



Boat Launch Project Frequently Asked Questions

The Village took on responsibility for the Boat Launch and helipad facility on incorporation in December 2005. Over the past 10+ years the ramp became undermined due to wave action and serious potholes were developing requiring significant repairs. As an island community, and as the only boat launch serving south Graham Island, it was not a matter of if the ramp should be repaired, but when. This handout attempts to answer some of the questions that have been asked about this project.

Q. *Why didn't the Village just pave the ramp again, wouldn't that have been the cheapest option with the least disruption?*

- A. The Council did consider just paving the ramp, but to improve boater safety, the idea of a breakwater made sense. Since we were seeking grant funding, Council felt that we should try to create the best possible infrastructure that we can afford to maintain. Also, upgrading the base of the undermined ramp would have been needed and environmentally, concrete pre cast panels have a smaller impact than repaving below the tideline.

Q. *Weren't there bigger priorities that this type of funding could have been spent on?*

- A. Grant funding is very specific and you usually have to meet very stringent criteria to be successful. In 2014 there was funding available to improve community infrastructure from both Gwaii Trust and the Northern Development Initiative Trust that matched a piece of infrastructure that was failing in the Queen Charlotte (i.e. the boat launch ramp). The Village also applied on Canada 150, a federal grant, but were turned down. All of the communities in the southern islands needed this project, there was no bigger priority. Council has not spent or committed to spend any money that had not been secured through grant funding which is why the Vibrant Communities Fund was so essential in completing Phase 2. Now that we are working on a new Fire Hall project, Council will have to re-assess priorities for grant funding as we don't have unlimited capacity at the Village office for project management. We have to use our resources wisely since development approvals and parks and recreation are increasing in scope, activity, and staff time.

Q. *Why, in the August 2015 in camera meeting did Council not decide to end the project when it was clear that the project was going to be more than double the originally anticipated cost?*

- A. At the decision point in August 2015 when Council knew the project would exceed the original rough estimate, they were making a choice between two design options following feedback from a public meeting. The options were 1) a blast rock breakwater or 2) lock block breakwater. Feedback from the public meeting clearly favored the lock block option. Also, the original grant funding was conditional upon completing the project. Council asked for and received permission from both grant funders to phase the project when they received the responses to the tender and knew for sure that the project estimates were off the mark. The Council is elected to make decisions on behalf of the electorate based on what they believe is in the best interests of the community. Having gone this far with the project, it was felt that the project benefits would outweigh the costs if we could secure further grant funding.

The following pros and cons were considered by Council for each option:

Option 1: Blast Rock		Option 2: Lock Block	
Pros	Cons	Pros	Cons
<ul style="list-style-type: none"> • Lower up-front costs than Option 2 (\$2,997). • Potential to involve more local contractors although no on island contractors can drive piles for the floating dock structure. • Lower final costs at \$816,477 (\$33,665 lower). • Blends in with adjacent beachfront • Pre-cast concrete ramp panels will increase the ramp grade from 12% to 13.5%. 	<ul style="list-style-type: none"> • \$23,807 over current approved funding total. • 36 feet less usable distance for the boat ramp and floats (up to 50% less usability). • Float storage in parking lot. • \$513,807 cost does not include floats, paving or parking meter (additional \$302,670). • Disturbance to existing beach due to expanse of the breakwater toe. 	<ul style="list-style-type: none"> • Longer dock (36 feet), greatly increases usability. • Less width at bottom of ramp. • Smaller water lot lease required. • Could provide a viewpoint/ public space on top. • More cost effective/ simple floating dock support structure. • Float storage on top of breakwater. • Pre-cast concrete ramp panels will increase the ramp grade from 12% to 13.5%. 	<ul style="list-style-type: none"> • \$26,804 over current approved funding total. • Higher up-front costs than Option 1 (\$2,997). • Material must be sourced off island. • \$516,804 cost does not include floats, paving or parking meter (additional \$333,338). • Higher final costs at \$850,142 (\$33,665 higher). • Longer construction time. • Does not blend in to natural surrounding as well.

The Project Engineer from Skyline Engineering also provided the following comments for Council to consider:

	Option 1: Blast Rock Breakwater	Option 2: Lock Block Breakwater
Cost	\$513,807	\$516,804
Useability	Approx. 50% usability of the floating dock structure (medium to high tide only).	Approx. 80% usability for the floating dock structure due to the extended length.

If budget constraints do not allow for the lock block breakwater I recommend deletion of the floating dock structure and replacement with a fixed dock (i.e. 3" concrete platform next to ramp that submerges when tide comes up. This fixed dock also reduces the height requirements of the breakwater and you could have a much more economical smaller blast rock breakwater).

It is up to the Council to decide if a floating dock structure is affordable. There is no doubt that the users will greatly appreciate the floating dock. In the lower mainland launch facilities with floating docks see 70% to 80% more traffic than the ones without.

The benefits that are provided by a floating dock structure are listed below:

- Increased safety for occupants (submerged concrete fixed docks get slippery and have to follow the slope of the ramp)
- Increased safety for boaters. Exiting and entering the boat is difficult without a floating dock
- Increased ability to use ramp in rough water
- Decreased loading and unloading time (quicker to get on and off the boat as well as having multiple boats at the dock at one time)
- Increased tourist usage (many tourists will not utilize a facility that does not have a floating dock due to concerns about damage to their boat)

Q. Why was funding from the new Gwaii Trust Vibrant Communities program used for this project?

- A. Once the construction quotes were received Council had real numbers to work with. They had already invested in the purchase of 400 lock blocks and 80 pre cast concrete panels and the bidding contractors were very flexible and agreed to hold their bids until the Village was able to secure additional funding – if they hadn't we might have had to go out to bid again potentially increasing costs. The construction was contingent on having very low tide conditions; which only occur at certain times of the year. For safety sake and if Council wanted the project completed this year (which they did given the deteriorating state of the existing ramp) we needed to do the construction in May/June/July or we would be waiting for Nov/Dec/Jan in the dark and storms. Finally, the fund is intended for community infrastructure – completing Phase 2 of the boat launch was a big priority.

Q. How much has this project cost the taxpayers of the municipality?

- A. The main costs to the municipality are administrative in nature for applying on grants and administering the projects, including contract management and construction oversight. Seeking grants is one of the only ways that communities can access income tax money that has been paid to the province and the federal government to create capital assets/infrastructure locally. However, the administration of the Village of Queen Charlotte is largely paid for by the Small Communities Grant each year which is allocated for salaries in our budget. As a small, rural and remote community we receive more money through this grant than we do from property taxes each year. In fact if we had to rely only on property taxes, we would be unable to offer many of our services and program. The grants for capital projects come from a larger group of taxpayers than we would be able to access in any other way and, other than administrative costs, this project has been completely paid for through grants.

Q. What are the phases of the project and when will it be consider complete?

- A. Phase 1 – Project Engineering, Design and Materials (complete)
Phase 2 – Construction of Lock Block Breakwater, concrete ramp, and parking lot drainage (complete)
Phase 3 – Floating docks and safety improvements (planning)
Phase 4 – Parking Lot paving (conceptual)

With the completion of Phase 2 the boat launch is considered to be functional, however the addition of the floating docks would increase safety for boaters and to protect boats from damage. The project will be considered completed once Phase 4 is finished, or Council decides not to proceed to seek further funding and they conclude the project.

Q. Why will the floating dock system be removed in the winter – the ramp is used year round?

- A. The design allows for the floating docks to be removed in the winter for maintenance and stored on top of the breakwater to avoid the damage that could be caused by winter storms. Yes, there are summer storms as well but they are less frequent – the intention isn't to avoid all damage but to minimize it and allow for regular maintenance. Also fewer people use the ramp in the winter and it will still be fully functional with the floats removed.

Q. *Of what materials and configuration is the float system comprised?*

- A. The original design has the floating dock structure anchored to the lock block breakwater using railings that would allow for the sections to be removed for maintenance and stored on top of the breakwater structure. The floating dock sections were to be made of pressure-treated wood on top of a marine-grade floatation system.

The floating dock structures have shorter life expectancies due to the wood content and salt water conditions. They are also the only non-static components and as such will wear around the hinges and piling supports. In order to cost the floating dock sections, the Village contacted the Small Craft Harbour Program with the Department of Fisheries and Oceans (DFO) and they have provided their costs for similar dock sections at \$3,788 per meter. Skyline Engineering recommended using a price of \$2,788 per meter which is reflected in the quotes.

As part of preparations for another grant application to cover Phase 3 – the Floating Dock, the Village went out to tender and only received one local quote, and that was just for installation. As a result, the grant was not applied for, and the Village has asked Skyline Engineering to update the design to use as much local material as possible. This will likely result in a lower cost point than that required by DFO standards. This new information will be used as part of future grant application(s) to fund Phase 3 – Floating Docks and Safety Improvements.

Q. *What will be the expected process and equipment required for taking in and putting out the floating dock system?*

- A. The Village plans to hire local equipment to remove the dock sections. The crane would be driven out on the breakwater and remove the sections individually.

Q. *Why was the original estimate so far off the actual costs?*

- A. Estimates are just that, estimates – if you want a better estimate you have to pay for it. Many grant opportunities open unexpectedly and close quickly – for infrastructure in particular they expect you to have your plans engineered and your budget pre-determined. That is hard to do as A) It costs money to develop shelf-ready projects and the cost estimates can quickly become out of date; B) there aren't many grants for creating plans or getting engineering designs shovel-ready; and C) those that exist often only cover a very small part of the cost of the studies. In terms of the Boat Launch, there are site specific challenges, like the drop off at the end of the ramp, that severely limit the length and type of breakwater that was possible. The site specific challenges could not have been known without a significant amount of money spent on surveys and there was a grant deadline to consider.

Q. *Why wasn't the breakwater built like the one in Sandspit so that the RCMP and other float planes could continue to use the ramp?*

- A. You always have to work with the geography of a particular site when designing breakwaters and each site will have different strengths and weaknesses. The steep drop off at the end of the ramp make it physically impossible to build the same type of ramp as the one used in Sandspit. The breakwater that was constructed is the longest useable length we could achieve given our site limitations. It is intended to improve boater safety, however it was never intended to try and compensate for every tide and every weather condition – just as before there will be times when the boat launch is not useable.

Q. *Were local contractors given a fair shot at these opportunities?*

- A. Yes, Village policy gives preference to local contractors and all of the tender opportunities were distributed to them via email. The breakdown of project contracts follow:

Contract # 1 – Engineering

The first contract was for engineering and there were no qualified applications locally although the successful firm, Skyline Engineering, had a local connection as the project engineer grew up on Haida Gwaii.

Contract #2 – Materials

The second contract was for the materials, i.e. the lock blocks and the pre cast panels. The tender resulted in calls from local contractors however, most indicated that they could only make 2 blocks at a time and we needed 400 made plus the pre-cast ramp panels with special concrete that would have had to have been shipped from off island. Pioneer Pre-Cast was the successful proponent and with shipping included the final amount was \$317,233. At this point in the project there was still \$134,467 left in the project budget and we did not know what the constructions costs would be, though we suspected they would put us over budget.

Contract #3 – Construction

The third contract was for construction. It was not even considered and awarded by Council until the funding through the Gwaii Trust Vibrant Haida Gwaii Communities funding was approved and the grant contract was signed. The construction contract was issued to Berg-Mac Industries of Lawn Hill who did a tremendous job. This local firm has at least 40 years of local contracting experience, including the previous construction of another pre-cast boat ramp here on Haida Gwaii.

Q. *Why can't the new boat ramp be used at very low tides?*

- A. There are concrete anchor panels at the base of the boat ramp right where the drop off starts. These panels are intended to keep the concrete pre-cast panels in place and to act as an indicator to boat operators that they have reached the end of the ramp so that they don't accidentally back too far down in a low tide. We are considering adding a tide indicator at the end of the breakwater that would have an indicator level for safe launching. The launch has always been and will continue to be a use at your own risk facility.

Q. *What about safety? There is no railing on the breakwater and people may be tempted to jump off the end or could fall off accidentally.*

- A. There is risk in everything and the Village cannot control what individuals will choose to do. The surface of the breakwater is very wide and safe for walking on. The Village will be posting "Use at your own Risk" "Underwater Hazard" and other safety signs to advise users of the potential risks. Anyone walking on the breakwater is advised to use caution and keep their personal safety in mind. The Village does not endorse or support any individuals jumping off the end of the breakwater.

Q. *Does it make sense for the community to seek these types of grants? What's in it for us as residents?*

- A. There has not been much infrastructure left on Haida Gwaii as a legacy of the resource extraction industries that have taken so much from these islands. Council believes that securing grant funding to create relatively low maintenance infrastructure which has been designed to a 50+ year standard, is the right thing to be doing for the community and will make us more attractive and liveable.

Q. Do you have any plans to protect the boat launch from SouthWesterly wind/storms?

- A. The engineered design provided by Skyline Engineering included a future plan for some floating breakwater structures to be anchored to help block SW and SE winds. Council sees this as a potential future project, and will seek funding for planning purposes and develop stronger estimates for decision making once the current project is determined to be completed.

Q. Can fiberglass boats using the boat launch get damaged by the breakwater?

- A. It is recommended that all users of the boat launch use fenders to protect their vessel on the side that will be against the breakwater.

Q. Why doesn't the Village install some sort of fender system or old tires on the breakwater to help protect boats?

- A. Phase 3 of the project is intended to add a floating dock system that would attach to anchoring rails on the breakwater. Attaching old tires to the breakwater would not be effective due to the number that would be required to account for the changing tides and would also leave black scuffs on fiberglass boats. Even if Phase 3 is approved and the project completed, it will still be recommended that boaters purchase fenders which are the most portable and effective way to protect your boat.

Q. Are the quotes for the floating dock and parking lot paving required for project completion still valid?

- A. The most recent quotes for the floating dock sections were received in June 2016 and will be useful for applying on grant opportunities within the next six months. The quote for the parking lot paving was obtained in 2015 and, as it would make sense to wait on paving until a paving plant is on island, it is anticipated that the costs will need to be re-estimated when the Village seeks funding.

Q. What has the Village learned from this project that will change how they manage projects in the future?

- A. Both Council and staff have learned a lot from this project which is the largest infrastructure project since the \$6.2 Million Water Treatment Plant. With a new Council and a new CAO, this project has been a steep learning curve. We learned that the planning phase of projects is essential and we should seek more planning level funding to give Council more information when they are making decisions about major projects. As a result, staff have been working on improving decision making tools by adding more rigor and analysis to reports, as well as building in project phasing up front where feasible to keep the scope manageable. We also learned that we need to do a better job communicating with the community and we need to start trying new ways to do so.

Q. What are the plans for further public input?

- A. The Council has two public meetings a month and Council and staff are available by phone, email or in person to any of the residents. Agendas are published and anyone can sign up to have them emailed by contacting office@queencharlotte.ca. Residents are welcome to come to any meeting and speak to Council on the topic of their choice. The Council and staff are looking at options for public input that could include a public meeting in the fall to discuss what is working well with the new ramp and breakwater, what is tricky and what we might want to do differently. This would give us an opportunity to consolidate any changes that might be needed into Phase 3 funding. We will also be looking at on line resident surveys and other tools.

As new questions come in, this FAQ will be updated and posted on:

www.QueenCharlotte.ca