

To: Community Services Committee

From: Ron Diskey, Commissioner,  
Community Services Department

Report Number: CS-21-93

Date of Report: September 15, 2021

Date of Meeting: September 20, 2021

Subject: Outdoor Winter Ice Rink Study

File: 03-05

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## **1.0 Purpose**

The purpose of this report is to respond to referral CS-21-01, CS-21-02, and CS-21-03 dated January 25, 2021:

“That Correspondence CS-21-01 from Siraj Patel, CS-21-02 from Linda Power and CS-21-03 from Mark Little in support of establishing an outdoor winter ice rink in Oshawa be referred to staff for a report on the viability, location, and all associated costs of a refrigerated, natural and synthetic outdoor winter ice rink in Oshawa and that staff investigate the need to update any existing by-law with regard to an outdoor winter ice rink to be provided in the Second Quarter 2021”.

## **2.0 Recommendation**

That the Community Services Committee recommend to City Council:

That Report CS-21-93 dated September 15, 2021 being the Outdoor Winter Ice Rink Study, be received for information.

## **3.0 Executive Summary**

N/A

## **4.0 Input From Other Sources**

- Community Services
  - Parks Planning and Development
  - Parks and Waste Operations
  - Recreation and Culture Services

- External Sources
  - Municipality of Clarington
  - City of Pickering

## 5.0 Analysis

### 5.1 Natural Outdoor Winter Ice Rink

Natural outdoor ice rinks are the most cost effective option however, natural outdoor ice rinks are completely weather dependent and usability can vary each year depending on conditions. Consistent, below freezing temperatures are required for the development of natural ice. Recent weather trends throughout the GTA has seen warmer temperatures, less snow and more rain during the winter months which is not conducive to the development of natural ice.

Table 1 below summarizes the pros and cons of a natural outdoor winter ice rink.

**Table 1. Pros and cons**

Pros	Cons
Low Capital Cost	Duration of use dependent on outside temperatures
	Natural ice requires ongoing maintenance and resurfacing, especially during freeze/thaw cycles

Table 2 below summarizes the costs associated with a natural outdoor winter ice rink.

**Table 2. Estimated Costs**

Capital Item	Estimated Capital Cost
Site grading and preparation	\$15,000 (excludes HST)
Annual Operating Item	Estimated Annual Operating Cost
Water and Supplies (boards, hose, shovels)	\$1,000

### 5.2 Synthetic Outdoor Winter Ice Rink

Synthetic outdoor ice rinks are relatively inexpensive when compared to refrigerated outdoor ice rinks and provides a useable skating surface for a longer period of time (typically November to April, although could be used year round with appropriate maintenance) compared to a natural outdoor ice rink. However, the skateability and feel is inferior to both refrigerated and natural ice rinks. Municipal comparators that have installed synthetic outdoor ice rinks have noted these disadvantages as well.

Table 3 below summarizes the pros and cons to a synthetic outdoor ice rink.

**Table 3. Pros and Cons**

Pros	Cons
Lower Capital cost when compared to refrigerated outdoor ice rink	Higher Capital cost when compared to natural outdoor ice rink
Lower Maintenance costs when compared to refrigerated outdoor ice rink	Staff training required for assembly, disassembly and maintenance
Useable year round	Skate enhancer must be applied every two weeks
	Surface must be kept clean and free from debris and snow
	Does not provide the same skateability and feel as natural ice

Table 4 below summarizes the costs associated with a synthetic outdoor winter ice rink.

**Table 4. Costs**

Estimated Capital Item	Capital Cost
Extruded Plastic Synthetic Rink*	\$30,000 (excluding HST)
Annual Operating Item	Estimated Annual Cost
Ongoing labour, maintenance and operating	**

\*Approximately 40ft x 60ft sized rink.

\*\*Not enough sufficient information available to form an operating cost estimate.

### 5.3 Refrigerated Outdoor Winter Ice Rink

Refrigerated outdoor ice rinks are growing in popularity and offer the public an opportunity to skate outdoors on natural ice for longer periods of time during the winter months. These systems require a refrigeration plant and concrete pad to run the refrigeration lines. An ice resurfer is also required for ongoing operation and maintenance of the rink. The frequency of resurfacing depends on usage but at most municipal locations it is every two hours. The typical length of season for refrigerated outdoor ice rinks is from early December to late March. They also typically include supporting amenities such as:

- Building to house mechanical, electrical and refrigeration systems;
- Garage for ice re-surfacing equipment;

Table 5 below summarizes the pros and cons of a refrigerated outdoor winter ice rink.

**Table 5. Pros and Cons**

<b>Pros</b>	<b>Cons</b>
Consistent and predictable useability throughout the winter season	High Capital Costs
Ability to skate on natural ice	High Operating costs for full-time staff and ongoing maintenance

Table 6 below summarizes the costs associated with a refrigerated outdoor winter ice rink.

**Table 6. Costs**

<b>Capital Item</b>	<b>Estimated Capital Cost</b>
Refrigerated Outdoor Ice Rink with Supporting Building	\$3,950,000 (excluding HST)
Ice Resurfacer	\$90,000
<b>Annual Operating Item</b>	<b>Estimated Annual Operating Cost</b>
Ongoing labour, maintenance and operating	\$200,000

#### **5.4 Site Selection**

Site selection should take into consideration whether the following supporting amenities and infrastructure, typical of outdoor ice rinks, can be accommodated such as:

- Heated washrooms and skate change rooms;
- Lights for evening skating, and audio system;
- Parking lot and connecting walkways; and
- Site Furnishings

It should be noted that operational efficiencies and cost savings would be achieved if a refrigerated outdoor ice rink was built in conjunction to a recreation centre that currently has an existing ice surface, ice resurfacer and refrigeration plant.

Lastly, the costs associated with the three options are high-level preliminary order of magnitude estimates, and would be refined based on the results of technical investigations (archeological, geotechnical and environmental risk assessment) and detailed design processes. Construction costing is for reference only.

## **5.5 By-law Implications**

Staff have investigated the need to update existing by-laws with regard to outdoor winter ice rinks. Upon review, there is no reference to outdoor winter ice rinks within the by-law, however, there is an Outdoor Ice Rink policy (Attachment 1). The policy helps to facilitate the installation of outdoor ice rinks and provides installation, maintenance and operational safety guidelines to community volunteers groups for such rinks.

## **6.0 Financial Implications**

There are no financial implications from this report.

## **7.0 Relationship to the Oshawa Strategic Plan**

This report addresses many of the goals set in the Oshawa Strategic Plan including the goal of “Economic Prosperity and Financial Stewardship” through the theme of “Safe and Reliable Infrastructure”, the goal of “Social Equity” through the theme of “An Active, Healthy and Safe Community”, and the goal of “Environmental Responsibility” through the theme of “Proactive Environmental Management and Combat Climate Change”.



Jim Naumovski, Director,  
Recreation and Culture Services



Ron Diskey, Commissioner,  
Community Services Department

<b>Policy No.</b>	<b>1.6.3-003</b>	<b>File No.</b>	<b>Page 1 of 3</b>
<b>Department:</b>	<b>Operational Services</b>	<b>Date:</b>	<b>1983 06 20</b>
<b>Branch:</b>	<b>Parks &amp; Facilities Maintenance</b>	<b>Revision:</b>	<b>2006 01 06</b>
<b>Subject:</b>	<b>Licensing, Permitting, etc.</b>	<b>Approved by:</b>	
<b>Title:</b>	<b>Outdoor Ice Rinks</b>	<b>Approved by Council:</b>	<b>2006 01 16</b>

## **Purpose**

To facilitate the installation of outdoor ice rinks and provide installation, maintenance and operational safety guidelines to community volunteers groups for such rinks.

## **Source**

Department of Community Services Policy & Procedures, 1981 11 20.

## **Policy**

The Department, through its Parks and Facilities Branch, will provide the opportunity for a community volunteer or a community group to install outdoor ice rinks on parkland or open space owned by the City of Oshawa. On a loan basis, to provide wooden boards and hose for outdoor ice rinks. These shall be made available to and at the request of community volunteers who fulfill the requirements of an Outdoor Ice Rink Permit application.

## **Procedure**

1. An Outdoor Ice Rink Permit application must be completed by the community volunteer or community group (applicant) and submitted to the Parks Maintenance Services Division on or before September 30, of the year for initial installation.
2. The application must be accompanied by a plan outlining the exact location, size, details of construction, ground conditions, location of water source and lighting, including foot candles of light over the ice surface.
3. Application requests for the loan of boards (numbers) and hose (100 feet only) can also be made. The provision of boards and hose are subject to availability and that year's current budget funding for the purchase of such.

The **applicant** will adhere to the following installation, maintenance and operational safety guidelines as noted below.

- a) Inspect all areas to be flooded before season begins.
- b) Areas must be flat and smooth, free from mounds or irregularities in grade, and not in an area that will cause flooding to adjacent residents' yards.
- c) Areas must be free of stones, sticks and debris. Grass and weeds must be cut as short as possible.
- d) Areas should be flooded or sprayed as temperature and weather conditions permit.

- e) Rink must be inspected daily by a community volunteer or a member of the community group and any hazards or problems with the outdoor ice rink must be attended to immediately.
  - f) Hazards such as cracks frost boils, or exposed ground must be repaired immediately as soon as weather conditions permit.
  - g) Inspect all rink lighting for need of lamp or lens replacement and for proper aiming, if applicable.
  - h) Check for adequate water supply and adequate equipment.
  - i) Rink boards should be properly installed without protruding stakes and not left in the park when fallen down.
  - j) Maintain in good condition all signage supplied and installed by the City of Oshawa.
  - k) Ensure appropriate parking is available.
  - l) Any knowledge of an injury that takes place in relation to the outdoor ice rink must be reported to the City immediately.
  - m) At the end of the season remove the boards and clean the site of all debris.
  - n) Responsible for the upkeep and maintenance of the snowfence barrier.
5. The **City** will
- a) Snowfence the perimeter of the rink areas, including a three (3) metre buffer from rink boards.
  - b) Provide adequate waste receptacles.
  - c) The City will provide appropriate signage outlining hours of use, supervision and codes of conduct.
  - d) The city will conduct weekly inspections of the outdoor ice rinks.
  - e) At the end of the season remove all snowfencing and signage.
6. Hours of use shall adhere to the Parks by-law.
7. Upon inspection, if the safety guidelines have not been adhered to the City upon notification to the applicant will close the outdoor ice rink.
8. New applications in any one year from the previous year for the loan of boards and hose will be subject to funding available in that current year's budget.