

To the best of our knowledge, the first curved microtunnel to be planned in the United States has just been successfully completed.

On May 19, 2010 Northeast Remsco Construction completed a planned, curved microtunnel in Hartford, CT. on behalf of The Metropolitan District Commission follow the design of AECOM.

This was part of the US\$1.6 billion "Clean Water Project" currently well underway in Hartford, the capital of the State of Connecticut.

The project includes three basic elements:-

- (1) Reduction of combined sewer overflows (CSOs) with the Hartford central sewer system;
- (2) Elimination of sanitary sewer overflows (SSOs) in the sanitary sewers of Wethersfield, West Hartford, Windsor, Rocky Hill and Newington;
- (3) Nitrogen reductions.

Although much of the project involved trenchless technology, this section had originally been planned as trenched. However, the density of other utility services in the vicinity of this section encouraged the contractor Northeast Remsco to suggest the alternative method of microtunnelling for the drive between shafts MHD and MHK. Detailed study of the obstacles on route necessitated that the drive would need to be curved. Such was the complexity of these obstacles that the precise alignment was modified several times until the most suitable course was finalized.

The machine used for this drive was the company-owned Herrenknecht AVND 1800AB MTBM equipped with a SLS Microtunnelling LT guidance system supplied by VMT GmbH.

VMT also provided an experienced engineer to oversee the guidance of the machine, which completed the 600 ft drive in just 9 days whilst undertaking a curve of 1,359 ft radius for a length of 160 ft to complete this complex project. The breakthrough accuracy was less than ½ inch in both horizontal and vertical.



