

# Erosion Control on Flood Defence Works



The Greatham flood alleviation scheme comprises the raising of and improvements to existing flood defences originally constructed in the mid to late 1800's by the formation of embankments and bunds.



The works include the construction of a new embankment alongside the A178. The embankments are 2.5m high with 1 in 3.5m to 1 in 4m side slopes dependent on ground conditions. The width across the top of the embankment is approximately 3m.

In order to minimise the visual impact of the new embankments and provide a habitat for wildlife the Environment Agency specified that they must be vegetated. This provided a challenge for Halcrow in providing a stable slope surface whilst the vegetation and root structure was established.

Initially the use of a biodegradable erosion control mat was considered but the consulting engineer, preferring a more permanent solution, decided that Erosamat Type 3 provided the material performance required.

## Key Project Information

Project	Greatham Flood Alleviation Works, Hartlepool
Client	Environment Agency
Consultant	Halcrow
Contractor	Birse
Products	<ul style="list-style-type: none"><li>• Erosamat 3/20Z</li><li>• Abweb Geocell Reinforcement</li></ul>
Benefits	<ul style="list-style-type: none"><li>• Speed of installation</li><li>• Extended project life</li><li>• Long term solution</li></ul>



Erosamat Type 3 comprises a three dimensional structure of entangled filaments to create a long lasting, environmentally friendly, flexible erosion control mat which, in combination with vegetation, forms both an effective erosion control surface and a vegetative root reinforcement layer.

Case Study



Following installation of the Erosamat and top soil the area was conventionally seeded to allow vegetation to develop.

ABG also helped the contractors solve a second issue in the construction of an access ramp where Abweb was specified to form a reinforced natural surface capable of carry occasional traffick.

Abweb is a three dimensional cellular matrix designed to strengthen weak soils in applications such as access roads.

Contact ABG to discover how our erosion control products could help you deliver a sustainable, cost efficient and carbon neutral solution in your project.

#### **About ABG**

ABG are a market leading developer of high performance geosynthetic solutions for use in a wide range of civil, environmental and building applications.

Established for 25 years and based in the UK ABG pride themselves of delivering outstanding customer service along with innovative solutions.

