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 impact(s) 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

<table>
<thead>
<tr>
<th>Client</th>
<th>Environment Agency</th>
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<tbody>
<tr>
<td>Contractor</td>
<td>Birse Civils</td>
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<tr>
<td>Consultant</td>
<td>Halcrow</td>
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<tr>
<td>Products</td>
<td>Erosamat 3/20Z 500</td>
</tr>
<tr>
<td>Quantity</td>
<td>36,000m$^2$</td>
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Benefits
- Speed of installation
- Extended project life of the embankment
- Long-term solution to the problem of surface erosion
The Solution
The original design incorporated a biodegradable mat, it was assessed that a permanent reinforcing product was demanded and **ABG’s Erosamat Type 3** was chosen by the consulting engineer. Comprising a three-dimensional structure of entangled filaments, **Erosamat** was selected which forms 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

Contact ABG today to discuss your project specific requirements and discover how ABG past experience and innovative products can help on your project.