

Staff Report

Operations –

Engineering and Capital Projects

Report To: COW - Operations, Planning and Building Services

Meeting Date: May 20, 2025 **Report Number:** OPS.25.020

Title: Tyrolean Lane and Kandahar Lane Watermain Replacement and

Wastewater Servicing Project

Prepared by: Pruthvi Desai, Manager of Capital Projects

A. Recommendations

THAT Council receive Staff Report OPS.25.020, entitled "Tyrolean Lane and Kandahar Lane Watermain Replacement and Wastewater Servicing Project";

AND THAT Council direct staff to include the Tyrolean Lane and Kandahar Lane watermain replacement and wastewater servicing project in the Town's 2028 Capital Budget for consideration;

AND THAT Council direct staff to evaluate the integration of wastewater servicing, watermain replacement, and urbanization works for Tyrolean Lane and Kandahar Lane as a consolidated project delivery approach.

B. Overview

On October 21, 2024, Council directed staff to bring forward a staff report with the materials and information with respect to the "Water & Wastewater Servicing of Tyrolean Lane – Phase 2 Works". (Attachment 2)

C. Background

In 2018, Town staff developed a Water and Wastewater Servicing Extension Plan which identified twenty-four (24) areas within the Town's Urban Area boundary, as designated by the Town's Official Plan, where future municipal servicing was recommended. Tyrolean Lane was identified within this plan as a candidate for wastewater servicing within a five-to-ten-year planning horizon (CSPW.19.007).

In response to ongoing watermain issues on Tyrolean Lane and Kandahar Lane, attributed to the age and material composition of the existing polybutylene watermain infrastructure, staff proposed including both a substandard watermain replacement project and the extension of wastewater servicing for Tyrolean Lane in the Draft 2020 Budget. In 2020, members of Council approved these initiatives, recognizing the urgent need to address the deteriorating water infrastructure and the reliance of area properties on aging private septic systems and holding tanks. The approved scope of work included the installation of new gravity sanitary sewers and individual service connections to property lines, as well as the replacement of the existing substandard watermain.

In accordance with the Town's Affordability Policy (POL.COR.17.02), which sets cost thresholds for water and wastewater service extensions, Council approval was required due to the potential for project costs to exceed these limits. It is also important to note that the current policy is based on 2016 census data, not the updated 2021 census. Under the policy, projects within 5% of the affordability threshold may proceed without Council approval; those between 5% and 10% require Council endorsement. In this case, the property owners at 136 Tyrolean Lane and 138 Kandahar Lane contributed a sufficient number of resort commercial units to meet the affordability criteria for the remaining residential properties on Tyrolean Lane.

Staff initiated public consultation by issuing a notice to affected property owners in February 2020 and hosting a Public Information Centre (PIC) in March 2020. Subsequently, WT Infrastructure Inc. was retained to complete the detailed engineering design and contract administration services. A second PIC was held on May 6, 2021, followed by a third PIC December 2, 2021, to present detailed design elements for Tyrolean Lane and Birchview Trail. Based on resident feedback and technical analysis, a recommendation was brought forward to members of Council to split the project into two phases (CSOPS.22.042).

Phase 1 consisted of the watermain replacement and wastewater servicing for Birchview Trail, which was successfully tendered, constructed, and completed in November 2022. Phase 2, which included wastewater servicing works on Tyrolean Lane, Kandahar Lane, and Arlberg Crescent, was initially intended for tendering in 2023. However, detailed design for Phase 2 was finalized in January 2023 and tendering was subsequently deferred due to uncertainties related to nearby development proposals, downstream infrastructure capacity limitations, and the designation of Tyrolean Lane as a Development Charges project requiring urbanization components.

On October 21, 2024, following a deputation (Attachment 2) from a resident, members of Council passed a resolution requesting staff to prepare a report addressing the inclusion of Phase 2 of the Tyrolean Village Watermain Replacement and Wastewater Servicing Project in the Draft 2025 Budget for Council's consideration.

D. Analysis

Existing Infrastructure

The existing watermain on Tyrolean Lane was installed in the 1970s using polybutylene piping. This material has become increasingly brittle over time, resulting in a heightened frequency of watermain breaks within the Tyrolean Village area. Replacement of this infrastructure is

required to maintain system reliability, service continuity and to protect the integrity of the drinking water system. In addition, residential properties on Tyrolean Lane are currently serviced by private septic systems. The absence of municipal sanitary servicing presents long-term environmental and public health risks, particularly as existing septic systems age and fail.

Capacity Issues

Capacity limitations have been identified within the downstream sanitary sewer system and at the Craigleith Sewage Lift Station (SLS), which serves the Craigleith area, including Tyrolean Village. As reported in the 2023 Year-End Water and Wastewater Capacity Assessment, the Craigleith SLS currently serves a total of approximately 5,672 units connected and is operating at a rated capacity of 180 L/s. This capacity is currently insufficient to support additional flows from the Tyrolean Village area without upgrades. The Town is actively progressing the final engineering design for the Craigleith SLS expansion, with construction tendering scheduled for June 2025 and a targeted project completion date of February 2027.

In addition to capacity constraints at the Craigleith SLS, flow deficiencies were previously identified in the Brooker Lane sanitary sewer, located downstream of the Tyrolean Lane area. While initial modeling by WT Infrastructure Inc. during the design phase suggested that future development flows would exceed the available capacity in the gravity sewer, further review has clarified that the issue is not strictly one of capacity but rather related to the flat slope of the pipe, which limits conveyance efficiency. Flow monitoring in the area has since been completed, and no additional monitoring is planned at this time. Staff will consider the findings as part of the Town's ongoing Wastewater Master Plan to determine any required remedial measures.

Planning Applications

Potential development at 136 Tyrolean Lane and 138 Kandahar Lane introduces additional considerations for coordinated infrastructure planning. At this time, no formal planning application has been submitted for 136 Tyrolean Lane, and as such, the nature, scale, and servicing requirements of any future development remain unknown. The adjacent property at 138 Kandahar Lane is currently subject to an appeal before the Ontario Land Tribunal (OLT), and no final site plan or approved concept has been established. Both properties are designated Resort Commercial in the Town's Official Plan and represent increasingly scarce large, undeveloped parcels within the Blue Mountain Resort area and its surroundings. As Resort Commercial lands, no standard residential density applies, making it difficult to estimate Equivalent Residential Units (ERUs) without a defined development proposal. While the future land use of these sites remains uncertain, staff acknowledge the opportunity to align municipal servicing with development approvals once confirmed, ensuring optimized servicing configurations, minimizing construction-related disruption, and achieving efficiencies in timing, design, and delivery.

Development Charges Background Study

The Town's 2024 Development Charges Background Study identifies Tyrolean Lane as a development related capital project requiring urbanization, including sidewalks, streetlights, and boulevard tree planting. Under the current scope of the servicing project, only restoration of disturbed road areas would occur. However, there is merit in considering a broader reconstruction effort, combining watermain and wastewater servicing with urbanization improvements, subject to development progress and resolution of downstream infrastructure constraints.

Conclusion

By bundling watermain replacement, sanitary servicing, and urbanization works into a single project, the Town can achieve cost efficiencies through reduced engineering design efforts, consolidated mobilization and demobilization costs, and minimized disruption to the community. Such an approach would also align with the objectives of the Town's Affordability Policy by potentially reducing the individual cost burden on affected residents. Moreover, it would streamline planning matters by synchronizing service with anticipated development activity. As the increased level of service associated with a full urban cross-section has been included in the Town's Development Charges (DC) Background Study and will be funded in part through DCs, and will lower the cost burden through local improvement charges.

Staff Recommendations

Staff recommend that Council direct the inclusion of Tyrolean Lane watermain replacement and wastewater servicing in the 2028 Budget for Council's consideration, contingent on the successful completion of the Craigleith Sewage Lift Station upgrade and the resolution of downstream sewer capacity issues. Further, staff recommend that Council consider incorporating the urbanization of Tyrolean Lane into the scope of the servicing project, ensuring a comprehensive and coordinated approach to infrastructure renewal and community development in this area.

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

Improperly maintained and failing septic systems may contribute to higher soil, groundwater and surface water pollution. The aging polybutylene watermain poses an environmental risk due to the potential for water loss, ground saturation and puts the entire drinking water system at risk. Completing the watermain replacement, wastewater servicing, and urbanization works as separate projects would result in increased ground disturbance, emissions, and resource consumption, whereas combining them minimizes cumulative environmental impacts through reduced construction activities and material use.

G. Financial Impacts

The Tyrolean Lane servicing project is proposed for consideration in the 2028 Capital Budget, funded through Water Reserves, Wastewater Capital Charges and Development Charges. Urbanization costs would be funded from Water, Wastewater & Road Related Development Charges. To the extent possible, the Town's Affordability Policy will apply to support cost-recovery from benefitting property owners. Combining the projects will reduce overall engineering, mobilization, and construction costs. Separate projects would increase financial pressures and duplication of efforts. Final funding allocations will be confirmed through the 2028 Budget process.

H. In Consultation With

Mike Humphries, Senior Infrastructure Capital Project Coordinator

Allison Kershaw, Manager of Water & Wastewater

Adam Farr, Senior Planner

Michael Switzer, Deputy Treasurer/Manager of Budgets & Accounting

Monica Quinlan, Treasurer/ Director of Corporate & Financial Services

Shawn Postma, Manager of Planning

Adam Smith, Acting 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 Pruthvi Desai, Manager of Capital Projects managercapitalprojects@thebluemountains.ca.

J. Attached

- 1. Tyrolean Village Project Map
- 2. Council Resolution Dated October 21, 2024 & Deputation
- 3. CSOPS.22.042 & Council Direction

Respectfully submitted,

Pruthvi Desai Manager of Capital Projects

Alan Pacheco Director of Operations

For more information, please contact: Pruthvi Desai, Manager of Capital Projects <u>managercapitalprojects@thebluemountains.ca</u> 519-599-3131 extension 236

Report Approval Details

Document Title:	OPS.25.020 Tyrolean Lane and Kandahar Lane Watermain Replacement and Wastewater Servicing Project.docx
Attachments:	 Attachment 1 Tyrolean Village Project Map.pdf Attachment 2 Council Resolutions dated October 21, 2014 and Deputation.pdf Attachment 3 CSOPS.22.042 Tyrolean Village Contstruction
	Follow-up and Council Resolutions dated April 12, 2022.pdf
Final Approval Date:	May 9, 2025

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

Pruthvi Desai - May 8, 2025 - 4:22 PM

Alan Pacheco - May 9, 2025 - 9:55 AM