

# CITY OF SANTA BARBARA WATERFRONT DEPARTMENT

## MEMORANDUM

**Date:** January 21, 2010  
**To:** Harbor Commission  
**From:** John N. Bridley, Waterfront Director  
**Subject:** **Marina One Replacement Project – Phase 1 Waterside Construction Plan**

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### **RECOMMENDATION:**

That Harbor Commission receive a report on the Marina One Replacement Project – Phase 1 Waterside Construction Plan.

### **DISCUSSION:**

#### Background

Marina One is Santa Barbara Harbor's largest marina providing boat slips for 592 vessels. An evaluation of "A" through "P" fingers was conducted in 2006 and determined that the 30-year old docking system should be replaced. In an effort to minimize disruption to boaters, displace as few vessels as possible during construction, and limit annual increases in debt service, staff prepared a project description outlining replacement of "A" through "P" fingers in 10 phases over a period of 10 – 15 years. The entire project including all 10 phases was advanced through the permit process with final approval received in April 2008. A \$5.5 million loan has been secured from the California Department of Boating and Waterways (DBAW) for the construction of Phases 1 – 4.

Phase 1 construction includes the replacement of the main headwalk and all utilities. The construction is divided into two key components, shoreside electrical service upgrades and waterside dock installation. Shoreside construction commenced in November 2009 and is almost complete providing improved electrical service to the new docks. Shoreside construction was limited to an area along the west and north sides of the 132 Building with minimal impact to the harbor community. Waterside construction involving the installation of 1,200' of new docks along the main headwalk is much more complicated with significant potential impacts to the boating public.

AIS Construction Company hired Bellingham Marine Incorporated (BMI) as a subcontractor to fabricate and install new docks. BMI has developed a conceptual Waterside Construction Plan including utility outages, dock assembly, marina access, and vessel displacement occurring in four stages. Waterfront staff will work closely with BMI to inform affected slipholders of construction related impacts, specifically displaced vessels and power outages.

#### Waterside Construction Plan

The Waterside Construction Plan has three key elements with anticipated impacts to Marina One vessels: 1) Utility Outages, 2) Access and 3) Displaced Vessels.

Construction will occur in four stages with the three elements listed above considered for each stage.

*Stage 1 - Temporary Utility Connection*

*Stage 2 - Dock Assembly*

*Stage 3 - Demolition, Re-positioning of New Docks and Transition Floats*

*Stage 4 - Permanent Utility Connection.*

### ***Stage 1 – Temporary Utility Connection ( 2 Weeks)***

Utilities feeding Marina 1 “A” through “P” fingers include electrical, water (domestic and fire water) and Cox Cable (phone, internet and TV). BMI will install temporary connections to each finger that will provide electricity and water for the duration of construction. It is unknown if Cox Cable will be able to provide temporary service during construction.

There are five transformers on the main headwalk each feeding three or four fingers. A new float with electrical switchgear will be installed immediately east of the existing electrical float at the foot of the gangway. The new electrical float will be fed by five submarine cables running under Fish Float South. BMI will energize the new electrical panel and reconnect the feeds to the five transformers on the main headwalk. BMI will then install a temporary electrical feed to each finger from its corresponding transformer. There will be a series of outages for each finger as the temporary electrical system is installed. The contract allows for electrical outages up to 48 hours, but BMI will attempt to limit outages from 4-8 hours 2 days in a row for each finger.

Each dock has a separate water supply and BMI will install flexible hoses connecting the existing fingers to the temporary water system. Full domestic and fire water service will be available for the duration of construction.

It is important to note that some temporary systems will be placed in the water or along the walers, but some temporary systems may be placed on the dock. Temporary utilities placed on the dock will be protected in place with a small cover.

There will be no vessels displaced during Stage 1.

### ***Stage 2 – Dock Assembly (7 Weeks)***

The new main headwalk consists of 73 new concrete floats that are 16’ long. The floats are “sub-assembled” in the field into 25 separate units. BMI proposes to install the majority of the “sub-assembled” units along the south side of the main headwalk between “P” finger and the Marina One East Restroom. As the “sub-assembled” units are attached to one another they will be moved west along the south side of the main headwalk. One 12’ long float at the intersection of each south finger and the existing main headwalk will be

removed to allow for the new headwalk to be moved alongside. Access to the fingers on the south side of Marina One will be over the newly assembled main headwalk as it lies next to the existing headwalk. It will take one to two weeks to completely assemble the new headwalk alongside the old headwalk.

Once all the “sub-assembly” units are attached, BMI will install new utilities on the docks including domestic and fire water under the walers and all electrical wiring in the deck. These utilities will not be hooked up until Stage 4. Utility installation will take approximately five weeks.

The temporary utilities installed during Stage 1 will be connected to the new headwalk. Four of the existing five transformers on the old headwalk will be moved to the new headwalk with a single new transformer installed to replace the most severely deteriorated existing transformer. Electrical service will be interrupted for up to eight hours for each finger as its corresponding transformer is moved and reconnected.

Vessels in slips 1 – 4 at each south finger will be displaced for the duration of dock assembly. Initially, 36 vessels will be displaced within the harbor to the maximum extent feasible.

### ***Stage 3 - Demolition, Re-positioning of New Docks, and Transition Floats (2 weeks)***

Once the new headwalk is completely assembled alongside the existing headwalk, utilities are installed, and temporary utilities are connected, the existing headwalk will be demolished and the new headwalk re-positioned into place. To maintain access to the fingers, the “fairway” sections of the existing headwalk between each finger will be demolished first. Once all the “fairway” sections are removed, the 12’ long floats at the intersection of the north fingers and the existing headwalk will be removed allowing the remainder of the existing headwalk to be demolished. Once this is complete, the new headwalk will be moved north into position.

Transition floats at the intersection of “A” through “P” fingers and the new headwalk will be installed immediately after re-positioning is complete. It is anticipated that there will be at least four hours that there will be no access to “A” through “P” fingers during re-positioning of the new headwalk and installation of the transition floats. Access may be provided by boat as needed.

Vessels in slips 1 – 4 at each north finger will be displaced during re-positioning. Sixteen to 32 vessels will need to be displaced within the harbor while some of the vessels displaced during Stage 2 will be allowed to re-occupy their slips. No utility outages are anticipated during Stage 3.

### ***Stage 4 – Permanent Utility Connection (2 weeks)***

Once the new headwalk is re-positioned into place and the transition floats are installed, the permanent utilities installed during Stage 2 will be connected to the existing fingers.

Domestic and fire water are routed along the outside of the docks under the walers on the main headwalk and fingers. The electrical system in the new docks are cast into the concrete floats but attach to existing conduits along the outside of the finger docks under the walers. Whether or not Cox Cable service is temporarily provided during construction, it will be re-connected during Stage 4. It is important to note that Cox Cable will be the only telephone provider on Marina One after construction is complete.

At least one restroom will remain open during construction. It is anticipated that Marina One West Restroom may be closed for up to three weeks.

### Conclusion

Upon approval of the concrete dock submittal drawings from BMI, fabrication at their Dixon, California plant will be scheduled. It is anticipated that BMI will begin casting floats the second week in February and complete fabrication in five weeks. Dock Assembly as described in Stage 2 may begin by the first week in March. Temporary Utility Connections described in Stage 1 will precede assembly.

This will be the most complicated construction project in Santa Barbara Harbor for many years with the potential to impact Marina One users for months. Once the exact date to begin construction is known, staff will convene a meeting with interested members of the harbor community, two weeks in advance, to discuss the details of the Waterside Construction Plan. Construction updates will be provided regularly to the Harbor Commission with additional harbor community meetings held as necessary throughout construction.

Prepared by: Karl Treiberg, Waterfront Facilities Manager