

Project Profile

Objective

To reduce reliance on use of potable water for irrigation of plants.

Solution

Hydro's Stormcell® Stormwater Storage System, installed beneath the plant display area, is used to store rainwater from part of the roof and excess from plant watering for recycling through an automatic irrigation system.



Product Profile

- Modular and flexible.
- Lightweight.
- High structural integrity - suitable for installation below roads, car parks and amenity areas.
- Patented silt prevention system.
- Woven geotextile on the top and bottom of each block prevents intrusion of fines.
- Simple and quick to install.
- Shallow 120 mm deep blocks also available.

Garden Centre, Gonerby Moor, Lincolnshire Stormcell® Aids Garden Centre Green Vision

For the new Oldrid Co. Ltd Garden Centre at Gonerby Moor, Lincolnshire, the main contractors - Lindum Group - limited its impact on the local services. Anticipating future pressure on potable water use, a rainwater recycling and irrigation system has been installed using Hydro's Stormcell® high capacity storage system.

Tom Robinson of architects and surveyors Meldrum Lee & Gillatt, who designed the scheme commented: "East Anglia is suffering lower water tables with increased pressure on groundwater supplies. Oldrids are anticipating restrictions or charges for use of potable water in the region so have installed the water recycling system".

"Rainwater from part of the roof and excess irrigation water from the plants is channelled to the 400 m³ Stormcell® storage tank, which is located under part of the block-paved plant display area. It allows us to achieve over 90% of the storage capacity of a conventional tank, without the heavy associated construction which would be required for an installation of this size."



The plant display area is approximately 160 m x 95 m, with a diagonal fall of about 1:80, and crossed with channel drainage which intercepts the surface water. The roof area is approximately 56 m x 53 m, with water collected by guttering and downpipes.

The recycled water is pumped from a sump at the tank outlet to a header tank where it is pH corrected and distributed via a sophisticated automatic irrigation system.

Hydro's Stormcell® comprises a modular block, high capacity stormwater storage system with a very shallow profile, suitable for shallow tanks. Its inherent structural strength reduces sub-base preparation requirements and it can withstand transient vertical loads of up to 40 tonnes/m² so it can be installed under car parks, driveways and other trafficked areas.

The Garden Centre is located in a prominent location on the A1 close to Grantham, on a site already occupied by a superstore and warehouse and is now open to the public.

Design of the Garden Centre, drainage system and Stormcell® installation were undertaken by Meldrum Lee & Gillatt of Boston, and the treatment and irrigation system by Glen Farrow UK Ltd of Spalding. The main contractor for the project was Lindum Construction of Lincoln.

turning water around ...®

This information is for guidance only and not intended to form part of a contract. Hydro International pursues a policy of continual development and reserves the right to amend specifications without prior notice. Equipment is patented in countries throughout the world.