



# project profile

## Project

A483 Highway

Gresford

UK

## System

Grasscrete GC1

## Quantity

529 m<sup>2</sup>

## Application

River embankment



Another of our flood protection projects close to the border and again the works for the A483 highway. On this occasion however the Grasscrete installation is next to the river itself.

The River Alyn at most times of the year slowly meanders along a route that coincides with the modern A484 Pulford to Gresford Bypass itself part of the busy main North to South Wales link. On rare occasions however the river takes on an altogether different personality as it becomes swollen with fast flowing flood water. So severe was one example of this that at a pinch point with the highway the slope become so eroded that it placed the integrity of the highway under threat should the erosion not be checked.

What followed was a programme of construction that saw the excavation of the eroded slope and the introduction of stone pitching to add stabilising weight. At the waters edge of the now reduced flow a toe beam was introduced to reduce the possibility of a slip circle failure. Once in position the pitching was capped with layers of sub-base material ready to receive the final armour layer. Selected for this was 100mm thick Grasscrete GC1 that have a flow capability corresponding to the anticipated maximum of 6 metres per second.

With the difficult access calling for double handling and the threat of flooding never far away the project wasn't without its challenges. Grasscrete however proved to be the ideal solution as it could follow the sweeping curve of the river in an unbroken structure and with no reliance upon grass for stability it was almost immediately up the job of holding back the flow.

*Also available as a full project report, please ask for further details*