

## The star of Scarborough

*ACO StormBrixx SD provides a shallow attenuation solution for Star Carr Farm distribution yard*



When James Stockdale Ltd, leading supplier to McCain Foods, looked to open up a new farm and potato store at Star Carr Farm, Scarborough, the appointed contractors turned to ACO Water Management to overcome a restricted installation for an essential attenuation requirement.

James Stockdale Ltd, or 'Stockdales' as it is often referred to, has been growing potatoes in Yorkshire since the 1940s. Initially supplying the county's fish and chip shops and greengrocers from a five acre plot, the company now farms in excess of 2,300 acres. Key to its sustainable growth has been its close working relationship with McCain, which began in the 1960s.

In 2018, Stockdales looked to expand its storage and haulage offering, through the creation of a series of potato stores.

Given the size of the planned storage area and distribution yard, which would need to have capacity for up to 65 potato bulkers at a time, providing adequate surface water drainage for

the new site was a critical planning criteria that needed to be satisfied. To achieve this, Stockdales appointed local construction contractors, Harlands Builders Ltd.

### FOR PEAT'S SAKE

Craig Harland oversaw the project: *"One of the key issues we encountered early on in the construction was the discovery of a layer of peat. As the Local Authority's environmental policy prevented the peat from being removed, we could only excavate a certain amount of material, leaving us a shallow area in which to fit a drainage system. As such, we needed a flexible solution that could work between this layer, whilst still be strong enough to cope with sustained*

### Project:

Star Carr Farm, Scarborough: potato storage and distribution yard.

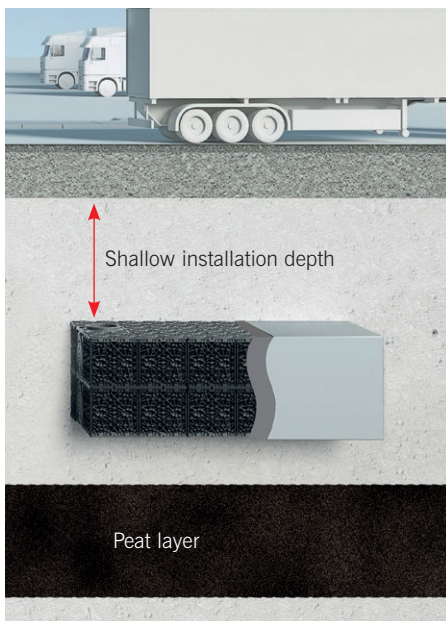
### Objective:

Provide an attenuation solution for a large area with restrictive installation depth due to a peat layer and be able to cope with sustained HGV traffic.

### Solution:

ACO StormBrixx SD geocellular attenuation units with a brick-bonded construction installed under the distribution yard.





ACO StormBrixx SD shallow installation designed above a peat layer

HGV traffic from the distribution network on the finished site above.

Craig continues: "However, we became aware of the ACO StormBrixx SD series, which was shallow enough to work within the available depth, while providing the required volume and mandated attenuation levels."

#### THE STORMBRIXX SOLUTION

ACO StormBrixx SD (Standard Duty) is a general-purpose extension to ACO's high-capacity patented plastic geocellular system, comprising of a 914mm high injection-moulded stackable crate design suitable for use in a wide range of construction applications.

While the StormBrixx HD (Heavy Duty) offers the ideal solution for Local Authority mandated projects, due to the option for integrated man access units which facilitates the rigorous maintenance requirements; the new SD range is the ideal cost-effective storage and infiltration solution for non-government funded work, such as the potato stores and distribution yard at Star Carr Farm.

#### COMPRESSIVE QUALITIES

The SD system offers a high void ratio of 97% – one of the highest available on the market – which limits the volume of excavation required to achieve a specified storage capacity, reducing both the installation time and cost. What's more, the high vertical compressive strength of



ACO StormBrixx SD being installed

350kNm<sup>2</sup> also ensures the StormBrixx system is able to cope with the intense and regular load challenges posed by the site's sustained HGV traffic as they come to collect the potatoes for delivery.

The StormBrixx crates were easy to construct with a snap-lock system and in Starr Car Farm the half crates were brick-bonded to each other, which evenly distributed vertical loads down the aligned pillars.

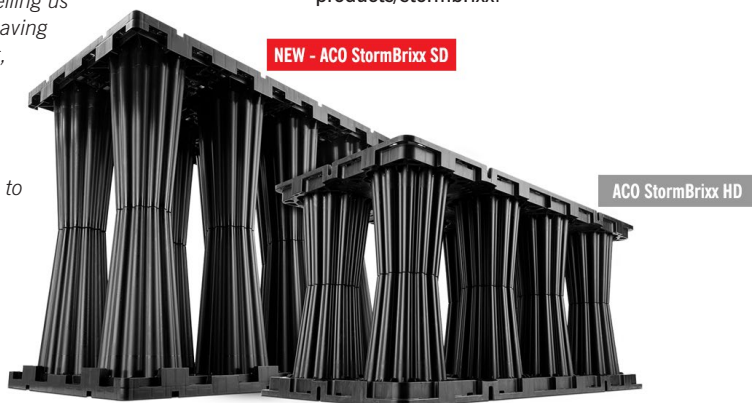
"The ACO Design Services team were fantastic," continues Craig.

"Not only did they work closely with us to design a system which would meet the load challenges of a sizeable distribution yard, with a limited maximum install depth, but they were very vocal when it came to the installation parameters. Rather than just selling us the product and leaving us to get on with it, the team was excellent in ensuring we were fully up-to-speed on how and where to install it."

#### FINAL THOUGHTS

Craig concludes: "From an installation perspective, it was incredibly easy to put together; and we completed the entire 1290m<sup>3</sup> StormBrixx project in just two working days. What was particularly helpful was the pre-site visit, where the ACO team brought with them some small-scale models of the system to demonstrate the brick-bonding mechanism in practice, prior to the final install. This really helped crystallise the simplicity of the StormBrixx product, and made for a very smooth install for a sizeable system in next to no time."

For more information on the ACO StormBrixx range, including the StormBrixx SD and the new SD half layer, suitable for where installation depth is restricted, please visit: [www.aco.co.uk/products/stormbrixx](http://www.aco.co.uk/products/stormbrixx).



#### ACO Technologies plc

ACO Business Park,  
Hitchin Road,  
Shefford,  
Bedfordshire  
SG17 5TE

Tel: 01462 816666  
Fax: 01462 815895

#### ACO Water Management Contacts:

e-mail Sales: [customersupport@aco.co.uk](mailto:customersupport@aco.co.uk)

e-mail Technical: [technical@aco.co.uk](mailto:technical@aco.co.uk)

website: [www.aco.co.uk](http://www.aco.co.uk)

#### ACO Building Drainage Contacts:

e-mail Customer Enquiries: [abdccommercial@aco.co.uk](mailto:abdccommercial@aco.co.uk)

e-mail Technical: [abdtechnical@aco.co.uk](mailto:abdtechnical@aco.co.uk)

website: [www.acobd.co.uk](http://www.acobd.co.uk)

