

Town of Windsor Waste Water Treatment Facility

Windsor, Nova Scotia



Stantec is currently providing design, construction oversight and contract management services for a new waste water treatment facility that will address the Town of Windsor's long-term sewage treatment requirements.

The primary objective of this project is to provide the Windsor with sewage treatment and effluent disposal capacity for various presently untreated areas in conformance with current Canadian Council of Ministers of the Environment (CCME) guidelines for municipal wastewater effluent (marine discharge).

Project tasks include evaluating previously completed work, identifying options and recommending the optimal solution for Windsor's long term sewage treatment needs. Stantec has considered several alternatives, including the use of a novel engineered wetland approach that would reduce the overall footprint of the wastewater treatment facility, and thereby provide a higher probability of meeting the project budget. The engineered wetland option could easily be expanded to include the possibility of upgrading the existing lagoon system to treat all of Windsor's municipal wastewater.

We reviewed options to meet the following criteria: capital costs, long-term operation and maintenance costs, ability to meet the effluent objectives, reliability, complexity, proximity to sewage generators, land acquisition, set back requirements (from NSTIR right of way), and potential aesthetic and odour issues.

Project challenges associated with this work include land acquisition (expropriation) and geotechnical issues (high groundwater table, marshlands). Our scope includes environmental management and permitting (wetlands, watercourse alterations) and site review for cultural (archaeological) significance.

