Permavoid selected for Winnersh Triangle park and ride scheme

Polypipe provided the ideal sub-base replacement stormwater attenuation solution for the new park and ride car parking facility.

Permavoid proved to be the ideal solution as it could be installed above the high water table.

The site, which was notoriously prone to flooding, was identified by both Reading and Wokingham borough councils as an ideal location for a new 390 car parking space park and ride, in order to give commuters greater public transport options. The site's geology consists of a high water table to cover level, which meant that an attenuation solution needed to be carefully considered.

Polypipe provided a solution, consisting of 29 shallow Permavoid attenuation tanks, with the capacity to store up to 590m³ of stormwater run-off from the car park.

Working with the design team the tanks were strategically positioned around the site to eliminate the need for the installation team, Keytec Geomembranes Ltd, to be working within the ground water zone.

The Permavoid high strength geocellular solution, incorporates a unique jointing mechanism that forms an interlocking 'raft' with exceptional strength that will support structural loads across the most heavily trafficked areas on the site.

The surface finish consisted of both gravel and asphalt, with Polypipe assisting the design team with structural and flotation calculations to ensure the minimum depth of sub-surface could be achieved, while preventing the geocellular tanks from floating.

CASE STUDY

Project
Winnersh Triangle Park and Ride

Client
Reading Borough Council and Wokingham Borough Council

Application
Surface water attenuation

Products
Permavoid

Site Constraints
High Water Table

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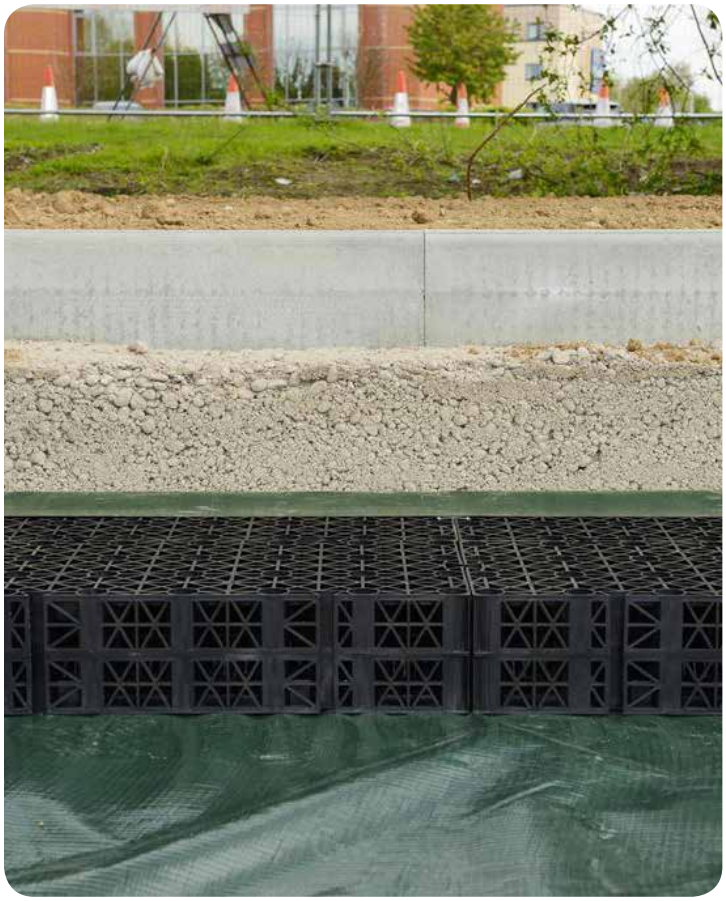
Polypipe

In addition, Polypipe worked with main contractor Dawnus to ensure that structural loading calculations were carried out to define the on-site travel routes for the different surface laying machinery. This allows surface works to be carried out without any detrimental effect to the Permavoid tank installations.

Due to its inherent strength Permavoid is ideally suited to this project, acting as a sub-base replacement system at shallow depths.

Richard Tithecott, Project Manager at Dawnus Construction, said:

"The team from Polypipe were a huge help on this project not only in selecting the right product, but assisting with the necessary structural loading calculations. These calculations substantiated our belief that the specified Permavoid system was more than strong enough to cope with the loads likely to be placed on it, which was one of our primary considerations when selecting a shallow attenuation solution."



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