## Sustainable Attenuation System

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for Lovell Homes

CASE STUDY

ACO Water Management has designed and delivered a 4,500m<sup>3</sup> StormBrixx attenuation tank to help prevent flooding at Lovell Homes' Drummond Park estate.



# ACO Supplies Sustainable Attenuation System for Lovell Homes Ludgershall

#### THE PROJECT

Drummond Park, Ludgershall

#### THE BRIEF

To provide an attenuation solution to prevent flooding on a new housing development

### THE SOLUTION

ACO StormBrixx

A mixed tenure development comprising of 412 quality homes, work at Drummond Park commenced in May 2022.

Consisting of 309 two, three, and four-bedroom homes for sale and 103 affordable homes for rent, the site required a large-scale solution to mitigate flooding from storm and surface water runoff. ACO's leading StormBrixx attenuation system was specified and installed with a depth to invert of 4.5m, following a consultation between civils contractor Tithegrove and ACO. Measuring 56.4m long by 26.6m wide by 2.4m high, the tank consists of 13,254 StormBrixx SD units which are stacked together in three layers. With a total volume of 4,500m<sup>3</sup>, it allows stormwater to slowly infiltrate back into the ground and soak away. As well as the supply and delivery, ACO customised the design, creating a bespoke, stepped edge as the tank met with the boundaries of the site.

A crucial aspect to the project was sustainable construction, and due to the innovative design of StormBrixx, the carbon footprint from transportation and logistics was significantly reduced. Alongside this, ancillary materials such as pipework and shingle were minimised.

Aaron Kersey, Sales Engineer at ACO, said: "When we were initially asked to consult on the attenuation tank for Drummond Park, they were already looking at a system that would require 64 truckloads of deliveries. With StormBrixx, we've managed to bring that down to just 16, vastly saving on carbon footprint, cost and storage requirements.

"This is down to StormBrixx's stackable design, meaning more units can be packed and delivered on a lorry. Not only this, but the unit is light and easy to handle by hand, so once delivered to site, there was no need to then use heavy machinery to lift or transport the products into position. This then meant that installation was much quicker too."





The attenuation tank uses a patented brick-bonding and cross-bonding, geocellular structure to enable it to withstand the pressure and load from traffic and covering material. In addition to the sustainable element to the project, ACO's StormBrixx solution also allows for easy maintenance and cleaning in future.

"A key feature of StormBrixx is the ability to easily get into the tank through manhole covers and clean the units of sediment and debris. The entirety of the tank is accessible at various points, making maintenance much easier over traditional tank systems. Again, this helps to reduce operational costs for the local authority," said Kersey. Paul Stevens, Materials Buyer at Tithegrove said: "We are extremely pleased with the StormBrixx attenuation tank and the way Aaron and the team at ACO were able to step in and help us value engineer this project. We were impressed with the flexibility of the solution and how easy it is to use. Most of all, we are thankful that the solution helped us to stay sustainable through lowering transportation, loading and unloading and general logistics requirements."

For more about ACO's StormBrixx system, please visit www.aco.co.uk/products/stormbrixx

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