



# Case Study

## Cellweb® TRP



### Location:

Fountaindale School  
Mansfield  
NG18 5BA

### Client:

Fountaindale School

### Project:

Fountaindale School



### Contractor:



### Arboricultural & Ecological Advise:



### Geosynthetic Limited

Fleming Road  
Harrowbrook Ind. Est  
Hinckley  
LE10 3DU  
Tel. 01455 617 139  
sales@geosyn.co.uk  
www.geosyn.co.uk

**Site access was required through an area of protected trees in order to serve the construction of new buildings at Fountaindale Special Educational Needs School. The specialist school is set in a former plantation woodland which offers access through a belt of high quality oak trees located a few miles south of Mansfield.**

There was a requirement to provide a separate site access for construction traffic and then access to a new car park in the finished scheme. A separate footpath was also required through the wooded area to provide pedestrian access to the new school from the main road.

Geosynthetic provided a no-dig solution using a 200mm Cellweb® Tree Root Protection (TRP) system for the site access road. Only leaf litter and debris were removed from the surface as the Cellweb® TRP system does not require excavation into the soil, therefore avoiding damage to tree roots. The Treetex® T-300 Geotextile was laid directly onto the ground as a separation and filtration layer. Treetex® T-300 also acts as a pollution control layer, trapping oil spills within its fibres to protect the soils beneath. A 100mm layer of clean, angular 4/20 stone was laid as a subbase to allow for variable levels and soil conditions within the site. The Cellweb® TRP 200mm was then laid with the same stone as infill and as the finished surface.



A 75mm Cellweb® TRP system with a tarmac surface was also used to create an attractive pedestrian footpath through the woodland.

Cellweb® TRP allowed the construction of a stable load bearing surface for heavy construction traffic without compacting the soils or damaging the roots of the protected trees. The system is also permeable, allowing water and air, essential for the trees' survival, to reach the soils beneath the road.


In using Cellweb® TRP, construction and access to the new school has been achieved while protecting the attractive woodland within the school grounds.

***'The Cellweb® TRP system allowed us to install a new access road through an area of protected trees, this would not have been possible using a traditional road construction'***

James Beardmore - Senior Project Surveyor - BAM



Rhyno®  
Woven Geotextile



Interlock  
Extruded HDPE Geogrids




Golpla Pregrown  
Ready To Lay Paving System



Landlok  
Turf Reinforcement Mat



Nicospan  
Erosion Control



Geomembrane  
Impermeable Membrane



Golpla  
Grass & Gravel Paving System



DuoDrain  
Composite Drainage Product




RockBox  
Gabion Mattresses



2 in 1  
Landscaping Fabric



Gas Membrane  
Radon, CO2, Methane,  
Hydrocarbon Control



Alert  
Contamination Indicator



Turfmesh  
Grass Reinforcement




Trinter  
Erosion Control Mat




Tenax  
Soil Reinforcement Solutions



GeoGlas  
Asphalt Reinforcement



Formpave  
Permeable Paving System




Flexitex  
Textile Shuttering



Bentotex GCL  
Geosynthetic Clay Liner




Cellweb  
Tree Root Protection



Fibertex  
Non Woven Geotextile



Telegrid  
Woven Polyester Geogrid



Envirogrid  
Cellular Confinement Grid




East Coast  
Biodegradable  
Erosion Control



RoofCell  
Sub Surface Drainage  
And Water Storage



Ekotex  
Non Woven Geotextile



Televev  
High Strength  
Woven Geotextile



T-Block  
Modular Retaining System




**Geosynthetics**  
Engineered Solutions

RootBlock  
Root Barrier