

ETC Project Profile



**Engineering
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Canada Ltd.**

- Innovative Wastewater Management & Design
- Environmental Engineering
- Geotechnical Engineering

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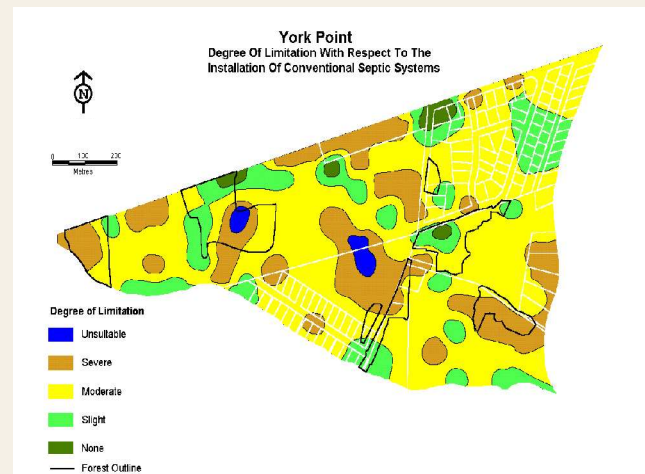
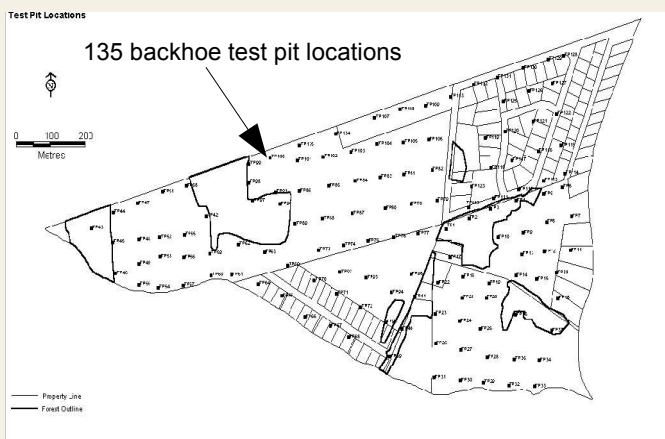
York Point On-Site Sewage Servicing Study

Client: Town of Cornwall, PEI

The Town of Cornwall, PEI had concluded that the cost to establish lift stations and force mains to service the southern portions of the Town was prohibitively high. As stated in their 1997 Official Plan: *“The objective would be to maintain on-site sewage systems in the area for as long as possible, certainly beyond the period covered by this plan”.*

However, due to problems with many old inappropriately sited septic systems, the Town Planning Department was reluctant to permit any new development to proceed. The Town retained **Engineering Technologies Canada Ltd. (ETC)** to carry out an On-site Sewage Treatment and Disposal Servicing Study of the York Point area and Parkview Subdivision.

The study involved an examination of conventional and *geographic information system (GIS)* maps, GIS modelling, and a *comprehensive field and laboratory testing program* which assessed the subsurface soils, bedrock and groundwater conditions within the 96 hectare (240 acre) study area.



Thematic maps were produced which graphically depicted the subsurface conditions for each parameter. The data collected during the field program was then analyzed in combination with existing provincial GIS database layers to determine an overall *potential degree of limitation rating* (none, slight, moderate, severe, unsuitable) with respect to the installation of conventional on-site sewage disposal systems. Finally, overall *synthesis maps* were produced which showed the results of this analysis graphically.

For those sub-areas that could be developed utilizing individual septic systems, ETC provided detailed guidelines for lot sizing and appropriate system configuration.

A series of general recommendations were also provided to facilitate maintenance and *increase longevity of individual septic systems*.

For *cluster systems*, ETC prepared budget estimates and land-use projections of the Recirculating Sand Filter (RSF) and the Peatland™ Sewage Treatment systems. Both technologies have a proven track record and can achieve advanced secondary treatment levels without highly skilled operators.

The study provided the Town with *a plan that would allow sustainable and cost effective development to proceed utilizing decentralized sewage systems*.

