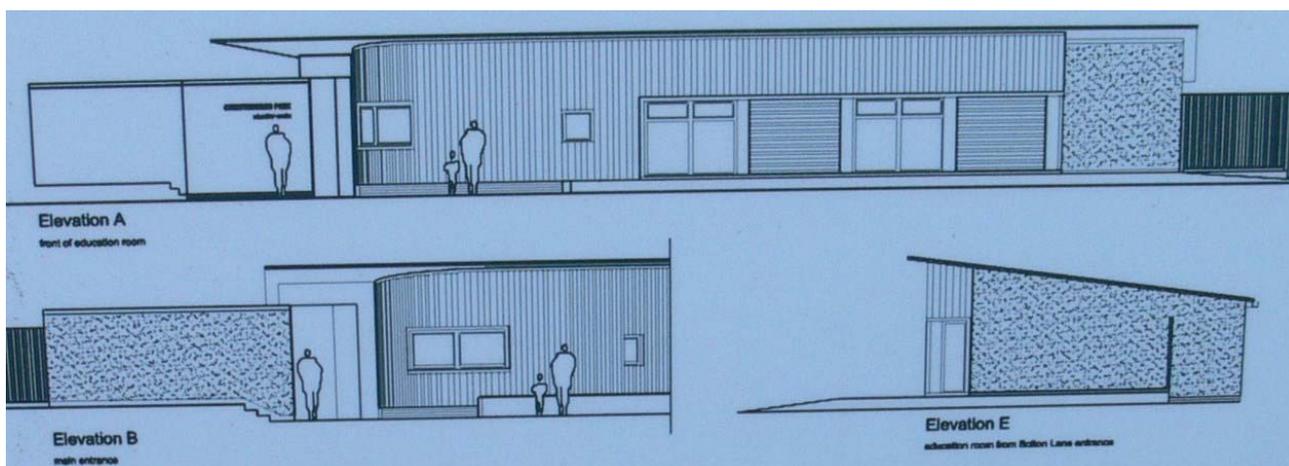


Christchurch Park Restoration Project Ipswich - Rainwater Harvesting

Client:	Ipswich Borough Council
Building Type:	New Management Facility and Visitor Centre
Roof:	70% mono pitch with sheet cover and 30% sedum
Area:	400m ²
Rainwater Apps:	8 toilets for public and staff use
Sustainability:	RWH, sun pipes, ground source heating, timber cladding, living roof
Built:	2007



Rainwater Harvesting Requirements

To provide as much WC water as possible. The estimated annual demand was 200m³ and the estimated rain yield was 130m³ which could offer a system up to 65% efficient. During the summer period of heavy demand and less rainfall the WCs would require mains water top-up. A single 6,000L PE tank was located under the buildings garage forecourt in sandy soil with no concrete base or backfill. All the buildings roof areas were connected to the tank via a leaf filter and overflow to soakaway.

The sedum roof area was also connected to the rainwater harvesting system. The yield from this part of the roof is low, at about 40% and due to the living aspect of the roof and soil layer the collected water is clean but not clear. With dilution from clear water collected from the main roof areas the water retains a slight brown colour that is not easily removed, the client accepted this at the design stage. Labels on each WC alert each user why the water may be slightly coloured.



Rainwater Harvesting System

A factory built and tested, wall mounted rain manager provides central control and all major system components. The 5.4 bar Wilo multi-stage centrifugal pump with electronic flow switch provides enough power to refill all toilets simultaneously, if required, in 40 seconds. The rain manager (shown with cover removed) is simple to hook-up during installation and easy to maintain for one person.



“As the M&E contractor we had not used Ecozi before this prestigious project. We found the equipment simple to install and commission using our own staff. We made a couple of phone calls to Ecozi who provided all the information we required at the planning stage through to client hand

over. We particularly like the factory built rain manager used to control and pump water to the toilets on demand.”

Roger Case- Managing Director, Burwell Mechanical Services



rainwater harvesting systems

Ecozi Ltd
Unit 2 Churchlands Business Park
Ufton Road
Harbury

01926 614 002
info@ecozi.com