## **GEOWEB**®

### **VEGETATED CHANNEL SYSTEM**

**Geosynthetic Clay Liner Protection** 

#### **PROJECT TEAM**

Owner: St. Modwen

Consulting Engineer: Halcrow

**Contractor:**Dean Dyball Civil Engineering

Material Supplier: Greenfix UK

ACCESS 18
Avonmouth, UK









# 3D GEOWEB® Soil Confinement & GeoJute Protect Clay Liner in Drainage Channel & Collection Pond.

### **Project Background**

Access 18 is situated in the strategically located development site in the established distribution and industrial location of Avonmouth on the edge of Bristol. The project consisted of a drainage channel or rhine and associated collection pond. The client was initially concerned with potentially contaminated soils, with this in mind the channel was lined with an impermeable, self sealing Geosynthetic Clay Liner. This would stop any possible contamination of the water course.

### **Channel System Components**

GEOWEB GW40V8 material, large cell, 200 mm (8 in) deep, was selected to protect the liner as its tendon load transfer system was ideally suited to provide safe, secure anchorage without the use of liner penetrating stake anchorage. High-strength tendons were securely anchored at the crest of the slopes with ATRA® Anchors and the tendons inserted through GEOWEB cell wall slots. The tendoned sections were then expanded down the slope and secured at the toe. Local topsoil material was used to infill the sections, and once completely filled, GeoJute biodegradeable fabric was applied to protect the seed before grass establishment.

**Performance** Seven years after installation, the channel functions as expected and remains in excellent condition—maintaining a sustainable green area in an otherwise commercial landscape.

