

SuDS Permeable Paving

HGV Parking Area, Truckcell 80, Road King, Cannock, UK



CASE STUDY



Project Description

The New Hollies Transport Cafe has been serving drivers and travellers on Watling Street (A5) since 1933, possibly making this the transport cafe with the longest continuous service in the UK. The Café has grown significantly and now hundreds of HGVs visit each week, creating demand for an increased area of robust and sustainable good quality parking.

The Challenge

The truck stop is in an area with a high ground water table. Planning permission for the extended parking area was granted with a restriction to keep surface water run off rates to the same level as pre-development. The limited footprint of the site meant that the use of a surface level attenuation pond would have taken up valuable parking space. In addition the high ground water table meant that even minor excavations would soon fill with water, suggesting that attenuation tanks would be impractical to install.

It became clear that a permeable pavement option would meet the requirement for surface attenuation. However concrete permeable surfaces are very expensive and traditional plastic porous pavers would struggle to cope with the volume and severity of traffic expected at this busy and successful transport café. HGVs would be turning and manoeuvring on all areas of the site all day and 7 days a week.

Project Information

Client	Road King
Contractor	GM Design & Build
Product	Truckcell, Fildrain, Terrex
Quantity	4,000m ²
Benefits	<ul style="list-style-type: none">• Able to withstand high volumes of HGV traffic• Highly permeable surface• Easy to handle and install• Lightweight• Easy to lift and relay• 100% recycled polymer



ABG Truckcell typical build up

ABG LTD

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The Solution

The key to making this parking development cost effective was to use **ABG Truckcell** as the surfacing, with a **Terrex** filtration geotextile as part of the treatment regime. **Truckcell** is a heavy duty plastic paver, designed to provide a robust level surface to cope with the most demanding traffic conditions caused by constant HGV movements and manoeuvres. **ABG Fildrain** increases drainage capacity under the surface without the need for an increase in construction depths. Other plastic surfacing systems were trialled, but only **Truckcell** was able to withstand the surface torsional forces created by the multiple wheeled HGVs turning on full lock.

The ABG Service

ABG provided a full design support service to Client, Engineer and Contractor to facilitate using Truckcell effectively for the surfacing. When drainage issues manifested on site during construction, ABG Engineers visited site and enabled them to quickly advise on a suitable solution utilising **ABG Fildrain**, with minimal disruption to the construction program.



"When we were planning the redevelopment of our Hollies Truck stop at Cannock, we faced major challenges in terms of site conditions and in identifying a suitable permeable paving system. **Truckcell 80** permeable recycled plastic pavers were selected as the surface wearing course, and have proved their ability to perform satisfactorily in very arduous conditions"

Road King Development Director



Easy to remove and relay for access to utilities



Designed for HGV braking, slewing and turning zones. Note the turning tyre marks caused by the HGVs

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