



Cardinal PW Garage Structural Wall Repair Business Case

Public Works

2025 Budget

Public Works
Cardinal PW Garage – Structural Wall Repair

Executive Summary

The block wall in bay 5 had been displaced below the sill plate requiring repairs. The most likely cause of the displacement is the applied lateral force to the blocks over time from the reoccurring practice of cold asphalt material being pushed up against the wall. Staff engaged the services of Greer Galloway to complete a structural review and prepare engineered drawings to complete repairs. Repairs should be completed in the first half of 2025.

Business Need

In June 2024, the north wall in bay 5 was raised as an area of concern. The block wall below the sill plate had been displaced for an unknown duration of time. The Manager of Public Works contacted the Interim CBO to assist in completing a preliminary assessment on the magnitude and urgency of the situation. The advice was to proceed with repairs to the structural wall prior to the upcoming winter season.

On July 22, 2024 Council resolution 2024-183 authorized staff to proceed with the structural repairs and new partial wall in bay 5 at the Cardinal Works Garage to an upset limit of \$30,000.00 and to cover the unbudgeted expense through a combination of operational adjustments and reserves.

Staff contacted three contractors to view the area and provide a quote on completing the structural repairs. Contractors were hesitant to proceed with the work without receiving additional guidance of a structural engineer.

Staff engaged the services of Greer Galloway to complete a structural review. The area was reviewed and temporary structural shoring put in place to provide added support to the roof structure. Engineering design of structural rehabilitation to repair the damaged structure and preparation of suitable stamped engineering drawings are in process.

Options or Solutions Analysis

Option # 1: Remain status quo. Keep temporary shoring in place for an extended time period or barricade a portion of the building off limits until a repair is made.

Option # 2: Complete the necessary structural wall repairs only with minor floor touch-ups.

Option # 3: Complete structural wall repair, minor floor touch-ups and construction of new partial protection wall.

Financial and/or Non Financial Benefits

Structural engineering services will cost between \$8,000.00 and \$10,000.00

Option # 1: Lowest cost however not resolving the issue.

Option # 2: Completes the minimum required work to return the structure back to original state. Estimate \$50,000.00

Option # 3: Highest cost. Completes the minimum required work to return the structure back to original state and provides a protection barrier to mitigate reoccurrence. Estimate: \$75,000.00

Risk Analysis

Option # 1: Does not address the risk and potentially additional costs when repair eventually proceeds based on some structural components being exposed to outside elements for an extended period of time.

Option # 2: Proceeding with this option returns the structure back to original state and full utilization.

Option # 3: Proceeding with this option returns the structure back to full utilization and adds a protective barrier to mitigate reoccurrence.

Recommendation

That committee recommends that Council include to complete structural wall repair, minor floor touch-ups and construction of new partial protection wall for consideration into the 2025 budget.

Implementation Plan

Q1 – Receiving quotes and award of work.


Q2 – Completion of work

Acceptance Sign-off

Lead Department: Public Works

Prepared By: Dave Grant, Director of Operations

Date: January 8, 2025

Signature: 

Approved By: Jessica Crawford, Treasurer

Date: January 9, 2025

Signature: 

Approved By: Sean Nicholson, CAO

Date: January 9, 2025

Signature: 