

PIPE JACKING CASE STUDY

St Martins Flood Alleviation Scheme



www.pipejacking.org

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| PROJECT | St Martins Flood Alleviation Scheme |
| CLIENT | Welsh Water/Costain |
| CONTRACTOR | A E Yates Trenchless Solutions Ltd |
| PIPE SUPPLIER | F P McCann |
| TUNNELLING MACHINE | Backacter shield |
| VALUE | £275,000 |



PROJECT OVERVIEW

To alleviate flooding in the Shropshire village of St Martins an underground storage tank and flushing chamber was installed to alleviate residential flooding risks in periods of heavy rain. It also included the laying of wastewater pipes through private land and in the public highway.

DESCRIPTION OF WORKS

A drive pit was formed by constructing an 8 metre x 5 metre x 5 metre deep sheeted pit and a reception pit installed, the main carcass of which was a 3600mm diameter, 6 metre deep caisson shaft.

103 metres of 1200mm diameter pipe was installed by jacking using a backacter shield. A 5 metre long timber heading was lined with a MDPE pipe to make the connection to the existing network. The drive pit was converted to form a PCC flushing chamber and the reception caisson was converted to a standard detail manhole.

Ground conditions were firm, dry clay.

CO₂ SAVINGS

CO₂ savings of the pipe jacking element compared to open cut construction were 35% for the 1200mm diameter drive. Source: pipejackingco2calculator.com

FURTHER INFORMATION: www.aeyates.co.uk

