

CASE STUDY

MICROTUNNELING | SLURRY MICROTUNNELING



Project Name:
Pleasant Run Microtunnel Project

Prime/Sub Contractors:
Midwest Mole – Greenfield, IN

Location:
Indianapolis, IN

Owner:
Citizens Energy Group

Ground Conditions:
Silty sands, medium to dense gravel, and trace clay with wet conditions

Akkerman Equipment:
SL74P Slurry Microtunneling System

Pipe:
74-in steel casing × 1-in wall thickness

Total Length/Longest:
100 LF

PROJECT OVERVIEW

Midwest Mole executed slurry microtunneling operations on the Pleasant Run project as part of the larger Dig Indy Tunnel System in Indianapolis, Indiana. Faced with tight spatial constraints, challenging ground conditions, and proximity to existing infrastructure, the crew selected the Akkerman SL74P Slurry Microtunneling System to maintain control and precision throughout the installation.

The project plays a key role in redirecting sewer overflows that previously discharged into Pleasant Run Creek. Through precise microtunneling operations, Midwest Mole contributed to critical infrastructure improvements designed to enhance water quality and long-term environmental sustainability for the surrounding community.

THE CHALLENGES

- Variable ground conditions, including silty sands, dense gravel, and trace clay in wet environments
- Limited workspace and tight shaft constraints in an urban setting
- Close proximity to existing utilities and structures requiring careful alignment control

- Need for consistent performance in mixed and potentially unstable soils

THE SOLUTION

- Deployed the Akkerman SL74P Slurry Microtunneling System to manage challenging and variable ground conditions
- Utilized slurry pressure balance to maintain face stability and mitigate ground movement
- Maintained precise line and grade control to safely navigate tight project constraints
- Leveraged proven trenchless methods to minimize surface disruption in a dense urban environment

OUTCOME

- Successfully completed the 100 LF microtunnel installation under constrained site conditions
- Maintained alignment and operational control through mixed ground conditions
- Supported the continued expansion of the DigIndy Tunnel System infrastructure
- Enabled the redirection of sewer overflows away from Pleasant Run Creek
- Contributed to improved water quality and environmental outcomes for the local community

