



## HORIZONTAL DIRECTIONAL DRILLING AT RIVER ALYN CROSSING

Client:  
**Williams Hughes Ltd**

Summary:  
Pipeline for Welsh Water



### PROJECT DETAILS

#### HORIZONTAL DIRECTIONAL DRILLING

AEYTS completed a Directional Drill installing a 180mm Foul Water main under the River Alyn near Llanferres in North Wales. The river crossing, which was part of a much larger pipeline for Welsh Water was initially based on a 50m length, but after a site visit by AEY it was clear that a road crossing could also be incorporated in the drill with only a marginal cost increase. The crossing was increased to 100m eliminating a road closure and the cost of open-cut work.

Welsh Water were very apprehensive about the particular section of pipe under the river, as very difficult ground conditions of running gravels had been identified in the initial site investigation work and failure to install this section would potentially render the whole pipeline inoperable.

To overcome the difficult conditions AEYTS designed a suitable drilling mud formula using only Biodegradable products and a drilling profile giving sufficient depth of cover to eliminate pollution to the watercourse. With these measures in place the installation was completed as programmed in 2 shifts from set-up to demobilisation.