Microtunneling

Trenchless technology offers **several advantages** over open cut construction, the main being that it **minimizes aboveground construction** disruption for underground work. We have even used this method for underground utility work inside existing facilities. Let us show you how this construction method can benefit you.

Corman Construction, Inc Maryland Avenue Branch Interceptor - Baltimore, Maryland "Your company was a pleasure to work with. Our job team would recommend your company in a heartbeat. Thank you!" Pilot tube microtunneling was originally developed by the Japanese in the 1970s and spread to Europe, where German manufacturers picked up on the idea. In the 1990s, Robinson Construction used the pilot tube method to install nearly 40,000 feet of pipe in Cape Girardeau, Missouri. This was the first large-scale pilot tube project undertaken in the United States.

Pilot tube microtunneling combines the benefits of microtunneling, directional drilling, and auger boring. It incorporates the accuracy of microtunneling, the steering mechanism of a directional drill, and a spoil removal system of an auger boring machine.

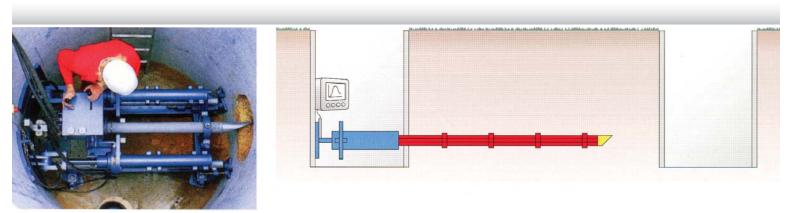
Benefits of the pilot tube system of microtunneling include minimal impact on existing utilities, only minor disruption to traffic, and less need for easement acquisition. Other advantages include:

- Minimal impacts on home owners and businesses
- Essentially no settlement
- Exact +/- 0.1-foot line and grade tolerance
- One-time, one-hour interruption for house connections
- · Minimal pavement replacement cost
- Improved safety for citizens and workers
- More comprehensive testing of completed sewer

Robinson Construction
"Delivering Experience"

Call on Robinson Construction. Let us show you the many advantages of choosing microtunneling over traditional open-cut construction for your next sewer project.

continued



Phase 1 - Accurate jacking of the pilot tube to a reception shaft by displacement only and without ground removal.

Microtunneling

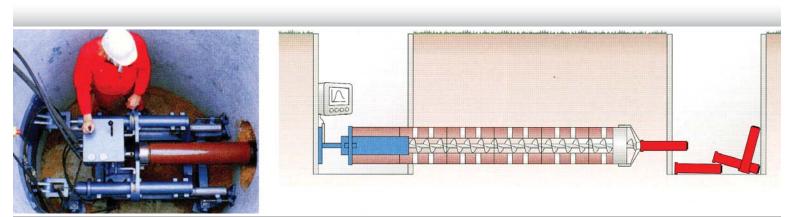
Experience

Since 1996 Robinson Construction has installed over 42,000 linear feet of clay, PVC, and steel pipe using the pilot tube system of microtunneling. Our customers have been very pleased with this innovative, yet cost-effective, method of upgrading their existing sewer systems. Following is a brief summary of projects we have completed.

	8"	10"	12"	15"	18"	24"	15"	16"	22"
Project Name & Location	Clay	Clay	Clay	Clay	Clay	Clay	PVC	Steel	Steel
College/Henderson South CSO Sewer Cape Girardeau, MO	4475	3320	1849				1396		
Fort "D" CSO Sewer Cape Girardeau, MO	5565	600	380						
College/Henderson North CSO Sewer Cape Girardeau, MO	10,176	3660	1156						
Main CSO Sewer Cape Girardeau, MO	868		591		1005				
Prison Utility Extension Charleston, MO									600
Greenbelt Highway Crossing Louisville, KY					260				
Sanitary Sewer Improvements Pacific Palisades, CA			500						
Lift Stations & Forcemain Cape Girardeau, MO	211	46	176		1446			57	120
Lewiston Sanitary Sewer Louisville, KY		226							
Feyhurst Sanitary Sewer Louisville, KY					290				
Valley Trunk Sanitary Sewer Louisville, KY	120								
Alga Road Sewer Crossing Carlsbad, CA			614						
Festus WWTP Improvements Festus, MO			175						
Arena Creek Sewer Cape Girardeau, MO			53	634					
Clark Avenue Relief Sewer Cape Girardeau, MO				222					
Elk Creek Sewer Rehab Holton, KS		282							
Magic Kingdom AVAC Tube System Walt Disney World-FL						300			
Clayton Road Microtunneling St. Louis, MO	500								
Continental Tire North America Plant Mt. Vernon, IL			100						



To request a video featuring Robinson Construction's microtunneling experience, please call 573.547.8397.



Phase 2 - Augering and removal of soil and the installation of product pipes by microtunneling.