Emergency Works on a Pipeline in a Stream

Large scour pool has formed over the pipe crossing point. Average channel width is 2.5 to 3m, here is is 6.5m now and 1.4m deep

Two tree roots have narrowed channel and concentrated flow

Prior to works - identifying the problem

Salix were brought in as specialist contractors to help deal with an exposed pipeline, in a river near Johnstown, Carmarthen.

Two trees growing on the river bank had dramatically narrowed the river, impacting the flow and created a large scour pool directly over the pipeline.

Salix went on site and did a full geomorphological and ecological survey of the site and recommended the site was dewatered whilst the pipeline was moved to a more stable channel crossing point.

Salix's Rock Rolls, erosion control coir matting and pre-planted Coir Rolls were used to ensure the riverbanks were protected from erosion.

Products Used

• Rock Rolls
• Pre-planted Coir Rolls
• Eronet C125
Dewatering the river to safely complete works

To ensure that there was as little impact on the local ecology as possible the river was redirected through a pipe, which allowed the client to dig up the river bed and move the asset.

The bed was reinstated with an additional cover of 250mm of stone over the pipeline. The bed was raised to achieve a minimum cover of 750mm and was achieved by a small fixed riffle feature (only 3 metres long).

The removal of upstream branches that had previously blocked the flow more than compensated for the local bed riffle feature in terms of channel conveyance.

The riverbanks were protected from erosion through the installation of Rock Rolls, pre-planted Coir Rolls and coir matting.

The methodology used meant that the situation was dealt with quickly, in a manner which was approved by the regulator and which will future proof the pipe from being exposed in the same manner.