

Project Profile

Mount Elgin Phase 2 Wastewater Expansion

Municipal Wastewater Treatment System

County of Oxford

Mount Elgin is a small community within the County of Oxford that was historically on individual septic systems for wastewater management. Following a Class Environmental Assessment, a small diameter sewer collection system and recirculating sand filter treatment system with subsurface disposal fields were selected to provide wastewater servicing. Servicing and plant capacity were to be installed in phases.

K. Smart Associates Limited was retained to provide detailed design and construction supervision for the Phase 2 Upgrade & Expansion. This expansion would result in a total rated capacity of 190 m³/day.



Mount Elgin WWTP



Construction of Shallow Buried Trench Disposal Bed

After a review of the existing Phase 1 system, deficiencies in the pump station, forcemain, metering chamber, electrical service and control building were identified and upgrades were designed and installed. Existing effluent disposal field problems were investigated and issues with the elevation and soils conditions at the proposed Phase 2 sand filter and disposal bed sites were identified. Therefore, the plant configuration was redesigned, and a shallow buried trench disposal system was designed to ensure better long-term performance.

The project also involved the design and construction of new storm sewers and small diameter shallow bore sanitary sewers to expand the serviced residential area, as well as the reconstruction of several roads. The shallow bore sewers included both pumped and gravity flow components. The system was constructed in 2014.



Existing Pump Tanks



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