

**From:** Kimmy Krueger <Kimmy@MantleIndustries.com>  
**Sent:** Thursday, November 4, 2021 3:50 PM  
**To:** chrisimmer islandchapel.net <chrisimmer@islandchapel.net>  
**Subject:** RE: Basic Concept for Public Dock Committee

Chris,  
Our engineering department comments for you:

The first thought is that hooking a 3,000 lb or heavier ramp onto the stern of this beat up boat is a bit sketchy from the get-go. Assuming that they can make the boat accommodate the stress and the weight, I would think that the engineering study to come up with something like this is going to be \$10,000 at a minimum. Maybe Keith or Kelly can give you an estimate for that or maybe they will suggest running away as quickly as possible. The 50' folding gangway is doable but with the truss reinforcements and connections for the hydraulics and all, you really need to do the engineering first to come up with an accurate estimate of the costs.

I am thinking that we may be able to build it for around \$80,000.00 but they really need to have the engineering done before any firm quote is given out. There are companies like Carbis, Prosertek and others that specialize in designing and building stuff like this and I know that they charge a lot of money for it.

It's uncertain whether they can attach this operable assembly to this boat even with a significant amount of reinforcement. We would not be able to provide the engineering support needed to properly assess the boat's condition. Additionally, the engineering design of the operable ramp would be closely related to the design of the boat reinforcement. Our in house team doesn't have any availability until January. Let me know your thoughts. Thank you.

Warmest Regards,

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