



### Project Description

The Greatham Managed Realignment Scheme was part of the Environment Agency's wider "Tees Tidal Flood Risk Management Strategy" which imposed a legal requirement upon the Environment Agency to deliver intertidal habitats as compensation for the impacts of flood management projects. The scheme essentially involved the raising, improving and remodelling of existing flood embankments and the construction of a new flood embankment along the West side of the A178.

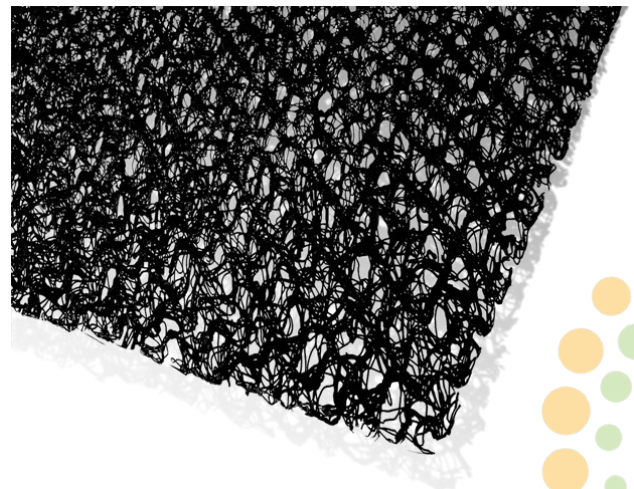
### The Challenge

The challenge for the overall scheme was to combine a flood defence strategy with habitat improvements. As part of this, the challenge for the works was to construct embankments 2.5m high and with 1 in 3.5 to 1 in 4 side slopes composed of predominantly site won material (from borrow pit).

The size, scale and nature of the works dictated that a tight timescale was maintained and that readily available high specification and high-performance materials were utilised to ensure a rapid return to the previous natural state.

### Project Information

|                   |  |
|-------------------|--|
| <b>Client</b>     | Environment Agency   |
| <b>Contractor</b> | Birse Civils   |
| <b>Products</b>   | Erosamat 3/20Z 500   |
| <b>Quantity</b>   | 36,000m <sup>2</sup>   |
| <b>Benefits</b>   | <ul style="list-style-type: none"><li>• Speed of installation</li><li>• Extended project life of the embankment</li><li>• Long-term solution to the problem of surface erosion</li></ul> |



Erosamat 3/20Z 500



# Erosion Control

Flood Embankment, Erosamat, Greatham, Hartlepool, UK



## The Solution

The original design incorporated a biodegradable mat, it was assessed that a permanent reinforcing product was required and ABG's **Erosamat Type 3** was specified by the consulting engineer.

Erosamat Type 3 comprises a three-dimensional structure of entangled filaments to form a permanent composite with the natural vegetative root structure supporting a robust sward of selected grasses.

## The ABG Service

ABG provided full specification and design support to aid the approval process.



Topsoil filling of Erosamat



Early retention of soil and seeds encouraging early germination



Composite root structure supporting healthy and sustainable vegetation

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