SuDS Permeable Paving

Park and Ride, Truckcell, Truro, UK



geosynthetic

engineering

Project Description

In 2008, Truro opened Cornwall's first permanent park and ride facility to reduce the traffic congestion in the city. Traffic however continued to build and reached 200 cars per day passing through the city to get to the West Park & Ride installation, causing further congestion. Cornwall County Council therefore created the Truro East Park and Ride facility with 1800 car parking spaces as part of a £9.6M regeneration scheme.

The Challenge

As with the original scheme, the design focused upon the importance of sustainability and enhancing/protecting the local habitat and landscape.

Planning limitations meant that the run-off from the site could not exceed pre-development levels. Cornwall County Council decided to meet this requirement in part though porous paving. Recognising the significant strains imposed on cellular pavers by coach trafficking, the client identified a requirement for a permeable paver system which can cope with frequent overrun by coaches and resist the forces exerted during turning and manoeuvring of heavy vehicles.

The Solution

Truckcell 80 was chosen as the heavy duty surfacing solution for discrete bus turning / parking areas, with the Terrex NW9 geotextile providing a combined separation and treatment function for the run-off. Truckcell satisfied the planning requirement for a natural finish to the surfacing and it allows effective stormwater treatment within the subbase whilst also reducing the overall depth of construction.

Project Information

Benefits

Client	Cornwall County Council
Contractor	Cormac Contracting
Consultant	AECOM/Grontmij
Products	Truckcell 80, Terrex NW9
Quantity	700 m ²
	High surface permeability

- Able to withstand regular coach and HGV traffic
- Easy to handle and place
- Cost effective



ABG Truckcell with gravel or grass infill overlaying sand and an ABG Terrex geotextile

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Truckcell is a highly effective source control system that manages stormwater runoff in accordance with best practice guidance. A cost effective SuDS compliant porous paving solution that facilitates rapid installation, Truckcell is manufactured from 100% recycled, and recyclable , plastics and is proven to withstand frequent overrun by HGVs, fork lift trucks, coaches, refuse vehicles, fire engines etc. Weighing only 9kgs per paver, Truckcell easily complies with safe manual handling recommendations.

The ABG Service

ABG provided support to all parties to ensure **Truckcell** offered the right solution for this site. Design advice on edge detailing, jointing, surface friction and subsurface buildup helped solve some challenging technical queries and meet the planning constraints.

Deliveries to site were coordinated with the project program to be there on time without taking up site compound storage space.



Easily handled interlocking blocks rapidly placed across the prepared surface, leaving a flush surface allowing heavy vehicles to turn without causing drag on the blocks



Grassed area blends sympathetically with the landscape



Truckcell assists with achieving surface water absorption equal to pre-development levels

Contact ABG today to discuss your project specific requirements and discover how ABG past experience and innovative products can help on your project.