

# Case Study

## Cellweb 75mm, Cellweb 200mm & Treetex McDonalds Drive-Thru in Cirencester, Gloucestershire



### Location:

Kingsmeadow Services  
Old Cricklade Road  
Cirencester  
GL7 1NP



### Client:

McDonalds Restaurant

### Contractor:

**MARK JAMES**  
COMPLETE BUILDING SERVICES

### Consultant:

C7 Architects

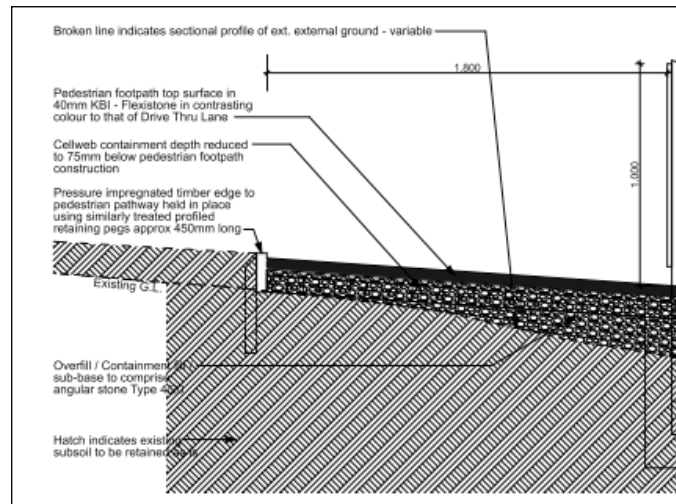
### Merchant:

Travis Perkins

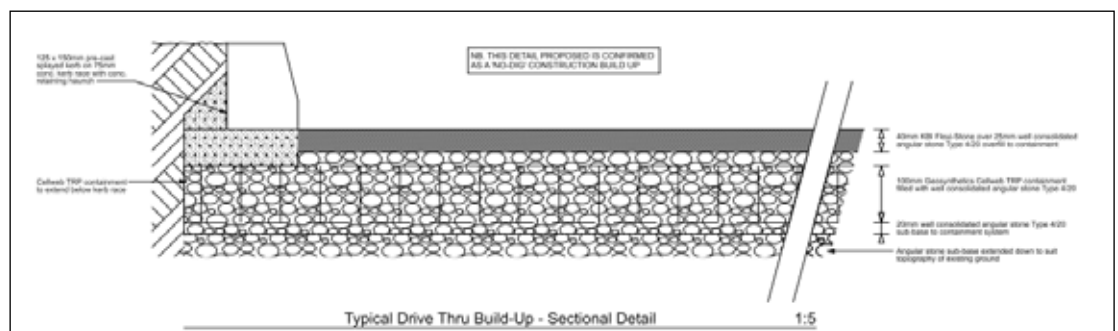
McDonalds restaurant had plans to make alterations to an existing site; this was to include a new drive-thru and single storey extension, however, the drive-thru would be constructed within the root protection area of two lime trees. The client required the best solution to prevent damage to the tree roots.

In December 2014, Glanville Group contacted the Geosynthetic technical department to look at the build-up for the drive-thru that fell within the root protection area at McDonalds in Cirencester. This recommendation formed part of the Design Office Architectural's submission to the local planning authority.

Geosynthetic engineering department, stayed in touch with the Design Office of Architectural offering assistance and support. They later found out that the new footpath would also encroach in the root protection area as well as the drive-thru. Geosynthetic was able to offer a further site specific recommendation for the footpath with a quick turnaround.



**C7 Architects finalised all the designs in July 2016 and with the help of the Geosynthetic's engineers, the build-up for the drive-thru and the footpath was specified.**



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Drawing taken from Design Office Architectural Ltd - 09-113/#922/15G

Mark James Complete Building Services secured the ground works package, work then commenced on site in October 2016. Geosynthetics were able to supply all the material required through Travis Perkins within 24 hours, in line with their merchant policy, offering on site support and guidance.

Using the Cellweb®TRP System ensured that excavation was kept to a minimum, preventing root severance. A layer of Treetex™ geotextile was laid, acting as a separation layer and a pollution control measure. Panels of Cellweb®TRP were then laid on top of the Treetex, reducing any further soil compaction within the rooting area. The Cellweb® system was then infilled with a 4-20mm clean angular aggregate. Geosynthetics recommend using a 4-20mm clean angular stone to ensure rigidity and pore spaces throughout the system. The infill needs to be clean to prevent clogging of the Treetex layer to allow continued water permeation and gas exchange between the atmosphere and the rooting environment.

**For advice on the construction of any form of hard surface through root protection areas please contact the Geosynthetics team on 01455 617 139.**



***“Geosynthetics Ltd provided a site specific solution which helped make this part of the development easy and straight forward to install. The team was helpful by offering next day delivery and on-site support. Using the Cellweb®TRP was a success and a system we would recommend”***

Simon James - MJ Complete Building Services

