

Retaining Wall

Webwall, Westfield, Pembrokeshire, UK



Case Study

Project Description

Westfield Pill nature reserve is on the edge of the Cleddau river near Milford Haven, and is home to part of the National Cycle Network Route 4, also known as the Celtic Trail. This section links two existing shared use paths, the Brunel and Milford Haven trails, to the Pembroke route. An improved link was commissioned to join the high level Milford Haven trail to the lower level Brunel trail via a zig-zag path to accommodate the change in levels.

The Challenge

Pembrokeshire County Council worked closely with the Wildlife Trust, firstly to mitigate the impact improvements to the foot and cycle paths would have to the nature reserve and, secondly, to promote biodiversity on this former railway route. To achieve this, improvements needed to meet strict design criteria and provide multiple environmental benefits, including promoting recolonisation of the area by native flora and fauna.

Retaining walls were needed to reduce the gradient of a descent used by cyclists and walkers and to improve accessibility for less physically able users. Traditional gabion basket or concrete based solutions would not meet both the environmental and structural requirements of this project.

Project Information

Client Pembrokeshire County Council

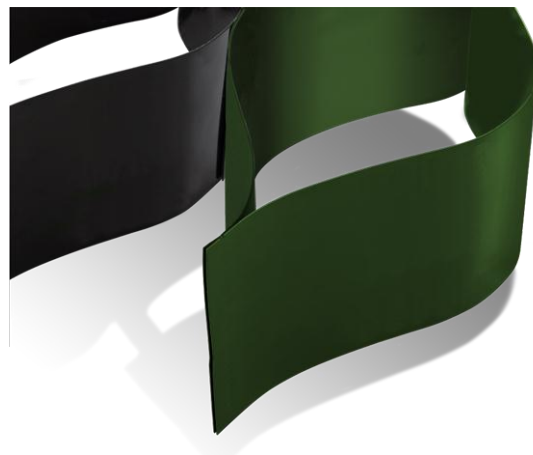
Contractor Evan Pritchard Contractors

Consultant Pembrokeshire County Council

Products Webwall, Fildrain 7DW, Trigrid EX

Quantity 120m²

- Benefits
- Speed of installation
 - Re-use of site won materials
 - Vegetated finish to soften visual impact and promote biodiversity



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The Solution

ABG proposed a design incorporating a **Webwall** facia reinforced using **Trigrid EX** and with structural drainage provided by **Fildrain**. The proposal was developed to meet all the site requirements, and **ABG** provided full detailed design and supervision of the construction.

Webwall uses site won material in its honeycomb cellular structure as backfill, reducing the requirement to import expensive quarried aggregates.

Trigrid EX geogrid is designed to promote interlock with the fill making it ideal for this earth reinforcement application. **Fildrain** drainage geocomposite was used behind the wall to control groundwater pressures. Once constructed **Webwall** was seeded with plants selected to enhance the local environment. This provided a pleasing biodiverse vegetated facia for the lifetime of the wall.

The ABG Service

ABG provided conceptual and detailed design support during the design phase of the scheme, and supplied materials and supervision of the construction on site.



The green front face Webwall cells were seeded with a local wild flower mix



Plant growth quickly covers Webwall



The finished descent is suitable for users of all abilities

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