

Ridgistorm-XL attenuation tank supplied to Southdale scheme

Polypipe supplied a bespoke water management solution for a brand new affordable housing development in Stanningly, Leeds.



Ridgistorm-XL
attenuation
tank

National affordable developer Southdale required a drainage solution which complied with a Section 104 agreement to be adopted by Yorkshire Water. Polypipe's specialist water management solutions team provided a 1500mm Ridgistorm-XL large diameter pipe system which was designed as an attenuation tank, complete with custom fittings and a Stormcheck Vortex Flow Control Unit to control the discharge rate from the site.

Polypipe worked with Met Consulting Engineers on the project which involved undertaking structural calculations and construction drawings which were submitted to Yorkshire Water for approval. By analysing the site's ground conditions, Polypipe's team of dedicated experts were able to value engineer the pipe to a stiffness classification of 3.0kN/m². Ensuring the most appropriate stiffness class of pipe for a specific project is one of the unique benefits of the Ridgistorm-XL system and ensures that pipes are neither over nor under engineered. The design also required a series of bespoke fittings to complement the Ridgistorm-XL attenuation tank, including a T-junction, a 90° bend and elbows suitable for man entry. As the fittings were pre-fabricated in Polypipe's in-house fabrications department, the installation time on-site was significantly reduced.

The Ridgistorm-XL pipes and fittings were jointed using Polypipe's unique patented electro-fusion jointing process which provides superior joint integrity.

A further benefit provided by the electro-fusion welding method is that the need for operatives to work in confined spaces is vastly reduced, providing excellent on-site health and safety benefits to the contractor.

Mark Rowden, Ridgistorm-XL Project Manager commented: "This project called for a bespoke drainage solution from the start and was particularly challenging for the team. We understood, however, that with the drainage solution subject to a Section 104 Agreement, there was absolutely no room for error in the project specifications and we're delighted with the results." The attenuation tank will be used to help reduce peak flow at the housing development by spreading it over a longer period of time.



CASE STUDY

Project

Southdale housing development water management solution

Client

Southdale

Application

Attenuation tank

Products

Ridgistorm-XL