

### River Gwenfro



#### KEY DETAILS

<b>PROJECT NAME :</b>	River Gwenfro
<b>CLIENT :</b>	Gower Homes
<b>LOCATION :</b>	Wrexham
<b>PROJECT CATEGORY :</b>	High energy rivers, Rail

A private developer had back gardens adjacent to a river that when in flood created severe scour issues. Initial river modelling indicated flow velocities in excess of 3.5m/sec.

Typically, the river looked more like a small stream with a low base flow, but in flood it became a significant risk. Original engineer designs preferred a gabion option but after meeting the developer on site, Salix proposed a value engineering option. The solution was to use rock rolls at the toe, with a pre-established coir roll. For protection of the banks NAG C350 and P550 was installed.

The rock rolls and NAG will provide permanent vegetative reinforcement, allowing the area to look natural and green but with an engineered solution that will withstand bankfull flood events.



Installing rock roll toe



NAG C350 and P550 above slope



8 weeks later after a major flood event



Fully established bioengineering solution

## CONTACT DETAILS

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