

# CITY OF SANTA BARBARA WATERFRONT DEPARTMENT

## MEMORANDUM

**Date:** July 19, 2012  
**To:** Harbor Commission  
**From:** Scott Riedman, Waterfront Director  
**Subject:** **Facilities Management Report**

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### **Ice House Repairs**

The ice house located on the City Pier has provided high quality “flake” ice for the harbor’s commercial fishing fleet since 1992. It is capable of producing up to 10 tons of ice daily and storing up to 12 tons. Despite being over 20 years old, the ice house is in reasonable condition but certain components have begun to deteriorate. Repair and maintenance has increased dramatically over the last two years and the system is less reliable than it should be.

The ice house has been serviced by a local refrigeration company for years at an annual cost of approximately \$25,000. The technician has done a reasonable job keeping the ice house operating, but recently extensive repairs have been required, roughly doubling the annual cost to keep it in service.

In an effort to improve reliability and efficiency, and to extend the life of the ice house, maintenance staff has worked with Public Works to assess the entire system and make recommendations for various upgrades. A series of 3 – 4 day “down time” outages are scheduled to complete these upgrades, the first of which will take place July 23<sup>rd</sup> through July 26<sup>th</sup>. Frequent ice house users, including the Fish Market and commercial fisherman, have been notified of this pending outage and encouraged to make other arrangements for ice during the scheduled upgrades. Additional outages are planned for October 2012 and February 2013.

The proposed upgrades should result in a more reliable and efficient system. Nevertheless, a key component, the evaporative condenser, needs to be replaced. This will be a major undertaking requiring the removal of the roof for installation. A cost estimate for this is currently being developed with the project planned for FY 2014 as part of the Waterfront’s Capital Improvement Plan. Ultimately, the entire system will have to be replaced but the proposed improvements should extend the life of this essential facility for years to come.

### **City Pier Utilities Replacement**

The City Pier is home to the fuel dock, ice house, USCG cutter *Blackfin*, and four fish hoists. All of these facilities require electricity and/or water service. These utilities are

routed under the deck and have not been replaced for over 20 years. Staff recently completed replacement of all the water lines and electrical service.

The project included the installation of over 320' of scaffolding providing access to the entire sub-deck of the pier. Installing this much scaffolding is a challenge considering the limited access as a result of fluctuating tides. Access was required for the entire sub-deck over the length and width of the pier to install the new utilities and remove the old.

New electrical conduit was installed for the length of the pier. Over 750' of wire was pulled, spliced, and connected to upgrade service and reliability. Interrupting service to the fuel dock or ice house is especially disruptive to the harbor community. Therefore, the new electrical system was installed alongside the old electrical feed to keep the pier in service the entire time.

The water system was replaced with 4" galvanized pipe. Each 20' pipe section weighs over 300 pounds requiring a series of slings, pulleys, and staff ingenuity to put each section in place. The system was pressure tested periodically to check for leaks. The tests identified inconsistencies in the pipe threads requiring staff to cut off the ends and re-thread each section of pipe. The old water system was kept in-service the entire time allowing the ice house to operate with limited interruption when the new system was connected.

### **Stearns Wharf Pile Rehabilitation Plan**

The majority of the piles supporting Stearns Wharf are wood and accessible through the deck for replacement. The Harbor Restaurant and the multi-tenant commercial buildings along the east side of the wharf pose unique challenges when it comes to pile replacement. There are approximately 150 piles under buildings in these areas, the majority of which were installed when the wharf was reopened in 1981. Annual inspections indicate that the piles are still in good shape but beginning to deteriorate in some areas.

Two methods are used to replace piles under buildings on the wharf. Splice piles are installed when an existing pile has sheered or washed away in a storm. Existing piles that have deteriorated, but still provide some load bearing capacity can be wrapped in a fiberglass jacket restoring their load bearing capacity for years to come. Both techniques were recently used in emergency repairs this past winter after dive inspections identified several piles severely damaged in the vicinity of the Harbor Restaurant elevator shaft.

In an effort to preemptively maintain the load bearing capacity of all the piles under these buildings, staff will begin systematic installation of fiberglass jackets on every existing wooden pile. The plan is to install 20 fiberglass jackets per year with the goal of reinforcing all the piles in six years. The first 20 locations will focus on the lift stations,

transformer pad, and remainder of elevator shaft piles. Additional piles will be reinforced if annual inspections identify areas with extensive damage.

Installation of 20 fiberglass jackets per year will cost approximately \$46,000 including labor and materials. Although this is a staff driven project, part time divers are hired to assist permanent employees with this effort. Funding for this project will come out of the Waterfront's annual CIP appropriation of \$300,000 for the Stearns Wharf annual pile driving contract. The Waterfront's FY 2012 – 2017 CIP includes funding for this program and the expected increases in the cost of overall structural upgrades to the wharf.

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