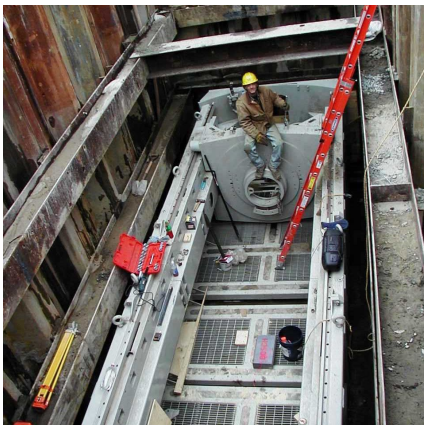


## Libbytown Storm Drain Project Portland, ME



### PROJECT OVERVIEW AND CHALLENGES

This project was to install a 24" storm sewer pipe for the City of Portland, Maine. Bradshaw used an Akkerman SL-24 microtunnel boring machine to one pass pipe jack 24" Hobas sewer pipe from shafts constructed by the contractor. The challenge on this project turned out to be the ground conditions which included unexpected cobbles and boulders. These conditions stopped the microtunnel boring machine and forced the installation of a rescue tunnel consisting of nearly 100' of 48" jacked steel casing.



### PROJECT INFORMATION - 390

**OWNER:**  
City of Portland

**ENGINEER:**

**CONTRACTOR:**  
D&C Construction

**COMPLETION DATE:**  
12/31/1969

**GEOLOGY:**  
Glacial Deposits of Silt, Sand,  
Cobbles, Boulders

**EXCAVATION METHOD:**  
Akkerman SL-24 Slurry Microtunnel

**MINING DIMENSIONS:**  
450' x 24" Ø

**FINAL LINING:**  
24" Hobas Fiberglass Pipe

**FOR MORE INFORMATION:**  
Lester M. Bradshaw, Jr., President  
410-970-8300  
Lester.Bradshaw@Bradshawcc.com  
Refer to Project 390