



To: COUNCIL

Meeting Date: 5/13/2025

Subject: **Critical Ice Making Component Replacements Dickson and Duncan McIntosh Arenas**

Submitted By: Mike Hausser, Director of Operations

Prepared By: Mike Hausser, Director of Operations

Report No.: 25-011-IFS

File No.: C11

Wards Affected: All Wards

RECOMMENDATION(S):

THAT Report 25-011-IFS Critical Ice Making Component Replacements Dickson and Duncan McIntosh Arenas be received;

AND THAT the creation of capital project A/01726-40 Duncan McIntosh Arena – Ice Equipment Repairs be approved and the funding in the amount of \$407,000 be transferred to the project from the Infrastructure Renewal Reserve Fund;

AND FURTHER THAT the creation of capital project A/01727-40 Dickson Arena – Ice Equipment Repairs be approved and the funding in the amount of \$164,000 be transferred to the project from the Infrastructure Renewal Reserve Fund.

EXECUTIVE SUMMARY:

Purpose

Both Dickson and Duncan McIntosh Arenas have experienced failure of end-of-life ice making equipment and require immediate replacement in order to reinstate and maintain ice for the 2025 / 2026 season.

Key Findings

Duncan McIntosh Arena and Dickson Arena require immediate repairs to the ice-making equipment.

Additional investment is needed to continue operating these two buildings in a good state of repair.

A future full renovation should be considered for both buildings to meet current standards and expectations of user groups and to meet a growing demand for indoor sports and event spaces.

Financial Implications

An immediate investment of \$407,000 is needed to repair ice-making equipment in Duncan McIntosh Arena.

An immediate investment of \$164,000 is needed to repair ice-making equipment in Dickson Arena.

The immediate investment totaling \$571,000 is recommended to be funded through the Infrastructure Renewal Fund (IRF).

An additional investment of \$2,356,700 is needed in Duncan McIntosh Arena to proactively replace the arena floor and brine plumbing as well as maintain building components as identified by a recent building condition assessment within 5 years to maintain current service levels. These should be new capital projects submitted for consideration through the 2026 budget process.

An additional investment of \$2,883,240 is needed in Dickson Arena to proactively replace the arena floor and brine plumbing as well as maintain building components as identified by a recent building condition assessment within 5 years to maintain current service levels. These should be new capital projects submitted for consideration through the 2026 budget process.

A significant renovation in each building is required to meet current standards and to address a growing demand for use and spaces in these facilities for both ice and non-ice-related indoor sports and community activities. An estimated cost of renovation for each building is not currently available.

STRATEGIC ALIGNMENT:

Strategic Action

Objective(s): Not Applicable

Strategic Action: Not Applicable

OR

☒ Core Service

Program: Facilities Operations and Management

Core Service: Arenas

This report seeks approval for an in-year capital project to replace failed ice-making equipment to enable the ice to be created in the arenas for the upcoming season.

BACKGROUND:

Dickson Arena was built in 1966 with some additions and renovations taking place in 1983, 1999, and 2010. The ice-making equipment is substantially original with the exception of re-active repairs and minor component replacements completed in the past few years.

Duncan McIntosh Arena was built in 1971 with some additions and renovations taking place in 2007 and 2017. The ice-making equipment is substantially original with the exception of re-active repairs and minor component replacements completed in the past few years.

With the additional ice-pad at Preston Auditorium, and ice time available at Cambridge Sports Park, both buildings had been expected to be re-purposed to other uses, and, as such, investment to maintain ice-making equipment in these buildings had not been planned.

In 2024, it was recognized that these facilities provide space for positive activities for youth and the residents of a rapidly growing City. In this light, the operating budget for continued operations for Dickson and Duncan McIntosh Arenas has been restored and approved through the Mayor's 2025 budget.

ANALYSIS:

Dickson Arena

The ice-making equipment in Dickson Arena is past its normal life expectancy and, as such, failure of components should be expected. At this time, the condenser and condenser tank have corroded to a point where re-charging the system to make ice this coming season is not possible. Replacement of these components is necessary to continue to operate this facility as an arena through the winter months. A new condenser and tank will need to be purchased as soon as possible.

The lead time from order to replacement is in the order of 12-14 weeks. There is an urgency to move this purchase forward to support the ability to make ice in this building for this coming fall season.

The dehumidifier is also past its normal life expectancy and is no longer able to maintain the expected humidity levels in the building and is negatively impacting the air quality for patrons and staff as well as impacting building components and equipment within it.

A building condition assessment was completed in February of 2025 that has also identified a number of urgent and high priority items that need to be considered in the 2026 operating and capital budget process. These items are listed in the financial impact section for Council's awareness.

Duncan MacIntosh Arena

The ice-making equipment in Duncan MacIntosh Arena is past its normal life expectancy and, as such, failure of components should be expected. At this time, the condenser and condenser water tank have corroded to a point where they cannot be used further. Replacement of these components is necessary to continue to operate this facility as an arena through the winter months.

The city has a spare condenser unit on-hand (re-purposed from Preston Arena) and it can be fitted into Duncan MacIntosh Arena. A new water tank will need to be purchased.

The chiller has been assessed and well beyond life expectancy and is at high probability of failure and should be replaced. This unit is not repairable due to the level of corrosion. Should this unit fail, the ice would be lost mid-season and a lead time to receive a replacement unit is currently at 12-14 weeks. An early or mid-season failure of this component would result in a full loss of ice for the remainder of the season at this facility.

The dehumidifier is past its normal life expectancy and is no longer able to maintain the expected humidity levels in the building and is negatively impacting the air quality for patrons and staff as well as impacting building components and equipment within it.

Three pumps that support the ice making equipment are well past life expectancy with one of them experiencing multiple failures in the past two years that was re-actively repaired during the ice season. All three pumps need pro-active replacement to avoid interruption of refrigeration operations.

A building condition assessment was completed in February of 2025 that has also identified a number of urgent and high priority items that need to be considered in the

2026 operating and capital budget process. These items are listed in the financial impact section for Council's awareness.

Options for the 2025/2026 Winter Season

Option A – Lowest risk – Recommended Option

- **Duncan** – \$407,000: Replace condenser, brine tank, chiller, dehumidifier and pumps.
- **Dickson** – \$164,000: Replace condenser and brine tank.

This option does not impact user needs and ice bookings.

Option B – Higher Risk

- **Duncan** – \$71,000: Replace condenser and brine tank.
- **Dickson** – \$164,000: Replace condenser and brine tank.

If Dickson and/or Duncan MacIntosh ice making components fail during the seasons, existing bookings would need to be reallocated to other operating ice facilities if capacity to accommodate exists. If capacity does not exist, bookings would need to be canceled.

Additional Needs and Notes

It should be noted that there are other ice-related components that remain past normal service life that need to be considered for replacement to support ice in these two buildings beyond the next season. Some of those items include the rink floor, rink board systems, and all other ice-making components not already specifically noted in this report that are end-of-service life. These components need to be identified as capital projects in the budget process to continue operating these buildings at the current levels of service.

Additionally, both buildings have aged and the expectations and needs of user groups has also evolved since these buildings were originally constructed. Sports teams require larger change rooms and more storage rooms for more equipment, meeting rooms, along with general building upgrades to meet current accessibility standards.

Both buildings are also used in spring and summer for camps for kids, non-ice sporting activities such as lacrosse, ball-hockey, pickleball, indoor events and community uses. These buildings are lacking heating and cooling to support non-ice programs.

A full renovation of both buildings should be considered as future capital projects to support a broader range of activities and users throughout all seasons and to upgrade to current standards and needs.

The ice pad at Karl Homuth Arena will be decommissioned upon opening of the expanded Preston Memorial Arena.

EXISTING POLICY / BY-LAW(S):

This is an out-of-budget capital project request as the repair is needed to re-instate service levels within the current budget year and was not anticipated through the regular budget process.

FINANCIAL IMPACT:

Dickson Arena – Immediate Need

A capital project is required to install a new condenser and brine tank at a cost of **\$164,000** plus applicable taxes.

It is proposed that funding be provided from an unallocated portion of the Infrastructure Renewal Reserve Fund.

Duncan McIntosh Arena – Immediate Need

A capital project is required to install a re-purposed condenser and a new brine tank, a dehumidifier, chiller, and three pumps at a cost of **\$407,000** plus applicable taxes.

It is proposed that funding be provided from an unallocated portion of the Infrastructure Renewal Reserve Fund.

Use of Dickson and McIntosh Arenas beyond April 2026

The recently completed condition assessment for both buildings outline the following urgent and high priority repairs needed within the next two to five years to maintain the building in a good state of repair and at current service levels. Capital projects should be submitted into the next budget cycle for consideration as part of the regular budget process as outlined below.

Dickson Arena – \$2,883,240

- HVAC, dehumidifier, electrical renewal – \$420,000
- Exterior and interior repairs and renewal – \$303,240
- Chiller – \$160,000

- Arena floor and brine lines – \$2,000,000

Duncan McIntosh Arena – \$2,356,700

- Electrical renewal – \$24,700
- Exterior and interior repairs and renewal – \$96,000
- Hot and cold-water piping systems – \$236,000
- Arena floor and brine lines – \$2,000,000

As noted in this report, both buildings are used as arenas with ice for approximately 6 months annually. Both buildings are also used for the remaining 6 months of each year, supporting range of activities and have an increasing demand for indoor sports and events.

Both buildings require significant renovation to meet current accessibility standards as well as the expectations of sports groups, events, and other users. As such, a renovation capital project for each building should be defined and submitted through the capital budget process for future consideration. An estimate for renovations to meet current standards and user expectations is not available at this time.

PUBLIC VALUE:

Transparency:

This report provides the public awareness of the capital expenditures needed to continue operating these two buildings into the future.

ADVISORY COMMITTEE INPUT:

Advisory Committees Consulted:

Not Applicable

PUBLIC INPUT:

Posted publicly as part of the report process.

INTERNAL / EXTERNAL CONSULTATION:

This report was developed in collaboration with Recreation, Facilities, and Finance to present the costs and options to Council.

CONCLUSION:

Both Duncan McIntosh and Dickson Arenas require immediate repairs to ice-making equipment to maintain service levels.

Additionally, both facilities have capital investment needs to be considered in future budget cycles to pro-actively maintain current service levels.

Both facilities have aged and are in need of significant renovation to meet current standards, demand, and expectations of these facilities for both ice and non-ice related sports, events, and community needs.

REPORT IMPACTS:

Agreement: **No**

By-law: **No**

Budget Amendment: **Yes**

Policy: **No**

APPROVALS:

This report has gone through the appropriate workflow and has been reviewed and or approved by the following as required:

Director

Deputy City Manager

Chief Financial Officer

City Solicitor

City Manager

ATTACHMENTS:

None