



East Hants Sportsplex Facility Condition Assessment

Corporate and Residential Services Committee

March 2023



EAST HANTS

Background

Purpose:

- Information report to Council to provide summary of the key findings of the facility condition assessment (“FCA”).

Timeline of Events:

- July 2021 - C21(214) - Council approved a \$375,000 addition to Capital Budget 21-012 to cover a FCA and any immediate capital work required to the Sportsplex, to be funded by debt.
- June 2022 - East Hants awarded the FCA project to Dillon Consulting as part of the larger corporate asset management consulting services contract.
- January 2023 - FCA final report received.

Facility Condition Assessments (“FCA”)

- FCAs are a critical tool in understanding the condition and future repair/replacement requirements of facility assets owned, operated, or provided funding by East Hants.
- FCAs typically include the assessment of core facility components, including: architectural, structural, electrical, mechanical/plumbing, and site conditions.
- Information obtained in FCAs is essential to consider in the AM Program, capital planning, annual budgets, and all strategic decision-making regarding East Hants’ facility assets.
- FCAs differ from property inspections.
 - Property inspections are typically completed as due diligence for real estate transactions to characterize an asset at a point in time, usually capturing the most immediate repairs required. They are often completed by a single commercial or residential building inspector.
 - FCAs are a functional tool to maintain a facility over time, with the intention to identify longer-term capital planning needs. They are completed by a team of engineers and specialists, and are often more detailed and technical.

Sportsplex FCA - Scope

- Scope of work included:
 - Site inspections (visual)
 - Inventory of facility components (per industry standard classification system UNIFORMAT II)
 - Condition analysis (per 5-level rating system consistent with Canadian Infrastructure Report Card)
 - Lifecycle analysis (per industry standards, component age, condition rating)
 - Recommended remedial activities (maintenance, rehabilitation, replacement)
 - Cost recommendations (per Yardstick, RS Means, local vendors, recent contractor pricing)
 - Short & long-term facility investment needs
 - Reporting (PDF & MS Excel)
- Consulting team consisted of an electrical engineer, mechanical engineer, structural engineer, architect and quantity surveyor/cost estimator.
- Fieldwork was conducted in September 2022.

Sportsplex FCA - Findings

- Findings presented in PDF written report, with photo inventory; the master inventory, lifecycle analysis, and financial analysis presented in MS Excel.
- FCA = living document
- Ongoing management of facility inventory data and the tracking of remedial activities is being developed as part of the AM Program.
- Staff are working with the East Hants Arena Association to address priority items identified in the FCA.
- The new Building Maintenance Coordinator position will play a significant role in assisting with the ongoing management of FCA information.

Financial Comments

Recommended Activities (10 Year Plan)

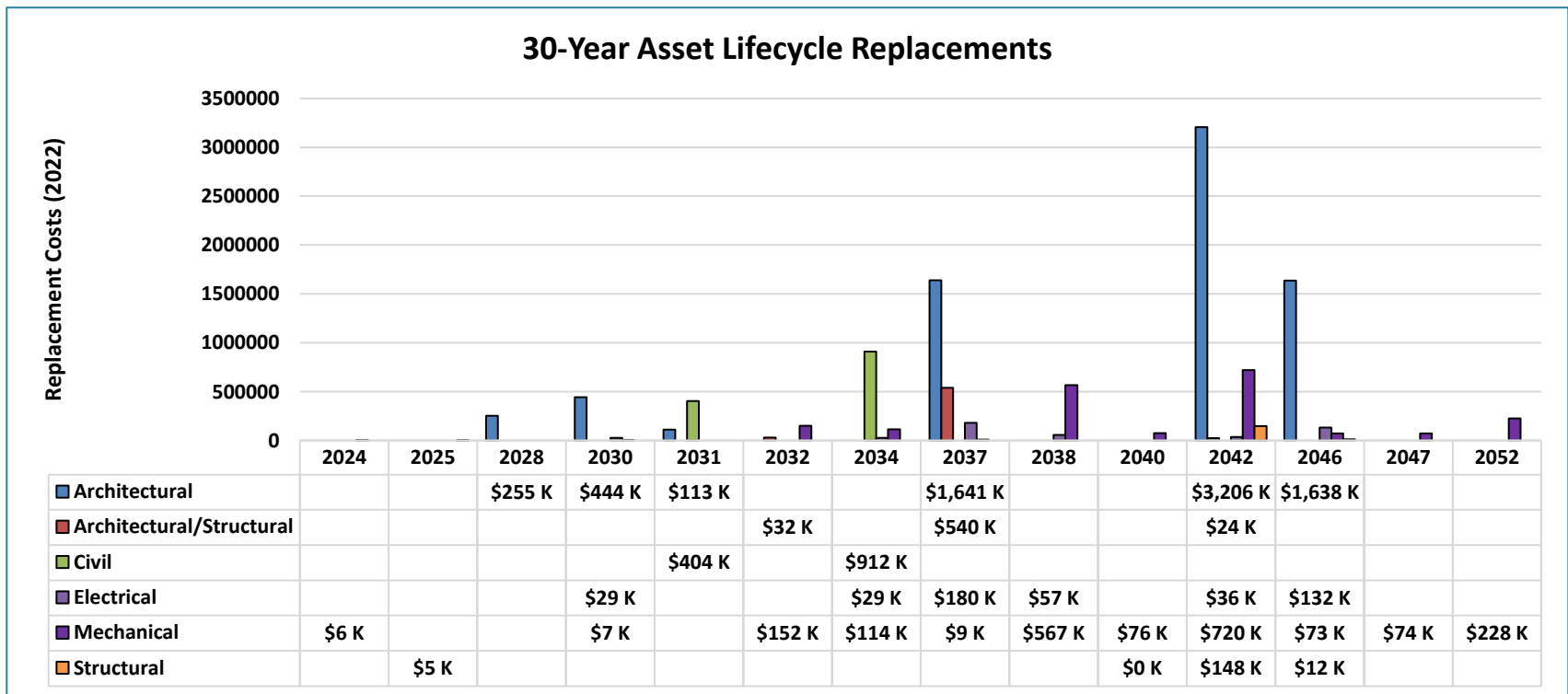
- The FCA identified a total recommended activity cost of \$342,525 within the next one (1) to two (2) years, and a total of \$1,330,785 over the next ten (10) years.
- Recommended activities are a mix of maintenance, rehabilitation, and replacement activities, with responsibility to be distributed between the East Hants Arena Association (“EHAA”) and East Hants, as per terms of the Facility Management Agreement (“FMA”).

Priority	Recommended Activity Cost (2022)	Timeframe
High	\$342,525	Next 1 - 2 Years
Medium	\$460,935	Within Next 5 years
Low	\$527,325	Within Next 10 years
Total	\$1,330,785	

Financial Comments

Projected Lifecycle Replacements (30-Year Plan)

- FCA identified a 30-year asset replacement needs projection of \$11.8M.



Financial Comments

- FCA identified \$342,525 of recommended activities within the next one (1) to two (2) years.
- The approved capital budget amount remaining is \$191,840 for 2023/2024. Any additional funds required to cover capital work in future years will come forward through the regular budget process.
- Staff will review the FCA's forecasted remedial activities alongside the Sportsplex Area Rate as part of the 2024/2025 budget process to ensure sufficient funds are available.
- Per the FMA, any surplus revenue generated from the Sportsplex's operations is put into the Sportsplex Operations Reserve.

Priority Capital Projects

- As a result of the FCA, PRC staff identified 2 priority capital projects and submitted grant proposals to the Province as part of the rink revitalization funding:
 - replace four (4) concrete piers supporting the ice plant tower structure
 - repairs to ice pad B arena roof

Example - Using FCA to Scope Project

PDF Report Excerpt:

5.0 Structural Condition Observations

The overall structural condition of the buildings at the complex were generally found to be in good condition, with exceptions noted below. The most urgent condition noted is the state of the footing piers and steel posts, base plates and anchors on the tower located on the east side of the ice plant portion of the rink building. The majority of structural elements were in good condition.

5.1.2 A1020 – Special Foundations

The concrete piers supporting the tower on the east side of the ice plant appeared to be in poor condition and deteriorating at the ground level. The steel base plates on the tower do not appear to be in full contact with the concrete surface of the piers. Concrete repair or replacement of the piers is required to provide proper support of the tower structure. See Photos A7 to A9.

Excel Spreadsheet Excerpt:

Level 4: Element Name	Condition Rating	Condition Grade	Expected Useful Life	Age	Theoretical Remaining Useful Life	Estimated Remaining Useful Life (Based on Last Known Condition)	Unit Cost	Unit of Measure	Quantity	Recommended Activity Description (From BCA)	Impacted Quantity	Recommended Activity Type	Activity Priority Rating	Recommended Activity Cost (2022)	Full Replacement Cost (2022)	Forecasted Replacement Year
Roof Deck	4	Poor	50	12	38	20		Per Sq.M	100	Determine cause of corrosion and loss of steel deck at 2nd floor stairwell. Repair deck as required.	1	Rehabilitate	High			2042
Concrete Piers	4	Poor	50	12	38	20		Per M of BF	380	Repair or replace concrete piers supporting tower structure outside the ice plant. Four (4) concrete piers total with an estimated replacement cost of \$12,500 each.	380	Replacement	High			2042
Base Plates	5	Very Poor	30	12	18	3		Each	4	Repair the corrosion on the steel base plates and at the base of the columns on the steel tower situated outside the ice plant. Remove corrosion to bare steel and re-inspect to determine proper repair procedure or steel replacement.	4	Replacement	High			2025

*Note: Costs have been redacted as to not impact project procurements

Example - Photo Inventory



Photo A7 - Steel tower structure



Photo A8 - Base plate corrosion and deteriorating concrete pier



Photo A9 - Base plate corrosion and deteriorating concrete pier

Example - Condition Analysis

Level 1: Major Group Elements	Level 2: Group Elements	Level 3: Individual Elements	Level 4: Element Name	Size/Material	Installation Year	Code Violation (Y/N)	Condition Rating	Condition Grade
B - Shell	B10 - Super Structure	B1020 - Roof Construction	Roof Deck	Steel	2011	No	4	Poor
A - Substructure	A10 - Foundations	A1020 - Special Foundations	Concrete Piers	Concrete	2011	No	4	Poor
F - Special Construction & Demolition	F10 - Special Construction	F1010 - Special Structures	Base Plates	Steel	2011	No	5	Very Poor

UNIFORMAT II
Asset classification system

Grade	Condition	Description
1	Very Good	Asset is physically sound and performing as intended. <i>(e.g. Secure weatherproof structure or building, which is well maintained. Good access and secure safe site.)</i>
2	Good	Asset is physically sound and performing as intended. Needs to be re-inspected in the medium term. <i>(e.g. Minor deterioration of surfaces. Some spalling but no corrosion staining. Some maintenance needed to prevent initial stages of decay or dereliction commencing.)</i>
3	Fair	Showing deterioration, with some components physically deficient. Early stages of decay or dereliction are becoming evident. <i>(e.g. Structure / Building functionally sound, but appearance affected by minor cracking, staining, peeling paintwork, minor leakage or overgrown vegetation.)</i>
4	Poor	Major portion of asset is physically deficient. Building not functioning properly due to leakage; rising damp; rotting woodwork; decayed brickwork. <i>(e.g. Structure is functioning but with problems due to significant leakage, cracking, spalling, loss of stability or deformation, corrosion substantially reducing size of structural member.)</i>
5	Very Poor	Physically unsound. High probability of failure. <i>(e.g. Serious problems having a detrimental effect on the performance. Access is extremely poor or hazardous. Site safety at risk.)</i>

Example - Remedial Activities

Level 4: Element Name	Unit of Measure	Quantity	Recommended Activity Description (From BCA)	Impacted Quantity	Recommended Activity Type	Activity Priority Rating	Forecasted Replacement Year
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Concrete Piers	Per M of BF	380	Repair or replace concrete piers supporting tower structure outside the ice plant. Four (4) concrete piers total with an estimated replacement cost of \$12,500 each.	380	Replacement	High	2042
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- There is a written description for every recommended activity
- FCA categorizes recommended activities into 3 types: maintenance, rehabilitation and replacement.
- Priority rating applied to guide timeframe for implementation. Priority was determined in consideration of the condition, outstanding safety or code issues, and operational risk.

Discussion

- As East Hants develops its facility management service area, alongside the corporate AM Program, Council will see an increase in tools for decision-making, like FCAs.
- The 2023/24 budget included a FCA for the Lloyd E. Matheson Centre.
- Staff have also submitted an application to the Sustainable Communities Challenge Fund to conduct FCAs and energy audits for key facility assets; a response on funding is expected in spring 2023.

Recommendation

- Staff recommend receiving the Sportsplex facility condition assessment as information, to be used to inform capital planning, annual budgets, and overall strategic decision-making for the asset.

Recommended Motion

Move that the Corporate and Residential Services Committee recommend that Council receive as information the Facility Condition Assessment for the East Hants Sportsplex dated December 8, 2022 and as updated January 30, 2023