BUILDING CONDITION ASSESSMENT

JAMES WHYTE ARENA

70 Front Street North, Thorold

Project: 254013

Prepared for:

City of Thorold

3540 Schmon Parkway

Thorold, Ontario, L2V 4A7

Prepared by:

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egis

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EXECUTIVE SUMMARY

A Building Condition Assessment (BCA) was carried out at **70 Front Street North, Thorold** by Egis Canada Limited (Egis) for the City of Thorold (City). The building was constructed in 1936 with an addition in 2000 to the northwest. Renovations occurred in 1976, 1986, 1992, 1995, 2002, and 2021. The single-storey assembly type building, with partial mezzanine, is located on the east side of Front Street North at the intersection of St. David Street East. The single pad structure includes two entrance lobbies, four Change Rooms at the north end, Referees and Woman's Change Room at the south end, Storage Rooms, Electrical Room, and Furnace Rooms. The remainder of the building, encompassing the Frank Doherty Arena, and the out-buildings were not assessed. Gross floor area is estimated at 22,500 square feet (sf) or 2,091 square meters (sm).

This BCA is based on a visual assessment of the property and a review of pertinent documentation provided by the City.

Our visual review found the facility to be in fair-to-poor condition and serviceable but in need of significant modifications based on age and inherent design issues. These issues require address in the immediate and short terms. Consideration should be given for possible building repurposing such as a dry floor use as opposed to demolition at least over the short term. Several options have been presented in the HDR letter of February 4, 2019. Building deficiencies and backlog of capital work other than refrigeration and dehumidification (e.g. HVAC, health and safety, thermal insulation improvements, etc.) would still require address under repurposing.

There are currently no restoration or renovation projects underway or scheduled. There has been no significant capital work performed at the facility over the last twenty years except for the 2016 roof shingle replacement, 2017 rainwater capture system, and the northwest addition in 1999/2000. The age of many of the main building components exceeds thirty years while the dasherboards and glazing are approximately forty years old and the concrete pad seventy-three years old.

Summary of Findings & Recommendations

A – Substructure

The substructure consists of masonry block foundation walls and poured concrete column piers. Thickened floor slabs are presumed to be located under the interior masonry block walls. A poured concrete floor slab is installed throughout. The substructure components are performing well overall with no notable signs of deterioration or extensive damage, except for delaminated and distressed cement parging on exposed portions of the foundation walls. Despite erosion, poor grading and steep embankment along the east side of the arena, there is no evidence of significant movement of the substructure components. Floor slabs of the perimeter apron of the arena need repair. Short term refurbishment of deteriorated components is carried to maintain the substructure and ensure adequate performance over the long term.

B – Shell

The superstructure consists of plain faced masonry block interior and exterior walls, architectural block walls, prefinished and painted metal siding, aluminum framed windows, aluminum/steel/wood framed doors, insulated metal overhead doors, sloped shingled roofs and modified bitumen roofs. The Press Box, arena storage rooms and the south mezzanine storage rooms are constructed with conventional wood framing methods. Truss uplift at the north addition have created voids along the upper masonry walls along with step cracking of mortar joints. The walls are also not laterally braced. All superstructure components, except for the new roof shingles, will require repair/refurbishment in the immediate to short term based on observed conditions.

The shell also has minimal to no insulating value and minimal air/vapour barrier integrity. Notable air and water infiltration/exfiltration through voids at exterior walls, doors, vents, grilles, etc. are widespread. These conditions result in significant energy losses (all HVAC equipment is working harder both in the heated and unheated areas). The effect of condensation is also problematic.

C – Interiors

The interior finishes consist of conventional materials including painted concrete block walls, painted plywood and transite wall and ceiling panels, painted concrete floors, ceramic floor tiles, sheet vinyl floors, vinyl floor tiles, painted gypsum board and lay-in ceiling tiles. The north change rooms are equipped with older rubber matting. Interior doors are both wood and metal core in metal frames.

All finishes will require updating. The north change rooms will require new rubber flooring and baseboard along with wall and ceiling repairs and refinishing of shower areas.

D – Services

Fire Protection and Life Safety Systems:

The 1-storey Assembly occupancy building is a combination of wood, steel, and masonry construction. The building is protected by a newer Mircom single-stage fire alarm system with main panel located at the west side of the main foyer. The panel has a battery back-up and is monitored by Fire Monitoring of Canada. Emergency lighting is provided by numerous battery back-up fixtures. 5-lb ABC fire extinguishers are installed throughout the building. The arena, refrigeration room and south mezzanine are equipped with a dry type of sprinkler suppression system. Servicing of the fire protection equipment is Aatel Communications, Sentinel Systems, and/or Johnson Controls.

The undated Fire Safety Plan is located in the wall mounted FSP box adjacent to the fire alarm panel. Egress floor exit plans are prominently posted at the south main foyer and the northwest vestibule. It is recommended that the plan be updated.

Vertical Transportation:

No vertical transportation devices are installed.

Mechanical:

The building is heated and ventilated by means of three gas-fired forced air furnaces. Two furnaces are installed at the north addition Mechanical Room and one furnace is located at the south Mechanical Room. The arena has seven suspended gas-fired radiant heaters; four along the east exterior wall are abandoned. Additional heat is provided by electric forced flow wall heaters and conventional baseboard heaters. Point source and central roof mounted exhaust fans are installed for the various service and user rooms. The arena bowl is ventilated by a small wall mounted exhaust fan and opposing interlocked fresh air intake louver. All heating and ventilating equipment, including distribution ducting need replacement. Fresh air introduction for ventilation is lacking in most areas.

Domestic water enters the building at two locations. Both are unmetered with no backflow protection. Domestic hot water service various gas-fired and electric hot water heaters and storage tanks. This equipment is predominantly newer. Allowances are carried to replace older galvanized piping, replace older copper piping especially at areas within showers and the provision of meters and backflow devices with proper valves.

Sanitary drainage is by gravity to the below-grade piping connected to the municipal system. The sanitary drainage system is functioning as intended but is also aging. Allowances are carried to map the piping and replace older floor drains. Plumbing fixtures are in fair condition. Allowances are carried to replace older fixtures and refurbish all shower areas.

The James Whyte Arena has no building automation system (BAS) but relies on manual switching and thermostatic controls. The system is operational and generally functions. There are no commissioning or balancing reports available. Future allowances are carried to provide BAS to the proposed HVAC replacements.

Electrical:

The building electrical systems are conventional with the main service provided from the local utility by an overhead service that is fed to the east pad mount transformer. The service runs underground to the Refrigeration Room main switch. The service is rated at 600-Amp, 575-Volt, 3-P, 4-W for main refrigeration components and then is stepped down to 120/240-V by remote transformers for general use equipment. The power is distributed by older and newer disconnects and panelboards for power and lighting requirements. Lighting is by T8 and T12 fluorescent fixtures. Arena lighting is by 400-W metal halide high bay fixtures. These fixtures are over 40-years old and connected by knob-and-tube type wiring. Illumination levels in most service and common areas of the building are lacking. Conventional toggle switches and three prong receptacles are used throughout. Ground fault interrupter (GFI) receptacles are lacking. Allowances are carried to replace the aging distribution system, including receptacles and switches, provision of GFI receptacles, replacement of abandoned wiring and overall identification of circuits.

E – Equipment & Furnishings

Equipment is limited to the Nevco score clock. Furnishings include benches in the change rooms, and two portable bleacher stands. The components will require updating in the short term.

F – Special Construction

The building has a single ice pad including dasherboards, and glazing. The refrigeration system was recently capped. The dasherboards and glazing although functional should be updated. If left as is, gaps, and loose edges must be repaired to prevent injury.

G – Site

The site is comprised of asphaltic concrete surfaced parking area to the north, sodded laneway to the east, gravel surfaced west service drive, poured concrete sidewalks, concrete curbing, and the wood framed storage outbuilding. The site has minimal soft landscaping features. Soffit and wall mounted fluorescent and HPS light fixtures are installed.

The asphalt parking lot, east and west laneways and lighting will require major capital work in the short term.

H – Legislation/Codes/Standards/Health & Safety Programs Documentation and Related Scopes of Work

Recommended reports include air balancing and commissioning of entire building, Designated Substance Survey report, energy audit, predictive quality measurements, provision of as-built drawings and illumination review. These costs are carried in the short term.

Immediate, Short- and Long-Term Capital Requirements

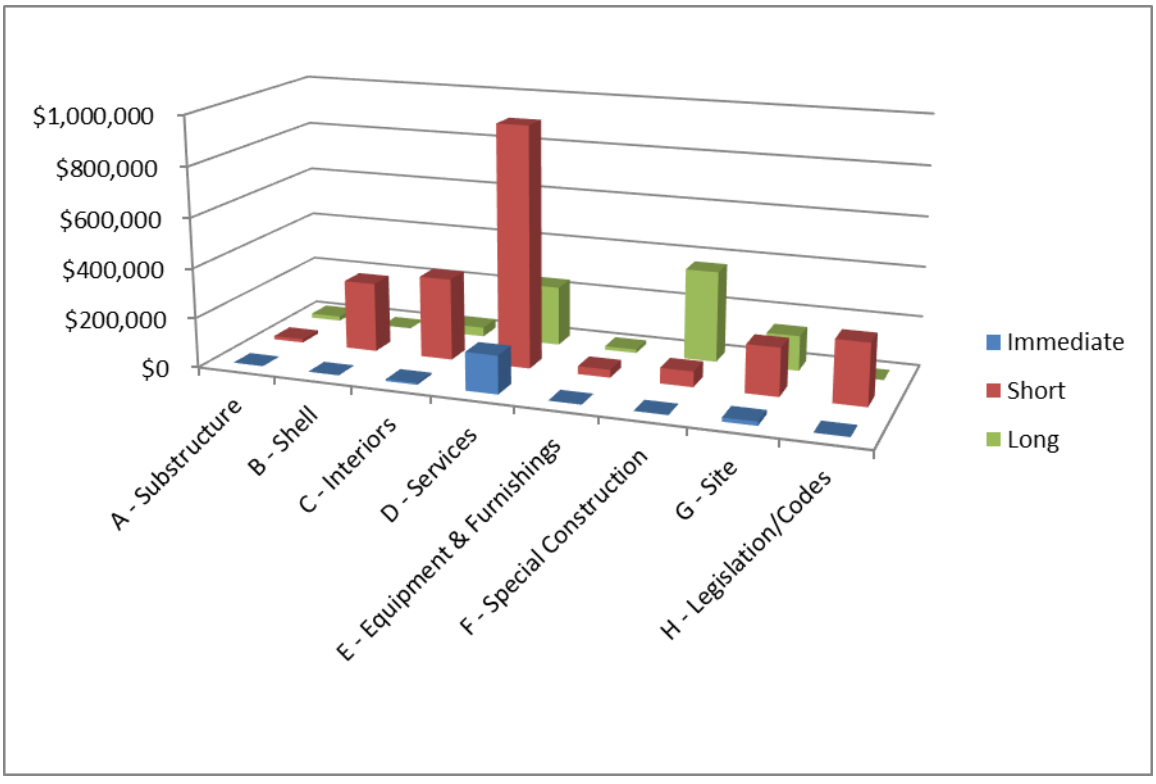
Over the next 10-years it is anticipated that most building equipment and systems will require major repair or replacement to maintain the building in a state-of-good repair under the current operational model.

Descriptions and observations are intentionally brief or absent. This information, as well as quantity, costs, life expectancy, and replacement year, are to be updated as components are replaced, and subsequent building condition assessments are completed.

Based on our visual review of the property, we are of the opinion that total cumulative expenditures will be in the range of $2,200,000 in the immediate (2024) and short terms (2025 to 2029) for the building and site to maintain the property in a state-of-good repair (refer to Appendix A). The above opinion of probable costs excludes sales taxes and inflation but includes contingencies, engineering, and project management costs.

Substantial reduction in costs could be realized if the building is used as is and negotiated Agreements are made with pending user groups to realize the buildings limitations and risks. Regardless, it is imperative that the minimum health and safety issues be rectified.

This executive summary is intended to provide an overview of pertinent facts and estimates contained in this BCA Report for the architectural/engineering disciplines, and it is provided as a convenience only. Readers are advised to refer to the full text of this BCA Report and accompanying spreadsheets for detailed information.



1.0 INTRODUCTION

Egis was retained by The City of Thorold (City) to carry out a Building Condition Assessment (BCA) of the facility located **70 Front Street North, Thorold**.

Probable costs for repairs or replacements over the immediate (0 and 1 years), short term (2 to 5 years) and long term (6 to 10 years) are provided.

The Report is not to be used as a specification for undertaking work. All immediate and short-term work emanating from this BCA is to be backed by intrusive destructive testing and measurements to obtain the means and methods to allow for such specifications. Work/costs forecasted out beyond the first few years (short term) are only to be viewed as speculative reserve placeholder items formed by life cycling of components. As this BCA is a static snapshot of the current conditions, and due to the detailed component listing provided, updates will be required continually as components age, systems are altered, management opinions change or new-found information surfaces. These undertakings are beyond the scope of the BCA.

The study included a visual assessment of the development which was carried out on November 6, 2024. The assessment focused on sitework, structure, building exterior, building interior and the electrical, mechanical and fire safety systems.

Details regarding each of the assessed elements, with our observations, are in an accompanying spreadsheet (Appendix A).

1.1 PROPERTY DESCRIPTION

The JAMES WHYTE ARENA was constructed as a natural ice pad in 1936 through partnership with Abitibi Paper. Original architects are unknown. In 1950, a refrigerated ice pad was installed, and four change rooms were added to the south end. The refrigeration plant was updated in 1960 and again in 1992, 1995, 1997, and 1998. The original 1936 wood framed roof structure was modified in 1976, 1991, and 1992. In 1983, dasherboards, glazing, pad, and apron were installed to increase the ice dimensions from 170' by 70' to 185' by 76'. The design was prepared by Williams Woodruff and Elmes Architects, St. Catherines, Ontario. In 1999/2000 four change rooms were added to the northwest corner of the building. The arena design incorporates a single level building with an enclosed mezzanine sound/media room at the northeast corner. The main entrance is located on the northwest elevation, adjacent to the parking lot. Secondary entrances are located at the east and west elevations through the main foyer. The facility has a gross floor area of approximately 22,500 square feet (sf).

The exterior walls of the arena are constructed with 8 inch plain faced masonry block. The walls of the addition are constructed with 8 inch architectural block.

The sloped roofs are protected by conventional three-tab asphalt shingles on wood sheathing on original Galvalume metal roof panels. The flat roof to the south is finished with a two-ply modified bitumen membrane on wood deck. Storm water is collected by conventional prefinished metal eavestroughs and PVC leader assembly with discharge to grade at both the north and south parking lots. The flat roof sections are drained by standard roof drains and internal leaders to below grade. Windows at the northwest addition are aluminum framed double glazed awning type. Exterior doors are a combination of wood and metal core in metal frames with and without glazing.

Mechanical systems include the domestic cold water, distribution piping, electric heaters and gas-fired forced air furnaces. The arena refrigeration system was capped in 2021. Ventilation is by various point-source exhaust fans discharged to roof level.

Electrical systems are conventionally supplied from the utility supply to the east pad-mount site transformer and onto the Refrigeration Room.

Interior finishes consist of painted concrete floors, vinyl floor tile, ceramic floor tile, painted gypsum board/plaster ceilings and painted concrete block walls.

The facility is located on the east side of Front Street North, south of St. David Street East, on a 3.90 acre (170,000 sf) irregular shaped lot with sharply sloped from west to east. The site is accessed from Front Street North, St. David Street and Ormond Street. The site landscaping features include asphalt paving, concrete sidewalks and minimal soft landscaping features.

The following Table 1 details the pertinent characteristics of the site and building, as identified during our site visit or otherwise provided by the City. All building and site areas are considered estimates.

Table 1 - Summary of Facility Features

Name: JAMES WHYTE ARENA **Address:** 70 Front Street North, Thorold			
Site Information			
Site Area & PIN	170,000 sf	3.90 acres	NA
Access Drives (Curb Cuts)	3	Front St., St. David St, Ormond St.	
Drives and Parking	North, 50, 2 BF	Traffic Surface	Asphalt
Walks	North, West	Traffic Surface	Concrete
Building Information			
Gross Floor Area	22,500 sf	2,091 sm	
Footprint Area	22,500 sf	2,091 sm	
Roof Type (Flat)	Wood Framed	Membrane	Modified Bitumen
Roof Type (Sloped)	Wood Framed	Membrane	Asphalt Shingles
Cladding Type	Masonry Block	Windows	Aluminum Framed
HVAC System	Gas-Fired Furnaces, Gas Unit Heaters, Electric Unit Heaters, Point-Source Exhaust Fans		
Electrical	600-Amp, 575-Volt, 3-Phase, 4-Wire		
Structural Framing	Concrete block walls, wood framed roofs supported on poured concrete foundations		
Fire Protection	Single Stage Fire Alarm, Dry Sprinkler System, Fire Extinguishers, Emergency & Exit Lighting		

1.2 METHODOLOGY

The Project consists of five (5) steps:

1.2.1 Part 1 – Documentation Review

MPL to review the following information (to be provided by the City):

1. All Architectural, Mechanical, Electrical and Site Drawings and Specifications;
2. Information on existing scheduled, pending, in-progress and completed projects information;
3. Relevant building/roof/structural assessment reports;
4. All existing warranties, guarantees and service contracts;
5. Records of capital items added since original construction;
6. Maintenance and inspection records and schedules including Work Order Records for Preventative Maintenance and Demand Maintenance;
7. Compliance Orders;
8. Tenant Agreements;
9. Any further information or known property problems.

The following documents were provided for our review:

1. Drawings and Reports:
    a. A Fire Safety Plan, undated, by ERC Design & Consulting Inc.;
    b. Ontario Environmental & Safety Network Ltd., Asbestos Materials Survey, June 1, 2016;
    c. Crack Program Monitoring Progress Report – November 2017 – by Amec Foster Wheeler;
    d. Visual Structural Assessment Reports dated October 24, 2016 and November 24, 2017 by IRC Building Sciences Group;
    e. Ice Arena Inspection Report for air quality dated March 21, 2019 by Niagara Region Public Health;
    f. IRC Contract dated July 18, 2016 for a 4-Year for Structural Review Reporting;
    g. Ultrasonic Thickness Survey for High Pressure Receiver dated March 11, 2019 by Team Industrial Services;
    h. Condition Assessment for James Whyte and Frank Doherty Arenas, Final Report dated February 2013;
    i. Ammonia Ice Rink Plant Review by Cimco Refrigeration dated April 2019;
    j. Thorold Arenas Repurposing Options by HDR Architecture Associates Inc. dated February 4, 2019;
    k. Drawings (various).

1.2.2 Part 2 - Interview with Key Individuals

An interview was conducted with a representative from the City at the time of the site visit. No additional concerns were raised since last assessed in 2019.

1.2.3 Part 3 - Site Visit

All site visits were coordinated with the City. The visit included a guided tour of the facility, service rooms, utility rooms, offices, shops and the grounds. All accessible areas within the building(s) were visually reviewed during our walk-through assessment. Review of attics, crawl spaces, basements and service tunnels were conducted where safe to do so for the assessors and where they are not deemed confined space. Tenant areas were assessed (tenant agreements were not provided for review).

Digital photographs were taken by digital camera including dating and description for logging purposes.

The site assessment was visual, non-intrusive and non-destructive type. General review of code and standard reviews was completed. Problematic areas requiring further assessment and testing were noted. Priority items were identified.

Assessment particulars:

Site – We will review all site items within the vicinity of the buildings being assessed. This includes underground services, parking lots and driveways, exterior lighting, curbs, gazebos, walks, patios, stairs, decks, retaining walls, soft landscaping, recreational equipment, signage, accessories, etc. Unless specifically listed, out-buildings, surveys, geotechnical, boreholes and soil testing are excluded from review at this time.

Interiors – Items include interior finishes (floor, wall and ceiling), doors, hardware, stairs, handrails, guards, common areas and user rooms, service rooms (electrical, mechanical, IT). Non-fixed furniture is excluded.

Environmental Issues – Hazardous Substance Surveys are not included in this project. At the minimum, we will review existing reports and provide commentary on general completeness and whether additional testing is required/recommended. If no existing reports are available our commentary will be limited to suspected hazardous substances, PCBs, storage tanks, mould, and indoor air quality from a visual assessment only. Phase 1, 2 and 3 Environmental Reports are excluded. Egis will also indicate locations of hazardous conditions and potential hazardous equipment.

Barrier-Free – Compliance with accessibility standards has been excluded from review.

Code – Compliance – Assessment is for general code compliance only and includes obvious infractions such as roof guarding, guards, tiebacks, etc. Cite code references where possible.

Structure – Items include foundations, superstructure, balconies, canopies, parking structures, stairs, guards, and handrails. Significant degradation and problematic detailing, including heights and stability of guards, are reviewed. Structural design analysis (calculations) is excluded at this time.

Building Envelope – Items include flashings, sealants, exterior finishes and wall systems, exterior windows, doors and wall penetrations, roofs, flashings, eavestroughs, downspouts. Thermography and roof test cuts are not included at this time. MPL will notify the City if thermography or test cuts are required. This work would be considered additional to the contract.

Mechanical – Items include all accessible heating, ventilation, and air conditioning equipment (recording the manufacturer, model and serial number, size and capacity, equipment number, and condition). Plumbing systems including domestic water supply, distribution, heaters, boilers, fixtures and drainage will be reviewed. Process and specialized equipment at all buildings are excluded (IT, communications, security, wastewater pumping, etc.).

Fire/Life Safety Systems - Items include suppression systems (sprinkler, standpipe), voice communication, fire extinguishers, fire alarm and annunciators, notification and signal devices. We will also review Fire Safety Plans and make comment on building classification, required fire resistance ratings (FRR), and occupancy type.

Electrical – Items include all accessible electrical equipment such as switchgear and switchboard units, motor control centres, distribution panels, light fixtures (interior and exterior), wiring, switches, receptacles, communication and security systems and accessories. Equipment will not be dismantled or intrusively accessed, and thermography will not be conducted. Elevators are included in the review; intrusive assessments of concealed equipment are excluded. Building Automation Systems (BAS) and lighting systems are included.

1.2.4 Part 4 - Estimating and Costing

The replacement costs of the various components forming the development detailed in this report are based on the unit rates provided and adjusted using the Adjustment Factor based on experience with repair and renovation of existing buildings. The costs are considered Class "D" preliminary, in Canadian Dollars.

The replacement cost of each component is based on the following assumptions:

- standard building materials will be used, purchased at the contractor's list price;
- current construction techniques will be used in replacement or repair of building components;
- quality of construction will be in accordance with the current edition of the relevant local Building Code;
- replacing like with like components unless:
    - A less expensive item is available that can perform to the same standard;
    - A cost-benefit analysis (including energy savings) that shows replacement to a higher standard would be cost-effective;
    - A higher standard is required because of changes to the OBC or other applicable standards and legislation;
    - An item of the original standard is unavailable.

The estimated replacement and maintenance costs contained in this report are based in part on information and quantities obtained by a visual review of the property and in part from a review of the available reports and drawings relating to this development.

1.2.5 Part 5 - Recording and Reporting

Provide all detailed data in an Excel spreadsheet and accompanied by a report.

1.2.6 Life Expectancy Assumptions

The assumptions regarding the life expectancy of each of the various components forming the common elements of this development, as detailed in this report, are based on the technical literature of manufacturers, on our experience with the materials and equipment forming the common element components of the development, and on relevant technical publications such as ASHRAE. The estimations of the remaining life expectancies of the common element components are based on an assessment of their present condition and effective age made during our visual review of the property.

1.3 TERMS OF REFERENCE

The terms of reference governing this Building Condition Assessment are detailed in our Proposal No. PCC-254013, dated November 4, 2024

The intent of this Project is to provide the City with a Building Condition Audit (BCA) that identifies per property/building a 10-year budget, which on a yearly basis lists all major repairs or replacements of systems based on current conditions, age, maintenance practices, life expectancy, etc.

The threshold reporting level was not defined but is presumed to be $5,000 for major capital items.

1.3.1 Definitions

Action Summary: The recommendation for repair, replacement or refurbishment.

Action Type: Actions include None, Repair, Lifecycle Replacement and Refurbishment.

Actual Age or Last Major Action: This is current age (in years) of the component either known or estimated by MPL.

Address: Physical address of the building as provided by the City.

ASHRAE: Refers to the American Society of Heating and Refrigeration and Air Conditioning Engineers.

Ancillary Costs: Design Contingency of 10% of Net Costs and General Contingency of 10% for unforeseen conditions are carried. Fees are included in the Current Repair Costs shown in the spreadsheets. These can be adjusted or removed at the discretion of the City.

Building: Refers to a structure consisting of a wall, roof and floor, or any one or more of them.

Building Area: Refers to the greatest horizontal area of a building within the outside surface of the exterior walls or, where a firewall is constructed, within the outside surface of exterior walls and the centre line of the firewalls.

Building Name: This is the name that identifies the property for which the assessment has been completed. Names are provided by the City.

Building Component, Category or Category Code: This is the inventory of the building components, systems and equipment that have been included in the BCA. The ASTM UniFormat II Classification (the classification of building elements and related site work) has been used. These elements usually perform a given function, regardless of the design specification, construction method or material used.

CBATS: City of Thorold Accessibility Technical Standards.

City: Refers to City of Thorold.

Condition Rating or Overall Condition: The following ratings and percentages are provided by the City.

Definition of Rating

Very Good – 80% to 100% new. Fit for the future with action timeline of 10+ years;

Good – 60% to 79% new. Adequate for now with only minor deterioration or defects evident; asset is well maintained. Action timeline of 5+ years with no immediate action required;

Fair – 40% to 59% new. Requires attention with some deterioration or defects evident but function is not significantly affected. Minor maintenance required;

Poor – 20% to 39% new. At risk with some deterioration in at least some portion of the structure. Function is adequate but asset needs significant maintenance and may need renewal or upgrade;

Very Poor – 0% to 19% new. Unfit for sustained service. No longer functional with general failure. Asset is in urgent need of major maintenance or refurbishment.

Construction Replacement Value (CRV): Value of the facility based on current market pricing, codes and regulations. Inclusive of all costs including construction, design, project management, administration, site development and site features. It is not representative of real property value or insurance replacement value, however. Calculated from RS Means Square Foot Costs 2024 data or otherwise provided by the City. This is not a requirement for the Project.

Current Repair Cost: Cost in current 2024 dollars to undertake the scope of work for each listed component. This is an estimate or opinion of probable cost, considered a Class D type and includes project management and design fees but excludes interest, taxes and inflation. Includes replacement costs.

Definition: Describing what is covered under the Category.

Description or Commentary: The component, material, composition, type, manufacturer, make, model, identification tag, etc.

Design: Refers to plans, sketches, drawings, graphic representation or specification intended to govern the construction, enlargement or alteration of a building or part of a building.

Development: Refers to the site and all its facilities there upon.

Dwelling Unit: Refers to a room or suite of rooms used or intended to be used as a domicile by one or more persons and usually containing cooking, eating, living, sleeping and sanitary facilities.

ECM: Refers to Energy Conservation Measure.

Effective or Observed Age: For various reasons a component may be wearing faster or slower than would normally be expected for its age. The Observed Age is an adjudged age of the component based on its current condition and remaining life expectancy.

Estimated Replacement Year(s): The event year of when the major repair or replacement is anticipated to occur. Years 2024 to 2034.

Fire Separation: Refers to a construction assembly that acts as a barrier against the spread of fire and that may or may not have a fire-resistance rating or a fire-protection rating.

General Review: In relation to the construction, enlargement or alteration of a building, means an examination of the building to determine whether the construction, enlargement or alteration is in general conformity with the design governing the construction, enlargement or alteration, and reporting thereon.

Grade: Means the lowest of the average levels of finished ground adjoining each exterior wall of a building but does not include localized depressions such as for vehicle or pedestrian entrances.

Gross Area: Means the total area of all floors above grade measured between the outside surfaces of exterior walls or, where no access or building service penetrates a firewall, between the outside surfaces of exterior walls and centre line of firewalls but in residential occupancy where access or a building service penetrates a firewall, the measurement may be taken to the centre line of the firewall.

High-rise Building or High Building: Buildings that are seven (7) stories or more in height.

IESO: Means the Independent Electrical System Operator.

LACAC: Means the Local Architectural Conservation Advisory Committee.

Observations/Recommendations or Commentary: The descriptive assessment of the component or equipment including all observed and tested concerns. The assessment will obtain the physical conditions of the architectural, structural, mechanical, electrical, fire and life safety related building components as referenced in the Scope of Work. Describe the deficiencies and conditions and indicate exact location of the issues.

OBC: Means Ontario Building Code.

OFC: Means Ontario Fire Code.

OSHA: Means Occupational Health and Safety Act.

Percent (%) of Quantity Scheduled: This is the percentage of the total quantity for any repair or replacement work covered by the Capital Expenditures for a component.

Personal Services Occupancy: Means occupancy for the rendering or receiving of professional or personals services.

Photo Reference: Photos referenced in the discussion of the components.

Priority Rating: All repair/retrofit/replacement Projects are to be categorized under one of the five listed priority ratings:

Priority 1A – Life Safety – Due to liability issues from life and health safety issue;

Priority 1B - Legislative – Due to legislative requirements and liability;

Priority 2 – Function Protection – For scheduled repairs or replacements to maintain functionality, or replacement at end of service life, or to maintain functionality of the building;

Priority 3 – Program Enhancement – For projects that would enhance or improve functionality, but are not essential to main functionality;

Priority 4 – Growth – Where decisions to proceed are subject to future use of the building, and thus, are dependent on the intended use of the building.

Project: Means the Scope of Work outlined in the RFP and the Consulting Agreement including all amendments.

Project Quantity: The quantity of work carried for replacement, major repair or renovation. Calculated by multiplying Total Quantity by % of Quantity Scheduled.

Quantity or Total Quantity: This is the total quantity or amount either measured from available Drawings, provided by the City or otherwise estimated by MPL.

Recommendations: The explanation for the highlighted deficiencies or projected concerns. The scope of work required is to be outlined illustrating the breakdown for the cost estimates where reasonable to do so.

Recommended Year or Year: The year that corresponds to the Remaining Life (number of years) that corrective action is required for the component.

Remaining Life: This is the time remaining (in Years) before the corrective work is estimated to be required. It is simply the difference between the Service Life and Effective or Observed Age.

Residential Occupancy: Means an occupancy in which sleeping accommodation is provided to residents who are not harboured for the purpose of receiving special care or treatment and are not involuntarily detained.

RFS: Means Reserve Fund Study or Studies.

Scope of Work: This is a brief description of the nature of corrective work involved with each of the building components. This can involve work of a repair/refurbishment nature through to complete replacement. Detailed descriptions, observations and recommendations will follow in subsequent columns.

Service Life or Repeat Interval: An estimate of how many years from the time it is new to the time the component requires corrective work that is noted in the Scope of Work. Estimated life expectancies are based on ASHRAE data references.

System Condition Index (SCI): A comparative ranking of the condition of the systems within an asset class. Calculated by aggregate of the asset backlog within each system in $ divided by the aggregate replacement cost of all assets within that system ($). The six primary physical systems are Structure, Building Envelope, Interior Finishes, Building Services, Equipment and Siteworks.

Terms: Immediate term is considered Year 0 (2024). Short term is considered Years 1 to 5 (2025 to 2029). Long term is considered Years 6 to 10 (2030 to 2034).

UniFormat Code or Category Code: Component identifier codes as per ASTM Standards unless otherwise provided by the City.

Units or Units of Measure: This is the unit measurement utilized in the calculation of the Current Cost. Allowance for a specific component and includes LM = lineal meter, SF = square feet, EA = number/each, LS = the component.

Unit Rate: The unit rate cost assigned to each component for replacement, repair or renovation presented in current 2024 dollars.

2.0 ENVIRONMENTAL AND HEALTH & SAFETY

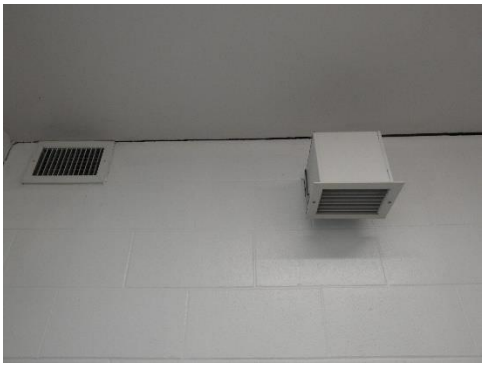
2.1 Hazardous Materials

The 2016 Asbestos Materials Survey by Ontario Environmental & Safety Network Ltd. Indicates that asbestos containing materials (ACM) are found in older vinyl floor tile, transite wall and ceiling panels, pipe fitting insulation, and cement transite piping.

Our assessment noted that some of the transite paneling, and vinyl floor tile/sheeting are damaged. Pipe fittings were also not marked (painted) where asbestos containing. Other hazardous materials are known to be present including lead, mercury, and silica.

It is recommended that a complete Designated Substance Survey (DSS) be provided to accompany this report and that the ACM be removed when renovating areas over the short term.

2.2 Indoor Air Quality



The building is equipped with point-source exhaust fans for the washrooms, change rooms, and arena bowl. Heating is by gas-fired furnaces and conventional ducting. Ventilation of rates were not measured but are anticipated to be less than adequate (not performing to meet the minimum ASHRAE standards).

It is recommended that the aging furnaces and fans be replaced, ducting and accessories be cleaned, and a full balancing and commissioning program be initiated to ensure proper ventilation rates are being provided to the building.

2.3 Code Compliance

The building is classified as a single-storey A3 Assembly Occupancy (Arena) with an estimated gross floor area of approximately 22,500 sf (James Whyte Arena portion only). As such the building can be constructed with combustible and non-combustible materials used singly or in combination provided that the building is sprinklered, not more than 1-storey in building height and has a building area of not more than 7,200 SM or 77,500 SF. The building is required to have a fire alarm system, with notification signal to fire department, based on occupancy load.

The building has the following life safety provisions:

- Dry type sprinkler system for arena and Refrigeration Room with fire department connection at west wall facing Front Street North;

- Portable ABC fire extinguishers;
- Public hydrants at east side of Front Street and at the Ormond Street driveway entrance;
- Key box at east side main entrance;
- Single stage Edwards (m# E2280) fire alarm system with main control and annunciator panels at Front Street entrance using smoke and heat detectors with electric bells and manual pull stations at exit doors;
- Battery back-up type emergency lighting fixtures;
- Voice communication is by a non-alarm integrated, unrated public address system located at Main Office covering the main foyer area and the Frank Doherty Arena only.
- 6" wide masonry block demising walls around main service rooms and from the arena to the south main foyer area.

We noted the following issues:

- Firestopping is not provided around ducting and pipe penetrations in the majority of services rooms;
- Egress instructions are not provided at the posted fire safety plans;
- Egress instructions are not posted at all fire exit doors;
- Emergency lighting fixture locations are not properly indicated on the FSP;
- Emergency lighting coverage is inadequate;
- Portable air compressor is used on the dry sprinkler system.

3.0 BUILDING OPERATIONAL PERFORMANCE

3.1 Building Envelope

The building is considered to have below-average energy efficiencies. This is based on both the mechanical equipment and the assumed thermal resistance values of the wall, windows and roof systems. Heat gain and heat loss are significant factors affecting the supply of heating and cooling of occupied areas.

R-values are estimated at R-2 for foundations, R-3 for exterior walls, R-1 to 7 for the sloped and flat roof assemblies and R-2 for the windows and doors. The arena building portion has no wall or roof insulation materials. There is also significant air infiltration and exfiltration through wall cracks, open ridge vents and the loose-fitting exterior doors. The north addition has no wall insulation and the attic has only 3" of blown fiberglass (R-7). There is also uncontrolled air infiltration at the low wall vents.

Well sealed, insulated walls and ceiling/roof assemblies makes it possible to control indoor climate. Heat loss and gain will increase energy use.

3.2 Mechanical, Electrical and Water

Based on our review the building would not be in compliance to the ASHRAE 90.1 Energy Standard for Buildings Except Low Rise Residential Buildings. Specific design parameters are unknown and load calculations have not been performed. Features include:

- Dual lamp T8/T12 fluorescent lighting fixtures;
- Older 400-W metal halide lighting for arena;
- Localized use of room occupancy sensor controls;
- Older double glazed, aluminum framed windows;
- Older high-efficiency furnaces;
- Older wall and roof exhaust fans;
- Basic HVAC controls with no building automation systems;
- Partially insulated domestic water piping;
- No recirculation lines on hot water systems;
- Extensive piping lengths on domestic hot water systems.

Potential opportunities include:

- Replacing interior lighting with LED type including the arena;
- Replace HVAC equipment with high-efficiency type (most has exceeded useful service life);
- Provide commissioning and balancing of all air and water systems;
- Improve all wall and roof insulation levels in short term;
- Consider installing energy recovery ventilators for the washroom/shower exhaust systems;
- Replace windows and doors with high-efficiency type;
- Improve hot water supply systems and layouts.

3.3 Structural Integrity

Structural reviews have been conducted in recent years to 2017 by various engineering consultants including IRC Building Sciences Group Inc., Amec Foster Wheeler, Ausenco Engineering Canada, M.A. Steelcon Engineering Limited, Shoalts Engineering, Sandwell Engineering and AECOM. The IRC Reports dated October 24, 2016 and November 24, 2017 were made available for review. All reports are based on visual assessment with no loading analysis or physical (intrusive) methods employed.

The arena structure was constructed in 1936 and is approximately 206 feet long with 13 bays of 15'-10.5" on centre by 90 feet wide. The roof is a gambrel type with two sloped sections per side creating clear heights over the arena of 26 to 35 feet. Four bays are reinforced with steel angle cross bracing. The north end wall is wood framed full height and clad with painted galvanized panels. The south wall is also wood framed.

The hipped arched roof trusses are constructed with multiple plies of ½" to 1" thick boards with bottom chords constructed as fully laminated type using 12 to 13 plies with visible nailing patterns. Web members are also constructed as fully laminated type using 4 larger wood planks with visible nailing patterns. The top chords of the truss are constructed with two larger wood plank sections separated by a third plank at the converging nodes. Steel plate gussets with both through bolts and spike nail connectors are used at all web connection (panel) points. Threaded rods with nuts and end plates are installed at each of the trusses ridge point. Trusses have lateral reinforcement consisting of smaller steel angles with bolted connections. Additional reinforcement (circa 1976) to some of the web members consist of tubular steel (HSS) sections welded to top and bottom gusset plates with steel angle clips. The columns supporting the trusses are constructed with five-plies of solid 2'x10"wood. The columns use a haunched connection detail, with turnbuckle clamps, as they connect to the truss ends. Higher notches indicate that a second set of turnbuckles were to be used. Most of the columns have through-bolted base plate. The columns extend down below the concrete slab apron; anchorage to concrete pier footings is concealed. The roof assembly consists of asphalt shingles on ¾" plywood roof deck on original galvanized metal panels on 2"x8" wood purlins at 24" on centre. Solid blocking with ribbon board are installed at mid-span between most of the trusses. The purlins are attached to the top chord of the truss members by galvanized Z clips except at the steel gusset plate locations.

A fire occurred circa 1950 causing damage to the many of the roof purlins and a truss member at the north end of the arena. In 1991, the wood roof structure was painted with red oxide primer as there was concerns with corrosion. In 1992, insulation batts were removed from the gambrel roof and north end wall and approximately one-hundred twenty 2"x8" purlins were added (sistered to existing purlins) due to sectional loss of the fire damaged purlins.

The east and west walls are constructed with 8" wide plain faced masonry block. Column ends are capped with prefabricated masonry caps to resemble faux pilasters.

Crack monitoring has been conducted from approximately 2010 to 2017 by Amec Foster Wheeler throughout the James Whyte Arena. Although some of the gauges have been physically tampered with, it was concluded that there is little movement (at a Normal Level of 2 mm or less).

IRC Group was also retained for a 4-year contract (2016 to 2020) to undertake Structural Assessments of both arenas on a semi-annual basis. The latest report of November 24, 2017 indicated no significant movement or concerns. Several recommendations have been made including sealing column ends, cleaning/re-painting truss members and columns and doubling up of cracked purlins where present. These repairs have not been undertaken.

3.4 Ice Plant Review

The James Whyte Arena has no refrigeration system. The system was capped in 2022 when the Frank Doherty Arena's refrigeration system was updated.

The concrete pad is in very good condition; smooth, very minimal cracking, and level.

4.0 CAPITAL PLANNING DISCUSSIONS

4.1 10-Year Capital Requirements

The following table depicts the anticipated capital expenditures over the next ten years in immediate, short term and longer-term segments (refer to Appendix B for annual expenditures).

	Expenditures				Year 0 & 1	Replacement Cost	
Section Breakout	Immediate	Short	Long	Total	Backlog	%	$
A - Substructure	$0	$13,800	$18,000	$31,800	$13,800	7%	$519,750
B - Shell	$0	$279,120	$0	$279,120	$105,120	26%	$1,930,500
C - Interiors	$7,200	$328,440	$37,260	$372,900	$255,240	7%	$519,750
D - Services	$152,640	$961,320	$240,240	$1,354,200	$499,800	26%	$1,930,500
E - Equipment & Furnishings	$0	$31,800	$14,400	$46,200	$6,000	1%	$74,250
F - Special Construction	$0	$62,400	$366,000	$428,400	$0	25%	$1,856,250
G - Site	$16,080	$192,492	$140,400	$348,972	$57,480	7%	$519,750
H - Legislation/Codes	$0	$247,440	$0	$247,440	$21,600	1%	$74,250
Grand Totals	$175,920	$2,116,812	$816,300	$3,109,032	$959,040	100%	$7,425,000

5.0 LIMITATIONS

The opinions of probable cost provided in this report are estimations only and are subject to confirmation and adjustment when tenders from suitably qualified contractors are obtained.

Any opinions of probable cost and any maintenance, repair or replacement schedules contained in this report are based on the assumption that the recommendations contained in this report will be carried out, that the property will be maintained on a regular and routine basis by skilled and qualified tradesmen and that a program of periodic professional review will be carried out throughout the life of the property. Failure to undertake any of these tasks in an expeditious manner may result in unanticipated failure of any of the systems and components that form the property and its improvements and lead to issues of public safety.

The information presented in this report is based on direct visual observation made by personnel with Egis and in some instances as noted within the report on information provided by others. Recommendations contained within our report reflect our informed opinion based on the information gathered during our investigation. The findings cannot be extended to components of the building or portions of the site that were not reviewed or that were concealed or unavailable for direct observation at the time of our visit. There is a possibility for additional deficiencies being present in the building which have not been identified during our visit, given the limited nature of this review.

Our mandate is to complete a visual walk-through survey of items, components and systems that are conspicuous, patent and which may be observed visually during the walk-through survey without intrusion, removal of material, exploratory probing or the use of special equipment. Therefore, concealed or inaccessible physical deficiencies are specifically excluded from our mandate. Our interviews of building personnel attempt to uncover known concerns in the building, but we cannot attest to the integrity or knowledge of the interviewees, nor can this process, or the proposed scope of work in its entirety, be considered technically exhaustive or be considered to eliminate all risks related to owning or having a financial interest in this property.

No legal survey, soil test, detailed structural engineering investigation, or quantity survey compilation have been made. Our scope of services for this assignment did not include a design review or engineering analysis of any of the building's systems or components. No responsibility, therefore, is assumed concerning these matters, or for any failure to carry out those technical or engineering procedures required to discover any inherent or hidden condition of this property since such investigation work was not included in the terms of reference governing this study.

The conclusions and recommendations detailed in this report are based upon the information available at the time of preparation of the report. No investigative method eliminates the possibility of obtaining imprecise or incomplete information. Professional judgement was exercised in gathering and analyzing the information obtained and in the formulation of our conclusions and recommendations. The recommendations are not intended to be utilized as a detailed specification for any remedial work that may be required. Egis accepts no responsibility for interpretation of our recommendations, or actions taken based on them without our consultation and supervision.

The mechanical and electrical equipment and the fire safety systems were visually inspected where accessible. The systems were not dismantled to verify the condition of the internal components.

We did not carry out a review to check compliance with all Building or Fire Code requirements which may have been applied at the time of construction, or which may be retroactively applied to this building. Our review assumes that the design professionals and building permit process have created a design (and subsequent construction) that is code compliant.

Information provided by Egis is intended for the exclusive use of JAMES WHYTE ARENA. Egis will not provide results or information to any party other than the client, unless the client, in writing, requests that information be provided to a third party or unless disclosure by Egis is required by law. Any use by a third party of reports or documents authored by Egis, or any reliance by a third party, or decisions made by a third party, on the findings described in reports or documents authored by Egis, is the sole responsibility of such third parties. Egis accepts no responsibility for damages suffered by any third party as a result of decisions made or work carried out based on reports or documents authored by Egis.

Egis makes no representations concerning the legal and medical significance of our findings. With respect to regulatory compliance requirements, regulations change from time to time, and interpretation of their meaning and intent may also change. Egis accepts no responsibility for any legal interpretation of the Regulations, or the consequent financial effect on transactions, property values, or requirements for follow-up actions and costs.

The liability of Egis or its staff is limited to the fees paid or actual damages incurred by the client, whichever is less. Egis is not responsible for consequential or indirect damages. All claims by the client shall be deemed relinquished if not made within two years after last date of services provided.

The client expressly agrees that it has entered into this agreement with Egis, both on its own behalf and as agent on behalf of its employees, principals and co-owners.

The client expressly agrees that Egis' employees and principals shall have no personal liability to the client in respect of a claim, whether in contract, or tort, or in any other cause of action in law. Accordingly, the client expressly agree that it will bring no proceedings and will take no action in any court of law against any of Egis' employees or principals.

APPENDIX A
Building Component Listing

BUILDING INFORMATION				ASSESSMENT											PRELIMINARY COSTS						OTHER FEES			
BUILDING NAME	ADDRESS	UNIFORMAT CODE	BUILDING COMPONENT	DESCRIPTION	OBSERVATIONS	RECOMMENDATIONS	CONDITION RATING	CRITICALITY RATING	IMAGE	SERVICE LIFE (Years)	ACTUAL AGE (Years)	OBSERVED AGE (Years)	REMAINING LIFE (Years)	RECOMMENDED YEAR	TOTAL QUANTITY	% OF QUANTITY SCHEDULED	PROJECT QUANTITY	UNIT OF MEASURE	UNIT RATE ($)	NET COST ($)	DESIGN/ENGINEERING FEES (10%)	CONTINGENCY (10%)	TOTAL OTHER FEES	TOTAL COST OF PROJECT
James Whyte Arena	70 Front Street North	A101001	Wall Foundations - Masonry Block	Masonry block foundations with cement parging finish are installed around the building perimeter of the original ice rink. Drawing details are not provided.	Block foundations are performing as intended with no notable settlement. Exposed areas observed showed no signs of settlement or extensive cracking. Parging delaminations are widespread.	Structural components to last life of building. Building has exceeded useful service life but is performing as intended. Allow to repair parging finish along with grading improvements.	Good	Life Cycle		75	88	74	1	2025	1	100%	1	L-SUM	$4,500	$4,500	$450	$450	$900	$5,400
James Whyte Arena	70 Front Street North	A101001	Wall Foundations - Masonry Block	Masonry block foundations with cement parging finish are installed around the building perimeter of the 1999 addition. Drawing details are not provided.	Block foundations are performing as intended with no notable settlement. Exposed areas observed showed no signs of settlement or extensive cracking. Parging delaminations are widespread along with moisture retention and effloresecence.	Structural components to last life of building. Allow to repair parging finish.	Good	Life Cycle		75	25	74	1	2025	1	100%	1	L-SUM	$4,000	$4,000	$400	$400	$800	$4,800
James Whyte Arena	70 Front Street North	A101002	Column Foundations And Pile Caps	The wood columns supporting the roof trusses are bearing on concrete piers. The exposed portion of the pier is covered with cement parging. Drawing details are not provided.	Column pier footings are performing as intended with no notable settlement. Exposed areas observed showed no signs of settlement or extensive cracking. Parging delaminations are minor in nature.	Structural components to last life of building. Allow to repair parging finish.	Good	Life Cycle		75	88	74	1	2025	1	100%	1	L-SUM	$3,000	$3,000	$300	$300	$600	$3,600
James Whyte Arena	70 Front Street North	A103001	Standard Slab on Grade	Poured concrete slab-on grade is installed throughout the building. Excludes ice pad and apron; under separate line item.	The slab is in good condition with localized damage at floor drains.	Components are expected to last life of building. No allowances carried. Repairs at floor drains to be covered under sanitary drainage item. Minor imperfections are covered under Finishes section.	Good	Life Cycle		75	88	74	1	2025	0	100%	0	L-SUM	$0	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	A103005	Under Slab Drainage & Insulation	Slabs are presumed to be installed on granular fill with and without insulation. The ice pad is presumed to have a drainage system per the 1983 design drawings.	No issues observed or reported.	No repairs carried at this time.	Fair	Life Cycle		75	41	41	34	2058	0	100%	0	L-SUM	$0	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	A103006	Foundation Drainage	4" diameter perimeter weeping tile is presumed to be installed along the foundation walls of both the arena and addition. No design drawings provided.	No issues observed or reported.	Allow for investigation and localized repairs in the long term.	Fair	Life Cycle		50	41	44	6	2030	1	100%	1	L-SUM	$15,000	$15,000	$1,500	$1,500	$3,000	$18,000
James Whyte Arena	70 Front Street North	A202002	Moisture Protection	The foundation walls are presumed to have no dampproofing or waterproofing.	No issues observed or reported.	No allowances carried.				25	41	25	0	2024	0	100%	0	L-SUM	$0	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	A202003	Basement Wall Insulation	Foundation insulation is not provided based on site conditions.	The walls are performing as intended.	No allowances carried.				50	41	50	0	2024	0	100%	0	L-SUM	$0	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	B101002	Structural Interior Walls	Structural interior walls are masonry block type.	The walls show minor signs of minor step cracking along mortar joints within the Refrigeration Room and the north addition as well as localized vertical cracking at interfacing walls. The cracking is primarily due to the effects of truss uplift as settlement issues were not noted within the foundations. Truss uplift has also created large gaps to occur at the top of the walls of the north addition. Lateral support of the interior demising walls has not been installed where inspected per requirements of the OBC.	Allow to rout and seal vertical and step cracking in the short term. Allow to provide lateral support methods of block walls and correct where omitted prior to repairing voids.	Good	Life Cycle		60	25	59	1	2025	1	100%	1	L-SUM	$14,000	$14,000	$1,400	$1,400	$2,800	$16,800

BUILDING INFORMATION				ASSESSMENT											PRELIMINARY COSTS						OTHER FEES			
BUILDING NAME	ADDRESS	UNIFORMAT CODE	BUILDING COMPONENT	DESCRIPTION	OBSERVATIONS	RECOMMENDATIONS	CONDITION RATING	CRITICALITY RATING	IMAGE	SERVICE LIFE (Years)	ACTUAL AGE (Years)	OBSERVED AGE (Years)	REMAINING LIFE (Years)	RECOMMENDED YEAR	TOTAL QUANTITY	% OF QUANTITY SCHEDULED	PROJECT QUANTITY	UNIT OF MEASURE	UNIT RATE ($)	NET COST ($)	DESIGN/ENGINEERING FEES (10%)	CONTINGENCY (10%)	TOTAL OTHER FEES	TOTAL COST OF PROJECT
James Whyte Arena	70 Front Street North	B101003	Floor Decks And Slabs	The mezzanine floors (south storage areas, Press Box and dehumidification platforms) are constructed with wood framing. Most framing is concealed.	The dehumidification platforms and the Press Box should be reconstructed due to layout and questionable connections where viewed from undersides. Press Box access stair has discontinuous handrails and non-conforming guard height with narrow 6.75" runs and 7.25" risers.	Allow to reconstruct mechanical platforms and Press Box in the short term. Replacement of the south end storage areas would occur with the replacement of the superstructure (Item B102001 below).	Fair	Recommended		75	88	74	1	2025	1	100%	1	L-SUM	$20,000	$20,000	$2,000	$2,000	$4,000	$24,000
James Whyte Arena	70 Front Street North	B102001	Roof Construction - Structural Frame	The 1999 Addition roof is framed with prefabricated wood roof trusses spanning in the east-to-west direction.	The roof framing is in good condition as viewed from the access hatch at the Mechanical Room.	Structural components to last life of building. No allowances carried.	Good	Life Cycle		75	25	25	50	2074	0	100%	0	L-SUM	$0	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	B102001	Roof Construction - Structural Frame	The 1999 Addition roof is framed with prefabricated wood roof trusses spanning in the east-to-west direction.	The attic is insulated with 4" blown fiberglass insulation on 6-mil polyethylene vapour barrier. The attic is well vented.	Allow to increase attic insulation to improve efficiencies.	Poor	Recommended		20	25	19	1	2025	1	100%	1	L-SUM	$3,000	$3,000	$300	$300	$600	$3,600
James Whyte Arena	70 Front Street North	B102001	Roof Construction - Structural Frame	The hipped arched roof trusses are constructed with multiple plies of ½" to 1" thick boards with bottom chords constructed as fully laminated type using 12 to 13 plies with visible nailing patterns. Web members are also constructed as fully laminated type using 4 larger wood planks with visible nailing patterns. The top chords of the truss are constructed with two larger wood plank sections separated by a third plank at the converging nodes. Steel plate gussets with both through bolts and spike nail connectors are used at all web connection (panel) points. Threaded rods with nuts and end plates are installed at each of the trusses ridge point.	The trusses are in fair condition overall. Trusses have lateral reinforcement consisting of smaller steel angles with bolted connections. Additional reinforcement (circa 1976) to some of the web members consist of tubular steel (HSS) sections welded to top and bottom gusset plates with steel angle clips.	Allow for continual monitoring only.	Fair	Life Cycle		75	88	74	1	2025	0	100%	0	L-SUM	$15,000	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	B201001	Exterior Closure - Masonry Block	8" wide smooth faced masonry block is installed along the east and west elevations of the arena.	The block is in good condition with the exception of vertical voids at column interfaces.	Allow for short term repairs (remove all loose mortar and provide backer rod and sealant on both interior and exterior sides.	Good	Life Cycle		75	88	74	1	2025	1	100%	1	L-SUM	$18,000	$18,000	$1,800	$1,800	$3,600	$21,600
James Whyte Arena	70 Front Street North	B201001	Exterior Closure - Masonry Block	8" wide architectural block is installed at the north addition. The walls are uninsulated with interior painted finish and no weep holes or base flashing.	The block is in good condition. Moisture within the block is being trapped and affecting the foundation parging. This will affect the long term durability of the wall system.	Allow for long term repairs.	Good	Life Cycle		25	25	22	3	2027	1	100%	1	L-SUM	$25,000	$25,000	$2,500	$2,500	$5,000	$30,000
James Whyte Arena	70 Front Street North	B201001	Exterior Closure - Vinyl Siding	Vinyl siding is installed at the gable end and soffit of the north addition.	The siding is in good condition.	Replace siding in the long term.	Good	Life Cycle		40	25	25	15	2039	1	100%	1	L-SUM	$4,300	$4,300	$430	$430	$860	$5,160
James Whyte Arena	70 Front Street North	B201001	Exterior Closure - Metal Siding	Prefinished metal siding is installed at some of the exposed column ends.	The siding and sealants are in good condition.	Replace siding in the long term.	Good	Life Cycle		40	9	9	31	2055	1	100%	1	L-SUM	$5,000	$5,000	$500	$500	$1,000	$6,000

BUILDING INFORMATION				ASSESSMENT											PRELIMINARY COSTS						OTHER FEES			
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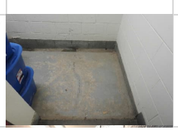
James Whyte Arena	70 Front Street North	B201001	Exterior Closure - Metal Siding	Painted galvanized steel panels are installed at the north and south gables of the arena. The panels are uninsulated.	The siding is in poor condition with notable corrosion at fasteners and worn paint finish. The siding is physical damaged at the north end at grade.	Replace siding in the short term with insulated type.	Poor	Life Cycle		40	88	38	2	2026	2800	100%	2800	SF	$30	$84,000	$8,400	$8,400	$16,800	$100,800
James Whyte Arena	70 Front Street North	B201008	Exterior Soffits	Vinyl clad soffits are installed at the north arena entrance.	The soffit is in good condition with localized damage.	Replace soffits in the long term. Repair soffit immediately under O & M.	Good	Life Cycle		40	25	25	15	2039	1	100%	1	L-SUM	$2,100	$2,100	$210	$210	$420	$2,520
James Whyte Arena	70 Front Street North	B201008	Exterior Soffits	Painted metal soffits are installed at main arena.	The soffits are in poor condition.	Replace soffits in the longer term with roofing.	Poor	Life Cycle		40	50	29	11	2035	1	100%	1	L-SUM	$15,000	$15,000	$1,500	$1,500	$3,000	$18,000
James Whyte Arena	70 Front Street North	B201011	Joint Sealant	Window, door and control sealants are installed.	The sealants are in poor condition overall.	Allow to replace sealants in short term. East and west control joint sealants are carried under B201001 item.	Poor	Necessary		15	20	13	2	2026	1	100%	1	L-SUM	$5,000	$5,000	$500	$500	$1,000	$6,000
James Whyte Arena	70 Front Street North	B202001	Windows	Aluminum framed, double glazed windows are installed at the north addition. The windows are operable awning type with acrylic exterior covering.	The windows are in fair condition. The plexiglass covers have faded/oxidized and the hardware is damage.	Allow to replace windows in the longer term.	Fair	Life Cycle		30	25	25	5	2029	1	100%	1	L-SUM	$6,000	$6,000	$600	$600	$1,200	$7,200
James Whyte Arena	70 Front Street North	B203001	Solid Doors	Wood framed, wood core doors are installed at arena exits.	The doors, frames and associated hardware are in poor condition. 1 door was replaced in 2022.	Replace doors and associated hardware in the short term.	Fair	Life Cycle		25	55	24	1	2025	3	100%	3	EA	$4,000	$12,000	$1,200	$1,200	$2,400	$14,400
James Whyte Arena	70 Front Street North	B203001	Solid Doors	Steel framed, solid panel door at west side of arena was added in 1999.	The door has a deteriorated threshold, corrosion of frames and aging hardware. Clear width is approximately 32". The landing is also undersized.	Replace door and associated hardware in the short term. Allow to widen door for barrier-free use.	Fair	Life Cycle		25	25	24	1	2025	1	100%	1	EA	$12,000	$12,000	$1,200	$1,200	$2,400	$14,400
James Whyte Arena	70 Front Street North	B203001	Solid Doors	Arena double leaf wood door at north end in wood frame.	The doors are in poor condition with corrosion and general wear. Hardware is also in poor condition.	Replace doors in the short term.	Poor	Life Cycle		25	55	24	1	2025	1	100%	1	EA	$8,600	$8,600	$860	$860	$1,720	$10,320
James Whyte Arena	70 Front Street North	B203002	Glazed Doors	The north entrance is accessed by two single leaf, metal clad doors with 1/2-height GWG single glazed vision panels.	The doors are in good condition with minor corrosion and general wear. Hardware is in fair condition and includes one Horton automatic operator. Clear width is 37".	Replace doors in the longer term. Allow to provide proper vision panels with double glazing.	Good	Life Cycle		25	25	20	5	2029	2	100%	2	EA	$12,500	$25,000	$2,500	$2,500	$5,000	$30,000
James Whyte Arena	70 Front Street North	B203008	Exterior Door Hardware	Older exterior door hardware is installed throughout the building including self-closers, cylinders and crash bars.	The hardware is in poor condition. Some of the doors are missing self-closers.	Replace all exterior door hardware. Cost is covered under door components.	Poor	Life Cycle		20	55	20	0	2024	0	100%	0	L-SUM	$18,000	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	B301001	High Slope Roof Coverings	The gambrel and hipped roofs of the arena and addition are protected by standard asphalt shingles.	The shingles are in good condition with no deterioration or water entry reported.	Replace asphalt shingles in the long term.	Good	Life Cycle		20	9	9	11	2035	27000	100%	27000	SF	$8	$216,000	$21,600	$21,600	$43,200	$259,200

BUILDING INFORMATION				ASSESSMENT											PRELIMINARY COSTS						OTHER FEES			
BUILDING NAME	ADDRESS	UNIFORMAT CODE	BUILDING COMPONENT	DESCRIPTION	OBSERVATIONS	RECOMMENDATIONS	CONDITION RATING	CRITICALITY RATING	IMAGE	SERVICE LIFE (Years)	ACTUAL AGE (Years)	OBSERVED AGE (Years)	REMAINING LIFE (Years)	RECOMMENDED YEAR	TOTAL QUANTITY	% OF QUANTITY SCHEDULED	PROJECT QUANTITY	UNIT OF MEASURE	UNIT RATE ($)	NET COST ($)	DESIGN/ENGINEERING FEES (10%)	CONTINGENCY (10%)	TOTAL OTHER FEES	TOTAL COST OF PROJECT
James Whyte Arena	70 Front Street North	C101005	Interior Windows	Wood framed window with GWG wired glass and plexiglass covering are installed at the Press Box.	The windows are in fair condition.	Replacement of interior windows are included in the proposed reconstruction of the Press Box.	Fair	Life Cycle		50	65	46	4	2028	0	100%	0	L-SUM	$0	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	C1010	Partitions - General	Wall partitions are fixed type constructed with masonry block.	The block walls are in good condition with some exceptions (see item B101002).	No repairs carried at this time.	Good	Life Cycle		20	88	19	1	2025	0	100%	0	L-SUM	$2,500	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	C102001	Standard Interior Doors	Metal and wood doors, in metal and wood frames, are used throughout the arena.	The doors are in fair condition with corroding door frames. Doors and frames at service areas are a combination of UL rated and non- UL rated type. All wood framed doors are in poor condition and in need of updating. Some of the doors were replaced in recent years at the south end of the arena (Women's Change Room, Furnace Room, Slop Sink Room). Doors at the north addition change rooms are lower quality (3 hinge type with limited panel reinforcement).	Allow to refurbish steel doors and replace older wood doors.	Fair	Recommended		25	41	23	2	2026	1	100%	1	L-SUM	$26,000	$26,000	$2,600	$2,600	$5,200	$31,200
James Whyte Arena	70 Front Street North	C102001	Standard Interior Doors	Doors to arena from main foyer are metal clad in metal frame with GWG single glazed vision panels.	The doors are in fair condition. Standard push/pull hardware is installed with self-closers. Vision panel configuration and single width (24.5") are non-conforming to barrier-free requirements.	Replace doors in the short term.	Fair	Life Cycle		25	41	23	2	2026	1	100%	1	EA	$18,000	$18,000	$1,800	$1,800	$3,600	$21,600
James Whyte Arena	70 Front Street North	C102007	Interior Door Hardware	Horton automatic door operator is installed at the north foyer to the arena.	The operator is in fair condition.	Replace hardware in the long term.	Fair	Life Cycle		25	25	6	19	2043	1	100%	1	EA	$7,200	$7,200	$720	$720	$1,440	$8,640
James Whyte Arena	70 Front Street North	C102007	Interior Door Hardware	Interior doors are equipped with standard lever and knob type pass sets, LCN self-closers and thumb latch cylinders.	The hardware is in fair condition. Door closer was omitted at the south Slop Sink Room; operation and maintenance item.	Replace hardware in the short term with doors.	Fair	Life Cycle		25	25	23	2	2026	1	100%	1	EA	$10,000	$10,000	$1,000	$1,000	$2,000	$12,000
James Whyte Arena	70 Front Street North	C103001	Compartments, Cubicles And Toilet Partitions	PVC type partitions are installed at the north change rooms and the south public washroom stalls.	The partitions are in good condition.	Allow to replace the partitions in the longer term.	Good	Life Cycle		15	7	7	8	2032	1	100%	1	L-SUM	$13,000	$13,000	$1,300	$1,300	$2,600	$15,600
James Whyte Arena	70 Front Street North	C103002	Toilet Accessories	Each washroom has a variety of soap dispensers, paper towel dispensers, toilet paper towel dispensers, grab bars, mirrors, etc. Newer World Dryer electric hand dryers are installed at the renovated public washrooms.	The accessories are in fair condition.	Allow to replace accessories in the short term.	Fair	Necessary		15	11	13	2	2026	1	100%	1	L-SUM	$5,000	$5,000	$500	$500	$1,000	$6,000
James Whyte Arena	70 Front Street North	C103004	Identifying Devices	Wayfinding signage is limited.	The signage is in need of updating.	Allow to replace accessories in the short term.	Fair	Necessary		20	24	19	1	2025	1	100%	1	L-SUM	$4,000	$4,000	$400	$400	$800	$4,800
James Whyte Arena	70 Front Street North	C103011	Firestopping Penetrations	Firestopping materials at Mechanical Rooms.	Voids at penetrations of block walls.	Allow for short term repairs.	Poor	Necessary		30	88	30	0	2024	1	100%	1	L-SUM	$6,000	$6,000	$600	$600	$1,200	$7,200
James Whyte Arena	70 Front Street North	C30	Interior Finishes	The north change room showers are constructed with poured concrete floors with painted finish, painted gypsum board ceilings and painted masonry block walls.	The wall and ceiling finishes are in fair condition. The floor finish is in poor condition.	Allow to update finishes in the short term. Allow to use durable, non-slip urethane floor finishes.	Poor	Necessary		5	14	4	1	2025	1	100%	1	L-SUM	$15,000	$15,000	$1,500	$1,500	$3,000	$18,000

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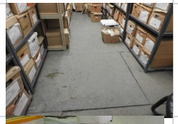
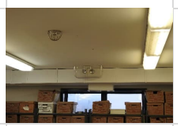
James Whyte Arena	70 Front Street North	C30	Interior Finishes	The south end of the arena (Refrigeration Room, Canteen, Referee's Room, Change Room 6, Main Entrance, Women's Change Room and southeast Mechanical Room) are finished with painted concrete floors with loose rubber sheets, painted transite (asbestos) board ceilings, painted plaster/wood framed walls and painted block walls. The upper area is not used (originally used as a Change Room with separate forced air ducting and registers, insulated walls with painted plywood cover and partially insulated roof rafters with painted plywood cover.	All finishes at this end of the arena are in fair-to-poor condition. The floor finishes are in poor condition especially at shower areas. Integrity of fire separation between the James Whyte Arena and the south common foyer requires improvement (omission of firestopping). Heat loss and exfiltration are also a concern due to the lack of insulation and vapour/air barrier components.	Allow to update finishes in the short term. Allow to use durable, non-slip urethane floor finishes in shower areas. Allow for full retrofit of south end of arena to rectify deficiencies (finishes, thermal and air leakage).	Poor	Necessary		25	74	24	1	2025	1	100%	1	L-SUM	$95,000	$95,000	$9,500	$9,500	$19,000	$114,000
James Whyte Arena	70 Front Street North	C301005	Painting to Walls	Block wall surfaces are painted at the various user and service rooms.	The painted surfaces are in fair condition with localized wear.	Allow for re-painting of the surfaces in the short term.	Fair	Life Cycle		4	2	2	2	2026	1	100%	1	L-SUM	$8,000	$8,000	$800	$800	$1,600	$9,600
James Whyte Arena	70 Front Street North	C301005	Painting to Walls	Block wall surfaces are painted throughout the arena bowl. Portions of the ceiling are also painted as is the main structure.	The painted surfaces are in fair condition notable wear.	Allow for re-painting of the surfaces in the short term. This will also improve illumination.	Very Good	Life Cycle		7	20	6	1	2025	1	100%	1	L-SUM	$30,000	$30,000	$3,000	$3,000	$6,000	$36,000
James Whyte Arena	70 Front Street North	C302099	Other Flooring And Floor Finishes	Sectional rubber floor mats are installed throughout the north change room, hall and vestibule. The floor mats are unadhered to the concrete slab-on-grade.	The rubber flooring is in poor condition with worn areas. Most flooring was removed in recent years. The flooring is at end of useful service life.	Allow to replace flooring in the short term with adhered type.	Fair	Life Cycle		15	20	14	1	2025	3300	100%	3300	SF	$19	$62,700	$6,270	$6,270	$12,540	$75,240
James Whyte Arena	70 Front Street North	C302099	Other Flooring And Floor Finishes	Newer athletic rubber flooring is installed at the south entrance from foyer and portion of apron.	The rubber flooring is in good condition.	Allow to replace flooring in the longer term.	Good	Life Cycle		15	8	8	7	2031	950	100%	950	SF	$19	$18,050	$1,805	$1,805	$3,610	$21,660
James Whyte Arena	70 Front Street North	C3030	Ceiling Finishes	Painted ceiling finishes are covered under C301005 item above.	The ceiling system is in need of updating due to physical damage.	Allow to replace ceiling system in the long term.	Fair	Life Cycle		10	15	10	0	2024	0	100%	0	L-SUM	$17,000	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	C303003	Gypsum Wallboard Ceiling Finishes	Gypsum wallboard, with and without texture, are installed at the lobby and change rooms of the north addition.	The gypsum board ceilings are in good condition with minor physical damage.	Ceiling board replacement are not anticipated to occur. Localized repairs are considered maintenance.	Good	Life Cycle		50	24	24	26	2050	0	100%	0	L-SUM	$0	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	D101002	Passenger Elevators	Building has no elevators or lifts.		Allow to add an elevator in the short term.	Poor	Necessary		25	0	22	3	2027	1	100%	1	L-SUM	$275,000	$275,000	$27,500	$27,500	$55,000	$330,000
James Whyte Arena	70 Front Street North	D2010	Plumbing Fixtures	The north change rooms are equipped with single American Standard and Gerber low-flow (6-LPF) floor mounted water closets with flush tanks, American Standard vitreous clay wall-hung vanities and dual head gang showers with residential type heads and single ball valve controls. The water closets were replaced in recent years while the vanities and showers are original. Similar vintage fixtures are installed at the Women's Change Room at south end of arena.	The fixtures are in fair-to-good condition.	Replace fixtures in longer term.	Fair	Life Cycle		15	11	11	4	2028	14	100%	14	EA	$1,500	$21,000	$2,100	$2,100	$4,200	$25,200
James Whyte Arena	70 Front Street North	D2010	Plumbing Fixtures	The northeast Referee's Room has been abandoned. Aging fixtures are installed.	The fixtures are in poor condition.	Allow to remove and cap all plumbing fixtures in the short term.	Poor	Life Cycle		15	41	14	1	2025	1	100%	1	EA	$2,000	$2,000	$200	$200	$400	$2,400

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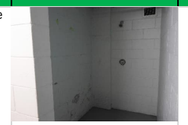
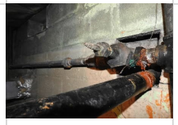
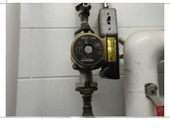
James Whyte Arena	70 Front Street North	D2010	Plumbing Fixtures	The south Referee's Room and Change Room 6 are equipped with older shower stalls with exposed domestic water piping, old floor mounted water closets with flush tanks and wall hung vanities.	The fixtures are in fair-to-poor condition.	Replace fixtures in the short term. Includes refinishing all showers.	Poor	Life Cycle		15	25	14	1	2025	1	100%	1	EA	$25,000	$25,000	$2,500	$2,500	$5,000	$30,000
James Whyte Arena	70 Front Street North	D2010	Plumbing Fixtures	PVC slop sinks and industrial faucets are installed at the two Janitor's Rooms.	The sinks are in good condition. The faucets have vacuum breaker devices as required.	Replace fixture in the long term.	Fair	Life Cycle		25	15	15	10	2034	2	100%	2	EA	$4,500	$9,000	$900	$900	$1,800	$10,800
James Whyte Arena	70 Front Street North	D201099	Emergency Fixtures	Eyewash stations are omitted at the two Janitor Rooms.	The omission is contrary to OHSA and ANSI Z358.1-2004 Standards.	Allow to add eyewash stations to the Janitor Rooms in immediate term.	Poor	Necessary		15	24	15	0	2024	2	100%	2	EA	$7,000	$14,000	$1,400	$1,400	$2,800	$16,800
James Whyte Arena	70 Front Street North	D202001	Pipes And Fittings	There are two domestic water supplies from the city, from the south and north ends of the arena in the Mechanical Rooms.	The north entrance is newer 1" diameter HDPE with ball valve to soldered copper distribution piping. The water service has an isolation ball valve, but no water meter, bypass or backflow preventer. The service is in fair condition.	Allow to update service in the long term.	Fair	Life Cycle		25	12	12	13	2037	1	100%	1	L-SUM	$10,000	$10,000	$1,000	$1,000	$2,000	$12,000
James Whyte Arena	70 Front Street North	D202001	Pipes And Fittings	There are two domestic water supplies from the city, from the south and north ends of the arena in the Mechanical Rooms.	The south entrance is original 1.5" diameter galvanized steel with ball valve to threaded galvanized steel piping. The water service has an isolation ball valve, but no water meter, bypass or backflow preventer. Copper sections are also installed but with no dielectric fittings. The service entrance is in poor condition.	Allow to update service in the long term.	Poor	Life Cycle		25	74	24	1	2025	1	100%	1	L-SUM	$10,000	$10,000	$1,000	$1,000	$2,000	$12,000
James Whyte Arena	70 Front Street North	D202001	Pipes And Fittings	Domestic water piping is installed and is a combination of galvanized steel screw threaded type and soldered copper. Ball and stem valves are installed.	The domestic water service is in fair condition but has reached the end of useful service life in most areas. Domestic cold water piping in the south Mechanical Room shows multiple signs of leakage at the unions and joints; active leakage not noted.	Allow for short term replacements of the domestic water system. Allow to add recirculation systems on hot water systems.	Fair	Necessary		50	88	49	1	2025	1	50%	1	L-SUM	$40,000	$20,000	$2,000	$2,000	$4,000	$24,000
James Whyte Arena	70 Front Street North	D202003	Domestic Water Equipment	Domestic hot water for the north change rooms is by an A.O. Smith MasterFit (m# BTR 500AL00N0000, s# LC000920633) gas-fired hot water heater. The heater is rated at 500-MBH input with 85-gallon capacity. Water is stored at 140F. A recirculation pump (Armstrong ASTRO 230SS) and a thermostatic mixing valve (Symmons) provides 120F domestic hot water.	The heater is in fair condition. The system does not use a hot water recirculation loop.	Allow to replace heater in the short term along with the provision of recirculation loop and expansion tank.	Fair	Life Cycle		20	24	19	1	2025	1	100%	1	EA	$21,000	$21,000	$2,100	$2,100	$4,200	$25,200
James Whyte Arena	70 Front Street North	D202003	Domestic Water Equipment	The south end of the building has a gas-fired domestic hot water heater and storage tank. The A.O. Smith (m# BTRC 120116, s#1650104262206) is rated at 120-MBH input and 71-US Gallons. The storage tank is an A.O. Smith (m# TJV-120M 000, s#1646103971514) has a 119 US gallon capacity.	The heater and storage tank are in good condition.	Allow to replace valve in the long term.	Good	Life Cycle		20	8	8	12	2036	1	100%	1	EA	$16,500	$16,500	$1,650	$1,650	$3,300	$19,800
James Whyte Arena	70 Front Street North	D202003	Domestic Water Equipment	Fractional horsepower circulating pumps are installed on the various domestic water heating systems.	The pumps are a combination of newer and older.	Replace pumps under O & M only as needed.	Fair	Life Cycle		20	19	19	1	2025	0	100%	0	EA	$2,000	$0	$0	$0	$0	$0

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James Whyte Arena	70 Front Street North	D202003	Domestic Water Equipment	New 2019 Symmons thermostatic control valve is installed for the north addition change rooms. The Women's Change Room shower faucet is a Symmons thermostatic type.	The valves are in fair-to-good condition. The south end areas require improvement in water temperature control.	Allow to add/modify design of thermostatic controls in immediate term.	Fair	Life Cycle		20	30	20	0	2024	1	100%	1	EA	$6,000	$6,000	$600	$600	$1,200	$7,200
James Whyte Arena	70 Front Street North	D202004	Insulation And Identification	Domestic water piping insulation is formed 1/2" fiberglass with PVC service jacket at newer installations. Older piping and fittings throughout the building are uninsulated.	The pipe insulation is in good condition where installed but is missing directional and identification labeling.	Allow to refurbish existing insulations and add insulations to bare piping and fittings in the short term.	Fair	Life Cycle		20	25	19	1	2025	1	100%	1	L-SUM	$6,700	$6,700	$670	$670	$1,340	$8,040
James Whyte Arena	70 Front Street North	D2030	Sanitary Waste	Sanitary waste systems is comprised of ABS, copper and cast iron piping, venting and fittings and includes floor drains.	The sanitary waste system is in fair condition with no known concerns at this time. Some traps are dry on older sections and some stacks are missing cleanouts. A floor drain in one of the south change rooms was recessed below the finished floor posing a trip hazard.	Replace components in the short term.	Fair	Life Cycle		35	83	33	2	2026	1	100%	1	L-SUM	$55,000	$55,000	$5,500	$5,500	$11,000	$66,000
James Whyte Arena	70 Front Street North	D204001	Rain Water Drainage - Pipe And Fittings	The sloped roof over the arena is equipped with 5" aluminum eavestroughs and 4" to 5" diameter PVC collection piping and fittings. The piping is supported on steel brackets affixed to the exterior walls with steel straps affixed to alternating supports. The piping is discharged to the east and west main entrance areas. The assembly was installed in 2017. The sloped roof over the arena is equipped with 5" aluminum eavestroughs and 4" to 5" diameter PVC collection piping and fittings. The piping is supported on steel brackets affixed to the exterior walls with steel straps affixed to alternating supports. The piping is discharged to the east and west main entrance areas.	The storm water drainage piping and fittings of the arena are in good condition. Corrosion has developed on all pipe strapping. The system does not utilize heat tracing; drainage in winter months is a concern. Current discharge points can cause safety issues during winter months as well due to freezing.	Allow to retrofit the collection storm water systems in the short term with heat tracing. Future replacement of the system (with roof shingle replacement) should utilize an oversized metal gutter, heat tracing, with discharge points directly to the storm water manhole(s). Allow to remove the original corroded soffit and fascia board when replacing shingles in the long term also.	Fair	Life Cycle		50	6	39	11	2035	1	100%	1	L-SUM	$26,000	$26,000	$2,600	$2,600	$5,200	$31,200
James Whyte Arena	70 Front Street North	D204001	Rain Water Drainage - Pipe And Fittings	The sloped roof over the arena is equipped with 5" aluminum eavestroughs and 4" to 5" diameter PVC collection piping and fittings. The piping is supported on steel brackets affixed to the exterior walls with steel straps affixed to alternating supports. The piping is discharged to the east and west main entrance areas. The assembly was installed in 2017. The sloped roof over the arena is equipped with 5" aluminum eavestroughs and 4" to 5" diameter PVC collection piping and fittings. The piping is supported on steel brackets affixed to the exterior walls with steel straps affixed to alternating supports. The piping is discharged to the east and west main entrance areas.	The storm water drainage piping and fittings of the arena are in good condition. Corrosion has developed on all pipe strapping. The system does not utilize heat tracing; drainage in winter months is a concern. Current discharge points can cause safety issues during winter months as well due to freezing.	Allow to retrofit the collection storm water systems in the short term with heat tracing. Readjust to ensure not leakage at spouts.	Fair	Life Cycle		15	6	14	1	2025	1	100%	1	L-SUM	$7,000	$7,000	$700	$700	$1,400	$8,400

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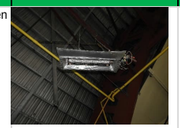
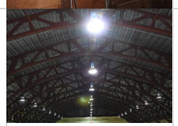
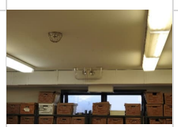
James Whyte Arena	70 Front Street North	D302003	Furnaces	York Diamond 90 (m# P3URC16N07501C, s# (8) ELM832700 and ELHM812847) gas-fired forced air furnaces are located at the North Furnace Room. The furnaces are rated at 80-MBH input and 76-MBH output (95% efficiency) and serve the north change rooms and service areas.	The 1999 high-efficiency furnaces are in fair condition. The furnaces have a ducted intake fresh air louver that is attached to the return air duct.	Allow to replace furnaces in short term.	Fair	Life Cycle		20	25	19	1	2025	2	100%	2	EA	$15,000	$30,000	$3,000	$3,000	$6,000	$36,000
James Whyte Arena	70 Front Street North	D302003	Furnaces	A gas-fired forced air furnace is installed at the southeast Mechanical Room. The furnace serves the south change rooms and storage areas. The Nordyne (m# KG6RC 080C-12B, s# KGA021204862) has an input of 80-MBH and output of 72-MBH (90% efficiency).	The mid-efficiency furnace is in fair condition. The fresh air vent to the return air plenum was disconnected; contrary to OBC 6.2.2.1.	Allow to replace furnace in short term. Allow to reinstate fresh air introduction under operation and maintenance.	Fair	Life Cycle		20	22	19	1	2025	1	100%	1	EA	$15,000	$15,000	$1,500	$1,500	$3,000	$18,000
James Whyte Arena	70 Front Street North	D304001	Air Distribution, Heating & Cooling	Galvanized ductwork, prefinished grills and dampers are used throughout for exhaust, supply and return air systems.	All components are in fair condition. The ducting and grilles are in need of cleaning. Several penetrations have no fire dampers.	Allow for replacements/refurbishment in the short term with replacement of furnaces, make-up air unit and exhaust fans. Allow also to verify condition of fire dampers through rated floors and walls.	Fair	Necessary		40	55	39	1	2025	1	100%	1	L-SUM	$20,000	$20,000	$2,000	$2,000	$4,000	$24,000
James Whyte Arena	70 Front Street North	D304001	Air Distribution, Heating & Cooling	Painted galvanized ductwork with prefinished grills are installed on the supply and return air runs for the north addition.	All components are in good condition. The ducting is installed in a reverse fashion with return air over the exterior walls and supply air at the internal walls of the change rooms. The installation is non-conforming and provides inadequate air circulation. Supply and exhaust air diffusers at the north addition barrier-free washroom are too close. Similar situation exists at the Women's Change Room/Referees Room on supply and return air locations.	Allow for retrofitting the existing ductwork installations at the north addition.	Fair	Necessary		40	25	40	0	2024	1	100%	1	L-SUM	$25,000	$25,000	$2,500	$2,500	$5,000	$30,000
James Whyte Arena	70 Front Street North	D304007	Exhaust Systems	Older downblast spun aluminum exhaust fan is installed at the north change rooms.	The fan is in fair condition; data label is illegible. The fan is operated via an electronic timer. The insulated duct extends vertically through the attic. The exterior shroud has extensive corrosion.	Allow to replace exhaust fan in short term.	Fair	Life Cycle		20	25	19	1	2025	1	100%	1	L-SUM	$4,200	$4,200	$420	$420	$840	$5,040
James Whyte Arena	70 Front Street North	D304099	Other Distribution Systems	Passed condensation and mould issues were reported in the north addition. As a result, wall openings were made at the base of the exterior walls to allow increased ventilation.	The venting method is allowing for uncontrolled and untempered air flow into the change rooms. The vents are also not sealed at the exterior louvers.	It is recommended that the vents be sealed up and that controlled mechanical ventilation means be introduced (e.g. dehumidification units, heat recovery ventilators and/or operate furnace fans continuously and/or under dehumidistat controls). This should be completed in conjunction with the improvement of exterior wall and ceiling insulation of the north addition building.	Poor	Recommended		25	25	23	2	2026	1	100%	1	L-SUM	$24,000	$24,000	$2,400	$2,400	$4,800	$28,800

BUILDING INFORMATION				ASSESSMENT											PRELIMINARY COSTS						OTHER FEES			
BUILDING NAME	ADDRESS	UNIFORMAT CODE	BUILDING COMPONENT	DESCRIPTION	OBSERVATIONS	RECOMMENDATIONS	CONDITION RATING	CRITICALITY RATING	IMAGE	SERVICE LIFE (Years)	ACTUAL AGE (Years)	OBSERVED AGE (Years)	REMAINING LIFE (Years)	RECOMMENDED YEAR	TOTAL QUANTITY	% OF QUANTITY SCHEDULED	PROJECT QUANTITY	UNIT OF MEASURE	UNIT RATE ($)	NET COST ($)	DESIGN/ENGINEERING FEES (10%)	CONTINGENCY (10%)	TOTAL OTHER FEES	TOTAL COST OF PROJECT
James Whyte Arena	70 Front Street North	D30502	Unit Heaters	Schwank (m# 2002, s# 597) 30-MBH input infrared gas-fired heaters are suspended at the south end of the arena over the bleachers. Similar heaters along the east side of the arena have been abandoned.	The heaters are in fair condition with notable corrosion on black steel piping and fittings. Wiring connections are not neatly tied or placed in junction box. Fixtures are vented into arena area which is acceptable where proper venting is provided as per CSA-B149.1 and OBC 6.2.2.4. Venting of arena is lacking and there are no gas detection systems in place.	Replace heaters in the short term with efficient type vented to exterior at south end of arena. Remove abandoned heaters and piping in short term.	Fair	Recommended		25	22	24	1	2025	1	100%	1	L-SUM	$35,000	$35,000	$3,500	$3,500	$7,000	$42,000
James Whyte Arena	70 Front Street North	D401001	Sprinklers And Releasing Devices	The building (arena and Refrigeration Room(s)) is partially sprinklered via a dry system. The 6" fire line enters the Refrigeration Room and is connected to a 6" diameter Grimes Model B dry valve, Potter PS10-2 pressure switch, Carnes alarm pressure switch, LynCar pressure gauges, water motor gong and Siamese connection. The black steel threaded piping is painted. The sprinkler system is maintained by Tyco Integrated Fire & Security (1-866-291-3568).	The sprinkler system is in fair condition and was installed in 1973. Piping within the arena at underside of roof shows signs of corrosion with most heads covered in significant dust. Note: The adjacent arena and service areas are not sprinklered and should not be used for trade shows, etc. in accordance to the OBC. A backflow preventer is not installed on the fire line which is in contravention of the OBC. Branch line in change room #6 is poorly supported.	Allow to replace the sprinkler system in the short term based on age and overall condition. Allow to extend coverage to remaining areas of the James Whyte Arena.	Fair	Life Cycle		40	51	37	3	2027	1	100%	1	L-SUM	$125,000	$125,000	$12,500	$12,500	$25,000	$150,000
James Whyte Arena	70 Front Street North	D401001	Sprinklers And Releasing Devices	The dry sprinkler system includes a Powermate (m# PPA1982054, s# L12410534A) portable compressor rated at 120-V, 15-A, 1-P with 20 US Gal capacity.	The compressor is in good condition but does not comply to the requirements of NFPA 13 and Electrical Code: Must be tank or base mounted with permanent electrical connection on a separate electrical circuit.	Allow to replace compressor in the short term with permanent type and GFI protection.	Fair	Life Cycle		18	12	15	3	2027	1	100%	1	L-SUM	$9,000	$9,000	$900	$900	$1,800	$10,800
James Whyte Arena	70 Front Street North	D402001	Standpipe Equipment & Piping	The building has no standpipe system.		No allowances carried.				35	88	34	1	2025	0	100%	0	L-SUM	$30,000	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	D403001	Fire Extinguishing Devices	Newer and older ABC type fire extinguishers are located throughout the building. The extinguishers are serviced as required by Sentinel Systems (289-783-2895).	The equipment is in good condition. Older extinguishers should be updated. Some extinguishers were not mounted; operation and maintenance item.	Replace components at the end of their expected life cycle.	Good	Life Cycle		15	6	6	9	2033	1	100%	1	L-SUM	$1,200	$1,200	$120	$120	$240	$1,440
James Whyte Arena	70 Front Street North	D501003	Main Switchboards	The electrical service is fed from overhead utility pole and down to a pad mount transformer located at the east arena entrance. The incoming service is run underground from the transformer to the Refrigeration Room. The newer Siemens main switch is rated at 600-A, 575-V, 3-P, 4-W.	The main switch, replaced in recent years, is in good condition.	Allow to replace the main switch in the long term.	Very Good	Life Cycle		40	15	15	25	2049	1	100%	1	EA	$11,000	$11,000	$1,100	$1,100	$2,200	$13,200
James Whyte Arena	70 Front Street North	D501004	Interior Distribution Transformers	Newer Square D 75-kVA , 600-V to 208Y/120-V is floor mounted at the Northwest Electrical Room.	The transformer is in good condition.	Replace transformer in the long term.	Good	Life Cycle		40	24	24	16	2040	1	100%	1	EA	$8,000	$8,000	$800	$800	$1,600	$9,600
James Whyte Arena	70 Front Street North	D501005	Distribution Panels & Breakers	Siemens (Type S3, cat# S3C72ML225ATS) panelboard "LP-R" is rated at 250-A (with 125-A main lug) 120/208-V, 3-P, 4-W, 72-circuits and is located in the Northwest Electrical Room. Serves both power and lighting (arena) requirements of common and service areas.	Installed in 2000, the panelboard is in good condition with some missing circuit closures.	Replace panel board in the long term.	Good	Life Cycle		40	24	24	16	2040	1	100%	1	EA	$7,500	$7,500	$750	$750	$1,500	$9,000

BUILDING INFORMATION				ASSESSMENT											PRELIMINARY COSTS						OTHER FEES			TOTAL COST OF PROJECT
BUILDING NAME	ADDRESS	UNIFORMAT CODE	BUILDING COMPONENT	DESCRIPTION	OBSERVATIONS	RECOMMENDATIONS	CONDITION RATING	CRITICALITY RATING	IMAGE	SERVICE LIFE (Years)	ACTUAL AGE (Years)	OBSERVED AGE (Years)	REMAINING LIFE (Years)	RECOMMENDED YEAR	TOTAL QUANTITY	% OF QUANTITY SCHEDULED	PROJECT QUANTITY	UNIT OF MEASURE	UNIT RATE ($)	NET COST ($)	DESIGN/ENGINEERING FEES (10%)	CONTINGENCY (10%)	TOTAL OTHER FEES	
James Whyte Arena	70 Front Street North	D501005	Distribution Panels & Breakers	Siemens (Type S1, cat# S1A18ML125ATS) panelboard "LP-A" is rated at 250-A (with 125-A main lug) 120/240-V, 1-P, 3-W, 18-circuits and is located in the Southeast Mechanical Room. Serves both power and lighting requirements of common and service areas.	Installed in 2000, the panelboard is in fair condition with notable corrosion at breakers.	Replace panel board in the longer term.	Good	Life Cycle		40	24	24	16	2040	1	100%	1	EA	$4,500	$4,500	$450	$450	$900	$5,400
James Whyte Arena	70 Front Street North	D501005	Distribution Panels & Breakers	Older Federal Pacific (cat# NALP 42-4L) panelboard "A" is rated at 250-A, 240-V, 3-P, 4-W, 42-circuit and located in the Refrigeration Room. Serves both power and lighting requirements of common and service areas.	The panelboard is in fair condition and at end of service life.	Replace panel board in the short term.	Fair	Life Cycle		40	41	39	1	2025	1	100%	1	EA	$5,500	$5,500	$550	$550	$1,100	$6,600
James Whyte Arena	70 Front Street North	D501006	Enclosed Circuit Breakers	Older circuit breakers and splitter at Refrigeration Room.	The disconnects are in fair condition and at end of service life.	Replace components in longer term.	Fair	Life Cycle		30	41	24	6	2030	1	100%	1	L-SUM	$15,000	$15,000	$1,500	$1,500	$3,000	$18,000
James Whyte Arena	70 Front Street North	D502001	Branch Wiring	Conventional three-prong receptacles and toggle light switches are installed. GFI receptacles are not installed in wet/damp areas as required.	The receptacles and switches are in fair condition. Omission of identification labels for electrical switches and timers in the Janitor's Rooms, Electrical Rooms and various service rooms.	Allow for the short term replacement of receptacles and switches. Provide GFI type in all wet/damp areas.	Fair	Recommended		25	41	24	1	2025	1	100%	1	L-SUM	$9,500	$9,500	$950	$950	$1,900	$11,400
James Whyte Arena	70 Front Street North	D502001	Branch Wiring	Older branch wiring is coreflex, armoured cable, and NMSC in conduit. Older knob-and-tube wiring is used for the arena lighting.	All components are in need of updating. Remove abandoned wiring where found.	Allow for the short term replacement of localized wiring. Wiring for lighting is carried under Section D502002.	Fair	Necessary		40	88	39	1	2025	1	100%	1	L-SUM	$20,000	$20,000	$2,000	$2,000	$4,000	$24,000
James Whyte Arena	70 Front Street North	D502002	Lighting Equipment	The arena is illuminated by means of 400-W metal halide high bay fixtures. The fixtures are manufactured by Canadian General Electric (cat# 24762 G1) circa 1975 and installed in 1983 (from another arena facility). The fixtures are installed on the original knob and tube wiring and support tie rods. Localized bulb replacements, recently installed, are protected with a safety coating.	The fixtures are in poor condition but operable. Reflectors are physically damaged. The primary and secondary support components are corroded and the secondary method is affixed to the primary support. The fixtures and supports are in need of updating. This also includes full electrical replacement.	Replace fixtures in immediate term due to age, type and wiring conditions. Allow to replace with LED type.	Poor	Life Cycle		20	49	20	0	2024	33	100%	33	EA	$1,400	$46,200	$4,620	$4,620	$9,240	$55,440
James Whyte Arena	70 Front Street North	D502002	Lighting Equipment	Dual T8 fluorescent lamped fixtures with acrylic lenses are installed in the change rooms and service rooms. T12 fluorescent fixtures were noted at the Press Box. Many of the fluorescent fixtures are missing lenses or guards, e.g. Olympia Room. Incandescent fixtures were also noted at some of the south service and user rooms.	The fixtures are in fair condition. Lighting levels at the south foyer entrance is only 25-lux (no light fixture installed).	Replace fixtures in the short term with LED type. Increase illumination levels as needed.	Fair	Life Cycle		20	25	19	1	2025	1	100%	1	EA	$27,000	$27,000	$2,700	$2,700	$5,400	$32,400
James Whyte Arena	70 Front Street North	D5030	Communications and Security	The building has basic telecommunications provisions.	The telecommunications system is in fair condition. There are no LAN Rooms at this facility.	Allow for short term updating of communication systems (software and hardware) in conjunction with electrical distribution components.	Fair	Life Cycle		15	25	14	1	2025	1	100%	1	L-SUM	$7,500	$7,500	$750	$750	$1,500	$9,000

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James Whyte Arena	70 Front Street North	D503001	Fire Alarm Systems	The building is equipped with a newer Mircom fire alarm panel. The single-stage, supervised fire alarm system includes automatic detection, zone indication, manual activation and sprinkler flow detection. Panel is located in west entrance of the main foyer. Devices include Edwards 6100D electric bells, Thermoflex CR135 and Edwards 281C heat detectors, Edwards 6250C smoke detectors and Edwards 270SPO manual pull stations. DSC Power Series control panel and security alarm are installed at the Refrigeration Room. The nine (9) zones include Old Arena, W/S Attic Compressor, Main Office/Lobby, East Arena, West Arena, Old Arena Dry Flow, Old Arena Dry Flow, Old Arena Low Pressure, Elevator Shaft.	The system is in good condition. Devices are typically older. The fire alarm is serviced by Aatel Communications (1-800-695-2883) and monitored by Fire Monitoring of Canada (1-800-563-3840). Testing and service reports were not reviewed.	Allow to replace fire panel in longer term. Update devices as needed under O & M.	Good	Life Cycle		25	4	4	21	2045	1	100%	1	EA	$25,000	$25,000	$2,500	$2,500	$5,000	$30,000
James Whyte Arena	70 Front Street North	D503004	Public Address Systems	The building has a basic public address system.		No allowances carried.				20	18	18	2	2026	0	100%	0	L-SUM	$15,000	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	D503008	Security Systems	The building has a CCTV system.		No allowances carried.				15	8	8	7	2031	0	100%	0	L-SUM	$15,000	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	D503008	Security Systems	The building is not equipped with a separate with an intrusion type security system (control panel, keypad, sensors/detectors).		Allow to add an intrusion type security system in the short term.	Fair	Recommended		12	15	11	1	2025	1	100%	1	L-SUM	$6,200	$6,200	$620	$620	$1,240	$7,440
James Whyte Arena	70 Front Street North	D503099	Other Communications & Alarm Systems	The arena is ventilated by seven industrial type non-modulated vents located at the roof ridge, a fractional horsepower exhaust fan at the north gable end that is interconnected to the fresh air intake louver at the south end (with modulating damper). The fan is activated manually.	The fan and intake are operational but undersized. The seven original ridge roof vents are corroded and are not weathertight.	Allow for provision of a gas detection system and interconnect with new fans and dampers in short term.	Poor	Necessary		18	41	18	0	2024	1	100%	1	L-SUM	$36,000	$36,000	$3,600	$3,600	$7,200	$43,200
James Whyte Arena	70 Front Street North	D509002	Emergency Lighting & Power	Older exit signs with acrylic lenses and metal trim enclosures are provided.	The exit signage is in poor condition but functional.	Replace exit signage with green "running man" LED type in the short term.	Fair	Necessary		20	40	19	1	2025	6	100%	6	EA	$950	$5,700	$570	$570	$1,140	$6,840
James Whyte Arena	70 Front Street North	D509002	Emergency Lighting & Power	The building is not equipped with a back-up generator.	Although not required, it would be beneficial to have a back-up generator for this building.	Allow to provide a back-up generator in the long term.	Fair	Recommended		25	88	19	6	2030	1	100%	1	EA	$175,000	$175,000	$17,500	$17,500	$35,000	$210,000
James Whyte Arena	70 Front Street North	D509002	Emergency Lighting & Power	Emergency lighting is provided by battery operated fixtures (13) with fixed and remote heads. Fixtures are a combination of newer and older type with 30-minute duration. Some of the exit signs are combination type (exit/emergency light).	The fixtures are dated and require replacement. One unit at the arena was not functioning and another unit has a damaged cover. Coverage is also inadequate based on number of fixtures. Wire mesh covers are restricting illumination.	Allow to replace fixtures and remote heads in the short term. Additional fixtures are also needed.	Fair	Recommended		25	30	24	1	2025	1	100%	1	L-SUM	$12,000	$12,000	$1,200	$1,200	$2,400	$14,400
James Whyte Arena	70 Front Street North	D509005	Electric Heating	Ouellet wall mounted force flow electric heaters are installed at the north end addition Mechanical Room and vestibule.	The force flow heaters are in fair condition with localized corrosion. Heaters are controlled manually.	Allow to replace heaters in the long term.	Fair	Life Cycle		30	25	25	5	2029	2	100%	2	EA	$1,400	$2,800	$280	$280	$560	$3,360
James Whyte Arena	70 Front Street North	E109003	Waste Handling Equipment	The building has no waste handling equipment.		No allowances carried.				25	51	9	1	2025	0	100%	0	L-SUM	$0	$0	$0	$0	$0	$0

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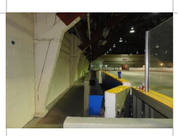
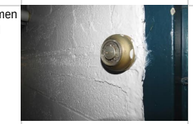
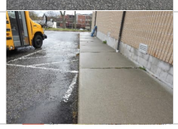
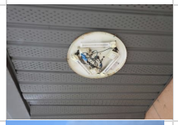
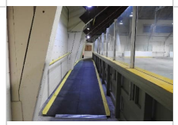
James Whyte Arena	70 Front Street North	E109002	Food Service Equipment	Garland deep fryer and associated kitchen equipment and counters.	The components are in fair condition but require updating.	Excluded item.	Fair	Life Cycle		25	28	23	2	2026	0	100%	0	L-SUM	$30,000	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	E109004	Residential Equipment			Excluded item.	Fair	Life Cycle		10	5	5	5	2029	0	100%	0	L-SUM	$1,000	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	E109007	Athletic, Recreational and Therapeutic Equipment	Old PVC or wood clad, steel framed benches are installed at players and timekeepers areas.	The benches are in fair condition but have surpassed useful service life. The configurations are not in conformance to ASTM F1703-13 Standard Guide for Skating and Ice Hockey Playing Facilities, ASTM F2442-07 Standard Guide for Layout of Ice Arena and ORFA Guidelines for Arena Dasherboards & Shielding Systems.	Allow to replace benches in the short term.	Fair	Necessary		25	28	22	3	2027	1	100%	1	L-SUM	$5,500	$5,500	$550	$550	$1,100	$6,600
James Whyte Arena	70 Front Street North	E109007	Athletic, Recreational and Therapeutic Equipment	Nevco (m# 4007, s# 42,139) 4600-W, 20-A, 120-V score clock is installed at north end of arena.	The clock is in fair condition but has exceeded service life; installed in 1986.	Replace clock in the short term with efficient LED type.	Fair	Life Cycle		25	38	23	2	2026	1	100%	1	L-SUM	$16,000	$16,000	$1,600	$1,600	$3,200	$19,200
James Whyte Arena	70 Front Street North	E201003	Seating (Fixed)	Fixed wood or PVC benching is installed in the Change Rooms.	The benching is in good condition.	Allow for long term replacement of the benching.	Good	Life Cycle		40	51	32	8	2032	1	100%	1	L-SUM	$12,000	$12,000	$1,200	$1,200	$2,400	$14,400
James Whyte Arena	70 Front Street North	E201003	Seating (Fixed)	Bleacher seating is provided by two steel framed portable bleachers at the south end of the arena.	The bleacher seating provided is non-conforming to OBC requirements with discontinuous handrails, short guards, open guards and non-uniform riser heights.	Refurbish bleachers in short term.	Fair	Life Cycle		50	45	49	1	2025	1	100%	1	L-SUM	$5,000	$5,000	$500	$500	$1,000	$6,000
James Whyte Arena	70 Front Street North	E201002	Window Treatments	The building has no window treatments.		No allowances carried.				20	0	0	20	2044	0	100%	0	L-SUM	$0	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	E2020	Moveable Furnishings	Furniture is limited to Office 122 desk and chair.	The furnishings are in fair condition.	Excluded item.	Fair	Necessary		20	18	19	1	2025	0	100%	0	L-SUM	$2,000	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	F104005	Ice Rinks	Refrigerated concrete floor slab is installed.	The slab is in good condition overall based on visual review and discussion with building operator. The slab is level with only very minor cracking occurring in a north-south direction along the west central section.	Slab replacement is not carried.	Good	Life Cycle		50	41	35	15	2039	0	100%	0	L-SUM	$400,000	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	F104005	Ice Rinks	Perimeter poured concrete apron. Rink slab is designed as 4.75" thick with 1:1:4 trap rock finish, 4" thick insulation, 4" diameter weepers (6) 2'-8" below insulation.	The slab is in fair condition overall. Cracking and uneven areas are located throughout the perimeter.	Allow to repair slab in the short term.	Fair	Life Cycle		50	41	48	2	2026	1	100%	1	L-SUM	$8,000	$8,000	$800	$800	$1,600	$9,600
James Whyte Arena	70 Front Street North	F104005	Ice Rinks	Wood and steel framed dasherboards are installed. Consists of 2"x6" top plate, 2"x4" top stringers, 2"x6" intermediate and base stringers, 3/4" plywood base layer with 1/4" HDPE cap, sill band, skin and kick plate. Support frame posts are 2.25"x2.25" at 4' o.c. with steel anchor plates embedded in thickened slab edge.	The dasherboards are in fair condition with 49.25" overall height. Some sections were re-constructed in 1999.	Allow to replace dasherboards in the longer term.	Fair	Life Cycle		25	41	19	6	2030	1	100%	1	L-SUM	$220,000	$220,000	$22,000	$22,000	$44,000	$264,000
James Whyte Arena	70 Front Street North	F104005	Ice Rinks	Wood and steel framed doors are installed with similar construction as the dasherboards. There are 11 singles and 3 double doors.	The doors are in poor condition overall. Gaps of 3/8" to 3/4" in width.	Allow to replace all doors in the short term.	Poor	Life Cycle		25	41	23	2	2026	1	100%	1	L-SUM	$29,000	$29,000	$2,900	$2,900	$5,800	$34,800

BUILDING INFORMATION				ASSESSMENT											PRELIMINARY COSTS						OTHER FEES			
BUILDING NAME	ADDRESS	UNIFORMAT CODE	BUILDING COMPONENT	DESCRIPTION	OBSERVATIONS	RECOMMENDATIONS	CONDITION RATING	CRITICALITY RATING	IMAGE	SERVICE LIFE (Years)	ACTUAL AGE (Years)	OBSERVED AGE (Years)	REMAINING LIFE (Years)	RECOMMENDED YEAR	TOTAL QUANTITY	% OF QUANTITY SCHEDULED	PROJECT QUANTITY	UNIT OF MEASURE	UNIT RATE ($)	NET COST ($)	DESIGN/ENGINEERING FEES (10%)	CONTINGENCY (10%)	TOTAL OTHER FEES	TOTAL COST OF PROJECT
James Whyte Arena	70 Front Street North	F104005	Ice Rinks	4' high (sides) and 5' high (ends) tempered glazing in aluminum stanchions are installed around the arena.	Glazing and stanchions are in poor condition.	Allow to replace glazing system in the longer term.	Poor	Life Cycle		25	41	19	6	2030	1	100%	1	L-SUM	$85,000	$85,000	$8,500	$8,500	$17,000	$102,000
James Whyte Arena	70 Front Street North	F104005	Ice Rinks	Arena dehumidification includes an older Blanchard Ness (m# LA 7.5G, s# 88-09-059) refrigerated (R-22) type unit.	The dehumidifier is beyond useful service life. The dehumidification unit, although functional, is inefficient and uses R-22 refrigerant (to be phased out by 2020). The unit has no safe permanent access ladder or perimeter guard.	Item not used.	Fair	Life Cycle		20	41	19	1	2025	0	100%	0	L-SUM	$145,000	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	F104005	Ice Rinks	Arena dehumidification includes a newer Cimco Humicon (m# MK VII, s# 214730B) desiccant type unit using R-22 refrigerant with 7.5-HP compressor motor.	The dehumidifier is in good condition overall. The dehumidification unit, although functional, is inefficient and uses R-22 refrigerant (to be phased out by 2020). The unit has no safe permanent access ladder or perimeter guard.	Item not used.	Good	Life Cycle		20	12	2	18	2042	0	100%	0	L-SUM	$30,000	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	F105002	Building Automation Systems	The James Whyte Arena has no automation controls but relies on conventional thermostats.	Standard digital thermostats are used for the furnaces. The thermostats for the James Whyte Arena are functioning as intended based on discussions with the building operator. Commissioning records are not available for review.	Allow for short term system updating. Commissioning is carried as a separate line item. Allow for basic building automation for the heating and ventilation systems in the short term.	Fair	Recommended		12	22	10	2	2026	1	100%	1	L-SUM	$15,000	$15,000	$1,500	$1,500	$3,000	$18,000
James Whyte Arena	70 Front Street North	G201001	Roadways - Bases And Subbases	The west service laneway is surfaced with granular stone.	The laneway is in fair condition with depressed areas.	Allow to provide new subbase with asphalt surfacing in short term.	Fair	Recommended		25	55	23	2	2026	1500	100%	1500	SF	$13	$19,500	$1,950	$1,950	$3,900	$23,400
James Whyte Arena	70 Front Street North	G202002	Parking Lots - Curbs & Gutters	Single stage poured concrete curbing is installed throughout the north parking lot.	The curbing is in good condition with minimal cracking and deterioration.	Allow for localized curbing replacement/modifications when replacing asphalt; cost covered under asphalt item. Allow for longer term repairs.	Good	Life Cycle		30	17	17	13	2037	500	20%	100	LF	$35	$3,500	$350	$350	$700	$4,200
James Whyte Arena	70 Front Street North	G202003	Parking Lots - Paved Surfaces	The north parking lot is surfaced with asphaltic concrete paving.	The paving is in fair condition with extensive block and fatigue cracking with loose sections especially within the barrier-free path of travel.	Allow to replace portion of paving in the short term.	Poor	Necessary		25	17	23	2	2026	26000	25%	6500	SF	$9	$58,500	$5,850	$5,850	$11,700	$70,200
James Whyte Arena	70 Front Street North	G202004	Parking Lots - Marking & Signage	Metal sign posts and wall signs are installed around the north parking lot.	The parking signage is in fair condition.	Allow to replace, and add, signage in the short term.	Fair	Life Cycle		15	22	14	1	2025	1	100%	1	L-SUM	$2,500	$2,500	$250	$250	$500	$3,000
James Whyte Arena	70 Front Street North	G202004	Parking Lots - Marking & Signage	Stall parking lines.	The parking stall line painting and decals are worn.	Allow to re-paint line work in the short term.	Fair	Necessary		10	22	9	1	2025	1	100%	1	L-SUM	$5,000	$5,000	$500	$500	$1,000	$6,000
James Whyte Arena	70 Front Street North	G203003	Pedestrian Paving - Paved Surfaces	Poured concrete, plain surfaced sidewalks are installed along the north and west sides of the addition.	The concrete is in good condition with minor cracking. One section on the north side is depressed creating a tripping hazard.	Allow for minor repairs in the immediate term.	Good	Necessary		25	25	25	0	2024	1	100%	1	L-SUM	$2,000	$2,000	$200	$200	$400	$2,400

BUILDING INFORMATION				ASSESSMENT											PRELIMINARY COSTS						OTHER FEES			
BUILDING NAME	ADDRESS	UNIFORMAT CODE	BUILDING COMPONENT	DESCRIPTION	OBSERVATIONS	RECOMMENDATIONS	CONDITION RATING	CRITICALITY RATING	IMAGE	SERVICE LIFE (Years)	ACTUAL AGE (Years)	OBSERVED AGE (Years)	REMAINING LIFE (Years)	RECOMMENDED YEAR	TOTAL QUANTITY	% OF QUANTITY SCHEDULED	PROJECT QUANTITY	UNIT OF MEASURE	UNIT RATE ($)	NET COST ($)	DESIGN/ENGINEERING FEES (10%)	CONTINGENCY (10%)	TOTAL OTHER FEES	TOTAL COST OF PROJECT
James Whyte Arena	70 Front Street North	G203003	Pedestrian Paving - Paved Surfaces	Poured concrete, plain surfaced landings are installed at two of the four exit doors from the arena.	The concrete of one landing is newer but is too short. The other landing is in fair condition. One of the exits has a deteriorating concrete step.	Allow to modify all exits with properly poured concrete landings in the short term.	Poor	Necessary		25	88	24	1	2025	1	100%	1	L-SUM	$5,500	$5,500	$550	$550	$1,100	$6,600
James Whyte Arena	70 Front Street North	G204001	Fencing & Gates	Partial run of wood slat fencing separates the arena site from the west residential building.	The fencing is in poor condition and is omitted at the north end.	Allow to provide fencing and end gate along laneway to secure site.	Poor	Recommended		30	45	28	2	2026	190	100%	190	LF	$39	$7,410	$741	$741	$1,482	$8,892
James Whyte Arena	70 Front Street North	G204001	Fencing & Gates	6' high galvanized chain link fencing is installed along the north portion of the east lot line.	The fencing is in fair condition with localized damage and corrosion.	Allow to modify fencing to secure the east side of the arena including swing gates with proper egress hardware. Allow for minor repairs to the fencing also.	Fair	Recommended		30	45	28	2	2026	1	100%	1	L-SUM	$19,000	$19,000	$1,900	$1,900	$3,800	$22,800
James Whyte Arena	70 Front Street North	G204001	Fencing & Gates	6' high galvanized chain link fencing is installed along the north portion of the east lot line.	The fencing is in fair condition with localized damage and corrosion.	Allow to replace fencing in the longer term.	Fair	Recommended		50	45	35	15	2039	450	100%	450	LF	$28	$12,600	$1,260	$1,260	$2,520	$15,120
James Whyte Arena	70 Front Street North	G204003	Exterior Furnishings	The building has no exterior furnishings (benches, bike racks, etc.).		Allow to add benching and general furnishings to the exterior of the arena facility.	Poor	Recommended		18	25	17	1	2025	1	100%	1	L-SUM	$6,000	$6,000	$600	$600	$1,200	$7,200
James Whyte Arena	70 Front Street North	G204005	Signage	Building and site signage.	Building and site signage is lacking at the north end of the site. A metal/plywood site sign is installed at the central west side of the building only.	Allow for site signage to the north end of the arena facility in the short term.	Fair	Life Cycle		20	25	19	1	2025	1	100%	1	L-SUM	$6,500	$6,500	$650	$650	$1,300	$7,800
James Whyte Arena	70 Front Street North	G204009	Flagpoles	The building has no flagpoles.		No allowances carried.				25	0	0	25	2049	0	100%	0	EA	$0	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	G202007	Miscellaneous Structures And Equipment	The wood framed outbuilding at the north end of the site is used for the Figure Skating Club storage.	The building has a newer sloped shingled roof, older painted metal siding, older double doors. The building is in fair condition overall. No access provided to building interior.	Allow to refurbish the building in the shorter term.	Fair	Recommended		20	65	18	2	2026	1	100%	1	L-SUM	$6,500	$6,500	$650	$650	$1,300	$7,800
James Whyte Arena	70 Front Street North	G2050	Landscaping	Soft landscaping is limited to sodded areas along the north, east and west elevations. Older deciduous trees are installed along the west lot line.	The components are in fair condition.	Allow for long term refurbishment of landscaping.	Fair	Life Cycle		25	88	19	6	2030	1	100%	1	L-SUM	$15,000	$15,000	$1,500	$1,500	$3,000	$18,000
James Whyte Arena	70 Front Street North	G205001	Final Grading And Soil Preparation	Final grading profile.	The grading around the building is fair condition with some notable back slope.	Allow to improve grading at east and west elevations in short term.	Fair	Life Cycle		25	88	24	1	2025	1	100%	1	L-SUM	$9,000	$9,000	$900	$900	$1,800	$10,800
James Whyte Arena	70 Front Street North	G205007	Irrigation Systems	The building is not equipped with an irrigation system.		No allowances carried.				20	88	20	0	2024	0	100%	0	L-SUM	$0	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	G3010	Water Supply	Main water service is presumed to be from Front Street to the east central Mechanical Room. A curb stop was observed at the west elevation. A second service enters the north Mechanical Room.	The water supply condition is unknown.	Allow for short term repairs to the water service.	Fair	Life Cycle		50	73	46	4	2028	1	100%	1	L-SUM	$15,000	$15,000	$1,500	$1,500	$3,000	$18,000
James Whyte Arena	70 Front Street North	G302001	Sanitary Sewer Piping	The location of the sanitary building main and connection to the municipal sewer main are unknown.	The sanitary drainage system is functioning with no notable damages reported or observed.	Allow for repairs and localized replacement of the sanitary system at the end of its expected life cycle.	Fair	Life Cycle		50	88	44	6	2030	1	100%	1	L-SUM	$25,000	$25,000	$2,500	$2,500	$5,000	$30,000

BUILDING INFORMATION				ASSESSMENT											PRELIMINARY COSTS						OTHER FEES			
BUILDING NAME	ADDRESS	UNIFORMAT CODE	BUILDING COMPONENT	DESCRIPTION	OBSERVATIONS	RECOMMENDATIONS	CONDITION RATING	CRITICALITY RATING	IMAGE	SERVICE LIFE (Years)	ACTUAL AGE (Years)	OBSERVED AGE (Years)	REMAINING LIFE (Years)	RECOMMENDED YEAR	TOTAL QUANTITY	% OF QUANTITY SCHEDULED	PROJECT QUANTITY	UNIT OF MEASURE	UNIT RATE ($)	NET COST ($)	DESIGN/ENGINEERING FEES (10%)	CONTINGENCY (10%)	TOTAL OTHER FEES	TOTAL COST OF PROJECT
James Whyte Arena	70 Front Street North	G303001	Storm Sewer Piping	Site storm water is presumed to be directed to the two manholes at the east and west sides of the building and onto the storm sewer main. Catch basins were noted at the north end of the site. Remnants of abandoned downspouts suggest that the manholes also received rainwater.	The storm water system is working well with no notable damages reported or observed.	Allow for repairs and localized replacement of the storm water systems at the end of its expected life cycle.	Fair	Necessary		50	88	44	6	2030	1	100%	1	L-SUM	$30,000	$30,000	$3,000	$3,000	$6,000	$36,000
James Whyte Arena	70 Front Street North	G306006	Gas Distribution Piping (Natural & Propane)	Natural gas service enters the building at the west side of the building at the Frank Doherty Arena. Service includes a Roots Meter with GE Dresser temperature compensator and Fisher Controls (type S202) regulator.	The meter and regulator are in fair condition. Exterior piping requires painting.	No allowances carried.	Fair	Necessary		50	54	49	1	2025	0	100%	0	L-SUM	$5,000	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	G401002	Transformers	The site pad mount transformer is located at the east central elevation.	The transformer is in fair condition.	Replacement is responsibility of local utility. No allowances carried.	Fair	Life Cycle		50	64	40	10	2034	0	100%	0	L-SUM	$0	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	G401006	Underground Electric Conductors	Underground electric power lines are located from the transformer to the Main Electrical Room.	No issues noted.	Allowances are carried for future repairs.	Good	Life Cycle		50	64	40	10	2034	1	100%	1	L-SUM	$9,000	$9,000	$900	$900	$1,800	$10,800
James Whyte Arena	70 Front Street North	G402006	Exterior Lighting Fixtures & Controls - Fixtures	Older and newer metal halide wallpacks are installed along the north, east and west elevations.	The fixtures are in fair-to-poor condition and several were not operating at the time of the inspection. Illumination levels are below IES/municipal requirements for public areas (even where currently illuminated).	Replace fixtures in the immediate term. Fixtures at outbuilding are flood light LED type. These can remain intact.	Poor	Necessary		20	20	20	0	2024	7	100%	7	EA	$1,200	$8,400	$840	$840	$1,680	$10,080
James Whyte Arena	70 Front Street North	G402006	Exterior Lighting Fixtures & Controls - Fixtures	Older incandescent/CFL soffit fixture at main north entrance.	The fixture is in poor condition.	Replace fixture and add along west walkway.	Poor	Necessary		20	20	20	0	2024	1	100%	1	L-SUM	$3,000	$3,000	$300	$300	$600	$3,600
James Whyte Arena	70 Front Street North	G402006	Exterior Lighting Fixtures & Controls - Fixtures	1962 40' high Stresscrete precast concrete light fixture is installed along the west boulevard. The standard has a newer LED luminaire.	The standard is in fair condition and the fixture is in good condition. Illumination levels at two barrier-free parking stalls is only 11-lux and 3-lux towards main entrance. Levels within the parking lot are 0 to 3-lux.	Replace standard and fixture in longer term and add standards to north parking lot to provide minimal required illumination levels.	Poor	Necessary		30	25	24	6	2030	1	100%	1	L-SUM	$38,000	$38,000	$3,800	$3,800	$7,600	$45,600
James Whyte Arena	70 Front Street North	H3010001	Report - BCA/RFS	Past BCA report by Mcintosh Perry was provided for review.		Allow to provide future report.	Good	Life Cycle		5	0	0	5	2029	1	100%	1	L-SUM	$7,500	$7,500	$750	$750	$1,500	$9,000
James Whyte Arena	70 Front Street North	H3010002	Report - Technical / Performance Audit	OES Asbestos Materials Survey, dated June 1, 2016, was made available for review.	Asbestos materials are present in older vinyl floor tile, transite board, transite piping and older insulated pipe fittings.	Allow for future update and to provide a full Designated Substance Survey (DSS).	Fair	Recommended		5	8	3	2	2026	1	100%	1	L-SUM	$6,200	$6,200	$620	$620	$1,240	$7,440
James Whyte Arena	70 Front Street North	H3010003	Report - Balancing / Commissioning	No balancing or commissioning reports available for review.	The HVAC systems require investigation to determine whether optimum performance is provided. Change Rooms are provided with ducted supply and return air.	Allow to provide investigations and general troubleshooting.	Fair	Recommended		10	9	9	1	2025	1	100%	1	L-SUM	$7,500	$7,500	$750	$750	$1,500	$9,000
James Whyte Arena	70 Front Street North	H3010006	Report - Indoor Air Quality	Air balancing.	There are no air balancing reports available.	Allow to provide air balancing reports with commissioning item.	Fair	Recommended		8	9	7	1	2025	1	100%	1	L-SUM	$7,000	$7,000	$700	$700	$1,400	$8,400
James Whyte Arena	70 Front Street North	H3010007	Report - Energy Audit	There is no Energy Audit Report available.		Allow to provide Energy Audit in the short term.	Fair	Recommended		8	8	6	2	2026	1	100%	1	L-SUM	$15,000	$15,000	$1,500	$1,500	$3,000	$18,000
James Whyte Arena	70 Front Street North	H3010008	Report - Destructive Testing	Intrusive testing.	Composition of exterior walls and foundation conditions are unknown.	Allow for intrusive investigations at foundations and exterior walls to determine composition.	Fair	Recommended		20	88	18	2	2026	1	100%	1	L-SUM	$5,000	$5,000	$500	$500	$1,000	$6,000

BUILDING INFORMATION				ASSESSMENT											PRELIMINARY COSTS						OTHER FEES			TOTAL COST OF PROJECT
BUILDING NAME	ADDRESS	UNIFORMAT CODE	BUILDING COMPONENT	DESCRIPTION	OBSERVATIONS	RECOMMENDATIONS	CONDITION RATING	CRITICALITY RATING	IMAGE	SERVICE LIFE (Years)	ACTUAL AGE (Years)	OBSERVED AGE (Years)	REMAINING LIFE (Years)	RECOMMENDED YEAR	TOTAL QUANTITY	% OF QUANTITY SCHEDULED	PROJECT QUANTITY	UNIT OF MEASURE	UNIT RATE ($)	NET COST ($)	DESIGN/ENGINEERING FEES (10%)	CONTINGENCY (10%)	TOTAL OTHER FEES	
James Whyte Arena	70 Front Street North	H3010008	Report - Roof Inspection Report	Roof inspection/assessment reports are not provided.		No allowances carried.	Fair	Necessary		8	36	7	1	2025	0	100%	0	L-SUM	$6,000	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	H3010010	Design and Specification	Building drawings were limited and are not as-built type.	The drawings require updating to show current conditions.	Allow for future drawing review and confirmation of as built conditions.	Fair	Recommended		20	36	18	2	2026	1	100%	1	L-SUM	$9,500	$9,500	$950	$950	$1,900	$11,400
James Whyte Arena	70 Front Street North	H3010012	Retro-commissioning	Commissioning reports.	Commissioning reports are unavailable.	Allow for production of commissioning reports per H301003.	Fair	Necessary		20	9	19	1	2025	0	100%	0	L-SUM	$0	$0	$0	$0	$0	$0
James Whyte Arena	70 Front Street North	H3010013	Illumination Review	Emergency lighting is provided by the standard emergency battery pack fixtures.	Illumination levels are unknown but are considered to be low or poor based on location of fixtures. Some fixtures were not operating.	Allow for emergency lighting testing.	Fair	Necessary		7	25	6	1	2025	1	100%	1	L-SUM	$3,500	$3,500	$350	$350	$700	$4,200
James Whyte Arena	70 Front Street North	H3010014	Site Servicing Locates	Site services including storm, sanitary and electrical.	Locations, construction and conditions of subsurface services is unknown. No irregular service issues are reported.	Allow for verification of locations, construction and conditions of subsurface services.	Fair	Recommended		15	50	13	2	2026	1	100%	1	L-SUM	$5,000	$5,000	$500	$500	$1,000	$6,000
James Whyte Arena	70 Front Street North	H3010014	Electrical Review	Predictive quality measurements.	No thermography or other PQM provided.	Allow to provide PQM in the short term including arc flash review.	Fair	Necessary		5	41	3	2	2026	1	100%	1	L-SUM	$15,000	$15,000	$1,500	$1,500	$3,000	$18,000
James Whyte Arena	70 Front Street North	H3010014	Barrier-Free Design	A barrier-free review was conducted by MP.	The interior and exterior components are all non-conforming. Recent installations of 1999 at the addition (parking stalls, curb cut, interior ramp/viewing area are all non-conforming to current standards. The north entrance doors have proper clear width (>34") but vision panels are non-compliant. Change rooms at the north end are also non-compliant.	Allow for modifications of existing components at James Whyte Arena including provision of barrier-free change room, interior ramp replacement and wider access doors.	Poor	Necessary		15	23	13	2	2026	1	100%	1	L-SUM	$125,000	$125,000	$12,500	$12,500	$25,000	$150,000

APPENDIX B
Capital Expenditure Table

0	1	2	3	4	5	6	7	8	9	10

ESTIMATED ANNUAL EXPENDITURES - 2024 to 2034

Construction Inflation F 0.0%

UNIFORMAT CODE	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
A101001	0	$5,400	0	0	0	0	0	0	0	0	0
A101001	0	$4,800	0	0	0	0	0	0	0	0	0
A101002	0	$3,600	0	0	0	0	0	0	0	0	0
A103001	0	$0	0	0	0	0	0	0	0	0	0
A103005	0	0	0	0	0	0	0	0	0	0	0
A103006	0	0	0	0	0	0	$18,000	0	0	0	0
A202002	$0	0	0	0	0	0	0	0	0	0	0
A202003	$0	0	0	0	0	0	0	0	0	0	0
B101002	0	$16,800	0	0	0	0	0	0	0	0	0
B101003	0	$24,000	0	0	0	0	0	0	0	0	0
B102001	0	0	0	0	0	0	0	0	0	0	0
B102001	0	$3,600	0	0	0	0	0	0	0	0	0
B102001	0	$0	0	0	0	0	0	0	0	0	0
B201001	0	$21,600	0	0	0	0	0	0	0	0	0
B201001	0	0	0	$30,000	0	0	0	0	0	0	0
B201001	0	0	0	0	0	0	0	0	0	0	0
B201001	0	0	0	0	0	0	0	0	0	0	0
B201001	0	0	$100,800	0	0	0	0	0	0	0	0
B201008	0	0	0	0	0	0	0	0	0	0	0
B201008	0	0	0	0	0	0	0	0	0	0	0
B201011	0	0	$6,000	0	0	0	0	0	0	0	0
B202001	0	0	0	0	0	$7,200	0	0	0	0	0
B203001	0	$14,400	0	0	0	0	0	0	0	0	0
B203001	0	$14,400	0	0	0	0	0	0	0	0	0
B203001	0	$10,320	0	0	0	0	0	0	0	0	0
B203002	0	0	0	0	0	$30,000	0	0	0	0	0
B203008	$0	0	0	0	0	0	0	0	0	0	0
B301001	0	0	0	0	0	0	0	0	0	0	0
C101005	0	0	0	0	$0	0	0	0	0	0	0
C1010	0	$0	0	0	0	0	0	0	0	0	0
C102001	0	0	$31,200	0	0	0	0	0	0	0	0
C102001	0	0	$21,600	0	0	0	0	0	0	0	0
C102007	0	0	0	0	0	0	0	0	0	0	0
C102007	0	0	$12,000	0	0	0	0	0	0	0	0
C103001	0	0	0	0	0	0	0	0	$15,600	0	0
C103002	0	0	$6,000	0	0	0	0	0	0	0	0
C103004	0	$4,800	0	0	0	0	0	0	0	0	0

0	1	2	3	4	5	6	7	8	9	10

ESTIMATED ANNUAL EXPENDITURES - 2024 to 2034

Construction Inflation F 0.0%

UNIFORMAT CODE	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
C103011	$7,200	0	0	0	0	0	0	0	0	0	0
C30	0	$18,000	0	0	0	0	0	0	0	0	0
C30	0	$114,000	0	0	0	0	0	0	0	0	0
C301005	0	0	$9,600	0	0	0	0	0	0	0	0
C301005	0	$36,000	0	0	0	0	0	0	0	0	0
C302099	0	$75,240	0	0	0	0	0	0	0	0	0
C302099	0	0	0	0	0	0	0	$21,660	0	0	0
C3030	$0	0	0	0	0	0	0	0	0	0	0
C303003	0	0	0	0	0	0	0	0	0	0	0
D101002	0	0	0	$330,000	0	0	0	0	0	0	0
D2010	0	0	0	0	$25,200	0	0	0	0	0	0
D2010	0	$2,400	0	0	0	0	0	0	0	0	0
D2010	0	$30,000	0	0	0	0	0	0	0	0	0
D2010	0	0	0	0	0	0	0	0	0	0	$10,800
D201099	$16,800	0	0	0	0	0	0	0	0	0	0
D202001	0	0	0	0	0	0	0	0	0	0	0
D202001	0	$12,000	0	0	0	0	0	0	0	0	0
D202001	0	$24,000	0	0	0	0	0	0	0	0	0
D202003	0	$25,200	0	0	0	0	0	0	0	0	0
D202003	0	0	0	0	0	0	0	0	0	0	0
D202003	0	$0	0	0	0	0	0	0	0	0	0
D202003	$7,200	0	0	0	0	0	0	0	0	0	0
D202004	0	$8,040	0	0	0	0	0	0	0	0	0
D2030	0	0	$66,000	0	0	0	0	0	0	0	0
D204001	0	0	0	0	0	0	0	0	0	0	0
D204001	0	$8,400	0	0	0	0	0	0	0	0	0
D302003	0	$36,000	0	0	0	0	0	0	0	0	0
D302003	0	$18,000	0	0	0	0	0	0	0	0	0
D304001	0	$24,000	0	0	0	0	0	0	0	0	0
D304001	$30,000	0	0	0	0	0	0	0	0	0	0
D304007	0	$5,040	0	0	0	0	0	0	0	0	0
D304099	0	0	$28,800	0	0	0	0	0	0	0	0
D30502	0	$42,000	0	0	0	0	0	0	0	0	0
D401001	0	0	0	$150,000	0	0	0	0	0	0	0
D401001	0	0	0	$10,800	0	0	0	0	0	0	0
D402001	0	$0	0	0	0	0	0	0	0	0	0
D403001	0	0	0	0	0	0	0	0	0	$1,440	0
D501003	0	0	0	0	0	0	0	0	0	0	0

0	1	2	3	4	5	6	7	8	9	10

ESTIMATED ANNUAL EXPENDITURES - 2024 to 2034

Construction Inflation F 0.0%

UNIFORMAT CODE	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
D501004	0	0	0	0	0	0	0	0	0	0	0
D501005	0	0	0	0	0	0	0	0	0	0	0
D501005	0	0	0	0	0	0	0	0	0	0	0
D501005	0	$6,600	0	0	0	0	0	0	0	0	0
D501006	0	0	0	0	0	0	$18,000	0	0	0	0
D502001	0	$11,400	0	0	0	0	0	0	0	0	0
D502001	0	$24,000	0	0	0	0	0	0	0	0	0
D502002	$55,440	0	0	0	0	0	0	0	0	0	0
D502002	0	$32,400	0	0	0	0	0	0	0	0	0
D5030	0	$9,000	0	0	0	0	0	0	0	0	0
D503001	0	0	0	0	0	0	0	0	0	0	0
D503004	0	0	$0	0	0	0	0	0	0	0	0
D503008	0	0	0	0	0	0	0	$0	0	0	0
D503008	0	$7,440	0	0	0	0	0	0	0	0	0
D503099	$43,200	0	0	0	0	0	0	0	0	0	0
D509002	0	$6,840	0	0	0	0	0	0	0	0	0
D509002	0	0	0	0	0	0	$210,000	0	0	0	0
D509002	0	$14,400	0	0	0	0	0	0	0	0	0
D509005	0	0	0	0	0	$3,360	0	0	0	0	0
E109003	0	$0	0	0	0	0	0	0	0	0	0
E109002	0	0	$0	0	0	0	0	0	0	0	0
E109004	0	0	0	0	0	$0	0	0	0	0	0
E109007	0	0	0	$6,600	0	0	0	0	0	0	0
E109007	0	0	$19,200	0	0	0	0	0	0	0	0
E201003	0	0	0	0	0	0	0	0	$14,400	0	0
E201003	0	$6,000	0	0	0	0	0	0	0	0	0
E201002	0	0	0	0	0	0	0	0	0	0	0
E2020	0	$0	0	0	0	0	0	0	0	0	0
F104005	0	0	0	0	0	0	0	0	0	0	0
F104005	0	0	$9,600	0	0	0	0	0	0	0	0
F104005	0	0	0	0	0	0	$264,000	0	0	0	0
F104005	0	0	$34,800	0	0	0	0	0	0	0	0
F104005	0	0	0	0	0	0	$102,000	0	0	0	0
F104005	0	$0	0	0	0	0	0	0	0	0	0
F104005	0	0	0	0	0	0	0	0	0	0	0
F105002	0	0	$18,000	0	0	0	0	0	0	0	0
G201001	0	0	$23,400	0	0	0	0	0	0	0	0
G202002	0	0	0	0	0	0	0	0	0	0	0

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ESTIMATED ANNUAL EXPENDITURES - 2024 to 2034

Construction Inflation F 0.0%

UNIFORMAT CODE	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
G202003	0	0	$70,200	0	0	0	0	0	0	0	0
G202004	0	$3,000	0	0	0	0	0	0	0	0	0
G202004	0	$6,000	0	0	0	0	0	0	0	0	0
G203003	$2,400	0	0	0	0	0	0	0	0	0	0
G203003	0	$6,600	0	0	0	0	0	0	0	0	0
G204001	0	0	$8,892	0	0	0	0	0	0	0	0
G204001	0	0	$22,800	0	0	0	0	0	0	0	0
G204001	0	0	0	0	0	0	0	0	0	0	0
G204003	0	$7,200	0	0	0	0	0	0	0	0	0
G204005	0	$7,800	0	0	0	0	0	0	0	0	0
G204009	0	0	0	0	0	0	0	0	0	0	0
G202007	0	0	$7,800	0	0	0	0	0	0	0	0
G2050	0	0	0	0	0	0	$18,000	0	0	0	0
G205001	0	$10,800	0	0	0	0	0	0	0	0	0
G205007	$0	0	0	0	0	0	0	0	0	0	0
G3010	0	0	0	0	$18,000	0	0	0	0	0	0
G302001	0	0	0	0	0	0	$30,000	0	0	0	0
G303001	0	0	0	0	0	0	$36,000	0	0	0	0
G306006	0	$0	0	0	0	0	0	0	0	0	0
G401002	0	0	0	0	0	0	0	0	0	0	$0
G401006	0	0	0	0	0	0	0	0	0	0	$10,800
G402006	$10,080	0	0	0	0	0	0	0	0	0	0
G402006	$3,600	0	0	0	0	0	0	0	0	0	0
G402006	0	0	0	0	0	0	$45,600	0	0	0	0
H3010001	0	0	0	0	0	$9,000	0	0	0	0	0
H3010002	0	0	$7,440	0	0	0	0	0	0	0	0
H3010003	0	$9,000	0	0	0	0	0	0	0	0	0
H3010006	0	$8,400	0	0	0	0	0	0	0	0	0
H3010007	0	0	$18,000	0	0	0	0	0	0	0	0
H3010008	0	0	$6,000	0	0	0	0	0	0	0	0
H3010008	0	$0	0	0	0	0	0	0	0	0	0
H3010010	0	0	$11,400	0	0	0	0	0	0	0	0
H3010012	0	$0	0	0	0	0	0	0	0	0	0
H3010013	0	$4,200	0	0	0	0	0	0	0	0	0
H3010014	0	0	$6,000	0	0	0	0	0	0	0	0
H3010014	0	0	$18,000	0	0	0	0	0	0	0	0
H3010014	0	0	$150,000	0	0	0	0	0	0	0	0

0 1 2 3 4 5 6 7 8 9 10

ESTIMATED ANNUAL EXPENDITURES - 2024 to 2034

Construction Inflation F 0.0%

UNIFORMAT CODE	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Annual Estimated Expenditures	$175,920	$783,120	$713,532	$527,400	$43,200	$49,560	$741,600	$21,660	$30,000	$1,440	$21,600