

# PIPE JACKING CASE STUDY

## Penketh Hall Nook, Warrington



[www.pipejacking.org](http://www.pipejacking.org)

PROJECT	Penketh Hall Nook, Warrington
CLIENT	UU/Galliford Costain Atkins JV
CONTRACTOR	A E Yates Trenchless Solutions Ltd
PIPE SUPPLIER	F P McCann
TUNNELLING MACHINE	Herrenknecht 1500 AVN
VALUE	£392,600



### PROJECT OVERVIEW

The Penketh Hall Nook Flood Alleviation Scheme at Warrington was required to provide pumped and gravity flows to a new outfall on the River Mersey.

### DESCRIPTION OF WORKS

A 1500mm diameter pipe jack was installed as a sleeve below a canal and a two line railway to accommodate a number of welded MDPE pipes to carry both the pumped and gravity flows to the new outfall on the River Mersey.

Trench sheeted launch and reception pits were installed and 72 metres of concrete pipes were jacked under the combined railway and canal crossing using a Herrenknecht AVN fitted with a soft ground cutting wheel. Ground conditions were clay.

The design required the top of the concrete pipes to pass within 1m of the canal bed. The likelihood of breaching the bed was mitigated by installing a porta-dam and draining a 20 metre length.

Additional works included the installation of manifold pipe work and construction of manholes and valve chambers within the drive and reception pits.

FURTHER INFORMATION: [www.aeyates.co.uk](http://www.aeyates.co.uk)

