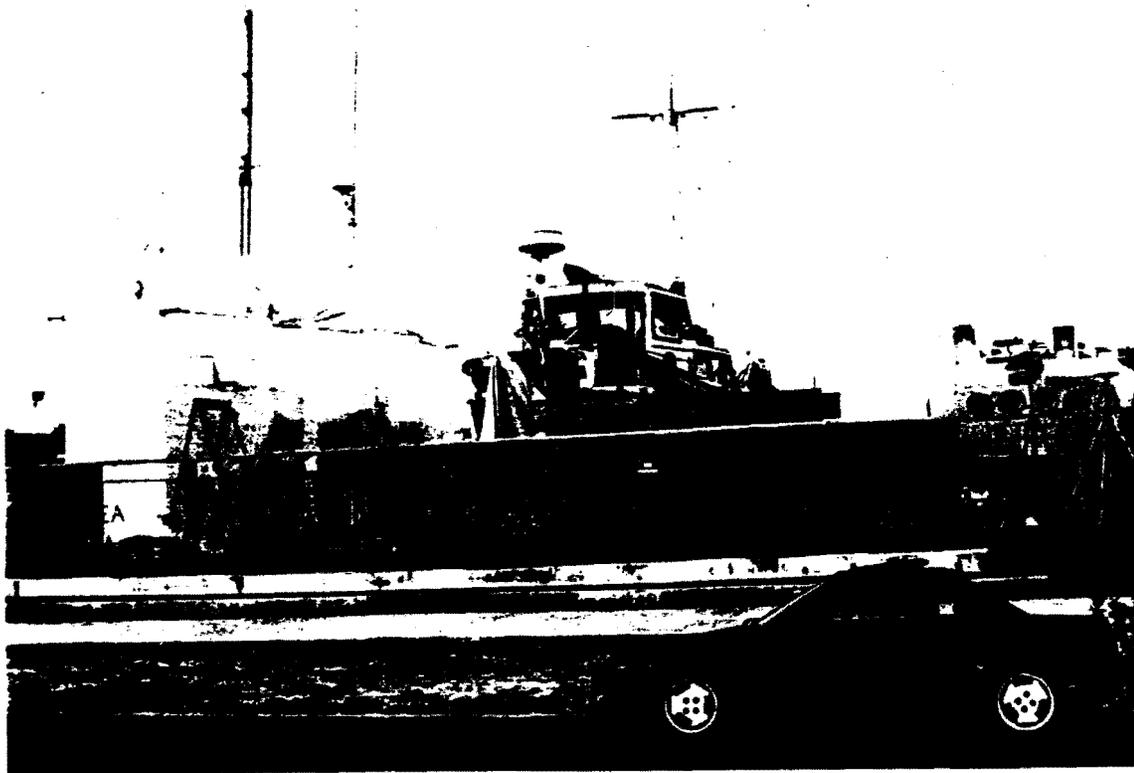
KETTENBURG MARINE (SHELTER ISLAND)



KETTENBURG MARINE (SHELTER ISLAND)



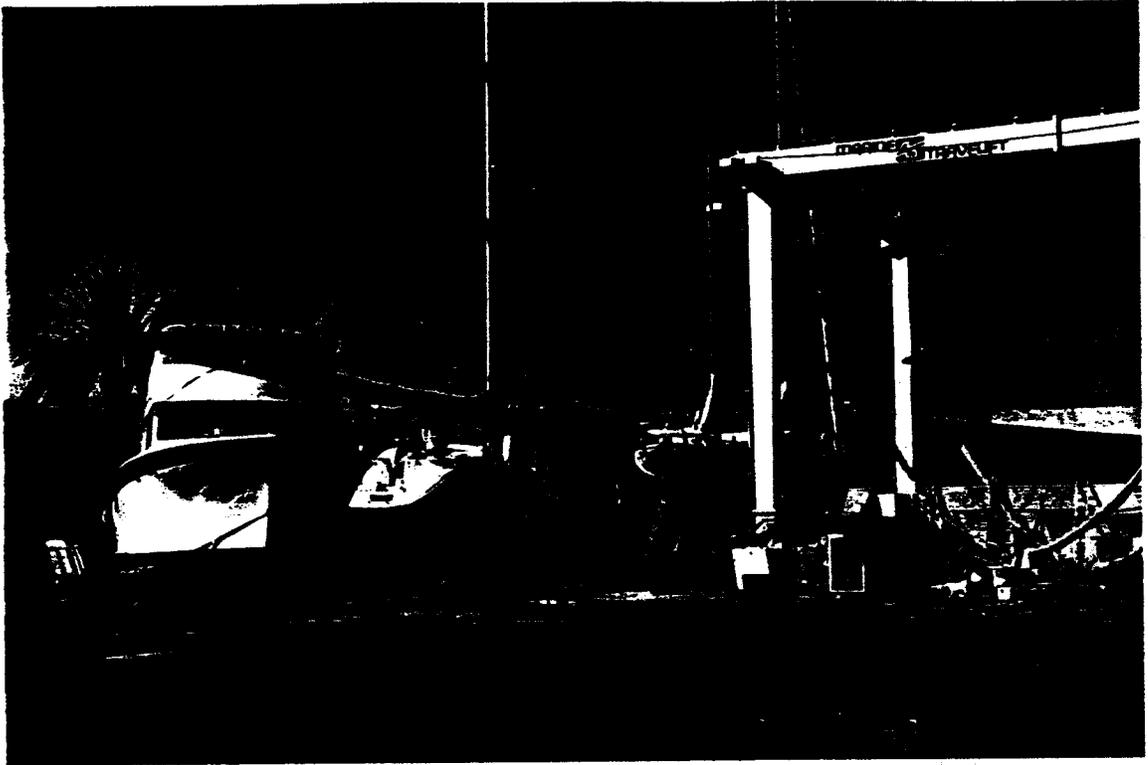
DRISCOLL BOAT WORKS (MISSION BAY)



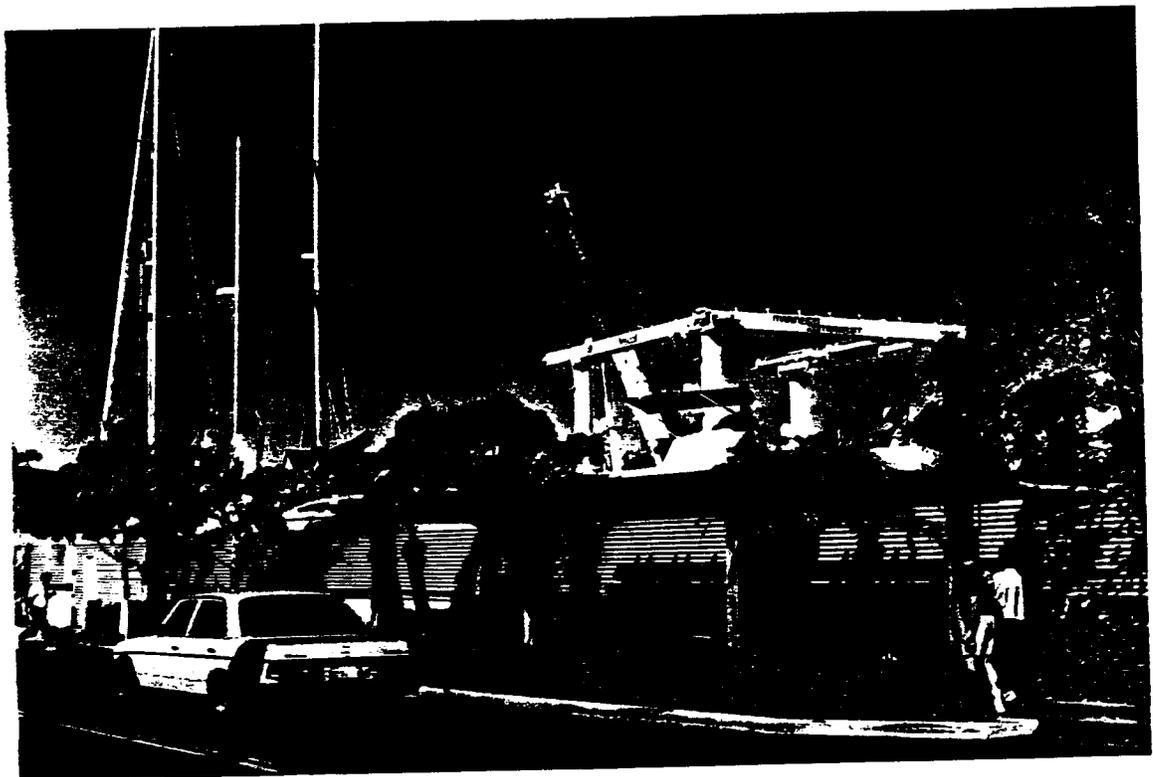
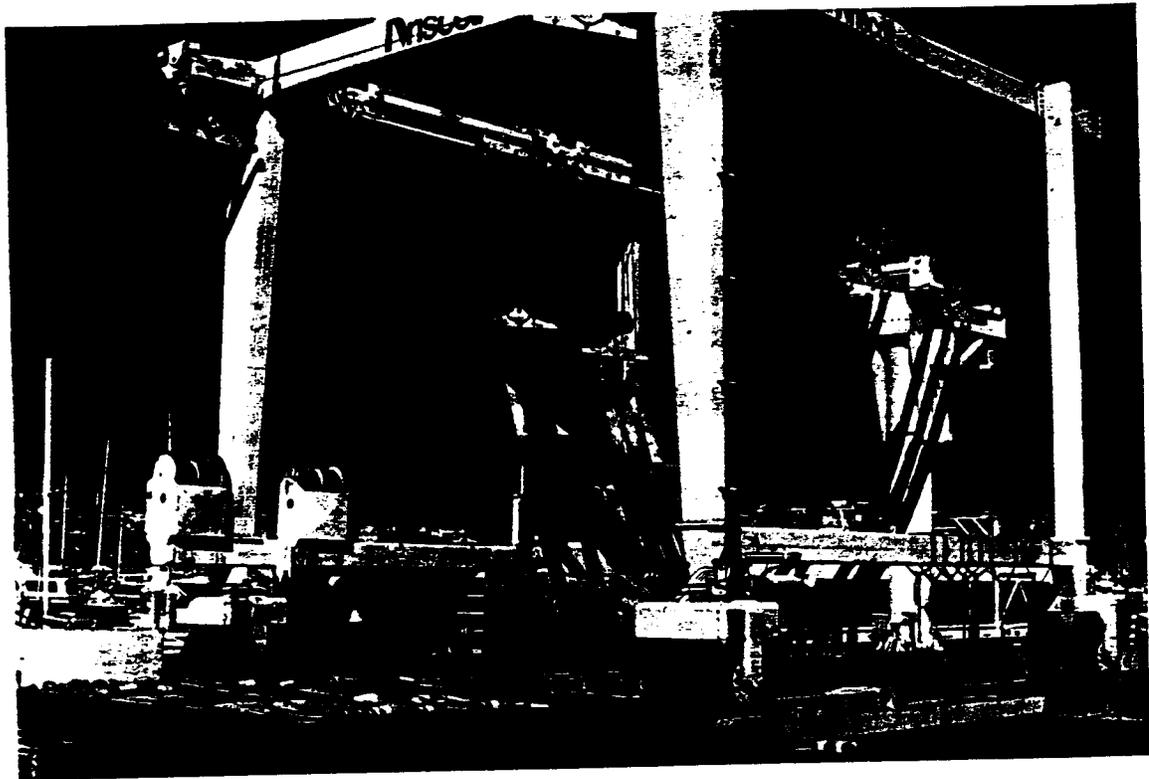
DRISCOLL BOAT WORKS (MISSION BAY)



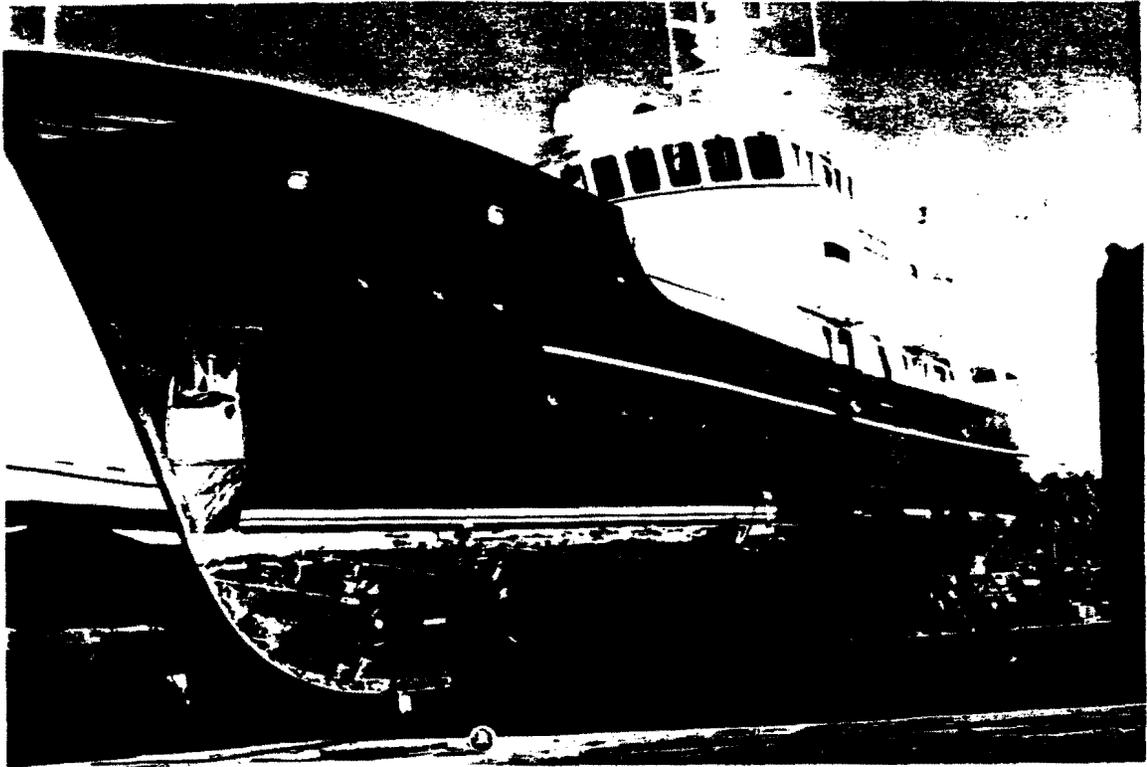
DRISCOLL BOAT WORKS (SHELTER ISLAND)



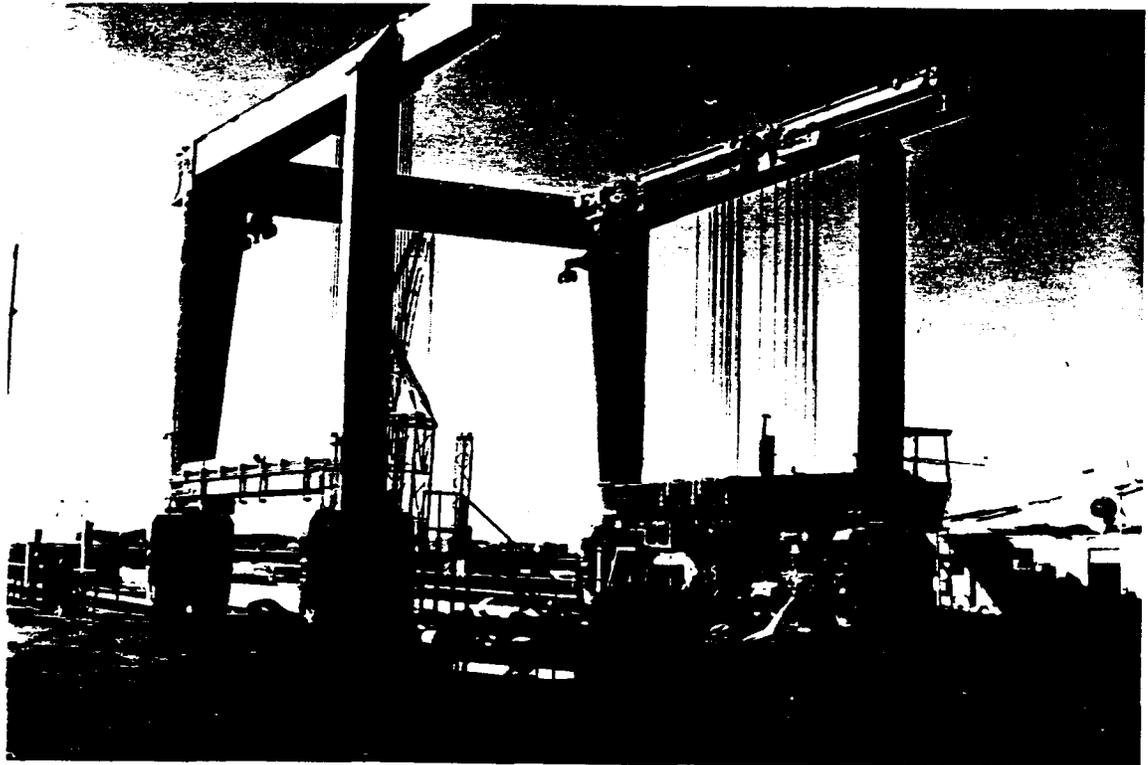
DRISCOLL BOAT WORKS (SHELTER ISLAND)



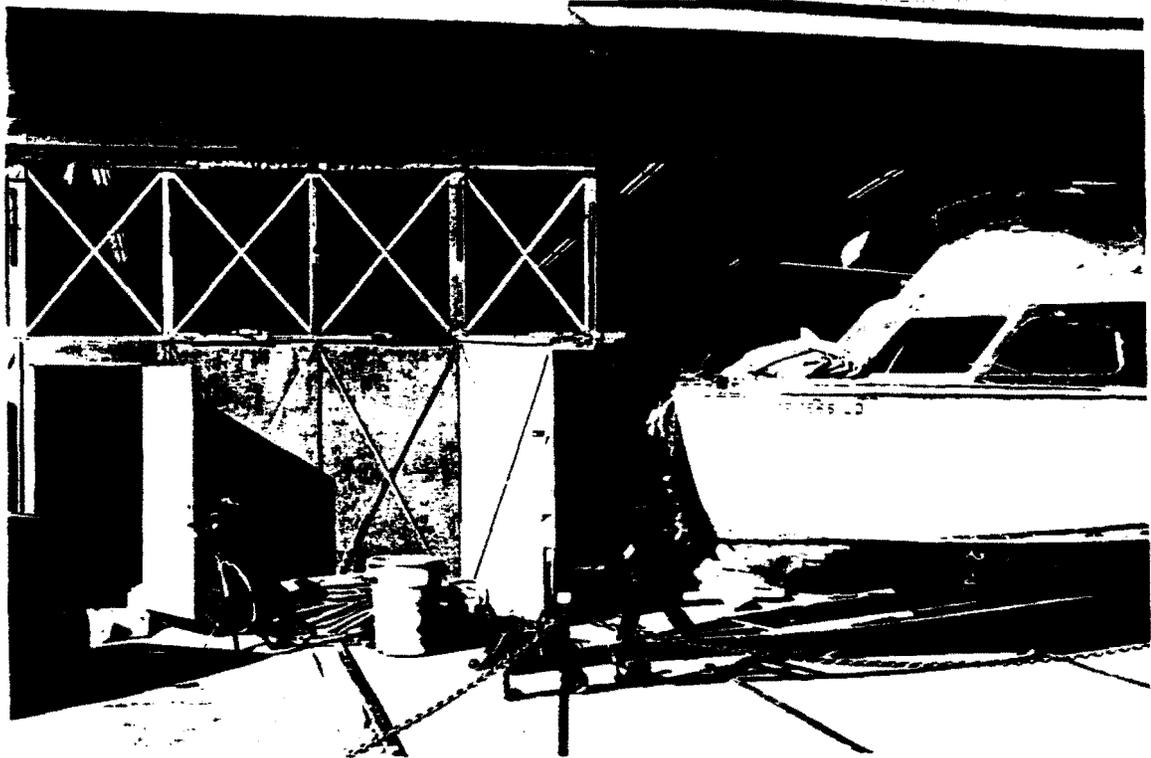
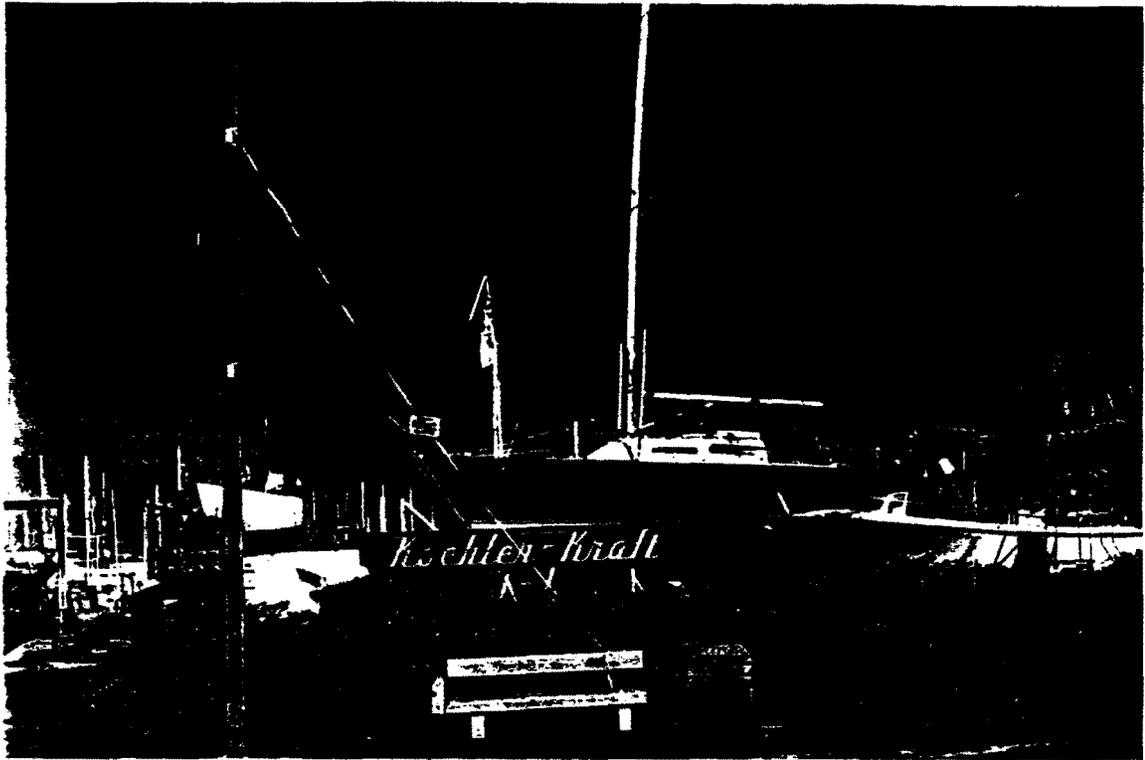
KNIGHT & CARVER (NATIONAL CITY)



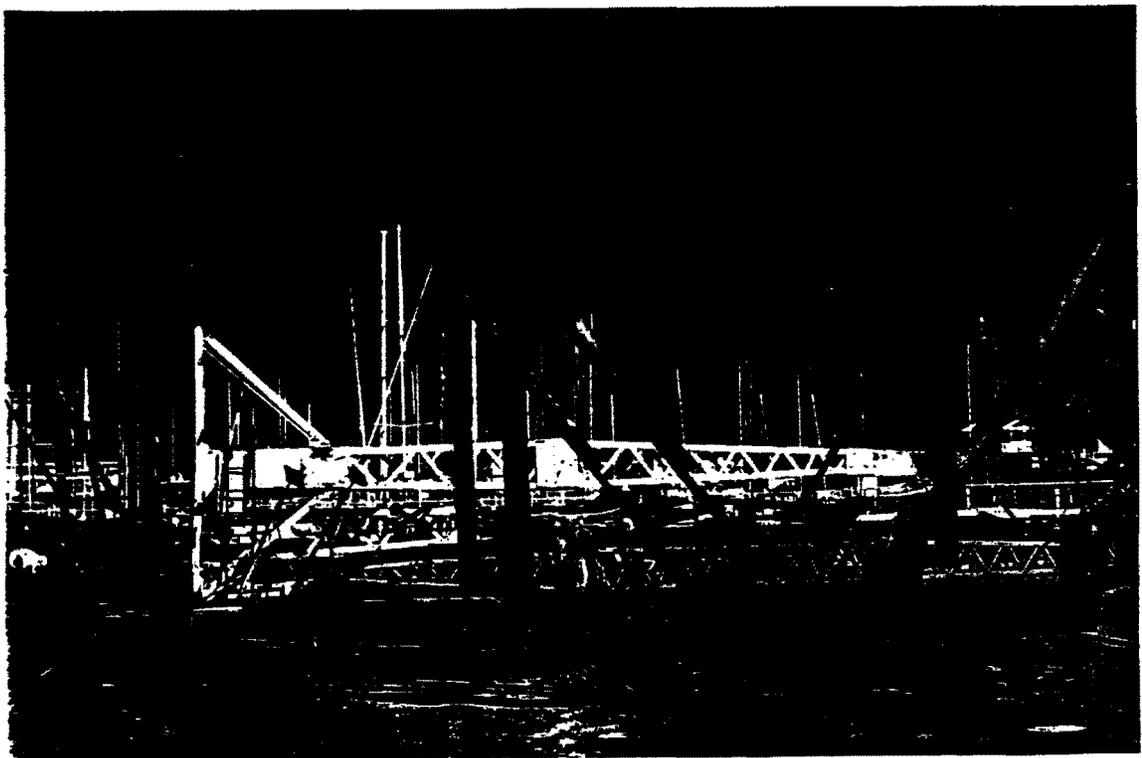
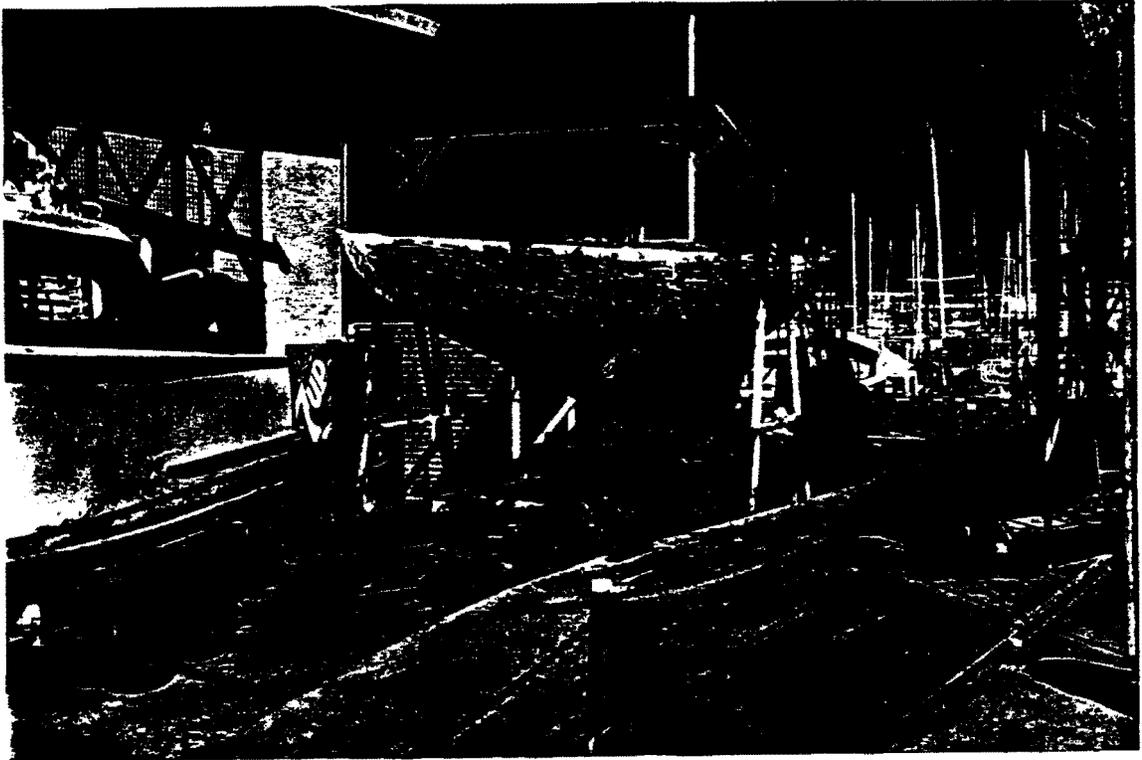
KNIGHT & CARVER (NATIONAL CITY)



KOEHLER KRAFT (SHELTER ISLAND)



KOEHLER KRAFT (SHELTER ISLAND)



NIELSEN BEAUMONT (SHELTER ISLAND)



NIELSEN BEAUMONT (SHELTER ISLAND)



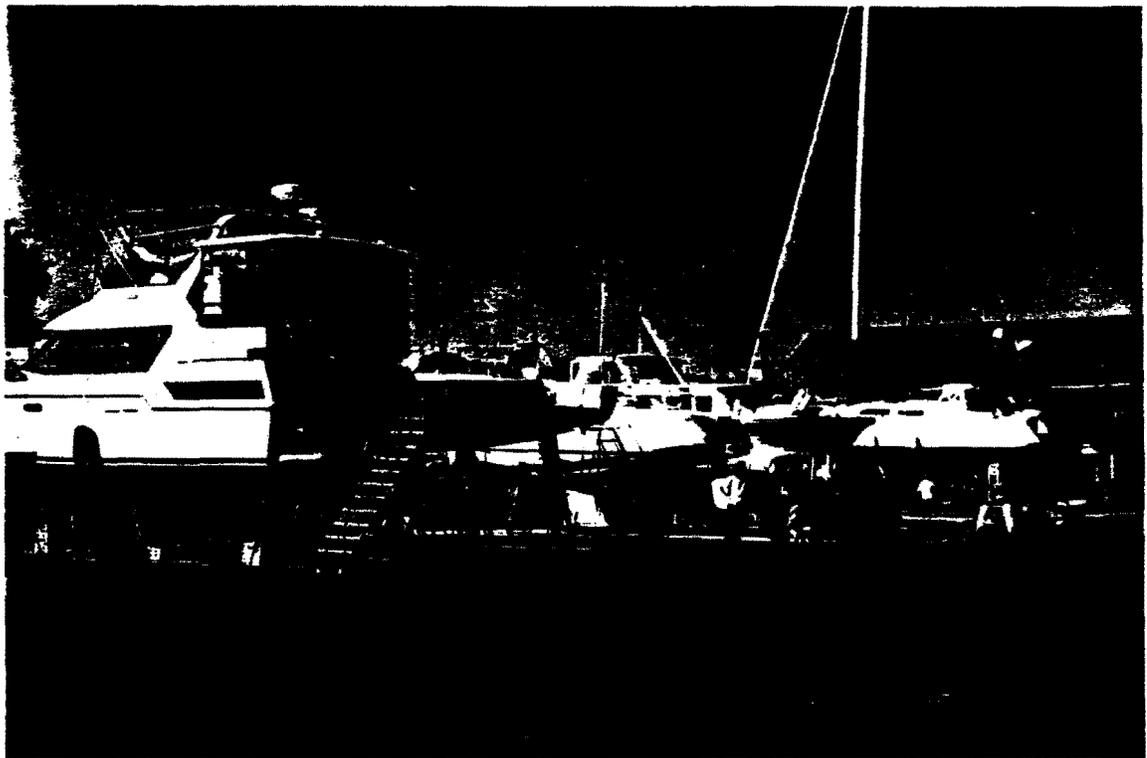
OCEANSIDE MARINE CENTRE (OCEANSIDE)



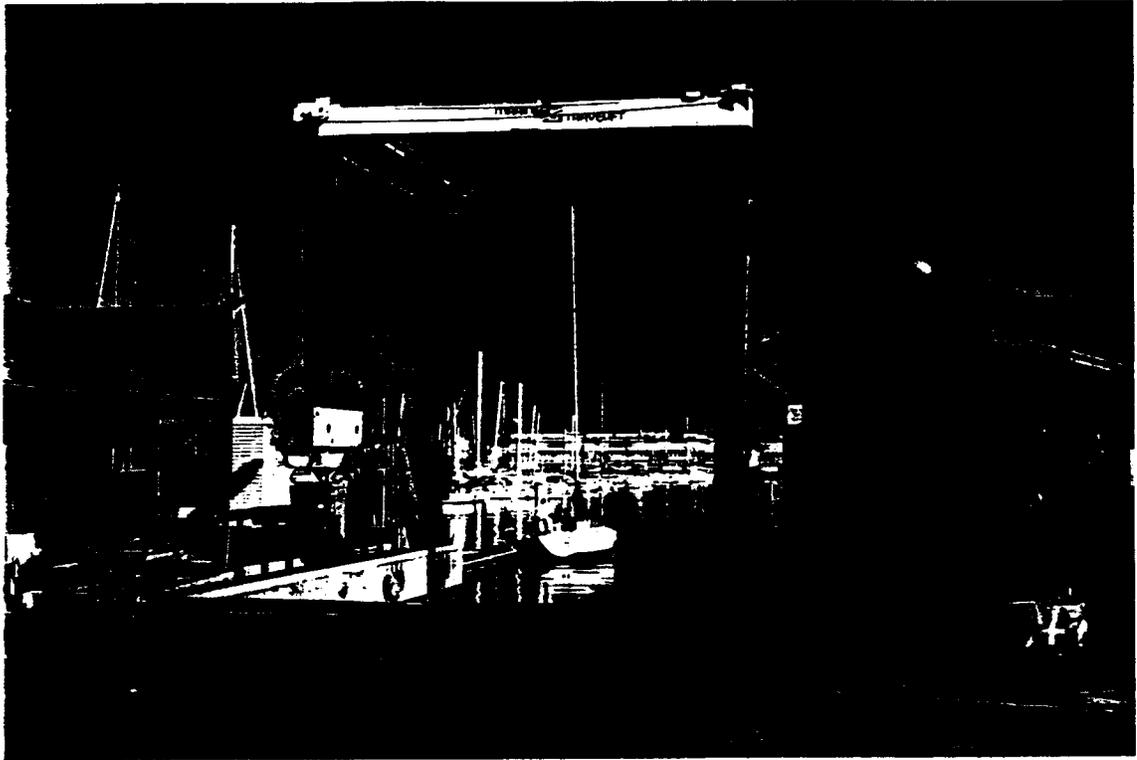
OCEANSIDE MARINE CENTRE (OCEANSIDE)



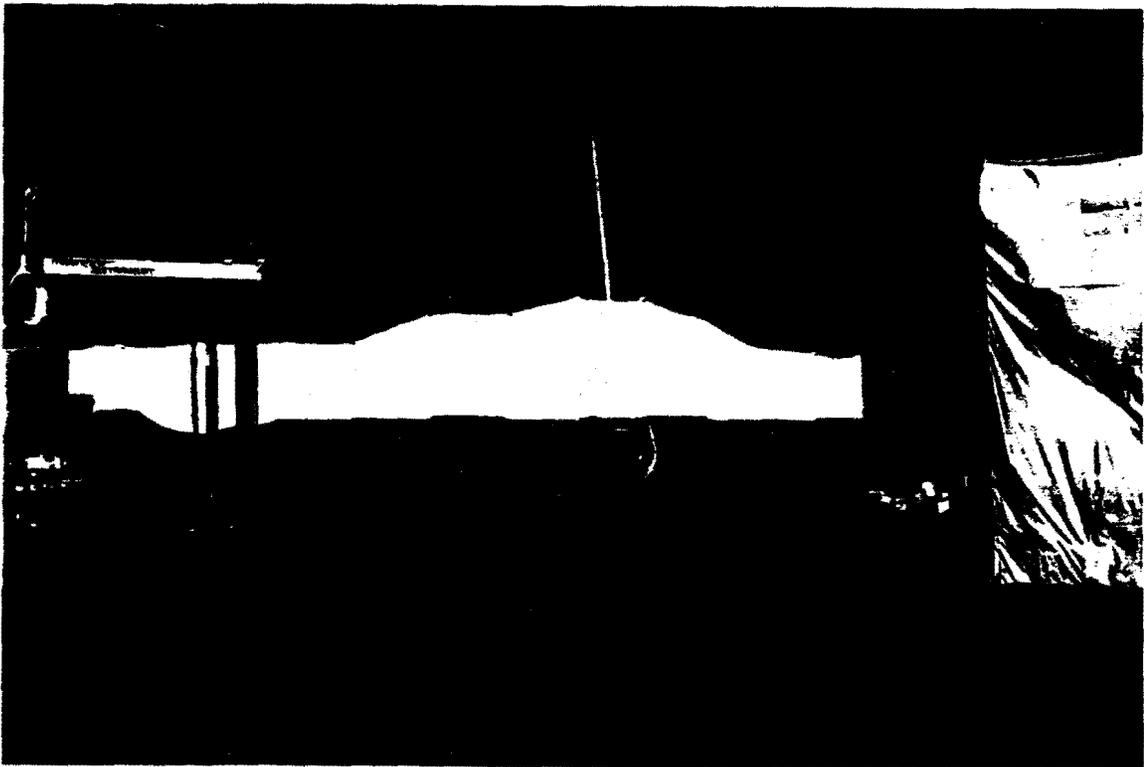
SHELTER ISLAND BOAT YARD (SHELTER ISLAND)



SHELTER ISLAND BOAT YARD (SHELTER ISLAND)



SOUTHBAY BOAT YARD (CHULA VISTA)



SOUTHBAY BOAT YARD (CHULA VISTA)

