

Polypipe and SEL put excess water to good use at Kirkby Waste Recycling Centre

A Permavoid SUDS Aggregate system helps Merseyside Recycling and Waste Authority clinch CEEQUAL Very Good Award.



**Shallow
stormwater
attenuation**

Merseyside Recycling and Waste Authority (MRWA) required a surface water SUDS system and rainwater harvesting scheme at their new Kirkby Waste and Recycling Centre being built to replace the outmoded existing site.

As part of a £1.1m project, the new WRC has the capacity to receive up to 15,000 tonnes of householders' waste and recyclable materials each year, and therefore needed the ability to handle an increased number of larger containers, more space on site for cars and a specialised system to harvest rainwater, manage surface water and improve sustainability.

Polypipe's Permavoid system was put forward as an alternative to the specified 'big box' system, allowing the surface water drainage to stay shallow and provide a much more cost effective solution, thanks to the utilisation of the sub-base layer to store surface water run-off.

SEL opted for a Sudsagg system which combines plastic crate storage with sudsagg.

Sudsagg has a special grading for the purpose to provide a 30% void ratio while also maintaining all the physical properties necessary to fulfill the role of a standard granular Type 1 sub-base. Permachannel oil and silt interception source control systems were used to collect and direct water through Biomat cells, which in turn treats the water before it enters the Sudsagg where it is stored prior to discharge. This gave Merseyside Recycling and Waste Authority a carefully crafted and perfectly executed water management system allowing for multiple levels of treatment.

This SUDs system even comes complete with newt crossing areas and a rainwater harvesting tank to collect water. The project was awarded with a CEEQUAL Very Good (Construction Only) Award.

SEL installed the specialist Permavoid elements of the drainage scheme together with the rainwater harvesting pumps, sump and control panel installation as a complete package solution.

CASE STUDY

Project

Kirkby Waste Recycling Centre

Client

MRWA

Application

Rainwater Harvesting

Products

Permavoid