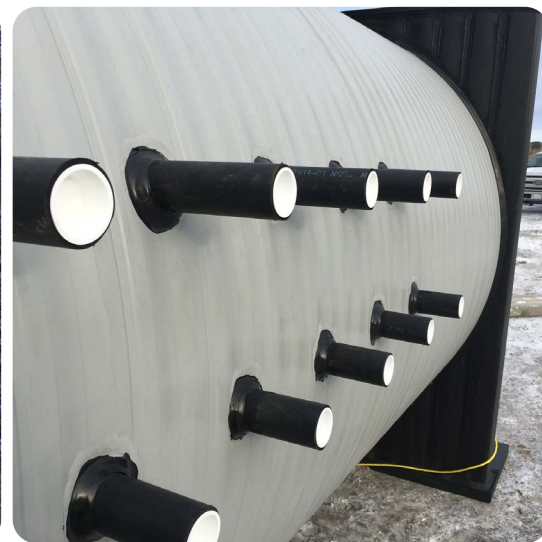


King City Geothermal Retrofit



Project Overview

Infra Pipes' Geothermal Vaults are used in commercial applications for ground source cooling and heating. Our Geothermal Vaults are manufactured with high-density polyethylene (HDPE) Weholite® pipe to provide the most efficient and long-lasting geothermal vault in the marketplace.

Our Geothermal Vaults are custom-designed and fabricated to meet the specific needs of each client. They feature P/T ports on all outlets and P/T gauges on the headers for easy pressure testing. Each vault is also equipped with an OSHA-compliant access ladder, non-slip grated floors, and a lightly-coloured interior to enhance safety.

In this case study, Seneca College sought Infra Pipes' Geothermal Vault product and additional fixtures to reduce greenhouse gas emissions.

Project Overview & Background

In May 2018, Seneca’s President announced that the Government of Ontario was “investing \$4.7 million in Seneca through an Innovation Grant Fund,” (Seneca News), which went towards “a geothermal retrofit at King Campus,” (Seneca News).

This funding aligns with Seneca’s Sustainability Plan, as the college aims to “establish sustainability as an essential consideration in the planning, design, and delivery of Seneca’s academic programs, services, and operations,” (Seneca). Infra Pipes’ Geothermal Vault was chosen due to its leak-free vault design with superior lifetime material and exceptional performance service.

The project was developed to reduce “greenhouse gas emissions at Garriock Hall by more than 50 percent,” (Seneca News). The project required 68 (sixty eight) bores at a depth of 500 (five hundred) feet deep. Due to the size of the vault, Weholite® anchors and buoyancy measures were required to promote anti-flotation, in addition to the installation of 2 (two) Manways and a Ventilation System.

The project was successful, with the customer stating the Geothermal Vault provided was lightweight and easy to install, resulting in significant cost-savings as no special equipment was required for the installation. This project supports Seneca in fulfilling its purpose of practicing sustainability in its day-to-day operations.

System, Partners & Timeline

Owner	Distributor	Installation Timeline
Seneca College - King Campus King City, Ontario, Canada	Sandale Utility Products	Fall 2018 - Spring 2019

STORAGE SYSTEM REQUIREMENTS

- 28’/8m of 72”/1.83m RSC250 Geothermal Vault
- 6”/152.4mm Mains with 22 Circuits of 2”/50.8mm each with Balancing Valves

