Polypipe provides engineered stormwater management solution for Somerset village

Polypipe's Ridgistorm-XL has helped a flood-stricken village manage its highway drainage effectively.



Muchelney, on the Somerset Levels, experienced its worst flood in 90 years during the high profile storms of early 2014. As a result, the village was subsequently cut off from its surrounding areas for two months, to such an extent that it was only accessible by boat.

Working closely with Skanska, the project's Main Contractor, Polypipe was called upon to provide more than 500m of its 900mm Ridgistorm-XL large diameter pipe system to form a stormwater management solution designed to cope with future similar flooding events, as part of a multi-agency Flood Action Plan.

Designed to run perpendicular to the newly raised access road, which has been increased by 1.2m in height, the Ridgistorm-XL system is buried underneath the road at intervals to convey floodwater from one side of the road to the other.

The system will prevent the raised village access road from acting as a dam and stop the road from flooding; enabling it to remain in use during and after a flooding event like those experienced in 2014.

Working collaboratively with Skanska and consulting engineer Atkins, Polypipe's engineers were able to engineer the Ridgistorm-XL system to a stiffness class of SN4 in order to meet local ground conditions

Ridgistorm-XL is up to 94% lighter in weight than products made from traditional materials and subsequently easier to handle, greatly reducing the need for heavy plant machinery and minimising time and installation cost.

CASE STUDY

Project

Muchelney Access Road

Client

Somerset County Council

Application

Flood alleviation

Products

Ridgistorm-XL

