

Ad-Hoc Lakefront Planning Group
Meeting Summary

PROJECT

Village of Kenilworth
 Beach Improvement Project

MEETING DATE

03.14.23

ITEM/DATE	DISCUSSION
07.01	Coastal Design Options
01	WTA presented four coastal design variations. 1. Reinforce the existing (minimal intervention, uses existing groin locations, maintains two distinct zones on the beach) 2. Future expansion of baseline protection strategy to increase sand retention/beach area. 3. Larger, singular beach with new revetment along north property line and intermediate armor stone breakwaters to create “coves”. 4. Potential to utilize a submerged breakwater in the center.
02	It was noted that all of these options are conceptual in nature and not fully engineered yet, so dimensions and final details can/will change as the design becomes finalized.
03	WTA noted the pros/cons of each option and the discussion at the meeting focused on those issues.
04	It was noted that WTA would provide multiple options to the public to review at the next public outreach meeting.
07.02	General Comments/Discussion
01	GZA noted that the armor stone would extend down to the seabed, though the top elevation of the armor stone varied by option/area.
02	GZA noted that private properties have a 125ft limit to how far they can extend into the lake, but that VOK does not have a limit. However, the further out the steel groin is extended, the costs increase significantly.
03	VOK asked about using sandbags rather than stones. GZA noted that this was not a long-term solution.
04	VOK noted a concern about armor stone shifting or becoming less effective over time. GZA noted that the stones do/will not move in a meaningful way that would negatively affect performance.
05	Over the course of the conversation it became clear that there are multiple key priorities including 1)protecting the existing building, 2)providing for a safe and effective watercraft launch area, and 3)providing for an optimal swimming beach and safe swimming environment.
07.03	Options 1/2 – Reinforce Existing Discussion
01	Options 1 and 2 explore the minimal amount of protection that could be foreseen at the Kenilworth beach to satisfy all objectives. Options 1 and 2 reinforce the existing shoreline protection strategies and build upon it.

02	Option 1 had the potential to offer a phased approach (Option 2) as it could be expanded in the future if it was not performing as desired.
03	The submerged armor stone along the east face of the building is intended to protect the foundation from wave scour as well as dissipate wave energy to limit overtopping of the patio. These stones would be just at or below the average water level of 579.2.
04	GZA noted that the stones could be installed as large steps or turned so that someone could walk on top of them.
05	VOK was concerned about the stone step idea being too slippery/unsafe once algae/moss began to grow on the stones subjected to regular wave action.
06	It was noted that the any armor stone revetment was unsafe because kids would naturally want to walk out on top of it. This will be a constant enforcement issue to deal with.
07	Discussion about whether or not a split beach – as it is today – is desirable, with varying opinions. A single beach would offer more multipurpose use when boating was less active and better line of sight from one side to the other. However, clearly separated program areas offer better safety and less overlap between boaters and swimmers. KSC members generally felt that the split beach offered better safety and program clarity and seemed functional for watercraft launching.
08	The swimming beach extents (north to south) would remain generally the same in this option.
09	It was noted that the north beach should not only be considered for watercraft, but instead be seen as a multipurpose beach.
10	A more specific design concept of creating a contoured shoreline wall that could redirect waves was reviewed briefly. This design can be studied, but questions about safety and visibility were raised.
07.04	Option 3/4
01	These variations proposed a relocated north groin to the northern property line to create a single continuous beach. The continuous beach option was requested by multiple community members but results in a much larger shoreline protection effort. The continuous beach offers the potential for more sand on the beach and more flexibility in programming.
02	KSC noted that the design as proposed presented a challenging boat launch/return situation that was less desirable. The openings between armor stone breakwaters is too narrow to safely return from the lake. GZA to review. There was also a conversation about the delineation of swimming versus sailing areas within the cove, and the obvious safety issues of overlapping the watercraft and swimming programming was discussed.
03	Some felt the larger/taller, stone revetments presented a safety issue since many people might swim/boat beyond the stone, which would be less visible for lifeguards.
04	The new north groin was designed to be south of the ravine drainage ditch, directing drainage to the north of the shoreline protection revetment, but VOK was concerned that it may not leave enough room for the boat launch on the north end. GZA to review.

05	A fourth variation was presented that submerges an armor stone breakwater between the north and south groin to open the view to the horizon. VOK agreed that there were multiple and substantial safety concerns with submerged breakwaters and that the option should be removed.
05	VOK asked about the potential for water trapped behind the toe of the stone revetment to become stagnant or unhealthy. GZA noted that it was important to design the beach in a manner that allows for continuous movement of fresh water.
07.05	Next Steps
01	WTA/GZA to refine the options for a future meeting.
02	VOK noted that the options should be studied and evaluated against the design criteria: <ol style="list-style-type: none"> 1. Protect the Beach 2. Develop a sustainable swimming area 3. Have a functional area to launch watercraft
03	Any impact to the neighbor's property should be studied and clearly indicated.
04	A conversation about understanding operational costs to replenish beach sand was initiated, and these costs will need to be better understood in addition to the construction costs.