

From: Paul Pottle PPottle@fstinc.com
Subject: RE: Islesford Pier Extension drawings and Construction Cost Estimate
Date: 29 February 2016 at 5:11 PM



To: Ronald Axelrod ronaldaxelrod@aol.com, Jim Fortune james@cranberryisles-me.gov
Cc: Bill Dowling dowlingw23@gmail.com, Bruce Fernald fernaldbruce@gmail.com, Denise McCormick denise@cranberryisles-me.gov, Dennis Dever Dyonymsys@TWC.com, Nan Hadlock nan@cranberryisles-me.gov, Nicholas Hadlock nickohadlock@hotmail.com, Norm Sanborn ncsanborn2@gmail.com, Richard Howland rhowland@hotmail.com, Roy Hadlock fvtwochances@gmail.com, Scott Bracy crustacean1980@yahoo.com, Ted Spurling jerited@spurlingdesign.com, Richard Beal rfbeal@icloud.com, Richard Beal rfbeal@wildblue.net, Joy Sprague joy.sprague@gmail.com, Malcolm Fernald malcolmfernalld@hotmail.com, Cory Duggan hikerboy14@gmail.com

Jim;

I know you need the remaining potential costs for doing the permitting work for the pier extension and for providing construction engineering support during construction. I have spoken with our environmental folks (part of Stantec) and they have had brief conversations with DEP about what might be necessary and likelihood of being accepted. Please know that nothing is guaranteed and without an actual filing of a permit application, and the conversations are not official. As I previously stated, if we keep the total impacts under the 500 square foot limit, we have a good chance of getting the fill under the pier that was desirable, just not as high as all would like (see the plans that were submitted). This would still require a full permit application with DEP and the Corp and will take a few months to obtain, but should only require a simplified coastal characterization, which can be done with one person and a report with pictures. This would also mean that we should be able to avoid mitigation or compensation for the impacts. We would still need to reach out to the various regulatory agencies and have at least one coordination meeting with them as well as file for a submerged lands lease. The estimate for doing this, assuming no real issues with the agencies would be between \$15,000 to \$20,000. I would suggest that you budget the \$20,000, but know you only pay for what it actually takes to obtain the permit.

As for support during construction, I am assuming the following will be needed:

- Attend a pre-construction meeting with the Town and contractor (1 day)
- Review any necessary submissions of materials and respond to contractor questions (2 days)
- Attend up to 2 days in the field during pile driving operations (2 days)
- Attend up to one day in the field for the placement of fill around the piles (1 day)
- Attend a final inspection of the completed pier (1 day)
- Travel/per diem to and from SW Harbor and passage on the ferry.
- Town will supply day to day monitoring of the work and will record all pile driving as well as track where all of the fill is placed so that we stay in compliance with permits issued. Town will also maintain any field records that may be required from any of the potential funding entities, and submit any records or reports that may be required.

This equates to the following:

- 7 days x 8 hrs./day = 56 hours x \$50/hr. x OH multiplier of 2.75 x a profit of 10% (1.1) = \$8,470
- 5 days of travel at 230 miles ea. X \$.54/mile = \$621
- 5 boat trips to island at \$30/trip = \$150
- Meals in field for 5 days at \$20/day = \$100

A summary of the costs for permitting and construction support for the pier extension would be as follows:

Permitting	\$20,000
Construction Support:	<u>\$ 9,500</u>
TOTAL:	\$29,500

This should give you a good idea of what your maximum exposure is for this effort and as always, we would only bill for what we actually have for incurred costs. A more formal proposal can be provided when the town is ready to move forward with this effort. I trust this gives you what you need for the Town Meeting and please do not hesitate to contact me with any questions you might have.

Paul

Paul D. Pottle

Project Manager
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From: Paul Pottle

Sent: Wednesday, January 27, 2016 5:01 PM

To: Ronald Axelrod; Jim Fortune

Cc: Bill Dowling; Bruce Fernald; Denise McCormick; Dennis Dever; Nan Hadlock; Nicholas Hadlock; Norm Sanborn; Richard Howland; Roy Hadlock; Scott Bracy; Ted Spurling; Richard Beal; Richard Beal; Joy Sprague; Malcolm Fernald; Cory Duggan

Subject: RE: Islesford Pier Extension drawings and Construction Cost Estimate

I have responded to the comments/questions raised with comments in red following the comment. Please take a look at and let me know if you have additional questions or comments.

Paul

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From: Ronald Axelrod [<mailto:ronaldaxelrod@aol.com>]

Sent: Wed 1/20/2016 5:08 PM

To: Jim Fortune; Paul Pottle

Cc: Bill Dowling; Bruce Fernald; Denise McCormick; Dennis Dever; Nan Hadlock; Nicholas Hadlock; Norm Sanborn; Richard Howland; Roy Hadlock; Scott Bracy; Ted Spurling; Richard Beal; Richard Beal; Joy Sprague; Malcolm Fernald; Cory Duggan

Subject: Re: Islesford Pier Extension drawings and Construction Cost Estimate

Jim and Paul:

Thank you for forwarding Paul's email and the drawings. The design selected by the Harbor Committee looks compact, efficient and cost effective. I have a few comments that I hope will be helpful to the Harbor Committee and generate some of their thoughts about the scheme:

1. There are two wave barriers proposed, Option 1: double offset sheathing and Option 2: timber piles with exterior side sheathing. What would you recommend as the best for this location, given that the best block barrier is the “Granite Block Barrier Option”? Concerning the block barrier options, I believe Ted Spurling, Roy Hadlock and others were interested in the most massive barrier possible. I would imagine both barrier options need to be permitted and I would expect the Harbor Committee would go for the granite option? **Either option should work and both will provide you with similar protection. I prefer the double offset sheathing, for it puts a little less energy (stress) on the pier and the configuration forces the water to change directions as it passes through the fence and the change helps to knock the wave down with minimal deflection or regeneration. This is similar to how the receiving wall of a wave tank works so that waves in the tank are not reflected back. Keep in mind, that this will not eliminate the wave in it's entirety and does not stop a wave from wrapping around the end of the pier, especially as the direction of wind is more from the west northwest. The reason for two options on the solid fill is cost and height. The granite blocks are more expensive to do, but will allow us to build the wall a little higher and keep it stable. The riprap wall is less expensive, but is built more in the way of a triangle, and will not allow us to go as high in height. Both need to be hand placed around the piles after they are installed and before the deck is put on and the overall footprint of the solid fill will need to stay under 500 square feet in order to potentially receive a permit. Our preliminary discussion with DEP indicated that they would give serious consideration as long as it stayed under the 500 square feet of impact and we will still need to do an assessment that meets their standards. This assumes that there will be nothing found in the assessment that causes DEP or Marine Resources to object.**

2. Cost: the costs to the town would be construction costs, Stantec permitting fees, construction support for Stantec as you described for your time during pile installation and support. I believe, we will not need full-time oversight from FST/Stantec as we have two highly qualified islanders who can oversee the construction on a periodic basis. Dennis Dever is our Code Enforcement Officer as well as experienced harbor master and Coast Guard Officer, and Richard Beal is a former Navy officer and engineering project manager after his naval service. Will you provide a complete cost estimate of construction, permitting costs, and FST/Stantec engineering inspection costs? **The costs provide so far are for construction and do not include permitting and providing engineering support during construction. I am putting together a price for the permitting effort and will also have some support cost shortly. I agree, that you do not need Stantec to provide full time oversight, but we would like to be on site for a day or two for pile driving and the beginning of the fill placement. I will outline that effort and have it in the cost breakdown.**

3. Funding: this pier extension is a necessity to maintain access to our island at all tides; therefore it would score very high for getting state funding. Paul: I understand there may be three funding sources:

SHIP - Small Harbor Improvement Program — I think there was a recent early 2015 Notification of Funding Availability (NOFA) for this program and I spoke with John Deven 207 941-4500 and Marty Rooney 207-624-3317 about the program. We did not have a design and construction cost at the time so we probably missed that funding round? Do you know when the next NOFA may be coming? **SHIP applications are normally done in the spring and as far as I know, there will be another round this spring. I will need to check with DOT on dates and if there is a limit on the size of the grant.**

MPI - Municipal Partnership Initiative - we discussed this funding option as you said FST was working on a number of infrastructure projects for Maine municipalities. I understand it is a

rolling funding and that it works off a base budget funded yearly? The participation as noted on the state website is capped at \$500,000/project with a 50% town match. Also, what is considered town matching funds: engineering fees, permitting fees, construction costs, etc? MPI can be requested at any time as long as funds are available and yes they are making funds available each year. Normally it is used for roads, so would need to show how this is your road to the island and that it is just as valuable for the island as any other minor collector that is found on the mainland. As far as match, I believe DOT would consider engineering fees, but if you already received state funding to assist with engineering, then they would not let you count those fees twice. Permitting fees and oversight would be eligible for consideration and if you provide that service, they should consider that as part of the match. As with any of these programs, towns compete for the limited funds and they tend to give extra consideration when there is a cash match that will go into the project.

FY 2016 Grants for Municipal and Regional Projects in Maine Coastal Zone - Jim: is this the program we were funded from for the FST/Stantec engineering fees? Can we request further funding if available?

Paul: which of these or other funding sources would you recommend? Also, would FST/Stantec develop the funding request as part of their fees as you have for other municipalities? I would apply for all available funds and indicate that you are seeking funding from multiple sources, since the cost of the project is high and you are a small coastal or island community with limited resources. As for assisting with the request, I would be happy to assist as I have with other communities. Normally the town does a lot of the application as it refers to specific local data and I assist with write-ups or justifications for the project (much like a purpose and need type statement). I am sure we can work together to make this happen.

4. Schedule: Paul, could you help us with a timeline for us lining up for funding? While we have our Town Meeting coming up in March, we could call a Special Town Meeting if needed to commit funds. I believe handling this at your regular Town Meeting should work. The most difficult thing for the Town will be deciding how much money you want to commit to this project and how much you want to rely on other sources. We can start looking at when applications are due and if there are maximum amounts that go along with the funding source. Once the maximum amount available is determined, you then need to assess the likelihood of receiving that amount. This exercise will help you decide how much local funding you will need to have as you pursue this project.

I hope this is helpful to the Harbor Committee and we appreciate Paul's long involvement with the town infrastructure and continuing to work with us on improving it.

If you have any questions, please do not hesitate to call or email.

Thanks,

Ron

Ronald Axelrod, Member,
Town of Cranberry Isles Municipal Advisory Commission
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Islesford, ME 04646
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ronaldaxelrod@aol.com

On Jan 15, 2016, at 1:51 PM, James Fortune <james@cranberryisles-me.gov> wrote:

From: Paul Pottle [<mailto:PPottle@fstinc.com>]
Sent: Thursday, January 14, 2016 4:06 PM
To: james@cranberryisles-me.gov
Cc: PHarrington@fstinc.com
Subject: Islesford Pier Extension drawings and Construction Cost Estimate

Jim;

Attached you will find the plans and a construction cost estimate for the pier extension at Islesford. The plans show a couple of different options for a wave barrier built into the pier, with one using sheathing only and the other using a combination of piles and sheathing, much like it is today. Along with those alternatives, there are a couple that show solid fill under the pile supported pier that we should be able to have permitted. Please note that neither of these fill options will bring the fill up to the high water mark, but the laid up granite should be able to get close to mid tide (+5' MLLW) and the heavy riprap will get to the normal low water and maybe slightly above (+1' MLLW). Both will give you better protection from swells and both will not let the waves just pass under the wave fence, which can happen during the lower tides.

Along with the wave barrier and fill options, you will see a detail for a rock socket for the piles. Without any geotechnical information and limited information on how deep previous piles were driven, we have had to make an assumption on how pile installation may go. As a minimum, we need to get 5 to 6 feet into good bottom material and we are hopeful that we will get as much as 15 feet of penetration. If we cannot get the 5 to 6 feet of penetration, we will need to install pile sockets for those piles. The sketch will tell the contractor what the expectation is. In order to get a realistic price for this option, should it be needed, we may want to tell the contractor that a couple are expected to be required and are included in the base bid price for the work. We can discuss this further when you are ready to go out to bid.

As for the estimate, I have put together a base price without the wave barrier and solid fill costs included. Basically, that price is \$400,000. Prices were obtained from a local marine contractor in Rockland and could be a little better when done in a bidding environment. I am using 12 weeks for construction, but that also could be a little shorter, but much will depend on when the work is planned and how much other vessel traffic is in the area. To get a total cost of the project, you will need to add in one of the wave barrier options as well as one of the solid fill options (if you still want one) and I would plan on 2 pile sockets for funding purposes and hope that you do not need to use any.

Lastly, you will need to plan on the cost associated with permitting the project and that will partially depend on whether you want to try for the solid fill. I will have a price soon for the permitting including what it will take to cover the solid fill. Along with permitting costs, you should plan on some construction support costs from Stantec. I would hope to be on site at least for a day or two while the piles and fill are being installed and should check on the progress a couple of other times as a minimum. If DOT provides any of the funding, they will insist on some coverage by the designer and will want you to have someone local do day to day observation and documentation. It is usually safe to estimate around 5% to 6% of the construction costs for this effort (especially if doing fulltime) assuming that some of this is done with someone who is

(especially if going fulltime), assuming that some of this is done with someone who is more local. If you wanted Stantec to provide someone on a fulltime basis during construction, it would cost approximately \$750 per day plus expenses for an inspector or assistant engineer. You can plan on something closer to \$1,000 per day for me plus expenses.

I trust this provides you with what you need for providing information to everyone before the annual town meeting. As we discussed, we are drafting a bid book based on the DOT requirements and will need to discuss some of your desires about which efforts and timing before we can finish that aspect of this project. Once people have had an opportunity to review the plans, let me know what there might be for questions or changes. We can make changes to the drawings before going out to bid once funding is secured.

Paul

Paul D. Pottle

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