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Staff Report

Operations

Report To: **COW - Operations, Planning and Building Services**
Meeting Date: February 24, 2026
Report Number: OPS.26.009
Title: Thornbury 1B Lessons Learned Follow-up Report
Prepared by: Alan Pacheco, Director of Operations

A. Recommendations

THAT Council receive Staff Report OPS.26.009, entitled "Thornbury 1B Lessons Learned Follow-up Report".

B. Overview

This report provides Council with a follow-up review of tree loss experienced during the Thornbury West Phase 1B Project, prepared in response to Council direction arising from deputations received on November 17, 2025, and January 13, 2026. The report acknowledges challenges encountered during construction, responds directly to each concern raised, and outlines lessons learned through an accountability lens.

The report also identifies corrective measures implemented to strengthen tree protection practices and establishes a systematic framework to ensure lessons learned are captured and embedded into future projects. These improvements are already being applied to current initiatives, including the Bay Street Reconstruction Project, demonstrating tangible changes to how tree protection is planned, implemented, and monitored.

As part of this review, this report also provides a breakdown of how contingency funds were utilized during the Thornbury West Project Phase 1B, by project location, to support tree-related mitigation measures implemented during construction, lessons learned, measures on ongoing Town projects and mitigation exercise for future Town projects.

This report is intended to directly address Council's expressed concern that prior reporting focused primarily on technical justification rather than accountability, systemic improvement, and measurable change. Accordingly, this report moves beyond explanation and documents how lessons learned will be operationalized, enforced, and reported on a go-forward basis.

C. Background

On November 17, 2025, and January 13, 2026, Council received deputations from Ms. Betty Muise regarding tree loss associated with the Thornbury West Project Phase 1B. The deputations raised concerns related to the accuracy of prior reporting, the timing and adequacy of tree protection measures, construction practices near trees, and communication with impacted residents.

Following these deputations, Council directed staff to prepare a follow-up report through the lens of accountability, specifically outlining lessons learned from challenges with trees during the Thornbury West Project Phase 1B, addressing each and every point raised in the deputations, and identifying how lessons learned will be systematically captured and operationalized on a go-forward basis.

Council further directed that this report demonstrate how real change will result in measurable outcomes, how knowledge will be retained within the organization, and how similar issues will be prevented on future projects through enforceable standards and reporting mechanisms.

D. Analysis

Accountability and Acknowledgement

Through internal review, staff acknowledge that aspects of tree protection during the Thornbury West Phase 1B Project did not meet expected standards. In particular:

- Tree Protection Zones (TPZs) were not consistently installed prior to site disturbance (storage of supplies near trees in particular);
- Root damage occurred in certain areas before full mitigation measures were implemented, limiting preservation options;
- Communication with impacted residents did not consistently include timely or sufficiently detailed technical explanations regarding tree condition and removals.

Staff accept responsibility for these shortcomings and have identified corrective measures to prevent recurrence.

Staff acknowledge that accountability requires not only explaining why decisions were made but also identifying where systems failed to prevent avoidable conflict, reduced public confidence, and reactive rather than proactive mitigation. This report explicitly addresses those gaps.

Response to Deputation Comments and Lessons Learned

1. **Tree Protection Fencing and Timing of Installation**

“For example, (page 3) said that “the Consultant and the Contractor applied preservation practices such as…Tree Protection Fencing…….A notable example occurred at the Beaver

Valley Community Centre…..".This happened only after prompting and submission of a photo and correspondence by Tree Trust showing NO TPZ's along Elma Street South."

The deputation noted that reports stated tree protection measures were applied, while photographic evidence demonstrated that TPZ fencing along Elma Street South was installed only after notification by Tree Trust. Staff review confirms that TPZ installation in this location occurred reactively rather than proactively".

Lesson Learned: Tree protection must be established prior to any construction activity and verified before mobilization including any storage activity around the trees.

Corrective Measures: Mandatory pre-construction inspections, written confirmation of TPZ installation, and clear identification of construction limits prior to excavation.

This represents a fundamental shift from discretionary application to mandatory enforcement and will be treated as a construction hold point on all future projects.

2. Sequence of Events and Root Damage at 45 and 47 Elma St

"Another example (page 4) misrepresents the sequence of events that lead to trees at 45 and 47 needing to be removed. There was no opportunity for assessment of preservation options because root damage due to poor construction practices occurred FIRST. Roots were already torn and badly damaged, completely negating any opportunity to consider preservation."

The deputation identified that root damage occurred prior to any opportunity for preservation assessment due to construction practices. Staff acknowledge that mitigation measures were not implemented early enough to prevent root damage, which eliminated viable preservation options.

Lesson Learned: Preservation planning and mitigation must occur before full excavation so that feasibility of retention is determined before irreversible impacts occur and supported by arborist oversight.

Corrective Measures: Use of hydro-vacuum or air-spade techniques where appropriate, defined sequencing requirements, clearer authority to halt work if tree protection measures are not in place, and enhanced escalation protocols between the Town, Consultant, and Contractor.

Staff acknowledge that earlier intervention would have improved decision-making transparency and reduced conflict, even if the final outcome remained unchanged.

3. Communication with Impacted Residents

While not explicitly referenced in the deputation, residents indicated that more frequent updates and clearer technical explanations were required.

Lesson Learned: Transparent, timely and technically clear communication is essential where tree impacts are anticipated, particularly involving mature trees.

Corrective Measures: Regular resident updates, plain-language explanations supported by arborist findings, and continued multi-party dialogue.

Staff recognize that communication failures can undermine public confidence even where decisions are technically sound, and this will be treated as an operational risk going forward.

Current Application – Bay Street Reconstruction Project

Lessons learned from Thornbury West Phase 1B Project have been applied as corrective measures on the Bay Street Reconstruction Project. Actions include clearly defined construction limits, Tree Protection Zones installed and verified prior to construction, mandatory coordination meetings, joint site inspections, detailed workplans outlining roles and responsibilities, preventative root exposure using air spade and hydro-vacuum methods, enhanced documentation, and proactive communication with impacted residents. These changes demonstrate that the lessons identified are not only theoretical but are already influencing how projects are delivered.

Contingency Spending on Tree Preservation on Thornbury West Phase 1 Project:

As directed by Council, staff reviewed the utilization of the $250,000, contingency allowance established to support enhanced tree preservation measures during Thornbury West Phase 1B. The allowance was an upset limit intended to remove financial barriers where advanced techniques could materially improve tree survivability, not a requirement to expend the full amount.

Based on field conditions and professional assessment during construction, only those mitigation measures that were technically appropriate and expected to provide meaningful benefit were implemented. In locations where major structural roots conflicted directly with required sidewalk, grading, or servicing infrastructure, advanced techniques such as air spading or structural soil would not have altered outcomes and were therefore not deployed.

Mitigation Measure	**Amount Spent ($)**	**Purpose / Outcome**
Select Tree Trimming	6,170	Addressed safety concerns and reduced risk to adjacent properties during construction
Root Pruning	740	Limited use where minor conflicts could be mitigated
Tree Protection Zone (TPZ) Fencing	3,096	Defined construction limits and protected retained trees
Tree Relocation (Spading)	975	Relocation of selected tree was complete as feasible

Mitigation Measure	Amount Spent ($)	Purpose / Outcome
Air Spading	0	Not deployed due to lack of benefit under site conditions
CU-Structural Soil	0	Not required based on final grading and sidewalk design
Total Expenditure	**10,981**	—

Development of a Framework for Tree Preservation in Future Capital Projects

The experience from Thornbury West Phase 1B highlighted the need for a more structured, enforceable, and consistent framework for managing tree protection during municipal reconstruction projects. While tree preservation has long been a stated objective within the Town's capital program, Phase 1B demonstrated that intent alone is insufficient without clearly defined standards, updated technical inputs, and explicit accountability embedded throughout the project lifecycle. In response, staff have identified three interrelated framework components to strengthen future outcomes and prevent recurrence of similar issues.

Construction Near Trees – Engineering Standards

The Town's current Engineering Standards address tree protection primarily at a design and planning level, including the requirement for arborist reports, tree inventories, and identification of trees for retention or removal during the design phase of capital projects. These standards support the intent of tree preservation and allow for mitigation measures to be considered during engineering design; however, they do not provide a comprehensive or enforceable construction-phase framework governing how work near retained trees is to be executed, monitored, and enforced once construction begins. As a result, requirements such as Tree Protection Zones, fencing, sequencing, root-exposure methods, and arborist oversight are addressed inconsistently across projects and rely heavily on project-specific discretion rather than standardized controls.

Staff recommend advancing the development of a formal Construction Near Trees standard to be incorporated into the Town's Engineering Standards and applied consistently across all reconstruction and infrastructure projects. As discussed during the January 13, 2026, Committee of the Whole meeting and reflected in prior staff report, the absence of a standardized construction-phase framework contributed to inconsistent application of Tree Protection Zones, variable contractor practices, and reactive mitigation rather than proactive protection. The proposed standard will close this gap by clearly defining minimum construction-phase requirements, inspection hold points, and enforcement mechanisms to ensure tree protection measures are implemented consistently and verified prior to and throughout construction. The creation of this standard will be funded through 2026 operating budget.

Completion of the new Construction Near Tree Standard is anticipated by the end of the second quarter of 2026

Mandatory In-Person Verification of Arborist Reports Prior to Tender

The Town's current practice requires arborist reports to be prepared during early design stages and reviewed and refined as engineering design advances toward completion. Tree inventories, condition assessments, and proposed retention or removals are updated through the design process and reflected in the final design drawings. This approach supports informed decision-making during design development; however, it does not currently require formal, in-person verification of tree condition immediately prior to the release of the construction tender.

A key lesson from Thornbury West Phase 1B is that tree health, structural integrity, and risk can change between final design completion and construction mobilization, particularly where arborist reports were initially prepared several years earlier. Without a mandatory pre-tender site verification, trees identified for removal or retention may proceed to construction based on assessments that no longer fully reflect current conditions.

To address this, staff will mandate an in-person arborist review immediately prior to tender release for all trees proposed for removal due to construction conflict, poor health, safety risk, or other project-related reasons. This verification will document the most current condition of each tree, confirm or revise the rationale for removal, and provide a clear, defensible record supporting the final design assumptions. Implementing this requirement will improve transparency, strengthen technical justification, and reduce uncertainty during construction by ensuring that removal decisions are based on the most up-to-date information available before contractors mobilize.

To enhance project oversight and accountability, this verification process will be implemented as a requirement for all future reconstruction tenders within the Town's Right-of-Way.

Embedding Tree Protection Accountability into Engineering Assignments

Thornbury West Phase 1B review confirmed that engineering consultants play a central role in coordinating arborist inputs, managing construction activities, and overseeing contractor compliance with approved design requirements. However, in the absence of a formal, Town-wide Construction Near Trees standard, tree protection practices have varied between projects and consultants, resulting in inconsistent application and reliance on project-specific judgment rather than a uniform protocol.

To address this gap, staff recommend embedding the Town's forthcoming Construction Near Trees standard directly into engineering consultant contracts RFP process. Once adopted, the standard will establish a consistent baseline for tree protection expectations across all capital projects, and engineering consultants will be contractually required to apply the standard throughout design development and construction.

Engineering RFPs will explicitly require consultants to demonstrate how the standard will be implemented, including integration of tree protection requirements into design drawings and

specifications, coordination of arborist reviews, and structured oversight of contractor compliance during construction. By capturing these expectations within consultant scopes of work, the Town ensures consistent application of tree protection practices across projects, reinforces accountability through contractual obligations, and shifts tree protection from a project-specific approach to a standardized component of infrastructure delivery.

This requirement will form part of all future reconstruction tenders and will apply to consulting firms working within the Town's Right-of-Way.

E. Strategic Priorities

1. Communication and Engagement

We will enhance communications and engagement between Town Staff, Town residents and stakeholders

2. Organizational Excellence

We will continually seek out ways to improve the internal organization of Town Staff and the management of Town assets.

3. Community

We will protect and enhance the community feel and the character of the Town, while ensuring the responsible use of resources and restoration of nature.

4. Quality of Life

We will foster a high quality of life for full-time and part-time residents of all ages and stages, while welcoming visitors.

F. Environmental Impacts

The corrective measures identified in this report are expected to result in improved protection of mature trees during construction, reduced avoidable root damage, enhanced long-term canopy health, and greater public confidence in environmental stewardship.

G. Financial Impacts

No additional funding is requested through this report. All future resource requirements associated with the production & implementation of Construction near tree protection standards or related process improvements will be funded by existing operating budget.

H. In Consultation With

Pruthvi Desai, Manager of Capital Projects

Adam Smith, CAO

I. Public Engagement

The topic of this Staff Report has not been the subject of a Public Meeting and/or a Public Information Centre as neither a Public Meeting nor a Public Information Centre are required. However, any comments regarding this report should be submitted to Alan Pacheco, Director of Operations directorops@thebluemountains.ca.

J. Attached

None.

Respectfully submitted,

Alan Pacheco
Director of Operations

For more information, please contact:
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Report Approval Details

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This report and all of its attachments were approved and signed as outlined below:

Alan Pacheco - Feb 17, 2026 - 9:01 AM

No Signature found

Adam Smith - Feb 17, 2026 - 9:17 AM