





CASE STUDY

MICROTUNNELING | SLURRY MICROTUNNELING



-  **Project Name:**
Fuel Transfer Line Replacement
-  **Subcontractor:**
BRH-Garver Construction, L.P.
-  **Location:**
Eglin AFB, FL
-  **Owner:**
U.S. Army Corps of Engineer (USACE),
Omaha District

-  **Ground Conditions:**
Sand and Clay
-  **Akkerman Equipment:**
SL30C MTBM with Soft Ground Cutter Head
-  **Pipe:**
32-in. OD Steel Casing, 8-in. Carrier pipe
-  **Total Length/Longest:**
3,630-lf./640-lf.

PROJECT OVERVIEW

The Eglin Air Force Base, in western Florida and adjacent to the Gulf of Mexico, is the nerve center for an estimated 16,000 military and civilians dedicated to around-the-clock support of air defense military operations.

Aligning fuel offload and upload demands with base activities is a constant logistical challenge using contracted fuel trucks to carry fuel from the base's storage facilities, over an hour away.

A \$34M underground fuel pipeline project will change all of that. The Fuel Transfer Line Replacement project connects the 96th Test Wing storage tank to the 33rd fuel storage area. With the capacity to deliver 600-GPM, the improvement will significantly bolster flying operations and military readiness, with sizeable resource savings.

Reliable Contracting Group, LLC of Louisville, KY, was awarded the contract to install 22,300-lf of pipeline, and several electrical structures and leak detection system upgrades.

BRH-Garver Construction, L.P. was awarded the microtunneling contract for the installation of 3,630-lf. of steel casing to house 8-in. carrier pipe in seven drives.

THE CHALLENGES

- No disruption to Air Force operations
- USACE's quarter-inch settlement specification for tunneling under airfield pavements
- Shallow cover, just 10-ft. below many of the base's runways and taxiways
- Coronavirus pandemic began in the U.S. 30 days after the project start
- Strict construction timeline

THE SOLUTION

- Akkerman SL30C Slurry Microtunnel Boring Machine (MTBM), with an increase kit to 32-inch outside diameter and soft-ground cutter head
- Average pace of one drive per month, working 10-hour shifts, six days a week

OUTCOME

- No COVID-19 outbreaks or injuries
- Accurate microtunneling runs completed one month ahead of schedule

