

California Regional Water Quality Control Board, San Diego Region

April 22, 2014

Certified Mail – Return Receipt Requested
Article Number: 7011 0470 0002 8952 6017

Mr. William L. Roberts
Shelter Island Yachtways, Ltd.
2330 Shelter Island Drive, Suite 1
San Diego, CA 92106-3127

**In reply/refer to:
802270:lhonna**

**Subject: Clean Water Act Section 401 Water Quality Certification No. R9-2013-0194
for the Shelter Island Boatyard Crane Replacement and Pier Addition
Project**

Mr. Roberts:

Enclosed find Clean Water Act Section 401 Water Quality Certification No. R9-2013-0194 (Certification) issued by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) in response to the application submitted by Shelter Island Yachtways, Ltd. for the Shelter Island Boatyard Crane Replacement and Pier Addition Project (Project). A description of the Project and Project location can be found in the Certification and site maps which are included as attachments to the Certification.

Shelter Island Yachtways, Ltd. is enrolled under State Water Resources Control Board Order No. 2003-017-DWQ as a condition of the Certification and is required to implement and comply with all terms and conditions of the Certification in order to ensure that water quality standards are met for the protection of wetlands and other aquatic resources. Failure to comply with this Certification may subject Shelter Island Yachtways, Ltd. to enforcement actions by the San Diego Water Board including administrative enforcement orders requiring Shelter Island Yachtways, Ltd. to cease and desist from violations or to clean up waste and abate existing or threatened conditions of pollution or nuisance; administrative civil liability in amounts of up to \$10,000 per day per violation; referral to the State Attorney General for injunctive relief; and, referral to the District Attorney for criminal prosecution.

Any petition for reconsideration of this Certification must be filed with the State Water Resources Control Board within 30 days of certification action pursuant to section 3867 of Title 23 of the California Code of Regulations (23 CCR). If no petition is received, it will be assumed that Shelter Island Yachtways, Ltd. has accepted and will comply with all terms and conditions of the Certification.

In the subject line of any response, please include reference number 802270:lhonma. For questions or comments, please contact Lisa Honma by telephone at (619) 521-3367 or by email at Lisa.Honma@waterboards.ca.gov.

Respectfully,



DAVID W. GIBSON
Executive Officer

Enclosure:

Clean Water Act Section 401 Water Quality Certification No. R9-2013-0194 for the Shelter Island Boatyard Crane Replacement and Pier Addition Project

DWG:jgs:db:kkd:lbh

cc: (via email)

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State Water Resources Control Board, Division of Water Quality
401 Water Quality Certification and Wetlands Unit
Stateboard401@waterboards.ca.gov

Tech Staff Info & Use	
Certification No.	R9-2013-0194
Party ID	40728
WDID	9 000002683
Regulatory ID	394425
Place ID	802270
Person ID	306426

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

2375 Northside Drive, Suite.100, San Diego, CA 92108
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Clean Water Act Section 401 Water Quality Certification
and Waste Discharge Requirements
for Discharge of Dredged and/or Fill Materials

PROJECT: Shelter Island Boatyard Crane Replacement and Pier Addition Project
Certification Number R9-2013-0194
WDID: 9 000002683

Reg. Meas. ID: 394425 Place ID: 802270 Party ID: 40728 Person ID: 306426

APPLICANT: Shelter Island Yachtways, Ltd.
2330 Shelter Island Drive, Suite 1
San Diego, CA 92106-3127

ACTION:

<input type="checkbox"/> Order for Low Impact Certification	<input type="checkbox"/> Order for Denial of Certification
<input checked="" type="checkbox"/> Order for Technically-conditioned Certification	<input type="checkbox"/> Waiver of Waste Discharge Requirements
<input checked="" type="checkbox"/> Enrollment in SWRCB GWDR Order No. 2003-017-DWQ	<input type="checkbox"/> Enrollment in Isolated Waters Order No. 2004-004-DWQ

PROJECT DESCRIPTION

An application dated December 26, 2013 was submitted by Shelter Island Yachtways, Ltd. (hereinafter Applicant), for Water Quality Certification pursuant to section 401 of the Clean Water Act (33 U.S.C. § 1341) for the proposed Shelter Island Boatyard Crane Replacement and Pier Addition Project (Project). The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) deemed the application to be complete on January 27, 2014. The Applicant proposes to discharge dredged or fill material to waters of the United States and/or State associated with construction activity at the Project site. The Applicant is also seeking a Section 10 Rivers and Harbors Act Letter of Permission from the United States Army Corps of Engineers for the Project (USACE File No. SPL-2013-00555-RRS).

The Project is located within the City of San Diego, San Diego County, California at 2330 Shelter Island Drive. The Project center reading is located at latitude 32.718965 and longitude -117.223946. The Applicant has paid all required fees for this Certification in the amount of \$1,601. On December 30, 2013, the San Diego Water Board provided public notice of the Project application pursuant to California Code of Regulations, title 23, section 3858 by posting information describing the Project on the San Diego Water Board's web site and providing a period of twenty-one days for public review and comment. No comments were received.

The Applicant proposes to update and modernize the equipment and facilities at the Shelter Island Boatyard (Project Site). This Project will allow the Applicant to accommodate an increased size (length, beam, and displacement) of recreational vessel and the niche service of yacht extensions while still servicing smaller vessels. Implementation of the Project will result in an approximately 7-square foot net decrease in San Diego Bay occupied surface area coverage resulting in a net gain in open water area.

To update and modernize the equipment and facilities at the Project Site, the Project proposes the following improvements:

- 1) Replacement of two existing boat gantry cranes (one at 35 ton lift capacity and one at 70 ton lift capacity) with two new gantry cranes with increased lift capacities (one at a 70 ton lift capacity and one at a 150 ton lift capacity);
- 2) Construction of two new 90-foot long parallel concrete piers with a 28-foot maximum clear width and a 33-foot wheelbase and installation of associated floating docks and pier piles for a total of 1,240 square feet of over-water improvements;
- 3) Removal of floating docks and four finger docks, eliminating a total of 1,247 square feet of occupied surface area coverage in San Diego Bay for an overall net decrease of 7 square feet of occupied surface area coverage;
- 4) Installation of a concrete abutment supported by bearing piles;
- 5) Demolition of two existing maintenance area storage sheds (336 square feet) and a portion of an on-site timber-frame shop structure (565 square feet);
- 6) Replacement of approximately 9,812 square feet of existing concrete slab; and
- 7) Repair of two sections (Area T6 and Area T7) of existing bulkhead. Repair work consists of protective coating application to existing bulkhead wall. The coating will be applied with the Carboline process, which employs the product Reactamine ET, an extra-tough, abrasion-resistant elastomer coating with extremely fast cure times and zero volatile organic compounds. The bulkhead surface will be prepared at low tide using hydrowash and vacuum sanding. The Reactamine ET coating will be applied to fill in gaps and cover rusted steel on the existing floating dock. Over-water work best management practices will include diaper netting, vacuum tools and plywood templates shaped to conform to the contours. No in-water work is involved and there will be no discharges into San Diego Bay from the existing bulkhead repair work process.

Twenty new piles will be installed on the waterside to support the new piers and 18 new piles will be installed on the landside to support the concrete slab abutment. The new piles will be 20-inch diameter round pre-stressed concrete piles, approximately 54 feet in length, and will be pile driven a minimum of 20 feet into the bay floor. Work requiring construction within San Diego Bay waters (including pile driving) will occur over an approximately 2- to 3-week span, assuming the installation of an average of 2 piles in the water per day.

The underwater pile driving will disrupt benthic habitats and organisms, directly through removal or burial, or indirectly through effects related to the disturbance of bottom sediments. This impact is less than significant because benthic communities are anticipated to recolonize disturbed sediment areas within 2 to 6 months. Additionally, any nearby fish, marine

mammals, or sea turtles may be affected by noise and vibration from pile installation equipment; however, the potential for exposure and/or injury is considered less than significant. The Project area does not contain sea turtle habitat or eelgrass.

A barge will be used for the construction of the ends of the new piers. The Project consists of various phases of construction: demolition work, waterside pier construction, new dock construction, landside work, and bulkhead repair/maintenance work. Construction is scheduled to begin in 2014 and to be completed within 6 months of project approvals by the San Diego Unified Port District and responsible resource agencies.

Construction-related turbidity impacts in San Diego Bay waters will be limited to short-term and localized turbidity increases in the water column associated with re-suspension of bottom sediments from pile driving, casting-in-place, and barge/tug operations, such as anchoring and propeller wash. Prior to conducting any pile-driving activities, the applicant will install temporary silt curtains around the work area. The silt curtains will be deployed around all in-water construction activities that generate turbidity.

Construction activities would occur adjacent to and within a portion of San Diego Bay that is listed as impaired on the 2010 Clean Water Act section 303(d) List of Impaired Water Bodies. San Diego Bay is listed as impaired for PCBs (polychlorinated biphenyls) in fish tissue; San Diego Bay Shoreline, Shelter Island Shoreline Park is listed as impaired for enterococcus, fecal coliform, and total coliform; and San Diego Bay, Shelter Island Yacht Basin is listed as impaired for dissolved copper. There is an adopted dissolved copper Total Maximum Daily Load (TMDL) for Shelter Island Yacht Basin. Project activities are short-term; therefore, the potential for these pollutants to be introduced to San Diego Bay would be limited to the construction phase of the Project.

The primary source of PCBs in fish tissue is from contaminated sediment. The Project is not located at a known toxic hot spot. Silt curtain deployment will ensure that any suspended sediment is contained at the Project site. The primary source of dissolved copper from marinas is antifouling paint. Project construction would not involve the use of antifouling paint and is not expected to contribute dissolved copper to San Diego Bay. Enterococcus, fecal coliform, and total coliform would have the potential to be introduced to San Diego Bay from fecal matter from the Project. However, construction workers will be provided access to either on-site restrooms or portable toilets. Portable toilets will be located in the staging areas, where pollutants would not have the potential to be washed into the San Diego Bay.

All storm water runoff will be managed in accordance with the *General Waste Discharge Requirements for Discharges from Boatyards and Boat Maintenance and Repair Facilities Adjacent to Surface Waters within the San Diego Region* (Order No. R9-2013-0026). Equipment used during in-water construction will be limited to the minimum amount necessary to complete Project activities. Vehicle maintenance, staging, storage, dispensing of fuel, and spoils sites will not be located within the San Diego Bay or other areas where spoil material could be washed into the San Diego Bay. Project activities are temporary and will not change the function of San Diego Bay. No post-construction Best Management Practices (BMPs) are proposed as project-related impacts are limited to the construction phase of the Project.

The Project application includes a description of the design objective, operation, and degree of treatment expected to be attained from equipment, facilities, or activities (including construction and post-construction BMPs) to treat waste and reduce runoff or other effluents which may be discharged. Compliance with the Certification conditions will help ensure that construction and post-construction discharges from the Project will not cause on-site or off-site erosion, damage to adjacent properties, or otherwise damage habitats in violation of water quality standards in the *Water Quality Control Plan for the San Diego Basin (9)* (Basin Plan).

Project construction will permanently impact 0.00138 acre (33.3 intermittent linear feet) of waters of the United States and/or State as a result of the replacement of habitat once occupied by benthic organisms with Project infrastructure. The impact footprint of the Project is small and will be offset to some extent by benthic species re-colonization in disturbed areas following completion of the Project. The Project will also add hard substrate habitat and the removal of floating docks and four finger docks will result in a net increase in the area of unshaded bay bottom habitat. The San Diego Unified Port District has evaluated the environmental effects of the Project and determined that the Project will not result in significant adverse impacts to the environment.

Additional Project details are provided in Attachments 1 through 3 of this Certification.

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Attachments:

- 1. Definitions**
- 2. Project Location Maps**
- 3. Project Site Plans**

I. STANDARD CONDITIONS

Pursuant to section 3860 of title 23 of the California Code of Regulations, the following three standard conditions apply to all water quality certification actions:

- A. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to section 13330 of the Water Code and chapter 28, article 6 (commencing with title 23, section 3867), of the California Code of Regulations.
- B. This Certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to California Code of Regulations title 23, section 3855 subdivision (b), and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
- C. This Certification action is conditioned upon total payment of any fee required under title 23, chapter 28 (commencing with section 3830) of California Code of Regulations and owed by the applicant.

II. GENERAL CONDITIONS

- A. **Term of Certification.** Water Quality Certification No. R9-2013-0194 (Certification) shall expire upon a) the expiration or retraction of the Clean Water Act section 404 (33 U.S.C. §1344) permit issued by the U.S. Army Corps of Engineers for this Project, or b) five (5) years from the date of issuance of this Certification, whichever occurs first.
- B. **Duty to Comply.** The Applicant must comply with all conditions and requirements of this Certification. Any Certification noncompliance constitutes a violation of the Water Code and is grounds for enforcement action or Certification termination, revocation and reissuance, or modification.
- C. **General Waste Discharge Requirements.** The requirements of this Certification are enforceable through Water Quality Order No. 2003-0017-DWQ, *Statewide General Waste Discharge Requirements for Discharges of Dredged or Fill Material that have Received State Water Quality Certification* (Water Quality Order No. 2003-0017-DWQ). This provision shall apply irrespective of whether a) the federal permit for which the Certification was obtained is subsequently retracted or is expired, or b) the Certification is expired. Water Quality Order No. 2003-0017-DWQ is accessible at:

http://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/generalorders/go_wdr401regulated_projects.pdf.

- D. **Project Conformance with Application.** All water quality protection measures and BMPs described in the application and supplemental information for water quality certification are incorporated by reference into this Certification as if fully stated herein. Notwithstanding any more specific conditions in this Certification, the Applicant shall construct, implement and comply with all water quality protection measures and BMPs described in the application and supplemental information. The conditions within this Certification shall supersede conflicting provisions within the application and supplemental information submitted as part of this Certification action.
- E. **Project Conformance with Water Quality Control Plans or Policies.** Notwithstanding any more specific conditions in this Certification, the Project shall be constructed in a manner consistent with the Basin Plan and any other applicable water quality control plans or policies adopted or approved pursuant to the Porter Cologne Water Quality Act (Division 7, commencing with Water Code Section 13000) or section 303 of the Clean Water Act (33 U.S.C §1313.)

The receiving water limitations set forth below for San Diego Bay waters are based on applicable water quality standards contained in the Basin Plan, other water quality control plans and policies and federal regulations and are a required part of this Certification. Project activities shall not cause or contribute to exceedances of these receiving water limitations in San Diego Bay. Compliance with these limitations shall be determined from samples collected at the points of compliance described in the Monitoring Requirements in section V of this Certification.

1. **Visual.** Floating particulates and grease and oil shall not be visible.
2. **Color.** Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses.
3. **Hydrogen Ion Concentration.** The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
4. **Hydrogen Ion Concentration.** The pH shall not be depressed below 7.0 nor raised above 9.0.
5. **Turbidity.** If natural turbidity is between 0 to 50 nephelometric turbidity units (NTUs), the maximum increase from dredge activities must not exceed 20 percent of the measured natural turbidity. If natural turbidity is between 51 to 100 NTUs, the maximum increase from dredge activities must not exceed 10 NTUs. If natural turbidity is greater than 100 NTUs, the maximum increase from dredge activities must not exceed 10 percent above natural background levels.
6. **Dissolved Oxygen.** The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally.
7. **Benthic Communities.** Pollutants in sediments shall not be present in quantities that, alone or in combination, are toxic to benthic communities.
8. **Human Health.** Pollutants shall not be present in sediments at levels that will bioaccumulate in aquatic life to levels that are harmful to human health.

9. **Water Quality Objectives.** Water quality objectives applicable to San Diego Bay established in Chapter 3 of the Basin Plan shall not be exceeded.
 10. **Priority Pollutant Criteria.** Priority pollutant criteria applicable to San Diego Bay promulgated by the U.S. Environmental Protection Agency (U.S. EPA) through the a) National Toxics Rule (NTR) (40 CFR 131 .36 promulgated on December 22, 1992 and amended on May 4, 1995) and b) California Toxics Rule (CTR) (40 CFR 131.38, (65 Fed. Register 31682-31719), adding Section 131.38 to Title 40 of the Code of Federal Regulations, on May 18, 2000) shall not be exceeded.
- F. **Project Modification.** The Applicant must submit any changes to the Project, including Project operation, which would have a significant or material effect on the findings, conclusions, or conditions of this Certification, to the San Diego Water for prior review and written approval. If the San Diego Water Board is not notified of a significant change to the Project, it will be considered a violation of this Certification.
- G. **Certification Distribution Posting.** During Project construction, the Applicant must maintain a copy of this Certification at the Project site. This Certification must be available at all times to site personnel and agencies. A copy of this Certification shall also be provided to any contractor or subcontractor performing construction work, and the copy shall remain in their possession at the Project site.
- H. **Inspection and Entry.** The Applicant must allow the San Diego Water Board or the State Water Resources Control Board, and/or their authorized representative(s) (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents as may be required under law, to:
1. Enter upon the Project or Compensatory Mitigation site(s) premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Certification;
 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Certification;
 3. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Certification; and
 4. Sample or monitor, at reasonable times, for the purposes of assuring Certification compliance, or as otherwise authorized by the Clean Water Act or Water Code, any substances or parameters at any location.
- I. **Enforcement Notification.** In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under State law. For purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions for the violation or threatened

violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Certification.

- J. **Certification Actions.** This Certification may be modified, revoked and reissued, or terminated for cause including but not limited to the following:
1. Violation of any term or condition of this Certification;
 2. Monitoring results indicate that continued Project activities could violate water quality objectives or impair the beneficial uses of San Diego Bay;
 3. Obtaining this Certification by misrepresentation or failure to disclose fully all relevant facts;
 4. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; and
 5. Incorporation of any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.

The filing of a request by the Applicant for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Certification condition.

- K. **Duty to Provide Information.** The Applicant shall furnish to the San Diego Water Board, within a reasonable time, any information which the San Diego Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Certification or to determine compliance with this Certification.
- L. **Property Rights.** This Certification does not convey any property rights of any sort, or any exclusive privilege.

III. CONSTRUCTION BEST MANAGEMENT PRACTICES

- A. **Approvals to Commence Construction.** The Applicant shall not commence Project construction until all necessary federal, state, and local approvals are obtained.
- B. **Personnel Education.** Prior to the start of the Project, and annually thereafter, the Applicant must educate all personnel on the requirements in this Certification, pollution prevention measures, spill response measures, and BMP implementation and maintenance measures.
- C. **Spill Containment Materials.** The Applicant must, at all times, maintain appropriate types and sufficient quantities of materials on-site to contain any spill or inadvertent release of materials that may cause a condition of pollution or nuisance if the materials reach waters of the United States and/or State.

- D. **Silt Curtain Deployment.** The Applicant shall deploy and maintain a continuous length of silt curtain, fully surrounding the pile driving area to trap sediment that may become suspended as a result of pile driving. The bottom of the silt curtains must be weighted with ballast weights or rods affixed to the base of the fabric to resist the natural buoyancy of the silt curtain fabric and lessen its tendency to move in response to currents. Where feasible and applicable, the floating silt curtains must be anchored and deployed from the surface of the water to just above the substrate. The silt curtain must be monitored for damage, dislocation or gaps and must be immediately repaired where it is no longer continuous or where it has loosened. The silt curtain must restrict the surface visible turbidity plume to the area of pile construction and must control and contain the migration of re-suspended sediments at the water surface and at depth.
- E. **General Construction Storm Water Permit.** Prior to start of Project construction, the Applicant must, as applicable, obtain coverage under, and comply with, the requirements of State Water Resources Control Board Water Quality Order No. 2009-0009-DWQ, the *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activity*, (General Construction Storm Water Permit) and any reissuance. If Project construction activities do not require coverage under the General Construction Storm Water Permit, the Applicant must develop and implement a runoff management plan (or equivalent construction BMP plan) to prevent the discharge of sediment and other pollutants during construction activities.
- F. **Waste Management.** The Applicant must properly manage, store, treat, and dispose of wastes in accordance with applicable federal, state, and local laws and regulations. Waste management shall be implemented to avoid or minimize exposure of wastes to precipitation or storm water runoff. The storage, handling, treatment, or disposal of waste shall not create conditions of pollution, contamination or nuisance as defined in Water Code section 13050. Upon Project completion, all Project generated debris, building materials, excess material, waste, and trash shall be removed from the Project site(s) for disposal at an authorized landfill or other disposal site in compliance with federal, state and local laws and regulations.
- G. **Waste Management.** Except for a discharge permitted under this Certification, the dumping, deposition, or discharge of trash, rubbish, unset cement or asphalt, concrete, grout, damaged concrete or asphalt, concrete or asphalt spoils, wash water, organic or earthen material, steel, sawdust or other construction debris waste from Project activities directly into waters of the United States and or State, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited.
- H. **Construction Equipment.** All equipment must be washed prior to transport to the Project site and must be free of sediment, debris, and foreign matter. All equipment used in direct contact with surface water shall be steam cleaned prior to use. All equipment using gas, oil, hydraulic fluid, or other petroleum products shall be inspected for leaks prior to use and shall be monitored for leakage. Stationary equipment (e.g., motors, pumps, generator, etc.) shall be positioned over drip pans or other types of

containment.

- I. **Process Water.** Water containing mud, silt, or other pollutants from equipment washing or other activities, must not be discharged to waters of the United States and/or State or placed in locations that may be subjected to storm water runoff flows. Pollutants discharged to areas within a stream diversion must be removed at the end of each work day or sooner if rain is predicted.
- J. **Hazardous Materials.** Except as authorized by this Certification, substances hazardous to aquatic life including, but not limited to, petroleum products, unused cement/concrete, asphalt, and coating materials, must be prevented from contaminating the soil and/or entering waters of the United States and/or State. BMPs must be implemented to prevent such discharges during each Project activity involving hazardous materials.
- K. **Limits of Disturbance.** The Applicant shall clearly define the limits of Project disturbance to waters of the United States and/or State using highly visible markers such as flag markers, construction fencing, or silt barriers prior to commencement of Project construction activities within those areas.
- L. **On-site Qualified Biologist.** The Applicant shall designate an on-site qualified biologist to monitor Project construction activities within or adjacent to waters of the United States and/or State to ensure compliance with the Certification requirements. The biologist shall be given the authority to stop all work on-site if a violation of this Certification occurs or has the potential to occur. Records and field notes of the biologist's activities shall be kept on-site and made available for review upon request by the San Diego Water Board.
- M. **Eelgrass.** A pre-construction eelgrass survey must be completed in accordance with the requirements of the Southern California Eelgrass Mitigation Policy (SCEMP) by a qualified biologist, prior to initiation of construction activities at the site. This survey must include both aerial and density characterization of the beds. If eelgrass is found during the pre-construction survey, a post-construction survey must be performed by a qualified biologist within 30 days following project completion to quantify any unanticipated losses to eelgrass habitat. Impacts must then be determined from a comparison of pre- and post-construction survey results. Impacts to eelgrass, if any, must be mitigated through conformance with the SCEMP, which defines the mitigation ratio and other requirements to achieve mitigation for significant eelgrass impacts. If required following the post-construction survey, the SCEMP defined mitigation must be developed; approved by the San Diego Water Board, U.S. Army Corps of Engineers, and National Marine Fisheries Service; and implemented to offset losses to eelgrass.

- N. **California Least Tern.** In-water construction activities are anticipated to be scheduled to occur between September 16 and March 31 outside the California least tern nesting season. Should in-water Project activities be conducted during the least tern breeding season, a qualified Biological Monitor familiar with the California least tern and other special status seabirds and waterfowl shall be retained by the Applicant to conduct monitoring within 500 feet of construction activities. The monitor shall be empowered to delay commencing work, and shall do so if terns are actively foraging (e.g., searching and diving) within the work area. Should adverse impacts to terns occur (e.g., agitation or startling during foraging activities), the Biological Monitor shall be empowered to delay or halt construction, and shall do so until California least terns have left the project site.
- O. **Beneficial Use Protection.** The Applicant must take all necessary measures to protect the beneficial uses of waters of San Diego Bay. This Certification requires compliance with all applicable requirements of the Basin Plan. If at any time, an unauthorized discharge to surface waters (including rivers or streams) occurs or monitoring indicates that the Project is violating, or threatens to violate, water quality objectives, the associated Project activities shall cease immediately and the San Diego Water Board shall be notified in accordance with Notification Requirement VII.A of this Certification. Associated Project activities may not resume without approval from the San Diego Water Board.

IV. PROJECT IMPACTS

- A. **Project Impact Avoidance and Minimization.** The Project must avoid and minimize adverse impacts to waters of the United States and/or State to the maximum extent practicable.
- B. **Project Impacts and Compensatory Mitigation.** Unavoidable Project impacts to San Diego Bay within the Pueblo Watershed must not exceed the type and magnitude of impacts described in the table below.

	Impacts (acres)	Impacts (linear ft.)	Mitigation for Impacts (acres)	Mitigation Ratio (area mitigated :area impacted)	Mitigation for Impacts (linear ft.)	Mitigation Ratio (linear feet mitigated :linear feet impacted)
Permanent Impacts						
Wetland	0.00138	33.3	0 ¹	N/A ¹	0 ¹	N/A ¹

¹ Compensatory mitigation is not required for this Project because impacts, while permanent, will not have a significant effect on San Diego Bay resources.

V. MONITORING AND REPORTING REQUIREMENTS

- A. **Representative Monitoring.** Samples and measurements taken for the purpose of monitoring under this Certification shall be representative of the monitored activity.
- B. **Monitoring Reports.** Monitoring results shall be reported to the San Diego Water Board at the intervals specified in section V.G. and V.H. of this Certification.
- C. **Monitoring and Reporting Revisions.** The San Diego Water Board may make revisions to the monitoring program at any time during the term of this Certification and may reduce or increase the number of parameters to be monitored, locations monitored, the frequency of monitoring, or the number and size of samples collected.
- D. **Records of Monitoring Information.** Records of monitoring information shall include:
1. The date, exact place, and time of sampling or measurements;
 2. The individual(s) who performed the sampling or measurements;
 3. The date(s) analyses were performed;
 4. The individual(s) who performed the analyses;
 5. The analytical techniques or methods used; and
 6. The results of such analyses.
- E. **Receiving Water Visual Observation Monitoring.** The applicant must conduct visual observation monitoring of the Project pile driving and bulkhead repair activities within the San Diego Bay prior to, during, and after each period of Project construction. The visual observation monitoring documentation must be included in the Project final completion report.
1. **Parameters.** The following parameters shall be visually monitored immediately outside of the construction area:
 - a. No floating particulates, suspended materials, grease, or oil; and
 - b. No significant discoloration of the water surface.
 2. **Field Documentation.** Visual observations shall be recorded throughout Project pile driving and bulkhead repair activities. In addition to the requirements listed in section V.D., monitoring field logs shall include observations of water quality conditions including sheen, color, odor, floating particulates, and surface visible turbidity plume. Logs shall also include weather conditions, such as wind speed/direction and cloud cover.

3. **Response Actions.** If the condition of the silt curtain is observed to be damaged, has become dislocated, or has gaps to where a visible turbidity plume is forming outside of the silt curtain, a response action shall be taken immediately to correct the situation. Response actions may include, but are not limited to, work stoppage until silt curtain repair is completed, implementation of operational modifications, and/or implementation of additional BMPs (e.g., a second silt curtain). Response actions, if needed, shall be documented in the monitoring field log.

F. **Receiving Water Quality Monitoring.** The Applicant shall conduct weekly receiving water monitoring during pile driving and bulkhead repair activities to verify that applicable water quality standards for pH, dissolved oxygen and turbidity are not violated outside of the construction area. The monitoring plan shall contain the following elements:

1. **Monitoring Stations.** During each monitoring event, water quality parameters including turbidity, dissolved oxygen, and pH shall be measured at four stations. Monitored water quality measurements shall be compared to "ambient" San Diego Bay reference measurements outside the construction area. Three of the stations shall be compliance stations and one of the stations shall be a reference station. Monitoring station positions shall be located using a Global Position System (GPS) accurate to within ± 3 meters. Station descriptions are as follows:
 - a. **Compliance Stations.** Three monitoring stations shall be located evenly along an arc located 50 feet from the construction area to capture all tidal and current conditions. The compliance stations shall be located approximately the same distance from shore as the construction activity. The locations shall be adjusted in the field to better target a visible turbidity plume, if a visible plume is observed; and
 - b. **Reference Station.** The reference station shall be located 1,000 feet from the construction activity in the direction of the head of the bay and beyond the influence of construction activities. Natural turbidity, dissolved oxygen, and pH shall be determined through measurements at the reference station. The reference station shall be monitored during every event, because the turbidity water quality objective is based on an acceptably small increase in the vicinity of the construction activity relative to ambient reference levels. The location of the reference station shall remain the same for all monitoring events;
2. **Water Quality Measurements.** Monitored water quality measurements for turbidity, dissolved oxygen, and pH at the Compliance Stations shall be compared to Reference Station measurements outside the construction area. Water quality measurements shall be collected from a depth of 10 feet below the water surface at each of the stations. Monitoring depths shall be determined using a depth finder with an accuracy of ± 0.5 feet. Water quality shall be monitored using instrumentation capable of measuring dissolved oxygen (DO), pH, and turbidity (in nephelometric turbidity units (NTU's));

3. **Monitoring Frequency.** Water quality monitoring shall be conducted on a weekly basis after pile driving and bulkhead repair activities have been underway for at least 30 minutes. During the weekly water column monitoring all water quality parameters will be measured during one monitoring event per week;
4. **Sample Integrity.** The integrity of each water sample collected shall be maintained from the time of collection to the point of data reporting. Proper record keeping and chain of custody (COC) procedures shall be implemented to allow samples to be traced from collection to final disposition. After collection of water samples, documentation on various logs and forms shall be required to adequately identify and catalog sample information; and
5. **Compliance Criteria.** Receiving Water Limitations are provided in section II.E of this Certification. The point of compliance with these receiving water limitations shall be located 50 feet from the edge of the construction area. The construction area is defined as the area(s) occupied by the pile driving equipment and silt curtains, bulkhead repair equipment, and associated work activities.

G. **Receiving Water Monitoring Report.** The Applicant shall prepare and submit a monitoring report that contains the results of visual observation monitoring and receiving water quality monitoring activities for each week of in-water Project construction activities. The report must be submitted no later than 30 days following completion of in-water construction activities and must include:

1. The following identification numbers in the header or subject line: Certification No. R9-2013-0194, PIN 802270;
2. The names, qualifications, and affiliations of the persons contributing to the report;
3. A summary table of the monitoring results with a comparison to receiving water limitation compliance criteria;
4. An evaluation, interpretation, and tabulation of the visual observations required under section V.E and water quality data required under section V.F including interpretations and conclusions as to whether applicable receiving water limitations were attained at each monitoring station; and
5. A description of all incidents of non-compliance and its cause, the period of the noncompliance including exact dates and times, if the noncompliance was not corrected, and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

- H. **Final Project Completion Report.** The Applicant must submit a Final Project Completion Report to the San Diego Water Board **within 30 days of completion of the Project.** The final report must include the following information:
1. Date of construction initiation;
 2. Date of construction completion;
 3. BMP installation and operational status for the Project;
 4. As-built drawings of the Project, no bigger than 11”X17”; and
 5. The pre-construction and post- construction (as necessary) eelgrass surveys required under section III.M of this Certification, including a description of actions that will be taken by the Applicant to mitigate for any impact to eelgrass habitat, if any.
- I. **Reporting Authority.** The submittal of information required under this Certification, or in response to a suspected violation of any condition of this Certification, is required pursuant to Water Code section 13267 and 13383. Civil liability may be administratively imposed by the San Diego Water Board for failure to submit information pursuant to Water Code sections 13268 or 13385.
- J. **Electronic and Paper Media Documents.** The Applicant must submit all reports and information required under this Certification in both hardcopy (paper) and electronic format. The preferred electronic format for each report submission is one file in PDF format that is also Optical Character Recognition (OCR) capable. All paper and electronic documents submitted to the San Diego Water Board must include the following identification numbers in the header or subject line: Certification No. R9-2013-0194:PIN 802270.
- K. **Document Signatory Requirements.** All applications, reports, or information submitted to the San Diego Water Board must be signed as follows:
1. For a corporation, by a responsible corporate officer of at least the level of vice president.
 2. For a partnership or sole proprietorship, by a general partner or proprietor, respectively.
 3. For a municipality, or a state, federal, or other public agency, by either a principal executive officer or ranking elected official.

4. A duly authorized representative may sign applications, reports, or information if:
 - a. The authorization is made in writing by a person described above.
 - b. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated activity.
 - c. The written authorization is submitted to the San Diego Water Board Executive Officer.

If such authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the Project, a new authorization satisfying the above requirements must be submitted to the San Diego Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative.

- L. **Document Certification Requirements.** All applications, reports, or information submitted to the San Diego Water Board must be certified as follows:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

- M. **Document Submittal Address.** The Applicant must submit reports required under this Certification, or other information required by the San Diego Water Board, to:

Executive Officer
California Regional Water Quality Control Board
San Diego Region
Attn: 401 Certification No. R9-2013-0194:PIN 802270
2375 Northside Drive, Suite 100
San Diego, California 92108

VI. NOTIFICATION REQUIREMENTS

- A. **Twenty Four Hour Non-Compliance Reporting.** The Applicant shall report any noncompliance which may endanger health or the environment. Any such information shall be provided orally to the San Diego Water Board within 24 hours from the time the Applicant becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Applicant becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The

San Diego Water Board, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

- B. The Applicant must conduct a surveillance-level survey for *Caulerpa taxifolia* not more than 90 days before the initiation of construction to determine presence/absence of this species within the immediate vicinity of the project. If *Caulerpa taxifolia* is identified during a survey, or at any other time before, during, or within 120 days following completion of authorized activities, both National Marine Fisheries Service and California Department of Fish and Wildlife must be contacted within 24 hours of first noting the occurrence. In the event *Caulerpa taxifolia* is detected, all disturbing activity must cease until such time as the infestation has been isolated and treated, or the risk of spread from the disturbing activity is eliminated in accordance with the Caulerpa Control Protocol.
- C. **Hazardous Substance Discharge.** Except for a discharge which is in compliance with this Certification, any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, shall as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the County of San Diego, in accordance with California Health and Safety Code section 5411.5 and the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Government Code Title 2, Division 1, Chapter 7, Article 3.7 (commencing with section 8574.17), and immediately notify the State Water Board or the San Diego Water Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of section 13271 of the Water Code unless the Applicant is in violation of a Basin Plan prohibition.
- D. **Oil or Petroleum Product Discharge.** Except for a discharge which is in compliance with this Certification, any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Government Code Title 2, Division 1, Chapter 7, Article 3.7 (commencing with section 8574.1). This requirement does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to Clean Water Act section 311, or the discharge is in violation of a Basin Plan prohibition.
- E. **Anticipated Noncompliance.** The Applicant shall give advance notice to the San Diego Water Board of any planned changes in the Project or the Compensatory Mitigation project which may result in noncompliance with Certification conditions or requirements.

F. **Transfers.** This Certification is not transferable in its entirety or in part to any person or organization except after notice to the San Diego Water Board in accordance with the following terms:

1. **Transfer of Property Ownership:** The Applicant must notify the San Diego Water Board of any change in ownership of the Project area. Notification of change in ownership must include, but not be limited to, a statement that the Applicant has provided the purchaser with a copy of the Section 401 Water Quality Certification and that the purchaser understands and accepts the certification requirements and the obligation to implement them or be subject to liability for failure to do so; the seller and purchaser must sign and date the notification and provide such notification to the San Diego Water Board **within 10 days of the transfer of ownership.**
2. **Transfer of Mitigation Responsibility:** Any notification of transfer of responsibilities to satisfy the mitigation requirements set forth in this Certification must include a signed statement from an authorized representative of the new party (transferee) demonstrating acceptance and understanding of the responsibility to comply with and fully satisfy the mitigation conditions and agreement that failure to comply with the mitigation conditions and associated requirements may subject the transferee to enforcement by the San Diego Water Board under Water Code section 13385, subdivision (a). Notification of transfer of responsibilities meeting the above conditions must be provided to the San Diego Water Board **within 10 days of the transfer date.**
3. **Transfer of Post-Construction BMP Maintenance Responsibility:** The Applicant assumes responsibility for the inspection and maintenance of all post-construction structural BMPs until such responsibility is legally transferred to another entity. At the time maintenance responsibility for post-construction BMPs is legally transferred the Applicant must submit to the San Diego Water Board a copy of such documentation and must provide the transferee with a copy of a long-term BMP maintenance plan that complies with manufacturer specifications. The Applicant must provide such notification to the San Diego Water Board within **10 days** of the transfer of BMP maintenance responsibility.

Upon properly noticed transfers of responsibility, the transferee assumes responsibility for compliance with this Certification and references in this Certification to the Applicant will be interpreted to refer to the transferee as appropriate. Transfer of responsibility does not necessarily relieve the Applicant of this Certification in the event that a transferee fails to comply.

G. **Discharge Commencement.** The Applicant must notify the San Diego Water Board in writing **at least 5 days prior to** the start of Project construction.

VII. CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE

- A. The San Diego Unified Port District is the Lead Agency under the California Environmental Quality Act (CEQA) (Public Resources Code section 21000, et seq.) section 21067, and CEQA Guidelines (California Code of Regulations, title 14, section 15000 et seq.) section 15367, and has filed a Notice of Determination dated December 13, 2013 for the Negative Declaration (IS/ND) titled Shelter Island Boatyard Crane Replacement and Pier Addition Project (State Clearing House Number 2013101052). The Lead Agency has determined the Project will not have a significant effect on the environment and mitigation measures were not made a condition of the Project.
- B. The San Diego Water Board is a Responsible Agency under CEQA (Public Resources Code section 21069; CEQA Guidelines section 15381). The San Diego Water Board has considered the Lead Agency's IS/ND and finds that the Project as proposed will not have a significant effect on resources within the San Diego Water Board's purview.
- C. The San Diego Water Board has not required mitigation measures as a condition of this Certification to avoid or reduce the environmental effects of the Project as impacts associated with respect to resources within the Board's purview are less than significant.
- D. The Lead Agency has not adopted a mitigation monitoring and reporting program pursuant to Public Resources Code section 21081.6 and CEQA Guidelines section 15097 as no significant impacts requiring mitigation were identified in the IS/ND. However, the San Diego Water Board has imposed additional monitoring and reporting requirements to ensure the Project does not adversely affect water quality as specified in section V of this Certification.
- E. As a Responsible Agency under CEQA, the San Diego Water Board will file a Notice of Determination in accordance with CEQA Guidelines section 15096 subdivision (i).

VIII. SAN DIEGO WATER BOARD CONTACT PERSON

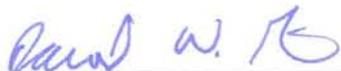
Lisa Honma, Environmental Scientist
California Regional Water Quality Control Board, San Diego Region
2375 Northside Drive, Suite 100
San Diego, California 92108
Telephone: 619-521-3367
Email: Lisa.Honma@waterboards.ca.gov

IX. WATER QUALITY CERTIFICATION

I hereby certify that the proposed discharge from the **Shelter Island Boatyard Crane Replacement and Pier Addition Project** (Certification No. R9-2013-0194) will comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. This discharge is also regulated under State Water Board Order No. 2003-0017-DWQ, "*Statewide General Waste Discharge Requirements for Dredged or Fill Discharges that have Received State Water Quality Certification (General WDRs)*," which requires compliance with all conditions of this Water Quality Certification. Please note that enrollment under Order No. 2003-017-DWQ is conditional and, should new information come to our attention that indicates a water quality problem, the San Diego Water Board may issue individual waste discharge requirements at that time.

Except insofar as may be modified by any preceding conditions, all Certification actions are contingent on (a) the discharge being limited to, and all proposed mitigation being completed in strict compliance with, the applicants' Project description and/or the description in this Certification, and (b) compliance with all applicable requirements of the Basin Plan.

I, David W. Gibson, Executive Officer, do hereby certify the forgoing is a full, true, and correct copy of Certification No. R9-2013-0194 issued on April 22, 2014.



DAVID W. GIBSON
Executive Officer
San Diego Water Board

22 April 2014

Date

ATTACHMENT 1
DEFINITIONS

Activity - when used in reference to a permit means any action, undertaking, or project including, but not limited to, construction, operation, maintenance, repair, modification, and restoration which may result in any discharge to waters of the state.

Buffer - means an upland, wetland, and/or riparian area that protects and/or enhances aquatic resource functions associated with wetlands, rivers, streams, lakes, marine, and estuarine systems from disturbances associated with adjacent land uses.

California Rapid Assessment Method (CRAM) - is a wetland assessment method intended to provide a rapid, scientifically-defensible and repeatable assessment methodology to monitor status and trends in the conditions of wetlands for applications throughout the state. It can also be used to assess the performance of compensatory mitigation projects and restoration projects. CRAM provides an assessment of overall ecological condition in terms of four attributes: landscape context and buffer, hydrology, physical structure and biotic structure. CRAM also includes an assessment of key stressors that may be affecting wetland condition and a "field to PC" data management tool (eCRAM) to ensure consistency and quality of data produced with the method.

Compensatory Mitigation Project - means compensatory mitigation implemented by the Applicant as a requirement of this Certification (i.e., applicant -responsible mitigation), or by a mitigation bank or an in-lieu fee program.

Discharge of dredged material – means any addition of dredged material into, including redeposit of dredged material other than incidental fallback within, the waters of the United States and/or State.

Discharge of fill material – means the addition of fill material into waters of the United States and/or State.

Dredged material – means material that is excavated or dredged from waters of the United States and/or State.

Ecological Success Performance Standards – means observable or measurable physical (including hydrological), chemical, and/or biological attributes that are used to determine if a compensatory mitigation project meets its objectives.

Enhancement – means the manipulation of the physical, chemical, or biological characteristics of an aquatic resource to improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Establishment – means the manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist. Creation results in a gain in aquatic resource area.

Fill material – means any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a water body.

Isolated wetland – means a wetland with no surface water connection to other aquatic resources.

Mitigation Bank – means a site, or suite of sites, where resources (e.g., wetlands, streams, riparian areas) are restored, established, enhanced, and/or preserved for the purpose of providing mitigation for impacts authorized by this Certification.

Preservation - means the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/ historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/ historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

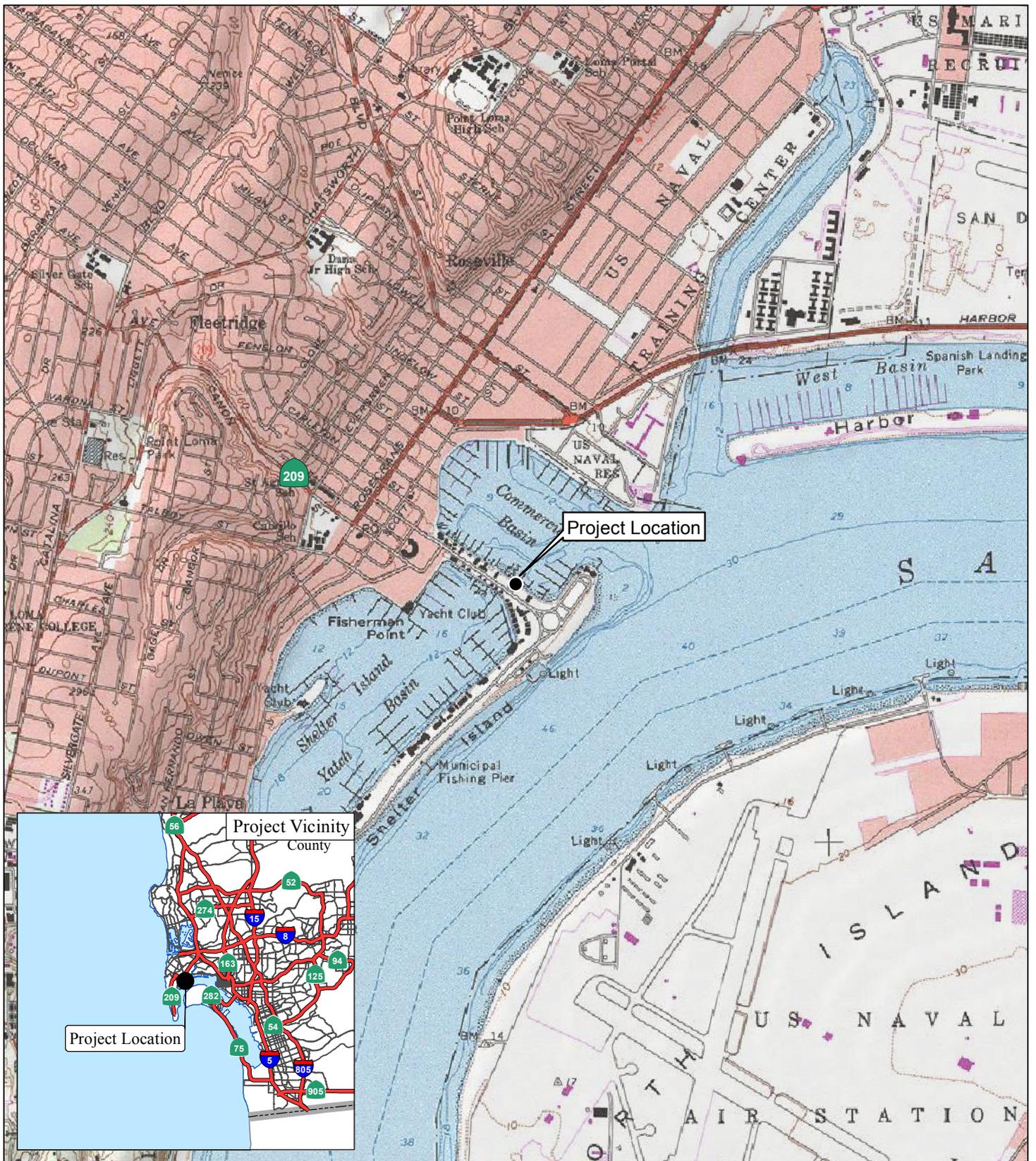
Start of Project Construction - For the purpose of this Certification, "start of Project construction" means to engage in a program of on-site construction, including site clearing, grading, dredging, landfilling, changing equipment, substituting equipment, or even moving the location of equipment specifically designed for a stationary source in preparation for the fabrication, erection or installation of the building components of the stationary source within waters of the United States and/or State.

Uplands - means non-wetland areas that lack any field-based indicators of wetlands or other aquatic conditions. Uplands are generally well-drained and occur above (i.e., up-slope) from nearby aquatic areas. Wetlands can, however, be entirely surrounded by uplands. For example, some natural seeps and constructed stock ponds lack aboveground hydrological connection to other aquatic areas. In the watershed context, uplands comprise the landscape matrix in which aquatic areas form. They are the primary sources of sediment, surface runoff, and associated chemicals that are deposited in aquatic areas or transported through them.

Water quality objectives and other appropriate requirements of state law – means the water quality objectives and beneficial uses as specified in the appropriate water quality control plan(s); the applicable provisions of sections 301, 302, 303, 306, and 307 of the Clean Water Act; and any other appropriate requirement of state law.

Shelter Island Yachtways, Ltd.
Shelter Island Boatyard Crane Replacement and Pier Addition Project
Certification No. R9-2013-0194

ATTACHMENT 2
PROJECT LOCATION MAPS



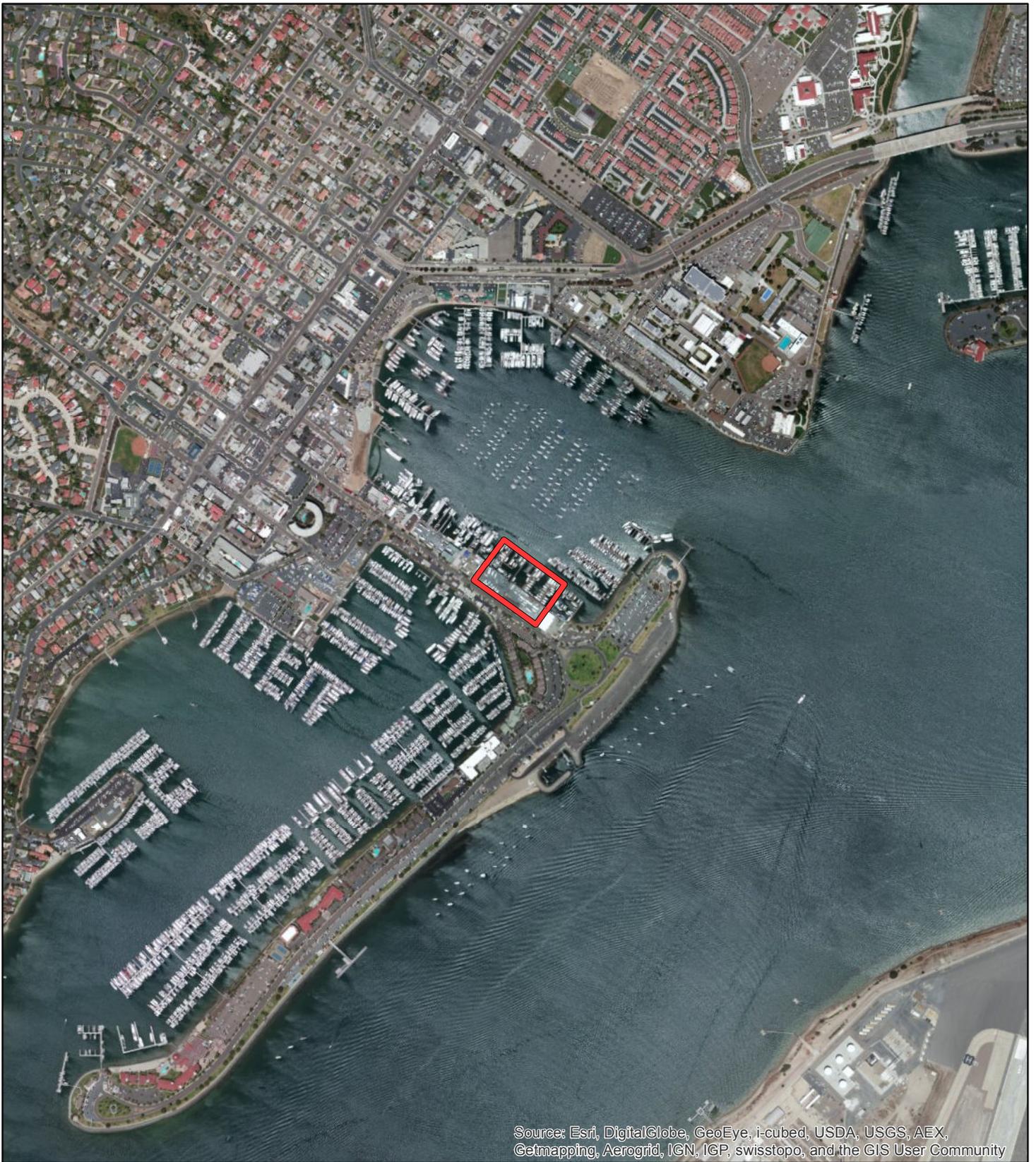
LSA

LEGEND

● Project Location

FIGURE 1

Shelter Island Boatyard Crane Replacement and Pier Addition
Regional Location



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

LSA

LEGEND

Project Location - Boatyard Property

FIGURE 2

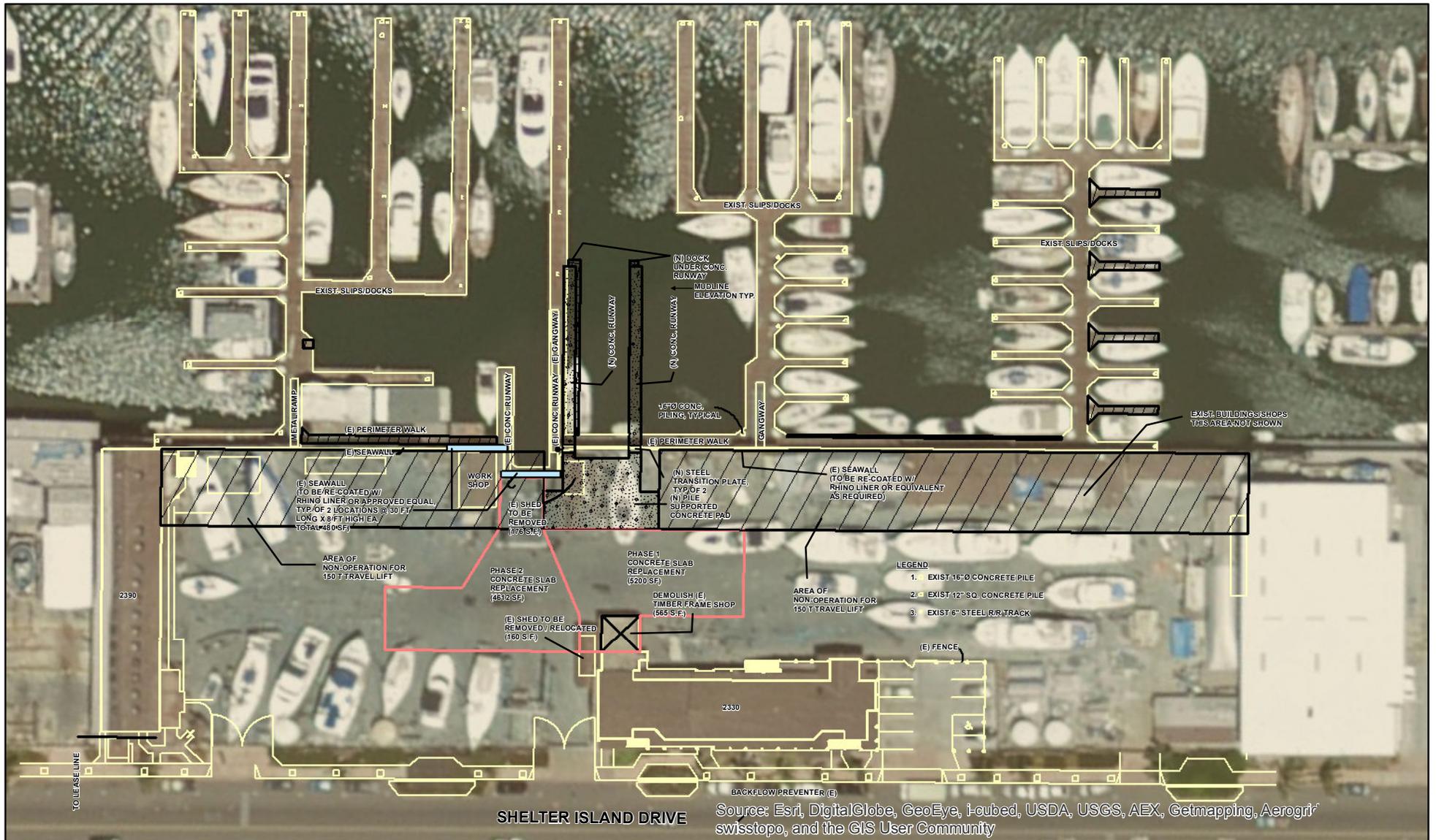


0 500 1000
FEET

Shelter Island Boatyard Crane Replacement and Pier Addition
Project Aerial

Shelter Island Yachtways, Ltd.
Shelter Island Boatyard Crane Replacement and Pier Addition Project
Certification No. R9-2013-0194

**ATTACHMENT 3
PROJECT SITE PLANS**



LSA

FIGURE 4



SOURCE: Microsoft (05/2010)

I:\SIB1302\GIS\ConceptualDesign_new.mxd (3/10/2014)

SHELTER ISLAND BOATYARD CRANE REPLACEMENT AND PIER ADDITION

CONSTRUCTION DESIGN AND DRAWINGS NOVEMBER 27, 2013

OWNER
SHELTER ISLAND YACHTWAYS, LTD.
OWNERS: ROY HOBBS AND BILL ROBERTS
619-222-0481

PROJECT ADDRESS
2330 SHELTER ISLAND DRIVE #1
SAN DIEGO, CA 92106

PARCEL INFORMATION
APN 760-003-06-00

ARCHITECT
R.D.BALDWIN & ASSOCIATES
ROGER BALDWIN, ARCHITECT
P.O. BOX 3891
RANCHO SANTA FE, CA 92067
858.756.0120 (TEL.)
858.756.9977 (FAX)

CIVIL/MARINA ENGINEER
BLUEWATER DESIGN GROUP
TIM BAZLEY, P.E.
2500 VIA CABRILLO MARINA
SUITE 200
SAN PEDRO, CA 90731
310.548.3132 (TEL)
310.548.1924 (FAX)

REFERENCES
1. GEOTECHNICAL INVESTIGATION FOR PROPOSED TRAVEL
LIFT PIER, PREPARED BY TERRA PACIFIC, APRIL 2008

SHEET LIST

- 1 T1 - TITLE PAGE
- 2 T2 - GENERAL NOTES
- 3 T3 - GENERAL NOTES
- 4 C1 - EXISTING SITE PLAN
- 5 C2 - PROPOSED SITE PLAN
- 6 C3.1 - PIER LAYOUT AND ELEVATION
- 7 C3.2 - PIER AND PILE DETAILS
- 8 C4 - FLOATING DOCK LAYOUT AND ELEVATION



VICINITY MAP
NO SCALE



LOCATION MAP
NO SCALE

1ST SUBMITTAL TO BUILDING DEPT.

Shelter Island BY (2013-11-27).dwg

FINAL
100%
90
0

STATUS	CONCEPT	PROJECT SHELTER ISLAND BOATYARD CRANE REPLACEMENT AND PIER ADDITION SAN DIEGO, CALIFORNIA	CLIENT R.D. BALDWIN & ASSOCIATES	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px;">NO.</td> <td style="width: 40px;">REVISION</td> <td style="width: 20px;">BY</td> <td style="width: 20px;">DATE</td> </tr> <tr> <td style="text-align: center;">-</td> <td></td> <td></td> <td></td> </tr> </table>	NO.	REVISION	BY	DATE	-					<p style="font-size: small;">Planning and Engineering Services For Marinas and Waterfront Resorts</p>	<p>2500 Via Cabrillo Marina, Suite 200 San Pedro, CA 90731 Tel: 310 548 3132 Fax: 310 548 1924</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40px;">DESIGNED BY</td> <td style="width: 60px;">JW</td> </tr> <tr> <td>DRAWN BY</td> <td>EB/JW</td> </tr> <tr> <td>CHECKED BY</td> <td>TB</td> </tr> </table>	DESIGNED BY	JW	DRAWN BY	EB/JW	CHECKED BY	TB	TITLE SHEET	SCALE NONE	DATE 11-27-2013
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DESIGNED BY	JW																							
DRAWN BY	EB/JW																							
CHECKED BY	TB																							
JOB NO.	2264-A		SHEET	T-1		SHEET #	1 of 8																	

SCOPE OF WORK:

- THE INTENT OF THIS PROJECT IS TO ADD TWO NEW GANTRY CRANE RUNWAYS (PIERS) ADJACENT TO THE EXISTING PIERS TO SUPPORT THE USE OF A NEW 150MT GANTRY CRANE, MANUFACTURED AND SUPPLIED BY OTHERS (ASCOM).
- REMOVE AND REPLACE 9,812 SF OF EXISTING CONCRETE PAVEMENT BEHIND THE SEAWALL.
- REMOVE 1,247 SF OF EXISTING FLOATING DOCKS, AND INSTALL NEW FLOATING DOCKS UNDERNEATH THE NEW CONCRETE PIERS TO FACILITATE MANEUVERING OF VESSELS BETWEEN THE PIERS.

VERTICAL DATUM:

- VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW) = 0.00' UNLESS NOTED OTHERWISE.

GENERAL REQUIREMENTS:

- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE COMPLETION OF THE PROJECT INCLUDING SCHEDULING OF ALL SUBCONTRACTOR WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR OVER ALL HOUSEKEEPING AND CLEANLINESS. CONTRACTOR SHALL REQUIRE INDIVIDUAL SUBCONTRACTORS TO BE RESPONSIBLE FOR HAULING DEBRIS FROM HIS OWN ACTIVITIES AND FOR OBSERVING ALL SAFETY REGULATIONS. CONTRACTOR SHALL HAVE A QUALIFIED FOREMAN OR SUPERINTENDENT ON THE JOB SITE DURING THE ENTIRE TIME OF CONSTRUCTION OF THE PROJECT TO SUPERVISE AND COORDINATE ALL PHASES OF THE PROJECT.
- TO MAINTAIN SCHEDULE, MULTIPLE SUBCONTRACTORS MAY BE ON THE JOB SITE CONCURRENTLY. CONTRACTOR SHALL BE RESPONSIBLE FOR RESOLVING ANY DISPUTES BETWEEN SUBCONTRACTORS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL INSPECTIONS AND TESTING REQUIRED BY GOVERNMENTAL AGENCIES SUCH AS FIRE DEPARTMENT, STORM DRAIN, ELECTRICAL AND BUILDING DEPARTMENTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A SPECIAL WATER METER, IF REQUIRED, AND PAY FOR ITS USE WHICH IS TO BE USED DURING CONSTRUCTION. CONTRACTOR SHALL ARRANGE AND PAY FOR TEMPORARY ELECTRICAL SERVICE TO BE USED IN CONSTRUCTION. CONTRACTOR SHALL TAKE ALL NECESSARY STEPS AND PROVIDE AND MAINTAIN ALL EQUIPMENT AND MATERIALS TO SAFEGUARD THE WORK SITE.
- CONTRACTOR AND HIS SUBCONTRACTORS MAY UTILIZE THE AREA DESIGNATED FOR USE AS A CONSTRUCTION STAGING AREA. THE CONDITION OF THE SITE SHALL BE DOCUMENTED TO THE MUTUAL AGREEMENT OF CONTRACTOR AND OWNER AND THE SITE SHALL BE PROPERLY MAINTAINED DURING THE CONSTRUCTION PERIOD. UPON COMPLETION OF THE PROJECT CONTRACTOR SHALL FULLY RESTORE THE SITE TO ITS PREVIOUS CONDITION OR BETTER. OBTAINING ADDITIONAL STAGING AREA TO COMPLETE THE PROJECT IN A TIMELY MANNER WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR SHALL MAINTAIN A RECORD OF ALL EQUIPMENT INSTALLED ON THE PROJECT AND RECORD ANY CHANGES OR ADJUSTMENTS TO THE PLANS MADE DURING THE CONSTRUCTION OF THE PROJECT. CONTRACTOR SHALL PROVIDE TO THE OWNER A SET OF "AS BUILT" PLANS TOGETHER WITH MANUFACTURER'S PRODUCT DATA AND OPERATIONAL AND MAINTENANCE MANUALS THROUGHOUT CONSTRUCTION AND AS REQUESTED BY OWNER.
- CODES: ALL WORK PERFORMED SHALL CONFORM TO THE APPLICABLE LAWS INCLUDING BUT NOT LIMITED TO THE LATEST ADOPTED EDITIONS OF:
 - CALIFORNIA BUILDING CODE
 - ERRORS, OMISSIONS, & DISCREPANCIES: CONTRACTORS SHALL REVIEW CONSTRUCTION DOCUMENTS & NOTIFY ENGINEER PROMPTLY & BEFORE COMMENCING WORK IF HE HAS KNOWLEDGE OF ANY ERRORS, OMISSIONS, DISCREPANCIES IN THESE CONSTRUCTION DOCUMENTS, OR OF ADVERSE JOB CONDITIONS. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE RESULTS OF SUCH ERRORS, OMISSIONS, DISCREPANCIES OR CONDITIONS NOT REPORTED IN WRITING TO THE ENGINEER.
 - ORGANIZATION: DO NOT CONSTRUCT THESE DOCUMENTS AS AN ATTEMPT BY THE ENGINEER TO ESTABLISH CONTRACT LIMITS BETWEEN THE OWNER & THE CONTRACTORS.
 - PERFORMANCE: ALL WORK SHALL BE EXECUTED IN ACCORDANCE W/ THE BEST STANDARDS & PRACTICES OF THE TRADE.
 - THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES.
 - THE TERM "CONTRACTOR" AS USED HEREIN & ON THE DRAWINGS SHALL ALSO BE APPLICABLE TO EACH SUBCONTRACTOR AS REQUIREMENTS PERTAIN TO HIS TRADE.
 - BEFORE COMMENCING WORK, EACH SUBCONTRACTOR SHALL VERIFY MEASUREMENTS, LINES, GRADES, LOCATIONS, & DETAILS OF EXISTING FIELD CONDITIONS & NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
 - CONTRACTORS SHALL ADEQUATELY PROTECT ALL PUBLIC, PRIVATE PROPERTY & IMPROVEMENTS FROM DAMAGE OR INJURY. DAMAGED AREAS SHALL BE REPLACED IN GOOD CONDITION AT NO ADDITIONAL COST TO THE OWNER.
 - THE CONTRACTOR SHALL REPLACE ANY DEFECTIVE MATERIALS & CORRECT ANY POOR WORKMANSHIP W/NO ADDITIONAL COST TO THE OWNER, & SHALL REMEDY ANY DEFECTS IN MATERIALS OR WORKMANSHIP WHICH APPEAR WITHIN A TWO YEAR PERIOD FROM THE DATE OF COMPLETION & ACCEPTANCE OF THE JOB.
 - THE CONTRACTORS SHALL SUPPLY ALL LABOR, MATERIALS, EQUIPMENT INSURANCE & SERVICES OF EVERY KIND NECESSARY FOR THE PROPER EXECUTION OF ALL WORK AS SHOWN, & INDICATED ON THESE DRAWINGS.
 - THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFE JOB SITE CONDITIONS. SUBCONTRACTOR SHALL BE RESPONSIBLE TO CLEANUP THE AREAS OF THEIR WORK AT THE END OF EACH DAY. AT THE END OF THE JOB, THE GENERAL CONTRACTOR SHALL ENSURE THAT ALL FINISHES ARE CLEAN & FREE OF DEFECTS. THE GENERAL CONTRACTOR AT NO ADDITIONAL COSTS TO THE OWNER SHALL REPLACE ANY BROKEN, DAMAGED OR SUB-STANDARD MATERIALS OR FINISHES.
 - INSPECTIONS: THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ARRANGING ALL NECESSARY INSPECTIONS.
 - DO NOT SCALE DRAWINGS. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE. DETAIL DRAWINGS SHALL TAKE PRECEDENCE OVER LARGER DRAWINGS.

- THE OUTLINE SPECIFICATIONS ARE DIVIDED BY THE ENGINEER FOR CONVENIENCE ONLY. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO DETERMINE WHAT TRADE IS RESPONSIBLE FOR EACH ITEM, & TO COMPLETE THE JOB IN ITS ENTIRETY.
- FRAMING CONDITIONS NOT SPECIFICALLY SHOWN SHALL BE FRAMED SIMILAR TO TYPICAL DETAILS SHOWN FOR PERSPECTIVE MATERIALS & SIMILAR CONDITIONS.
- VERIFY W/ELECTRICAL, MECHANICAL & PLUMBING SUBCONTRACTORS, THE SIZE & LOCATION OF ALL OPENINGS REQUIRED FOR ALL PIPE SLEEVES, ELECTRICAL CONDUITS, WATER & DRAINAGE PIPING & OTHER ITEMS TO BE EMBEDDED IN CONCRETE OR OTHERWISE INCORPORATED IN STRUCTURAL WORK. ELECTRICAL, MECHANICAL & PLUMBING SUBCONTRACTORS SHALL NOT CUT NOTCH OR DRILL HOLES IN STRUCTURAL FRAMING THAT WILL WEAKEN THE VALUE OF STRUCTURAL MEMBERS, ACCEPT AS ALLOWED IN STRUCTURAL PLANS & NOTES. ANY DAMAGE CAUSED TO STRUCTURAL MEMBERS BY ELECTRICAL, MECHANICAL & PLUMBING SUBCONTRACTORS WILL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER.
- ALL MATERIALS & FINISHES SHALL BE INSTALLED IN STRICT CONFORMANCE W/THE APPLICABLE BUILDING CODES, MANUFACTURER'S SPECIFICATIONS & TO THE COMPLETE SATISFACTION OF THE ENGINEER & THE OWNER.
- THE CONTRACT DRAWINGS & SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE SHOWN, THEY DO NOT INDICATE THE MEANS AND METHOD OF CONSTRUCTION. THE GENERAL CONTRACTOR SHALL SUPERVISE & DIRECT THE WORK & SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES & PROCEDURES. OBSERVATION VISITS TO THE SITE BY FIELD REPRESENTATIVES OF THE ENGINEER SHALL NOT INCLUDE INSPECTIONS OF THE PROTECTIVE MEASURES OR THE CONSTRUCTION PROCEDURES REQUIRED OR SAME, WHICH ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. OBSERVATIONS BY THE ENGINEER DO NOT GUARANTEE THE GENERAL CONTRACTOR'S PERFORMANCE & SHALL NOT BE CONSTRUED AS SUPERVISION OF CONSTRUCTION.
- TRASH & DEBRIS: THE GENERAL CONTRACTOR SHALL PROVIDE A PLACE FOR TRASH & DEBRIS COLLECTION & BE RESPONSIBLE FOR MAINTAINING SAFE JOB CONDITIONS. SUBCONTRACTORS SHALL BE RESPONSIBLE TO CLEANUP THE AREAS OF THEIR WORK AT THE END OF EACH DAY. THE GENERAL CONTRACTOR SHALL KEEP THE PREMISES CLEAN & FREE FROM ACCUMULATION OF WASTE MATERIALS & DEBRIS & AT THE END OF THE JOB SHALL REMOVE ALL RUBBISH, SURPLUS MATERIALS & TOOLS & LEAVE THE JOB SITE BROOM CLEAN.
- THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT 48 HOURS IN ADVANCE OF ANY EXCAVATION OR DEMOLITION ON THE PROJECT.
- CONTRACTOR SHALL CONDUCT HIS OPERATION IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF THE STATE WATER RESOURCE CONTROL BOARD, ARMY CORPS OF ENGINEERS, CALIFORNIA COASTAL COMMISSION, AND SAN DIEGO UNIFIED PORT DISTRICT.
- SILT CURTAINS OR TURBIDITY BARRIERS SHALL BE INSTALLED AND MAINTAINED DURING THE ENTIRE IN WATER CONSTRUCTION PROCESS.
- TURBIDITY PLUMES GENERATED BY CONSTRUCTION ACTIVITY SHALL BE MONITORED CONTINUOUSLY BY CONTRACTOR. ALL TURBIDITY GENERATED BY THESE CONSTRUCTION ACTIVITIES SHALL BE CONTAINED WITHIN THE CONFINES OF THE SILT CURTAIN. IF VISIBLE TURBIDITY IS OBSERVED OUTSIDE THE PERIMETER OF THE CURTAIN, CONTRACTOR SHALL IMMEDIATELY SUSPEND OPERATIONS IN THE AFFECTED AREA UNTIL COMPLIANCE WITH THIS CONDITION IS RESUMED.
- FOR THE PURPOSE OF MONITORING, TURBIDITY SHALL BE DEFINED AS ANY CHANGE IN THE AMBIENT CONDITION OF THE CLARITY OF THE WATER COLUMN TO THE NAKED EYE.
- THE CONTRACTOR SHALL COMPLY WITH ALL STATE, COUNTY AND CITY LAWS AND ORDINANCES RELATING TO SAFETY AND CHARACTER OF WORK, EQUIPMENT AND LABOR PERSONNEL. THIS SHALL INCLUDE, BUT IS NOT LIMITED TO, THE SHORING OF TRENCHES AND THE PREVENTION OF DEBRIS DISCHARGE TO THE CHANNEL.
- IN THE EVENT OF A CONFLICT OR INCONSISTENCY BETWEEN ITEMS INDICATED ON THE PLANS AND/OR SPECIFICATIONS OR WITH CODE REQUIREMENTS, THE NOTE, SPECIFICATIONS OR CODE WHICH PRESCRIBES AND ESTABLISHES THE MORE COMPLETE JOB OR THE HIGHER STANDARD SHALL PREVAIL.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTY ADJACENT TO THE WORK THROUGHOUT THE PERIOD OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING STRUCTURES AND UTILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN EXCAVATION AND WORKING NEAR EXISTING UTILITIES. LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EXISTING UTILITIES. ANY UTILITIES EXPOSED OR DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY HIM AT HIS EXPENSE.
- THE CONTRACTOR ASSUMES SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS AT ALL TIMES. THE CONTRACTOR SHALL PROVIDE ADEQUATE LIABILITY INSURANCE TO DEFEND, INDEMNIFY AND HOLD HARMLESS THE OWNER FROM ANY CLAIMS AND DAMAGES THAT MAY ARISE FROM THIS CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING ALL REQUIRED INSPECTIONS. THE PRESENCE OR ABSENCE OF A COUNTY OR OTHER INSPECTOR WILL NOT RELIEVE THE CONTRACTOR OF HIS FULL RESPONSIBILITY FOR THE PROPER PERFORMANCE OF WORK.
- ANY CONFLICTS WITH THE DESIGN OR ANY CHANGES TO THE PLANS SHALL BE AUTHORIZED BY THE ENGINEER BEFORE CONTINUING WITH WORK IN THAT AREA.
- ALL MATERIALS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNLESS OTHERWISE NOTED. ANY CONSTRUCTION NOTES IN THESE PLANS NOT IDENTIFIED AS EXISTING SHALL BE NEW AND FURNISHED AND INSTALLED BY CONTRACTOR.
- THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN EXCAVATION AND WORKING NEAR EXISTING BULKHEAD. THE EXISTING BULKHEAD SHALL BE PROTECTED IN-PLACE. REPAIR ANY DAMAGE TO THE EXISTING BULKHEAD CAUSED BY OR DURING THE PERFORMANCE OF WORK AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL PREPARE AS-BUILTS AND SUBMIT AT THE END OF CONSTRUCTION.
- NO CONSTRUCTION MATERIALS, EQUIPMENT, DEBRIS, OR WASTE SHALL BE PLACED OR STORED WHERE IT MAY BE SUBJECT TO WAVE, WIND, OR RAIN EROSION AND DISPERSION.
- FLOATING BOOMS SHALL BE USED TO CONTAIN DEBRIS DISCHARGED INTO COASTAL WATERS AND ANY DEBRIS DISCHARGED SHALL BE REMOVED AS SOON AS POSSIBLE BUT NO LATER THAN THE END OF EACH DAY.

- NON-BUOYANT DEBRIS DISCHARGED INTO COASTAL WATERS SHALL BE RECOVERED BY DIVERS AS SOON AS POSSIBLE AFTER LOSS.
- CONTRACTOR TO VERIFY EXISTING FIELD CONDITIONS AND DIMENSIONS.
- CONCRETE MIX GREATER THAN 2,500 PSI SHALL REQUIRE SPECIAL INSPECTION.

WATER POLLUTION CONTROL NOTES:

- THROUGHOUT THE SITE CARE WILL BE TAKEN IN THE PREVENTION OF POLLUTANTS AND OTHER DISCHARGED ASSOCIATED WITH THE CONSTRUCTION PROCESS FROM ENTERING THE STORM WATER SYSTEM OR THE HARBOR.
- ALL MATERIAL TO BE USED IN THE CONSTRUCTION PROCESS SHALL BE STORED AT THE SITE IN A COVERED STORAGE UNIT, OR WITH SOME FORM OF OVERHEAD COVERING EITHER BY A TARP OR IN A STORAGE UNIT AND OFF THE GROUND DURING STORAGE. ANY DEBRIS CREATED IN THE CONSTRUCTION PROCESS SHALL BE COLLECTED AND DISPOSED OF IN THE APPROPRIATE DUMPSTER AT THE END OF EACH DAY OF WORK.
- DURING THE UTILITY TRENCHING PROCESS, ALL MATERIAL REMOVED FROM THE TRENCH WILL BE PLACED AT THE SIDE OF THE TRENCH AND COVERED WITH A TARP IF RAIN SHOULD BE SUSPECTED. TRENCH SHALL BE COVERED FOR THE PREVENTION OF WALLS COLLAPSING. AFTER THE TRENCH IS BACKFILLED ALL EXCESS MATERIAL WILL BE REMOVED AND DISPOSED OF BY WAY OF TRUCK TO THE LOCAL DUMPING FACILITIES. ANY MATERIAL BEING STORED ON SITE, WILL BE COVERED WITH A TARP. EXCESS MATERIAL BELONGS TO THE CONTRACTOR.
- ALL TARPS WILL BE WEIGHTED DOWN WITH ROCKS OR SAND BAGS TO HELP PREVENT WIND FROM REMOVING THEM
- ALL CONCRETE DEBRIS AND DUST SHALL BE VACUUMED AND REMOVED FOR THE PREVENTION OF RUNOFF INTO THE STORM DRAIN SYSTEM. ANY SPILLS WILL BE CLEANED UP AND DISPOSED OF AND NOT WASHED DOWN THE STORM DRAIN SYSTEM. STORM DRAIN SHALL BE PROTECTED BY TARP AND WOOD IN ORDER TO PREVENT RUNOFF FROM ENTERING INTO THE DRAINAGE SYSTEM AND THE TARP WILL BE WEIGHTED DOWN WITH THE STEEL GRATE TO PREVENT REMOVAL BY WIND OR CONSTRUCTION TRAFFIC. ANY MATERIAL THAT MIGHT HAPPEN TO ENTER THE DRAIN WILL BE PROMPTLY REMOVED.
- DURING CONSTRUCTION OF THE FACILITIES OVER THE WATER, MATERIAL WILL BE STORED OFF THE DECK OF THE FLOATS AND COVERED WITH A TARP IF NOT IN USE AND RAIN IS SUSPECT AND/OR FORCASTED AS A 50% OR GREATER CHANCE. ALL EXCESS MATERIAL WILL BE REMOVED AT THE END OF THE DAY AND DISPOSED OF IN THE PROPER DISPOSAL BINS. ANYTIME THERE IS A POSSIBILITY OF DEBRIS ESCAPING INTO THE WATER, THE AREA SHALL BE ENCLOSED WITH A FLOATING BOOM.
- ALL MATERIALS USED IN THE PREVENTION OF STORM WATER POLLUTION WILL BE REMOVED AT THE COMPLETION OF THE WORK AND DISPOSED OF IN WASTE BINS. ANY MATERIAL ENDING UP IN THE STORM DRAIN SYSTEM WILL BE CLEANED OUT AND REMOVED TO A DISPOSAL SITE.
- SHOULD ANY WORK BE IN PROGRESS DURING RAINS THAT MIGHT ALLOW RUNOFF TO ENTER INTO THE BAY OR THE STORM DRAIN SYSTEM, IT WILL BE IMMEDIATELY STOPPED AND ALL WORK AREAS COVERED WITH TARPS.
- ALL NEWLY COMPACTED TRENCHES WILL BE COVERED TO PREVENT EROSION OF DIRT AND DRAINAGE INTO THE BAY OR STORM DRAIN SYSTEM.
- THESE MEASURE SHALL BE IMPLEMENTED PRIOR TO THE COMMENCEMENT OF WORK AND SHALL REMAIN IN EFFECT UNTIL SUCH TIME AS THE WORK IS COMPLETED. ALL SUBCONTRACTORS SHALL BE EDUCATED ON THESE PRACTICES PRIOR TO THE COMMENCEMENT OF WORK AND SHALL BE HELD TO THESE STANDARDS FOR THE DURATION OF THEIR WORK AT THE SITE.

1ST SUBMITTAL TO BUILDING DEPT.

PROJECT
**SHELTER ISLAND BOATYARD
 CRANE REPLACEMENT AND PIER
 ADDITION
 SAN DIEGO, CALIFORNIA**

CLIENT
**R.D. BALDWIN &
 ASSOCIATES**

NO.	REVISION	BY	DATE



**2500 Via Cabrillo Marina, Suite 200
 San Pedro, CA 90731
 Tel: 310 548 3132
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DESIGNED BY: JW
 DRAWN BY: EB/JW
 CHECKED BY: TB

GENERAL NOTES

SCALE	DATE
NONE	11-27-2013
JOB NO.	2264-A
SHEET	T-3
SHEET #	2 of 8

CONCRETE PIERS AND SLAB

DESIGN CRITERIA:

CONCRETE STRUCTURES SHALL BE DESIGNED IN ACCORDANCE WITH THE LATEST EDITION OF CBC.

- 1. LOADS ACTING ON THE RUNWAY SHALL CONSIST OF THE SELF-WEIGHT OF THE STRUCTURE, IN ADDITION TO A CONCENTRATED WHEEL LOAD APPLIED BY THE NEW 150MT GANTRY CRANE, MANUFACTURED BY OTHERS (ASCOM).
2. PIERS SHALL BE DESIGNED TO RESIST THE VERTICAL AND LATERAL LOADING COMPONENTS, OR ENVIRONMENTAL LOADING (WIND, WAVE, EARTHQUAKE, ETC.) WHICHEVER IS WORST CASE.

MATERIALS:

CONCRETE (PIERS)

- 1. CONCRETE FOR PIERS SHALL HAVE MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI. PORTLAND CEMENT SHALL BE TYPE V LOW ALKALI CONFORMING TO ASTM C150 AND CONFORMING TO ASTM C33 WITH CONCRETE SHRINKAGE CHARACTERISTICS OF LESS THAN 0.050%; CEMENT WATER RATIO SHALL NOT EXCEED 0.40.
2. THE MAXIMUM CONCRETE SLUMP SHALL NOT EXCEED 4". PLACING OF ANY CONCRETE SHALL BE CONTINUOUSLY INSPECTED BY A REGISTERED SPECIAL INSPECTOR PAID FOR BY THE OWNER.
3. THE CONTRACTOR SHALL SUBMIT A POURING SCHEDULE WITH CONSTRUCTION JOINT LOCATIONS AND DETAILS INDICATED FOR APPROVAL PRIOR TO CONSTRUCTION.
4. ALL CONCRETE MIX DESIGNS CONFORMING TO CBC SECTIONS 1904 & 1905 SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL BEFORE ANY CONCRETE IS PLACED. ALL CONCRETE MIXES SHALL HAVE A MINIMUM CEMENT CONTENT OF 6.0 SACKS OF CEMENT PER CUBIC YARD OF MIX. FOR USED IN A SALT WATER ENVIRONMENT. ALL CONCRETE MIXES SHALL BE CERTIFIED BY A CONCRETE TESTING LABORATORY AND SIGNED BY A CALIFORNIA REGISTERED CIVIL ENGINEER.
5. AGGREGATES SHALL BE ASTM C-33 AGGREGATES
6. CONCRETE TEST SAMPLES SHALL BE TAKEN IN ACCORDANCE WITH ASTM AND CBC STANDARDS. RESULTS OF THE 7 & 28 DAY TESTS SHALL BE SUBMITTED TO THE ENGINEER FOR HIS RECORDS. SLUMP TESTS ARE REQUIRED FOR ALL TEST SAMPLES AND MUST ALSO BE REPORTED.
7. NO FLY ASH SHALL BE USED IN ANY CONCRETE. NO CALCIUM CHLORIDE SHALL BE USED IN ANY CONCRETE.
8. ALL CONCRETE SHALL BE CURED FOR A MINIMUM OF 3 DAYS BY A METHOD ACCEPTABLE TO THE ENGINEER.
9. ALL STEEL REINFORCEMENTS SHALL BE SECURED IN POSITION AND INSPECTED BY THE LOCAL BUILDING DEPARTMENT INSPECTOR PRIOR TO THE PLACING OF ANY CONCRETE.
10. FORMS MAY BE STRIPPED ONLY AFTER THE CONCRETE HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.
11. GROUT USED SHALL BE HIGH STRENGTH (8,000 PSI), NON SHRINK, NON METALLIC, NONCORROSIVE, WILL NOT ATTACK REINFORCEMENT. IT SHALL MEET ASTM C 1107. GROUT SHALL BE PUMPABLE, FOR EASIER PLACEMENT IN DIFFICULT AND LOW CLEARANCE INSTALLATIONS.
12. ALL CONSTRUCTION JOINTS SHALL BE CLEANED OF SURFACE LAITANCE, CURING COMPOUND, AND OTHER FOREIGN MATERIALS BEFORE FRESH CONCRETE IS PLACED AGAINST THE SURFACE OF THE JOINT. ABRASIVE BLAST METHODS SHALL BE USED TO CLEAN HORIZONTAL CONSTRUCTION JOINTS TO THE EXTENT THAT CLEAN AGGREGATE IS EXPOSED. ALL CONSTRUCTION JOINTS SHALL BE FLUSHED WITH WATER AND ALLOWED TO DRY TO SURFACE DRY CONDITION IMMEDIATELY PRIOR TO PLACING CONCRETE.
13. ALL EXPOSED CONCRETE EDGES AND CORNERS TO BE CHAMFERED 3/4 IN X 3/4 IN UNLESS OTHERWISE NOTED.
14. CONTRACTOR'S FORMING SYSTEM SHALL BE CAPABLE OF INCORPORATING MISALIGNED PILES INTO THE STRUCTURE, IF APPROVED BY THE ENGINEER, AT NO EXTRA COST.
15. CONCRETE COVER TO DECK REINFORCEMENT SHALL BE 3" MIN WHEN CAST AGAINST EARTH, 2" WHEN OVER WATER UNLESS NOTED OTHERWISE.

REINFORCEMENT

- 1. REINFORCING BARS: EXCEPT AS NOTED, REINFORCING BARS SHALL BE DEFORMED AND SHALL CONFORM TO ASTM A 615, GRADE 60. REINFORCING BARS FOR PILE DOWELS SHALL CONFORM TO ASTM A706, GRADE 60. STRAIGHT AND BENT REINFORCING BARS SHALL BE FABRICATED PRIOR TO COATING AND COATING SHALL COMPLY WITH ASTM A934. THE MINIMUM COATING THICKNESS SHALL BE 7 MILS. COATED BARS SHALL BE HANDLED AND PROTECTED IN ACCORDANCE WITH THE PROVISIONS OF ASTM D3963.
2. WELDING OF REINFORCING BARS: WELDING OF BARS IS NOT PERMITTED EXCEPT WHERE SHOWN OR APPROVED BY ENGINEER. ALL WELDING SHALL CONFORM TO AWS D1.4
3. PROVIDED SPLICE LENGTHS FOR REINFORCING BARS UNLESS OTHERWISE NOTED. SPLICES PERMITTED ONLY AT LOCATIONS SHOWN OR APPROVED BY THE ENGINEER.

CLASS B LAP SPLICE LENGTH (IN)

GR 60, FY = 60000 PSI, F'C = 5000 PSI

Table with 3 columns: BAR SIZE, TOP BARS, OTHER. Rows #4 through #11.

- 4. SPLICES IN ADJACENT REINFORCING BARS AT ANY PARTICULAR SECTION SHALL BE STAGGERED. THE MINIMUM DISTANCE BETWEEN STAGGERED SPLICES SHALL BE 40 BAR DIAMETERS CLEAR. NO MORE THAN ON HALF THE REINFORCEMENT SHALL BE SPLICED AT ANY ONE LOCATION. TOP BARS SHALL BE SPLICED AT MID SPAN BETWEEN BENTS AND BOTTOM BARS SHALL BE SPLICED AT CENTERLINE ON BENTS UNLESS OTHERWISE NOTED. NO MORE THAN ONE HALF THE REINFORCEMENT SHALL BE SPLICED WITHIN ANY ONE SPAN UNLESS OTHERWISE SHOWN. SPACE EMBEDDED PIPES OR CONDUIT AT LEAST 3 DIAMETER OC APART UNLESS OTHERWISE SHOWN ON DRAWINGS.
5. SINGLE MAT REINFORCEMENT SHALL BE PLACED AT MID DEPTH UNLESS OTHERWISE NOTED.
6. DO NOT CUT OR REPOSITION REINFORCEMENT SHOWN ON DRAWINGS WITHOUT PRIOR APPROVAL BY THE ENGINEER.
7. REVIEW ALL DRAWINGS FOR OPENINGS IN THE SLABS OR WALLS. ALL OPENINGS SHALL BE FORMED OR SLEEVED BEFORE CONCRETE IS PLACED. ADDITIONAL REINFORCING IS NOT REQUIRED FOR OPENINGS WHOSE LARGEST DIMENSION IS 9 INCHES OR LESS BUT, INTERRUPTED BARS SHALL BE DEFLECTED AROUND OPENING TO MAINTAIN SPECIFIED CLEARANCES. ALL OTHER OPENINGS SHALL BE REINFORCED AS DETAILED OR AS REQUIRED BY THE STANDARD DETAILS WHEN NOT SPECIFICALLY DETAILED.

PILES:

CONTRACTOR MUST REVIEW THE ENTIRE GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT. CONTRACTOR SHALL VERIFY PILE EMBEDMENT AND REVIEW INSTALLATION METHODS SPECIFIED IN THE GEOTECHNICAL REPORT. GEOTECHNICAL REPORT IS PREPARED BY TERRA PACIFIC CONSULTANTS, INC. FILE NO. 28013 DATED 04-30-2008. WITH SUPPLEMENTAL GEOTECHNICAL RECOMMENDATIONS BY TERRA PACIFIC CONSULTANTS, INC, FILE NO. 28013 DATED 02-10-2009.

ANY ERRORS, OMISSIONS AND DISCREPANCIES SHALL BE NOTIFIED TO THE ENGINEER PROMPTLY AND BEFORE COMMENCING WORK. THE CONTRACTOR IS RESPONSIBLE FOR SUCH OMISSIONS, DISCREPANCIES OR CONDITIONS NOT REPORTED IN WRITING TO THE ENGINEER.

THE FOLLOWING GENERAL NOTES AND SPECIFICATIONS RELATE TO THE PROJECT'S BEARING PILES. CONCRETE BEARING PILES HAVE BEEN DESIGNED FOR USE FOR THE NEW PIER RUNWAYS AND LANDSIDE SLAB. PILES SHALL BE SUPPLIED BY A LICENSED FABRICATOR.

DELIVERY AND HANDLING

- 1. CONTRACTOR SHALL TAKE EXTREME CARE TO PREVENT DAMAGE TO THE PILES DURING DELIVERY AND HANDLING. THE PILES WILL BE INSPECTED PRIOR TO INSTALLATION AND ANY DAMAGE MAY CAUSE FOR REJECTION OF PILE AT CONTRACTORS EXPENSE.
2. ROCK POCKETS AND HONEYCOMBING ARE PROHIBITED. REPAIR OF SUCH DEFECTS WILL NOT BE PERMITTED. SUCH DEFECTS WILL BE CAUSE TO REJECT THE PILE (AS APPLICABLE).
3. INDIVIDUAL SMALL SURFACE DEFECTS SUCH AS AIR BUBBLES, VOIDS, AND FISSURES WILL BE ACCEPTED WITHOUT REPAIR, IF THE VOIDS OR AIR BUBBLES ARE LESS THAN 1/2-INCH IN DIAMETER AND 3/8-INCH IN DEPTH AND IF FISSURES DO NOT PENETRATE MORE THAN 3/8 OF AN INCH IN DEPTH (AS APPLICABLE).
4. SURFACE DEFECTS BETWEEN 3/8-INCH IN DEPTH, AND BETWEEN 1/2-INCH AND 1-INCH IN DIAMETER MAY BE REPAIRED (AS APPLICABLE).

MATERIALS:

CONCRETE:

- 1. CEMENT SHALL BE TYPE V, LOW ALKALI PORTLAND CEMENT CONFORMING TO ASTM C150 AND REFERENCE SPECIFICATION (RS) SUBSECTION 201-1.2.1
2. AGGREGATES SHALL CONFORM TO ASTM C33 AND RS SUBSECTION 201-1.2.2 WITH A COMBINED AGGREGATE GRADATION C (1 INCH MAXIMUM) AS SHOWN IN SUBSECTION 201-1.3.2 TABLE 201-1.3.2(A). AGGREGATES SHALL WEIGH AT LEAST 140 POUNDS PER CUBIC FOOT BASED ON THE MINIMUM DENSITY OF SOLID MATERIAL IN AN OVEN-DRY CONDITION.
3. MIXING, CURING, AND WASHING WATER SHALL CONFORM TO RS SUBSECTION 201-1.2.3.
4. FLY ASH SHALL BE CLASS F, CONFORMING TO RS SUBSECTION 201-1.2.5.
5. ADMIXTURES: NO CALCIUM CHLORIDE, THIOCYANATE OR OTHER ADMIXTURES CONTAINING MORE THAN 0.05 PERCENT CHLORIDE IONS.
6. WATER REDUCING ADMIXTURES SHALL CONFORM TO ASTM C494, TYPE A AND SHALL BE NON TOXIC AFTER 30 DAYS. AMOUNT OF ADMIXTURE ADDED TO THE CONCRETE SHALL CONFORM TO MANUFACTURER'S RECOMMENDATIONS.
7. THE USE OF OTHER ADMIXTURES IS SUBJECT TO APPROVAL BY THE ENGINEER.
8. NO COMPONENT OF CONCRETE MIX DESIGN SHALL CONTAIN CALCIUM CHLORIDE.
9. MINIMUM 28 DAY COMPRESSIVE STRENGTH FOR ALL BEARING PILES AND GUIDE PILES SHALL BE 6000 PSI, AS SHOWN ON THE DRAWINGS.
10. CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGN PRIOR TO THE FABRICATION OF CONCRETE PILES FOR APPROVAL OF THE ENGINEER.

REINFORCEMENT:

- 1. HI-TENSILE REINFORCING: SMALL DIAMETER PRESTRESSING STRANDS (NOMINAL STRAND DIAMETERS FROM 0.25 INCH THRU 0.60 INCH) SHALL BE OF THE UNCOATED 7 WIRE HIGH TENSILE STEEL COLD DRAWN TYPE, STRESS RELIEVED AFTER BEING FORMED INTO STRANDS. THE STRAND SHALL CONFORM TO ASTM A416 GRADE 270, LOW RELAXATION. NOMINAL SIZE OF STRAND SHALL BE AS SHOWN ON DRAWINGS.
2. SPIRAL REINFORCING SHALL MEET THE REQUIREMENTS OF ASTM A82 UNLESS OTHERWISE NOTED ON DRAWINGS.
3. REINFORCING STEEL BARS SHALL BE DEFORMED BARS IN CONFORMANCE WITH ASTM A615, GRADE 60, AND SHALL BE EPOXY COATED PER ASTM A775.
4. CORRUGATED METAL TUBES SHALL BE MINIMUM OF 0.023 INCH THICK WITH A MINIMUM INSIDE DIAMETER OF 1-7/8 INCH. THE METAL SHALL BE MILD STEEL.

SPECIAL INSPECTION NOTES:

- 1. SPECIAL INSPECTIONS SHALL BE PERFORMED PER CBC CHAPTER 17.
2. THE SPECIAL INSPECTOR MUST BE APPROVED BY THE COUNTY OF LOS ANGELES.
3. THE TESTING LABORATORY MUST BE APPROVED BY THE COUNTY OF LOS ANGELES.
4. FABRICATOR SHALL SUBMIT "APPLICATION TO PERFORM OFF-SITE FABRICATION" TO THE INSPECTION SERVICES DIVISION FOR APPROVAL PRIOR TO COMMENCEMENT OF FABRICATION.
5. FABRICATOR SHALL SUBMIT A "CERTIFICATE OF COMPLIANCE FOR OFF-SITE FABRICATION TO THE INSPECTION SERVICES DIVISION PRIOR TO ERECTION OF PREFABRICATED ITEMS AND ASSEMBLIES.
6. A CERTIFICATE OF SATISFACTORY COMPLETION OF WORK REQUIRING SPECIAL INSPECTION MUST BE COMPLETED AND SUBMITTED TO THE INSPECTION SERVICES DIVISION.
7. PROPERTY OWNER/CONTRACTOR SHALL COMPLETE AND SIGN AGREEMENT FORM FOR SPECIAL INSPECTION. IT SHALL BE SUBMITTED AT THE PERMIT SERVICES DIVISION PRIOR TO ISSUANCE OF THE PERMIT.

INSTALLATION OF PILES AND TOLERANCES:

- 1. PILES SHALL BE INSTALLED ONLY IN THE PRESENCE OF THE ENGINEER.
2. IT IS ANTICIPATED THAT PILE INSTALLATION THROUGH DREDGED SECTIONS WILL RESULT IN CONSOLIDATION OF THE ROCK FILL AND LATERAL MOVEMENT OF PILES DURING CONSTRUCTION. IT IS INTENDED THAT THE CONTRACTOR MAKE ALL NECESSARY PROVISIONS TO THE DRIVING PROCEDURE, INITIAL SPOTTING, AND INITIAL INCLINATION OF THE PILES IN ORDER TO ACHIEVE INSTALLATION TO THE INDICATED TOLERANCES.
3. PILES SHALL BE INSTALLED WITHOUT VOLUNTARY INTERRUPTION BY METHODS APPROVED BY THE ENGINEER AND TO THE DEPTHS SHOWN ON DRAWINGS.
4. CUSHIONS, HAMMER FUEL SETTINGS OR ENERGY SETTINGS: CHANGE PILE CUSHIONS, OR CHANGE HAMMER FUEL OR ENERGY SETTINGS WHEN REQUESTED BY THE ENGINEER.
5. CONTRACTOR IS RESPONSIBLE TO INSTALL PILES SUCH THAT THEIR FINAL POSITIONS ARE AS SHOWN ON DRAWINGS. ANY PILE WHICH IS INSTALLED OUT OF PLUMB MAY BE REJECTED BY THE ENGINEER. PILES WHICH DO NOT MEET THE LOCATION REQUIREMENTS WITHIN THE STATED TOLERANCES, MAY BE REJECTED BY THE ENGINEER. IF A PILE IS OUT OF TOLERANCE, THE ENGINEER MAY DIRECT CONTRACTOR TO TAKE THE FOLLOWING CORRECTIVE MEASURES:
a. THE ENGINEER MAY ORDER THE PILE TO BE BROKEN OFF ONE FOOT BELOW THE MUDLINE AND BE REPLACED BY A SECOND PILE AT A NEARBY LOCATION.
b. THE ENGINEER MAY ALLOW THE PILE TO REMAIN IN PLACE.
c. FOR REPLACEMENT PILES OR OUT-OF-TOLERANCE PILES ALLOWED TO REMAIN IN PLACE, THE ENGINEER WILL REQUIRE CONTRACTOR TO PROVIDE A WORK PLAN FOR CORRECTIVE MEASURES FOR THE ENGINEER'S REVIEW. THE WORK PLAN SHALL INCLUDE ALL REDESIGN NECESSARY ON THE DECK SYSTEM, INCLUDING ADJUSTMENT OF REINFORCING BAR CAUSED BY THE OUT OF TOLERANCE PILES OR REPLACEMENT PILES AND MODIFICATION TO EQUIPMENT OR DRIVING PROCEDURE TO REMEDIATE THE PROBLEM. THE PROBLEM SHALL BE REMEDIATED BEFORE RESUMING PRODUCTION PILE DRIVING. NO SCHEDULE TIME EXTENSION AND NO REQUEST FOR EXTRAS SHALL BE ALLOWED FOR THE PILES THAT WERE DEEMED UNACCEPTABLE BY THE ENGINEER DUE TO CONTRACTOR'S ERROR.
6. ACCURACY OF DRIVING:
a. PILES SHALL BE DRIVEN WITH AN INCLINATION OF NOT MORE THAN 1/8 PER FOOT FROM THE VERTICAL AND THE PILE TOPS SHALL NOT VARY FROM THE DESIGN POSITION BY MORE THAN THE FOLLOWING DIMENSIONS: 4 INCH IN ANY DIRECTION MEASURED AT AN ELEVATION OF +4FT MLW. THE PILES SHALL NOT BE PULLED FROM THEIR NATURAL (FREESTANDING) LOCATION. THE NATURAL (FREESTANDING) LOCATION SHALL BE DETERMINED WITHOUT CONSTRAINT, SUPPORT, OR MOVEMENT OF THE LEADS AGAINST THE PILES.
b. DETERMINE THE APPROPRIATE STARTING INCLINATION, IF ANY, AND DRIVE THE PILE AT THAT INCLINATION TO ACHIEVE ALIGNMENT SHOWN ON DRAWINGS.
7. WHERE OBSTRUCTIONS ARE ENCOUNTERED THAT RESULT IN A SUDDEN, UNEXPECTED INCREASE IN PENETRATION RESISTANCE AND DEVIATION FROM THE SPECIFIED TOLERANCES, PERFORM ONE OR MORE OF THE FOLLOWING ACTIONS AT THE DIRECTION OF THE ENGINEER:
a. REMOVE THE OBSTRUCTION AND REDRIVE;
b. EXTRACT, INSPECT, REPOSITION, AND REDRIVE THE PILE.
c. DRIVE A DRIVING RAM, SPUD OR MANDREL APPROVED BY THE ENGINEER, IN ADVANCE OF DRIVING THE PILES WHERE ROCK OR OTHER OBSTRUCTIONS ARE ENCOUNTERED AND WHEN DIRECTED BY THE ENGINEER, THIS SHALL BE DONE TO PROVIDE A CLEAN AND UNOBSTRUCTED OPENING FOR THE PILES TO REACH THE SUBSOIL WITHOUT DAMAGE.
d. RELOCATE OR REMOVE ROCKS OR OTHER OBSTRUCTION WHICH PREVENT THE LOCATING OR DRIVING OF THE PILES EXCEPT WHERE THE ENGINEER PERMITS SPUDDING TO BREAK ROCKS.
e. IF AN OBSTRUCTION IS ENCOUNTERED ABOVE THE REQUIRED PILE TOE ELEVATION, CONTRACTOR SHALL STOP DRIVING AND SHALL IMMEDIATELY DETERMINE THE NATURE AND EXTENT OF THE PROBLEM BY ANY METHOD, SUBJECT TO THE APPROVAL OF THE ENGINEER. THE ENGINEER WILL REVIEW THE PROBLEM AND DETERMINE THE APPROPRIATE STEPS FOR RESOLUTION AS HEREIN SPECIFIED.
f. IF AN OBSTRUCTION WHICH CANNOT BE EASILY REMOVED IS ENCOUNTERED LESS THAN 15 FEET BELOW THE GROUND SURFACE, THE OBJECT SHALL BE SPURRED THROUGH. THE PROCEDURE FOR SPUDDING SHALL BE AS FOLLOWS: 1. REMOVE PILE AND PLACE SAFELY ON GROUND OR BARGE USING TECHNIQUES THAT ALLOW PILE TO BE REUSED. ANY DAMAGE WHICH OCCURS TO THE PILE DURING REMOVAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. 2. THE ENGINEER WILL DETERMINE IF ANY DAMAGE RENDERS THE PILE UNUSABLE. 3. USE A SPUD OF THE CONTRACTOR'S DESIGN, APPROVED BY THE ENGINEER, TO BREAK UP THE OBSTRUCTION; THE PILE SHALL THEN BE REDRIVEN IN THE SAME LOCATION.
9. IF THE OBSTRUCTION CANNOT BE SPURRED THROUGH OR OCCURS DEEPER THAN 15 FEET BELOW THE GROUND SURFACE, DRIVE ANOTHER PILE AT AN ADJACENT LOCATION DIRECTED BY THE ENGINEER.
8. CONTRACTOR SHALL TAKE ANY ADDITIONAL PRECAUTIONS TO THOSE SHOWN ON DRAWINGS AND IN THE SPECIFICATIONS TO PROTECT ANY EXISTING ADJACENT FEATURES DURING JETTING AND DRIVING, INASMUCH AS DAMAGE TO ANY SUCH FEATURES SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
10. IF PILES ARE DAMAGED DURING INSTALLATION, CONTRACTOR SHALL NOTIFY THE ENGINEER FOR INSPECTION. UPON THE ENGINEER'S INSPECTION, THE PILE WILL EITHER BE REPLACED OR REPAIRED AS DETERMINED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
11. PERFORM SURVEY WORK DURING PILE DRIVING OPERATIONS TO DETERMINE PILE INCLINATION AND POSITION.
12. CONTRACTOR SHALL VERIFY MUDLINE ELEVATIONS WITH PILE SCHEDULE TABLES SHOWN ON DRAWINGS PRIOR TO PERFORMING WORK OR ORDERING OF PILES. ANY DISCREPANCIES SHALL BE NOTIFIED TO THE ENGINEER.

1ST SUBMITTAL TO BUILDING DEPT.

PROJECT: SHELTER ISLAND BOATYARD CRANE REPLACEMENT AND PIER ADDITION SAN DIEGO, CALIFORNIA

CLIENT: R.D. BALDWIN & ASSOCIATES

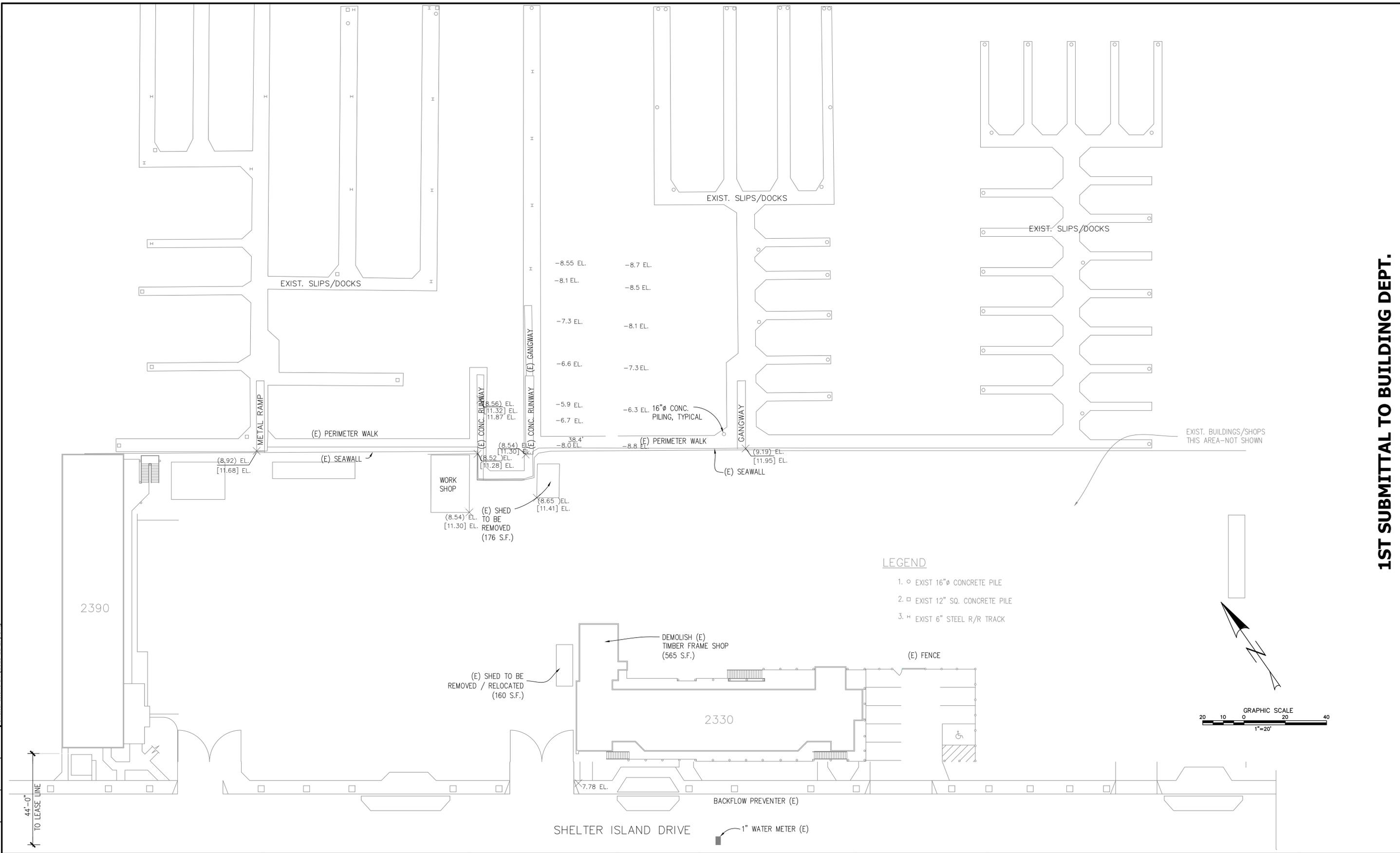
REGISTERED PROFESSIONAL ENGINEER TIMOTHY BAZLEY No. C 50019 Exp. 6/30/15 CIVIL STATE OF CALIFORNIA

BLUEWATER 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

GENERAL NOTES SHEET T-3 OF 8

SCALE: NONE JOB NO: 2264-A SHEET: T-3 SHEET #: 3 OF 8 DATE: 11-27-2013

FINAL
100%
90



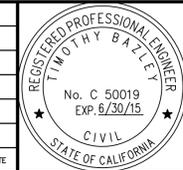
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STATUS

PROJECT
**SHELTER ISLAND BOATYARD
 CRANE REPLACEMENT AND PIER
 ADDITION
 SAN DIEGO, CALIFORNIA**

CLIENT
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 ASSOCIATES**

NO.	REVISION	BY	DATE



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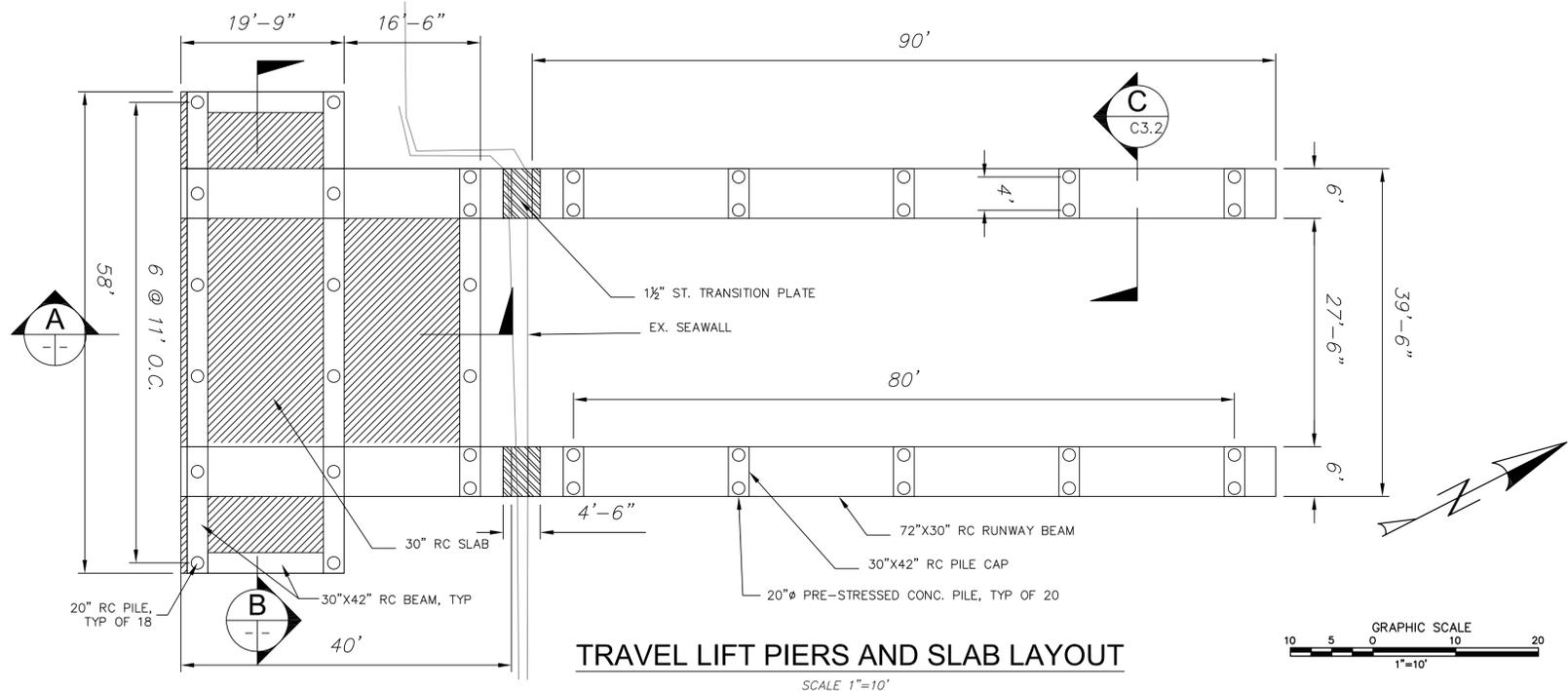
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 San Pedro, CA 90731
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 Fax: 310 548 1924

DESIGNED BY: JW
 DRAWN BY: EB/JW
 CHECKED BY: TB

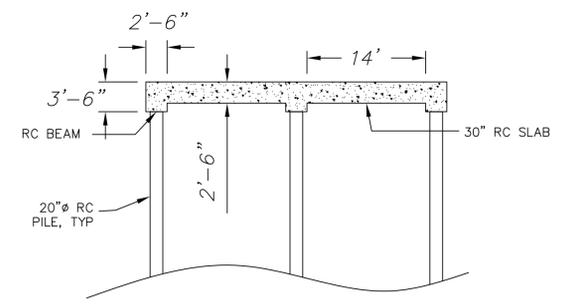
EXISTING SITE PLAN

SCALE	DATE
1" = 20'	11-27-2013
JOB NO.	2264-A
SHEET	C-1
SHEET #	4 of 8

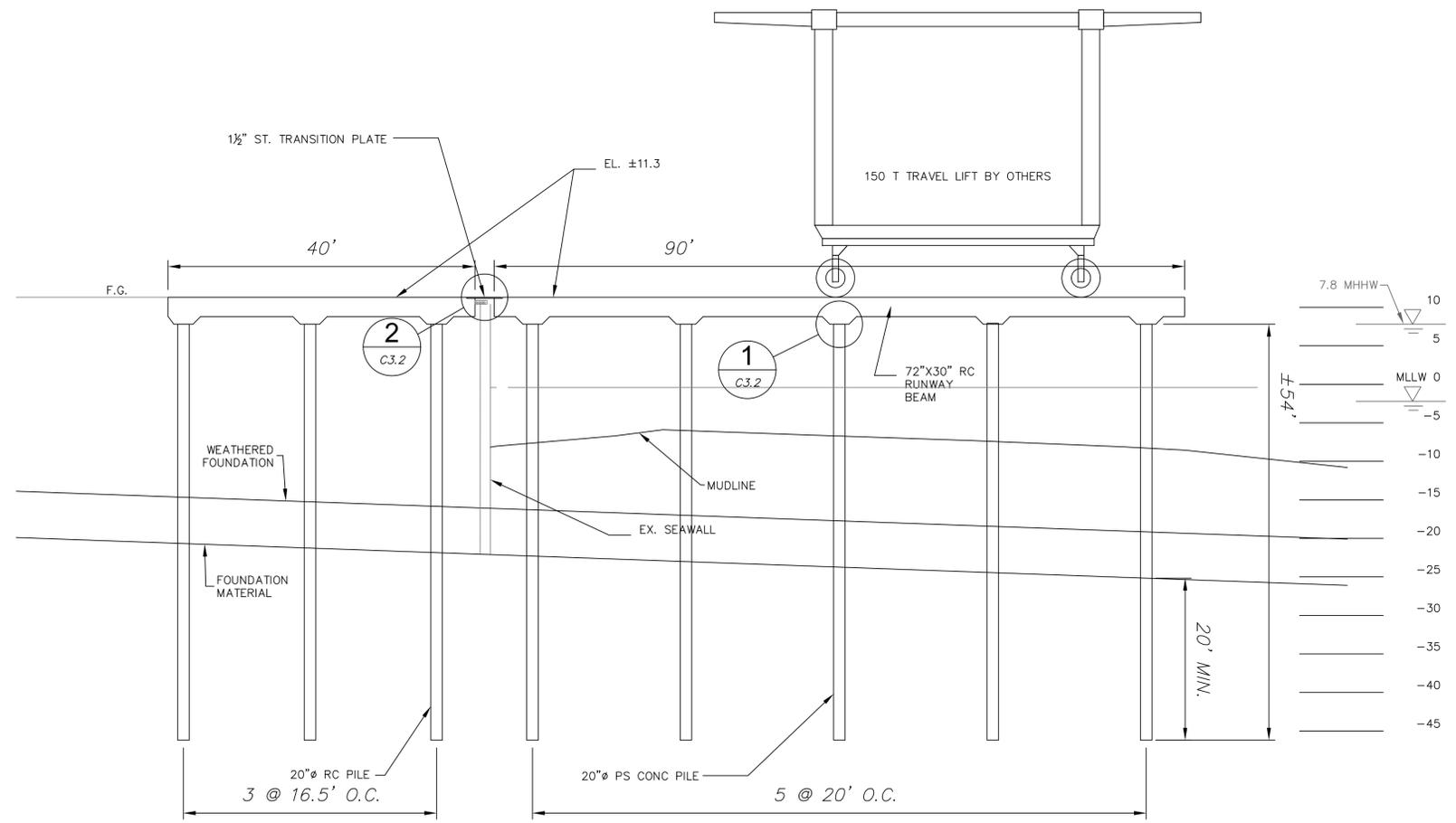
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90	100%
	FINAL



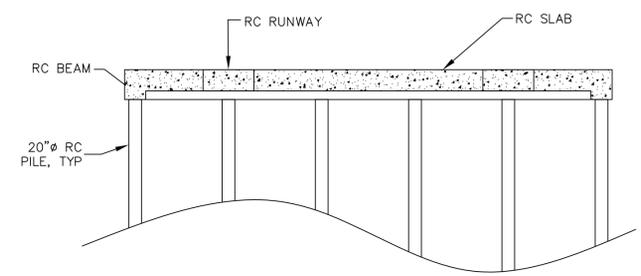
TRAVEL LIFT PIERS AND SLAB LAYOUT
SCALE 1"=10'



SECTION A
SCALE 1"=10'



TRAVEL LIFT PIERS AND SLAB ELEVATION
SCALE 1"=10'



SECTION B
SCALE 1"=10'

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PROJECT
**SHELTER ISLAND BOATYARD
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**PIER LAYOUT AND
ELEVATION**

SCALE	DATE
AS NOTED	11-27-2013
JOB NO.	2264-A
SHEET	C-3.1
SHEET #	6 of 8

Printed On: Nov 30, 2013 - 8:07pm

Shelter Island BY (2013-11-27).dwg

FINAL
100%
90

STATUS

PROJECT
**SHELTER ISLAND BOATYARD
 CRANE REPLACEMENT AND PIER
 ADDITION
 SAN DIEGO, CALIFORNIA**

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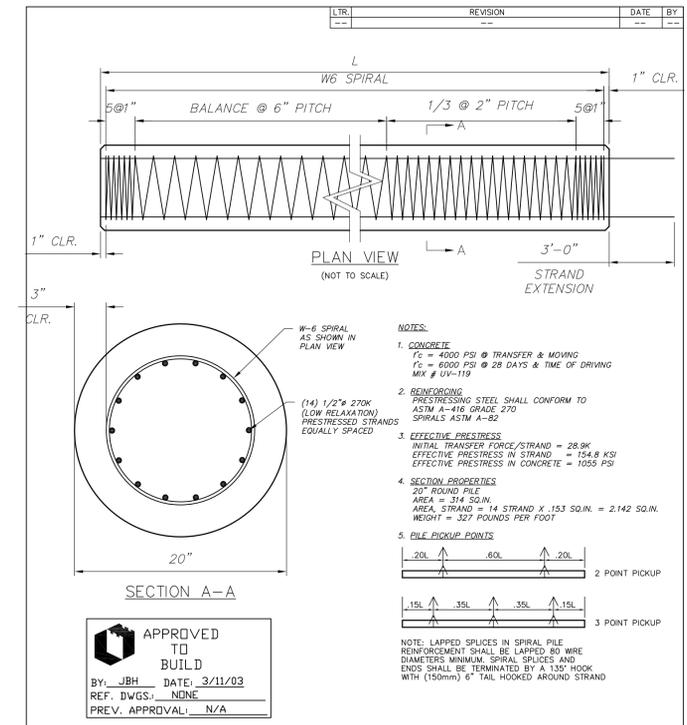
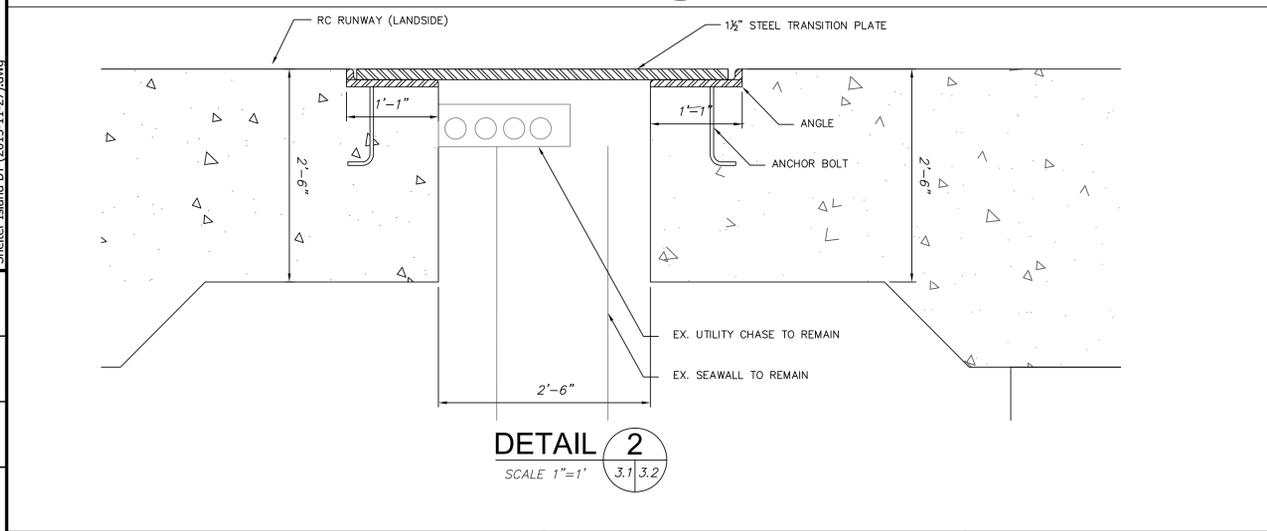
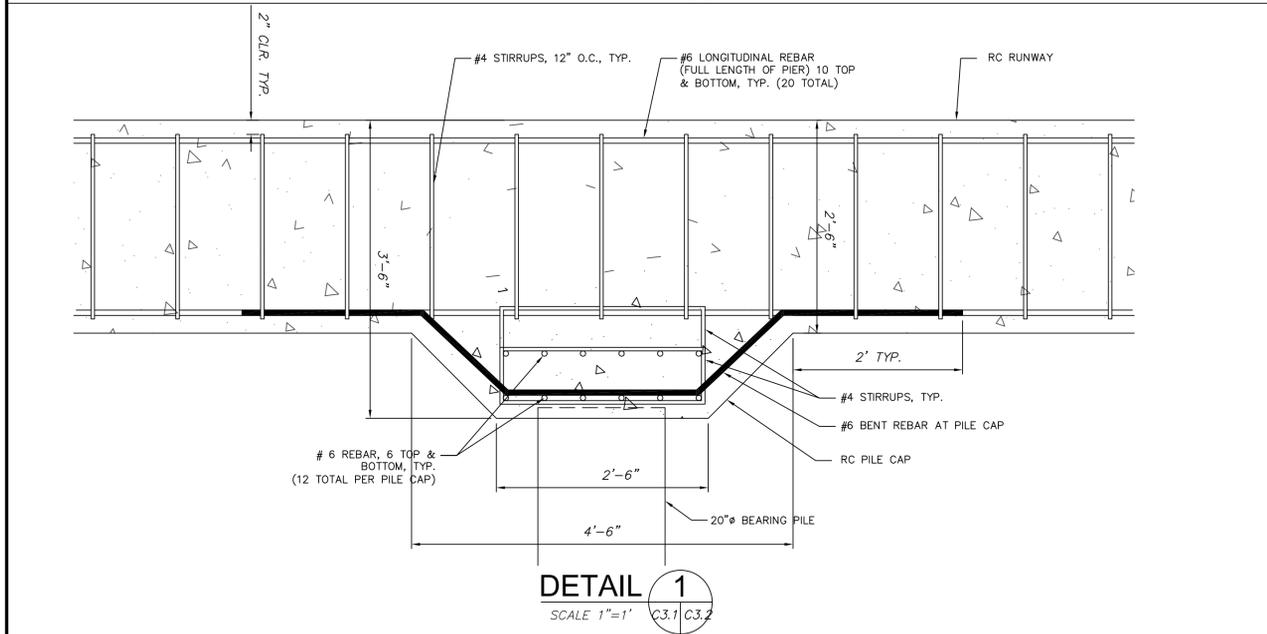
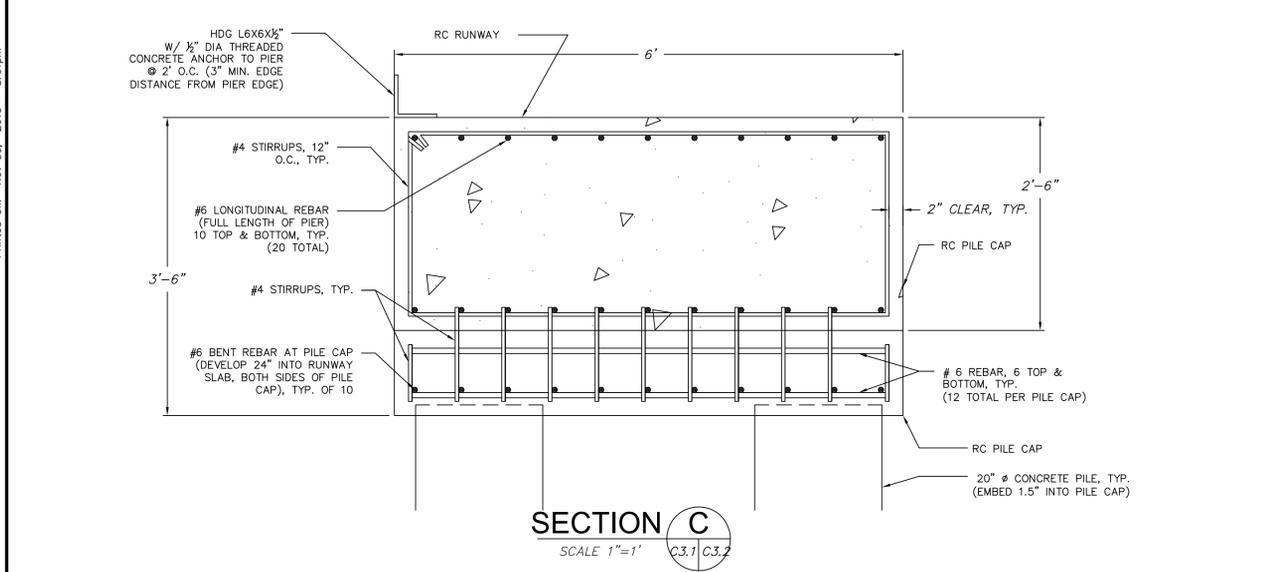
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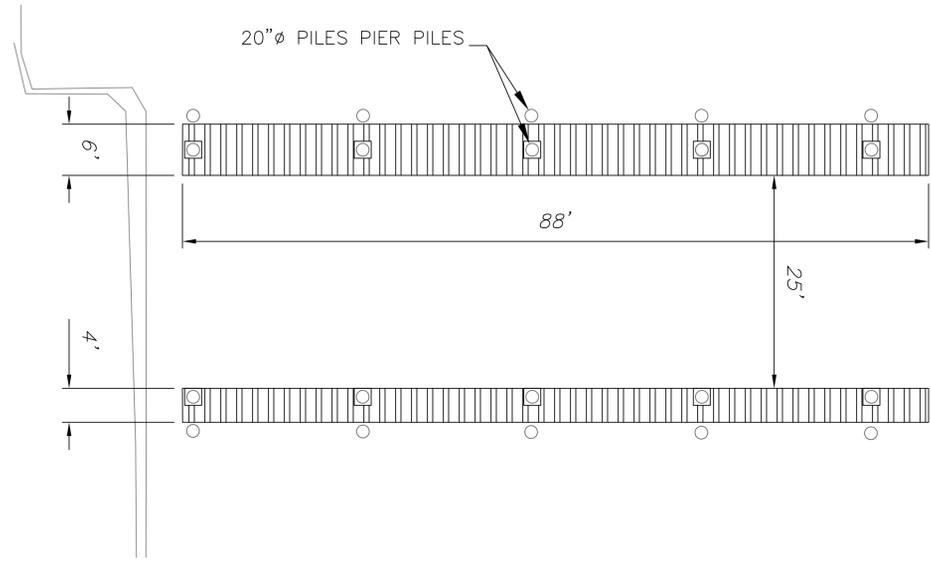
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SCALE	AS NOTED	DATE	11-27-2013
JOB NO.	2264-A		
SHEET	C-3.2		
SHEET #	7 of 8		

PIER & PILE DETAILS

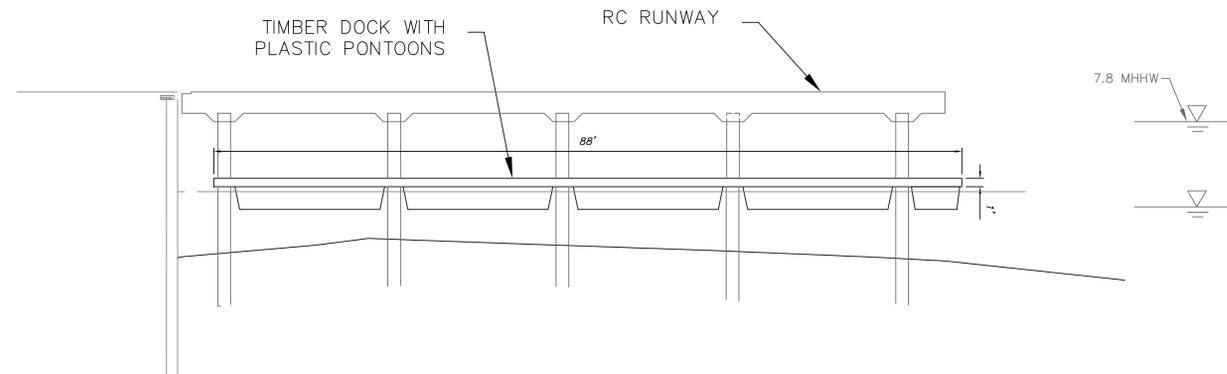


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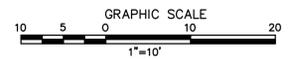
TIMBER BOARDING FLOATS - LAYOUT

SCALE 1"=10'



TIMBER BOARDING FLOATS - ELEVATION

SCALE 1"=10'



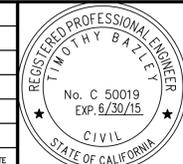
1ST SUBMITTAL TO BUILDING DEPT.

STATUS	CONCEPT	90	100%	FINAL
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PROJECT
**SHELTER ISLAND BOATYARD
 CRANE REPLACEMENT AND PIER
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 SAN DIEGO, CALIFORNIA**

CLIENT
**R.D. BALDWIN &
 ASSOCIATES**

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**FLOATING DOCK
 LAYOUT AND
 ELEVATION**

SCALE	AS NOTED	DATE	11-27-2013
JOB NO.	2264-A		
SHEET	C-4		
SHEET #	8 of 8		