

## CITY OF HAMILTON

# **PUBLIC WORKS DEPARTMENT**Corporate Assets and Strategic Planning Division

то:	Chair and Members Public Works Committee
COMMITTEE DATE:	March 2, 2015
SUBJECT/REPORT NO:	Confederation Park Boat Ramp, 680 Van Wagner's Beach Road, Hamilton (PW15013) - (Ward 5) (Outstanding Business List Item)
WARD(S) AFFECTED:	Ward 5
PREPARED BY:	Hin Tat Lam (905) 546-2424, Extension 4621
SUBMITTED BY:	Gerry Davis, CMA General Manager Public Works Department
SIGNATURE:	

#### RECOMMENDATION

- (a) That the former Confederation Park Boat Ramp, as shown in Appendix "A" to Report PW15013, not be re-instated, and that public boat ramp access be directed to other available ramp locations offered within Hamilton and adjacent municipalities as identified in Appendices "B" and "C" to Report PW15013.
- (b) That the Outstanding Business List item related to Confederation Park Boat Ramp be identified as complete and removed from the list.

#### **EXECUTIVE SUMMARY**

This report is prepared in response to Public Works Outstanding Business Listing Item "F" regarding City Council Minutes dated May 14, 2014, *Item 5.8 "Petition to re-establish the Confederation Park Boat Ramp signed by 232 signatories". Recommendation:* (Collins/Merulla) be received and referred to the General Manager of Public Works for a report to the Public Works Committee.

This boat ramp was decommissioned in approximately 1982 soon after the Hamilton Conservation Authority assumed the operations and maintenance of Confederation Park.

Key detailed considerations for not re-instating this boat ramp are:

- 1. Conflict with existing Waterfront Trail that sees over 350,000 users per year. Potentially causing safety, liability issues and conflict of use.
- 2. Unpredictable wave action causing public health and safety concerns within navigable waters in and around the structure impeding safe boater access and

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egress. This is an un-protected structure. This shoreline is open to the full effects of Lake Ontario and not protected by a wave break.

- 3. Impact to the Confederation Park Master Plan which identifies this area as the new main entrance into the park and the area will be the new Central Village location, comprised of mixed use commercial spaces and activities. The existing parking lot is proposed in the Master Plan to be converted into a habitat restoration area.
- 4. High cost of maintenance and removal of beach cobble and lake debris frequently washed into the launch ramp area.
- 5. The former ramp structure is over 47 years old and is at the end of its life and would need to be replaced in its entirety, including the construction of a wave break.
- 6. The estimated costs are as follows: Capital Cost to re-instate boat ramp function at \$1,350,000; Annual Operating Cost at \$162,000; and Equipment Capital Cost at \$370,000.

Staff has investigated several existing boat ramp locations that are public and private with fees ranging from no cost to \$23.50 per occurrence (2014 charges). There are five locations identified and summarized in Appendix "C" of Report PW15013, Existing Available Boat Ramp Locations spreadsheet. They include Bayfront Park and La Salle Park Marina that are free; Fifty Point Marina operated by the HCA; Fisherman's Pier operated by the Hamilton Port Authority; and Harbour-West Marina operated by the Hamilton Port Authority.

For reasons stated above, staff does not recommend re-instating the former boat ramp, and recommends the consideration of adjacent existing boat ramp locations.

Innovate Now (Public Works Business Plan) - This report's recommendations support Innovate Now by "Building on our Core Capacities." The use of "smart processes to match our needs," is the primary focus of this report and directly supports the strategic plan by finding creative and better ways to leverage resources.

## Alternatives for Consideration - See Page 6

#### FINANCIAL - STAFFING - LEGAL IMPLICATIONS

Financial: There are no financial implications from the recommendations in this report. "Alternatives for Consideration" details potential financial implications for ramp restoration.

Staffing: There are no staffing impacts from the recommendations in this report.

Legal: There are no legal implications from the recommendations in this report.

### HISTORICAL BACKGROUND

The former boat ramp in Confederation Park is located on the beach area along the shore of Lake Ontario. The only access to this general area is from the current main entrance at Van Wagner's Beach Road into Confederation Park and turns north, towards the parking lot along the beach area, as displayed in Appendix "A" of Report

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PW15013. Access from this parking lot to the beach area is currently separated by green space and the highly active Hamilton Beach Trail. The roadway and parking area are physically delineated by a low post-and-chain feature to maintain a separation between vehicular traffic and open space beach and trail uses for health and safety reasons. There is no hard surface vehicular access to the boat ramp from the existing parking lot. The former ramp structure was constructed with steel sheet-pile and concrete as located on Appendix "A". The Feasibility Assessment identified that due to the age of this structure; the steel sheet piles would be substantially reduced in thickness due to sand abrasion, and would be at the end of their design life.

The following is a description of timelines and actions taken during the past functional life of this boat ramp. These discussion items are gathered through interviews with senior staff from the Hamilton Waterfront Trust (HWT) and the Hamilton Conservation Authority (HCA), on November 21, 2014, as follows:

- (a) The existing ramp was constructed between 1967- 1968.
- (b) HCA took over maintenance of Confederation Park in 1981.
- (c) This ramp was decommissioned in 1982 primarily due to extensive cobble material and lake debris washing into the ramp structure from daily wave action and during storm events. The clean-up of cobble and debris required increased cost for HCA staff and equipment to excavate and remove the debris and cobble material. The frequency of this service was up to twice a week which impacted operation cost.

On the May 14, 2014 City Council Minutes, Item 5.8 "Petition to re-establish the Confederation Park Boat Ramp signed by 232 signatories".

To quote: "We the undersigned believe that additional boating access to Lake Ontario is needed in a cost effective means. This location has public access, an adjacent parking lot, and we believe the project can be opened with minimal work and cost. The end result being a free boat launch and utilizing existing facilities."

On December 12, 2014, staff commissioned a feasibility assessment as presented by Shoreplan Engineering Limited containing high level technical information to support the recommendation in this report. This Feasibility Assessment is attached in Appendix "D".

#### POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

Staff does not anticipate any policy implications nor legislated requirements that are affected by the contents of this report.

## **RELEVANT CONSULTATION**

Consultation with various governments and agencies was undertaken to obtain background and chronology of information regarding the construction, operation and decommissioning of this existing boat ramp.

Externally, key participants included senior staff from the Hamilton Conservation Authority (HCA), the Hamilton Waterfront Trust (HWT), Hamilton Port Authority (HPA) and Shoreplan Engineering Limited (coastal engineering consultant).

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Both the HCA and HWT staff interviewed were former Park Development staff of the City of Hamilton (pre-amalgamation), who provided historic comments on installation, maintenance and reasons for decommissioning of the former ramp.

Attached in Appendix "D" of Report PW15013, is a Feasibility Assessment prepared by Shoreplan Engineering Ltd., identifying:

- (a) Under the criteria given in the Ministry of Natural Resources (MNR) Technical Guidelines, this site is classified as a dynamic beach. As such, the dynamic beach hazard would be applicable at this site. Development is not permitted within the dynamic beach hazard. On page 7-4 of the MNR Technical Guidelines state "Although the policies governing natural hazards do provide the flexibility for municipalities and planning boards to consider development and site alteration within the least hazardous portions of the hazardous lands, care must be taken to ensure that development and site alteration are not permitted within those area identified in Policy 3.1.2 namely: defined portions of the dynamic beach (Policy 3.1.2(a))...". Policy 3.1.2 is from the Provincial Policy Statement.
- (b) Re-instatement of the ramp would require extending the groynes further into the lake. This strategy would result in a more pronounced effect and further interruption of the littoral transport from east to west. It is for this reason that under the Ministry of Natural Resources' Public Lands Act that this proposal will not be supported.
- (c) The Feasibility Assessment does not recommend replacing or improving the existing structure at the existing location primarily on the basis of potential impact on the downdrift shore and the need for ongoing maintenance.

Internally, staff conducted a cross department consultation with Public Works with input from the following Divisions and Sections.

Public Works

- (a) Hamilton Water, Infrastructure and Source Water Planning who commented on the technical results of the "Cherry Beach Shoreline Protection Class Environmental Assessment Report".
- (b) Environmental Services, Parks and Cemeteries, commented on operations, staffing and equipment requirements should the former ramp be reinstated.

## Corporate Services

Risk Management, commented that proper controls should be in place to limit exposure to the potential for injury claims for persons who use the waterfront trail and boat ramp.

Ward 5 Councillor

The Councillor is aware of the recommendations in this Report.

## ANALYSIS AND RATIONALE FOR RECOMMENDATION

Staff recommend not to re-instate the former boat ramp structure and redirect small watercraft launch to other marina operated boat ramp locations as identified on

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Appendix "C" of Report PW15013. The rationale for this recommendation is based relevant consultation and the following supporting information:

- (i) The estimated capital cost to make this a safe and accessible structure would be \$1,350,000. The estimated capital cost for equipment required to regularly to clean the ramp and excavate cobble sediment would be \$370,000. The equipment required would include a backhoe, 5-ton truck, 1-ton stake truck, hand tools, lawn mower and trimmers. The estimated annual cost to operate and maintain the facility would be \$162,000.
- (ii) The "dynamic beach hazard" under the Ministry of Natural Resources (MNR) Technical Guidelines, based on the "Feasibility Assessment" verified that this is not a feasible location for a boat ramp, as per Appendix "D" "Feasibility Assessment Confederation Park Boat Ramp" by Shoreplan Engineering Limited.
- (iii) Comments from the Hamilton Conservation Authority, identified that both the Provincial Natural Hazard Policy and HCA Development Policy discourage development within the flood and erosion hazards of the Great Lakes, with the exception of those works required to be located in these areas (i.e. shoreline erosion protection works).
- (iv) The Confederation Park Master Plan Review and Update (Hamilton Conservation Authority - August 2010) identifies the adjacent area as the future Central Village development with direct access/egress off Centennial Parkway. This area will be built into an intensified commercial mixed use development. The master plan also identified the conversion of the existing parking lot into habitat restoration and green space. Roadway access to the beach area will be eliminated as part of the master plan redevelopment. Therefore, there will be no vehicle access to the area of the former ramp.
- (v) In the Confederation Park Master Plan Economic Feasibility Study, Sierra Planning and Management also identified that the Waterfront Trail sees 350,000 visitors/trail users annually, with activities such as cycling, walking, roller blading, running, and dog walking. This trail presently bisects the route between the existing parking lot and former boat ramp, which would result in significant user conflict between boat launch and trail activities.
- (vi) Wave action was noted to be un-predictable and intense at times. Based on the technical findings from the "Cherry Beach Shoreline Protection Class Environmental Assessment Report by Dillon Consulting (with Shoreplan Engineering), prepared on September 2014, this shoreline receives wave heights of 2.5 metres to 3.75 metres and sustain to a duration of ten seconds. These waves are generated by prevailing winds from the east and north-east directions, and extend from Cherry Beach to the Burlington Canal.
- (vii) Risk Management recommends if this former boat ramp is re-instated, to address the request of the noted 232 signatories, that proper controls should be in place to limit potential injury for the approximately 350,000 users of the waterfront trail.

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These controls would include a signalized crossing at the trail to limit pedestrian traffic while vehicles are reversing into the ramp area, ideally it would be in the best interest of the City and to the safety of citizens to install a 180 metre trail bypass around the boat ramp area to eliminate the potential for injuries. As well, adequate signage warning of the inherent dangers with launching a boat would need to be installed. Costs associated with these measures are over and above those identified to re-establish the boat ramp. This Traffic Diversion Concept is depicted in Appendix "E".

### **ALTERNATIVES FOR CONSIDERATION**

The following alternatives can be considered:

Alternative A - Re-commission of the Former Boat Ramp

This option would require the construction of a four metre width paved access road from the existing parking lot across the grassed open space and beach trail, and over the existing beach to the former ramp. This is approximately forty metres in length. Due to the high recreation trail traffic along the Waterfront Trail, two manual traffic control arms would have to be installed to redirect the trail traffic around the existing parking lot to maintain public safety. A four metre wide asphalt walkway with a length of approximately 180 metres would have to be constructed to divert Waterfront Trail traffic away from the boat ramp area during active boat launch and extraction operations to maintain public safety. This Traffic Diversion Concept is depicted in Appendix "E".

The ramp structure is over 47 years old and would require upgrades including new sheet pile, concrete apron and lighting. These improvements will also require the construction of wave protection structure to dampen active waves to allow for safe launch and extraction activities and to address issues presented in the MNR Technical Guidelines on page 4. Staff do not recommend this option.

Financial: Shoreplan Engineering identifies the following potential costs:

Approximately \$250,000 for the design and construction of ramp access road, diversion of the Waterfront Trail, and installation of manual traffic control arms, and signage;

Approximately \$500,000 for the design and construction of wave protection rock groyne extension;

Approximately \$600.000 for the redevelopment of the ramp structure;

Approximately \$370,000 in Operating Capital for a dedicated backhoe, 5-ton truck, 1-ton stake truck, hand tools, lawn mower and trimmers.

Total Estimated Construction Capital: \$1,350,000;

Total Estimated Operating Capital: \$370,000;

Estimated Annual Operating Cost: \$162,000 for cobble removal and ramp maintenance

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Staffing: Based on discussions with Parks Operations, this work would require a

backhoe operator, five-ton truck operator and two workers for the removal of cobble and lake debris, garbage removal, turf and regular beach grooming and after each storm event - for a total of two seasonal (full time) operators and two summer students, for an annual staff cost of approximately \$37,000 per season, which is included in the overall Estimated Annual Operating Cost above.

Legal: See consultation from Risk Management on page 8, item (vii).

#### ALIGNMENT TO THE 2012 - 2015 STRATEGIC PLAN

## Strategic Priority #1

A Prosperous & Healthy Community

WE enhance our image, economy and well-being by demonstrating that Hamilton is a great place to live, work, play and learn.

## **Strategic Objective**

- 1.2 Continue to prioritize capital infrastructure projects to support managed growth and optimize community benefit.
- 1.3 Promote economic opportunities with a focus on Hamilton's downtown core, all downtown areas and waterfronts.
- 1.6 Enhance Overall Sustainability (financial, economic, social and environmental).

### Strategic Priority #2

Valued & Sustainable Services

WE deliver high quality services that meet citizen needs and expectations, in a cost effective and responsible manner.

## **Strategic Objective**

- 2.1 Implement processes to improve services, leverage technology and validate cost effectiveness and efficiencies across the Corporation.
- 2.2 Improve the City's approach to engaging and informing citizens and stakeholders.
- 2.3 Enhance customer service satisfaction.

## Strategic Priority #3

Leadership & Governance

WE work together to ensure we are a government that is respectful towards each other and that the community has confidence and trust in.

## **Strategic Objective**

3.1 Engage in a range of inter-governmental relations (IGR) work that will advance partnerships and projects that benefit the City of Hamilton.

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- 3.2 Build organizational capacity to ensure the City has a skilled workforce that is capable and enabled to deliver its business objectives.
- 3.4 Enhance opportunities for administrative and operational efficiencies.

### APPENDICES AND SCHEDULES ATTACHED

Appendix A	Former Boat Ramp (closed 1982)
Appendix B	Existing Available Boat Ramp Locations (key map)
Appendix C	Existing Available Boat Ramp Locations (spreadsheet)
Appendix D	Feasibility Assessment, prepared by Shoreplan Engineering Ltd.
Appendix E	Traffic Diversion Concept