

Polypipe provides SUDS for Kent residential project

Polypipe supplied an effective integrated stormwater drainage system to attenuate surface water run-off from a new housing development.



Twofold
SUDS for
residential
development



Working closely with Pentland Homes, Polypipe provided a 2700mm Ridgistorm-XL large diameter piping system and a Polystorm-R geocellular system to attenuate stormwater at the new Folkstone development, Scholars Village.

Installed beneath a public open space, where the installation footprint available was limited, the solution was designed to firstly capture stormwater within the 246m³ capacity Ridgistorm-XL attenuation tank, which was adopted under a Section 104 agreement by Southern Water.

The system will provide adequate protection for the development from a '1 in 30' year storm event. In order to ensure that stormwater released from the system will not overwhelm the local sewer network, Polypipe also incorporated a Stormcheck Vortex Flow Controller within a 2700mm offset chamber downstream of the structure.

In the event of larger, '1 in 100' year storms, the Ridgistorm-XL tank will feed any excess increased rainfall volume into the Polystorm-R tank which is able to attenuate 194m³ of extra stormwater.

As the location of the tanks is low lying and adjacent to an existing culverted watercourse, Southern Water advised as part of their review that the tank passed buoyancy calculations in order to stop flotation occurring should water be present at ground level.

Working with the project's consultant engineer DHA Planning, Polypipe incorporated further cover levels into the design, removing the need to strap the Ridgistorm-XL tank to a concrete base.

CASE STUDY

Project

Scholars Village

Client

Pentland Homes

Application

Stormwater attenuation

Products

Polystorm-R

Ridgistorm-XL

Stormcheck Vortex Flow Controller