

June 16, 2026

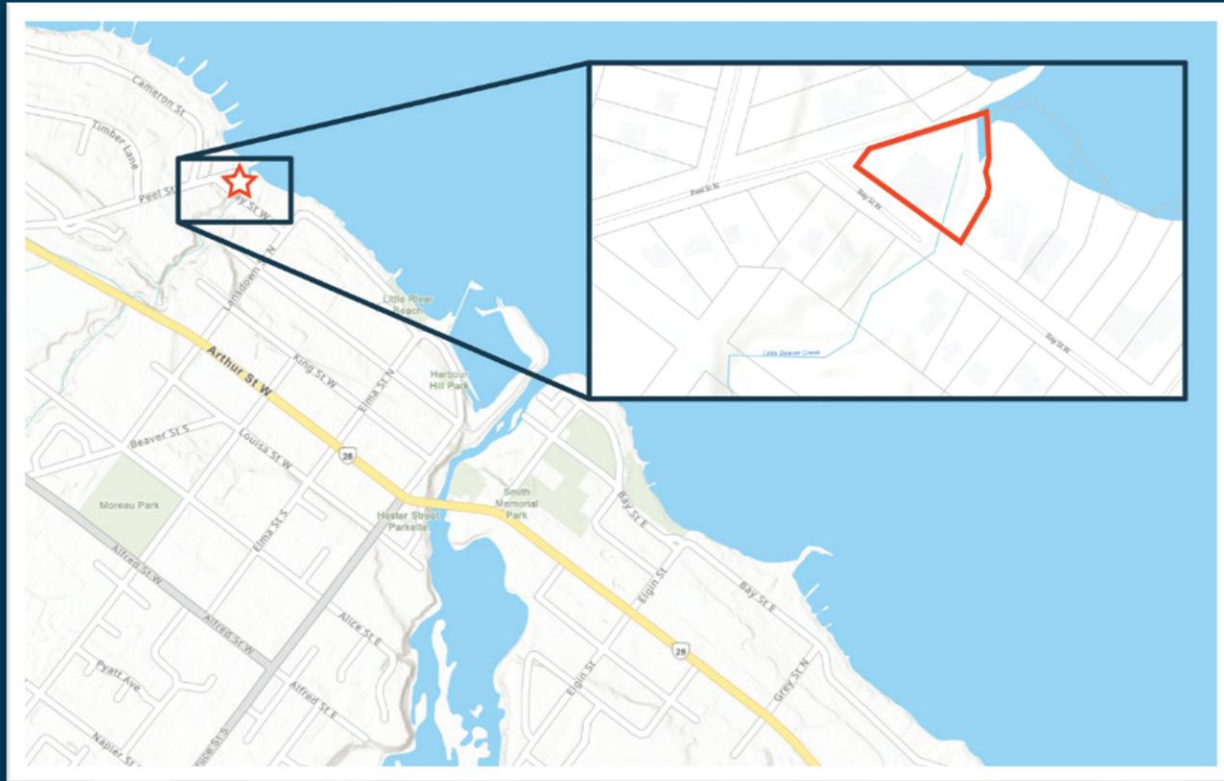
Town of The Blue Mountains Thornbury Water Treatment Plant Upgrades Municipal Class Environmental Assessment



Platinum
member



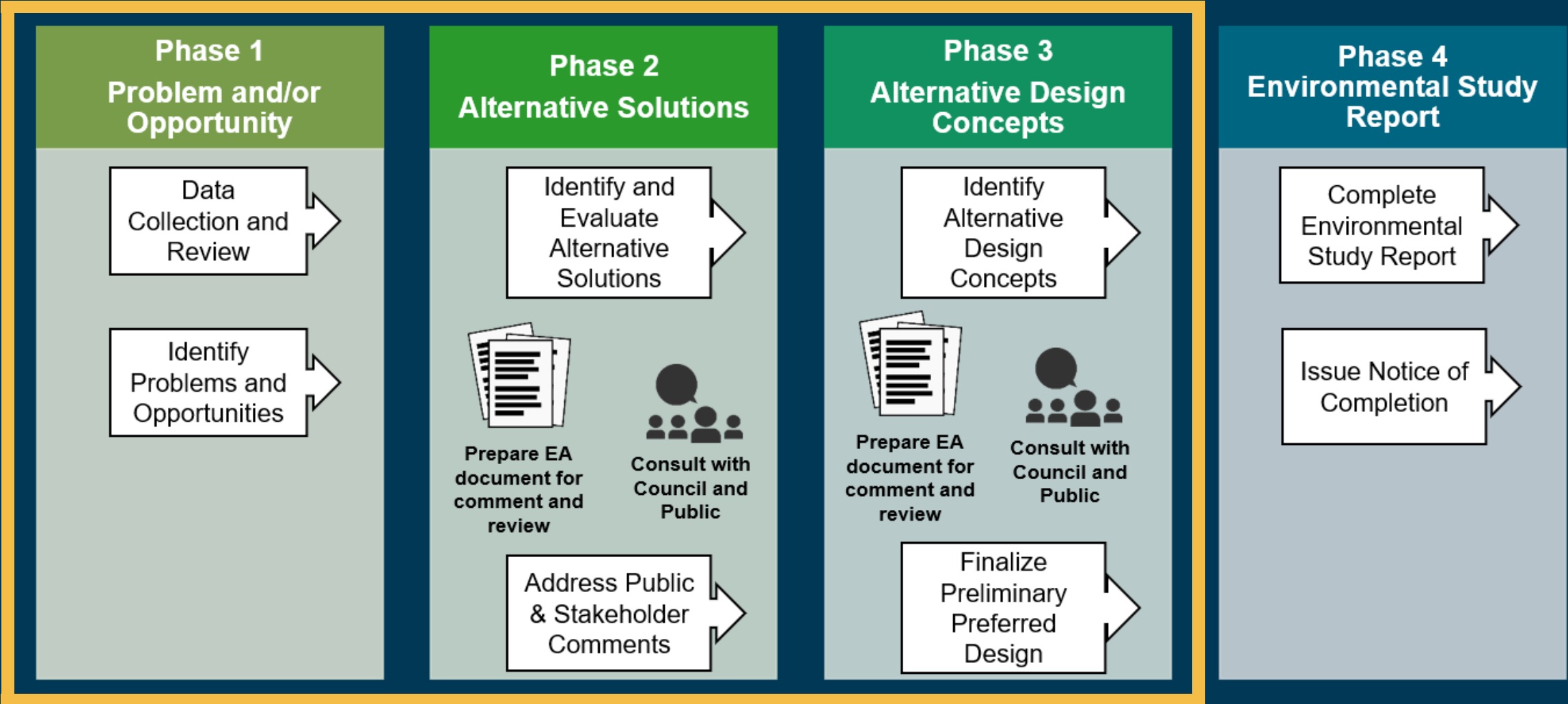
Project Overview



The Town is undertaking this Municipal Class Environmental Assessment to implement the recommended upgrades to the Thornbury Water Treatment Plant as part of the ongoing MCEA for Drinking Water Storage and Supply Deficiencies in the Town's eastern pressure zones.

- 1. Current Capacity:** In 2014, an MCEA was undertaken to re-rate the plant to the existing rated capacity of 15,140 m³/d. The existing Permit to Take Water allows for 18,662.4 m³/d.
- 2. Plant Constraints:** In 2021, a capacity assessment determined the actual firm capacity of the plant was 13,392 m³/d due to condition of the high lift pumps. Two of the high lift pumps have since been replaced. Clearwell capacity is also expected to require upgrades.
- 3. Recommended Upgrades:** In 2022, a detailed assessment of the condition of the membranes at the WTP was completed. It was identified that by upgrading the membranes could result in a 20% increase in plant capacity, up to 18,185 m³/d.

MCEA Process Overview



Recommended Plant Upgrades

From 15,140 M³/day to 18,165 M³/day



Microfiltration Membrane Upgrades to Existing Three Trains and potential 4th Train

Chlorination System Upgrades (Chemical Feed Pump and Storage Tank)

Clearwell Upgrades for Additional Capacity

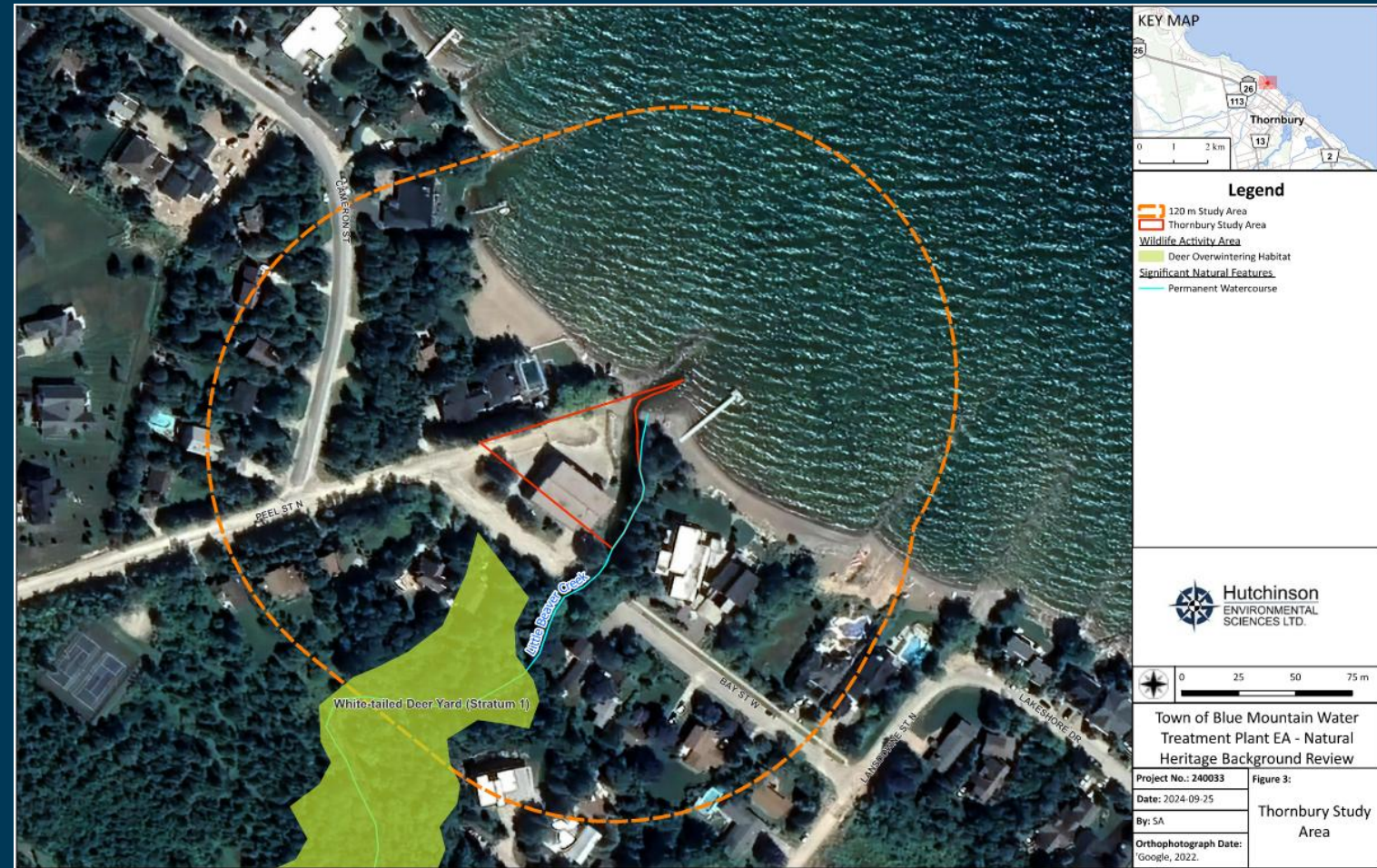
High Lift Pump Upgrades (Three New Pumps with Modifications to Headers as Required)

Class D Capital Costs: \$4M

**Expected to be within +/- 30% accuracy.*

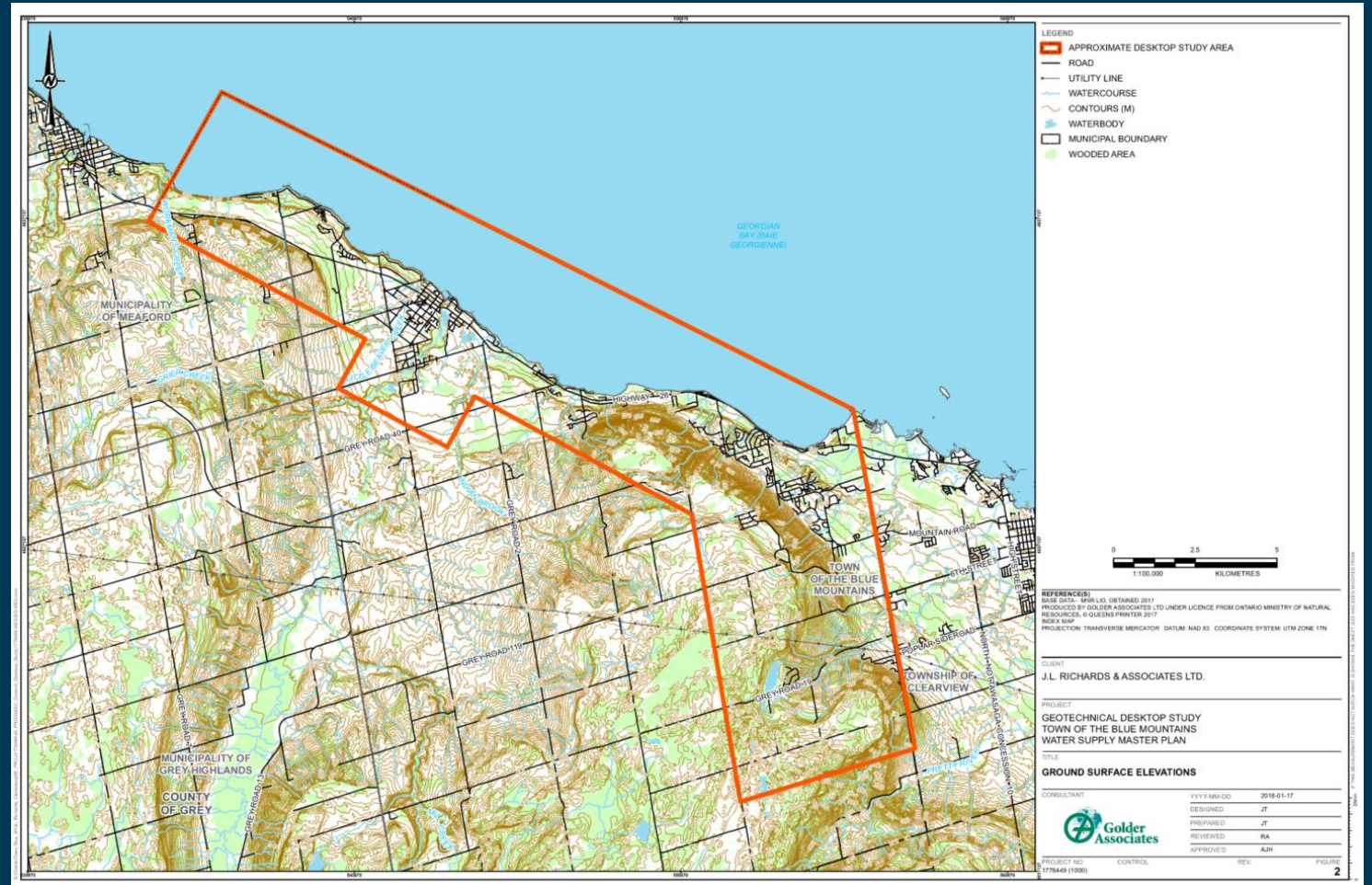
Environmental Considerations

- No significant wetlands, coastal wetlands, ANSIs, or valley lands were identified in the Natural Heritage Background Review of the Thornbury WTP study area (Hutchinson Environmental Sciences Ltd, 2024)
- Natural heritage constraints include a stream, and a significant wildlife habitat (deer wintering).
- Construction at the WTP site will mainly be constrained to previously disturbed areas of the site
- Field investigations may be required as part of detailed design if potential habitat for endangered or threatened species will be removed or impacted by construction

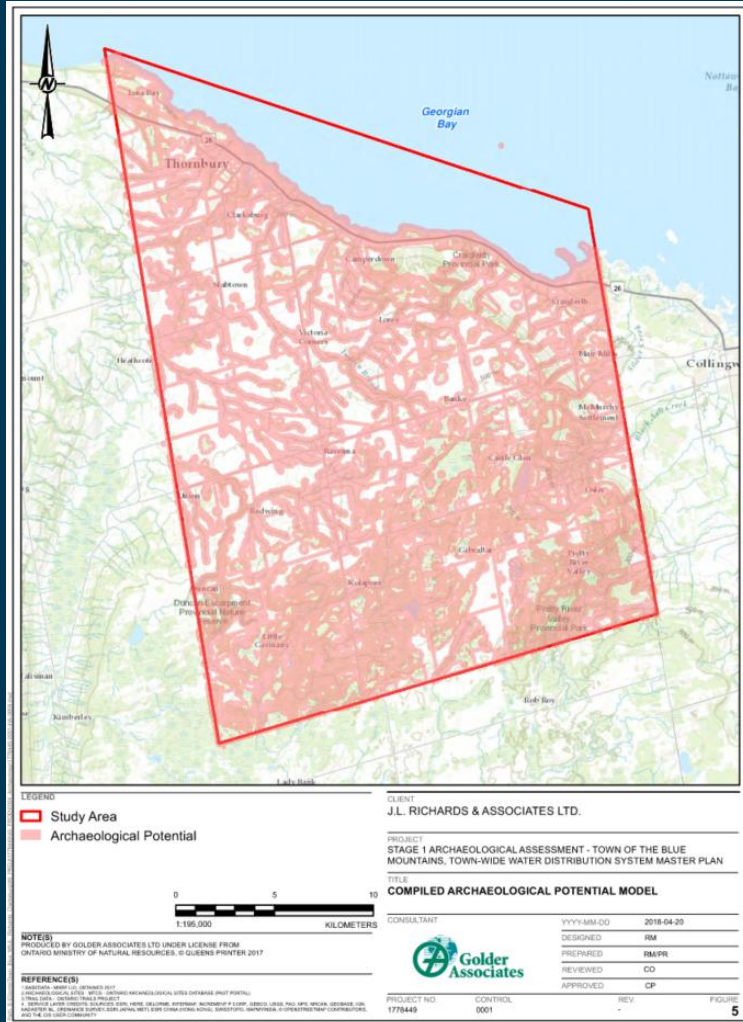


Geologic & Hydrogeologic Considerations

- Bedrock elevations in the project area may present design and construction challenges as identified in a desktop geotechnical and hydrogeological investigation (Golder, 2018)
- Geotechnical and excess soils management investigations will be conducted as part of detailed design of the preferred alternative.



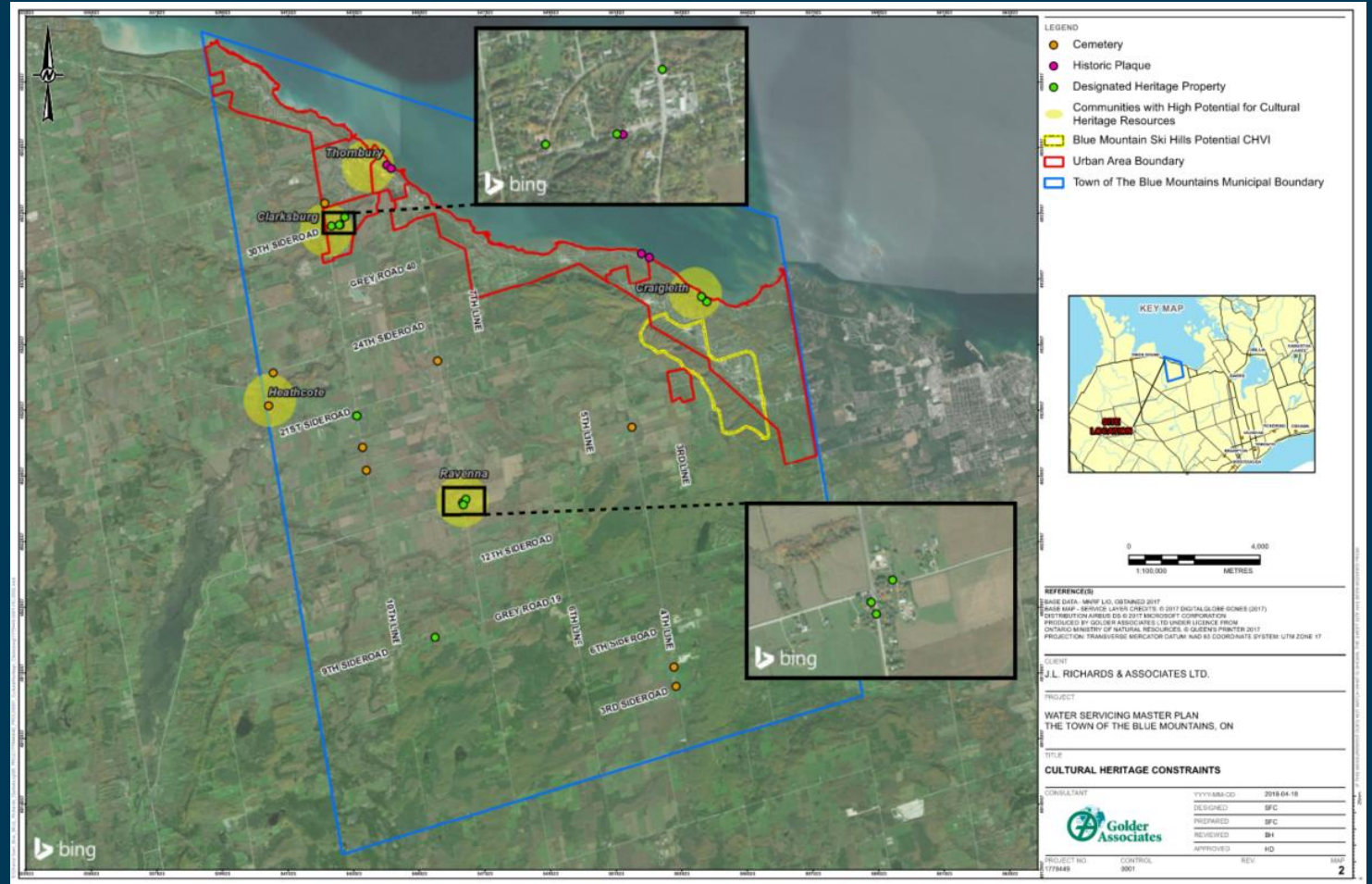
Archaeological Considerations



- The Thornbury WTP site was determined to have archaeological potential based on the Stage 1 Archaeological Assessment (Golder, 2018)
- If ground disturbance of previously un-disturbed areas is associated with the preferred alternative, a Stage 2 Archaeological Assessment will be required to identify any archaeological resources on the proposed property.

Cultural Heritage Considerations

- The Cultural Heritage Impact Assessment (Golder, 2018) did not identify any known cultural heritage resources at the Thornbury WTP
- The existing Thornbury WTP is > 40-years old.
- If changes are proposed to a structure >40 years old, a Cultural Heritage Impact Assessment (CHIA) is required to be conducted prior to construction to determine if the building is of cultural heritage value.



Source Water Protection

- The **Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Plan** was adopted in July 2016.
 - It identifies Intake Protection Zones (IPZs) to protect the source water for municipal residential drinking water systems.
- The Thornbury WTP is within the IPZs for the Town's drinking water.
 - There is no impact to the existing intake protection zones from the proposed upgrades.



2026 Capital Projects Funding Sources – User Fees

- The Town of Blue Mountains has approved the budget for this work in the 2026 Town Budget, including Engineering to confirm required upgrades, and the high-level cost for the potential Plant Upgrades.
- The funding for the work is sourced through the Water Asset Replacement Reserve Fund as well as the Water Supply Development Charges.

Next Steps:

- **Notice of Completion (Q4 2026)**

- Following input from this consultation, the Environmental Study Report can be finalized for this project
- The Environmental Study Report will be posted for a 30-day review period for public comment.
- Following the 30-day review and incorporation of all comments, the Town can proceed into procuring detailed engineering and design of the proposed upgrades

- **East Side Water Storage and Supply MCEA**

- The overall MCEA addressing the long-term water storage and supply needs in the eastern pressure zones is continuing to be advanced concurrently
 - The third Public Information Centre is expected to be held in **Q2-2027**, where public feedback will be welcomed
 - Study completion is expected in **Q4-2027**
-





J.L. Richards

ENGINEERS · ARCHITECTS · PLANNERS



Jane Wilson, M.Sc., P.Eng.

Senior Associate

Director of Municipal Infrastructure and Planning

226-780-7487

jwilson@jlrichards.ca



Platinum
member

www.jlrichards.ca