MARKET SECTOR:
Commercial

LOCATION:
Bradburns Lane, Hartford
Northwich, CW8 1LU

CONTRACTOR:
F & S Construction

CONSULTANT:
Bell Munro Consulting

Case

STUDY

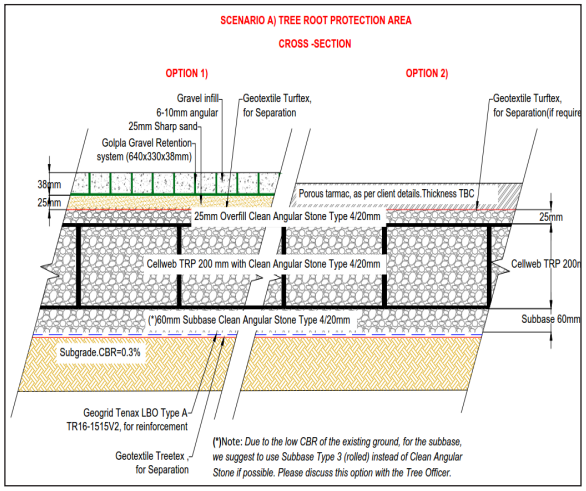
TENAX, CELLWEB & GOLPLA
Grange School
Car Park

The

BACKGROUND

The location of the new access road and car park at the Grange School in Hartford was established within Tree Root Protection Areas (RPAs).

The project required to protect surrounding trees complying to the BS 5837 (Trees in relation to design, demolition and construction- recommendations) and find a solution that will keep with the natural surrounding area.



Our Client's

REQUIREMENTS

A sustainable solution for a reinforced car park

Bell Munro Consulting contacted Geosynthetics Ltd to find a suitable solution for the access road and car park taking into account the extremely poor conditions of the existing ground and the requirements of the project.

Tel. 01455 617 139
Email. sales@geosyn.co.uk
www.geosyn.co.uk

Our Value Engineered

SOLUTION

Our arboriculturalist evaluated the factors needed to protect the trees and worked with our engineering team to provide site specific calculations.

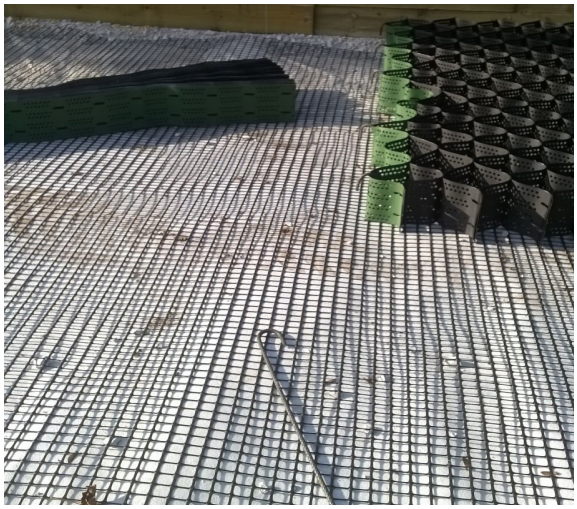
The final solution consisted on a combined system using Cellweb® Tree Root Protection and two types of surface: Golpla® gravel retention system and porous tarmac. A full and comprehensive technical recommendation was provided to the designer with the solutions outlinedThe ground conditions comprised a very soft and loose material with CBR (California Bearing Ratio) of 0.3%.

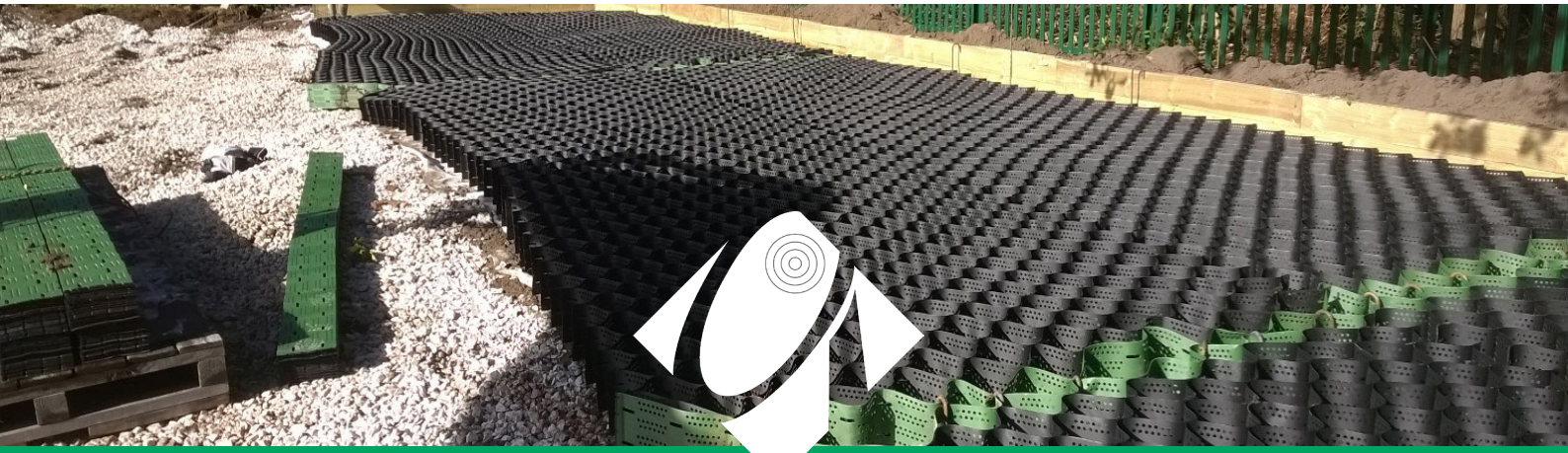
Based on the soils parameters and the traffic information, a solution was provided with two different surfaces as requested by the designer. After running the calculations, a depth of 200mm Cellweb® TRP System was recommended along with a 60mm subbase and a Tenax LBO HM Geogrid for reinforcement. Due to the low CBR of the existing ground we proposed to use Cellweb® TRP and Tenax Geogrid to ensure a better distribution of the load and reducing the pressures applied over the existing ground. We also recommended the use of our Golpla® gravel retention system as a surface for the parking bays with an infill of 6-10mm angular gravel.

The Cellweb® and Golpla® work in conjunction to maintain water and oxygen pathways to the rooting environment and to provide an aesthetically pleasing and functional finish. The technical recommendation was then passed on to Bell Munro who incorporated this into their design and then issued this to the contractor F & S Construction in order for the works to start. The contractor purchased these materials via one of our stockist builders' merchants in line with our merchant policy.

"Geosynthetics value engineered an easily installed solution that was available for quick delivery. Their customer service and support was really appreciated and we'd be happy to work with them in the future"

SHAUN NICHOLS
F & S Construction





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