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STORMWATER HARVESTING TRIAL - CLAREMONT AVENUE, NETHERBY

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The City of Mitcham is pleased to demonstrate a commitment to TREENET by providing Claremont Avenue and adjacent verge area (situated immediately to the south of the Waite Institute grounds) as a trial site. Attendees at previous symposiums have had the opportunity to observe the interaction of the root system of a mature street tree with the adjacent road surface following exposure of the tree's root system with an air-knife. Additionally, the performance of a number of *Pyrus spp*. installed into SPACE medium within the northern verge will be monitored indefinitely.

The Stormwater Harvesting trial consists of the installation, monitoring and evaluation of several simple stormwater diversion devices. Each device employs a different method to divert quantities of stormwater from the water table into a soakage trench, then, in turn into the soil medium within the verge. It is anticipated that in most instances increasing the volume of moisture available to street trees by this method will improve their overall health and reduce the need for tanker watering.

Replacement of the road surface and realignment of kerbing along the entire length of Claremont Avenue has been scheduled for some time allowing the requirements of this trial to be accommodated in the overall design.

Such a trial seems particularly relevant at this time, it supports the International Council for Local Environmental Initiatives (ICLEI) Water Campaign concept adopted by the City of Mitcham and will compliment self imposed or legislated water restrictions.

Whilst the benefits gained by providing additional moisture to the root zones of trees are quite easily identified and monitored, the effect of introducing moisture to the highly engineered road sub-surface may not be so easily observed. An accurate indication of the extent of moisture infiltration and its impact on the strength, durability and performance of the road surface will be obtained through the use of regularly spaced moisture probes and controls. This data will be matched with roadway surface strength measurements providing comparative readings.

University of South Australia honours students, Steven Porch and Jeffrey Zanker have selected this project to form the basis of their thesis and will talk specifically about their studies later in the symposium.

The City of Mitcham has provided a venue for the trial and Council construction crews are installing the devices. However, the concept, design and impetus for the project has come from a group formed by representatives from Transport SA, the University of South Australia, TREENET and the City of Mitcham.