

KIAMA CBD STORMWATER TREATMENT & REUSE

Introduction

Kiama Council engaged STORM to manage the impacts of Kiama CBD's runoff on Kiama Harbour. STORM conceptualised and designed a stormwater treatment and harvesting system and to use this water for irrigation of public open space (parkland).

This project is an excellent example of Integrated Urban Water Cycle Management.

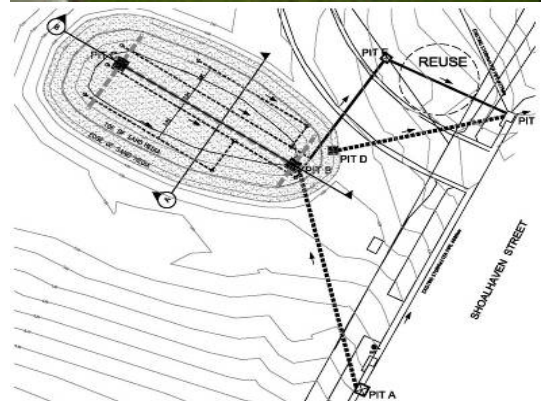
Features

The stormwater treatment train chosen comprises pit inlet baskets and a subterranean sand filter which does not interfere with the aesthetics and recreational function of Hindmarsh Park, and UV disinfection prior to irrigation. Pit inlet baskets were chosen after an exhaustive Life Cycle Cost analysis comparing different litter trapping devices and strategies.

The sand filter employs advanced German permeable pipe technology known as *Hydrocon* which is very effective at removing dissolved pollutants. The sand filter surcharges above ground level in a shallow depression during extreme rain events, otherwise all flows are contained and treated underground.

Extensive modelling was undertaken in support of the system design and monitoring is proving the system to provide a high level of treatment - suitable for its intended use.

Performance monitoring of the system shows it to produce high quality treated stormwater suitable for its intended irrigation use.



Awards & Recognition

This project (along with its Kiama Council counterpart - Elambra Estate WSUD - has been nominated for and received several awards including the **Stormwater Industry Association National Water Sensitive Design Award 2004** - presented at the International Conference on WSUD in Adelaide.