

## A19 Chapel Haddlesey, North Yorkshire

### Rock Armour Filter – HPS5



#### Flood Protection - Geofabrics HPS5

On 18th February 2020, the A19 was closed between Chapel Haddlesey and Eggborough, due to collapse following erosion resulting from Storm Dennis. The subsequent travel disruption impacted heavily upon residents and those travelling to and from Selby using the M62.

The reconstruction design addressed the risk of future flood damage to the road with the new embankment being protected by rock armour.

Geofabrics HPS5 was successfully installed by Jakto below the rock armour on the River Aire's flood plain. The challenge of this installation grew as the area was subject to further flooding during construction.

Geofabrics HPS5 is a thick needle punched nonwoven geotextile manufactured from 100% virgin polypropylene high tenacity fibres containing 1% active carbon black. The main function of HPS5 is to prevent loss of the sub-soil from below the rock armour. HPS5 was ideal with its combined filtration and permeability characteristics whilst its high tensile elongation and CBR provided a robust solution capable of withstanding the rock impact during installation.

Project Information	
<b>Location</b>	A19 Chapel Haddlesey, Near Selby, North Yorkshire
<b>Product</b>	HPS5 Geotextile
<b>Civil Engineering Contractor (installer)</b>	Jakto
<b>Main Contractor</b>	Balfour Beatty
<b>Client</b>	North Yorkshire County Council
<b>Designer / Consultant</b>	WSP
<b>Installation Date</b>	October – December 2020

The **benefits** of using Geofabrics HPS5

- **Easy installation** – 6m wide rolls
- **Manufactured for performance** – high tenacity fibre
- **Bespoke roll length** – minimising joints
- **Isotropic properties** – strength in all directions
- **High tensile elongation** – sufficient stretch during rock placement
- **Puncture resistance** – manufactured to CBR value taking into account rock weight, drop height and factor of safety
- **UV Stabilised** – active carbon black
- **100% virgin polymer Fibres** – 100 years durability

For more information on our River, Flood & Coastal Products please contact our Sector Managers  
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