

HDPE performs best in Bow

PROBLEM:

In Bow, N.H., the Public Works Department updates the storm sewers beneath its 110 miles of roads as part of a regular maintenance program. Public Works Director Leighton Cleverly started by using traditional pipe materials, but didn't like the way they handled or stood up to local conditions. "For the last several years we have used HDPE exclusively. We have progressed from RCP (reinforced concrete pipe) to CMP (corrugated metal pipe), to HDPE, where we will stay," he says.

THE CORRUGATED POLYETHYLENE PIPE SOLUTION:

Corrugated high density polyethylene pipe (HDPE) is the only material the Town of Bow uses in its roadway drainage projects. The community of 6,500 residents has 110 miles of roadway, and as old roads are upgraded and new roads built, Cleverly includes storm drains made of HDPE. • Cleverly likes corrugated polyethylene pipe's ability to withstand frost action in the varied soil conditions beneath the town. "Metal pipe and cement pull apart from heat, and the freeze-and-contract movement in the winter. If there's a pocket of clay, water beneath the surface humps it up when it freezes, and that makes metal pipe come apart at the joints," he adds, noting that he hasn't seen any similar problems with corrugated polyethylene pipe. • Additionally, Cleverly likes the safety factor HDPE pipe provides over metal pipe. He describes freshly-cut metal pipe ends as, "razor-sharp," compared to HDPE. "We try to be as safety-conscious as possible," he says.

INSTALLATION DETAILS:

Since 1993, Cleverly estimates the Town has installed at least 5,000 feet of 12"-24" pipe; private contractors hired by subdivision developers have installed hundreds of feet more.

Project: Stormwater Drainage System

Location: Town of Bow, NH

Engineer: Leighton Cleverly, Director of Public Works Bow, NH, Private Developers

Contractor: Town of Bow, NH

Timing: 1993-Present

"HDPE is safe to handle. It's the best thing that's come along."

Leighton Cleverly, Director of Public Works Bow, NH