



# PUBLIC NOTICE

U.S. ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT

BUILDING STRONG®

## APPLICATION FOR PERMIT THE BOATYARD MARINA AND TRAVEL LIFT PIERS REPLACEMENT

**Public Notice/Application No.:** SPL-2013-00427-BEM

**Project:** The BoatYard Marina and Travel Lift Piers Replacement

**Comment Period:** November 25 through December 25, 2013

**Project Manager:** Brianne McGuffie; 213-452-3419; [Brianne.E.McGuffie@usace.army.mil](mailto:Brianne.E.McGuffie@usace.army.mil)

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### Applicant

Gregory Schem  
Harbor Real Estate Group  
13555 Fiji Way  
Marina Del Rey, California 90292

### Contact

Gregory Schem  
Harbor Real Estate Group  
13555 Fiji Way  
Marina Del Rey, California 90292

### Location

The project is located within The BoatYard Marina at 13555 Fiji Way (Parcel 53), Marina del Rey, unincorporated Los Angeles County, California (33.976143°, -118.443687°)

### Activity

To reconfigure an existing marina (see attached drawings). For more information see page 4 of this notice.

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Interested parties are hereby notified that an application has been received for a Department of the Army permit for the activity described herein and shown on the attached drawing(s). We invite you to review today's public notice and provide views on the proposed work. By providing substantive, site-specific comments to the Corps Regulatory Division, you provide information that support the Corps' decision-making process, all comments received during the comment period become part of the record and will be considered in the decision. This permit will be issued, issued with special conditions, or denied. Comments should be mailed to:

CORPS OF ENGINEERS, LOS ANGELES DISTRICT  
P.O. BOX 532711  
LOS ANGELES, CALIFORNIA 90053-2325

Alternatively, comments can be sent electronically to: [Brianne.E.McGuffie@usace.army.mil](mailto:Brianne.E.McGuffie@usace.army.mil)

The mission of the U.S. Army Corps of Engineers Regulatory Program is to protect the Nation's aquatic resources, while allowing reasonable development through fair, flexible and balanced permit decisions. The Corps evaluates permit applications for essentially all construction activities that occur in the Nation's waters, including wetlands. The Regulatory Program in the Los Angeles District is executed to protect aquatic resources by developing and implementing short- and long-term initiatives to improve regulatory products, processes, program transparency, and customer feedback considering current staffing levels and historical funding trends.

Corps permits are necessary for any work, including construction and dredging, in the Nation's navigable water and their tributary waters. The Corps balances the reasonably foreseeable benefits and detriments of proposed projects, and makes permit decisions that recognize the essential values of the Nation's aquatic ecosystems to the general public, as well as the property rights of private citizens who want to use their land. The Corps strives to make its permit decisions in a timely manner that minimizes impacts to the regulated public.

During the permit process, the Corps considers the views of other Federal, state and local agencies, interest groups, and the general public. The results of this careful public interest review are fair and equitable decisions that allow reasonable use of private property, infrastructure development, and growth of the economy, while offsetting the authorized impacts to the waters of the United States. The permit review process serves to first avoid and then minimize adverse effects of projects on aquatic resources to the maximum practicable extent. Any remaining unavoidable adverse impacts to the aquatic environment are offset by compensatory mitigation requirements, which may include restoration, enhancement, establishment, and/or preservation of aquatic ecosystem system functions and services.

### **Evaluation Factors**

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof. Factors that will be considered include conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people. In addition, if the proposal would discharge dredged or fill material, the evaluation of the activity will include application of the EPA Guidelines (40 CFR Part 230) as required by Section 404 (b)(1) of the Clean Water Act.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties,

water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

### **Preliminary Review of Selected Factors**

**EIS Determination**- A preliminary determination has been made that an environmental impact statement is not required for the proposed work.

**Water Quality**- The applicant may be required to obtain water quality certification, under Section 401 of the Clean Water Act, from the California Regional Water Quality Control Board. Section 401 requires that any applicant for an individual Section 404 permit provide proof of water quality certification to the Corps of Engineers prior to permit issuance. For any proposed activity on Tribal land that is subject to Section 404 jurisdiction, the applicant will be required to obtain water quality certification from the U.S. Environmental Protection Agency.

**Coastal Zone Management**- The applicant has certified that the proposed activity would comply with and would be conducted in a manner that is consistent with the approved State Coastal Zone Management Program. For those projects in or affecting the coastal zone, the Federal Coastal Zone Management Act requires that prior to issuing the Corps authorization for the project, the applicant must obtain concurrence from the California Coastal Commission that the project is consistent with the State's Coastal Zone Management Plan. The California Coastal Commission issued Coastal Development Permit Number 5-11-131 on June 26, 2012 for demolition and reconstruction of six private leasehold marinas, including the proposed project (i.e. The Boatyard/Parcel 53).

**Essential Fish Habitat**- It is the Corps initial determination the proposed activity would adversely affect but would not have a substantial adverse impact on EFH or federally managed fisheries in California waters. An eelgrass survey performed on April 30, 2013 by Merkel & Associates (Attachment B) confirmed no eelgrass (*Zostera marina*) or *Caulerpa* was present in the project area. Furthermore, a review of EcoAtlas revealed no eelgrass habitat in the project area (Attachment C). My final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NOAA Fisheries. If I do not receive written comments (regular mail or e-mail) within the 30-day notification period, I will assume concurrence by NOAA Fisheries that no mitigation measures are necessary.

**Cultural Resources**- The latest version of the National Register of Historic Places has been consulted and this site is not listed. This review constitutes the extent of cultural resources investigations by the District Engineer, and he is otherwise unaware of the presence of such resources.

**Endangered Species**- Preliminary determinations indicate that the proposed activity would not affect federally-listed endangered or threatened species, or their critical habitat. Therefore, formal consultation under Section 7 of the Endangered Species Act does not appear to be required at this time.

**Public Hearing-** Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearing shall state with particularity the reasons for holding a public hearing.

### **Proposed Activity for Which a Permit is Required**

**Basic Project Purpose-** The basic project purpose comprises the fundamental, essential, or irreducible purpose of the proposed project, and is used by the Corps to determine whether the applicant's project is water dependent (i.e., requires access or proximity to or siting within the special aquatic site to fulfill its basic purpose). Establishment of the basic project purpose is necessary only when the proposed activity would discharge dredged or fill material in to a special aquatic site (e.g., wetlands, pool and riffle complex, mudflats, coral reefs). Because no fills are proposed within special aquatic sites, identification of the basic project purpose is not necessary. The project is not water dependent.

**Overall Project Purpose-** The overall project purpose serves as the basis for the Corps' 404(b)(1) alternatives analysis and is determined by further defining the basic project purpose in a manner that more specifically describes the applicant's goals for the project, and which allows a reasonable range of alternatives to be analyzed. The proposed project would not discharge dredged or fill material into waters of the U.S. and therefore a 404(b)(1) alternatives analysis is not required.

### **Additional Project Information**

**Baseline information-** The BoatYard Marina, located in Marina del Rey, was constructed in the 1970's and offers rental slips as well as repair and maintenance services on both recreational and commercial vessels utilizing two existing travel lifts. The docking facility is currently in disrepair and in need of replacement. New travel lift piers are proposed in order to accommodate longer and wide vessels, which cannot be lifted from the piers in their current configuration. The existing facility consists of 5 main piers with 5 associated gangways which accommodate 20, 23, 25, 19, and 16 slips respectively (from west to east). The existing slip mix within the lease boundary currently accommodates 5 twenty foot vessels, 30 twenty-five foot vessels, 23 thirty foot vessels, 36 thirty-five foot vessels, and 9 forty foot vessels. Additionally, 3 travel lift piers and underlying floating docks are located between the 4<sup>th</sup> and 5<sup>th</sup> main piers. The existing facility currently accommodates 103 slips within the county lease area; however, the facility accommodates up to 10 additional slips outside of the lease area at the waterward edge of 5 main piers. Please see attachment A, Figure 2 for existing layout.

**Project description-** The proposed marina would be comprised of 5 main piers accommodating 19, 21, 23, 25, and 13 slips respectively. Each main pier would have an associated gangway, while the westernmost pier would have a second gangway for approved Americans with Disability Act (ADA) use. One concrete travel lift pier would partially overlap with the easternmost main pier and 2 additional travel lift piers, associated floating docks, and one gangway would be located further east. The proposed slip count for the docking facility within the lease boundaries would include 4 twenty foot vessels, 27 twenty five foot vessels, 23 thirty foot vessels, 20 thirty-two foot vessels, 18 thirty-five foot vessels and 9 forty foot vessels, for a total of 101 vessels. The

reconfigured docking facility would also accommodate up to 9 additional slips outside of the lease area at the waterward edge of 5 main piers. Please see attachment A, Figure 3 for proposed layout.

The reconfigured docking facility will reduce overwater structures (i.e. docks, piers, gangways, platforms) by 2,383 square feet. Additionally, the proposed slip mix will result in the following changes:

- A reduction of 1 twenty foot slip
- A reduction of 3 twenty-five foot slips
- An addition of 20 thirty-two foot slips
- A reduction of 18 thirty-five foot slips

Proposed Mitigation– The proposed mitigation may change as a result of comments received in response to this public notice, the applicant's response to those comments. In consideration of the above, the proposed mitigation sequence (avoidance/minimization/compensation), as applied to the proposed project is summarized below:

**Avoidance:** Based on resource surveys submitted by the applicant, there are no existing high-value aquatic resources in the project area.

**Minimization:** There are no proposed resource impacts and the number of existing slips within the lease area is being reduced by two. The number of slips able to be accommodated outside of the lease area is being reduced by one.

**Compensation:** No compensatory mitigation is proposed for this project.

### **Proposed Special Conditions**

None at this time.

For additional information please call Brianne McGuffie of my staff at 213-452-3419 or via e-mail at [Brianne.E.McGuffie@usace.army.mil](mailto:Brianne.E.McGuffie@usace.army.mil) . This public notice is issued by the Chief, Regulatory Division.



#### *Regulatory Program Goals:*

- To provide strong protection of the nation's aquatic environment, including wetlands.
- To ensure the Corps provides the regulated public with fair and reasonable decisions.
- To enhance the efficiency of the Corps' administration of its regulatory program.

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**U.S. ARMY CORPS OF ENGINEERS – LOS ANGELES DISTRICT**

[WWW.SPL.USACE.ARMY.MIL](http://WWW.SPL.USACE.ARMY.MIL)

# ATTACHMENT A

SHEET LIST:

- |                                         |     |
|-----------------------------------------|-----|
| 1. TITLE SHEET                          | T-1 |
| 2. VICINITY MAP & LOCATION MAP          | T-2 |
| 3. EXISTING LAYOUT                      | L-1 |
| 4. PROPOSED LAYOUT                      | L-2 |
| 5. EXISTING OVER PROPOSED LAYOUT        | L-3 |
| 6. DOCK SECTION                         | D-1 |
| 7. PILE DETAILS                         | P-1 |
| 8. TRAVEL LIFT PIER LAYOUT              | S-1 |
| 9. TRAVEL LIFT PIER ELEVATION & SECTION | S-2 |

PROJECT DATA:

APPLICANT / LESSEE:  
HARBOR REAL ESTATE GROUP

JURISDICTION:

LOS ANGELES COUNTY

TIDAL INFORMATION:

AVERAGE WATER DEPTH: 10'±

OWNER:

LOS ANGELES COUNTY DEPARTMENT OF BEACHES AND HARBORS  
ASSESSORS PARCEL NUMBER: 4224-010-900

PROJECT ADDRESS:

13555 FIJI WAY  
MARINA DEL REY, CA 90292

|                                                                                                                                                                                |                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><u>LESSEE:</u></p> <p>HARBOR REAL ESTATE GROUP<br/>13555 FIJI WAY<br/>MARINA DEL REY, CA 90292</p> <p>ATTN: GREG SCHEM<br/>(310)823-8964 - MAIN<br/>(310)821-0569 - FAX</p> | <p><u>OWNER:</u></p> <p>LOS ANGELES COUNTY<br/>DEPARTMENT OF BEACHES AND HARBORS<br/>13483 FIJI WAY, TR#3<br/>MARINA DEL REY, CA 90292</p> <p>ATTN: PAUL WONG,<br/>DIVISION CHIEF<br/>(310) 305-9533 - MAIN</p> | <p><u>CIVIL/MARINE ENGINEER:</u></p> <p>BLUEWATER DESIGN GROUP<br/>2500 VIA CABRILLO MARINA,<br/>SUITE 200<br/>SAN PEDRO, CA 90731</p> <p>ATTN: JEFF WINTER<br/>(310) 548-3132 - MAIN<br/>(310) 548-1924 - FAX</p>                                               |
| <p><b>PURPOSE:</b><br/>REPLACE EXISTING<br/>103 SLIP MARINA &amp;<br/>EXISTING 3 TRAVEL LIFT PIERS<br/>WITH NEW 101 SLIP MARINA &amp;<br/>3 NEW TRAVEL LIFT PIERS</p>          | <p align="center"><b>THE BOAT YARD</b><br/>MARINA AND TRAVEL LIFT PIERS<br/>REPLACEMENT</p> <p align="center">13555 FIJI WAY<br/>MARINA DEL REY<br/>CALIFORNIA 90292</p> <p align="center">SCALE AS NOTED</p>   | <p><b>REFERENCE:</b><br/><b>PROPOSED:</b><br/>REMOVE &amp; REPLACE EXISTING DOCKS, PIERS, RAMPS &amp;<br/>PILINGS.</p> <p><b>AT:</b> THE BOAT YARD<br/><b>APPLICATION BY:</b><br/>HARBOR REAL ESTATE GROUP<br/><b>SHEET: T1</b><br/><b>DATE: MAY 6, 2013</b></p> |



**LOCATION MAP**  
1" = 500'



**PROJECT SITE**  
**THE BOAT YARD**  
MARINA DEL REY HARBOR  
LATITUDE: 33°58'32" NORTH  
LONGITUDE: 118°26'36" WEST

**VICINITY MAP**  
NTS

**PURPOSE:**  
REPLACE EXISTING  
103 SLIP MARINA &  
EXISTING 3 TRAVEL LIFT PIERS  
WITH NEW 101 SLIP MARINA &  
3 NEW TRAVEL LIFT PIERS

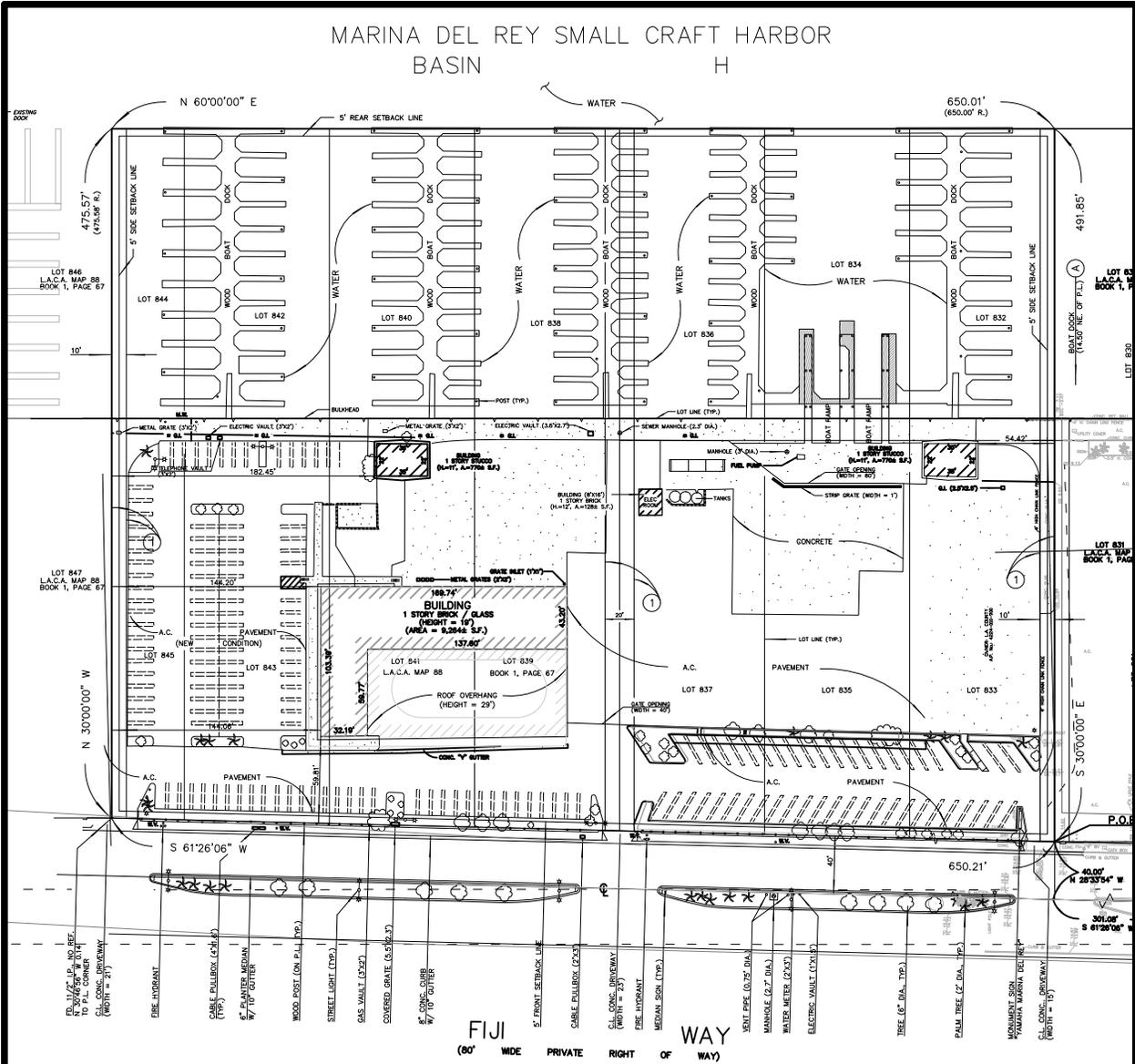
**THE BOAT YARD**  
MARINA AND TRAVEL LIFT PIERS  
REPLACEMENT

13555 FIJI WAY  
MARINA DEL REY  
CALIFORNIA 90292

SCALE AS NOTED

**REFERENCE:**  
**PROPOSED:**  
REMOVE & REPLACE EXISTING DOCKS, PIERS, RAMPS &  
PILINGS.

**AT:** THE BOAT YARD  
**APPLICATION BY:**  
HARBOR REAL ESTATE GROUP  
**SHEET: T2**  
**DATE: MAY 6, 2013**



**EXISTING LAYOUT**  
NTS

| DESCRIPTION   | AREA (sf)     | PILE AREA (sf) | SHADING (sf)  |
|---------------|---------------|----------------|---------------|
| DOCK          | 27,910        | 62             | 27,848        |
| PIERS         | 199           | 27*            | 172           |
| GANGWAYS      | 170           |                | 170           |
| <b>TOTALS</b> | <b>28,279</b> | <b>89</b>      | <b>28,190</b> |

\* EXCLUDING LANDSIDE PILES

**PURPOSE:**  
REPLACE EXISTING 103 SLIP MARINA & EXISTING 3 TRAVEL LIFT PIERS WITH NEW 101 SLIP MARINA & 3 NEW TRAVEL LIFT PIERS

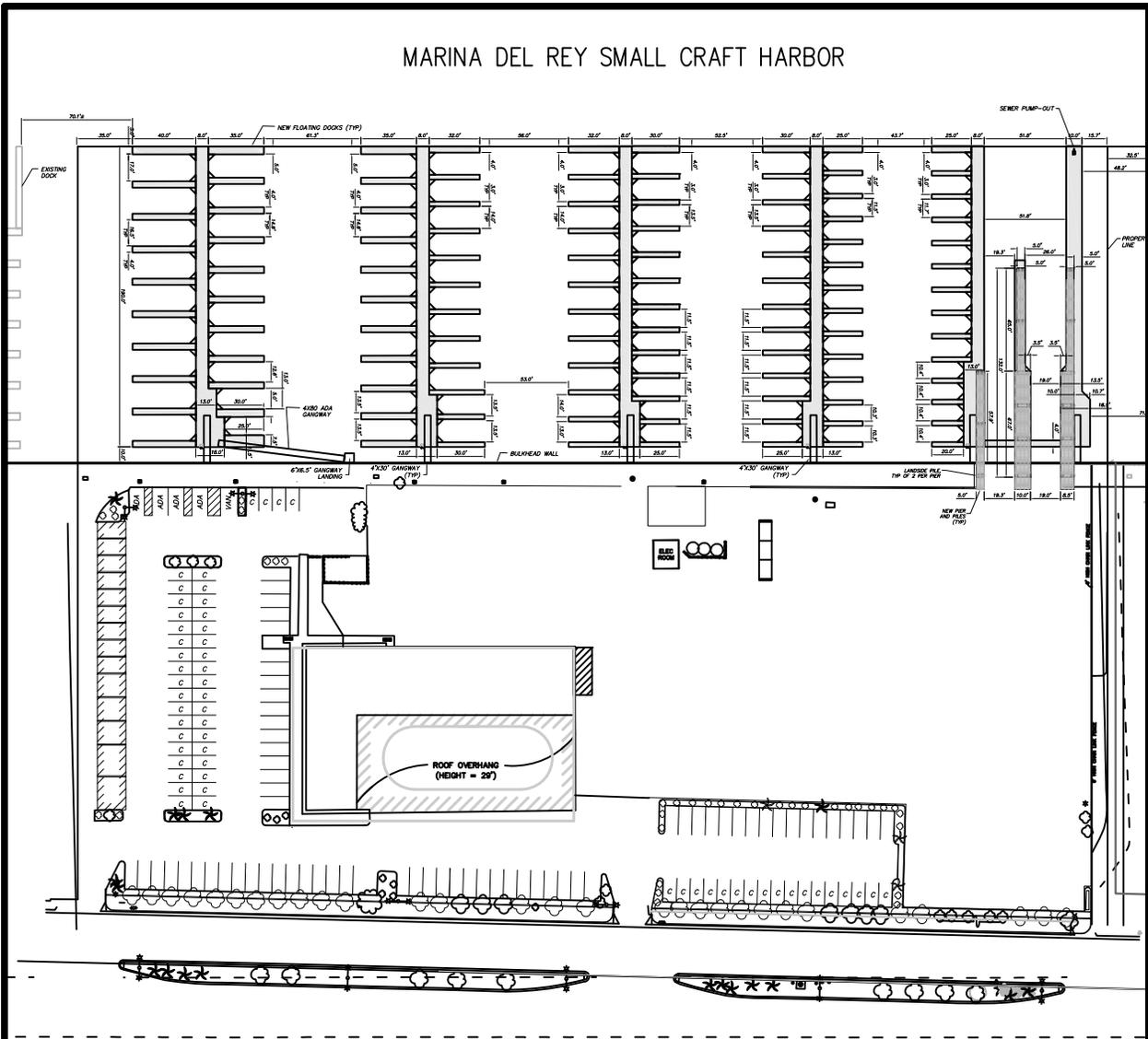
**THE BOAT YARD**  
MARINA AND TRAVEL LIFT PIERS REPLACEMENT

13555 FIJI WAY  
MARINA DEL REY  
CALIFORNIA 90292

SCALE AS NOTED

**REFERENCE:**  
**PROPOSED:**  
REMOVE & REPLACE EXISTING DOCKS, PIERS, RAMPS & PILLINGS.

**AT:** THE BOAT YARD  
**APPLICATION BY:**  
HARBOR REAL ESTATE GROUP  
**SHEET: L-1**  
**DATE: MAY 6, 2013**



**PROPOSED LAYOUT**  
NTS

| DESCRIPTION   | AREA (sf)     | PILE AREA (sf) | SHADING (sf)  |
|---------------|---------------|----------------|---------------|
| DOCK          | 25,107        | 73             | 25,034        |
| PIERS         | 236           | 67*            | 169           |
| GANGWAYS      | 513           |                | 513           |
| PLATFORM      | 40            |                | 40            |
| <b>TOTALS</b> | <b>25,896</b> | <b>140</b>     | <b>25,756</b> |

**LEGEND:**  
 FLOATING DOCK  
 CONCRETE PIER  
 (LOCATED ABOVE DOCK)

\* EXCLUDING LANDSIDE PILES

**PURPOSE:**  
 REPLACE EXISTING  
 103 SLIP MARINA &  
 EXISTING 3 TRAVEL LIFT PIERS  
 WITH NEW 101 SLIP MARINA &  
 3 NEW TRAVEL LIFT PIERS

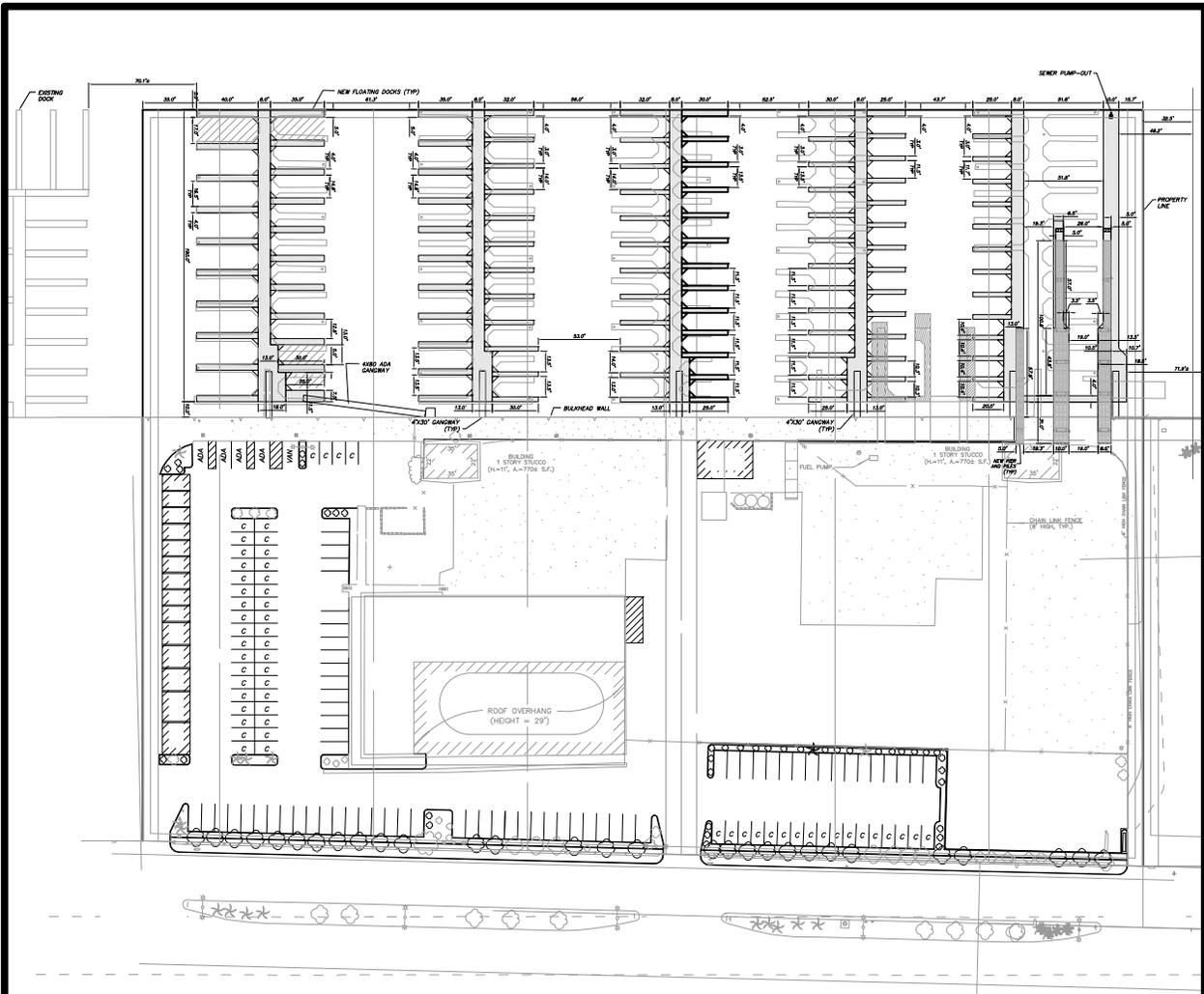
**THE BOAT YARD**  
 MARINA AND TRAVEL LIFT PIERS  
 REPLACEMENT

13555 FIJI WAY  
 MARINA DEL REY  
 CALIFORNIA 90292

SCALE AS NOTED

**REFERENCE:**  
**PROPOSED:**  
 REMOVE & REPLACE EXISTING DOCKS, PIERS, RAMPS &  
 PILLINGS.

**AT: THE BOAT YARD**  
**APPLICATION BY:**  
 HARBOR REAL ESTATE GROUP  
**SHEET: L-2**  
**DATE: MAY 6, 2013**



**PROPOSED LAYOUT OVER EXISTING**  
NTS

**PURPOSE:**  
REPLACE EXISTING  
103 SLIP MARINA &  
EXISTING 3 TRAVEL LIFT PIERS  
WITH NEW 101 SLIP MARINA &  
3 NEW TRAVEL LIFT PIERS

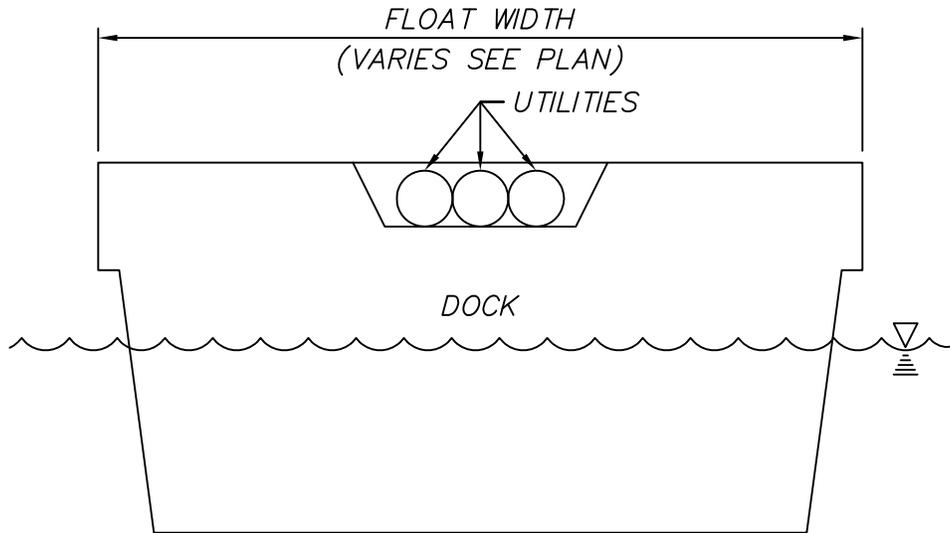
**THE BOAT YARD**  
MARINA AND TRAVEL LIFT PIERS  
REPLACEMENT

13555 FIJI WAY  
MARINA DEL REY  
CALIFORNIA 90292

SCALE AS NOTED

**REFERENCE:**  
**PROPOSED:**  
REMOVE & REPLACE EXISTING DOCKS, PIERS, RAMPS &  
PILINGS.

**AT:** THE BOAT YARD  
**APPLICATION BY:**  
HARBOR REAL ESTATE GROUP  
**SHEET: L-3**  
**DATE: MAY 6, 2013**



TYPICAL DOCK SECTION  
NTS

**PURPOSE:**

REPLACE EXISTING  
103 SLIP MARINA &  
EXISTING 3 TRAVEL LIFT PIERS  
WITH NEW 101 SLIP MARINA &  
3 NEW TRAVEL LIFT PIERS

**THE BOAT YARD**  
MARINA AND TRAVEL LIFT PIERS  
REPLACEMENT

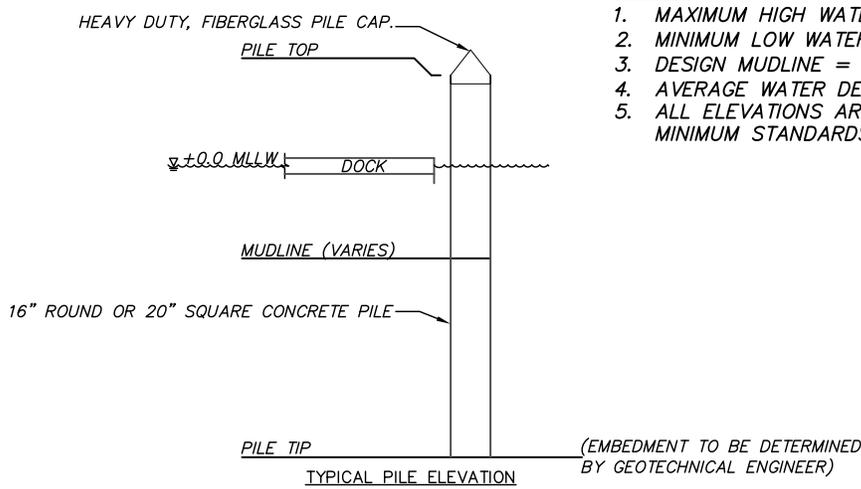
13555 FIJI WAY  
MARINA DEL REY  
CALIFORNIA 90292

SCALE AS NOTED

**REFERENCE:**

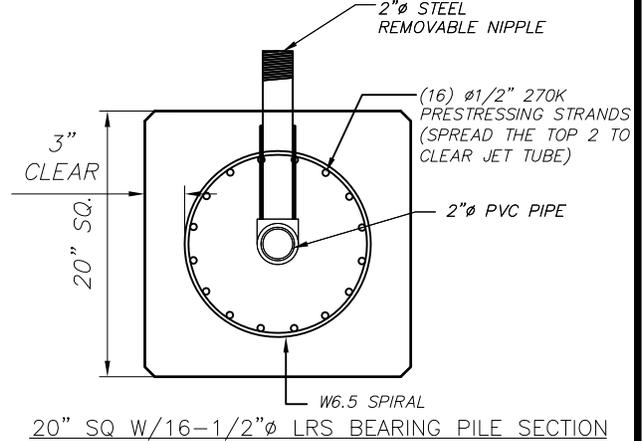
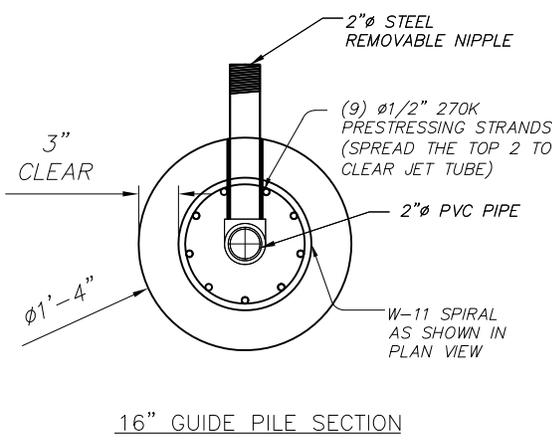
**PROPOSED:**  
REMOVE & REPLACE EXISTING DOCKS, PIERS, RAMPS &  
PILINGS.

**AT:** THE BOAT YARD  
**APPLICATION BY:**  
HARBOR REAL ESTATE GROUP  
**SHEET: D1**  
**DATE: MAY 6, 2013**



**NOTES:**

1. MAXIMUM HIGH WATER ELEVATION = +7.3' MLLW.
2. MINIMUM LOW WATER ELEVATION = -1.8' MLLW.
3. DESIGN MUDLINE = -10' MLLW.
4. AVERAGE WATER DEPTH = 10'±
5. ALL ELEVATIONS ARE PER MARINA DEL REY MINIMUM STANDARDS AND SPECIFICATIONS.



**PURPOSE:**  
 REPLACE EXISTING  
 103 SLIP MARINA &  
 EXISTING 3 TRAVEL LIFT PIERS  
 WITH NEW 101 SLIP MARINA &  
 3 NEW TRAVEL LIFT PIERS

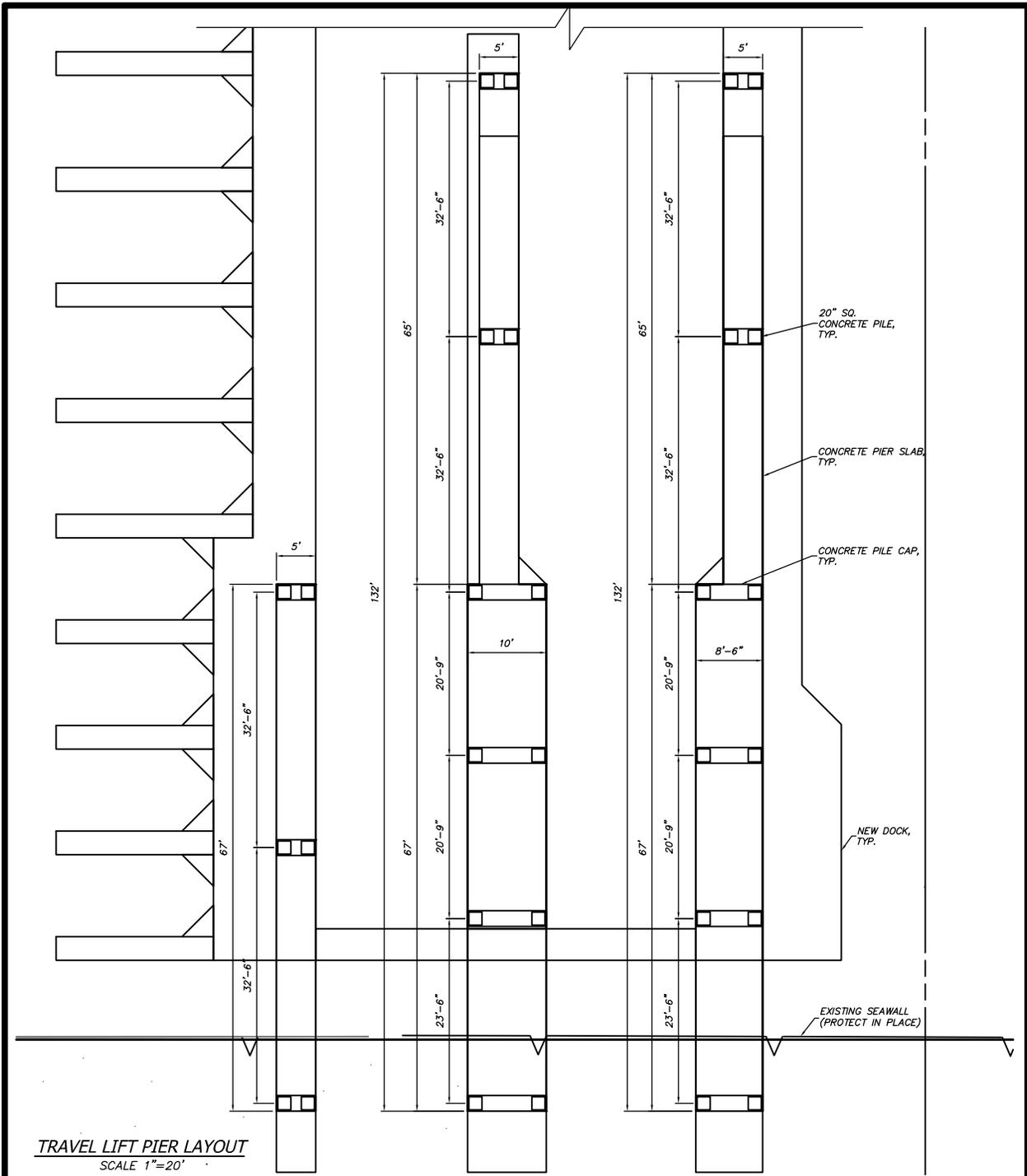
**THE BOAT YARD**  
 MARINA AND TRAVEL LIFT PIERS  
 REPLACEMENT

13555 FIJI WAY  
 MARINA DEL REY  
 CALIFORNIA 90292

SCALE AS NOTED

**REFERENCE:**  
**PROPOSED:**  
 REMOVE & REPLACE EXISTING DOCKS, PIERS, RAMPS &  
 PILLINGS.

**AT:** THE BOAT YARD  
**APPLICATION BY:**  
 HARBOR REAL ESTATE GROUP  
**SHEET: P-1**  
**DATE: MAY 6, 2013**



**TRAVEL LIFT PIER LAYOUT**  
SCALE 1"=20'

**PURPOSE:**  
REPLACE EXISTING  
103 SLIP MARINA &  
EXISTING 3 TRAVEL LIFT PIERS  
WITH NEW 101 SLIP MARINA &  
3 NEW TRAVEL LIFT PIERS

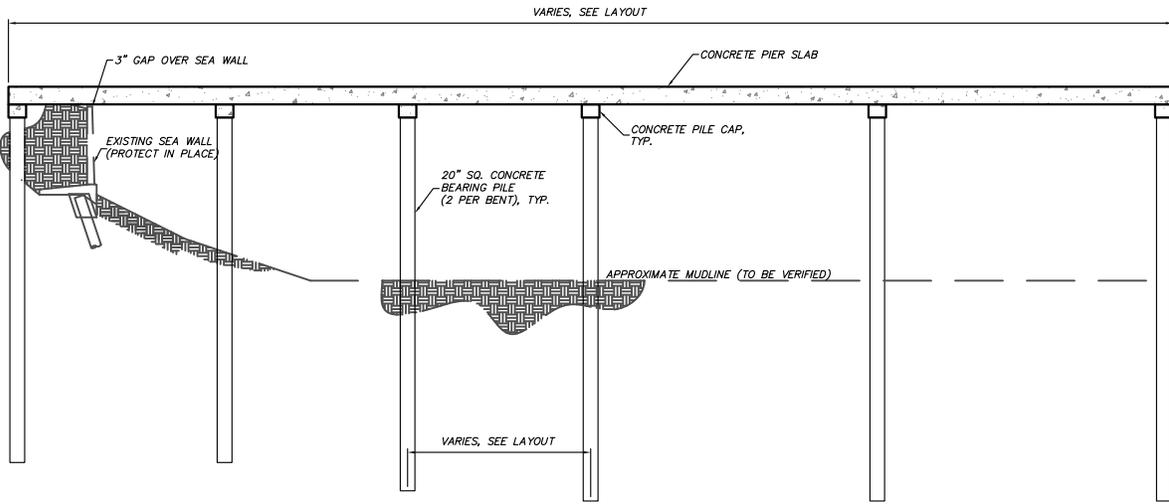
**THE BOAT YARD**  
MARINA AND TRAVEL LIFT PIERS  
REPLACEMENT

13555 FIJI WAY  
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CALIFORNIA 90292

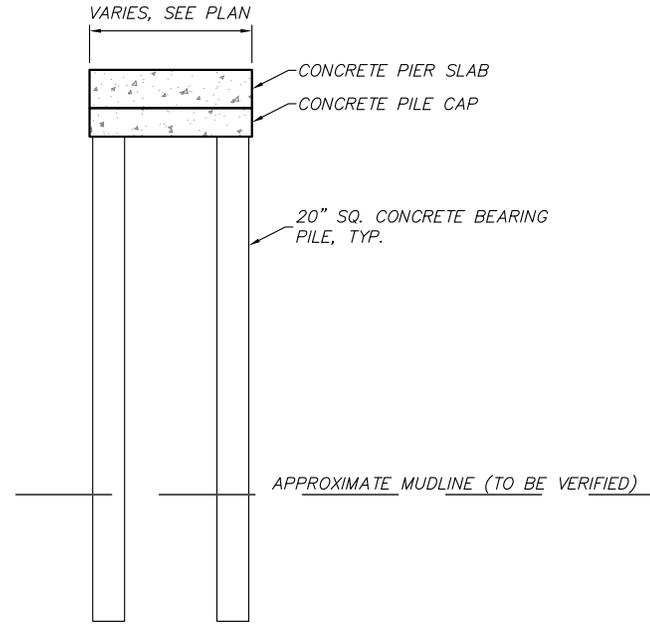
SCALE AS NOTED

**REFERENCE:**  
**PROPOSED:**  
REMOVE & REPLACE EXISTING DOCKS, PIERS, RAMPS &  
PILINGS.

**AT:** THE BOAT YARD  
**APPLICATION BY:**  
HARBOR REAL ESTATE GROUP  
**SHEET: S-1**  
**DATE: MAY 6, 2013**



**TYPICAL TRAVEL LIFT PIER ELEVATION**  
NTS



EMBEDMENT TBD BY GEOTECHNICAL ENGINEER

**TYPICAL TRAVEL LIFT PIER SECTION**  
NTS

**PURPOSE:**  
REPLACE EXISTING  
103 SLIP MARINA &  
EXISTING 3 TRAVEL LIFT PIERS  
WITH NEW 101 SLIP MARINA &  
3 NEW TRAVEL LIFT PIERS

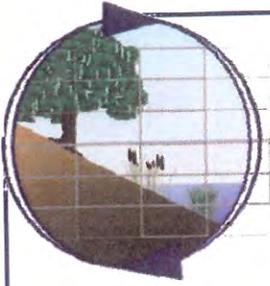
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**PROPOSED:**  
REMOVE & REPLACE EXISTING DOCKS, PIERS, RAMPS &  
PILINGS.

**AT:** THE BOAT YARD  
**APPLICATION BY:**  
HARBOR REAL ESTATE GROUP  
**SHEET: S-2**  
**DATE: MAY 6, 2013**

**Merkel & Associates, Inc.**

5434 Ruffin Road, San Diego, CA 92123

Tel: 858/560-5465 • Fax: 858/560-7779

e-mail: associates@merkelinc.com

June 10, 2013  
M&A #13-003-01

Mr. Greg Schem  
Harbor Real Estate Group  
13555 Fiji Way  
Marina Del Rey, CA 90292

**RE: Baseline Eelgrass Study and Marine Biological Resource Assessment for  
The Boatyard Marina and Travel Lift Piers Replacement Project, Parcel 53  
Marina del Rey, California**

Dear Mr. Schem:

Merkel & Associates, Inc. completed a baseline eelgrass survey and marine biological assessment in support of the Boatyard Marina and Travel Lift Piers Replacement Project, Parcel 53 in Marina de Rey, California. The following letter report summarizes field methods, and results for work completed.

#### **INTRODUCTION AND PROJECT DESCRIPTION**

The project includes a proposal to replace an existing five-dock marina and travel lift piers located in Basin H of Marina del Rey. The site is located on Fiji Way, adjacent to the public launch ramp and Burton Chase Park (Figure 1). The project would include removal of existing piers and lifts and replacement with a new five-dock marina and travel lift piers in the same location (Appendix 1). The site currently supports 103 slips of varying lengths (between 20 and 40 feet [ft]) located along five wooden docks. The proposed project would result in 101 slips (between 20 and 40 ft) located on five docks, along with relocated lift piers. The total length of docks would decrease from 3,160 to 3,075 linear feet (lf). Piles supporting the docks would be removed and new piles would be either jetted or driven in place. The work would result in a dock area reduction from 28,110 square feet (ft<sup>2</sup>) to 25,343 ft<sup>2</sup>.

#### **BIOLOGICAL INVESTIGATIONS**

##### **FIELD INVESTIGATIONS AND ANALYSIS METHODS**

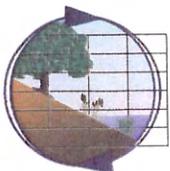
M&A staff, Kira Withy-Allen and Jordan Volker, performed marine biological surveys of the project site on April 30, 2013. Field investigations included a baseline eelgrass survey and subtidal marine habitat surveys.

##### **Baseline Eelgrass Survey**

A baseline assessment of eelgrass resources was performed by collecting field data with an interferometric wide-swath sonar system operating at 468 kHz. The sonar was set to scan out to 35 meters (m) on both the starboard and port channels for a 70-m wide swath. Parallel survey tracklines were navigated through the project survey area until the entire survey footprint was covered (Figure 2). Adjacent tracklines were spaced to allow overlap such that the area directly beneath the sonar head (nadir gap) was filled with valid data. Geographic positioning was provided via a dual-antenna GPS/compass receiver with better than 60-cm accuracy. The collected data were spatially corrected for vessel heave, pitch, and roll via an integrated vessel's motion sensor.

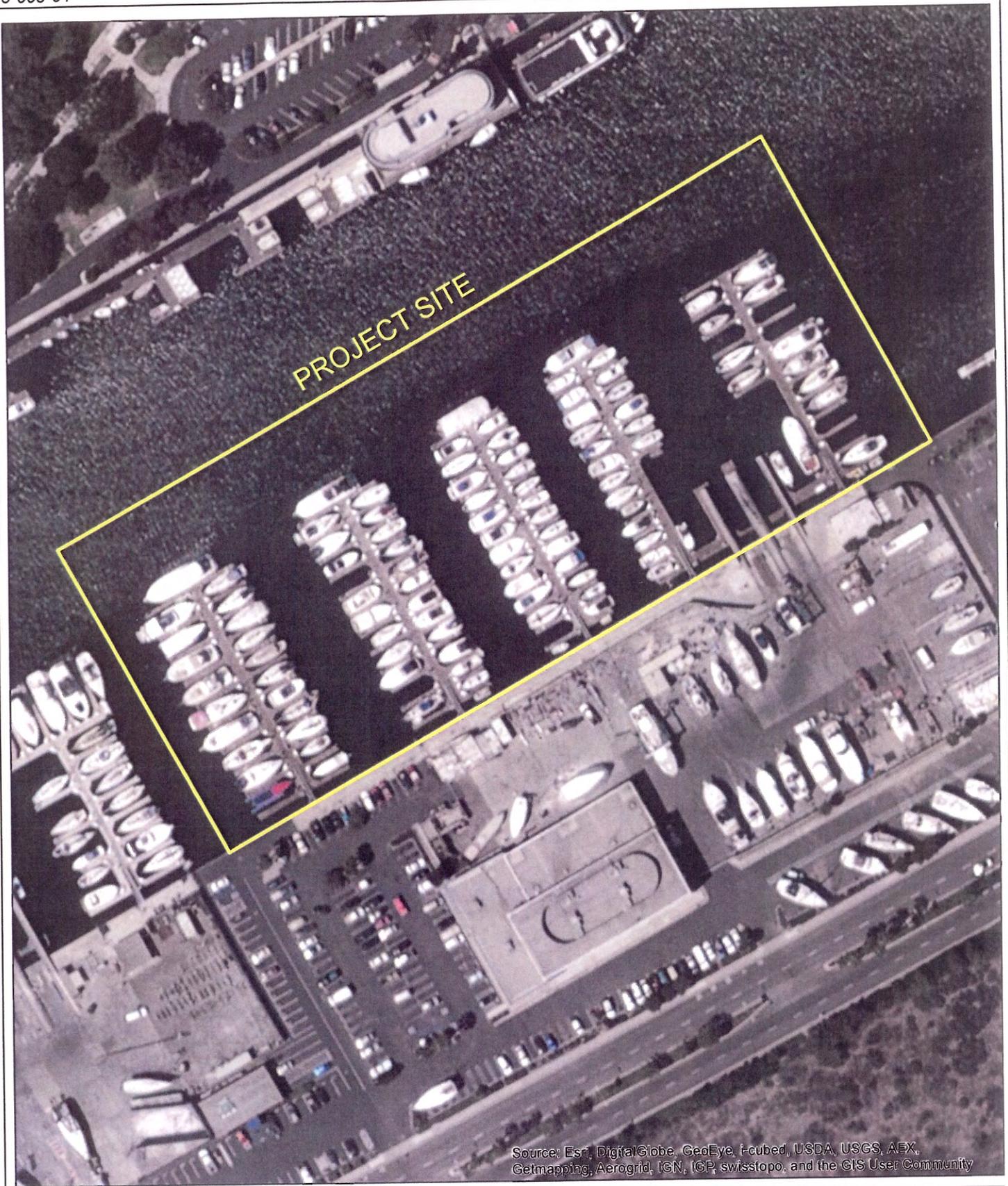


Source: Esri, DigitalGlobe, GeoEye, Earthstar, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



**Project Vicinity Map**  
Marina and Travel Lift Piers Replacement  
Parcel 53

**Figure 1**



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



**Project Site**  
Marina and Travel Lift Piers Replacement  
Parcel 53

**Figure 2**

Digital sonar traces were then immediately field ground-truthed using SCUBA at all locations where sonar data indicated potential presence of eelgrass. Following completion of the field survey, the digital sonar traces (backscatter data) were joined together into a single mosaic and geographically registered using the recorded navigational data. The registered sonar mosaic was then overlaid on an aerial image of the survey area and reviewed for accuracy.

#### **General Marine Resources Surveys**

Subtidal marine surveys were completed by M&A biologist, Kira Withy-Allen, using SCUBA to survey the habitats along the shoreline and docks of the project survey area. Observed flora and fauna were recorded to the lowest possible taxonomic level in the field. Voucher specimens of some species were transported to the laboratory for identification and/or verification.

### **RESULTS**

#### **Physical Site Conditions**

The project site consists of a shoreline dominated by a bulkhead wall and concrete block riprap revetments. Nearshore subtidal habitat consists primarily of unvegetated mud bottom. Tidal elevations within the study area extend to a depth of approximately -1 ft MLLW at the riprap near the bulkhead wall to -12 ft MLLW near the channel. Water visibility at the time of the survey was approximately 1-2 ft. The following section describes the habitat types present within the study area.

#### **Baseline Eelgrass Survey**

The baseline eelgrass survey conducted on April 30, 2013 determined that no eelgrass existed within the study area. The sidescan images did not detect eelgrass. A SCUBA diver ground-truthed sidescan sonar data to verify that eelgrass was not present at the site.

#### **Marine Resources**

##### **Subtidal Unvegetated Habitat**

Bare, silty mud occurs throughout most of the project site, with depths ranging up to -12 ft MLLW. The majority of the project site is considered to be shallow subtidal habitat, with soft bottom consisting of fine sands and silt, and some mussel mats near the riprap.

The only fish observed in subtidal unvegetated habitat was a small goby (Family Gobiidae). However, other demersal fish species including Round stingrays (*Urobatis halleri*) and juvenile barred sand bass (*Paralabrax nebulifer*) are likely to utilize this habitat. No invertebrates were directly observed on the mud bottom, although there were signs of burrowing invertebrate activities, likely from bivalves (*Chione* spp., *Macoma* spp.), amphipods (*Grandidierella japonica*), bay ghost shrimp (*Callinassa californiensis*), burrowing anemones (*Harenactis attenuata*), and tube-dwelling anemones (*Pachycerianthus fimbriatus*).



*The soft bottom was covered with mud that had signs of some mussel mat in the shallow regions and invertebrate burrowing activity in the deeper areas.*

##### **Subtidal Vegetated Habitat**

The only vegetated habitat observed was algal mat fringing the riprap and dock portions of the site. No eelgrass or algal vegetation was observed on the mud bottom.

### Open Water

No fish were observed in the water column during the survey. Some species that may use the area include silversides such as anchovy (*Anchoa spp.*) and topsmelt (*Atherinops affinis*). The occurrence of these species in open water is important to several species of piscivorous birds including pelicans, loons, grebes, cormorants, and mergansers, which are known to forage in this area.

Other fish species with potential to occur within the study area include bottom dwellers such as round stingray, diamond turbot (*Hypsopsetta guttulata*), California halibut (*Paralichthys californicus*), and hornyhead turbot (*Pleuronichthys verticalis*), although the latter species are not typically common in such fine sediment environments. Fish species commonly associated with bulkhead and dock structures in southern California bays include shiner surfperch (*Cymatogaster aggregata*), black surfperch (*Embiotoca jacksoni*), barred sand bass, spotted sand bass (*Paralabrax maculatofasciatus*), yellowfin croaker (*Umbrina roncador*), and bay blenny (*Hypsoblennius gentilis*).

### Bulkhead Wall

The bulkhead wall usually provides habitat for an assemblage of organisms known as the fouling community. The organisms observed at the site include rock scallops (*Crassedoma giganteum*) and native bay mussels (*Mytilus edulis*).

### Subtidal Riprap Revetment

In most areas of the project site, the base of the bulkhead wall is armored with concrete block riprap revetment that extends to roughly -1 foot MLLW where it transitions to either mussel mats or unvegetated mud bottom habitat. Invertebrates were sparse, but the opisthobranch *Navanax inermis*, a Kellett's whelk (*Kelletia kelletii*), an encrusting orange sponge (*Clathria* sp.) and the invasive non-native tunicate, *Styela clava*, were observed.

### Dock and Dock Pilings

Docks and dock pilings occur throughout the project site, offshore from the riprap and bulkhead wall. Dock pilings also provide habitat for the fouling community. Native bay mussels were the dominant species in this habitat. Invasive, stalked tunicate was also observed on the docks. The dock community often attracts schooling fish, which feed on the attached invertebrates and algae, and obtain refuge from predation (Glasby 1999). The species present and the overall complexity of the fouling community on pier pilings are dependent upon a number of factors including tidal elevation and inundation time, light availability, wave exposure, and size and shape of the pilings themselves (Connell and Glasby 1999, Connell 2001). While several studies indicate that man-made marinas do not support



Rock scallops (*Crassedoma giganteum*) attached to the bulkhead wall.



Kellett's whelk (*Kelletia kelletii*) camouflaged within riprap habitat near the bulkhead wall.



An invasive, stalked tunicate (*Styela clava*) attached to subtidal riprap.



Native bay mussels, *Mytilus edulis*, were the dominant species observed on docks and pilings.

the same complexity of organisms as do natural reefs, it is apparent that pier pilings in coastal marinas do provide habitat value for fouling communities and associated fish assemblages (Clynick 2008).

**Sensitive Species**

Species identified as protected, rare, sensitive, threatened or endangered by the USFWS, NMFS, or CDFW, that may be expected in the project area at various times include three bird species and two marine mammals (Table 1). None of these species were observed within the project area at the time of the current survey effort. However, California brown pelican (*Pelecanus occidentalis californicus*) and double crested cormorant (*Phalacrocorax auritus*) are known to frequent Marina del Rey to loaf on docks and forage in waters. These species are not listed as threatened or endangered and do not nest in the area. The state and federally listed endangered California least tern (*Sternula antillarum browni*) does make seasonal foraging use of the waters of Marina del Rey. There are two California least tern nesting areas in Los Angeles County; Venice Beach (1.39 miles southwest of the project site at the mouth of Ballona Creek), and the Port of Los Angeles (approximately 22 miles south of the project site) (CDFG 2012). California least tern are expected to rarely forage within the project area. Harbor seals (*Phoca vitulina*) and sea lions (*Zalophus californianus californianus*) do not breed within the project area but do forage throughout Marina del Rey and are observed in the bay year round.

**Table 1. Protected Species Observed or Expected to Occur within the Study Area**

| Common Name              | Scientific Name                             | Status  | Occurrence at Project Site |
|--------------------------|---------------------------------------------|---------|----------------------------|
| California Brown Pelican | <i>Pelecanus occidentalis californicus</i>  | CDFW FP | Likely                     |
| Double-crested Cormorant | <i>Phalacrocorax auritus</i>                | CDFW WL | Likely                     |
| California Least Tern    | <i>Sternula antillarum browni</i>           | SE, FE  | Likely*                    |
| Harbor Seal              | <i>Phoca vitulina</i>                       | MMPA    | Uncommon                   |
| California Sea Lion      | <i>Zalophus californianus californianus</i> | MMPA    | Uncommon                   |

SE – State Endangered; FE- Federally Endangered; FT – Federally Threatened; CDFW SSC- CDFW Species of Special Concern; CDFW-FP – CDFW Fully Protected Species; CDFW-WL- CDFW Watch List; MMPA – species protected by the Marine Mammal Protection Act

\*Least terns are a migratory species found in the area from approximately April 1 – September 15 of each year.

**PROJECT IMPACTS**

**Marine Resource Impacts**

The following section describes potential impacts of proposed project elements on specific marine resources that occur within the project area.

**Subtidal Unvegetated Habitat**

The Boatyard Parcel 53 docks would be replaced in the same location and configuration with a net reduction in bay coverage of 2,767 ft<sup>2</sup>. Lift piers would be relocated to the eastern boundary of the site, at a location that currently supports a dock. The shading footprint on unvegetated mud bottom habitat would overall be decreased. No adverse impacts to the habitat are anticipated.

### **Subtidal Vegetated Habitat**

No eelgrass was located within the project area and, therefore, impacts are not anticipated.

### **Open Water**

The proposed project would not result in an increase in bay surface area coverage over open water habitat. Therefore, there would be no impact to foraging habitat available for piscivorous avian species. There is an expectation that temporary effects may include localized increases in turbidity and sedimentation from disturbance of docks and pilings during replacement. Given the short-term nature of construction, the temporary impacts to open water would be less than significant.

### **Bulkhead Wall and Subtidal Riprap Revetment**

The proposed project includes removal and replacement of docks and lift piers. Adjacent riprap revetment and bulkhead wall would be left undisturbed. Some fish are expected to temporarily avoid the areas closest to the work during construction due to noise or turbidity, while other species may be expected to form local feeding aggregations if encrusting communities on the piles are damaged by the work. More opportunistic fish species would be expected to temporarily move just outside of the work area, then immediately return to forage on the released or damaged biota. These temporary impacts are not considered to be significant given the continued wide availability of comparable riprap and bulkhead habitat adjacent of the project site that would serve as a temporary refuge.

### **Docks and Dock Pilings**

The proposed project would result in removal and replacement of docks and dock pilings. Construction would have temporary impacts on the existing fouling communities within the dock footprint and area immediately around the piles. In addition, project construction could result in short-term temporary displacement of some of the piling fish community due to the short-term loss of pile habitat, underwater pressure waves associated with pile driving, and increased turbidity. However, following construction, an encrusting algal and invertebrate community would be anticipated to rapidly colonize the new docks and piles. Fouling organisms are typically rapid recruiters to newly available space, though recruitment on pier pilings is dependent upon a number of factors including degrees of shading, position of piles relative to the shore and seafloor, type of substrate, and patterns of currents and water flow around pilings (Connell 2001, Glasby 1999, Connell and Glasby 1999, Davis et al 2002).

Although fish kills have been reported in association with very large diameter steel pile driving operations such as the San Francisco Oakland Bay Bridge Project and the Benecia Martinez Bridge, such impacts would not be expected to result from the pile driving or jetting associated with the proposed project. The large bridge projects involve the placement of enormous steel piles that are being driven with tremendous hammer energy generating pressure waves comparable to submerged high explosive detonations. There is no evidence based on numerous comparable projects that would suggest that the equipment and energy necessary to drive the smaller piles of this project would result in the mortality of fish impacts.

Temporary impacts to dock and dock pilings associated fish and invertebrate communities are not considered to be significant.

### ***Sensitive Species Impacts***

There were no sensitive species observed within the project area during the field survey. The project site does not feature unique or rare habitats whose alteration would significantly impact sensitive species in the area. A discussion of the likelihood of the sensitive species to occur and/or be impacted by the project is discussed below.

### **Birds**

Sensitive bird species that could potentially occur within the project area on a year round basis include the California brown pelican and double-crested cormorant. The brown pelican and double-crested cormorant are commonly observed in the bay and is found in small numbers near the mouth of Marina del Rey. No large roosting aggregations of either species occur in the project area. The project would not result in a net loss of open water foraging habitat; however, temporarily increased turbidity associated with construction could potentially reduce the forage efficacy of these species within more turbid areas while concentrating foraging on aggregated prey fish at the periphery of the work area. The available open water habitat within the rest of Marina del Rey and the nearshore coastal waters would provide ample alternative foraging opportunities and the temporary nature of the work would make this level of disturbance not significant.

During the California least tern breeding season, April to October, the endangered least tern forges within Marina del Rey. It is presumed that following initial migration, these birds are all associated with the Venice Beach nesting colony located approximately 1.39 miles southeast of the proposed project site at the mouth of Ballona Creek. Proposed work is slated to occur within an active marina and work would be expected to temporarily increase turbidity associated with project construction could potentially reduce the forage efficacy of this species within the local plume while concentrating prey fish around the plume, enhancing foraging opportunities along the edge of the plume. The effects of local turbidity are expected to be short term and not impacting on the terns given the small scale of the project area relative to available foraging areas as well as the anticipated localized effects on foraging distribution. Locally, project results in a net reduction of bay coverage and thus more available water foraging habitat during subsequent post-construction years. With the short-term and minor nature of construction turbidity generation coupled with the long-term gains in open water, the proposed project is not expected to result in significant impacts to least terns.

### **Mammals**

Harbor seals and California sea lions are observed commonly in Marina del Rey. There are no established haul-out, foraging, or breeding areas used by these or other marine mammals within the project area or vicinity, although individuals may make occasional transient use of the area. Construction is anticipated to be of a short duration and may result in temporary displacement of transient mammals due to elevated activity levels and both above and in water noise generation from equipment and pile driving. There is a limited risk of hearing impact to mammals associated with noise generation in the water as a result of pile driving near mammals; however risks can be greatly reduced by implementation of construction period impact minimization measures. The potential to adversely affect marine mammals is considered significant and readily mitigable by incorporation of construction measures to avoid potential harm to marine mammals.

## **MITIGATION**

### **MARINE RESOURCE MITIGATION**

As discussed above, the proposed project would result in a 2,767-ft<sup>2</sup> net reduction of the existing bay surface coverage while reconstructing the marina facility in much the same area as presently exists. The work would include marine structure demolition and replacement, including pulling and replacing piles. No eelgrass exists within the project area and the project would not result in impacts to rip rap or bulkhead communities, however the fouling invertebrate communities and fish associated with existing docks and piles would be temporarily impacted during project construction. These habitat impacts are not considered to be significant. Marine communities and avian species

use within the area may be temporarily affected during construction but effects are considered to be minor and would not be considered significant. Temporary impacts to water quality could occur during dock and pile removal and installation of new piles. These impacts are considered to be less than significant given the localized area and short-term duration of the work combined with the lack of sensitive marine communities within the area.

A low potential but significant concern exists that marine mammals may be adversely affected by noise generated during pile driving. To mitigate this potential impact, the following measures are recommended:

- 1) If in-water construction vessels are utilized, the vessels shall not exceed existing posted speed for the area.
- 2) During impact hammer pile-driving activities, a qualified mammal observer shall conduct monitoring within 500 ft of construction activities. The contractor shall halt work if any observations of marine mammals are made within 500 ft of the work. Work shall not recommence until a observer determines that the mammal(s) have left the area or is located at a safe distance from the work area given the type of piles being driven and the impact hammer being used.
- 3) When performing impact pile driving, the contractor shall commence work with a few short blows followed by a 5-minute period of no pile driving, prior to commencing full pile driving activities. The purpose of this activity is to encourage mammals in the area to leave the project site prior to commencement of work. A qualified mammal observer shall then commence monitoring as described above to determine if mammals are in the area.

## **CONCLUSIONS**

The Boatyard Marina and Travel Lift Piers Replacement Project, Parcel 53, involves the removal and replacement of docks and piles, as well as relocation of travel lift piers. The project would maintain the same footprint as the existing docks, and would result in a net decrease in number (from 103 to 101) and length (from 3,160 to 3,075 lf) of slips. Three short lift piers would be reconfigured into two longer piers at the eastern boundary of the site; with a footprint that partially overlaps the existing dock footprint. In addition, the overall area of over water dock would be reduced by 2,767 ft<sup>2</sup>, resulting in a net decrease in bay coverage. Eelgrass was not located on site and is not anticipated to occur in the project area. Impacts associated with project construction are considered to be temporary and not significant, or temporary and significant but mitigable with protective measures taken during construction.

If you have questions regarding this report or you need additional information, please do not hesitate to call Holly Henderson or me at (858) 560-5465.

Sincerely,



Keith Merkel  
Principal Consultant

## REFERENCES

- Clynick, B.G. 2008. Characteristics of an urban fish assemblage: distribution of fish associated with coastal marinas. *Marine Environmental Research* 65:18-33.
- [CDFG] California Department of Fish and Game. 2012. California Least Tern Breeding Survey – 2011 Season. Nongame Wildlife Program. San Diego, CA. May 2012.
- Connell, S.D. 2001. Urban structures as marine habitats: an experimental comparison of the composition and abundance of subtidal epibiota among pilings, pontoons, and rocky reefs. *Marine Environmental Research* 52:115-125.
- Connell, S.D. and T.M. Glasby. 1999. Do urban structures influence local abundance and diversity of subtidal epibiota? A case study from Sydney Harbour, Australia. *Marine Environmental Research* 47:373-387.
- Davis, J.L.D., L.A. Levin, and S.M. Walther. 2002. Artificial armored shorelines: sites for opencoast species in a southern California bay. *Marine Biology* 140:1249-1262.
- Glasby, T.M. 1999. Differences between subtidal epibiota on pier pilings and rocky reefs at marinas in Sydney, Australia. *Estuarine, Coastal and Shelf Science* 48:281-290.
- [NMFS] National Marine Fisheries Service, Southwest Region, 1991. Southern California Eelgrass Mitigation Policy (adopted July 31, 1991 rev. 11).
- [NMFS] National Marine Fisheries Service. 1998. Essential fish habitat: new marine fish habitat conservation mandate for federal agencies. National Marine Fisheries Service Southwest Regional Office.
- [NMFS] National Marine Fisheries Service Southwest Region, 2004. *Caulerpa* Control Protocol (Version 1.2b).

**APPENDIX 1. THE BOATYARD MARINA AND TRAVEL LIFT PIERS REPLACEMENT PARCEL 53 PLANS**

SHEET LIST

- T-1 TITLE SHEET
- T-2 AERIAL PLAN P53
- DK-1 EXISTING PLAN P53
- DK-2 PROPOSED PLAN P53
- DK-3 PROPOSED PLAN AREA 1
- DK-4 PROPOSED PLAN AREA 2
- DK-5 PHOTO INDEX P53
- DK-6 PHOTOS P53

# THE BOATYARD

## MARINA AND TRAVEL LIFT PIERS REPLACEMENT

### PARCEL 53

**PROJECT DESCRIPTION**

REPLACE EXISTING 5 DOCK MARINA AND TRAVEL LIFT PIERS WITH NEW 5 DOCK MARINA AND NEW TRAVEL LIFT PIERS.

**OWNER:**

LOS ANGELES COUNTY DEPARTMENT OF BEACHES AND HARBORS  
 ATTN: SANTOS KREIMANN, DIRECTOR  
 13837 FIJI WAY  
 MARINA DEL REY, CA 90292

**LESSEE:**

GREG SCHEM  
 HARBOR REAL ESTATE GROUP  
 13555 FIJI WAY  
 MARINA DEL REY, CA 90292

**ENGINEER:**

BLUWATER DESIGN GROUP  
 TIM BAZLEY, P.E.  
 2500 VIA CABRILLO MARINA, SUITE 200  
 SAN PEDRO, CA 90731  
 (310) 548-3132 - MAIN  
 (310) 548-1924 - FAX

**CONTRACTOR:**

TBD



VICINITY MAP

**PROJECT DATA**

LA COUNTY ZONING: M1  
 ASSASSINATE NUMBER: 14-010-900  
 COUNTY MAP NUMBER: 51  
 PROJECT ADDRESS: 13555 FIJI WAY  
 MARINA DEL REY, CA 90292

APPROVAL IN CONCEPT SUBMITTAL (NOT FOR CONSTRUCTION)

**PROJECT**  
 THE BOATYARD  
 MARINA AND TRAVEL  
 LIFT PIERS  
 REPLACEMENT  
 PARCEL 53

**CLIENT**  
 HARBOR  
 REAL ESTATE  
 GROUP

|     |          |    |      |
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| NO. | REVISION | BY | DATE |
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**BLUWATER**  
 Design Group  
 Planning and Engineering Services  
 For Marinas and Waterfront Resorts

2500 Via Cabrillo Marina, Suite 200  
 San Pedro, CA 90731  
 Tel: 310 548 3132  
 Fax: 310 548 1924

**TITLE SHEET**

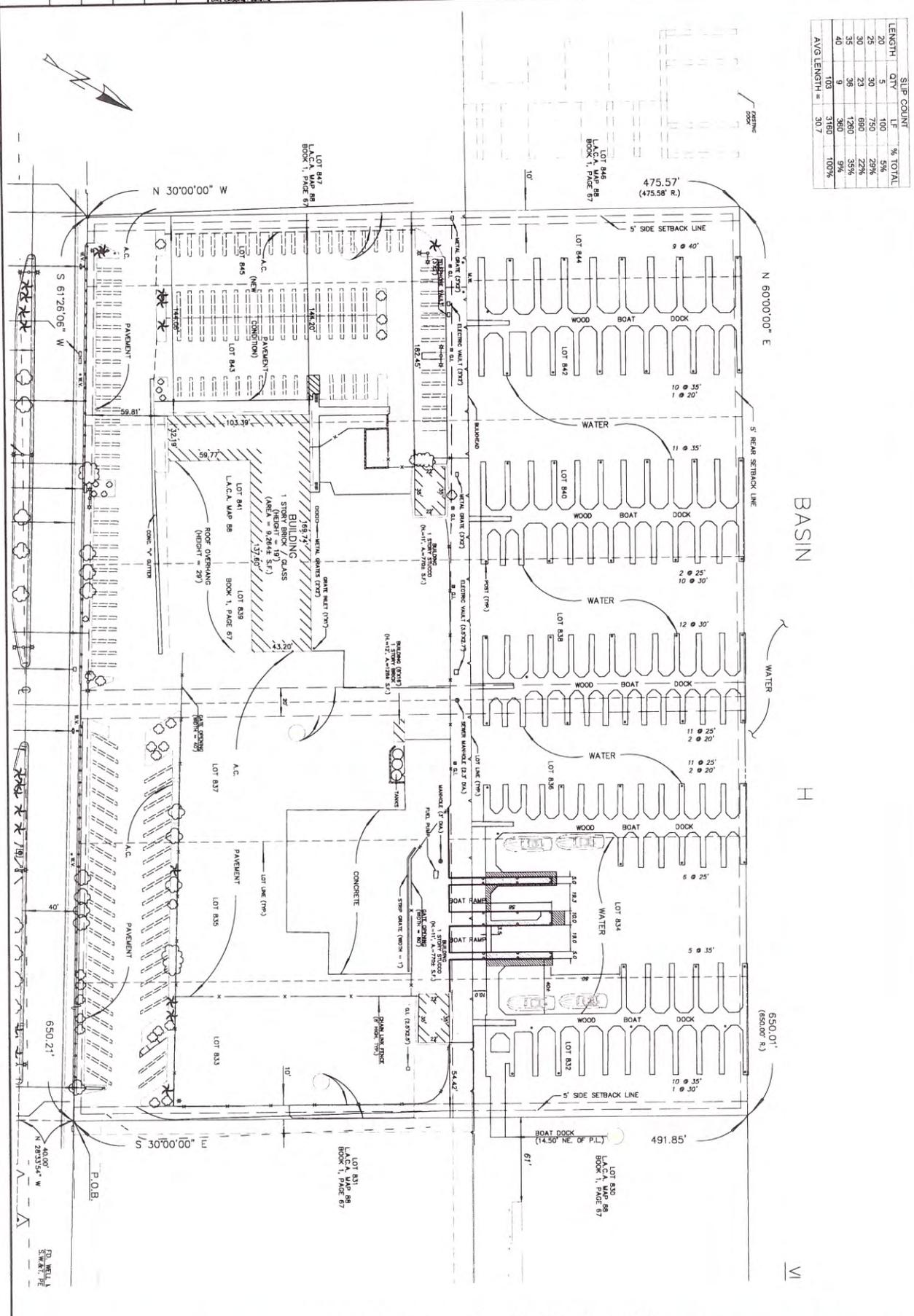
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| AS SHOWN | 05-10-11 |
| SHEET    | T-1      |
| SHEET #  | - of -   |



Imagery Date: Nov 15, 2009  
 607 ft  
 39°58'32.41" N 118°26'33.67" W elev. 15 ft  
 © 2011 Google  
 © 2010 Google  
 Eye alt: 2083 ft

**APPROVAL IN CONCEPT SUBMITTAL (NOT FOR CONSTRUCTION)**

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|-----------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------|--------------------------------------|
| <b>PROJECT</b><br>THE BOATYARD<br>MARINA AND TRAVEL<br>LIFT PIERS<br>REPLACEMENT<br>PARCEL 53 | <b>CLIENT</b><br>HARBOR<br>REAL ESTATE<br>GROUP | NO.      REVISION      BY      DATE                        | <br>Planning and Engineering Services<br>For Marinas and Waterfront Resorts | 2300 Via Cabrillo Marina, Suite 200<br>San Pedro, CA 90731<br>Tel: 310 948 3132<br>Fax: 310 948 1924 | <b>AERIAL PLAN</b><br><b>P53</b> | DATE      DATE<br>NONE      05-10-11 |
|                                                                                               |                                                 | JWB                                                        |                                                                                                                                                                |                                                                                                      |                                  | SHEET #      - of -                  |
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| LENGTH       | QTY | LF   | % TOTAL |
|--------------|-----|------|---------|
| 20           | 5   | 100  | 5%      |
| 25           | 30  | 750  | 29%     |
| 30           | 23  | 690  | 22%     |
| 35           | 36  | 1260 | 35%     |
| 40           | 9   | 360  | 9%      |
| Avg Length = | 103 | 3160 | 100%    |
|              |     | 30.7 |         |

APPROVAL IN CONCEPT SUBMITTAL (NOT FOR CONSTRUCTION)

PROJECT  
**THE BOATYARD MARINA AND TRAVEL LIFT PIERS REPLACEMENT PARCEL 53**

CLIENT  
**HARBOR REAL ESTATE GROUP**

| NO. | REVISION | DATE |
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**BLUEWATER**  
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**EXISTING SITE SURVEY P53**

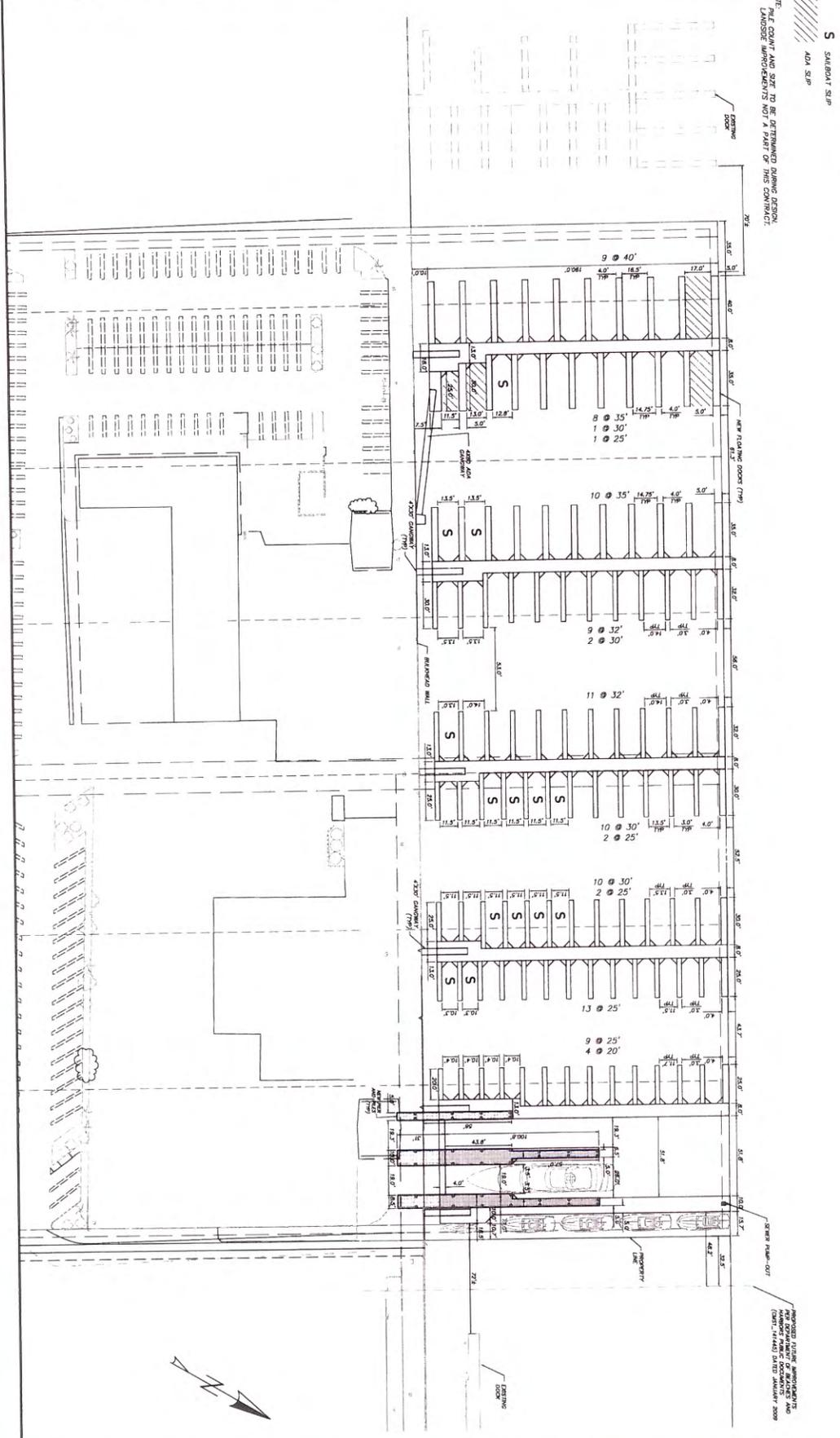
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| PROJECT | DK-1     |
| SHEET # | - of -   |

STATUS:  X

DK2 Site Plan P53.dwg

| SLIP COUNT          |            |             |             |
|---------------------|------------|-------------|-------------|
| LENGTH              | QTY        | LF          | % TOTAL     |
| 20                  | 4          | 80          | 4%          |
| 25                  | 27         | 675         | 27%         |
| 30                  | 23         | 690         | 23%         |
| 32                  | 20         | 640         | 20%         |
| 35                  | 18         | 630         | 18%         |
| 40                  | 9          | 360         | 9%          |
| <b>TOTAL</b>        | <b>101</b> | <b>3075</b> | <b>100%</b> |
| <b>AVG LENGTH =</b> |            | <b>30.4</b> |             |

NOTE:  
 1. PILE COUNT AND SIZE TO BE DETERMINED DURING DESIGN.  
 2. LANDSCAPE ARCHITECTURE TO BE A PART OF THE CONTRACT.



**APPROVAL IN CONCEPT SUBMITTAL (NOT FOR CONSTRUCTION)**

PROJECT  
**THE BOATYARD MARINA AND TRAVEL LIFT PIERS REPLACEMENT PARCEL 53**

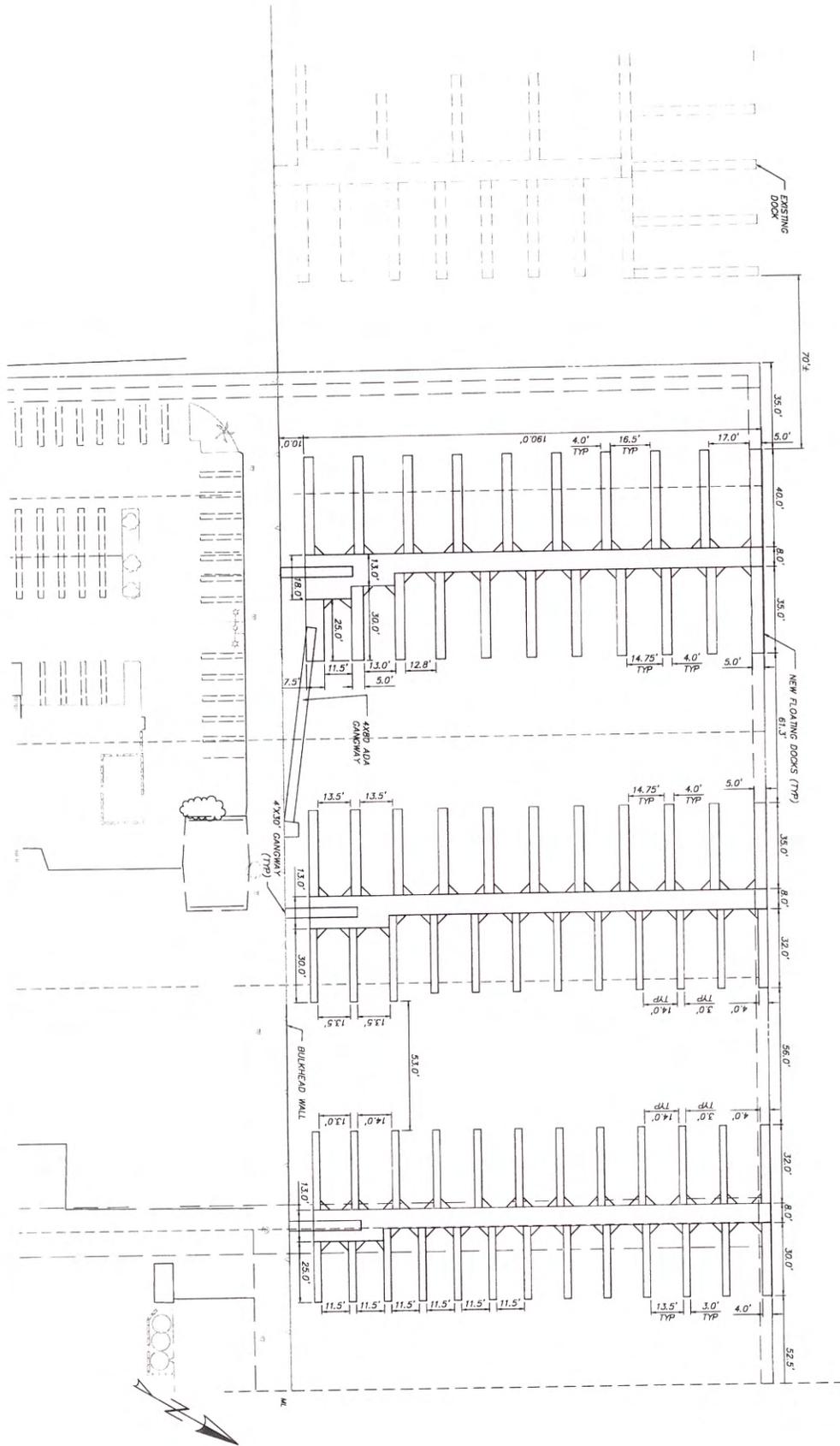
CLIENT  
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**BLUEWATER DESIGN GROUP**  
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 For Marinas and Waterfront Resorts

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**PROPOSED SITE PLAN P53**

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| SCALE   | DATE     |
| 1"=30'  | 05-10-11 |
| JOB NO. | -        |
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| SHEET # | - of -   |



APPROVAL IN CONCEPT SUBMITTAL (NOT FOR CONSTRUCTION)

PROJECT  
**THE BOATYARD  
 MARINA AND TRAVEL  
 LIFT PIERS  
 REPLACEMENT  
 PARCEL 53**

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 San Pedro, CA 90731  
 Tel: 310 548 3132  
 Fax: 310 548 1924

DESIGNED BY: -  
 DRAWN BY: -  
 CHECKED BY: -

**PROPOSED  
 SITE PLAN  
 AREA 1**

| SCALE   | DATE     |
|---------|----------|
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| SHEET # | - of -   |







2



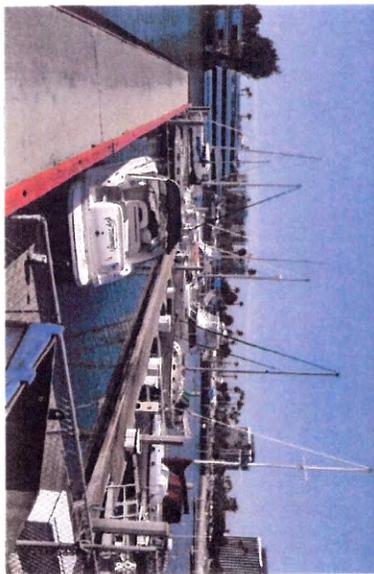
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APPROVAL IN CONCEPT SUBMITTAL (NOT FOR CONSTRUCTION)

PROJECT  
**THE BOATYARD  
 MARINA AND TRAVEL  
 LIFT PIERS  
 REPLACEMENT  
 PARCEL 53**

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**HARBOR  
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|             |  |
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| DESIGNED BY |  |
| DRAWN BY    |  |
| CHECKED BY  |  |

**PHOTOS  
 P53**

|               |          |
|---------------|----------|
| DATE AS SHOWN | 05-10-11 |
| JOB NO.       | -        |
| SHEET         | DK-6     |
| SHEET #       | - of -   |

# ATTACHMENT C

South Coast : [Map](#) | [Projects](#) | [Summaries](#)

Layers ▾ | [Legends](#) ▾ | [Basemap](#) ▾ | [Overlays](#) ▾

project site

