



City of Homer

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Port and Harbor

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Memorandum 21-154

TO: HOMER CITY COUNCIL

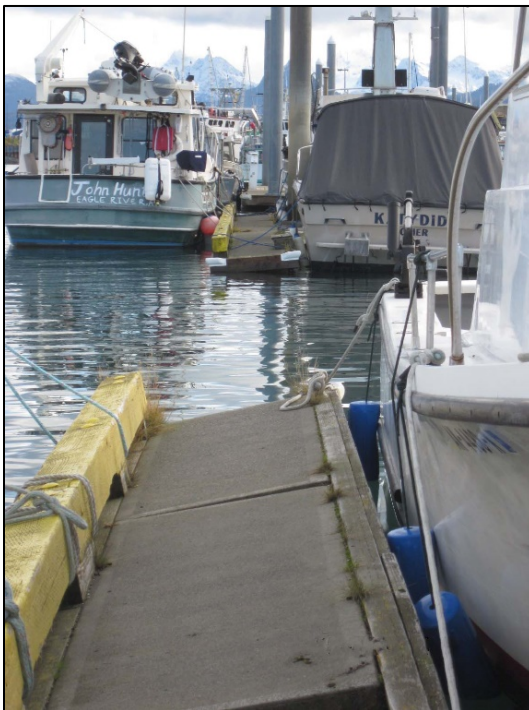
THRU: ROB DUMOUCHEL, CITY MANAGER

FROM: BRYAN HAWKINS, PORT DIRECTOR/HARBORMASTER

DATE: AUGUST 30, 2021

SUBJECT: FLOAT REPAIRS FOR "K" THRU "Q" ENDCAPS

The end caps of finger floats "K" through "Q" were built in 1986 and are currently 5 years past their engineered life expectancy. Remarkably, most of the length of the floats are still in usable shape even at this age. But the end caps, over time, have racked to a level of permanent twist and damage that will shortly take it beyond safe limits and will force the harbor to close access to those sections and condemn them. Causes for the twisting damage of the end caps down the middle fairway come from several factors, the age of the floats themselves, the strain caused by rafting multiple vessels out on the transient bullrail, and the high wake events caused by fast incoming vessels traveling to the Load and Launch Ramp have all added greater force loads to the floats than they were engineered for. Those forces over time add up.



End Caps on Floats

The end caps of these finger floats are designated as transient moorage that provided mooring space for 3,276 vessel night stays in the year of 2020. The number of vessel nights is broken out by finger float and listed below:

"K" – 542 nights	"L" – 462 nights	"M" – 572 nights
"N" – 539 nights	"P" – 602 nights	"Q" – 559 nights

You may notice that the number of vessel night stays for 2020 on these endcaps, in all cases, is above the 365 nights in a given year, this is because this is highly utilized space and boats are often rafted 2 or more abreast in the summertime. If these endcaps aren't repaired, the Port has to condemn the space and we will lose the ability to accommodate the transient vessel fleet in those areas. Those 3,276 vessel night stays will either have to be shifted to other areas as far as possible, putting even more strain on the remaining usable floats, or boats will have to be turned away. We will also lose the 12 reserved stalls currently leased to tenants that are part of those end caps. Lost revenue for the reserved stalls will average \$24,000 annually for each year we are unable to repair the floats. Transient moorage, due to its flexible nature and rate structure is a bit harder to pin down, but a conservative estimate, looking at use statistics, would be around \$40,016 annually. It holds the physical and rate structure potential to be triple that.

Bellingham Marine is the provider and builder of the Homer Harbor's "K"- "Q" floats from 1986. Luckily, they are still in business, and they have our original plans, so a seamless repair and rebuild of the endcaps is possible without having to replace the whole finger floats. A quote from the company for this proposed job was received on August 4th. The quote is broken down into two main portions:

- \$123,250.00 (material supplies) + Supervisor for 2 weeks (10 days)
- \$176,500.00 (installation) includes 4 man crew from Bellingham Marine for 6 weeks
- TOTAL: \$299,750.00

Per the Bid, the Port would be responsible for providing all equipment for offloading and handling of materials, a small work barge and or boat for material storage and handling, a crane to lift the triangle frame with pile hoop over any pile, and other lay down yard/restroom facilities as needed. The Port has its own team of knowledgeable maintenance personnel that have the capability to assist in the rehabilitation effort. It would mean dedicating staff time to this large project until completion, and shifting other tasks, but the cost savings of using our own personnel would be significant. We are proposing to accept ONLY the \$123,250.00 portion of the quote for materials, supplies, and the fabrication/shipping of the replacement float end caps. Further, on a project like this we would usually add a contingency of 20% to plan for fluctuations in build material costs, shipping changes, and other yet unknown factors. A 20% contingency would make the total amount allocated for this project \$147,900.

The Port and Harbor Advisory Commission reviewed this proposed project at their August 25th meeting and made a motion to support the repair of floats "K" thru "Q" and recommended that City Council approve the appropriation of funds from the port reserves for the materials and construction of the replacement float portions through Bellingham Marine.

Sole source justifications

Bellingham Marine is the company responsible for the original design and construction of the floats. They have detailed and extensive knowledge of how they're engineered and how best to tie the repairs into the existing

structure. They are uniquely qualified to have the materials milled and treated to exact specifications. Additionally, they have developed special techniques and tools over the years to do this kind of rehab.

It's important to keep in mind that the bulk of the cost in the quote portion that the Port went with is in materials. I know of no other contractor that could perform this kind of repair without themselves going to Bellingham Marine for the materials and assistance with the construction portion of the float replacements. This means that the only portion of the quote that holds the possibility of being put out to bid would be the labor and installation, but this is also the area that, as mentioned above, the Port can achieve significant savings by calling on the knowledge and experience of our own skilled maintenance staff which would be our preferred cost saving option.

Condemning vs. Repair

Condemning the floats would lose revenue continually for every future year after 2022. The choice to repair the floats, even using the lowest revenue numbers that can be generated from this space at \$64,000 per annum, would mean that it would take about 2 and a half years to reimburse the repair. Given that the last float endcaps lasted for 30+ years before needed replacement, we anticipate being able to continue to use and collect revenue from the repaired endcaps for well past the next 2 and a half years. Repairing, instead of condemning and thereby losing these endcap floats seems to be the economic choice.

RECOMMENDATION

Support of repairing Floats "K" thru "Q" and recommended City Council approval of the appropriation of funds from the Port Reserves for the materials and construction of the replacement float portions through Bellingham Marine.

Attached: Bellingham Marine Unifloat Supply Proposal
 Ordinance to Appropriate Funds for Float Repairs