Yorkshire Water utilises largest diameter Ridgistorm-XL pipe system for Section 104 trial scheme

A new housing development in Featherstone, West Yorkshire is set to benefit from the use of Polypipe's 3m diameter plastic pipe, the largest in its product range, as part of a unique stormwater drainage system.



SUDS solution for Section 104 adoption



Polypipe worked closely with Yorkshire Water and RAB Engineering Design Limited to provide an innovative solution for Strata Homes' 'Origin' housing development.

With a limited public open space of just 360m² available on the site, Polypipe designed a solution that utilised its popular Ridgistorm-XL piping solution in 3m diameter to form a 430m³ stormwater attenuation system consisting of four legs and two manifolds. In order to avoid overwhelming the local drainage system, the system will discharge stormwater from a tank located beneath the public open space at a flow rate of 127 litres per second.

These flow rate calculations ensure that the system will provide necessary attenuation for the development in the event of a '1 in 100' year storm event, whilst allowing additional space to mitigate the effects of climate change on rainfall, as stipulated by the local authority, which is also adoptable for Section 104 approval.

The engineered system, was jointed by internal welding by BFS Nationwide Ltd. The process was made much simpler due to the inclusion of integral sockets within Ridgistorm-XL, which work to provide improved alignment between pipes.

CASE STUDY

Project Origin Development

Client Strata Homes

Application SUDS solution for Section 104 adoption

Polypipe

Products Ridgistorm-XL

Polypipe Civils Head Office, Charnwood Business Park, North Road, Loughborough, LE11 1LE Tel: +44 (0)1509 615100 Fax: +44 (0)1509 610215 Email: wmsenquiries@polypipe.com

www.polypipe.com/wms