Erosion Control

Silt Runoff Control, Erosamat 1 & 2, Cobrey Farm, Coughton, UK

CASE STUDY

Project Information

Client	Cobrey Farm
Consultant	Cranfield University
Products	Erosaweb Type 1 and 2
Quantity	35,000 m^2
Benefits	• Approved for use on Sites of Special Scientific Interest (SSSI) • Protects silt from erosion • Protects grass during initial growth • Fully biodegradable • Easy to install

Project Description

Cobrey Farm is a family run business in the picturesque Wye Valley. The farm grows a range of crops over its 1,500 acres of land, and is known for being one of the UK's largest and most innovative growers of asparagus, fine beans, and blueberries in this hilly area. The Wye Valley is home to a number of rare and highly sensitive species of crustaceans. The eco-system is very sensitive, so the area has been designated a SSSI (Site of Special Scientific Interest) to protect it. Environment Agency monitoring revealed that during heavy rainfall, significant volumes of runoff were picking up soil particles and discharging silt into protected waterways.

The Challenge

Many years of farming in the area had caused a reduced level of organic content in the soil, which meant low capacity for water retention. This caused high surface runoff volumes during heavy rainfall, washing expensive fertiliser treatments away, and causing further erosion of soil particles as they are lifted and carried from the fields. Drainage ditches had been installed to combat this, but they proved unable to cope with the volume of water and required frequent maintenance. Previous attempts to establish grass had also proven difficult due to residual levels of herbicide in the ground.

ABG biodegradable Erosamat available in coir and jute

ABG LTD

E7 Meltham Mills Road, Meltham, Holmfirth, HD9 4DS • +44 (0)1484 852096 • www.abgltd.com

a Bontexgeo Group company

Erosion Control

Silt Runoff Control, Erosamat 1 & 2, Cobrey Farm, Coughton, UK

The Solution

Cranfield University designed planting layouts incorporating grassed waterways to control runoff and reduce the damaging effects of erosion. Establishing grass is the key to the long term success of this approach, but the residual levels of herbicide meant the grass took a long time to take hold. After consultation with ABG, Erosamat Type 1 and 2 were specified for different areas to provide immediate erosion control for the new waterways, as well as protection for the grass seed during the extended growth period. This protection allowed the waterway to be 50% smaller than without Erosamat, so the land loss to the waterway was reduced. Further soil erosion was prevented, and the degradation of Erosamat added organic content to the soil. This solution was deemed so successful that Cranfield University and the Environment Agency invited ABG to present at a "Better Soil and Waste Management" event to educate other farms in SSSI areas on how to manage their sites as successfully.

Before grass was established water had a clear and fast path to leave the field. Grass slows the runoff and allows it to infiltrate back into the ground, rather than carrying pollutants into the local watercourses.

The ABG Service

ABG expertise helped to select the correct Erosamat for each area, and confirmed the appropriate installation methods.

Planting layouts designed to work with undulating fields

Partially established grassed waterway

ABG LTD

E7 Meltham Mills Road, Meltham, Holmfirth, HD9 4DS • +44 (0)1484 852096 • www.abgltd.com

a Bontexgeo Group company