

River Ebbw Bank Stabilisation



KEY DETAILS

PROJECT NAME :	River Ebbw bank stabilisation
CLIENT :	Merrimans Ltd
LOCATION :	Risca, South Wales
PROJECT CATEGORY :	Rivers and watercourses (High energy rivers)

Salix worked with consulting geotechnical engineers to provide design and build proposals to stabilise over 800 metres of steep riverbank composed of highly erodible colliery shale. Initial proposals looked at the extensive use of large blockstone to stabilise the bank.

Salix wanted to explore the possibility of using greener and more cost effective bioengineering methods which would provide underlying engineering stability whilst providing an ecological resource and improving the visual landscape.

Bank gradient 1 in 1.5 Slope length 10-15m Water depth (1:100) 4m Velocity (1:100) 4.2m/sec Discharge (1:100) 80 cumecs

The toe of the bank was protected using a combination of rock rolls and living willow brushwood faggots. The upper bank was protected using two high performance erosion control mats; NAG VMax3 P550 and NAG VMax3 C350. Independent research and thousands of applications across the world have shown these products to be able to withstand extremely high flow velocities (7.6m/s – P550 and 6m/s C350) when vegetated. Even prior to vegetation establishment the “composite” fibre layer provides exceptional erosion control performance (3.8m/s – P550 and 3.2m/s – C350).



NAG P550 installation



Installation complete



One year later



Size of blockstone replaced

CONTACT DETAILS

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