Township of Scugog Staff Report

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Report Number: COMS-2025-013

Prepared by: Lori Bowers, Director of Community Services

Department: Community Services

Report To: Council

Date: June 23, 2025

Reference: Strategic Direction 1: Infrastructure: Leverage and improve roads, transportation, infrastructure, facilities, equipment and assets

SD1 Objective 2: Enhance recreation facilities

Report Title: **Blackstock Arena Refrigeration Plant Replacement**

Recommendations:

1. **THAT** Report COMS-2025-013, Blackstock Arena Refrigeration Plant Replacement, be received; and

2. **THAT** the project for the Refrigeration Plant replacement at the Blackstock Arena, in the amount of $606,800 (net of HST rebate), be awarded to CIMCO.

1. Background:

The Blackstock Recreation Complex (BRC) is located at 3440 Church Street in the hamlet of Blackstock within the Township of Scugog. The building is a single-storey structure with partial basements. The building consists of a banquet hall, small single pad arena, dressing rooms, nursery, kitchens, mechanical spaces, a staff office, washrooms and storage areas.

The facility was originally opened in 1913 as an armoury. An outdoor rink was constructed in 1937 and enclosed at an unknown date. Refrigeration equipment was added to the arena in 1960. The refrigeration system for the arena is Freon-based. In 1977, the interior of the armoury was renovated, and an addition was constructed to the east side of the facility. In

1988 a foyer/linkage area was constructed with a basement that includes dressing rooms, furnace room and electrical room. A major renovation of the armoury/banquet hall was undertaken in 2014 which included a new kitchen, repositioned bar, accessible washroom, other washrooms updated, new ceiling and electrical system upgraded.

The Parks, Recreation and Culture Strategic Master Plan was updated in 2018 and identified the highest priority as the replacement of the single pad of ice at the Blackstock Recreation Complex (BRC). The 80 plus year old arena is both undersized and in poor condition. Also, the ice plant for the arena is a Freon based system, and the refrigerant is no longer available. Over the past several years the Township has worked towards the goal to replace the arena, as follows:

- May 2019 - completed the 2019 Development Charge Background Study which included the construction of phase one of a new complex at the BRC in 2024.
- November 2019 - completed a conceptual design and public consultation to decommission the existing ice pad and construct a new recreation facility in Blackstock.
- November 2019 – submitted a grant application under the Investment in Canada Infrastructure Program (ICIP) Community Culture and Recreation program for the new recreation facility at BRC (COMS-2019-042).
- May 2021 – completed the preliminary design to a reduced scope to just replace the arena at the BRC (PWIS-2021-017).
- July 2021 – submitted a grant application under the Green and Inclusive Community Buildings program for the replacement of the arena at the BRC (PWIS-2021-024).
- February 2023 - submitted a second grant application under the Green and Inclusive Community Buildings program for the replacement of the arena at the BRC (PWIS-2023-001).

Unfortunately, all three of the grant applications were unsuccessful.

To determine how much investment is needed to continue operation of the facility, and specifically the arena, over the next five years a Building Condition Assessment (BCA) was included as part of the 2023 Capital Budget. Report PWIS-2023-20 described the results of the BCA and made recommendations for Council to move forward with the Blackstock Arena.

2. Discussion:

2.1 2024-2025 Ice Plant Repairs

During the 2024-2025 ice season at the Blackstock Arena, staff were faced with several operational repairs for the refrigeration plant, including several leaks that were repaired but required the use of the stored Freon. In January 2020, Freon (R-22 refrigerant) started to be

phased out of use, and the only remaining source of R-22 is that which is recycled, reclaimed or recovered from existing units. In 2019, the Township purchased 100 pounds of Freon and is now close to depleting our reserves this season due to the leaks. Known deficiencies within the refrigeration plant are:

- Repair water leaks and de-ice primary cooling tower (unit is past its life expectancy).
- Repair internal leaks on heat exchangers.
- Secondary cooling tower has a seized drive assembly and needs repair.
- Freon leaks (described above).

2.2 Replacement of Refrigeration Plant

Due to the challenges faced this season at the Blackstock Arena, staff reached out to our refrigeration contractor CIMCO to provide a summary of defects in the refrigeration plant (stated above) that would possibly impact the opening of the arena for the 2025-2026 season and to provide a quote for suggested remedies.

The estimated time for delivery and installation, once approval is granted, is not until the middle of February 2026 due to long chiller lead times. CIMCO has recommended that the Township start the refrigeration plant in October 2025 for the ice season but cannot guarantee the full season of ice due to the deficiencies. For the 2025-2026 ice season there could be a potential shutdown of the arena if the refrigeration plant faces severe failures; however, with our contractor and staff aware, some preventative maintenance will be performed in the off-season to maintain a continuity of service to our user groups while we await the new system.

CIMCO has successfully installed a stand-alone ammonia portable outdoor ice plant package at the Almonte Curling Club. A similar unit would replace the Freon ice plant and resolve all the repairs listed above. Additionally, the unit could be moved to accommodate a future renovation or expansion.



This portable ice plant has the following functionality:

- Ammonia based.
- Titanium plate and frame chiller
- Condenser – efficient heat exchange for optimal cooling
- Brine pump and mounted brine expansion tank.
- Low refrigerant charge
- Turnkey Refrigeration system (All-in-one solution)
- Can be repurposed if not required at Blackstock Arena in the future.

A recommendation in Report PWIS-2023-020 to Council was "*that if one of the major components of the arena portion of the Blackstock Recreation Centre fails, then it is understood that this will most likely result in the permanent closure of the arena, Further, such a closure is likely to occur within the next 3 years."* Council amended this recommendation, as the minutes of the meeting reflected "*that if one of the major components of the arena portion of the Blackstock Recreation Centre fails, it will be revisited and reassessed at that time."*

2.3 Ice Usage Rates and Current User Groups

An important consideration for deciding the amount of investment to continue the operation of the BRC is the utilization of the prime-time ice pads at both the Scugog Community Recreation Complex (SCRC) and BRC. Table 1 provides the percentage of prime-time ice used for each of the pads. The table provides data from three years pre-COVID and three

years' post-COVID. The winters of 2020-2021 and 2021-2022 are not provided as the SCRC was highly impacted by the COVID pandemic and the BRC was closed for those seasons.

	2017-2018	2018-2019	2019-2020	2022-2023	2023-2024	2024-2025
Blackstock	71%	69%	70%	55%	57%	56%
SCRC Pad 1	86%	86%	92%	85%	82%	83%
SCRC Pad 2	87%	82%	86%	86%	84%	85%

The data shows that the demand for ice at the SCRC has been fairly consistent. At the BRC ice usage rates were fairly consistent prior to COVID at between 69-71%. The BRC was fully closed for two years during the pandemic and, as such, is taking time to recover with a steady increase over the past two seasons. In 2024-2025, Blackstock lost ice usage time due to start-up weather issues, some cancellations due to ice plant issues and scheduling conflicts within the Blackstock Minor Hockey Association.

The BRC ice is regularly rented by several organizations, including:

- Blackstock Minor Hockey
- Blackstock Skating Club
- Blackstock Curling Club
- Blackstock Men's Hockey League
- Blackstock Women's Hockey League
- Public Skating and Shinny Programs
- Private Ice Renters

Should the ice plant not be functional for the upcoming ice season, then the organizations would need to be accommodated at the SCRC or facilities outside of Scugog. There is limited prime-time ice available at the SCRC to provide the current Blackstock ice user groups and the rates are significantly higher for the full-sized pads at the SCRC.

Without the planning for replacement of the refrigeration plant immediately, future ice seasons are in jeopardy and would displace the above organizations.

2.4 Alternatives to the Recommendation

2.4.1 Do nothing – run the existing refrigeration unit until it fails. If failure occurs mid-season, there would be significant impacts to the ice user season, as there is little ice availability at the SCRC, and requests would not be accommodated.

2.4.2 Permanent refrigeration system replacement – completely replace the existing refrigeration system with a new system utilizing ammonia refrigerant. This option has an estimated cost of $950,000 and is a permanent solution and commits the Township to upgrading the Blackstock Arena with other high-cost items, such as, replacing the refrigerated slab and finding a solution to inaccessible change rooms.

2.4.3 Repurpose Arena for non-ice uses – to accommodate ball hockey, pickleball, indoor soccer, an investment in insulation, and a multi-purpose sports floor would need to be budgeted. The estimated cost for multi-purpose sports flooring installation is $150,000.

Staff evaluated the options, and the recommendations of the report provide a unit that will upgrade the existing Freon-based unit, providing adequate support to the existing rink.

3. Financial Implications:

3.1 Sole Source Purchase

Section 6.6 for Procurement By-Law #42-22 provides a number of justifications for Non-Competitive Procurement. Sub-section (c) deals with Only One Supplier being used to ensure compatibility with existing goods. The Township has contracted with CIMCO for over 40 years. They are the vendor responsible for the maintenance, inspection and installation of all refrigeration, dehumidifiers and desiccant equipment currently in the facility. The Township also has a preventative maintenance agreement with CIMCO.

To maintain compatibility with the other equipment and installation requirements, staff are recommending that the project to install the stand-alone ammonia refrigeration package be awarded to CIMCO in the amount of $606,800 (net of HST rebate).

Unbudgeted Capital Account No. 20-70-620-925xx-7377 – Blackstock Ice Plant Replacement

Approved Capital Budget		**N/A**
Contractor (net of HST rebate)	**$542,000**	
Other (Decommission, Concrete Pad)	**$10,000**	
Contingency 10%	**$54,800**	
Overbudget or Under Budget		**($606,800)**

In the BCA, the option to completely replace the existing refrigeration system with a new traditional ammonia plant, such as one installed at the SCRC was estimated at $950,000 and is a permanent solution and cannot be moved if funding becomes available to replace BRC's undersized ice pad.

The funding for this project in the amount of $606,800 has not been previously approved. The recommendation is that these funds be drawn from the Major Facilities Reserve Fund. Utilizing the funds for this project would mean they are no longer available to offset the BRC replacement design project planned for 2027 in the Capital Forecast.

4. Communication Considerations:

The project timelines will be communicated to the ice user groups at the BRC. This will provide the groups with an update on major improvements within the facility. As well, we will inform them of the delivery and installation timelines, along with the potential for a critical failure in the interim, which could impact ice use bookings during their 2025-26 season.

A news release and social media will be arranged to highlight the investment in the Blackstock facility, ensuring continued use and enjoyment for residents.

5. Conclusion:

With the information received from our refrigeration contractor in May 2025 regarding the age and repairs required to the existing refrigeration plant at the BRC to make the equipment functional for ice seasons past the 2025-2026 season, it is recommended that Council approve the purchase of a stand-alone ammonia refrigeration plant package to be installed at the BRC. The estimated delivery and installation time, once approval is granted, is not until the middle of February 2026 due to long chiller lead times. The existing refrigeration system will be activated in September, pending the delivery of the new equipment.

Respectfully Submitted by:	Reviewed By:
Lori Bowers	Warren Mar
Director of Community Services	CAO

Attachments:

None.