

Stormwater Reuse and Outdoor Courts

Project Director: Chris Pines
Project Manager: Rod Smyth, Alan Gordon
Site Foreman: Rex Gauld
Safety Officer: Peter Lucas



Client: **Mosman Council**

Location: **Mosman, NSW**

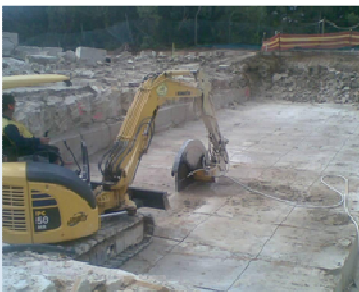
Project Cost: **\$1,500,000**

During 2007/2008 CC Pines undertook this five month project for Mosman Council which involved the construction of civil, electrical and mechanical infrastructure to capture and transport rainwater for re-use. Three netball courts were built on top of a 500 kilolitre rainwater storage tank and the rest of the site was landscaped and replanted which included a rock check dam and spillway.

The works involved the excavation of almost the entire site with strict environmental control for Phytophthora Management and Archaeological Relics. We also delivered the works in accordance with our Waste Management Plan that required the recycling of almost all material that was transported off site. We developed an alternative construction methodology for the 500 kilolitre rainwater storage tank which saved Mosman Council considerable time and money.



The overburden from the initial excavation was put through a trommel screen to produce high quality top soil for later use during landscaping and planting at the end of the project. The product from the screen was tested for contaminants and chemical composition and as a result CC Pines improved the soil prior to reuse with increased organic matter and drainage materials.



A rock saw was used to excavate the majority of the underground tank rather than a hammer to allow for the re-use of the sandstone being removed. Blocks were carefully cut out and removed from site to be used in future projects. This was a positive environmental result and also reduced the level of noise disruption for surrounding residents.



The storage tank was formed using shotcrete sprayed directly onto rock. Over 70m³ was sprayed in a single day using two rigs. The floor was pumped out of a boom pump in sections following the shotcreting to avoid cold joints. The roof of the tank was placed a week later and included 15 support columns to withstand a 20kPa load.