

**Subject:** Quaker Road Reconstruction Project Update**Recommendation:**

**BE IT RESOLVED THAT Council receive Report #2023-0083-Public Works – Quaker Road Reconstruction Project Update and Pelham St Phase 4 Project, for information;**

**AND THAT Council approve the deferral of the following projects to 2024: RD 13-23 Quaker Rd Reconstruction (\$2,100,000); WTR 01-23 Quaker Rd-Watermain (\$800,000) and WST 06-23 Quaker Rd-Wastewater (\$1,050,000) as summarized on Appendix 1;**

**AND THAT Council approve in 2023 the Pelham Street Phase 4 Reconstruction Road Project # 300649 for \$3,436,000 and Pelham St Phase 4 Watermain Project # 700286 for \$685,000, to be funded as follows: \$595,000 Roads Reserve, \$644,000 by the Water Reserve, \$41,000 by the Wastewater Reserve, \$791,000 by Ontario Community Infrastructure Fund (OCIF), \$1,200,000 ICIP Northern and Rural Grant and \$850,000 by Development Charges Revenue as summarized on Appendix 1;**

**AND THAT Council approve the change in funding for RD 09-23 Road Rehabilitation project # 300643 in 2023 from \$163,171 Roads Reserve and \$836,829 OCIF grant to \$630,171 Roads Reserve, \$324,000 from the Canada Community Benefit Fund (CCBF) and \$45,829 OCIF as summarized on Appendix 1.**

**Background:**

On February 7, 2022, Council authorized the execution of a cost sharing agreement between the Region of Niagara (Region) and the Town of Pelham (Town) with respect to the Quaker Road Reconstruction Project between Pelham Street and Line Avenue. The purpose of the project is for the Region to construct a new trunk sanitary sewer from Pelham Street to Rice Road that will alleviate the existing capacity issues of the Pelham Street sanitary sewer, and support future flows associated with the growth of Pelham.

As part of the project, Quaker Road from Pelham Street to Line Avenue is to be fully urbanized, complete with a new storm sewer, curb and gutter, sidewalk, and replace the existing watermain and sanitary sewer. The design for the project was to be complete by the end of 2022, with tendering and the start of construction taking place in 2023. Council approved funding for the construction portion of the project as part of the 2023 Capital Budget.

Given the size and complexity of the Region's project, the project is estimated to take 240 working days to complete, which would result in the construction portion of the project finishing by the end of 2024. The construction was to be phased so that all work in Pelham was to be completed by the end of 2023, allowing the Town to proceed with Phase 4 of the Pelham Street Reconstruction project in 2024, which goes from the south Spruceside Crescent intersection to the Pelham/Welland border, approximately 500m south of Quaker Road.

On March 16, 2023, Town staff were approached by Region staff to discuss altering the construction phasing so that the project would start at Rice Road, and proceed west to Pelham Street. The design engineer for the project identified a constructability issue between the proposed trunk sanitary sewer and the Town's existing sanitary sewer that services Quaker Road. The Town's sanitary sewer that services Quaker Road would be cut off as it is in the way of the proposed trunk sanitary sewer and the new local sanitary sewer cannot be constructed as it would not have a proper outlet. Starting the project at Rice Road would allow the trunk sanitary sewer to be constructed up to the intersection of Pelham Street, at which point the new local sanitary sewer could then be constructed and connected to the new trunk sanitary sewer, providing it with a proper outlet.

### **Analysis:**

The proposed construction staging provided to the Town on March 23, 2023, would see that the Welland portion of the project be completed in 2023, with the remaining works, including the Pelham portion, be completed in 2024. The Welland portion of the project is estimated to take 130 working days to complete, and the Pelham portion is estimated to take 110 days to complete.

As of March 24, 2023, the tender documents and design drawings for the Quaker Road Reconstruction Project have not been finalized. Given the coordination, finalization of documents, tendering, review, and award, Town staff anticipate that the construction portion of the Quaker Road project will not commence until July 2023 at the earliest. If construction were to start in July there would be approximately a maximum of 120 possible working days remaining in 2023. However, adverse weather conditions and unforeseen constructability issues, such as high groundwater levels, could negatively impact the construction progress. Therefore, there is a risk that some of the Welland portion of the project will need

to be completed in 2024, which would push back the completion date of the Pelham portion, resulting in a late 2024/early 2025 completion date for the Quaker Road project.

Pelham Street Phase 4 from Spruceside Crescent south to 500m south of Quaker Road has been budgeted for construction in 2024, as it has federal grant funding with a mandatory substantial completion date of October 31, 2026. The project consists of road urbanization including catch basins, bike lanes, sidewalks, and curb and gutter, as well as replacement of the existing waterman, and is estimated to take 100 working days to complete.

Due to safety regulations, two separate construction projects cannot share a common border with each other. Therefore, Pelham Street Phase 4 construction cannot take place at the same time as the Pelham portion of the Quaker Road project. If the Region does not start the Pelham portion of the Quaker Road project until 2024, it is highly unlikely that Pelham Street Phase 4 is able to commence in 2024. This would push the Pelham Street Phase 4 start date back until 2025, and risk losing the remaining grant funding in the amount of approximately \$1,200,000.

After discussions with the Region, the design engineer for the Quaker Road project, MTE Consultants Inc. (MTE), and the design engineer for Pelham Street Phase 4, Associated Engineering (AE), Staff strongly believe the best course of action is to proceed with Pelham Street Phase 4 in 2023. The project is ready to be tendered, and construction could commence as early as Mid-May. Pelham Street Phase 4 would be completed before the end of 2023, and well before the Quaker Road project begins the Pelham portion of it. Proceeding with Pelham Street Phase 4 in 2023 would also ensure that the completion requirements for the federal grant funding associated with the project would be met, and the remainder of the grant funding would be received. There would be no risk of losing the grant funding due to the project not being substantially complete by October 31, 2026.

### **Financial Considerations:**

Based on the original construction phasing for the Quaker Road project having the Pelham portion completed in 2023, staff had budgeted for the project in the 2023 Capital Budget that was approved by Council on February 6, 2023. Given that the Pelham portion of the Quaker Road project will not begin until 2024, the Town has no financial commitments to the project until then. The total approved budget for the Quaker Road project is \$3,950,000. The breakdown of the approved budget is as follows: Road (RD 13-23) \$2,100,000, Wastewater (WST 06-23) for \$1,050,000 and Water (WTR 01-23) for \$800,000.

Staff received a cost estimate for Pelham Street Phase 4 on March 23, 2023, based on current industry unit prices. The estimated construction cost for Pelham Street

Phase 4 is \$3,961,000. Also required for the project are contract administration and geotechnical testing, which is estimated to cost \$160,000. Therefore, the total estimated cost of Pelham Street Phase 4 is \$4,121,000. The breakdown of the estimated project cost is as follows:

Road:	\$3,460,000
Wastewater:	\$ 41,000
Water:	\$ 620,000

Appendix 1 has a breakdown of the funding sources for the Pelham St Phase 4 Project. In summary the funding of \$4,121,000 is as follows: \$595,000 Roads Reserve, \$644,000 by the Water Reserve, \$41,000 by the Wastewater Reserve, \$791,000 by Ontario Community Infrastructure Fund (OCIF), \$1,200,000 ICIP Northern and Rural Grant and \$850,000 by Development Charges Revenue.

Staff estimate there to be \$640,000 in savings for the Pelham Stret Phase 3 project (RD 11-22) thanks to value engineering that was done by Town staff, the consulting engineer, and the contractor that will used to fund Pelham Street Phase 4.

The Quaker Road Reconstruction project will be budgeted in the 2024 Capital Budget. The breakdown is on Appendix 1.

In order to fund Pelham St Phase 4 project certain grant funding needed to be reallocated. This has impacted Project RD 09-23 Road Rehabilitation. There is \$324,000 of Canada Community Benefit Fund that is carryforward from 2022 that is being allocated to this project. Please refer to Appendix 1 for the reallocation of funds.

In summary, by deferring the Quaker Road project to 2024 and moving the Pelham St Phase 4 project to 2023 the impact over the two years (as listed on Appendix 1) is as follows:

- Increase to Roads Reserve of \$271,000, decrease to Water Reserve of \$756,000, increase to the Wastewater Reserve of \$41,000, increase to CCBF of \$324,000, decrease ICIP Northern and Rural Grant of \$621,610 and decrease in a new debenture of \$1,881,140, for a total net decrease of \$2,622,750.

### **Alternatives Reviewed:**

An alternative to proceeding with Pelham Street Phase 4 in 2023 is to wait for the Quaker Road project to be complete and proceed with Pelham Street Phase 4 after that. Staff is not in favour of this alternative as there is no guarantee that the Quaker Road project is complete by the end of 2024, which increases the Town's risk of losing \$1,200,000 in grant funding for Pelham Street Phase 4 as the project

may not be complete by the mandatory substantial completion date of October 31, 2026, as outlined in the grant agreement.

### **Strategic Plan Relationship: Build Strong Communities and Cultural Assets**

The Town's infrastructure benefits from the timely replacement of aging infrastructure, and is critical to ensuring the Town maintains a safe and efficient transportation network, water distribution system, wastewater collection system, and stormwater management system.

### **Consultation:**

Consultation was undertaken with the Region of Niagara, MTE Consultants Inc. and Associated Engineering, in preparation for this report.

### **Other Pertinent Reports/Attachments:**

Appendix 1: 2023 Capital Budget Changes for Quaker Rd and Pelham St Phase 4

2022-0035-Public Works – Quaker Road Reconstruction Cost Sharing Agreement with Niagara Region

2021-0192-Public Works – Detailed Design of Quaker Road Reconstruction between Pelham Street and Line Avenue

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