

Region of Waterloo
Engineering and Environmental Services
Water and Wastewater Services

To: Planning and Works Committee
Meeting Date: April 4, 2023
Report Title: Notice of Completion: Baden - New Hamburg Water and Wastewater System Servicing Review

1. Recommendation

That the Regional Municipality of Waterloo approve the Baden – New Hamburg Water and Wastewater System Servicing Review EA – Project File Report as summarized in this Report EES-WAS-23-004 dated April 4, 2023; and

that the Regional Municipality of Waterloo publish the Notice of Completion for the Baden – New Hamburg Water and Wastewater System Servicing Review and provide the Project File Report for a 30-day public review and comment period, in accordance with the Municipal Class Environmental Assessment process; and

that the Regional Municipality of Waterloo direct and authorize staff to commence with required real estate acquisitions for easements as outlined in this Report EES-WAS-23-004 dated April 4, 2023.

2. Purpose / Issue:

The Region has completed a Master Plan under the Municipal Class Environmental Assessment process (Class EA). The Class EA identifies the best way, in terms of social, environmental, technical and cost to provide water and wastewater servicing that meets the growth identified in the current 2019 Township Official Plan and 2015 Region Official Plan in the communities of Baden, New Hamburg and Foxboro Green in the Township of Wilmot.

3. Strategic Plan:

The Baden - New Hamburg Water and Wastewater System Servicing Review project supports the Environment and Climate Action focus area in the 2019-2023 Strategic Plan by protecting our water resources (Objective 3.4).

4. Report Highlights:

- **Water Supply Systems are Sufficient:** Water Supply from the currently active

water supply systems for the communities of Baden and New Hamburg are sufficient for the growth identified in the 2019 Township Official Plan and 2015 Region Official Plan.

- **Wastewater Conveyance Opportunity Identified:** The New Hamburg Wastewater Treatment Plant was expanded in 2020 and has sufficient capacity for growth identified in the current official plan. However to convey the wastewater to the plant, the current collection system is inadequate due to rain events combined with snow melt getting into the pipes. Although Region staff have worked with Township staff on the inflow and infiltration (groundwater, rain and snow melt in the sanitary system) problem, measures have not, thus far, been effective in reducing inflow and infiltration. An opportunity to address the issue in a holistic manner was adopted in this study. The highest scoring alternative was to convey flows from Baden directly to New Hamburg Wastewater Treatment Plant, thereby freeing up capacity in the Township's Morningside wastewater trunk main. A new sanitary pump station and forcemain would be constructed. Easements would be required in this alternative
- **Foxboro Green Efficiencies Explored:** Water and wastewater systems in Foxboro Green are provided as a communal system. The Region was ordered to take ownership and operate the systems by the Ministry of Environment, Conservation and Parks in the late 1990's. The capacity for water and wastewater infrastructure is sufficient at Foxboro Green, however a number of the Region's treatment plant assets are nearing end of service life. The opportunity to provide these services in a more sustainable and efficient manner for the long term future was explored. The highest scoring alternative was to supply water and convey wastewater using a direct route from Foxboro Green to Baden. Two new wastewater pumping stations and collection wastewater mains will be constructed, while the existing onsite treatment systems will be discontinued. Easements will be required in this alternative.

5. Background:

The Region provides water supply, water treatment, wastewater transmission and wastewater treatment services in the communities of Baden and New Hamburg. Based on growth identified in the Region Official Plan and Township Official Plan, the demand for water and wastewater services will increase.

The Baden-New Hamburg Water and Wastewater System Servicing Review assessed the current state of the Region's water and wastewater systems, developed alternatives to satisfy future water and wastewater servicing needs, and preferred solutions were identified to ensure servicing is available now and in the future. Opportunity to service the community of Foxboro Green was also part of this review.

6. Area Municipality Communication and Public/Stakeholder Engagement:

Area Municipality Communication: Staff from the Township of Wilmot were consulted throughout the project to obtain feedback at key project milestones.

Public/Stakeholder Engagement: Three virtual PCC's were held for this project (June 1, 2021, January 12, 2022 and June 7, 2022). The public, agencies, Indigenous communities (Haudenosaunee Confederacy, Mississaugas of the Credit First Nation, and Six Nations of the Grand River), and stakeholders were invited to review material over the 30-day review period and asked to provide feedback. Comments were received about construction disruption and addressed. The Mississaugas of New Credit First Nation requested review of our Stage 1 archaeological report and environmental scan report and responded that they have no comment, but requested to be kept involved during the next stages. In addition, the Study Team met with the condominium corporation representing Foxboro Green community to explain the proposed alternative. After exchange of ideas and a guided tour, their feedback was incorporated to arrive at the preferred solution. Their feedback and letter in agreement on the preferred alternative is part of the Project File Report.

7. Financial Implications:

The approved 2023-2032 Water Capital Program and Forecast includes a budget of \$27,500,000 between 2025 and 2027 for the design and construction of the Foxboro Water Connection project (Project #04893) to be funded from the Water Capital Reserve (73.0%; \$20,075,000), and the Water Development Charge Reserve Fund (27.0%; \$7,425,000). An amount of \$800,000 has been allocated for the work of the Foxboro Water Connection project.

The approved 2023-2032 Wastewater Capital Program and Forecast includes a budget of \$16,809,000 between 2023 and 2027 for the design and construction of the Baden Pump Station and Forcemain project (Project #08310) to be funded from the Wastewater Capital Reserve (73.0%; \$12,270,600), and the Wastewater Development Charge Reserve Fund (27.0%; \$4,538,400).

The approved 2023-2032 Wastewater Capital Program and Forecast includes a budget of \$8,500,000 between 2025 and 2027 for the design and construction of the Foxboro Sanitary Connection project (Project #08309) to be funded from the Wastewater Capital Reserve (57.9%; \$4,921,500), and the Wastewater Development Charge Reserve Fund (42.1%; \$3,578,500). An amount of \$2,900,000 has been allocated for the work of the Foxboro Sanitary Connection project.

Updated project costs were included in the 10 year Water Capital Plan, however, more detailed cost estimates will be developed through the detailed designs of the projects.

8. Conclusion / Next Steps:

The project team will review feedback received during the 30-day public review period of the Project File Report. If necessary, the Project File Report will be updated to address comments received. After comments for the Project File Report have been addressed, the Baden – New Hamburg Water and Wastewater System Servicing Review study will be complete. Detailed design for the preferred solutions for the Baden sanitary pump station and forcemain, and Foxboro servicing is scheduled to begin in 2023 pending acquisition of easements.

9. Attachments:

Appendix A: Map of Project Study Area

Appendix B: Project File Report Executive Summary

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