CALIFORNIA COASTAL COMMISSION
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W21b

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STAFF REPORT: REGULAR CALENDAR

Application No.:	**5-15-0012**
Applicant:	**City of Avalon**
Agent:	Timothy Bazley
Location:	2 Casino Way, Avalon, Los Angeles County (APN 748-002-1002)
Project Description:	Remove an existing public pier with 74 timber piles, and replace it in the same footprint with a 108 foot x 36 foot timber public pier supported by fifty-five 14-inch diameter bearing piles and nineteen 12-inch diameter fender piles. The new bearing piles will be attached to precast concrete footings embedded into the sand or rubble below the pier. The new pier will support a one-story fueling station, public restrooms and a café. Replace all pier-side utilities (including electrical, potable water, fire protection, sewer, and fuel supply systems) as required and replace three existing fuel dispensers with two new fuel dispensers. Temporarily locate fuel dispensing activities at the City pump-a-head dock while the new pier is being constructed.
Staff Recommendation:	Approval with Conditions

SUMMARY OF STAFF RECOMMENDATION:

The City of Avalon is seeking a coastal development permit to replace the Avalon Bay Fuel Pier on Catalina Island, a 108 foot x 36 foot public pier that supports a one-story structure containing a fueling station, public restrooms, a convenience store and a small café. The pier serves tour boats, private yachts and visiting boaters as the only on-water fueling facility in Avalon. The existing timber pier and its 74 decaying timber piles will be removed. The pier will be replaced in the same footprint with a new 108

foot x 36 foot timber pier supported by fifty-five 14-inch diameter bearing piles and nineteen 12-inch diameter fender piles. The new pier will also support a one-story fueling station, public restrooms and a café. The new fueling system includes leak detection sensors and an automatic shutoff system to prevent spills.

The primary Coastal Act issues raised by this application relate to fill of coastal waters, protection of marine resources, water quality, public access and recreation, and impacts from natural hazards. Staff is recommending **approval** of the proposed coastal development permit with thirteen (**13)** special conditions regarding: 1) Permit Compliance, 2) Pre-Construction *Caulerpa taxifolia* Survey, 3) Anchoring of Work Vessels, 4) Pressure-Treated Wood in the Marine Environment, 5) Piling Materials, 6) Construction Responsibilities, 7) Conformance with Interim Fuel Plan, 8) Best Management Practices Program for Fueling Operations, 9) Conformance with the Requirements of the Resource Agencies, 10) Public Access To and Along the Shoreline, 11) Removal of Fuel Pier, 12) Assumption of Risk, Waiver of Liability and Indemnity, and 13) Replacement of Timber Cross Braces Under the Pier.

Fill of open coastal waters is permitted under the Coastal Act for public recreational piers providing public access and recreational opportunities and for new or expanded boating facilities. The existing pier is a public fueling pier with a convenience store, café and restrooms. To ensure that the pier continues to serve boating related and visitor-serving recreational uses, the Commission imposes **Special Condition 1**. The piles supporting the new pier will be slightly reconfigured, changing the location and amount of bottom coverage. However, because the proposed new concrete pile footings will be smaller than the existing pile footings, the proposed project will result in a net increase of approximately 104 square feet of bottom habitat. To protect marine resources and prevent the spread of invasive algae during construction, the Commission imposes **Special Condition 2** requiring the applicant to conduct a pre-construction *Caulerpa taxifolia* survey. The Commission also imposes **Special Condition 3** requiring the applicant to avoid anchoring work vessels in giant kelp within the project area.

As proposed, all newly placed timbers, including piles, will be treated with ammoniacal copper zinc arsenate (ACZA) and the 74 piles will be wrapped with a fiberglass and epoxy resin composite and sealed with a heat shrink cap to prevent leaching of the chemical preservative into the marine environment. The Commission imposes **Special Condition 4** to minimize the risk of contamination of marine waters from the pressure-treated wood. To ensure the integrity of the piles and their protective wrap materials, the Commission imposes **Special Condition 5** requiring the applicant to regularly inspect the piles and wrap materials. The Commission also imposes **Special Condition 6** requiring the applicant to comply with construction related best management practices to avoid or minimize adverse impacts to water quality from construction activities. Fuel operations also pose potential risks to water quality in Avalon Bay. To minimize the risks of operation of the fuel pier to water quality, the Commission imposes **Special Condition 7** requiring the applicant to implement the proposed Interim Fuel Plan and imposes **Special Condition 8** requiring the applicant to submit a final best management practices and spill response procedures plan prior to issuance of the permit.

The proposed project is located in the ocean and is subject to coastal hazards. Recognizing that high surf conditions exacerbated by sea level rise or other coastal hazards may damage the fuel pier, the Commission imposes **Special Condition 11** requiring the applicant to remove all or part of the pier when it becomes unusable or hazardous to the public due to destruction or damage by wave attack or other coastal hazards. The Commission also imposes **Special Condition 12** requiring that the permittee acknowledge and assume the potential hazards associated with development in or near the water.

Finally, **Special Condition 13** requires the applicant to agree to replace the approved timber cross braces underneath the approved pier prior to the year 2040 or to apply for an amendment or new coastal development permit to wrap the approved timber cross braces before they become submerged.

Staff Note:

Pursuant to Section 30519 of the Coastal Act, development located within the Commission's area of original jurisdiction requires a coastal development permit from the Commission. The Commission's area of original jurisdiction includes tidelands, submerged lands, and public trust lands, whether filled or unfilled. The proposed project is situated on submerged lands and on filled tidelands within the Commission's area of original jurisdiction. The Commission's standard of review for the proposed development in its area of original jurisdiction is the Chapter 3 policies of the Coastal Act. The City of Avalon certified LCP is advisory in nature and may provide guidance. The proposed project does not conflict with the City of Avalon certified LCP.

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APPENDICES

EXHIBITS

I. MOTION AND RESOLUTION

Motion:

*I move that the Commission **approve** Coastal Development Permit Application No. 5-15-0012 pursuant to the staff recommendation.*

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

Resolution:

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

II. STANDARD CONDITIONS:

This permit is granted subject to the following standard conditions:

1. **Notice of Receipt and Acknowledgment**. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation.** Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS:

This permit is granted subject to the following special conditions:

1. **Permit Compliance.** The permitted use of the approved development is for boating-related and visitor-serving recreation uses only. All development must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions. Any deviation from the approved plans must be submitted for review by the Executive Director to determine whether an amendment to this coastal development permit is necessary.

2. **Pre-Construction *Caulerpa taxifolia* Survey.**
A. Not earlier than 90 days nor later than 30 days prior to commencement or re-commencement of any development authorized under this coastal development permit (the "project"), the applicant shall undertake a survey of the project area and a buffer area at least 10 meters beyond the project area to determine the presence of the invasive alga *Caulerpa taxifolia*. The survey shall include a visual examination of the substrate.

B. The survey protocol shall be prepared in consultation with the Regional Water Quality Control Board, the California Department of Fish and Wildlife, and the National Marine Fisheries Service (see http://www.westcoast.fisheries.noaa.gov/habitat/habitat_types/seagrass_info/caulerpa_taxifolia.html).

C. Within five (5) business days of completion of the survey, the applicant shall submit the survey:

1. for the review and approval of the Executive Director; and

2. to the Surveillance Subcommittee to the Southern California Caulerpa Action Team (SCCAT). The SCCAT Surveillance Subcommittee may be contacted through William Paznokas, California Department of Fish & Wildlife (858-467-4218 / William.Paznokas@wildlife.ca.gov) or Bryant Chesney, National Marine Fisheries Service (562-980-4037 / Bryant.Chesney@noaa.gov), or their successors.

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

3. **Anchoring of Work Vessels.** Work vessels shall avoid damage to giant kelp by anchoring outside of existing kelp beds. The location of kelp beds in the project area are generally shown in Exhibit #10 of the staff report dated 7/31/2015, however, the kelp beds may have moved and be more or less extensive than depicted in Exhibit #10.

4. **Pressure-Treated Wood in the Marine Environment.** The permittee shall comply with the following requirements related to the use of pressure-treated wood in the marine environment:

   A. Each new pressure-treated pile installed shall be wrapped with a fiberglass and epoxy resin composite, extending the entire length of the pile and sealed completely to prevent any leaching of preservative chemicals into coastal waters. Any place where the protective wrap is required to be punctured (e.g., for mounting hardware, attaching cross bracing, or attaching bumpers to fender piles) shall be sealed thoroughly with epoxy suited to the marine environment.

   B. Pressure-treated wood used in construction of the project shall meet the American Wood Protection Association's (AWPA) wood preservative standards, specifically AWPA Standard U1, the primary specification for pressure-treated wood.

   C. Ammoniacal copper zinc arsenate (ACZA) pressure-treated wood shall be treated to the proper preservative retention standard (i.e., amount of preservative) specified by the AWPA for the appropriate AWPA Use Category. The ACZA pressure-treated wood used for the project shall not have a preservative retention exceeding the minimum specified for the appropriate Use Category, in order to minimize the amount of preservative present in treated wood on-site that may subsequently leach into the marine environment.

   D. The ACZA pressure-treated wood shall be inspected on-site to assure it is free of visible surface residues or bleeding of preservatives. If ACZA pressure-treated wood has a noticeable ammonia odor, then it has not been properly processed or aged, and the preservative may thus not be properly fixed, therefore the lumber shall not be used.

   E. The ACZA pressure-treated wood shall be stored in a contained area within a continuous, plastic-lined berm on the deck of the materials barge or the staging area. If there is a chance of precipitation, the wood shall be stored under a covered area or tarp to prevent exposure to precipitation or run-on wastes from surrounding areas. No runoff from the pressure treated wood storage area shall be allowed to drain to the marine environment.

   F. Whenever possible, cutting or drilling of ACZA pressure-treated wood shall be performed at a site a minimum of 100 feet away from the water, to minimize transport of debris and sawdust by wind to the marine environment. Any resulting sawdust, drill shavings, and wood scraps shall be contained and collected immediately, in order to prevent the discharge of pressure-treated wood to the marine environment. If it is essential that treated wood be cut or drilled in place on the pier, a protective layer shall be installed between the activity and the receiving waters so that all sawdust, shavings, and wood scraps generated during construction will be collected and prevented from entering the water below.

   G. The procedures outlined in AWPA Standard M4, Standard for the Care of Preservative-Treated Wood Products, shall be followed when applying a topical (non- pressure treated) preservative to the cut ends of treated wood. Whenever possible, application of a topical preservative to treated wood shall be performed at a site a minimum of 100 feet away from the water, equipped with containment for potential drips and spills, in order to prevent

discharge of the preservative to the environment. The topical preservative shall not be applied during rain events. Any excess topical preservative shall be wiped off, and the preservative shall be allowed to fully dry before the wood is used in construction. If a small amount of touch-up preservative application must be performed over water, then tarps or containers shall be used to capture any potential spills or drips.

H. Existing creosote-treated or ACZA-treated piles at the pier to be removed shall be removed and disposed of at a landfill authorized to accept such chemically treated waste.

5. **Piling Materials.** To prevent the introduction of toxins and debris into the marine environment, the use of wrapped pilings (e.g., fiberglass and epoxy resin composite, High-density polyethylene (HDPE) wrap, etc.) shall conform to the following requirements:

A. Whenever possible, application of a "wrap material" and/or affixing epoxy to treated wood shall be performed at a site a minimum of 100 feet away from the water, equipped with containment for potential drips and spills, in order to prevent discharge of the wrap material or epoxy to the environment. The wrap material or epoxy shall not be applied during rain events. Any excess wrap material or epoxy shall be wiped off, and the wrap material or epoxy shall be allowed to fully dry before the wood is used in construction. If a small amount of touch-up wrap material or epoxy application must be performed over water, then tarps or containers shall be used to capture any potential spills or drips and all debris and collected materials shall be removed immediately upon completion of the application

B. The permittee shall exercise due diligence in periodically inspecting pilings to be replaced under this permit, and shall immediately undertake any repairs necessary to maintain the wrapping and/or structural integrity of the pilings. ON AN ANNUAL BASIS FOR ALL WRAPPED PILES THAT MAY COME INTO CONTACT WITH VESSELS AND OTHER FLOATING DEBRIS, AND ON A BIANNUAL BASIS FOR THOSE THAT WILL NOT, beginning one and two years (as applicable) following the date construction of the fuel pier is completed, the permittee shall conduct a piling inspection to ensure the integrity of the piles and their protective wrapping. The applicant shall provide to the Executive Director the results of the monitoring annually for the life of the piling(s). The inspections shall be undertaken by boat, during periods of extreme low tides. If the monitoring results indicate repairs are necessary, the applicant shall apply for an amendment to this permit or a new permit for those repairs requiring a permit. Alternatively, the permittee may submit a different timeline for the piling inspection program that ensures that the wrapping and/or structural integrity of the pile is properly maintained; the alternative timeline shall be reviewed and approved by the Executive Director, prior to the issuance of the permit.

C. By acceptance of this permit, the applicant agrees to submit an application for an amendment to this permit or a new coastal development permit if the Executive Director determines there is new information available that indicates that the wrapping material has harmful effects on the marine environment, and that environmentally superior, feasible alternative(s) are available. The amendment or new coastal development shall include measures to eliminate or significantly reduce the adverse impacts of the wrapping material including, if necessary, the replacement of the pilings.

6. **Construction Responsibilities.** The permittee shall comply with the construction Best Management Practices listed in the permittee's project description received by Commission staff on April 21, 2015, except as modified herein. Construction-related requirements shall include, but shall not be limited to, the following Best Management Practices:

A. No demolition or construction materials, equipment, debris, or waste shall be placed or stored where it may enter sensitive habitat, receiving waters or a storm drain, or be subject to wave, wind, rain, or tidal erosion and dispersion;

B. Any and all debris resulting from construction activities shall be removed from the site within 24 hours of the completion of construction;

C. No machinery or construction materials not essential for project improvements shall be allowed at any time in the intertidal zone;

D. If turbid conditions will be generated during construction, a silt curtain shall be utilized to control turbidity;

E. Floating booms shall be used to contain debris discharged into coastal waters and any debris discharged shall be removed as soon as possible after loss;

F. Non-buoyant debris discharged into coastal waters shall be recovered by divers as soon as possible after loss;

G. Demolition or construction debris and sediment shall be removed from work areas each day that demolition or construction occurs to prevent the accumulation of sediment and other debris that may be discharged into coastal waters;

H. All trash and debris shall be disposed in the proper trash and recycling receptacles at the end of every construction day;

I. The applicant shall provide adequate disposal facilities for solid waste, including excess treated wood or concrete, produced during demolition or construction;

J. Debris shall be disposed of at a legal disposal site or recycled at a recycling facility. If the disposal site is located in the coastal zone, a coastal development permit or an amendment to this permit shall be required before disposal can take place unless the Executive Director determines that no amendment or new permit is legally required;

K. All stock piles and construction materials shall be covered, enclosed on all sides, surrounded by a berm, shall be located as far away as possible from drain inlets and any waterway, and shall not be stored in contact with the soil;

L. Machinery and equipment shall be maintained and washed in confined areas specifically designed to control runoff. Thinners or solvents shall not be discharged into sanitary or storm sewer systems;

M. The discharge of any hazardous materials into any receiving waters shall be prohibited;

N. Spill prevention and control measures shall be implemented to ensure the proper handling and storage of petroleum products and other construction materials. Measures shall include a designated fueling and vehicle maintenance area with appropriate berms and protection to prevent any spillage of gasoline or related petroleum products or contact with runoff. The area shall be located as far away from the receiving waters and storm drain inlets as possible. The applicant and the applicant's contractors shall have adequate equipment to contain and absorb or collect any such spill immediately;

O. Best Management Practices (BMPs) and Good Housekeeping Practices (GHPs) designed to prevent spillage and/or runoff of demolition or construction-related materials, and to contain sediment or contaminants associated with demolition or construction activity, shall be implemented prior to the on-set of such activity; and

P. All construction related BMPs shall remain in place and be maintained in a functional condition throughout the duration of construction activity, and all construction equipment and surplus materials have been removed from the site.

7. **Conformance with Interim Fuel Plan.** The applicant shall conform to the proposed Interim Fuel Plan dated June 2015, except as modified herein. The Interim Fuel Plan shall also include:

A. Containment devices lined with absorbent materials below all hose fittings and joints, and under fuel dispensers associated with the interim fuel dock during the construction period;

B. An automatic shutoff system; and

C. Easy-to-read signs on the interim fuel dock that explain proper fueling, spill prevention and spill reporting procedures.

Any proposed changes to the approved plan shall be reported to the Executive Director. No changes to the approved plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

8. **Best Management Practices Program for Fueling Operations**. PRIOR TO ISSUANCE OF THE PERMIT, the applicant shall submit, for the review and approval of the Executive Director, a revised final Best Management Practices and Spill Response Procedures plan that is in substantial conformance with the *Best Management Practices (BMPs) for Avalon Fuel Dock*, dated December 2013 (Exhibit #11, pages 14-17 of the staff report dated 7/31/2015), but which shall be modified as follows:

A. Provide a secure location away from water and protected from rain or run-on to store hazardous wastes, including petroleum products, old gasoline or gasoline with water, absorbent materials, and oily rags;

B. Provide containers for anti-freeze, lead acid batteries, used oil and used oil filters which will be collected separately for recycling;

C. Place signage on all regular trash containers to indicate that hazardous wastes may not be disposed of in the container. The signs shall notify boaters how to dispose of hazardous wastes and where to recycle certain recyclable wastes;

D. Maintain an adequate supply of absorbent pads for use by customers for the cleaning of minor spills;

E. Provide a service that reduces oily discharges from in-board engines, either a bilge pump-out facility (with an oil water separation device) or the operator shall promote the use of oil absorbing materials in the bilge areas or engine compartments of vessels with inboard engines. When distributing oil absorbents to boaters, the operator shall provide adequate safety warnings as to the safe use and handling of flammable materials and methods to prevent fouling the bilge pump. The operator shall recycle the materials, if possible, or dispose of them in accordance with hazardous waste disposal regulations; and

F. Update the Spill Response Procedures to clarify that spills of all sizes must be reported pursuant to the reporting procedures, to add the California Department of Fish & Wildlife Office of Spill Prevention and Response to the list of required spill reporting contacts, and to clarify that cleanup of all spills is required in addition to containment of spills.

The permittee shall undertake the development in accordance with the approved final Best Management Practices and Spill Response Procedures plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

9. **Conformance with the Requirements of the Resource Agencies.** The permittee shall comply with all requirements, requests and mitigation measures from the California Department of Fish and Wildlife, Regional Water Quality Control Board, U.S. Army Corps of Engineers, and the U.S. Fish and Wildlife Service with respect to preservation and protection of water quality and marine environment. Any change in the approved project that may be required by the above-stated agencies shall be submitted to the Executive Director in order to determine if the proposed change shall require a permit amendment pursuant to the requirements of the Coastal Act and the California Code of Regulations. No changes to the approved development shall occur without a Commission amendment to this coastal development permit or a new coastal development permit, unless the Executive Director determines that no amendment or new permit is required.

10. **Public Access To and Along the Shoreline.** The applicant and the development shall not interfere with public access along the shoreline in the project area, except for the temporary disruptions that may occur during the completion of the permitted development.

11. **Removal of Fuel Pier.** By acceptance of this permit, the applicant agrees, on behalf of itself and all successors and assigns, that, the applicant shall remove all or part of the development

authorized by this permit, at such time that the fuel pier becomes unusable or hazardous to the public, due to destruction or damage by wave attack or other coastal hazards. In the event that the fuel pier is substantially damaged, the applicant shall remove the fuel pier and lawfully dispose of any associated debris in an approved disposal site. Removal of the pier shall not preclude the use of this site for future fuel pier or other appropriate boating-related, visitor-serving uses. Such removal and any future replacement development shall require a coastal development permit.

12. **Assumption of Risk, Waiver of Liability and Indemnity.** By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from flooding, sea level rise, erosion and wave uprush; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

13. **Replacement of Timber Cross Braces Under the Pier.** By acceptance of this permit, the applicant agrees, on behalf of itself and all successors and assigns, that, the applicant shall replace the approved timber cross braces underneath the pier prior to the year 2040 when they would become submerged. Alternatively, the applicant may wrap, coat or use other wood preservative treatments on the approved timber cross braces underneath the pier prior to 2040 in lieu of replacement of the approved structures. Such removal and replacement or any future treatment to the approved cross braces shall require an amendment to this permit or a new coastal development permit.

IV. FINDINGS AND DECLARATIONS:

A. PROJECT LOCATION & DESCRIPTION

The proposed project involves the replacement of the Avalon Bay Fuel Pier on Catalina Island (Exhibit #1 and Exhibit #2). The existing 108 foot x 36 foot public pier supports a one-story structure that contains a fueling station, public restrooms, a convenience store and a small café (Exhibit #3). The pier serves tour boats, private yachts and visiting boaters as the only on-water fueling facility in Avalon. The existing timber pier and its 74 decaying timber piles will be removed. The pier will be replaced in the same footprint with a new 108 foot x 36 foot timber pier supported by fifty-five 14-inch diameter bearing piles and nineteen 12-inch diameter fender piles (Exhibit #4).

The new pier, like the old one being replaced, will support a fueling station (with new fuel dispensers), public restrooms, a convenience store and a small café inside a one-story structure (Exhibit #5). An existing dinghy dock and a seasonal fuel float (deployed in summer only) will be re-attached to the new pier upon its completion (Exhibit #6). The four existing underground fuel storage tanks, located on the land next to the pier, will not be altered as part of the proposed project, although they will be temporarily out of service. The fuel lines will run from the underground fuel tanks on shore suspended below the fuel pier deck with pipe hangers to the seaward edge of the deck. The fuel lines will then run behind the most seaward stringer to the two fuel dispensers (Exhibit #7). Sumps installed at each fuel line connection point will be fitted with a sensor to detect any accumulation of fluid in the sump and will automatically shut off the flow of fuel if any leak is detected. Absorbent material will be placed in each sump to capture any leak (Exhibit #7).

The proposed demolition and construction is expected to take about 160 days to complete. The project staging area will be situated on the land area adjacent to the pier. A barge-mounted crane will be used during demolition and construction. The bedrock under the pier, which is very hard, is covered by a layer of rock rubble covered by a layer of sand deposits (Exhibit #8). After the old pier structure is removed from the site and barged to the mainland for disposal, workers using hand-held tools will move (side cast) the loose rocks and sand deposits away from the pile locations in order to prepare the bay bottom for the placement of the new piles. All newly placed timbers, including piles, will be treated with ammoniacal copper zinc arsenate (ACZA) and the 74 piles will be wrapped with a fiberglass and epoxy resin composite and sealed with a heat shrink cap to prevent leaching of the chemical preservative. The fifty-five 14-inch diameter bearing piles will be attached to 20 inch x 20 inch precast-concrete footings and embedded at least 6 inches into the rubble layer or a minimum of 30 inches into sand deposits overlaying the rubble layer. The applicant proposes to install the nineteen 12-inch diameter fender piles either resting on the seafloor or embedded into sand up to 12 inches. Bumpers will be bolted to the fender piles to prevent boats pull up to the fuel pier from damaging the piles and their protective wraps. The surface of the new pier deck is proposed to be about 6.5 feet higher than the mean high tide line (+12’ MLLW - Exhibit #8).

While Avalon’s only in-water fuel facility is out of service during the (160 day) construction period, the City proposes to implement an interim plan for providing fuel to boaters. The interim plan involves the use of the City-owned Pump-a-Head waste disposal dock located on Casino Point, about two hundred feet east of the proposed pier (Exhibit #2). Fuel will be provided to the dispensers on the floating dock through a fuel hose attached to land-based fuel storage tanker trucks. Safety equipment and a small

office will be contained inside an 8 foot x 16 foot portable trailer placed temporarily in the Casino Point parking lot.

The interim fuel dock and the proposed new pier are both located within the protected waters of Avalon Bay (Exhibit #2). The south facing shoreline in the project area is comprised of an engineered rock shoreline which will not be altered as part of the proposed project. The sloping bay bottom at the project site is comprised of loose rocks, sometimes covered by a layer of sand. On July 12, 2014, marine biologists Rick Ware and Nick DaSilva surveyed the project area and found no eelgrass (*Zostera marina*) or noxious algae (*Caulerpa taxifolia).* However, an invasive algae (*Sargassum horneri*) was observed within the footprint and outside the footprint of the pier. Low underwater light beneath the existing pier contribute to low biological diversity. The proposed project has received the approval of the City of Avalon Planning Commission. The applicant has applied for approval from the U.S. Army Corps of Engineers (Application No. SPL-2014-00050-BLR), and has received a Section 401 Certification from the California Regional Water Quality Control Board (File No. 13-159).

B. PROJECT HISTORY

The Avalon Fuel Pier was constructed in the 1920s and the City has sought to replace it several times. In 2009 the Commission approved Coastal Development Permit No. 5-09-092 for the replacement of the fuel pier with a concrete pier supported by eight 24-inch diameter polyethylene-coated steel piles drilled into bedrock. In 2010 the California Department of Boating and Waterways awarded the City of Avalon a 50% matching $1 million Boating Infrastructure Tier II Grant to replace the fuel pier. According to a letter from the City's Harbor Master to the Department of Boating and Waterways dated June 6, 2013, the City's engineering consultant provided a final cost estimate for the concrete design alternative at $3.2 million. This estimate was approximately $1 million more than the City had budgeted. By the time all necessary permits were obtained, the economy was in recession and public funding opportunities disappeared. As a result, the City was unable to fund the concrete design alternative and the permit expired. In the intervening years, the City has repaired the fuel pier several times while it worked to identify a design alternative it could afford using the Department of Boating and Waterways grant or additional funding sources.[1]

The City's proposed timber pier replacement project is estimated at a cost of roughly $2 million, in line with the City's original budget for the replacement. The Department of Boating and Waterways allowed the City to amend its grant to construct the proposed timber design alternative. The City has never been able to identify additional funding sources that would allow it to construct the more expensive concrete design.

C. FILL IN COASTAL WATERS, WATER QUALITY AND PROTECTION OF MARINE RESOURCES

Coastal Act section 30230 states:

> *Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to those areas and species of special biological or economic*

[1] Most recently, the pier sustained damage from high surf in July 2014. The City did emergency repairs under emergency permit no. G-5-14-0030 and the Commission approved 5-15-0752-W to make those emergency repairs permanent. The pier was also repaired following Commission approval of Coastal Development Permit No. 5-13-096.

significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Coastal Act section 30231 states:

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

Coastal Act section 30233 states, in relevant part:

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

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

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

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

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

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

6) Restoration purposes.

7) Nature study, aquaculture, or similar resource dependent activities.

Coastal Act Section 30108.2 defines "fill" as "earth or any other substance or material, including pilings placed for the purposes of erecting structures thereon, placed in a submerged area." The proposed project involves the in-kind replacement of 74 timber piles, including fifty-five 14-inch diameter bearing piles attached to 20 inch x 20 inch concrete footings and nineteen 12-inch diameter fender piles within subtidal and intertidal waters of Avalon Bay, resulting in approximately 168 square feet of replacement fill.

The applicable provisions of Sections 30230, 30231, and 30233 of the Coastal Act cited above require that the pier replacement: (1) fit within one of seven use categories described in Coastal Act Section 30233(a)(1)-(7), (2) use the least environmentally damaging feasible alternative; and (3)

provide feasible mitigation measures designed to minimize adverse environmental effects and protect the biological productivity and the quality of coastal waters.

1. Allowable Use

Section 30233(a)(3) allows fill of open coastal waters for the placement of structural pilings for public recreational piers that provide public access and recreational opportunities. The proposed project is the replacement of an existing fuel pier serving recreational boaters, including island residents and visitors. New or expanded boating facilities are allowable uses of fill under Coastal Act Section 30233(a)(3). To ensure that the pier continues to serve boating related and visitor-serving recreation uses only, the Commission imposes **Special Condition 1**. Therefore, the Commission finds that the project meets the allowable use test for fill of coastal waters under the Coastal Act.

2. Least Environmentally Damaging Feasible Alternative

As previously noted, the Commission must ensure that the method of replacement be the least environmentally damaging feasible alternative consistent with Section 30233 of the Coastal Act. Coastal Act Section 30108 defines "feasible" as "*…capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors*." In this case, alternatives that have been identified include: (1) the "no project" alternative; (2) alternative pile installation methods; and (3) alternative pile types.

a. No project alternative. The purpose of the proposed project is to replace a public pier weakened by age and the elements. Under the "no project" alternative, the objective of the project – to replace and maintain the facility – would not be met. The pier facility would continue to deteriorate, with more of the existing piles becoming severely damaged and eventually being swept away. Although the "no project" alternative would avoid the adverse impacts to coastal resources that are posed by the pier replacement project, this benefit would disappear when the existing pier eventually fails. The pier is used to fuel recreational boats. If the pier collapses, the fuel lines could rupture and spill fuel into the bay, severely impacting water quality and marine habitat and temporarily shutting down the pier, leaving island residents and visitors to Santa Catalina Island without a source for fuel. Because the project is necessary to maintain a structurally secure public pier and safe fueling infrastructure at the site, the "no project" alternative is not a less environmentally damaging feasible alternative to the proposed project as conditioned.

b. Alternative pile installation methods. The applicant proposes to remove all 74 existing piles with a barge-mounted crane and divers using non-powered hand tools. Replacement of the piles will also be completed by the crane-mounted barge and divers using hand tools. The sloping bay bottom at the project site is comprised of bedrock, overlain with approximately 10 to 14 feet of loose rocks, and sometimes covered with a layer of sand. The loose rocks appear to be rubble materials generated from rock blasted for construction of the adjacent Casino and dumped along the shoreline. The geotechnical report states that the rocks are irregularly shaped, making drilling into the rock pieces "very challenging, relatively inaccurate, and costly." Pile driving is also considered geotechnically infeasible because "the timber piles could easily buckle and fracture prior to reaching any measurable penetration into the rubble layer." In addition, drilling or pile driving would generate more noise and turbidity than the proposed project. Therefore, drilling the piles into the rubble

layer or pile driving alternatives are not a less environmentally damaging feasible alternative to the project as conditioned.

c. Alternative pile types. The applicant proposes to replace the existing timber piles with new ammoniacal copper zinc arsenate (ACZA)-treated timber piles. To prevent the wood preservative from leaching toxic chemicals into coastal waters, the applicant proposes to wrap the new treated piles with a fiberglass and epoxy resin composite prior to installation. The 74 existing timber piles (many with concrete jackets) occupy approximately 272 square feet of intertidal and subtidal habitat area. All 74 existing piles will be removed and approximately 168 square feet of intertidal and subtidal habitat area will be occupied by the proposed fifty-five 20 inch x 20 inch concrete footings and the nineteen 12-inch diameter piles. Therefore, the proposed project will result in a net increase of about 104 square feet of habitat area.

The use of steel or concrete piles instead of wood would further minimize the chance of water quality impairment because they have not been found to leach significant amounts of toxins into the environment. Concrete and steel piles are also longer lasting than wood in the marine environment. These alternative pile materials could prolong the time until the pier would have to be replaced again. Further, a concrete and steel design would result in less fill than the proposed timber design. The concrete and steel design approved by the Commission in 2009 (CDP No. 5-09-092) included eight 24-inch diameter piles covering 25 square feet of intertidal and subtidal habitat area – this would result in a net increase of 247 square feet of habitat area. However, this alternative is not considered feasible. In the nearly six years since the Commission approved the concrete and steel design alternative, the City has been unable to identify any further funding source that would cover the approximately $1.2 million cost difference for the concrete design. The City must replace the pier by the end of its current grant term (March 1, 2016) or risk losing the $1 million matching funds it does have from the Department of Boating and Waterways. As a result, the previously approved concrete design alternative is not a feasible alternative because it is not "*capable of being accomplished in a successful manner within a reasonable period of time*" due to economic factors.

3. Feasible Mitigation Measures

Coastal Act Section 30233(a) also requires that any project which results in fill of open coastal waters provide feasible mitigation. Coastal Act Sections 30230 and 30231 further require the protection of biological productivity and the quality of coastal waters. The proposed project could have a number of potential adverse effects on the environment of Avalon Harbor, including impacts to: (1) marine habitat; (2) fish, marine mammals, and seabirds; and (3) water quality.

a. Loss of marine habitat. The proposed project will result in the temporary loss of habitat and increase in water turbidity during the bottom disturbance that will occur with the removal of the existing piles and placement of the new piles. However, the in-water construction work will take approximately 5 weeks to complete and the applicant proposes to use silt curtains during this work. The applicant's marine biological survey from 2009 states that the disturbed habitat in the project area will be completely recolonized within one to three years. The placement of the proposed piles will displace approximately 168 square feet of bottom habitat. The applicant proposes to remove the old piles in their entirety and to place

approximately 90% of the new piles in the footprints of the old piles. The community of benthic organisms that inhabit the bottom in the pier area, though low in diversity, could be impacted as a result of the removal and replacement of the pier. However, the new piles are replacing 74 old piles that cover approximately 272 square feet of bottom habitat. Therefore, as the piles will be replaced in-kind and the proposed project will result in a net increase of approximately 104 square feet of bottom habitat, the proposed project, as conditioned, will minimize adverse impacts to benthic habitat.

The proposed pilings will also provide new vertical habitat for marine organisms such as mussels, barnacles, limpets, littorine snails, red and brown seaweed, surfgrass, anemones, and polychaetes. Thus, adequate mitigation is provided by the proposed project in that the replacement of the 74 existing piles with 74 new piles will increase the amount of bottom habitat, and by the fact that the pilings themselves will provide new vertical intertidal habitat for marine organisms.

The applicant's marine biological survey update conducted on June 12, 2014 indicates that no eelgrass is located in the project area. Low underwater light levels beneath the existing pier are not conducive to eelgrass growth. As a result, the proposed project will not have any adverse impact on eelgrass.

Marine habitat can also be adversely impacted by construction activities contributing to the spread of invasive algae. *Caulerpa taxifolia* has not been observed at this site, however **Special Condition 2** requires the applicant to verify, prior to commencement of demolition, that *C. taxifolia* is not present at the project site. As conditioned, the Commission finds that the proposed project provides feasible mitigation measures to minimize potential adverse impacts from invasive species.

b. Fish, marine mammals, and seabirds. Santa Catalina Island is located in an area designated as Essential Fish Habitat (EFH) in the Coastal Pelagics Fishery Management Plan (FMP) and the Pacific Groundfish FMP. No coastal pelagic or groundfish species were observed during the applicant's marine biological survey update conducted on June 12, 2014 and no direct impacts to the fish species are anticipated. However, the survey did observe some giant kelp in the project area surrounding the pier footprint. Giant kelp beds provide important habitat for a variety of groundfish species and their prey and adverse impacts to kelp could have adverse impacts to associated fish communities. The applicant proposes several best management practices (BMPs) to minimize any adverse impact to the kelp, including requiring construction activities to avoid disturbances to giant kelp plants and avoid work vessel anchoring over kelp beds and natural reefs in the vicinity of the fuel pier. To ensure that the work minimizes any disturbance to existing kelp beds, the Commission imposes **Special Condition 3** requiring work vessels to anchor outside of kelp beds, as generally shown in Exhibit #10. The Commission finds that the proposed project, as conditioned, provides feasible mitigation measures to minimize potential adverse impacts to giant kelp.

Minimal noise will be generated during the removal and installation of pier piles, pier deck construction, and the use of heavy machinery. The project's mitigated negative declaration and the Marine Biological Survey Report (Marine Biological Survey Report and Essential Fish

Habitat Analysis for the Casino Fuel Pier Replacement Project, Avalon Harbor, California, by Coastal Resources Management, Inc., 2/4/2009) prepared for the previously-approved concrete and steel design alternative both address noise impacts, and both state that noise impacts will be less than significant. Like the previously-approved project, the proposed project does not include any pile driving that could create loud underwater noises that would adversely affect fish and marine mammals. In addition, divers assisting with removal and replacement of piles will not use any powered or pneumatic tools. The Marine Biological Survey Report also states that noise will have a less than significant effect on seabirds (i.e., gulls, cormorants and pelicans) because there are no seabird breeding sites nearby and the birds have acclimated to noise levels in the harbor area. As a result, no adverse impacts to fish, marine mammals or seabirds are anticipated.

c. Water quality. The installation of new piles and other structural components of the fuel pier and the removal of existing pier components could have an adverse impact on water quality if treated wood were to leach contaminants into the marine environment, or if construction debris or hazardous materials were to enter bay waters.

As previously described, the applicant proposes to use ACZA pressure-treated wood piles. Chemicals in the wood preservative such as copper and arsenic could leach out of the piles and into the water column where they could be absorbed by fish and other aquatic organisms with potentially adverse consequences. In recent years, the Commission has required that wood piles with metal arsenate treatment be encapsulated by a durable and inert wrapping or coating to prevent chemicals from leaching into the marine environment. To prevent chemical leaching from the new piles, the applicant proposes to wrap the piles with a fiberglass and epoxy resin composite. The wrap will be applied to the piles onsite by the contractor prior to installation. In addition to the placement of new ACZA-treated wrapped piles, the project involves the use of ACZA-treated wood for other pier components like the decking. The Commission imposes **Special Condition 4** for the use of pressure-treated wood to minimize the risk of contamination of marine waters. The Commission also imposes **Special Condition 5** to require the applicant to regularly inspect and submit monitoring reports following installation of the wrapped piles to ensure that the wrapping and structural integrity of the piles are maintained. Because new pressure-treated piles will be wrapped, best management practices will be utilized in selecting, treating, storing, cutting, and drilling treated wood, and the applicant will maintain the wrapping on piles, the use of pressure treated wood is not expected to have an adverse impact on the water quality of Avalon Harbor. Thus, the Commission finds that the proposed project, as conditioned, provides feasible mitigation measures to minimize potential adverse impacts of treated wood in the marine environment.

Potential adverse impacts to the water quality of Avalon Harbor could also occur during the construction process if hazardous materials or construction debris were to enter coastal waters. The applicant proposes a number of measures to minimize water quality impacts from the removal of old piles and other construction activities. Those measures include the deployment of a silt curtain while in-water construction activities create excessive turbidity (expected during removal or replacement of the pier foundation piles) and proper handling and storage of construction equipment, materials and debris. To ensure that the applicant complies with the proposed best management practices (BMPs), the Commission attaches the proposed BMPs as part of **Special Condition 6**. The Commission finds that the proposed

project, as conditioned, provides feasible mitigation measures to minimize potential adverse impacts of construction activities in the marine environment.

Fuel operations also pose potential risks to water quality in Avalon Harbor. During construction, fuel operations will be temporarily moved east of the fuel pier and will operate from the City-owned Pump-a-Head waste disposal dock located on Casino Point. Fuel will be provided to the dispensers on the floating dock through a fuel hose attached to land-based fuel storage tanker trucks. Safety equipment and a small office will be contained inside an 8 foot x 16 foot portable trailer placed temporarily in the Casino Point parking lot. The applicant's proposed Interim Fuel Plan incorporates BMPs for the temporary fueling operations (Exhibit #11). The Commission imposes **Special Condition 7** requiring the applicant to implement the Interim Fuel Plan that also includes containment devices lined with absorbent materials below all temporary hose fittings and joints, and under fuel dispensers, an automatic shutoff system, and easy-to-read signs on the interim fuel dock that explain proper fueling, spill prevention and spill reporting procedures. After construction is complete and fueling operations resume at the new fuel pier, potential spills will continue to threaten water quality. The applicant proposes several BMPs related to fueling operations and spill response procedures (Exhibit #11, pages 14-17). The Commission imposes **Special Condition 8** requiring the applicant to submit a final best management practices and spill response procedures plan prior to issuance of the permit that also addresses appropriate storage, transfer, containment and disposal facilities for liquid materials commonly used in vessel fueling and clarifies the spill cleanup and reporting procedures. As a result, the Commission finds that as conditioned, the proposed project provides feasible mitigation measures to minimize the potential impacts to water quality from fuel operations both during and after construction of the proposed project.

4. Conclusion

In addition to the conditions described above, the Commission imposes **Special Condition 9** requiring the permittee to comply with all permit requirements and mitigation measures of the California Department of Fish and Wildlife, Regional Water Quality Control Board, U.S. Army Corps of Engineers, and the U.S. Fish and Wildlife Service with respect to preservation and protection of water quality and marine environment. The proposed project, as conditioned, will maintain marine resources and the biological productivity and quality of coastal waters. In addition, the fill in coastal waters associated with the project is for an allowable use, is the least environmentally damaging feasible alternative, and includes feasible mitigation measures to minimize adverse environmental effects. Therefore, the Commission finds that the project, as conditioned, is consistent with Sections 30230, 30231, and 30233 of the Coastal Act.

D. PUBLIC ACCESS AND RECREATION

Coastal Act section 30210 states:

> *In carrying out the requirements of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational activities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

Coastal Act section 30213 states, in relevant part:

> *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.*

Coastal Act section 30224 states, in relevant part:

> *Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.*

Coastal Act section 30234 states, in relevant part:

> *Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded.*

The proposed project involves the necessary replacement of a public pier with no change in use. The proposed public pier will provide public recreational opportunities and will support increased recreational boating use of coastal waters. A new public restroom will be provided. The pier will continue to be available for public use, and the fuel facility will continue to enhance public access and recreational opportunities at Catalina Island. The proposed pier, which supports recreational boating, is an allowable and encouraged marine related use, and is consistent with Sections 30224 and 30234 of the Coastal Act.

The public currently has access to the Avalon Bay Fuel Pier and along the shoreline at the project site. The proposed project will not interfere with public access along the shoreline, except for the temporary disruptions that may occur during the completion of the permitted development.

A designated scuba area is situated on the north side of Casino Point and is outside of the bay and about three hundred feet north of the project site. The proposed project will not adversely affect Casino Point Park or the scuba diving area. **Special Condition 10** prohibits the applicant and the development from interfering with public access along the shoreline in the project area, except for the temporary disruptions that may occur during the completion of the permitted development. Only as conditioned can the proposed project be found consistent with the public access and recreation policies of the Coastal Act.

E. HAZARDS

Coastal Act section 30253 states:

> *New development shall do all of the following:*
> *(a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
> *(b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

The proposed project will not create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. However, no development in the water can be guaranteed to be safe from damage caused by wave energy, floods, seismic events, storms and erosion. The applicant proposes to construct the replacement pier at the same elevation as the existing pier (+12.0' MLLW) and shore (Exhibit #9). The bottom of the pier will be at approximately 9.5' MLLW and the cross-bracing will be as low as about +6.0' MLLW. The applicant completed a Coastal Hazards Analysis to assess how the proposed design will fare under current conditions and future sea level rise scenarios during the pier's expected economic life of 50 years. At present, the top of the pier is about 6.5 feet above the average higher high tide, but the lowest cross brace is only about 0.5 feet above the average higher high tide. According to the applicant's analysis using a mid-range estimate of sea level rise (28 to 29 inches in 50 years), the MHHW level by 2065 will reach an elevation of 7.9 feet, MLLW, approximately 4 feet below the top of the pier deck but high enough to submerge about half the cross-bracing (Exhibit #9). Using the sea level rise projections provided by the 2012 National Research Council's Sea-Level Rise for the Coasts of California, Oregon and Washington: Past, Present and Future, the upper range of sea level by 2065 could be almost 36" higher than the present level. With this projection, MHHW could reach an elevation of almost 8.5 feet, MLLW. This water level would submerge large sections of cross-bracing each day and small amounts of surge or El Niño conditions could raise average tides above the lower part of the pier deck. The highest astronomical tide, based on the Los Angeles Tide Gauge could be about 1.85 feet higher than the MHHW. Under the highest astronomical tide conditions, the lower part of the pier could be submerged with only a modest increase in sea level and the entire deck could be flooded.

The existing fuel pier has sustained damage in recent years from high surf conditions, including broken piles and cross bracing under the deck. Damage to the proposed pile wraps could lead to leaching of toxic chemicals into the water. If the fuel lines to the dock were damaged, a spill would have severe impacts on water quality and marine habitat and would temporarily shut down the pier, leaving island residents and visitors to Santa Catalina Island without a source for fuel. To minimize the need to replace or undertake extensive maintenance and repairs that would have adverse impacts to the marine environment over the next 50 years, the proposed project could be redesigned to withstand the worst case scenario sea level rise estimates by elevating the pier. Normally, impacts from sea level rise can be addressed either through initial design modifications or through future adaptation. However, pier elevation is the only option available to the fuel pier for addressing sea level rise within the current footprint, and future adaptation would necessitate changes to the elevation of the pier through replacement of all the pier supports and other reconstruction.

The applicant states that an increase in the elevation of the pier would require a number of design changes that would extend the time required to complete the project and risk the funding the applicant has available. Some of the design changes required to elevate the pier include extending or replacing gangways to the moored seasonal docks to accommodate a longer distance from the pier deck to the dock decks and construction of ADA accessible ramps from the landward side of the pier deck onto shore. The concrete pile footings would also have to be larger to stabilize the elevated structure, resulting in increased hard bottom coverage. As proposed, the fuel lines will be secured to the underside of the pier deck and at the seaward edge of the pier they will be protected from wave action behind the stringer. In addition, the proposed fuel pier design includes an

automatic fuel shutoff system with leak detection at each connection point in the fuel lines to minimize the risk of a spill in the event of severe damage to the pier from wave action. Although the proposed project may not be safe from the impacts of sea level rise for the next 50 years, the proposal does minimize risks of a fuel spill if the pier is damaged by increased wave action.

Recognizing that high surf conditions exacerbated by sea level rise or other coastal hazards may damage the fuel pier, the Commission imposes **Special Condition 11** which requires the removal of all or part of the pier when it becomes unusable or hazardous to the public due to destruction or damage by wave attack or other coastal hazards. The Commission also imposes **Special Condition 12** requiring that the permittee acknowledge and assume the potential hazards associated with development in or near the water. Finally, the applicant's sea level rise analysis also indicates that the timber cross braces under the pier deck will begin to be submerged at MHHW by 2040. The timber used for the cross braces will be treated with ACZA, but are not proposed to be wrapped at this time because they will not regularly be in contact with the water until closer to 2040. As discussed earlier, if exposed to water, ACZA treated timber can leach toxic chemicals into the water threatening water quality and marine life. The applicant states that because the cross braces below the pier deck will need to be replaced before 2040, wrapping them now is unnecessary. To ensure that the approved timber cross braces that are treated with ACZA but not wrapped do not become submerged, the Commission imposes **Special Condition 13** that requires the removal of the approved unwrapped timber cross braces prior to 2040 when they would become submerged. Replacement cross braces would include the use of wrappings, coatings or other wood preservative treatments that would protect water quality and marine resources from leaching of toxic chemicals. The special condition also allows the applicant to obtain an amendment or new permit to keep the approved cross braces and to wrap or otherwise treat them in the future, prior to them becoming submerged.

F. VISUAL RESOURCES

Coastal Act section 30251 states, in relevant part:

> *The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of the surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.*

Section 30251 of the Coastal Act requires that the scenic and visual resources of coastal areas be considered and protected as a resource of public importance. In addition, public views to and along the ocean and scenic coastal areas shall be protected.

The proposed project is the replacement of an existing public pier, with no significant change to its current configuration. The existing one-story building on the pier will be replaced by a new one-story building of similar size (Exhibit #5). The new building is on the same footprint as the existing building. The design of the proposed building is visually compatible with the character of the surrounding area (Casino Point). Therefore, the proposed project will not block any existing public views or result in any significant change to visual resources, and is consistent with Section 30251 of the Coastal Act.

G. LOCAL COASTAL PROGRAM (LCP)

Section 30604(a) of the Coastal Act provides that the Commission shall issue a coastal permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program (LCP) which conforms with the Chapter 3 policies of the Coastal Act. A coastal development permit is required from the Commission for the proposed development because it is located within the Commission's area of original jurisdiction. The Commission's standard of review for the proposed development is the Chapter 3 policies of the Coastal Act. The City of Avalon certified LCP is advisory in nature and may provide guidance.

The Commission certified the City of Avalon LCP on May 21, 1981. The City of Avalon certified Land Use Plan (LUP) designates the project area as a Resort Recreational District. The certified LCP states that the Resort Recreational District is established "for the purpose of stimulating and allowing a variety of uses associated with the resort character of Avalon." The principal use of the Resort Recreational District is that of resort hotel uses and associated activities. The proposed project, which supports public recreation and boating activities, is consistent with the Resort Recreational land use designation.

The City of Avalon certified LCP sets forth the following relevant policies:

Access Policy 1: Constantly monitor and improve transportation from the mainland to Avalon to assure affordable and efficient transportation to residents and visitors alike and continue to minimize private automobile use in Avalon.

Access Policy 7: Casino Point shall be set aside as a public park and for scuba and swim areas.

[Staff Note: The LCP's "Existing Coastal Access" map shows the dinghy landing and fuel pier in their current location in Avalon Bay. The designated scuba area is situated on the north side of Casino Point, outside of the bay. The Casino Point Park is shown on Casino Point, in the open space area seaward of the Casino building.]

Recreation Policy 3: Development on the City tidelands shall be restricted to visitor-serving or recreational uses.

Recreation Policy 4: Public facilities shall be constantly upgraded and maintained.

Recreation Policy 6: Casino Point shall be designated as a public park, and for swimming and scuba diving.

Marine Resource Policy 1: Identify and control existing sources of runoff into the harbor and surrounding coves.

Marine Resource Policy 2: Require new developments adjacent to the water to use the best mitigation measure available for controlling runoff.

Shoreline Structures Policy 1: Any diking, dredging, filling and construction of shoreline structures will be planned to avoid disruption to marine and wildlife habitats.

Shoreline Structures Policy 3: Shoreline structures such as piers established for recreational and visitor-serving purposes shall be encouraged where feasible in Hamilton Cove, Descanso Bay, and the Pebbly Beach area.

Shoreline Structures Policy 4: Existing structures will be inventoried to establish their reliability in a storm situation and steps taken to mitigate weaknesses.

Boating Policy 2: Encourage maintenance and upgrading of facilities which provide recreational boats and serve commercial fishermen.

Boating Policy 3: Apply design criteria to ensure gas docks and marine servicing areas are aesthetically pleasing and in harmony with waterfront ambience.

ESHA Policy 3: Existing air and water quality in Avalon shall be a primary concern in any new development or potentially impacting activity.

Hazard Policy 3: Locate new developments to avoid hazards.

New Development Policy 5: Give priority to affordable housing and visitor-serving facilities if infrastructure limitations become restrictive.

Visual Resource Policy 3: Continue to preserve the scale and charm of existing development through the adoption of design criteria and height and bulk restrictions.

Visual Resource Policy 4: Allow no development along the shoreline which in any way restricts the view of the water from the adjacent pedestrian walk.

Public Works Policy 4: Monitor new development to make sure they are following flood hazard building standards.

Public Works Policy 5: Require stringent runoff mitigating measures in any new development.

As conditioned, the proposed development is consistent with Chapter 3 of the Coastal Act and the certified LCP for the area.

H. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Section 13096 of the California Code of Regulations requires Commission approval of coastal development permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

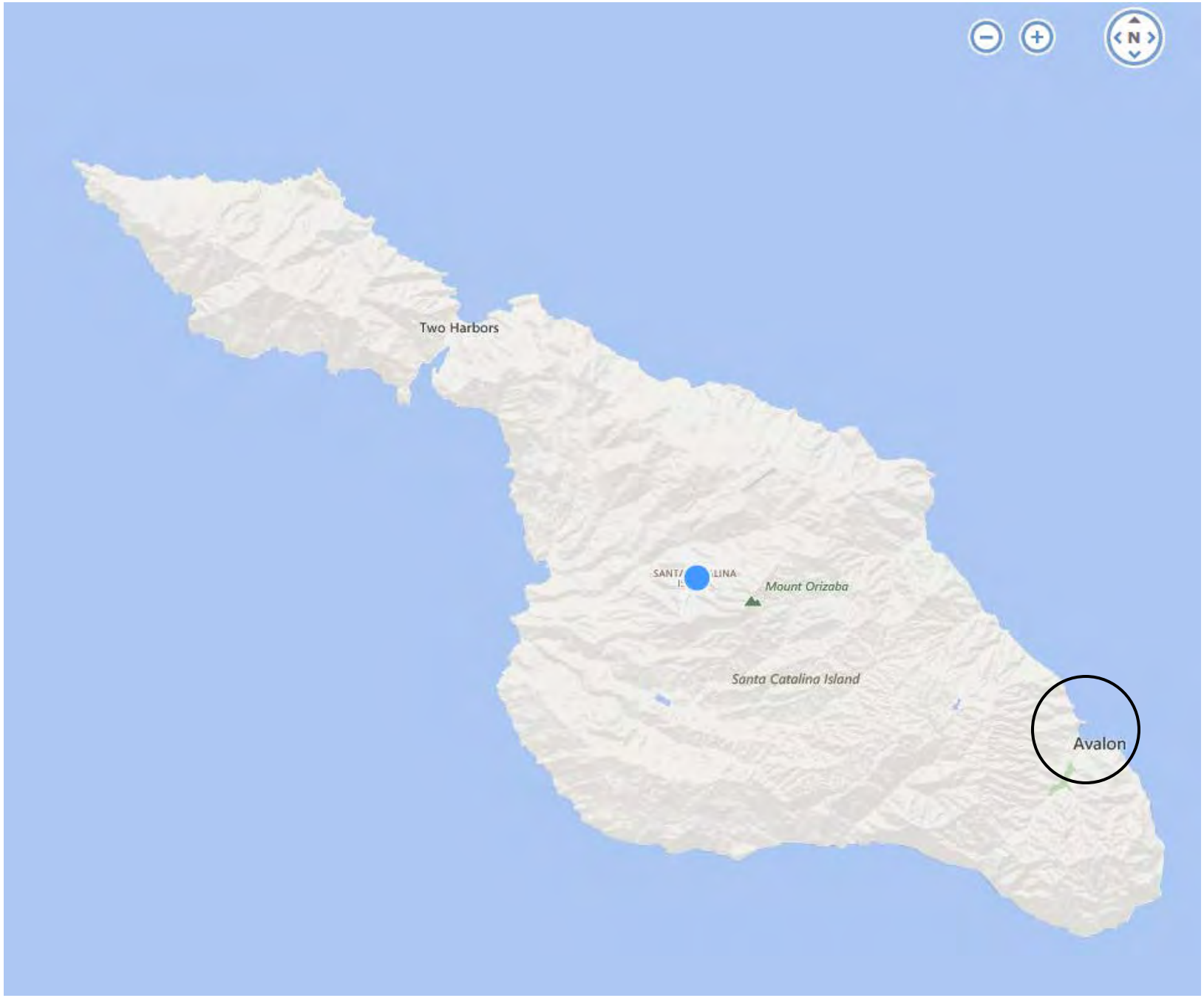
On April 29, 2009, the City of Avalon certified a Mitigated Negative Declaration for the Avalon Fuel Dock Replacement Project for a concrete replacement pier design. The City approved an addendum to the April 2009 Negative Declaration on October 17, 2014 for the timber design proposed in this application. The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. As discussed above, the proposed development, as conditioned, is consistent with the Chapter 3 policies of the Coastal Act. Feasible mitigation measures, which will minimize all adverse environmental effects, have been required as special conditions. The following special conditions are required to assure the project's consistency with Section 13096 of the California Code of Regulations:

Special Conditions 1 through 13

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

Appendix A - Substantive File Documents

- City of Avalon certified Local Coastal Program (LCP), May 21, 1981
- Coastal Development Permit 5-09-092 (City of Avalon Fuel Pier)
- California Regional Water Quality Control Board Section 401 Water Certification Application File No. 13-159
- U.S. Army Corps of Engineers Nationwide Permit Application No. SPL-2014-00050-BLR
- City of Avalon certified Mitigated Negative Declaration for the Casino Fuel Dock Replacement Project, dated April 29, 2009 and Addendum to the Adopted Mitigated Negative Declaration and Site Plan Application for the Casino Fuel Dock, dated October 17, 2014
- *Report of Geotechnical Evaluation & Recommendations, Proposed Avalon Casino Fuel Pier Replacement, 2 Casino Way, City of Avalon, Santa Catalina Island*, by Associated Soils Engineering, Inc., dated July 15, 2014
- *Marine Biological Survey Report and Essential Fish Habitat (EFG) Analysis for the Casino Fuel Pier Replacement Project, Avalon Harbor, Avalon, California*, by Coastal Resources Management, Inc., dated February 2, 2009 and *Casino Fuel Pier (Avalon) Marine Biological Assessment Update*, by Coastal Resources Management, Inc., dated July 17, 2014
- *Coastal Hazards Analysis for Avalon Fuel Dock Replacement Project*, by BLUEWater Design Group, dated 3/31/2015
- *Best Management Practices (BMPs) for Avalon Fuel Dock*, dated December 2013
- *Interim Fuel Plan*, dated June 2015
- Letter from Brian Bray, City of Avalon Harbor Master, to Kevin Atkinson, Department of Boating and Waterways, dated June 6, 2013, regarding City of Avalon Boating Infrastructure Grant.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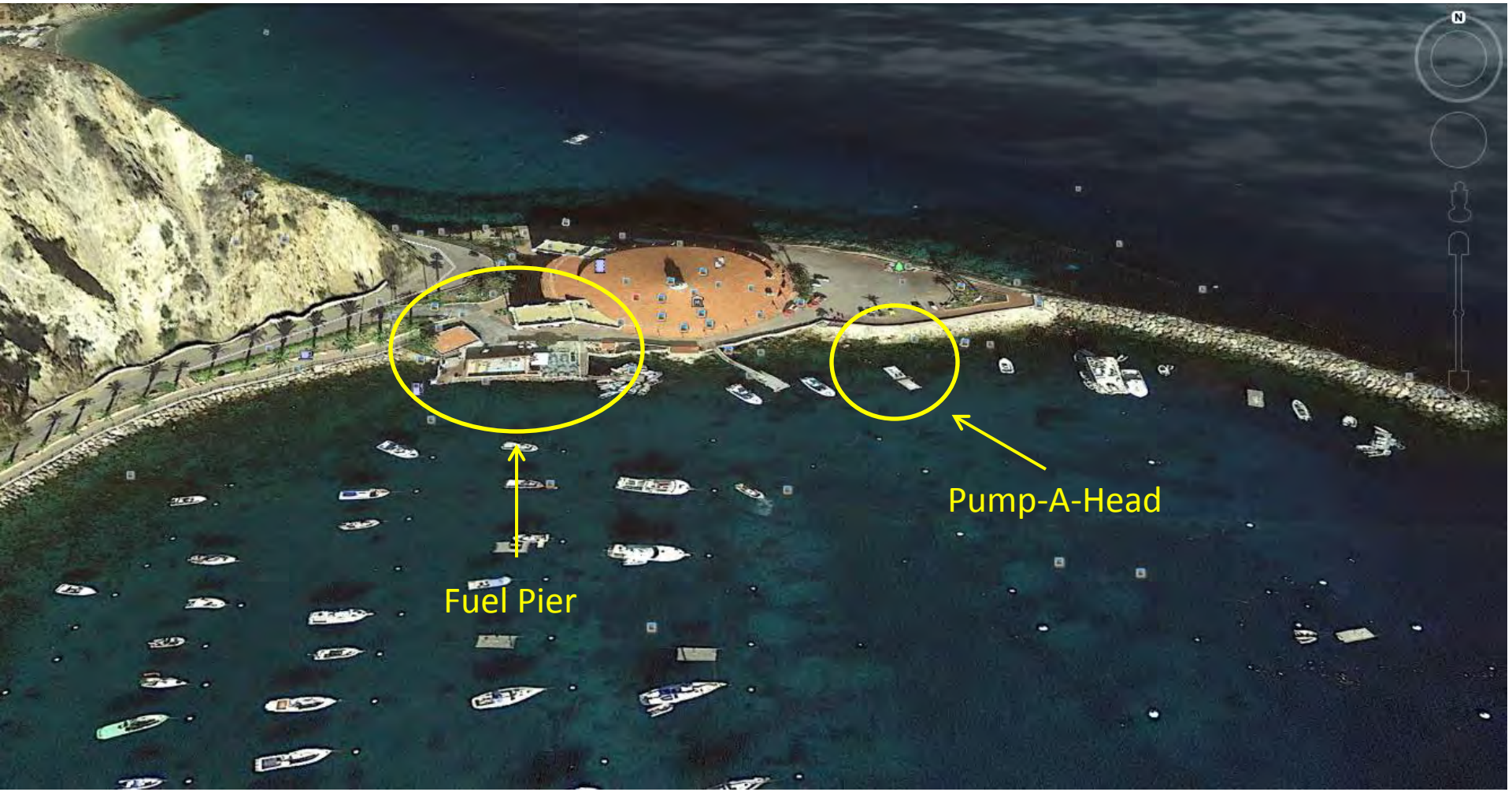
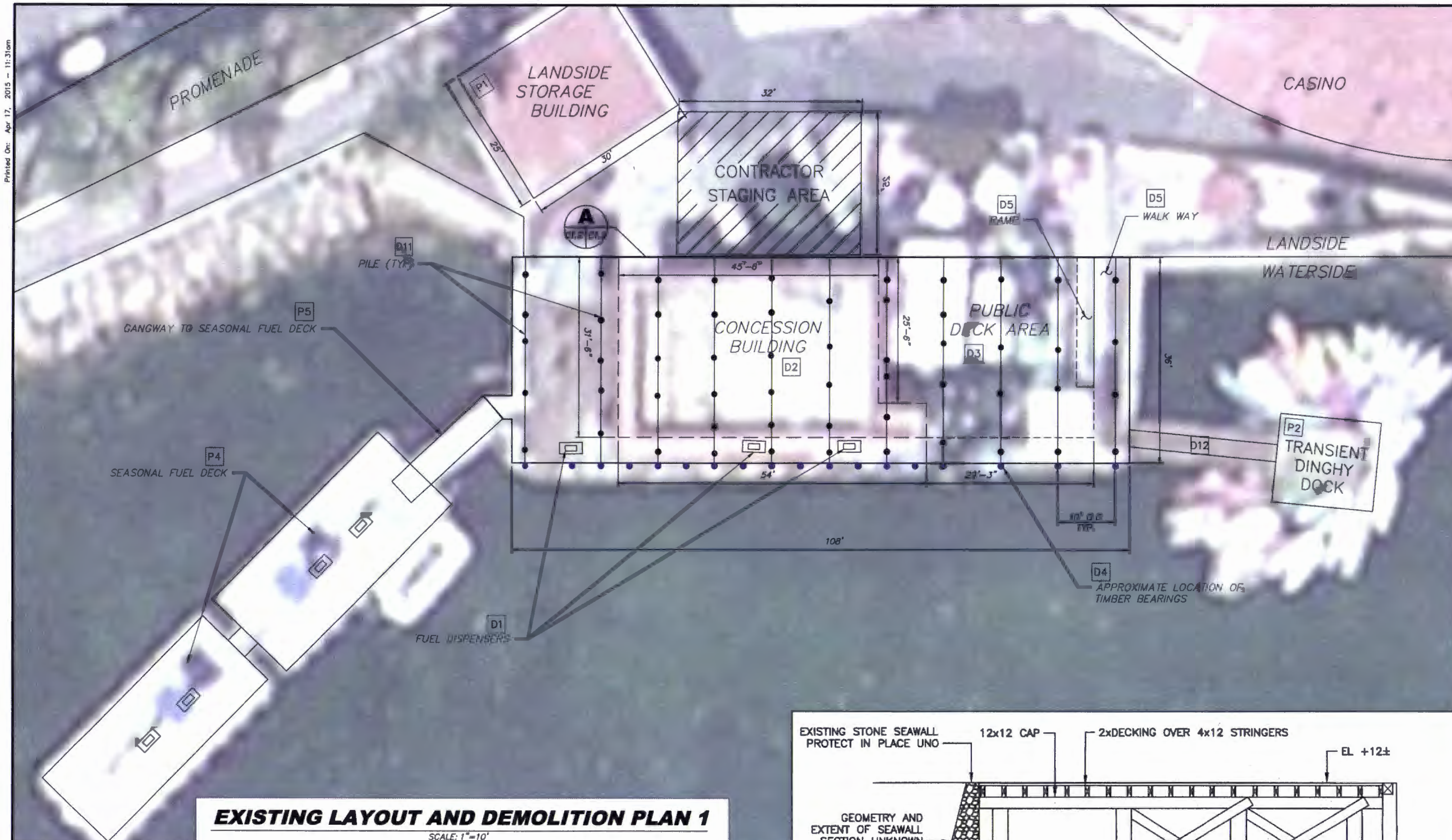
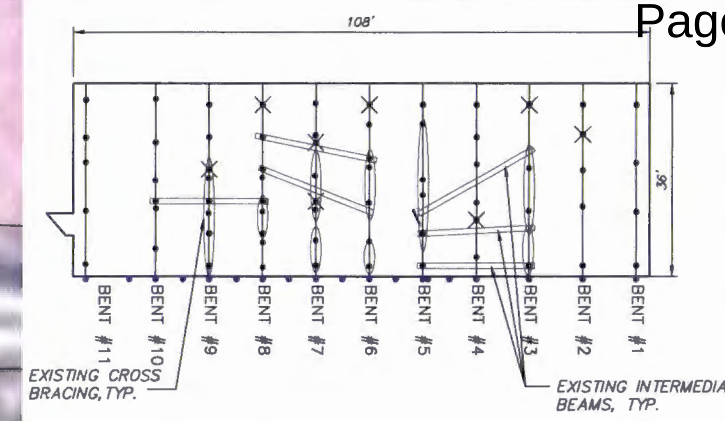
Mount Orizaba
Santa Catalina Island
Avalon


Fuel Pier
Pump-A-Head



EXISTING LAYOUT AND DEMOLITION PLAN 1
SCALE: 1"=10'



EXISTING PILE CONDITIONS
SCALE: 1"=16"

LEGEND:

- ● INDICATES PILE WITH 'GREATER THAN 50% CAPACITY REMAINING'.
- ✕ INDICATES 'DETERIORATED, DAMAGED, OR MISSING' PILE.
- ● INDICATES EXISTING TIMBER FENDER PILE.

ALL DIMENSIONS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND QUANTITY OF STRUCTURAL MEMBERS AND HARDWARE REQUIRED.

DEMOLITION NOTES:

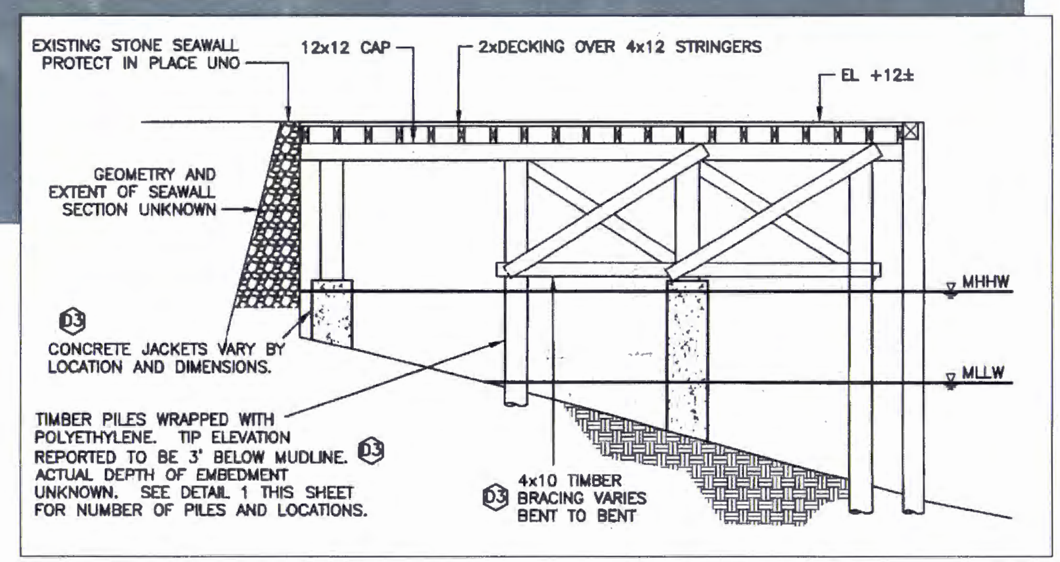
1) NO DEMOLITION SHALL BE PERFORMED UNTIL THE CONTRACTORS DEMOLITION PLAN HAS BEEN APPROVED BY THE ENGINEER.
2) ALL REMOVED MATERIAL OF EVERY DESCRIPTION EXCEPT ITEMS IDENTIFIED FOR SALVAGE SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
3) NO MATERIALS OF ANY DESCRIPTIONS SHALL BE ALLOWED TO FALL INTO THE OCEAN IMMEDIATELY.
4) EXISTING PILES TO BE REMOVED SHALL BE COMPLETELY EXTRACTED INCLUDING ALL EXISTING PILE JACKETS, PILE WRAP AND MISCELLANEOUS HARDWARE.
5) CONTRACTOR IS ADVISED THAT THE PIER HAS BEEN REPAIRED ON NUMEROUS OCCASIONS. THE LATEST WORK CONSISTED OF TEMPORARY STEEL BEAM REINFORCEMENT AND DECK REPAIR TO THE EAST DECK AREA. CONTRACTOR SHALL COMPLETELY DEMOLISH AND REMOVE ALL MISCELLANEOUS REPAIR, TIMBER, STEEL BEAMS, HARDWARE, AND ATTACHMENTS.

DEMOLITION SCHEDULE:

- D1 REMOVE EXISTING FUEL DISPENSERS
- D2 REMOVE EXISTING PIER BUILDING
- D3 REMOVE EXISTING PUBLIC DECK AREA
- D4 REMOVE ALL EXISTING TIMBER BEARING AND FENDER PILES IN THEIR ENTIRETY INCLUDING PILE WRAP, CONCRETE JACKETS, AND MISCELLANEOUS HARDWARE AND ATTACHMENTS.
- D5 REMOVE EXISTING AND DISPOSE OF ALL PIER REPAIRS INCLUDING: RAISED FLOOR PLATFORM, ADA RAMP W/ TOP LANDING AND HANDRAILS, STAIRS AND HANDRAILS, FENCE, AND CONCRETE ENCASEMENT AROUND PILES.
- D11 REMOVE EXISTING PILE TO MUDLINE
- D12 REMOVE THE EXISTING GANGWAY TO THE DINGY DOCK

ITEMS TO PROTECT IN PLACE:

- P1 LANDSIDE STORAGE BUILDING
- P2 TRANSIENT DINGHY DOCK
- P3 SEASONAL FUEL DOCK
- P4 GANGWAY TO SEASONAL FUEL DOCK



A PIER SECTION
C1.2 | C1.2
SCALE: 1"=5'

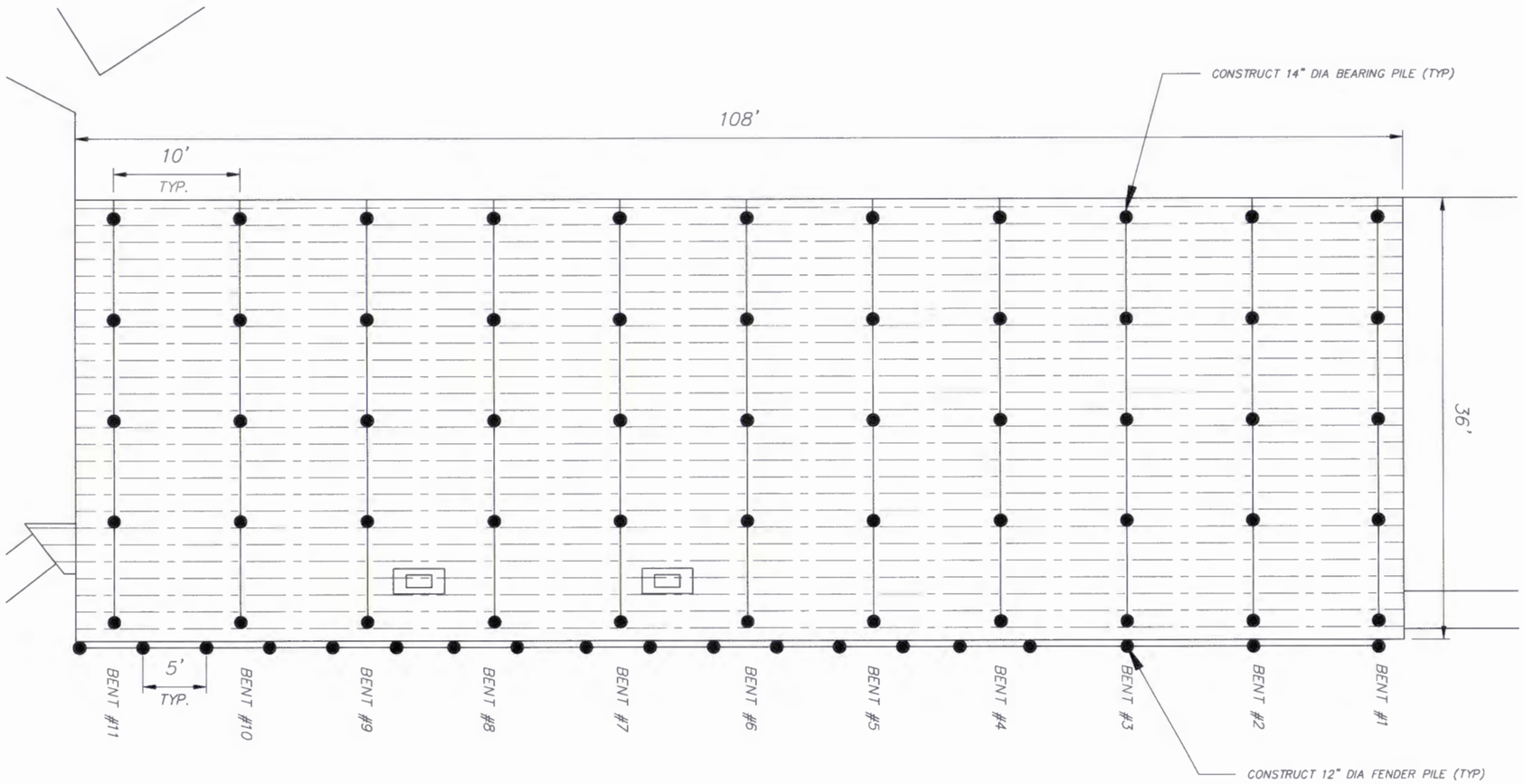
GRAPHIC SCALE 1"=10'

PROJECT: AVALON HARBOR FUEL FACILITIES AVALON, CA	CLIENT: CITY OF AVALON P.O. BOX 707 410 AVALON CANYON RD. AVALON, CA 90704	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; DESIGNED BY GH; DRAWN BY JL; CHECKED BY TB	EXISTING LAYOUT AND DEMOLITION PLAN 1

SCALE	DATE
AS NOTED	04/09/15
JOB NO.	2324-C
SHEET	C1.2
SHEET #	4 of 59

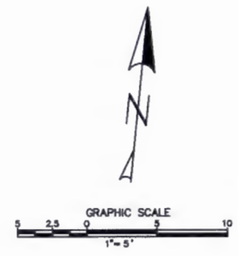
REGISTERED PROFESSIONAL ENGINEER TIMOTHY BAILEY No. C 50019 EXP. 6/30/15 CIVIL STATE OF CALIFORNIA

STATUS



PILE LAYOUT

SCALE: 1"=5'



STATUS: CONCEPT | BID | AGR | ISSUE: X | FINAL

PROJECT
AVALON HARBOR FUEL FACILITIES AVALON, CA

CLIENT
CITY OF AVALON
P.O. BOX 707
410 AVALON CANYON RD.
AVALON, CA 90704

NO.	REVISION	BY	DATE
1	-	-	-

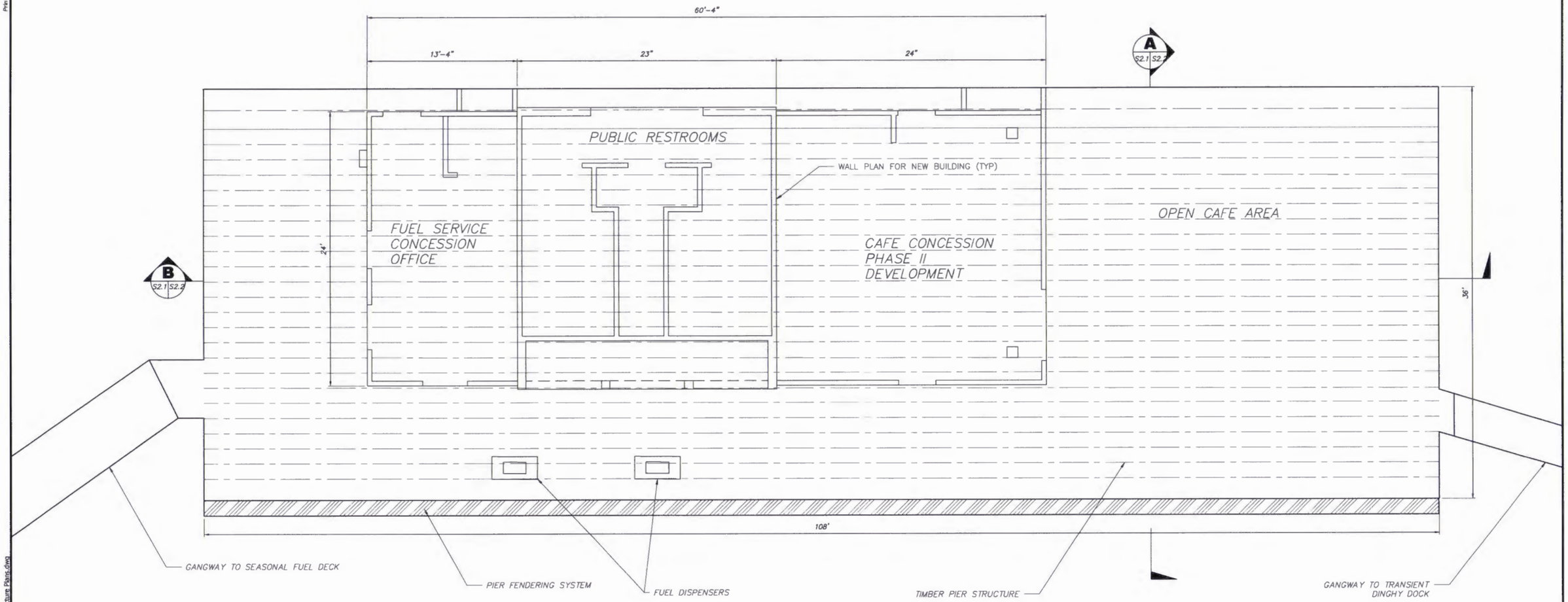
REGISTERED PROFESSIONAL ENGINEER
TIMOTHY BAILEY
No. C 50019
EXP. 6/30/15
CIVIL
STATE OF CALIFORNIA

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

DESIGNED BY	GH
DRAWN BY	GH
CHECKED BY	TB

PILE PLAN

SCALE	AS NOTED
DATE	02/24/15
JOB NO.	2324-D
SHEET	S1.1
SHEET #	9 of



PROPOSED PIER LAYOUT & BUILDING WALL PLAN

SCALE: 1"=4'

STATUS	CONCEPT						FINAL
						X	

PROJECT
AVALON HARBOR FUEL FACILITIES AVALON, CA

CLIENT
CITY OF AVALON
P.O. BOX 707
410 AVALON CANYON RD.
AVALON, CA 90704

NO.	REVISION	BY	DATE
1	-	-	-

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

BLUEWATER Design Group
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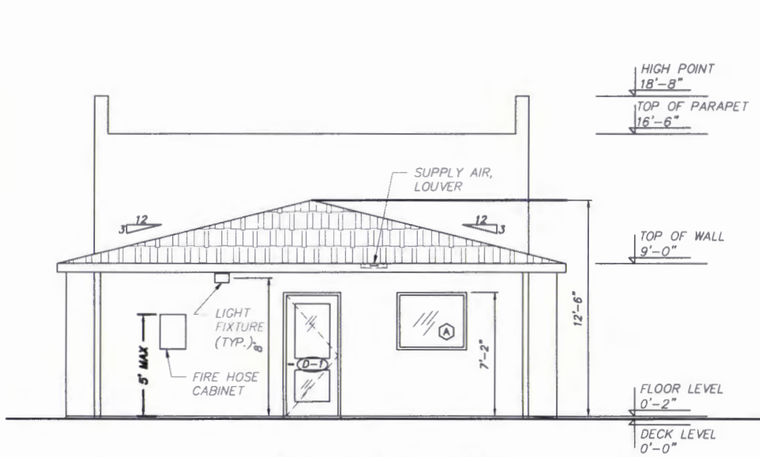
For Marinas and Waterfront Resorts

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

DESIGNED BY	GH
DRAWN BY	GH
CHECKED BY	TB

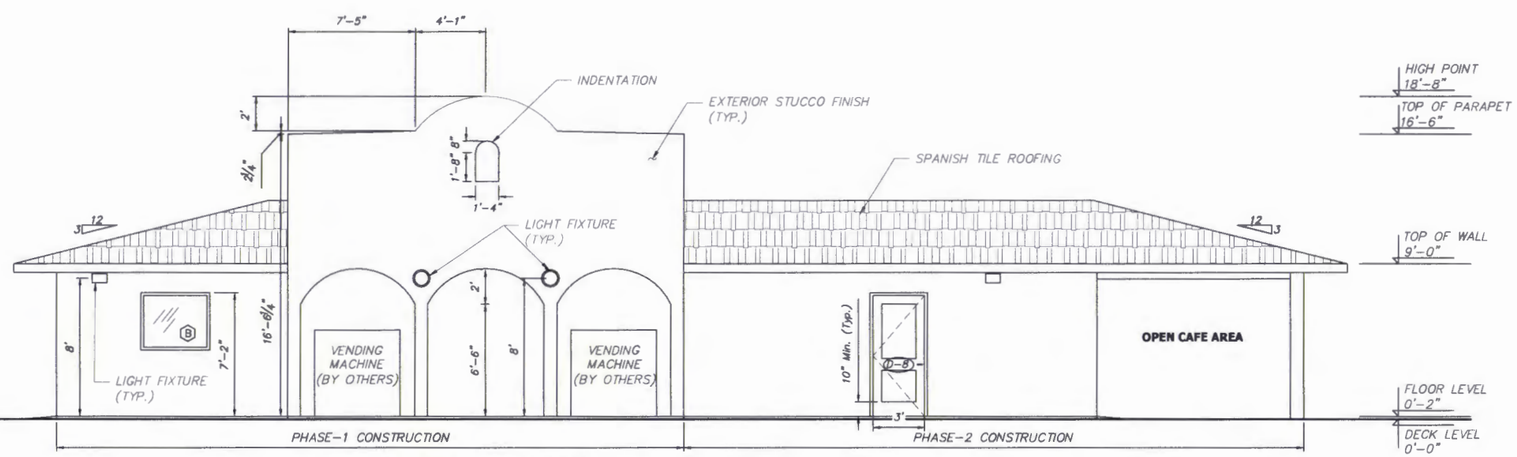
DECK PLAN

SCALE	AS NOTED
DATE	02/24/15
JOB NO.	2324-D
SHEET	S2.1
SHEET #	10 of



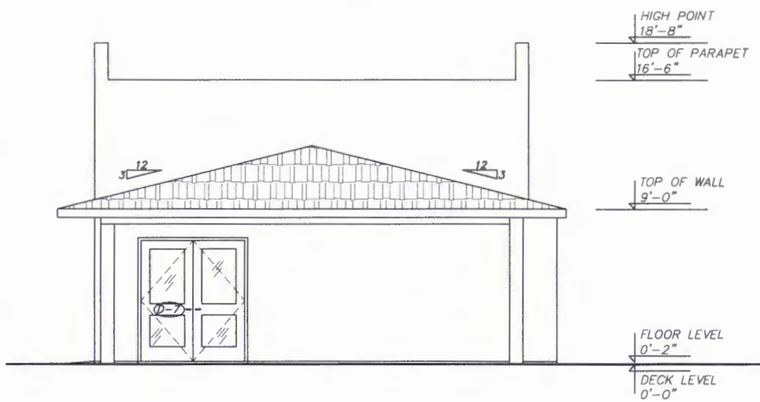
WEST ELEVATION

SCALE: 1"=4'



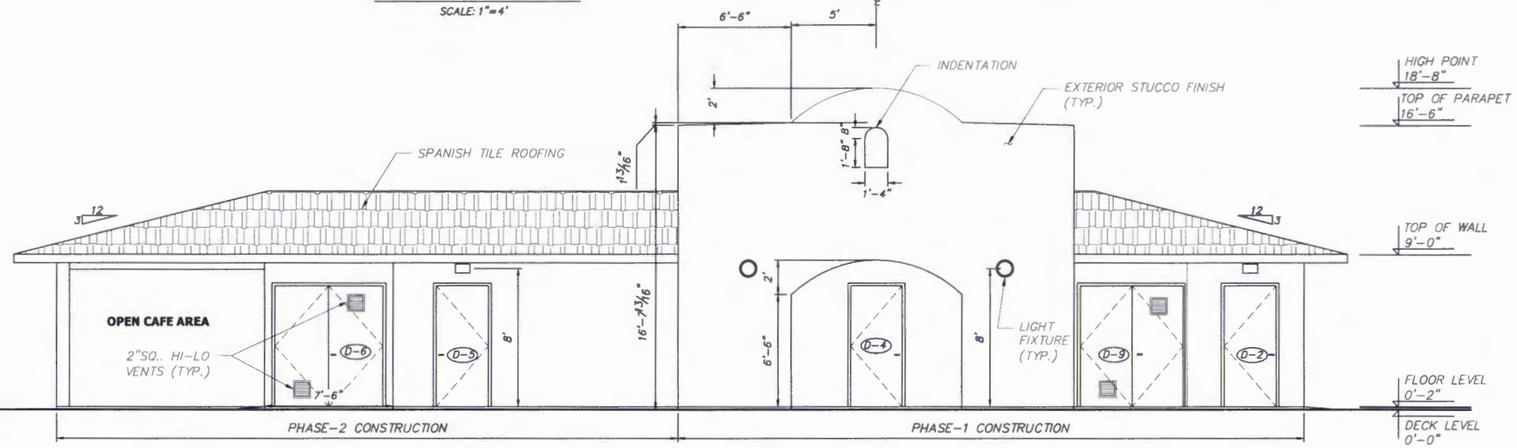
SOUTH ELEVATION

SCALE: 1"=4'



EAST ELEVATION

SCALE: 1"=4'



NORTH ELEVATION

SCALE: 1"=4'

A-1, A-7 Architech Plans.dwg

STATUS	CONCEPT	RISE	RUN	SIGN	FINAL
			X		

PROJECT
AVALON HARBOR FUEL FACILITIES AVALON, CA

CLIENT
CITY OF AVALON
P.O. BOX 707
410 AVALON CANYON RD.
AVALON, CA 90704

NO.	REVISION	BY	DATE
1	-	-	-

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

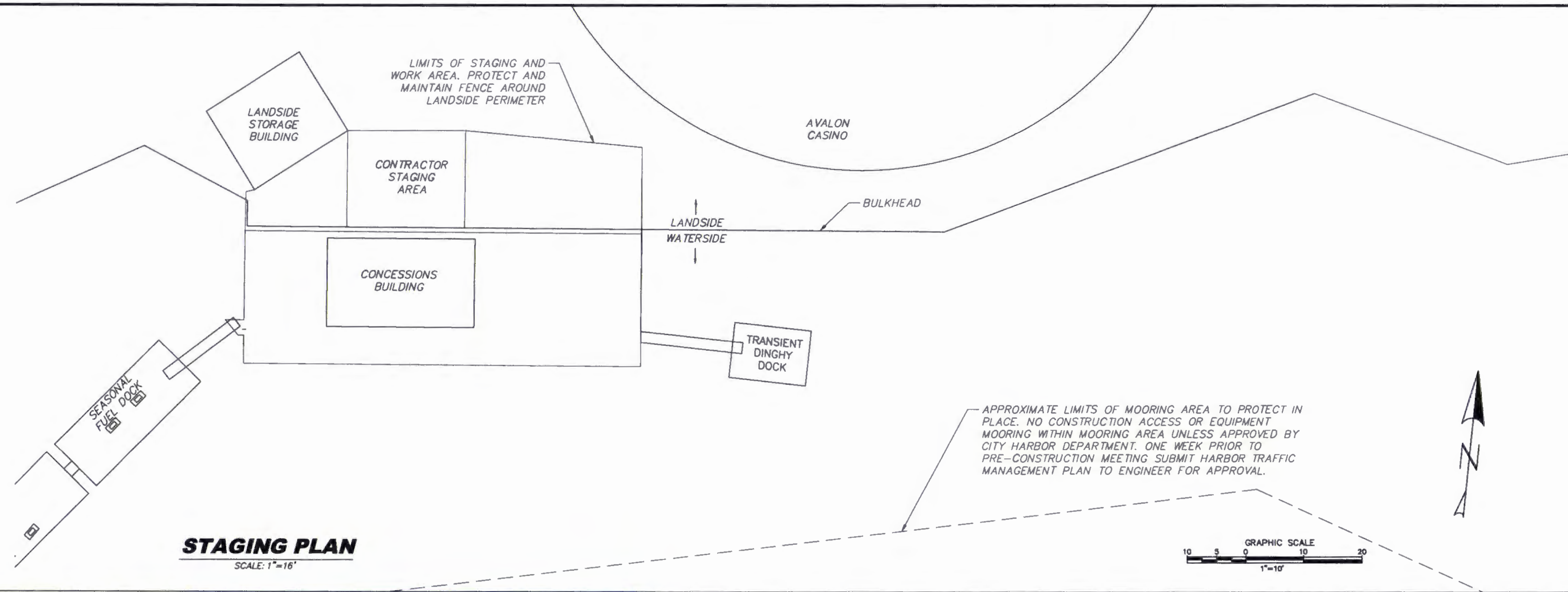
BLUEWATER Design Group
Planning and Engineering Services For Marinas and Waterfront Resorts

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

DESIGNED BY	GH
DRAWN BY	GH
CHECKED BY	TB

EXTERIOR ELEVATIONS

SCALE	DATE
AS NOTED	02/24/15
JOB NO.	2324-D
SHEET	A-5
SHEET #	33 of



STAGING PLAN

SCALE: 1"=16'

LANDSIDE ACCESS

SCALE: 1"=300'

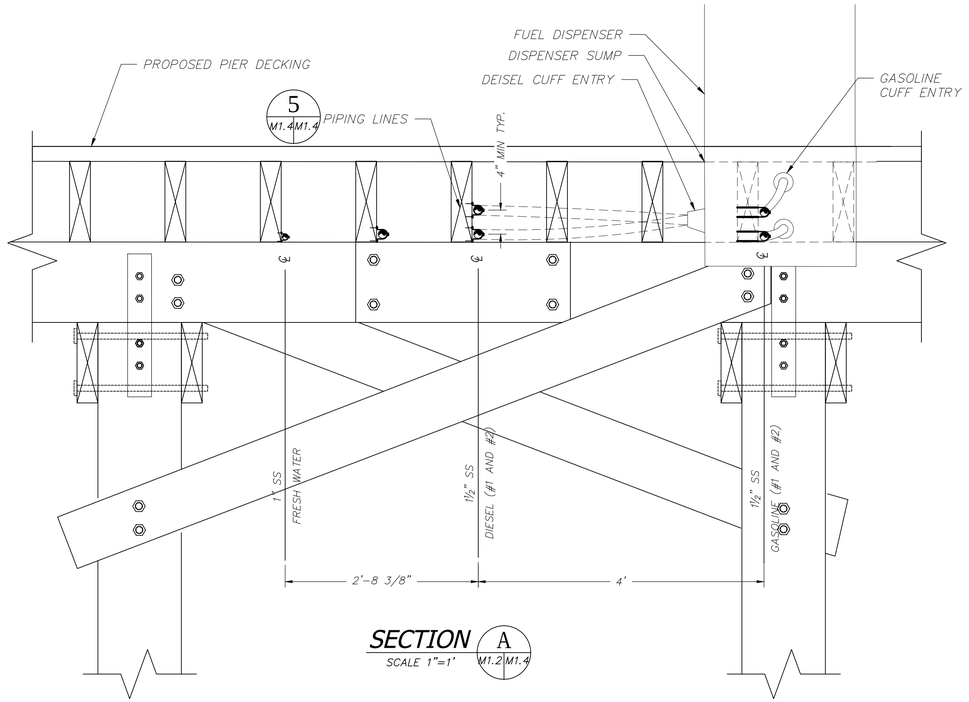
NOTES:

1. ACCESS TO SITE IS LIMITED. TRUCK TRAFFIC SHALL BE CONFINED TO ROUTE SHOWN (PEBBLY BEACH RD/ CLARESSA AVE/ BEACON ST/ SUMNER AVE/ BEACON ST/ METROPOLE ABE/ CRESCENT AVE/ CASINO WAY).
2. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COORDINATION OF ALL TRAFFIC DETOURS AND HAULING ROUTES WITH THE CITY OF AVALON AND COORDINATING ALL APPROVALS AND ACQUIRING ALL PERMITS THAT MAY BE REQUIRED FROM THE CITY OF AVALON TO ALLOW ANY CONSTRUCTION TRAFFIC TO USE THE DESIGNATED HAUL ROUTE.
3. ONE WEEK PRIOR TO PRE-CONSTRUCTION MEETING THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL AND PUBLIC SAFETY PLAN TO THE ENGINEER FOR APPROVAL.
4. CITY OF AVALON SHALL ERECT AND MAINTAIN FLOATING FUEL DOCK FACILITY FOR DURATION OF PROJECT. CONTRACTOR SHALL COOPERATE WITH CITY TO MAINTAIN PUBLIC BOAT ACCESS TO TEMPORARY FUEL DOCK AT ALL TIMES.
5. WATER ACCESS TO SITE IS LIMITED. CONTRACTOR SHALL COORDINATE BARGE TRAFFIC AND ANCHORAGE WITH CITY HARBOR DEPARTMENT. ONE WEEK PRIOR TO THE PRE-CONSTRUCTION MEETING THE CONTRACTOR SHALL SUBMIT A HARBOR TRAFFIC MANAGEMENT PLAN TO THE ENGINEER FOR APPROVAL.

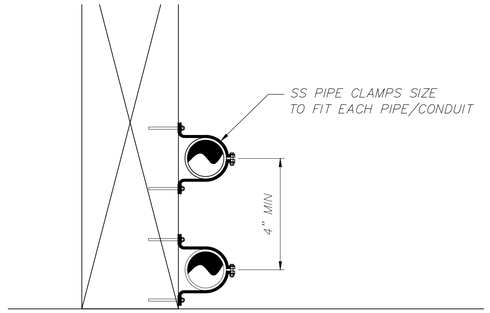
STAGING AND ACCESS NOTES:

1. NO WORK SHALL BE PERFORMED UNTIL THE CONTRACTOR'S STAGING AND ACCESS PLAN HAS BEEN APPROVED BY THE ENGINEER.
2. THE CONTRACTOR IS ADVISED THAT THE PIER IS SIGNIFICANTLY LOAD LIMITED. THE CONTRACTOR SHALL SOLELY ASSUME ALL RISK IF HE ELECTS TO USE THE EXISTING PIER TO SUPPORT EQUIPMENT AND MATERIALS.
3. SPACE ADJACENT TO THE PIER FOR STAGING AND MATERIALS STORAGE IS LIMITED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ARRANGING AND SECURING ADDITIONAL STAGING AND STORAGE AREA OUTSIDE OF THAT SHOWN ON THIS SHEET AS STIPULATED IN THE SPECIAL PROVISIONS.
4. MOBILIZATION SHALL NOT BE COMPLETE UNTIL THE FOLLOWING SUBMITTALS AND WORK HAVE BEEN APPROVED OR DEEMED SATISFACTORY BY THE ENGINEER IN CONFORMANCE WITH SECTION 900-17 OF THE SPECIAL PROVISIONS.
   a. LIST OF SUBCONTRACTORS AND SUPPLIERS
   b. EROSION, SEDIMENT AND CHEMICAL CONTROL PLAN
   c. PERMIT COMPLIANCE PLAN
   d. PROJECT SCHEDULE
   e. TRAFFIC CONTROL AND PUBLIC SAFETY PLAN
   f. SUPERINTENDENT RESUME AND LETTER DESIGNATING HIM AS AUTHORIZED REPRESENTATIVE
   g. DIGITAL VIDEOS OF EXISTING SITE CONDITIONS
   h. PAY ITEM SUBMITTAL
   i. QUALITY ASSURANCE PLAN
   j. HARBOR TRAFFIC MANAGEMENT PLAN
   k. DEMOLITION PLAN
   l. PILE PLACEMENT METHODS PLAN
   m. ROCK ANCHOR PLACEMENT PLAN
   n. CONCRETE BATCHING AND DELIVERY PLAN
   o. CONCRETE FORMING AND PLACEMENT PLAN
   p. EXCAVATION PLAN FOR STEEL PIPE PILES
   q. PAVEMENT EARHTWORK PLAN
5. NO WORK AT THE JOB SITE SHALL BE PERFORMED UNTIL THE FIELD OFFICE IS COMPLETE AND READY FOR USE.
6. SEE SECTION 900-8D OF THE SPECIAL PROVISIONS FOR MANDATORY SUBMITTAL AND ATTENDANCE REQUIREMENTS FOR THE PRE-CONSTRUCTION MEEETING

STATUS	PROJECT	CLIENT				
X	AVALON HARBOR FUEL FACILITIES AVALON, CA	CITY OF AVALON P.O. BOX 707 410 AVALON CANYON RD. AVALON, CA 90704	REGISTERED PROFESSIONAL ENGINEER TIMOTHY BAILEY 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 — DESIGNED BY GH; DRAWN BY GH; CHECKED BY TB	STAGING and ACCESS PLAN DEMOLITION DETAIL — SCALE AS NOTED; DATE 03/16/15; JOB NO. 2324-C; SHEET C1.4; SHEET # 6 of

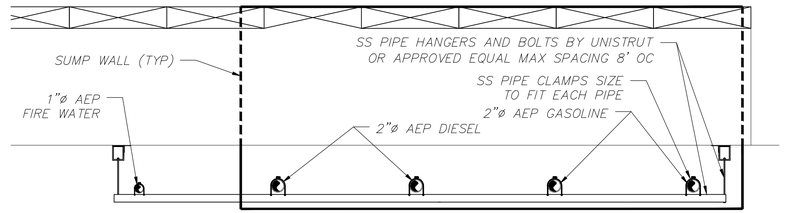


SECTION A
SCALE 1"=1'
M1.2 M1.4

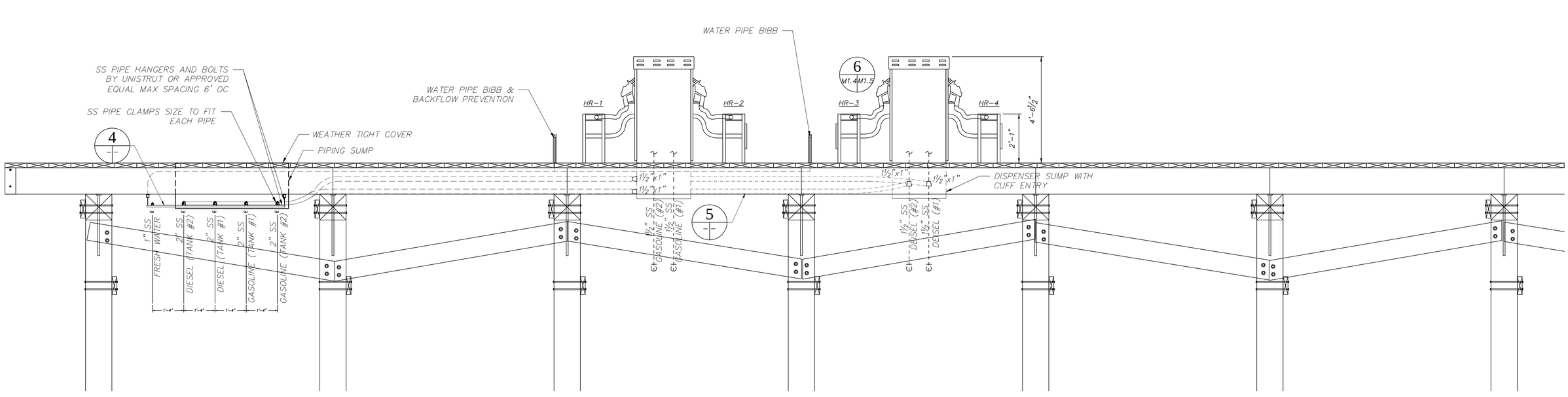


PIPING DETAIL 5
SCALE: NONE

		DISPENSER HOSE REELS		
TAG NO.	MFR.	MODEL	HOSE LENGTH	HOSE DIAMETER
HR-1	HANNAY	SS818-25-26B	50 FT	1"
HR-2	HANNAY	SS820-25-26-10.5A	75 FT	1"
HR-3	HANNAY	SS818-25-26B	50 FT	1"
HR-4	HANNAY	SS820-25-26-10.5A	75 FT	1"



PIPING HANGER DETAIL 4
SCALE: NONE



SECTION B
SCALE 1"=2'
M1.2 M1.4

M1.1 M5.2 Mechanical Plans.dwg

STATUS	CONCEPT	60%	90%	100%	FINAL
				X	

PROJECT
AVALON HARBOR
FUEL FACILITIES
AVALON, CA

CLIENT
CITY OF AVALON
P.O. BOX 707
410 AVALON CANYON RD.
AVALON, CA 90704

NO.	REVISION	BY	DATE
2	PLAN CHECK CORRECTIONS – 6/18/15	GH	06/30/15
1	PLAN CHECK CORRECTIONS – 12/14/15	TB	04/09/15

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

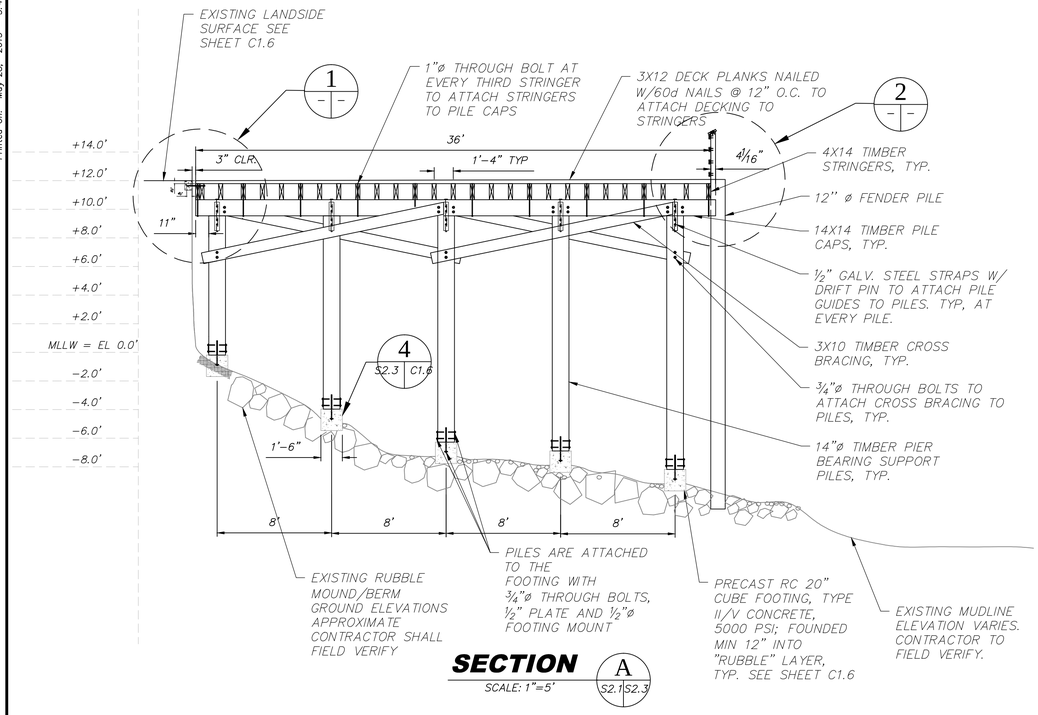
BLUEWATER Design Group
Planning and Engineering Services
For Marinas and Waterfront Resorts

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

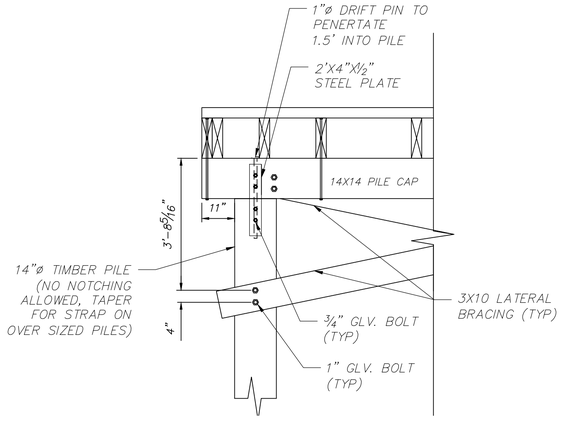
DESIGNED BY GH
DRAWN BY JL
CHECKED BY TB

PIPING SECTIONS

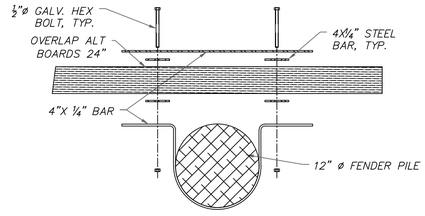
SCALE: AS NOTED
DATE: 06/30/15
JOB NO.: 2324-C
SHEET: M1.4
SHEET #: 19 of 59



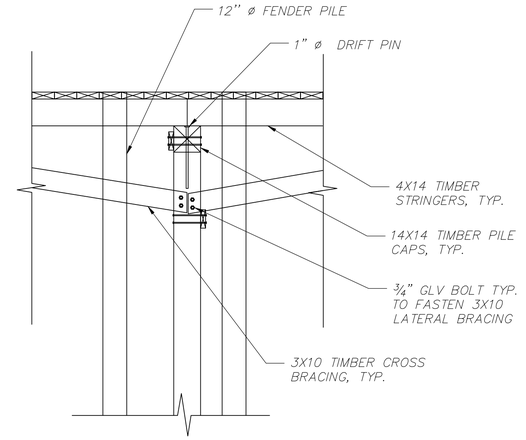
SECTION A (S2.1 | S2.3)
SCALE: 1"=5'



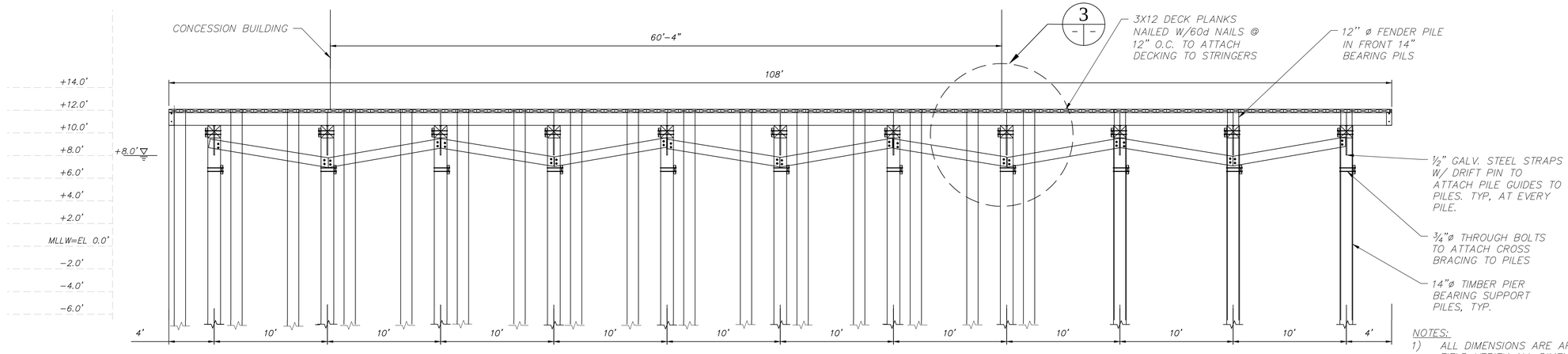
1 **TIMBER BRACING DETAIL**
SCALE: 1"=2'



2 **FENDER PILE DETAIL**
SCALE: 1"=1'



3 **TIMBER BRACING DETAIL**
SCALE: 1"=3'



SECTION B (S2.1 | S2.3)
SCALE: 1"=5'

NOTES:
1) ALL DIMENSIONS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND QUANTITY OF STRUCTURAL MEMBERS AND HARDWARE REQUIRED.
2) SECTIONS AND ELEVATIONS ARE PROVIDED FOR GENERAL INFORMATION ONLY. NOT INTENDED TO REFLECT TRUE AS BUILT CONDITION.
3) EXISTING MUDLINE ELEVATION VARIES, CONTRACTOR TO FIELD VERIFY.

STATUS: CONCEPT | 60% | 90% | 100% X | FINAL

PROJECT
AVALON HARBOR FUEL FACILITIES AVALON, CA

CLIENT
CITY OF AVALON
P.O. BOX 707
410 AVALON CANYON RD.
AVALON, CA 90704

NO.	REVISION	BY	DATE
1	PLAN CHECK CORRECTIONS – 12/14/15	TB	04/09/15

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

DESIGNED BY	GH
DRAWN BY	JL
CHECKED BY	TB

DECK ELEVATIONS AND DETAILS

SCALE	AS NOTED
DATE	05/28/15
JOB NO.	2324-C
SHEET	S2.3
SHEET #	12 of 59

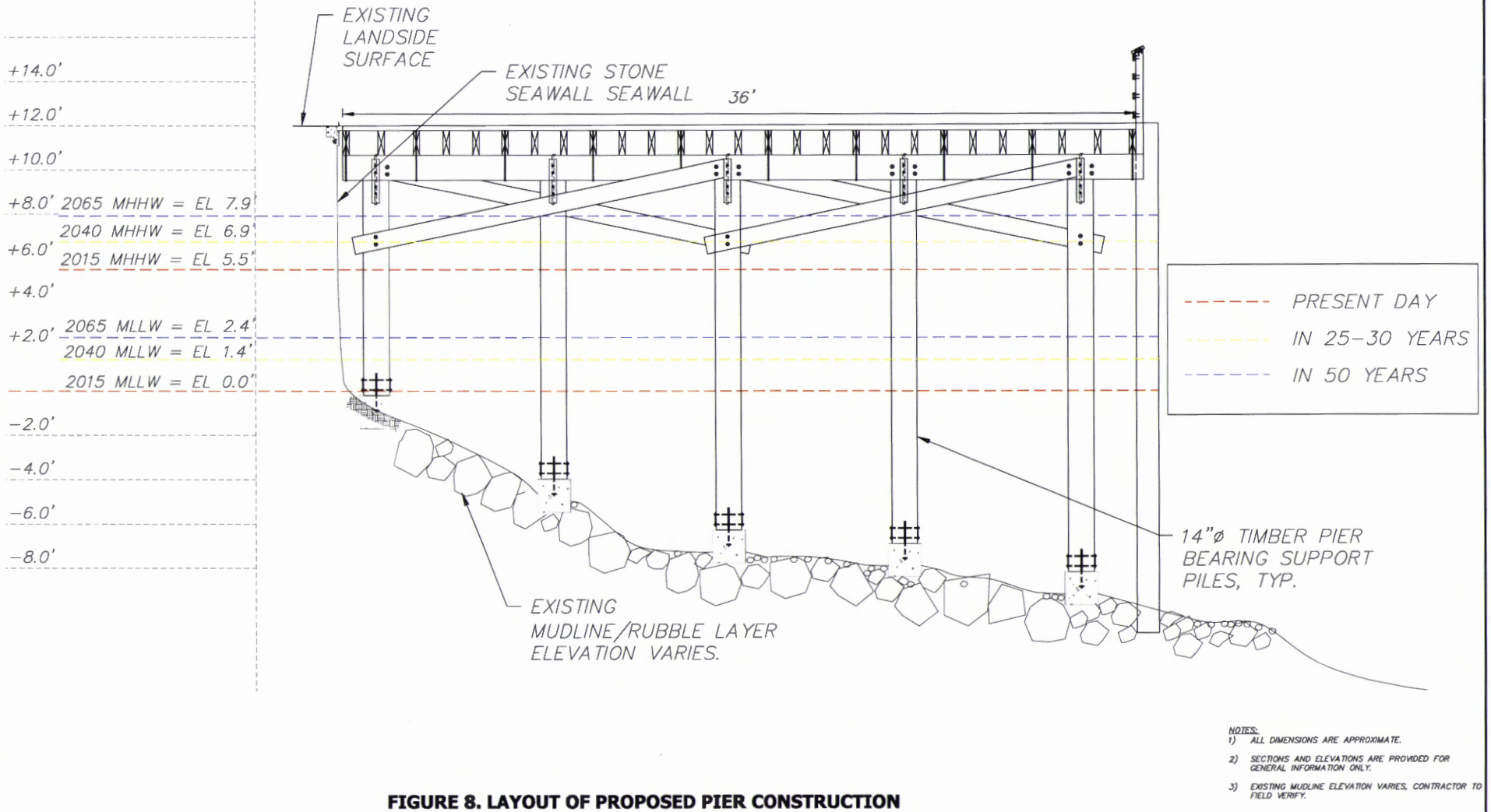


FIGURE 8. LAYOUT OF PROPOSED PIER CONSTRUCTION


Juvenile giant kelp plants (1 to 2 meters tall)
attached to very scattered, low-relief boulders located about every 1 to 5
meters along the face of the pier, and out a distance of approximately 5 meters
from the outer row of piles. No surface canopy. All plants in poor condition.
Stipe counts estimated to be <5 per plant.


SCATTERED BOULDERS WITH GIANT KELP
Google earth
90 ft
N

Interim Fuel Plan

JUNE 2015

Introduction

The City of Avalon is in the process of replacing the Casino fuel dock pier which is in an extremely deteriorated condition. This facility is a 60 year old wood pier which is owned by the City of Avalon. Principal uses of the pier include a fuel operation, a cafe and tie-up dingy docks allowing the boating public to provide direct access to dock businesses and the shore within the City of Avalon.

This report discusses all fueling operations (temporary and permanent) located on and/or related to the Casino fuel dock pier. During the construction of the new Casino dock pier the City will need to provide temporary fuel operations within Avalon Harbor.

Currently, Avalon's fuel dock operator is the City of Avalon which operates the marine dock facilities. It serves as a fueling facility for all Santa Catalina Island tour boats, private yachts and other visiting boaters.

The City of Avalon has formulated a plan to provide for temporary fueling services within Avalon Harbor during the construction of the new Casino dock pier. This plan will also require approvals by the Santa Catalina Island Company. The land based interim fuel facilities will be staged on Santa Catalina Island Company property at the Casino Point area.

A Water Quality Management Plan (WQMP) develops a plan to manage the quality of storm water or urban runoff that flows from a developed site after construction is completed and for the facilities or structures that are occupied and/or operational. All projects that are new developments or significant redevelopments require a WQMP. Because the proposed project maintains the exact footprint of the existing Casino fuel dock pier and does not alter the adjacent land, the proposed project is not considered a significant redevelopment or new development. Additionally, replacing the existing fuel dock pier and preserving it's footprint in the new proposed fuel dock will not cause the existing surface run-off quantity or quality to change. For these reasons, a Water Quality Management Plan is found to be inapplicable to the proposed Casino fuel dock pier replacement project.

However, Best Management Practices (BMPs) have been included in this report, in order to ensure the proper containment of all fuel and other potential contaminants, prevent spills and leaks of waste water, fuel and oil in the marine environment, and mitigate the adverse environmental impact in the event that a spill or leak does occur. Additionally, the City of Avalon and Cat Tow Inc. has response equipment staged in Avalon Harbor in case of an oil spill requiring a clean up response.

Description of Existing Fuel Operations

Catalina Freight Line transports fuel and other materials from their Wilmington Terminal facility to their Avalon facility on Catalina Island. Catalina Freight Line utilizes a marine barge to transport full and empty fuel tanker trucks to and from their respective locations. The Avalon facility owned by Catalina Freight Line is on the shore of Pebbly Beach, just south of the main city area of Avalon. The fuel dock is located on the edge of Avalon Harbor adjacent to the Avalon Casino building.

The Catalina Freight Line Avalon facility is located at 40 Pebbly Beach Road, Avalon, CA 90704.

The majority of the fuel is stored in 8,000 gallon tanker trucks and the fuel tanker trucks are stored south of the main facility structure. See Figure 1 of this attachment for facility layout drawing.

From their Avalon facility located at 40 Pebbly Beach Road (See Figure 2 of this attachment), fuel is transported by Catalina Freight Line fuel tanker trucks to the Casino dock pier located at 2 Casino Way, Avalon, CA 90704 (See Figure 3 of this attachment).

The Casino dock pier facility encompasses a convenience store and cafe within the main building located on the pier. Adjacent to the Casino dock pier, sitting just north of the pier is the fuel storage area which includes four (4) underground storage fuel tanks. The four (4) underground fuel storage tanks are each used to store fuel to support fuel operations at the pier within Avalon Harbor. See Figure 4 of this attachment.

1.0 Plan Objectives

Provide a method on a temporary basis to supply gasoline and diesel fuel to vessels in Avalon Harbor on Santa Catalina Island during construction of the new Casino dock pier.

2.0 Plan Overview

The replacement of the existing wood pier structure by the City of Avalon will result in the need to relocate on a temporary basis fueling operation normally conducted by City of Avalon off of the pier. Additionally, the underground fuel storage tanks located adjacent to the Casino dock pier will remain in place but will temporarily be taken out of service. While the four (4) underground fuel storage tanks are not part of the actual construction project they will be removed from service until completion of the new Casino fuel dock pier.

The City of Avalon's Harbor Master has designated the City owned Pump-a-Head Float as the facility which shall be used to support temporary fueling operations through-out the construction project. This float is an existing 10'x40' float which will enable boaters to tie off and receive fuel in Avalon Harbor. All temporary fueling operations will be conducted by the City of Avalon who is the current marine fuel dock operator.

No fuels will be stored on the Pump-a-Head Float. Fuels being provided to the Pump-a-Head Float will be through fuel line hosing connected directly to land based fuel storage trucks. See Figure 5 of this attachment.

A land based portable trailer, 8'x16', will be provided by the City of Avalon to be used for both interim business transactions and as a storage facility for all required safety equipment. See Figure 5 of this attachment. For aerial photo, see Figure 6 of this attachment.

3.1 Key Plan Elements

A. Catalina Freight Line has operated and maintained its marine freight transport business at Catalina Freight Line terminal, located at 62 Pebbly Beach Road in Avalon for more than 30 years. Catalina Freight Line has considerable experience at operating this important facility on Santa Catalina Island and the City of Avalon is capable of providing temporary service while protecting both the environment and the public.

B. All fuel tanker trucks used in providing temporary fuel service to Avalon Harbor will be stored at Catalina Freight Line, Avalon facility at 40 Pebbly Beach Road.

Each fuel tanker truck is compartmentalized and can contain multiple types of fuel. Trucks used will be a maximum of 30 feet in length with a

maximum fuel capacity of 4000 gallons. However, no more than one (1) truck will be used to both store and provide fuel during interim fueling operations at the Pump-a-Head Float.

C. All fuel tanker trucks providing temporary fuel service shall be allowed to leave all fuel lines connected only during fueling hours of operation. The City of Avalon is requiring that during hours of non-operation all storage truck fuel lines must be disconnected. Fuel valves must also be closed and secured.

D. All City of Avalon emergency spill response equipment normally available at the Casino fuel dock will be relocated and stored at the 8'x16' temporary office.

E. Electrical power and telephone service to the 8'x16' temporary office will be provided. This will support the temporary fueling operations throughout the duration of the construction of the new Casino dock pier.

F. During all temporary fueling operations being conducted at the Pump-a-Head Float in Avalon Harbor, pump out service will remain available 24 hours a day to the boating public concurrently at this location.

G. Hours of operation will be consistent with the established "Normal Winter Schedule".

Sunday through Saturday 8:00am to 4:00pm

4.0 Security

Temporary fuel operations, including both the Pump-a-Head Float and the land based interim fuel facilities will be monitored 24 hours a day. This will occur through the use of the City of Avalon's advanced remote camera system. This system is currently in operation and has large monitors installed in the Harbor Masters office located on the Green Pleasure Pier in Avalon Harbor. Positions of existing security cameras within Avalon Harbor allow both the existing fuel dock and the proposed interim fuel operations area to be monitored on a constant basis.

The City of Avalon also has a number of small marine vessels operated by the Harbor Patrol Officers that patrol Avalon Harbor 24 hours a day, 365 days a year.

The above referenced security elements coupled with equipment inspections by City of Avalon Fuel Dock employees during normal hours of temporary fueling operations should provide protection against potential small leaks, spills or vandalism.

5.0 Inspections and Records

Equipment shall be visually monitored routinely. Inspections that indicate a leak, potential oil or fuel spill event or equipment failure require an inspection form identifying the location of the inspected area, inspector's name, date and procedures to mitigate or abate the problem.

6.1 Best Management Practices (BMPs)

City of Avalon Fuel Dock has Best Management Practices Procedures in place, which are designed to ensure safe and proper transfer of fuel to avoid unnecessary harm to human health and the environment.

See attached Best Management Practices (BMPs) for Diesel / Gasoline Fuel Dispensing and Spill Response Procedures.

7.1 Inclement Weather Procedures

A. The City of Avalon's Harbor Masters office personnel monitor weather 24 hours a day and shall notify the fuel dock of any weather which would pose a threat to conducting safe fuel operations within the harbor.

B. Upon receiving notification of inclement weather from the City of Avalon's Harbor Department the fuel dock operator shall close the fuel dispensing operations.

C. Fuel dock operator shall also secure all fuel lines and storage truck valves in a manner consistent with their Best Management Practices Plan.

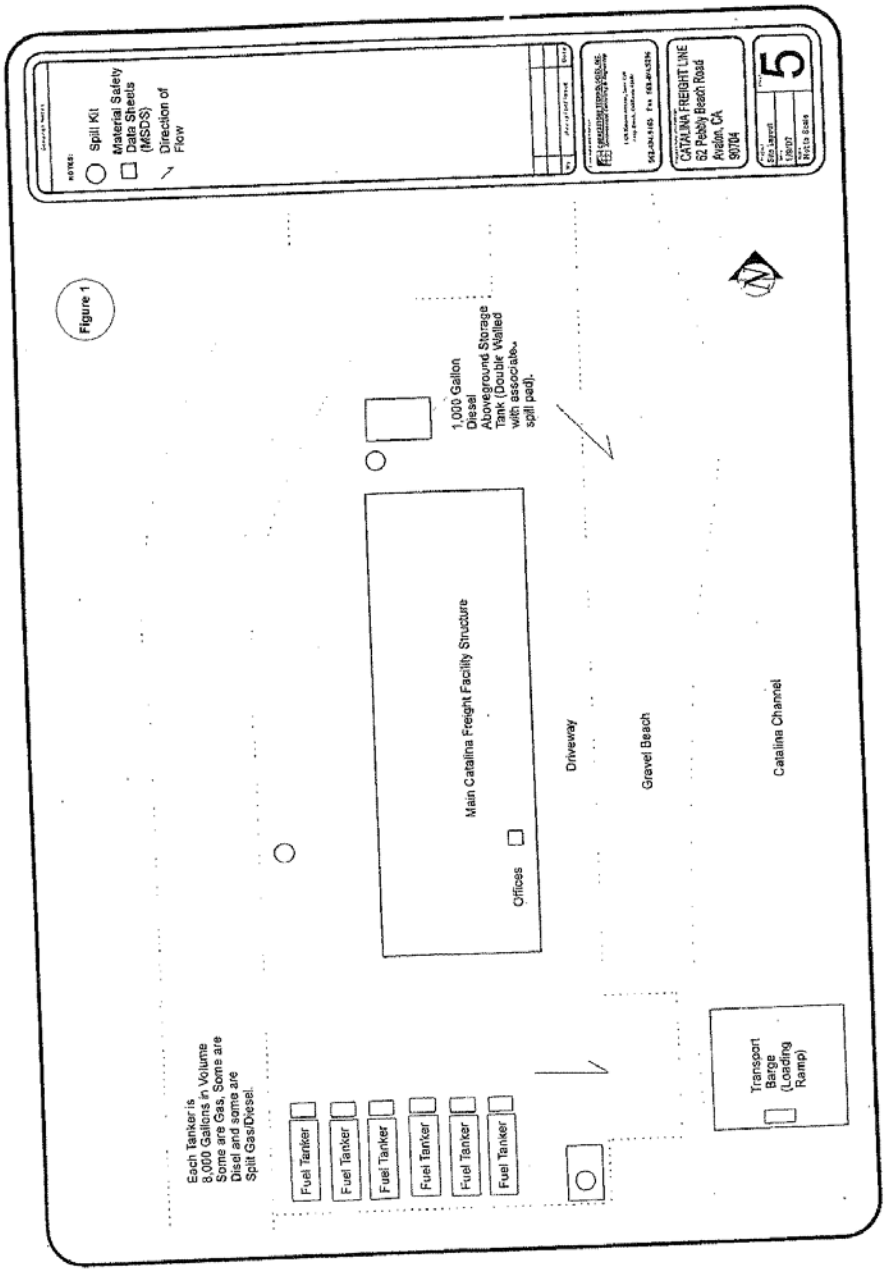
D. The Avalon Harbor Departments Harbor Master will notify the fuel dock operator when they can resume fueling operations. Harbor Department personnel will record all notifications in their daily log.

E. In any event triggering inclement weather notifications the City of Avalon's Harbor Department will utilize the following key contact notification numbers:

Key Contact Notification Numbers

Avalon fuel dock operator.....310-510-0046
Tomas Moreno,Fuel Dock Supervisor..... 310-892-5114 Cell
310-510-8554 Home
If Tomas is not available call Brian Bray…….....310-510-0423 Home
310-995-8520 Cell

List of Figures



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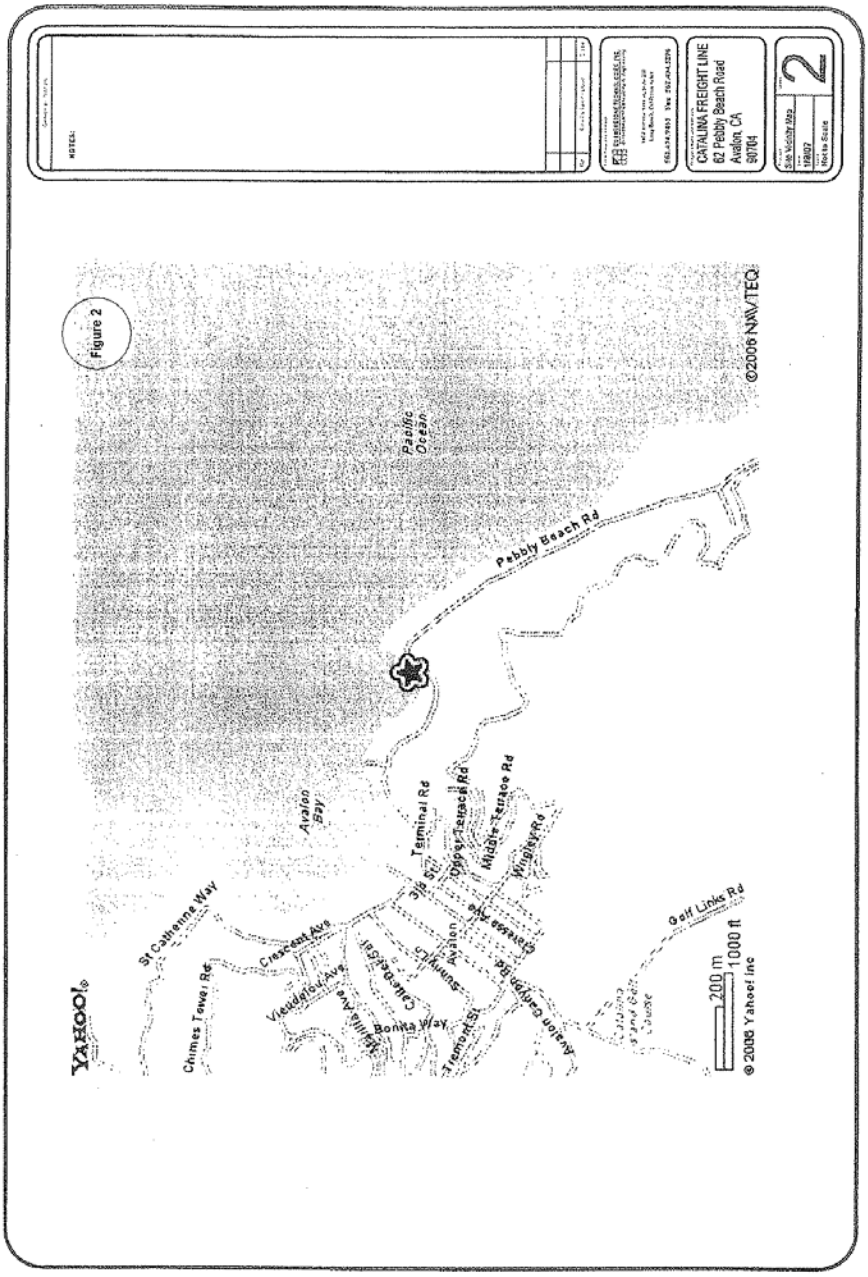

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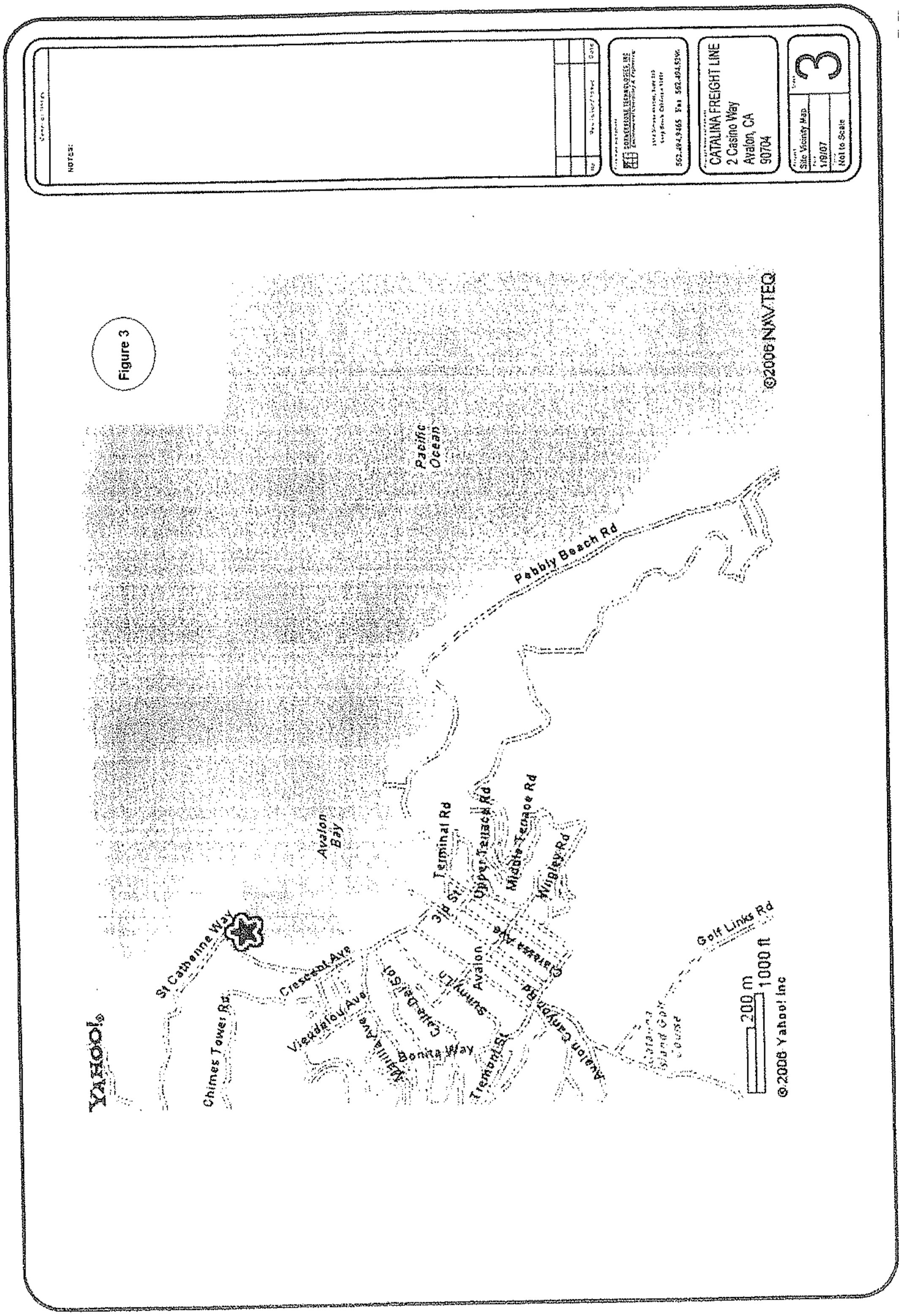
NOTES:
CATALINA FREIGHT LINE
2 Casino Way
Avalon, CA
90704
Site Vicinity Map
Not to Scale
3
Figure 3
Pacific Ocean
Pebbly Beach Rd
Avalon Bay
Terminal Rd
Upper Terrace Rd
Middle Terrace Rd
Wrigley Rd
3rd St
Crescent Ave
Chimes Tower Rd
Avalon
Sunny Ln
Bonita Way
Tremont St
Avalon Canyon Rd
Golf Links Rd
200 m
1000 ft
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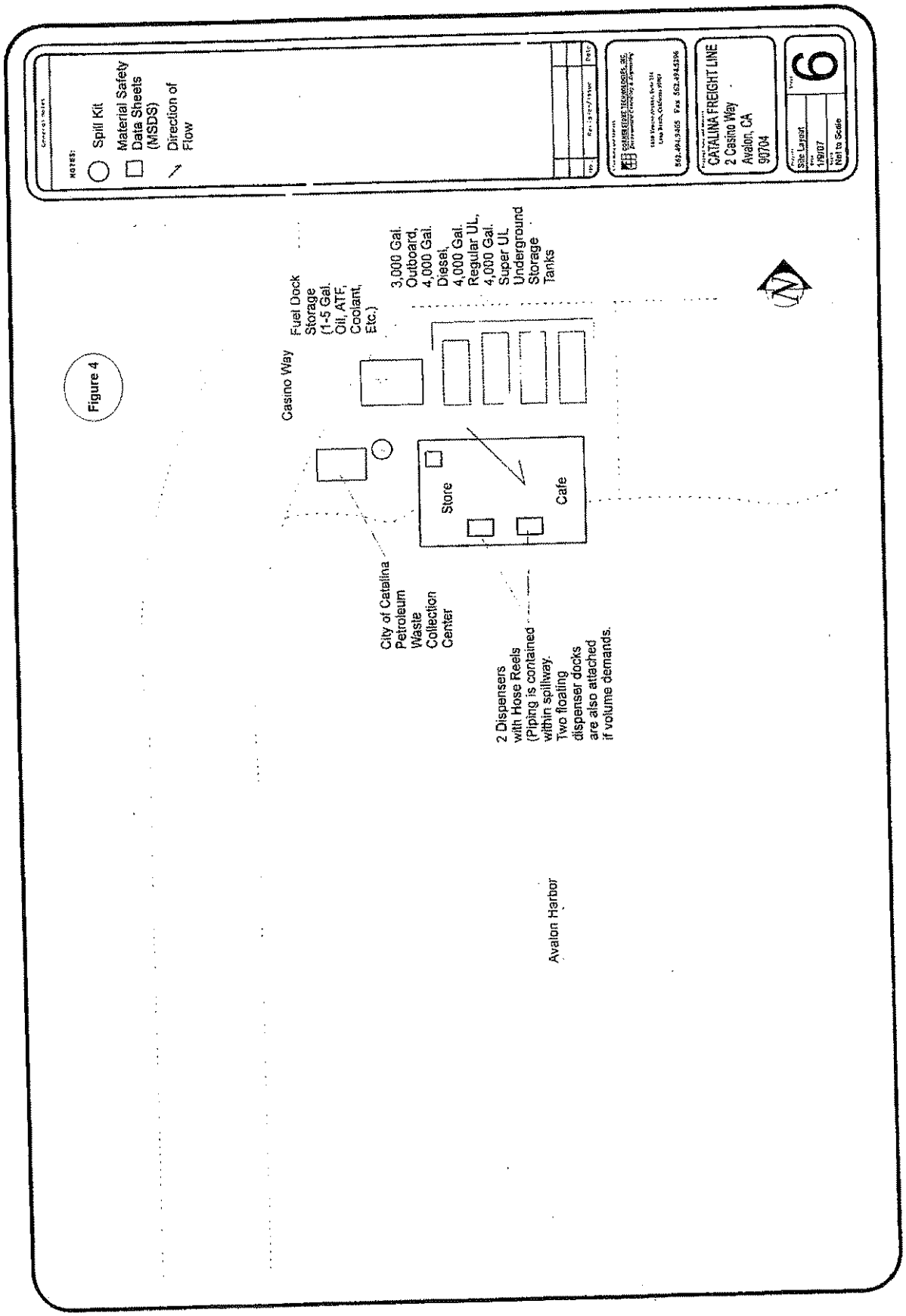
NOTES:
Spill Kit
Material Safety Data Sheets (MSDS)
Direction of Flow
CATALINA FREIGHT LINE
2 Casino Way
Avalon, CA
90704
Site Layout
1/9/07
Not to Scale
6
Figure 4
Casino Way
Fuel Dock Storage (1-5 Gal. Oil, ATF, Coolant, Etc.)
3,000 Gal. Outboard, 4,000 Gal. Diesel, 4,000 Gal. Regular UL, 4,000 Gal. Super UL Underground Storage Tanks
Store
Cafe
City of Catalina Petroleum Waste Collection Center
2 Dispensers with Hose Reels (Piping is contained within spillway. Two floating dispenser docks are also attached if volume demands.
Avalon Harbor

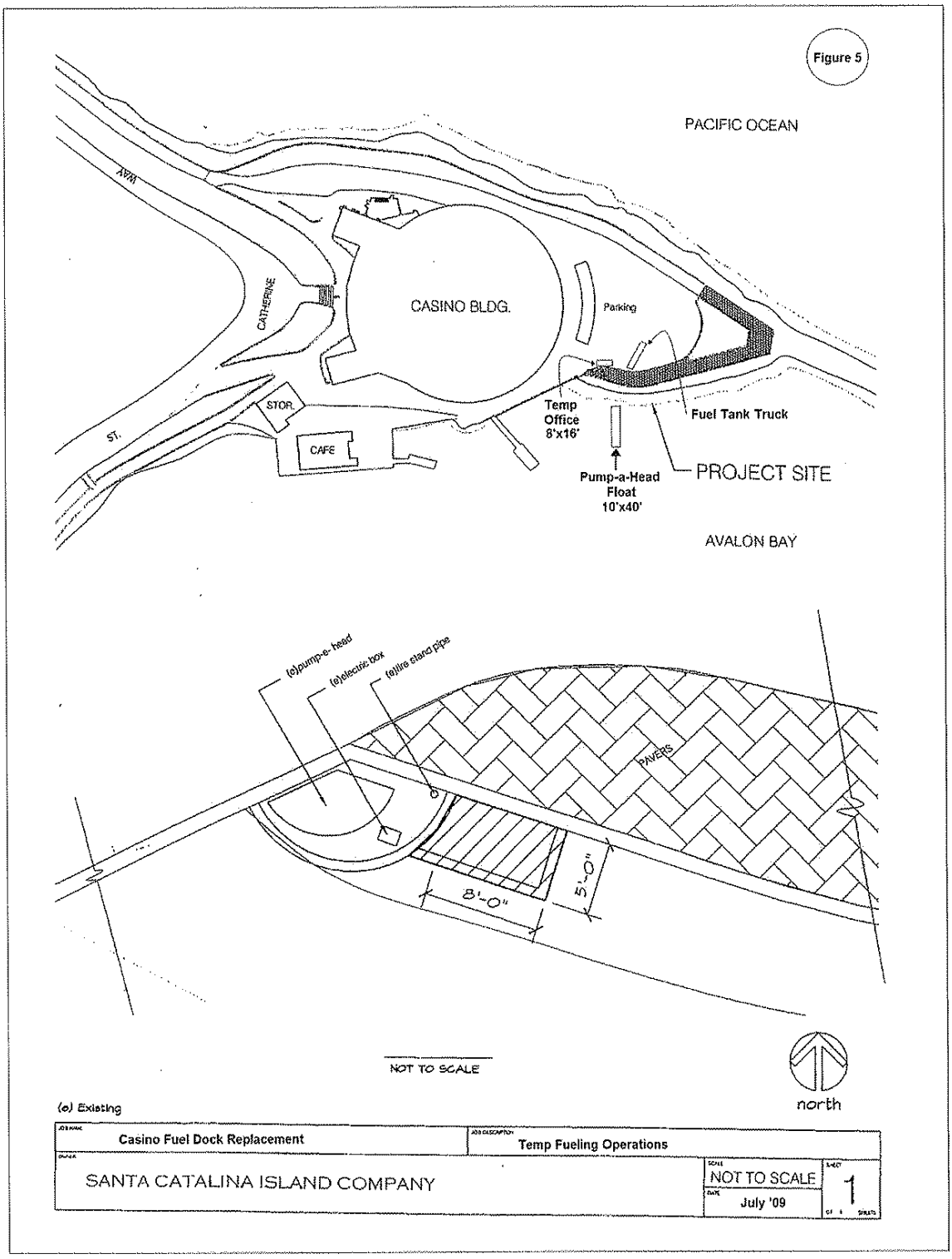
Figure 5
PACIFIC OCEAN
CASINO BLDG.
Parking
CATHERINE
STOR.
CAFE
Temp Office 8'x16'
Fuel Tank Truck
Pump-a-Head Float 10'x40'
PROJECT SITE
AVALON BAY
(e)pump-e- head
(e)electric box
(e)fire stand pipe
PAVERS
8'-0"
5'-0"
NOT TO SCALE
north
(e) Existing
Casino Fuel Dock Replacement
Temp Fueling Operations
SANTA CATALINA ISLAND COMPANY
NOT TO SCALE
July '09
1

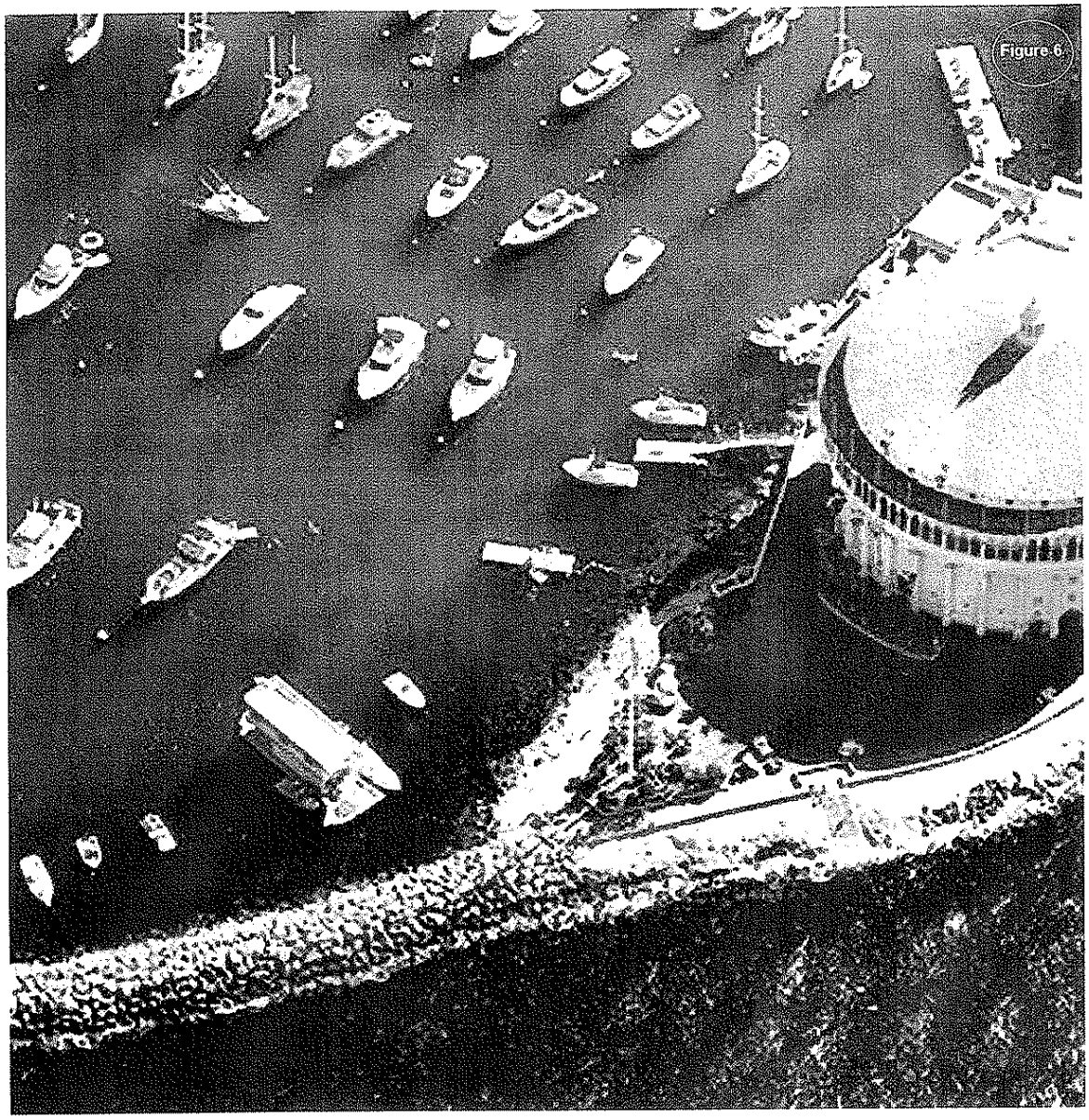
Figure 6

Best Management Practices (BMPs) for
Avalon Fuel Dock

Updated December 2013

Summary:
The City of Avalon operates the Avalon Fuel Dock. It serves as a fueling facility for all visiting boats and the local tour operators. It is critical that in the event of any kind of spill all supervisors and employees know immediately how to respond.

Objective:
This procedure has been written to clearly layout the responsibilities and actions needed by supervisors and employees in the event of a spill at the fuel dock. Failure to follow these procedures as outlined may result in disciplinary action up to and including suspension or discharge.

Responsibilities:
All employees working on the Fuel Dock premises, and in particular the Fuel Dock supervisor, are responsible for making sure that all safety precautions are adhered to. It is the Fuel Dock supervisor's responsibility to train all new employees. The supervisor is also responsible for ensuring all equipment is in good working condition and stored in the appropriate place. The Harbor Master is responsible to ensure these procedures are implemented and all responsible parties are fully trained in these procedures and that all necessary equipment is available.

Available Emergency Response Equipment:
Emergency spill response equipment will be available in a trailer stored at the location of the temporary fueling location. This equipment must be inspected and verified for completeness and viability every month. The following equipment is available at the fuel dock: Spill control kits (Tyvek suits, Neoprene Gloves, Face Shields, Safety Helmets) Booms (500 feet of marine boom for containment of waterborne spills) Absorbent Materials (floorsweep, absorbent rugs, socks, diapers) Cleaning Equipment (mops, brooms, shovels, scrapers, buckets) over pack drums.

Fuel Dock Procedures

Safety must at all times be the number 1 priority. Attached are procedure guidelines for Emergency Fire response and Emergency Evacuation Procedures. In addition to those guidelines, the following practices and processes must be followed and adhered to at all times by all employees working the Fuel Dock for your safety and the safety of others.

Familiarize yourself with all safety equipment, shut off valves, switches, phone numbers, etc. Drag out the fire hose and test it so you are familiar how it works. If you are unfamiliar with any of this equipment see your supervisor for further instructions on its care and use.

FUELING

- Always ask what type of fuel is requested. Never assume a vessel wants Unleaded or Diesel; ASK!

- Always have the customer put the fuel into their own tanks. DO NOT fuel boats yourself. The boater knows which tank-fills are correct. DO NOT let them talk you into filling their tanks for them. If they put the fuel into the water tank, it was their mistake.

- Always take care and advise the customer to avoid spills. Use a ¼ sheet of absorbent cloth whenever a boat has a side-hull, or stern-mount fill fitting. Avoid "topping off" fuel tanks.

- Don not allow anyone to place any object into the handle while filling. There is NOT an automatic shutoff in the nozzles. Locking the nozzle into place causes spills.

- Do not allow customers to set or re-set the pumps. Always turn the pumps on and off yourself. This will avoid closing out sales before they are recorded, and will avoid having the pumps run while not actually in use. The pumps are not designed to stay in the "On" position. If left "On", the pump in the main tanks will continue to run and eventually burn up the impeller. Always shut-off the pumps when not in use.

- Outboard Engines sometimes require oil-mix ratios with fuel. Attendants must learn the proper technique used in mixing fuels and ALWAYS be certain that the customer fills his own tanks and determines the correct mix ratio.

- After Hours Fueling: On Occasion it will be necessary to pump fuel after the fuel dock has closed. When this is necessary, be certain that all fuel is logged and recorded in the proper manner. The following day the pump readings will be show a discrepancy from the previous day's close and the quantity and payment must be logged with the new day's totals.

Spills

Fuel is Extremely Flammable. Safety is top priority! Always use caution, good judgment and common sense to avoid spills. If a spill should occur, immediately notify the Harbor Patrol and then follow the Spill Response Procedure.

Spill Response Procedures:

1. If a boat is moored at the time a spill occurs immediately inform the boater to turn off his bilge pump so as not to suck up or discharge contaminated water.

2. If there are any injuries or an unsafe condition such as fire or extreme threat of fire occurring, then any employee on duty must call "911" immediately, before attempting to further contain the spill.

3. If the spill can be determined to be 1 gallon or less, apply the diapers that are located on the dock and in the cave to the spill.

4. If it is determined that the spill is more than 1 gallon and has migrated to the water then the booms must be retrieved from the cave storage and place in the water.

5. One of the on-duty personnel should call the Harbor Patrol office (310) 510-0535 and have a patrol boat manage the boom and encircle the spill using the patrol boat as a guide.

6. If the Harbor Patrol has a delayed response, call Vessel Assist (310) 510-1675 to assist.

7. Every attempt to contain the spill on site by all available personnel must be immediately addressed.

8. All Spill Response equipment must be made readily available in the event of a spill and used to contain the spill as quickly as possible.

9. The source of the spill must be immediately identified and corrected as soon as possible.

Immediate Notifications:

Notification of appropriate personnel is made base upon the type of spill that has occurred and if there are any injuries. If a person is down, a call to "911" is the priority. After all immediate notifications are made the following calls must be made in the order indicated below:

1. Tomas Moreno
   - 310 510-0535 (Work) 24 Hours
   - 310 892-5114 (Cell)
   - 310 510-8554(Home)

2. Brian Bray, Harbor Master
   - 310 510-0535 (Work) 24 Hours
   - 310 995-8520 (Cell)
   - 310 510-0423 (Home)

The on duty supervisor at the Harbor Patrol office will then make calls to the necessary agencies as indicated below:

1.	Local Unified Program Agency	323 890-4317
2.	National Response Center	800 424-8802
2.	State Office of Emergency Services	800 852-7550

Information to be provided is as follows:

- Your Name and the Telephone Number from where you are calling
- Exact address of the release or threatened release
- Date, time, cause, and type of incident (ex: fire, spill)
- Material and quantity of the release to the extent known
- Extent of injuries, if any.
- Possible hazards to public health and/or environment outside of facility.

In Case of Fire: Fuel Dock

1. TOP PRIORITY: Remove all people from the area immediately by the quickest means possible. If available, designate a person to evacuate the area.

2. Turn off Emergency Shut Off Switch.

3. Call 911 and give the dispatcher as much information as possible regarding the fire and any injuries if known.

4. If the fire is visible (an open cockpit or open space) discharge a fire extinguisher at the base of the flames until discharged or extinguished. DO NOT enter a burning vessel or attempt to go below decks. Avoid standing down wind of the fumes. Burning vessels give off poison fumes and could make you a VICTIM!

5. Pull fire hose from storage box **completely**, then turn on water and assess the scene. If necessary begin spraying water on the burning area to contain the flames.

6. Remember, Property is replaceable, life is NOT! DO NOT place yourself or anyone else in a dangerous position. THINK safety first!

7. When the Harbor Department, Baywatch or Fire Department arrives on scene, do as you are instructed. DO NOT argue, advise, interrupt, or leave open to interpretation their instructions. Do EXACTLY as you are told.