

Report to Community and Protective Services Committee

To: Chair and Members
Community and Protective Services Committee

From: Anna Lisa Barbon, CPA, CGA
Deputy City Manager, Finance Supports

Subject: East Lions Community Centre Repairs

Date: October 24, 2023

Recommendation

That, on the recommendation of the Deputy City Manager, Finance Supports with the concurrence of the City Manager, the following be received with respect to the East Lions Community Centre Repairs Update:

- a) The report dated October 24, 2023, titled “East Lions Community Centre Repairs” which provides an update on the status and progress of the soffit repairs **BE RECEIVED** for information.

Executive Summary

The purpose of this report is to inform Council of the actions being taken to complete the soffit repairs at East Lions Community Centre.

Linkage to the Corporate Strategic Plan

Building a Sustainable City

London’s infrastructure is built, maintained, and operated to meet long-term needs of our community.

- Improve London’s resiliency to respond to potential future challenges.
- Manage the infrastructure gap for all assets.

Analysis

1.0 Background Information

On February 8, 2023, a section of soffit on the west side of the building failed. On February 24, 2023, a section of the north entrance soffit also failed. On February 25, 2023, the south entrance soffit was removed as it was showing distress, followed by a section of the west soffit on February 27, 2023.

1.1 Previous Reports Related to this Matter

- East Lions Community Centre Construction Update – CPSC Dec 15, 2020
- Naming of New East Community Centre (CPSC September 10, 2019)
- East Community Centre Construction Update – CPSC Aug 13, 2019
- East Community Centre Tender 17-67 Project #P015-RC2756 – CPSC Oct 11, 2017
- Update on East Community Centre Build Project (CPSC – Jun. 2017)
- Architect to Act as Prime Consultant for the East Community Centre (CPSC - Dec. 2015)

2.0 Key Issues and Considerations

2.1 Soffit Design

The north soffit (above the entrance from the parking lot) and the south soffit (above the entrance from Wavell St.) are both cold soffits and therefore the volume of air within the soffit assembly is not part of the building's conditioned space, it is at or near the same temperature as the exterior air.

The west soffits (along the pool) are all warm soffits and therefore are fully insulated and the volume of air within the soffit assembly is part of the buildings' conditioned space, it is at or near the same temperature as the internal air.

A crucial component of both soffit assemblies is a continuous air and vapor barrier (AVB), which is the physical barrier separating the interior and exterior environments of a structure. One of the primary functions of an AVB is to control moisture infiltration.

3.2 Cause of Failure

The conclusion from the experts' review determined that a significant cause of the soffit failures was a result of the discontinuity of the air vapour barrier (AVB).

The discontinuity of the AVB on the north and south soffits allowed leakage of internal conditioned air to escape the building envelope into the soffit assembly. When the internal and external air temperatures were drastically different and mixed within the soffit assembly, the reaction created condensation. The condensation created soaked the soffit material making it heavier than the clips holding it up were designed to hold, resulting in the failure of the soffit.

The west soffit failure was determined to be caused by breaches made in the AVB during construction and not properly repaired and sealed. Similar to the north and south soffits, this condition allowed exterior air into the conditioned soffit assembly. When the internal and exterior air mixed, it caused significant condensation which soaked the soffit material making it heavy and thus failing.

3.3 Repairs

Perini Management Services Inc. are undertaking the repairs to rework the AVB transition along the entirety of the soffits as originally detailed. All repairs completed will ensure a continuous air vapour barrier system.

The City has retained EXP Services Inc, a fully qualified building science engineer, to oversee the repairs by Perini Management Services Inc. This third-party oversight ensures work is completed satisfactorily and conforms to the original design details.

3.0 Financial Impact

Repair work is being undertaken by Perini Management Services Inc. in their entirety at their expense.

EXP Services Inc. fees for their oversight services are \$27,750.00.

Conclusion

Repairs to the soffit at East Lions Community Centre are being undertaken by Perini Management Services Inc. Public Administration via the professional services of EXP Services Inc. has oversight of the repairs to ensure conformity to the original details.

Prepared by: Ashley Howard
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Submitted by: Lynda Stewart
Director, Fleet and Facilities

Recommended by: Anna Lisa Barbon, CPA, CGA
Deputy City Manager, Finance Supports

cc: Val Moragdo, Senior Manager, Facilities
Grace Smith, Solicitor, City Solicitor's Office