Polystorm protection for new Crawley school

Polypipe's Polystorm system provided the solution for an attenuation structure during the construction of new school buildings at Thomas Bennett Secondary School.



West Sussex County Council commissioned a new development for the school to replace the old school buildings. The new school consists of eight separate, large, flat-roofed buildings with an extensive paved car parking area around. The combination of a clay underlay to the soil and vast amounts of rainwater run-off from both the roofs and car park meant that an effective ground drainage system was essential to prevent collection of surface water, even in showery weather and the potential for flooding in stormwater conditions.

LF Nugent, groundworker on the project, decided in consultation with Polypipe that an attenuation system based on Polystorm modular cell units would provide the perfect solution to the ground drainage issue.

Each Polystorm unit, measuring one metre long x 0.5 metre wide x 0.4 metres deep, weighs only 9 kilograms, has a storage capacity of 190 litres and a 95% void ratio.

With a minimum strength of 40 tonnes per square metre, each cell withstands trafficked loading when installed.

Cells can be interlinked to form a rigid storage tank of any shape required, whether in narrow strips or, as in the case of Thomas Bennett School, a sizeable rectangular area.

LF Nugent installed 7,200 Polystorm units wrapped in a non-permeable membrane in two large excavations. Surface water is directed into the tanks via a total of seven 300mm diameter Ridgidrain pipes.

Despite the size of the excavations, installation was completed in two weeks and L F Nugent were impressed with both the simplicity of the Polystorm system and the support provided from Polypipe at every stage of the project.

CASE STUDY

Project

Polystorm modular attenuation solution for the development of a new School complex

Client

West Sussex County Council

Application

Attenuation

Products

Polystorm Ridgidrain

