



Modular cells provide big water storage in small spaces

Modular plastic cells are an ideal solution for underground stormwater storage where space is limited.

Water infrastructure specialists JHL Civil used the Rocla eco^{3™} modular storage cell system to create a large underground storage facility in a small space for an industrial unit at Port Melbourne.

The small landscaped area was only 5.5 x 3.8 metres but the completed system can store 30,000 litres of stormwater, captured from a 905 square metre warehouse roof, an 87 square metre office roof and a 170 square metre carpark.

After detailed product research, JHL decided that the Rocla[®] modular system would provide maximum capacity and flexibility.



Because of potential silt build-up from the carpark and the construction equipment stored in the warehouse, JHL installed a Rocla First Defense[®] vortex separator as a pre-treatment unit to remove sediment and floatables from the stormwater. The installation was straightforward, including an intercepting connection into the stormwater drainage pit at the front of the property, and craning in the First Defense[®] unit and the eco^{3™} storage cells, which were stacked three-high.

The flexibility of the modular system allowed the storage area to be designed to fit around an existing stormwater pit. The whole installation was completed in two weeks.

A small pump transfers the stored water into a drip irrigation system, allowing the landscaped area to remain healthy year round, in spite of water restrictions, and without being limited to drought-tolerant plants.

Good enough for your own backyard

Director of JHL Civil, Tony Mau, was so impressed with the flexibility of Rocla eco^{3™} modular storage cells, he used them to build a rainwater tank in his own backyard.

With a minimal footprint available on the 700 square metre block, an underground tank was the most effective solution for storing water on the Melbourne suburban property. Limited access only allowed entry for a small excavator.

By stacking 352 cells two-high in a space 7.5 x 6.5 metres, Tony created a 40,000 litre storage tank. New pipework connects downpipes from the house roof to the storage system, with a self-cleaning cistern filter to minimise maintenance.

The system is now connected to the garden's irrigation system and later will be used for toilet flushing.

