

Case Study

ARMORMAX®

Longwick Road, Princes Risborough, Buckinghamshire



Location:

Mears Homes,
Longwick Road,
Princes Risborough,
HP27 9RS



Client:

Mears Group PLC

Designer:

Geoman Ltd

Installer:

Geogrow Ltd

ARMORMAX® is an independently tested engineered earth armouring system comprising PYRAMAT, a High Performance Turf Reinforcement Mat, and Percussion Driven Engineered Earth Anchors. The two elements work together to lock soil in place and protect against hydraulic and non-hydraulic stresses providing a dynamic erosion control and surficial slope stabilisation solution.

Mears Group PLC contacted Geosynthetics Ltd to investigate the 1V:3H side slope to a swale running through a new housing development. The slope height varied between 1.5-2.5m high and had been constructed from made ground and was thought to be unstable.

Having visited site Geosynthetics undertook analysis using Slope/W slope stability software which confirmed the suspicion that the slope was unstable.

Various solutions, such as a low height retaining wall to slacken the angle, were then discussed with the client before the ARMORMAX® system was chosen. This proved to be the most cost effective, and least disruptive to the existing slope which most importantly increased the slopes Factor of Safety to an acceptable 1.5.



In total, 35m of swale was remediated by specialist contractor Geogrow Ltd, who removed the vegetation, before installing the PYRAMAT erosion matting and earth anchors. The anchors were driven through the mat in a diamond pattern to the design depth before being 'load locked'. Finally the stabilised slope was topsoiled and hydro-seeded to allow the slope to revegetate and provide a green, visually soft but structurally stable solution.



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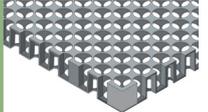
2 in 1
Landscaping Fabric



Gas Membrane
Radon, CO2, Methane,
Hydrocarbon Control



RoofCell
Sub Surface Drainage
And Water Storage



Alert®
Contamination Indicator



Geoglas®
Asphalt Reinforcement



Stratagrid
Soil Reinforcement Geogrid



AquaBlock®
Water Containment Liners



Geomembrane
Impermeable Membrane



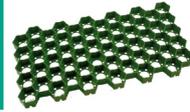
Strataweb
Slope Stabilisation



Bentotex® GCL
Geosynthetic Clay Liner



Golpla
Grass & Gravel Paving System



T-Block
Modular Retaining System



Cellweb® TRP
Tree Root Protection



Golpla Pregrown
Ready To Lay Paving System



Telegrid
Woven Polyester Geogrid



DuoDrain®
Composite Drainage Product



Interlock
Extruded HDPE Geogrids



Televev
High Strength
Woven Geotextile



Erosion Control
Comprehensive Range



Knotblock®
Japanese Knotweed Barrier



Tenax
Soil Reinforcement Solutions



Ekotex®
Non Woven Geotextile



Landlok
Turf Reinforcement Mat



Total Traffic Exopave
Heavy Duty Paver



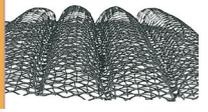
Fiberforce®
Equestrian Geotextile



Nicospan
Erosion Control



Trinter
Erosion Control Mat



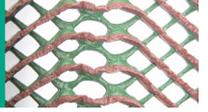
Fibertex
Non Woven Geotextile



Rhyno®
Woven Geotextile



Turfmesh
Grass Reinforcement



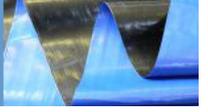
Flexitex
Textile Shuttering



RockBox
Gabion Mattresses



RootBlock
Root Barrier




INVESTORS
IN PEOPLE

Bronze