

Case Study: Long Lake Camps Low Pressure Sewer System - Princeton, Maine

Overview

Long Lake Camps is a rustic fishing and cabin retreat located on the shores of Long Lake in Princeton, Maine. When the property needed a reliable wastewater solution for its waterfront cabins, a traditional gravity sewer system was not a practical option given the challenging terrain and proximity to the lake. A low pressure sewer collection system utilizing individual grinder pump stations provided the ideal solution, offering effective wastewater management while minimizing disruption to the natural landscape.

Each cabin is equipped with an individual Environment One (E/One) grinder pump station that conveys wastewater through a network of small-diameter force mains to a central septic system. This approach allowed the installation to navigate the wooded, rocky terrain with minimal excavation while delivering dependable wastewater management for the entire property.

The Solution

The project consists of 5 individual E/One grinder pump stations, each serving a cabin and pumping wastewater up through a 2-inch force main to a central septic system. The system was originally built in 2005 and has demonstrated outstanding long-term reliability, nearly all of the original equipment remains in service today, with only one pump replacement required since installation in 2018, more than 13 years into operation

The cabins sit directly on the water's edge, presenting



Long Lake Camps Entrance, Princeton, ME



Waterfront cabins along Long Lake



Force main trench installation through wooded terrain

unique installation challenges. The use of small-diameter force mains allowed the piping network to be routed through the heavily wooded and rocky terrain between the cabins and the central septic system, minimizing excavation and preserving the natural character of the property.

Results

The Long Lake Camps project is a testament to the long-term durability and reliability of E/One low pressure sewer technology. Over 20 years after original installation, the system continues to serve the property with minimal maintenance requirements. The use of individual grinder pump stations allowed for a practical and cost-effective wastewater solution in a challenging waterfront environment where conventional gravity sewer infrastructure would have been impractical.

The result is a dependable, low-maintenance wastewater management system that has protected Long Lake's shoreline environment while reliably serving guests for over two decades, a true demonstration of E/One system longevity in the field.



Grinder pump station installation at cabin site



Completed pump station with riser lid at cabin site



E/One pump station installed along wooden path

For more information please contact me today!

Daryl Coppola

dcoppola@frmahony.com | 781-820-5808 (cell)