

PIPE JACKING CASE STUDY

Weston Square, Barry, Flood Alleviation



www.pipejacking.org

PROJECT Weston Square, Flood Alleviation

CLIENT Dwr Cymru Welsh Water

CONTRACTOR Morgan Sindall

PIPE SUPPLIER F P McCann

TUNNELLING MACHINE 1500 Iseki Unclemole

VALUE £500,000



PROJECT OVERVIEW

In order to eliminate flooding to properties located around Weston Square, on the outskirts of Barry, South Wales, DCWW designed a scheme to install a 1500mm internal diameter pipe from Weston Square to an existing sewer. This route had to cross the Cardiff to Barry railway line and the main road to the holiday centre of Barry Island. Although it was possible to open cut along the road through the arch of a railway bridge, a pipejack was designed to run parallel to the road and to cross under both main arteries in order to minimise disruption to the residents.

DESCRIPTION OF WORKS

A 150-metre long pipejack was constructed between two sheet piled pits located beyond the main road and the railway. The strata encountered on the job progressed from clay to weathered Mercia Mudstone to fresh Mercia Mudstone, below the water table.

CO₂ SAVINGS

CO₂ savings of the pipe jacking element compared to open cut construction were 35% for the 1500mm diameter drive. Source:pipejackingco2calculator.com

FURTHER INFORMATION: www.construction.morgansindall.com

