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PILOT TUBE MICROTUNNELING NEAR LAKE ERIE IN TOLEDO OHIO: A CASE STUDY

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ABSTRACT: Pilot Tube Microtunneling (PTMT) has been increasing in popularity year after year since it was first introduced in the United States in 1995. This guided-boring process has grown to become a replacement for the early small-diameter auger microtunnel machines. Among the reasons for the popularity of this system are; low equipment costs, relatively small topside footprint, small jacking pits and accuracy.

Case Study: Point Place Relief Sewer, Toledo, OH

Contractor: Gleason Construction, Holland, OH

Point Place is a small boating community in the City of Toledo situated on a peninsula surrounded by the Ottawa River and Maumee Bay. The area has been prone to flooding, basement backups and is home to three Sanitary Sewer Overflows. The recent project using Pilot Tube Microtunneling sewer installation was the final phase of a three-phase project to eliminate those overflows.

The project consisted of the installation of 3500 LF of gravity sewer. Although originally designed to be open-cut, Pilot Tube Microtunneling was considered and ultimately chosen as the installation method due to problems with previous construction. These problems included: traffic tie-ups due to the limited arteries into and out of the community, damages to existing utilities, poor soil conditions causing trench wall cave-ins, and low community and contractor morale. Also taken into consideration were the depth of installation, and proximity of existing buildings and utilities.

This case study will discuss the process of Pilot Tube Microtunneling, the reasons that it was chosen as the installation method over open cut, project statistics and the effects that it had on the neighborhood.