

# Intelligent water management solutions bring retail village to life

Polypipe demonstrates how to combine space for water including irrigation capability.



Making space for water



Surface water management



Water quality



Biodiversity



Placemaking

## CASE STUDY

### Project

Whiteley Shopping Village,  
Southampton

### Client

McLaren

### Application

SuDS and biodiversity

### Product

Permavoid, Permachannel,  
Permafilter, Polystorm and  
Biomat, Permaceptors

 **Polypipe**



## Whiteley Retail Park

The human desire – and need – for green space is something we need to take very seriously when designing construction projects – even retail schemes. Once a mono-functional, run-of-the-mill shopping centre, Whiteley Retail Village now occupies a new, more appealing site – a multi-functional green oasis punctuating car parks, attracting wildlife and providing recreation around the location resulting in increased footfall, longer dwell times, socialising and an overall sense of wellbeing.

And it's all down to intelligent water management designed into the project to include Green Infrastructure as well as managing stormwater run-off to prevent flooding.

The design includes a range of innovative products to capture, control and reuse stormwater.

**Over 1,300m of Permachannel has been installed to capture the stormwater before passing it through the Permafilter Biomat units – removing contaminants from the car park surface. The treated water is stored within Permavoid and Polystorm cells ready for controlled attenuation and re-use.**



Polypipe utilise the water stored in the attenuation tank to cascade into a separate system which would be provided to the tree pits for irrigation, reducing mains water feed to these areas.

Now a sustainable and green public space, the area, with its injection of vitality, is encouraging people to not only shop, but to visit and linger; the planting offers aesthetics and beauty whilst attracting much-needed biodiversity.

And, ultimately, makes shopping a more pleasant experience.

“The intelligent engineering of this scheme meant that the attenuation system created a cascade within the design which allowed some stormwater to be used for irrigating the tree planters. This project demonstrates how a combined approach to stormwater management and tree irrigation can produce a bespoke solution which is best fit for the project and the end purpose. There is flexibility in the products we have to work with and an ever-growing range of knowledge and best practise which means that an all-encompassing solution can be considered on most projects.”

**Phil Tomlinson, Market Development Director.**