



TODAY'S PCCP SPARKS NEW LIFE UNDER POWER LINES

Old Interpace pipe replaced with new superior prestressed concrete cylinder pipe



OVERVIEW

Erie County is home to nearly 1 million people in western New York. The Buffalo-Niagra metropolitan area is the second largest region in the state. In the 1970s, 30" prestressed concrete cylinder pipe (PCCP) manufactured by Interpace was installed near an electric grid system. PCCP made by Interpace during this time period was made with defective materials and poor practices. After years of leaks and frustration with the Interpace pipe, Erie County Water Authority sought replacement. Corrosive soils, a five-lane highway, and overhead power lines meant multiple considerations from the ground up.

WHY PCCP

After the Interpace pipe problems, process and material improvements were put in place. Thompson Pipe Group PCCP has provided superior performance for decades. As the only pipe material specified for this project, engineers knew it could withstand corrosive soils, stray currents from overhead power lines, and offer:

- ▶ Ease of Installation for open cut and trenchless sections of the pipeline
- ▶ Testable joints
- ▶ Affordability

Robert Klavoon, P.E., of Wendel Engineering in Williamsville, New York, managed the project and knew PCCP was the right choice. "With corrosive soil conditions and stray currents, PCCP made the most sense." Expense was another a concern, "Double bagging and adding cathodic protection of thick ductile iron was too costly."

INSTALLATION

In several areas roadways and power lines prevented open cut trenches. The project included 3,100 linear feet of Thompson Pipe Group 36" PCCP. Additionally, five bores required 60" steel casing. Thompson Pipe Group manufactures trenchless PCCP with raised mortar coated skids which eliminate supplemental casing spacer failures.



JOINTS

The Thompson Pipe Group PCCP rubber and steel gasketed joint rings provide a positive leak-free seal. This project incorporated testable joints which allow the contractor to receive immediate feedback on the integrity of the joints. This ensures a leak-free hydrostatic test.

Harness clamp joints provided restraint where necessary. The two-part harness clamp is positioned around the joint and secured simply by tightening drawbolts on each side of the pipe. Joints are covered in thick cement-rich mortar coating. No welding or cathodic protection required.

