

Project Profile

Objective

Expansion of the Wyevale Garden Centre resulted in an increase in stormwater runoff. Existing discharge limits were still to be met so an attenuation storage system was required to store excess stormwater.

Solution

The attenuation storage was provided by Hydro International's Stormbloc® modular, load bearing storage system in two shallow tanks.



Product Profile

- Infiltration / soakaway applications.
- Fully accessible for inspection and maintenance.
- Very strong (suitable for use under trafficked areas).
- High void ratio (95%).
- Low cost.
- Lightweight.
- Simple and quick to install.
- Shallower 350 mm deep blocks also available.

Stormbloc® Solves Garden Centre Development Drainage Problem

Redeveloping the Bicester Wyvale Garden Centre greatly increased the impervious area and stormwater runoff - yet existing discharge limits still had to be met. Increased attenuation storage was required but within a very limited space, so Hydro International's Stormbloc® modular block storage was specified because it was versatile enough to fit the space constraints with low installation costs.

Expansion at the Wyevale Garden Centre has meant a larger, fully asphalted car park, and a rebuilt and more extensive roofed building. The project phases and the dimensions and topography of the existing site meant that two tanks, totalling around 500 cu m were sited in different locations to take runoff water from roofs and car park.

The tanks are constructed from Hydro's Stormbloc® loadbearing modular polypropylene block, and installed within a 1mm polypropylene membrane by Keytec Environmental with a 300 g Geotextile as a protection whilst backfilling. David Pipe Quantity Surveyor of main contractor Barnwood Construction commented: "Although round tanks had originally been specified by the engineers, there were potential difficulties with the space required. By using Stormbloc® we found we could achieve the storage volume within a shallow rectangle; it is also load bearing so local aggregate and sand was used for backfilling without extensive civils work, and resulting in an economical installation."

The whole site is in a low lying area, so stormwater is directed from the Stormbloc® tanks to pumping chambers, and from there pumped to local watercourses, as with the original site.

Stormbloc® stormwater storage and infiltration medium from Hydro International is a cost-effective modular block system, with a designed-in and patented access tunnel for easy maintenance.



The modular blocks make Stormbloc® quick and easy to install in almost any situation including industrial and commercial projects as well as residential developments, SUDS schemes and conveyance applications. Strong enough to withstand traffic loads, Stormbloc® can be installed under roads, parking areas, driveways and landscaped areas without additional protection.

turning water around ...®

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