

THE LAKEFRONT COMMITTEE MEETING OF THE PARK DISTRICT OF HIGHLAND PARK HELD ON SEPTEMBER 9, 2021, 4:00 PM. THE MEETING WAS HELD AT WEST RIDGE CENTER, 636 RIDGE ROAD HIGHLAND PARK.

A motion was made by Commissioner Freeman and seconded by Commissioner Kaplan to allow Commissioner Bernstein and President Ruttenberg to join the meeting through electronic means as their absences was due to employment purposes.

Roll Call:

Aye: Commissioner Kaplan, Commissioner Freeman, Vice President Grossberg

Nay: None

Absent: None

Abstain: None

Present: Commissioner Bernstein, Commissioner Kaplan, Commissioner Freeman, Vice President Grossberg, President Ruttenberg

Also, Present: Executive Director Romes; Director Smith, Director Carr; Director Peters; Assistant Director Murrin; Manager Schwartz; Manager Johnson; Coordinator Hejnowski

Guest Speaker: Mark Wagstaff, SmithGroup Engineer

Public Comment

None

Approval of the Lakefront Committee Meeting Minutes from August 17, 2021

August 17, 2021, Lakefront Committee Meeting minutes were approved.

Park Avenue Breakwater and Boat Ramp Replacement Project Update

Mr. Wagstaff reported that SmithGroup completed a vigorous data collection which included a topographic and bathymetric survey along with a costal analysis examining wave impacts and overtopping. Additionally, SmithGroup completed preliminary engineering which included a concept review, design considerations, and cost opinions. As a reminder, the overtopping rate governs the potential for damage to your structures and property and poses hazards for users.

As for the Preliminary Engineering findings, Mr. Wagstaff reported that the Park District is exploring three options.

Breakwater Considerations:

1. Caisson Alternative (cost of opinion \$2.8 million, with 25% contingency)

This was taken from the Precast Concrete Caisson on Rubblemound Breakwater proposed in 2018. The alternative includes a parapet wall to reduce overtopping, widening the crest for added stability, and raising the structure. This is a long-term solution with a 40ft wide ramp with two floating docks and a walkway that is accessible to the public.

2. Cellular Sheet Pile Alternative (cost of opinion \$2.9 million, with 25% contingency).

This is a long-term solution with a 40ft wide ramp with two floating docks and a walkway that is accessible to the public.

3. No Barge Removal / Rubble Breakwater (cost of opinion \$1.1 million, with 25% contingency)

This is a short-term solution with a 32 ft wide ramp with one boarding float. This option does not allow for a public walkway, nor can not the dock be extended.

Boat Launch Considerations:

Current Option

32 ft wide with two 13.5 ft lanes and one 5 ft boarding dock.

Option 1

53 ft wide with two 20ft lanes and two 6.5 ft boarding docks.

Option 2

43 ft wide with two 15 ft lanes and two 6.5 ft boarding docks.

Option 3

36.5 ft wide, with two 15 ft lanes and one 6.5 ft central boarding dock.

Option 4

40 ft wide with two 13.5 ft lanes and two 6.5 ft boarding docks.

Construction Cost Components

Mr. Wagstaff reported that due to the pandemic the following items have caused the proposed solutions to significantly increase:

1. Armor stone materials are in very high demand with a limited supply
2. Liability concerns for the barge deconstruction and removal
3. The water treatment plant is posing access and site restrictions for removal and construction

As for the next steps, Mr. Wagstaff reported that the Park District needs to select a structure type and width for the launch ramp so that SmithGroup can develop construction documents for bidding. Overall, final engineering could begin this October, the bid would open in January of 2022, a contractor will be awarded in April of 2022 so that construction can begin in September of 2022.

Commissioner Kaplan would like to know if all three solutions provide the same type of protection to the property.

Mr. Wagstaff reported the No Barge Removal / Rubble Breakwater lacks durability and protection to the property since this is a short-term solution utilizing the current barge. The long-term solutions, the Caisson Alternative or the Cellular Sheet Pile Alternative would protect the property since both these options include constructing a new breakwater.

President Ruttenberg would like to know if the No Barge Removal / Rubble Breakwater option includes a sheet pile.

Mr. Wagstaff reported that a sheet pile is not included with that option, instead, H Piles are used to support the current barge structure. Furthermore, additional piling cannot be placed on the lakeside of the structure.

President Ruttenberg would like to know why the long-term solutions are significantly higher than the No Barge Removal / Rubble Breakwater solution.

Mr. Wagstaff reported that the deconstruction and removal costs are high due to liability and the cost of armor stone has significantly increased due to the high demand and limited supply which affects both these solutions.

Commissioner Bernstein requested a summary explaining the differences between the three proposed solutions.

Mr. Wagstaff reported that the Caisson Alternative and the Cellular Sheet Pile Alternative provide long-term solutions with a 40ft wide ramp with two floating docks and a walkway that is accessible to the public. From an operations perspective, they offer identical benefits. Whereas the No Barge Removal / Rubble Breakwater is a short-term solution in which H Piles would be driven into the exoskeleton of the current barge structure so that rubble can be placed into the structure. This option does not allow for a public walkway, nor can not the dock be extended.

Commissioner Bernstein would like to know the costs for the additional maintenance needed if the Park District selected the No Barge Removal / Rubble Breakwater option.

Mr. Wagstaff reported that inspections would need to be conducted after storms to see if stones/rubble placed into the barge would need to be replaced.

Commissioner Bernstein would like a budget recommendation to support annual maintenance for the No Barge Removal / Rubble Breakwater option.

Mr. Wagstaff will follow up and share that recommendation with Director Smith.

Commissioner Bernstein would like to know how the lake levels will impact all three solutions.

Mr. Wagstaff reported that an analysis can be conducted so that the designs for the Caisson Alternative and the Cellular Sheet Pile Alternative could be built to withstand higher lake levels. As for the No Barge Removal / Rubble Breakwater option, since the current barge is deteriorating it's difficult to say how the lake levels will impact this short-term solution.

Commissioner Bernstein would like a recommendation to support annual maintenance for the Caisson Alternative and the Cellular Sheet Pile Alternative.

Commissioner Freeman would like to know the lifespan of the Caisson Alternative and the Cellular Sheet Pile Alternative.

Mr. Wagstaff reported both solutions have an estimated 50year life span.

Commissioner Freeman would like to know future enhancements/alterations could be constructed on the Caisson Alternative and the Cellular Sheet Pile Alternative should the lake levels rise.

Mr. Wagstaff reported that the District could extend the parapet walls on either structure to reduce overtopping and add additional armor stones if needed. Another option, which is a temporary solution, would be placing trap bags or sandbags atop the structures.

Commissioner Freeman would like to know why the Cellular Sheet Pile Alternative was preferred over the Caisson Alternative.

Mr. Wagstaff reported there is potential for higher annual maintenance costs with the Caisson Alternative. He will share the recommended annual maintenance costs for both solutions with Director Smith.

Commissioner Freeman would like to know if all three solutions have the same risk of overtopping.

Mr. Wagstaff reported the Caisson Alternative, and the Cellular Sheet Pile Alternative can better dissipate wave energy since they have a higher impermeable layer.

Vice President Grossberg would like to know what the contingency was for the Caisson Alternative when it was originally quoted at \$1.5million in 2018.

Mr. Wagstaff reported that contingency was still estimated at 25% however, the deconstruction and removal costs are high due to liability posed to the water plant and the cost of armor stone has significantly increased from the pandemic.

Vice President Grossberg would like to know if the No Barge Removal / Rubble Breakwater option can become impermeable.

Mr. Wagstaff reported that there will be three layers of sediment and stone placed into the current barge structure, however since it's deteriorating it will not be an impermeable solution.

Vice President Grossberg would like to know how much the Park District has currently spent on this project.

Director Smith reported that as of 2021 the District spent \$63,000, which included Phase 1: Data Collection at \$19,000 and Phase 2: Preliminary Engineering at \$44,000.

President Ruttenberg would like to know if the District is under contract with SmithGroup for any other projects.

Executive Director Romes reported that the District is not under further contracts with SmithGroup.

President Ruttenberg and Vice President Grossberg would like to know how much the Park District has invested into SmithGroup.

Director Smith reported that he will follow up to provide that figure.

Executive Director Romes reported that staff received the Phase 3: Final Engineering Proposal from SmithGroup for \$72,000. Staff will have a recommendation for the next steps at the September 28 Regular Board Meeting.

President Ruttenberg would like to know if staff is leaning towards the Caisson Alternative or the Cellular Sheet Pile Alternative.

Executive Director Romes reported that staff are not comfortable providing a recommendation at this time and will further discuss these options at the September 23 Finance Committee Meeting and hope to have a formal recommendation at the September 28 Regular Board Meeting.

Adjournment

The meeting adjourned at 4:58 p.m.