



Hamilton

INFORMATION UPDATE

TO:	Mayor and Members City Council
DATE:	June 13, 2019
SUBJECT:	Waterfront Trail Repair Update - (ES19020) (City Wide)
WARD(S) AFFECTED:	City Wide
SUBMITTED BY:	Craig Murdoch Director, Environmental Services Public Works Department
SIGNATURE:	

In May 2017 and May 2018, the City of Hamilton experienced flooding and erosion along the Waterfronts of Hamilton Harbour and Lake Ontario. To address the damages caused by these events, Council provided direction and funding for the repair work. This work and funding is not part of the Disaster Mitigation and Adaptation Fund (DMAF) project announced in April 2019 and supported by Council in May 2019. This update is meant to inform Council of the ongoing work and costs associated with the 2017 and 2018 direction.

Waterfront Trail Repair

On July 13, 2018, Council approved report PW18063 Waterfront (Bayfront) Trail Repair which included the following recommendations:

- a) That Environmental Services Division staff be directed to implement Phase 1 - short term Trail Remediation Measures to repair the asphalt pathway for the trail areas from Bayfront Park to the floating bridge in the amount of \$157,150 to be funded through the unallocated Capital Reserve #108020;

Status: Staff provided temporary improvements to the Bayfront Trail through the addition of aggregate along the shoreline and asphalt pathway repairs. Work was completed in Q3&Q4 2018, at a combined cost of \$225,000. Parks Operations addressed the funding variance through capital block funding allocated to the Waterfront Trail.

- b) That Environmental Services Division staff be directed to implement Phase 1 - short term Trail Remediation Measures to dredge the channel at the floating

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bridge and repair the bridge, in the amount of \$125,000 to be funded through the unallocated Capital Reserve #108020;

Status: Staff engaged a consultant to review existing conditions of the bridge and channel, including a bathymetric survey and propose recommendations for the area and floating structure.

Recommendations of options to dredge the area that comply with environmentally legislated considerations are not yet complete but are expected from the consultant by Q3 2019. Costs associated with this work cannot be determined until the completion of design work and scope/schedule. Engineering fees to date are approximately \$22,000.

- c) That Environmental Services Division staff be directed to implement Phase 1 - Trail Remediation Measures to raise the asphalt pathway for the trail areas from Princess Point to the Fishway above the current water level, in the amount of \$154,000 to be funded through the unallocated Capital Reserve #108020;

Status: This recommendation was not actioned due to limited staff resources and the prioritization of higher risk erosion area work. With the recent flooding, staff implemented temporary measures (sandbags) to address the flooding which held until the water levels rose to record setting levels. Staff will be meeting with the Ministry of Transportation and the Royal Botanical Gardens to review any constraints and issues and prepare a plan for the raising of the trail to an elevation above the highest water level to date.

In addition, the Parks Operations budget provided approximately \$5,000.00 to fund the installation of gates and fencing to support the closure of the trail when required.

Confederation Beach Trail Repair

On May 9, 2018, Council approved a motion, to Public Works Report PWC18006 for Emergency Shoreline Protection Works, which included the following recommendations:

- a) That the costs for design and construction of emergency shoreline protection works, to address 2017 and 2018 damage, at Confederation Beach Park, valued at \$875,000, be funded from the unallocated capital reserve.

Below is the status of works completed to date, listed from west to east, following engineered shoreline studies and receipt of HCA permits:

- West Beach Road site (close to lift bridge), caused by high water and wave action, resulting in bank erosion and risking loss of the Waterfront Trail initially occurred in 2017. At this time, Parks Operations budget funded a portion of the repairs including providing aggregate protection measures for approximately \$250,000.

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Additional similar repairs totalling \$135,000, to be funded from this motion, have been awarded and scheduled to begin when water recedes in 2019.

- Confederation Beach Park, at the old boat launch area, had damage caused by high water and wave action, resulting in bank erosion and risking loss of the Waterfront Trail. Repairs including the introduction of an aggregate shoreline, installed in spring 2018 totalling \$60,000.
- Confederation Beach Park, at the beach side path, directly north of the Beaches Snack Bar, had damage caused by high water and wave action in Spring 2017, which resulted in bank erosion and risking loss of the Waterfront Trail. In 2018, additional high water and wave action in mid-May 2018, resulted in collapsed asphalt pathway and stone walls, and required a more robust design implementation. Repairs including specifically sized aggregate materials and placement was performed in spring 2018 totalling \$160,000.
- Confederation Beach Park, at the beach side path, adjacent to the Lakeview Restaurant, had damage caused by high water and wave action in mid-May 2018, which resulted in bank erosion and risking loss of the Waterfront Trail. Area is to be repaired in 2020 - estimated at \$350,000 as part of the shoreline protection program under design review by Landscape Architectural Services to be funded through the DMAF program.
- Confederation Beach Park, at the beach side path, east of Hutch's on The Beach, had damages caused by high water and wave action in mid-May 2018, which resulted in bank erosion and collapsed asphalt pathway. Area to be repaired by placing appropriately sized and located aggregate in the area, planned for the Fall 2019 when water recedes, totalling \$143,000.
- Confederation Beach Park, at the beach side path, adjacent to Wild Water Works, had damages caused by high water and wave action in mid-May 2018, which resulted in bank erosion and risking loss of the Waterfront Trail. Area to be repaired using appropriately sized and located aggregate in Fall 2019 when water recedes, totalling \$235,000.

Since the first flooding event in the Spring of 2017, the City of Hamilton has continued to learn and improve process and operational practices to keep residents safe and address flooding related issues. Costs associated with trail closures, storm clean up, minor flood mitigation (sand bagging) and temporary minor repairs, are undertaken by Parks Operations staff.

APPENDICES AND SCHEDULES ATTACHED

Not applicable

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