

CASE STUDY

PILOT TUBE METHOD | PILOT TUBE MICROTUNNELING



Project Name:
Green River & Chatwood Lift Station

Prime/Sub Contractors:
Reytec Construction Resources, Inc. - Houston, TX

Location:
Houston, TX

Owner:
Houston Public Works Dept

Ground Conditions:
Clay

Akkerman Equipment:
4800 GBM System, PCH-30.5, Gen. V Guidance System, 2325B-D Jetting & Lubrication system

Pipe:
30-in Hobas™ FRPM Pipe

Total Length/Longest:
320-LF

PROJECT OVERVIEW

The Green River Dr. and Chatwood Lift Station Diversion project was a \$25,680,000 capital improvement project through the Houston Public Works Department for new sanitary sewers, manholes, and upgraded lift stations. Over 10,000-LF of new sanitary sewer lines in various diameters were installed throughout four phases on the project by trenchless technology.

THE CHALLENGES

- Part of a major \$25.7 million capital improvement project requiring trenchless installation of over 10,000 LF of sanitary sewer
- Specific segment required a precise 320-LF guided bore in clay soils
- Tight alignment tolerances were critical due to existing underground infrastructure and urban constraints
- Installation needed to be completed efficiently to maintain the schedule across four active project phases

THE SOLUTION

- Reytec Construction used the Akkerman 4800 GBM System with the PCH-30.5 and Gen. V Guidance System to ensure pinpoint accuracy
- Clay conditions were managed with the 2325B-D Jetting & Lubrication System, which helped reduce jacking forces and improve line control
- 30-in. Hobas™ FRPM pipe was installed across the 320-LF alignment with minimal surface disruption
- Equipment setup allowed for smooth operations in urban settings while maintaining a fast-paced schedule

OUTCOME

- Successfully completed the 320-LF guided bore segment with high precision and no disruptions to surrounding infrastructure
- Maintained alignment and grade throughout clay conditions using advanced guidance and lubrication systems
- Contributed to the on-time progress of a multi-phase, city-wide sanitary sewer improvement project
- Demonstrated the efficiency and accuracy of the Akkerman 4800 GBM system in urban trenchless applications
- Helped deliver reliable, upgraded sanitary infrastructure for the Houston Public Works Department

