



Learn more about trenchless utility installation by visiting www.dcaweb.org/pages/HDDCommittee.









DID YOU KNOW?

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Technology and Fluid Basics

## **TRENCHLESS TECHNOLOGY INSTALLATION**

Underground utilities are installed every day using precise, environmentally friendly, proven trenchless technology and boring fluid. Boring fluid is a non-toxic, water-based product and is used to assist in stabilizing the install while protecting the boring equipment.

PRECISE, GUIDED INSTALLATION

> INSTALL UNDER WATER, ROADWAYS AND OTHER OBSTACLES

**Trenchless installation equipment** is used to tunnel underground and install utilities with minimal ground disturbance. Trenchless installation is a proven method that has existed for over half a century. It is environmentally friendly and offers a lower carbon footprint than other installation methods. It also produces less noise pollution.

Prior to any installation, existing utilities are located and exposed to avoid any intersecting. During the boring processes, advanced technology sends data informing the operator where the machine is underground.

There are many benefits to using trenchless installation equipment, including but not limited to:

- Reduced property and traffic disturbance
- Shorter installation timelines
- Less overturned ground

- Minimal yard restoration

**AVOID EXISTING UTILITIES** 

**AND CONTROL FLUIDS** 

- Less risk of utilities intersecting

**Boring fluid** is used while the equipment tunnels under the ground. It helps stabilize the installation path, lubricate and cool the ground-engaging tooling to help reduce any environmental impact. It is designed and selected to be safe, effective and match the ground condition it is being used in.

This fluid is made up of 97 percent water. The other 3 percent of additives is derived from common, earthly elements, such as: bentonite, starch, soap, vegetable oil, cotton seed linters, balsa wood and soda ash.

One of the most common additives – Bentonite – is used in every day household items, including: kitty litter, cosmetics, chocolate, paint and pond construction.

