

Memorandum

Date: June 21, 2022

To: Members of Council

From: Ben Pressman, Senior Project Manager, Engineering Services

Subject: Update regarding Strawberry Hill Court Retaining Wall

At the Council Meeting on October 26, 2021, Council passed the following motion:

That based on the homeowners request, that staff be directed to include a placeholder capital project in the 2022 budget for the stabilization and replacement of the retaining wall on Strawberry Hill Court in the amount of \$2.6 million; and

That staff report back following the completion of the necessary engineering design work on the scope of the retaining wall replacement, a work plan based on a target completion of work in 2022, project cost and resource needs, and any available legal remedies to recover the Town's cost associated with the project.

This memorandum is being provided in response to this direction and provides an update on the scope of the retaining wall replacement, a work plan based on a target completion of work in 2022 and a construction cost estimate.

Background

A gabion retaining wall located along the rear yards of 54, 56, 58 and 60 Strawberry Hill Court was installed in 1999 and is now failing. As a result, Bond Street pedestrian walkway has been closed in the interest of public safety.

In October 2021, Council directed staff to begin working on an engineering design to replace the failing wall.

In December 2021, an agreement with R. J. Burnside and Associates Limited (Staff Report 2021-0464) was executed on an emergency basis to provide continuous monitoring of the stability of the existing gabion basket retaining wall, engineering advice with respect to the stability of the wall, as well as engineering assistance in the event wall requires intervention in advance of the replacement. Continuous monitoring of the retaining wall is ongoing and contingency plans are in place should the immediate intervention be necessary. No interim intervention is anticipated to be required at this time.

In February 2022, McIntosh Perry Consulting Engineers Ltd. was retained through a competitive bidding process (NRFP 2021-112) to undertake related design and contract administration services of the retaining wall replacement. A Preliminary Design Report is now complete which includes a review and analysis of the various replacement options, as a high-level cost estimate and construction schedule.

In March 2022, a competitive bidding prequalification was completed (RFPQ 2022-35) resulting in three (3) qualified contractors to bid on this sensitive and high priority construction work. A subsequent request for Tender bidding process will be sent to the three (3) prequalified contractors following the completion of the remaining necessary engineering design work on the scope of the retaining wall replacement.

Key stakeholders participated in a multi-criteria analysis of various replacement options

Various retaining wall replacement options were weighed against a set of criteria. Key stakeholders, including the most impacted residents were involved in the process to score the criteria and a consensus was reached. A total of twelve (12) retaining wall options were considered. A few of the highest weighted criteria which were considered are: impacts of adjacent properties, capital cost of construction, durability and lifespan, impact to other nearby stakeholders, maintenance requirements of the wall, etc.

Tiered armour stone block with enhance foundational support was selected

The proposed armour stone block retaining wall replacement will sit on a concrete foundational support system which is anticipated to include the use of concrete helical pile reinforcements for additional stability. This will ensure that the durability and lifespan of the replacement wall will be optimized, while at the same time minimizing the disruption to the nearby residents by allowing for more compact and less intrusive construction techniques and equipment.

The proposed concrete foundational system also allows for a vast majority of the weight of the proposed armour stone, and the weight of the existing gabion wall to be removed from the Peel Region easement which intersects the existing and proposed walls. The mentioned easement is located between 54 and 56 Strawberry Hill Court and contains multiple underground sanitary forcemains owned and operated by Peel Region. An inspection and condition assessment by Peel Region of these forcemains is currently underway, and the analysis of results are anticipated to be completed in July 2022.

Construction is currently scheduled to commence in September 2022

Based on the progress made to date, construction is anticipated to begin in September 2022. Major risks to meeting this proposed schedule include: potential delays in obtaining the required permits and approvals, or if new and currently unknown information is uncovered about the existing condition of the underground Peel Region infrastructure.

Construction cost estimate of between \$1.7M and \$2.0M falls within the allocated budget

A preliminary construction cost estimate has been completed which indicates a cost of between \$1.7M and \$2.0M. The budget allocated under Capital Project #22-133 is sufficient at this time. Please note that estimates will continue to be updated as the design progresses, and that the risk of inflationary construction cost increases are present.

Legal remedies to recover cost associated with the project are under review

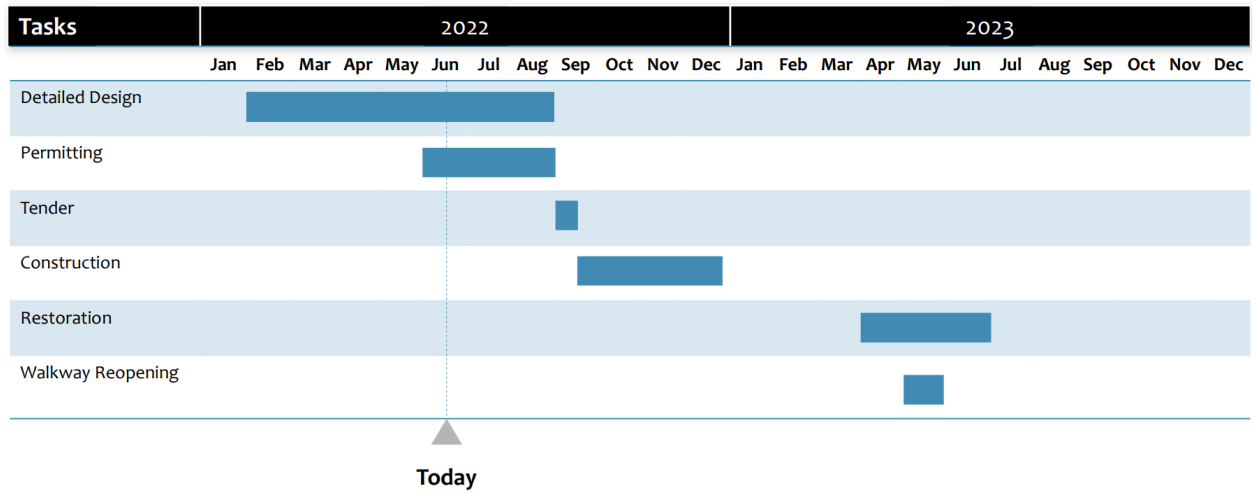
Legal Services is continuing to review available legal remedies to recover costs associated with this project. An update will be provided upon completion of the comprehensive ongoing analysis. Additional easements will not be required at this time as the replacement retaining wall will be constructed on Town property in such a way as to allow for inspection and maintenance access.

Attachments:

Schedule A: Proposed Schedule

Schedule B: Digital Renderings of Proposed Tiered Armour Stone Wall

Schedule A: Proposed Schedule



Schedule B: Digital Renderings of Proposed Tiered Armour Stone Wall

