Case Study

Cellweb Tree Root Protection

Location:

Harcourt Arboretum

Client:

Oxford University

Project:

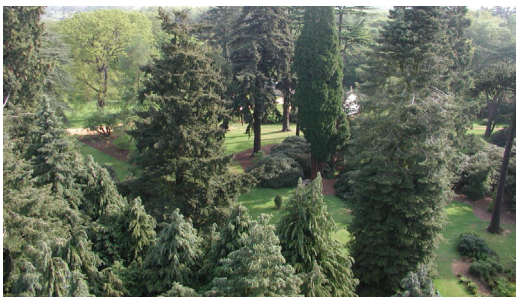
Harcourt Arboretum

Contractor:

White Horse Contractors Ltd

The increase in visitor numbers has put pressures on the parking availability on site and the Arboretum needed to provide additional parking bays and vehicular access paths to cope with the extra traffic. The only viable space to use was situated to the north of the Arboretum in an area that was populated by a large number of mature, extremely valuable trees.

We proposed the use of our Cellweb 150mm Tree Root Protection System with a non woven needle punched Treetex Geotextile placed directly on the formation. The Cellweb TRP 150mm was in filled with a clean 20mm to 40mm angular stone to promote aeration and positive water transfer through to the existing ground. The granular material is simply placed inside the Cellweb with no compaction required of the infill. There were obvious concerns that using this area for car parking would effectively damage the trees health long term due to the soil compaction that would occur from your traffic driving over the RPA of these wonderful trees. The architects for the project, Peter Brett and Associates, contacted the Geosynthetics Cellweb TRP technical team to provide a suitable solution. The grading of the infill means voids are created ensuring that water



and air are able to pass through to the sub soils, The CellWeb was surcharged by 50mm of the granular fill to give a rustic look to the final surface. Granular material depths were able to be reduced by using CellWeb. In most cases sub-base thickness can be reduced by 50%. Independent testing concluded that the CellWeb has a significant effect on reducing sub-soil compaction around existing tree roots. The final installed system provides a suitable platform for all intended vehicular traffic at the aboretum.

"We carried out some research into the pavement construction options for a proposed car park in an existing arboretum. The most non evasive option to reduce the excavation between the tree roots involved the use of a product like CellWeb"

Katherine Marshall from Peter Brett Associates

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