

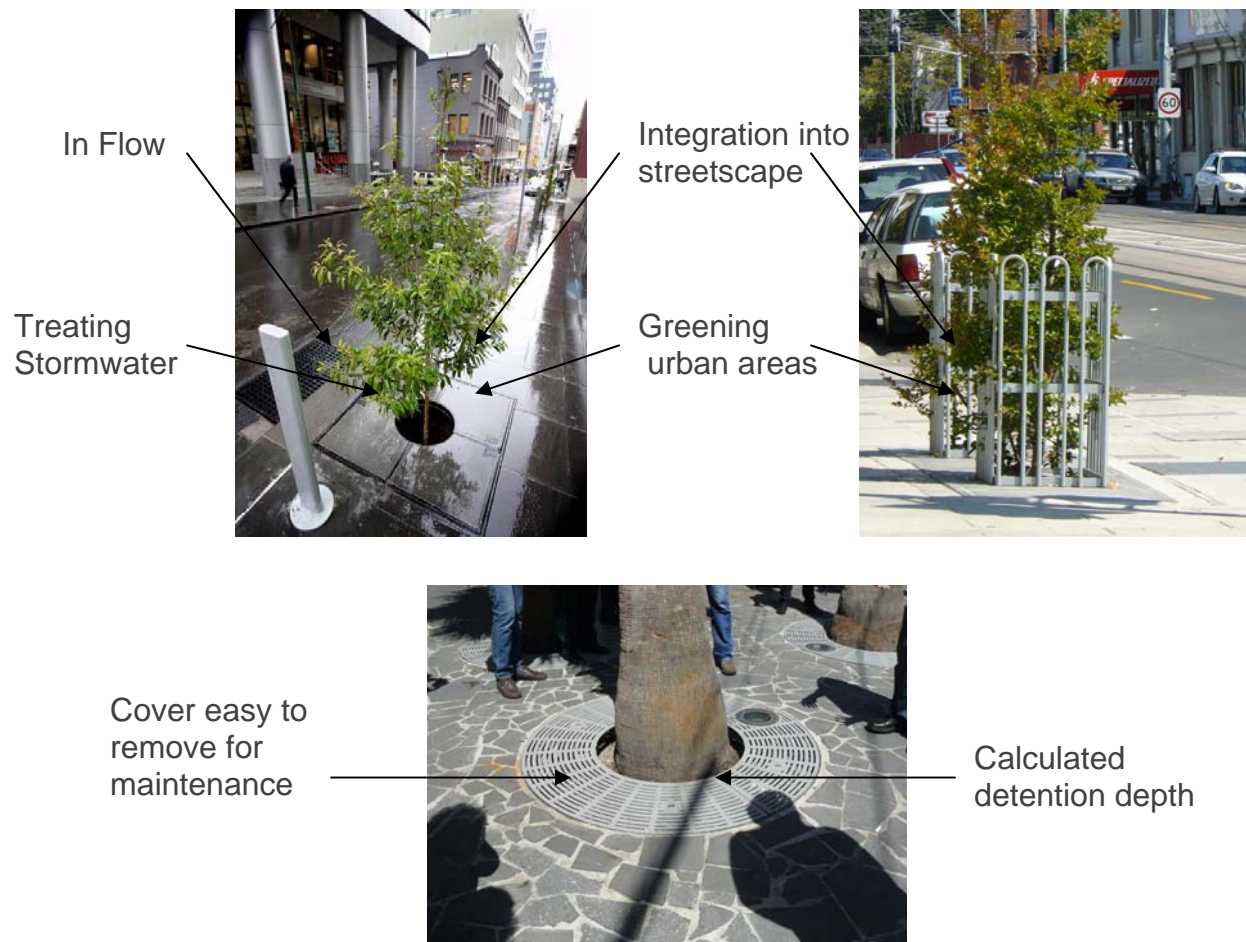
Tree pit design principles

Using street trees to treat stormwater

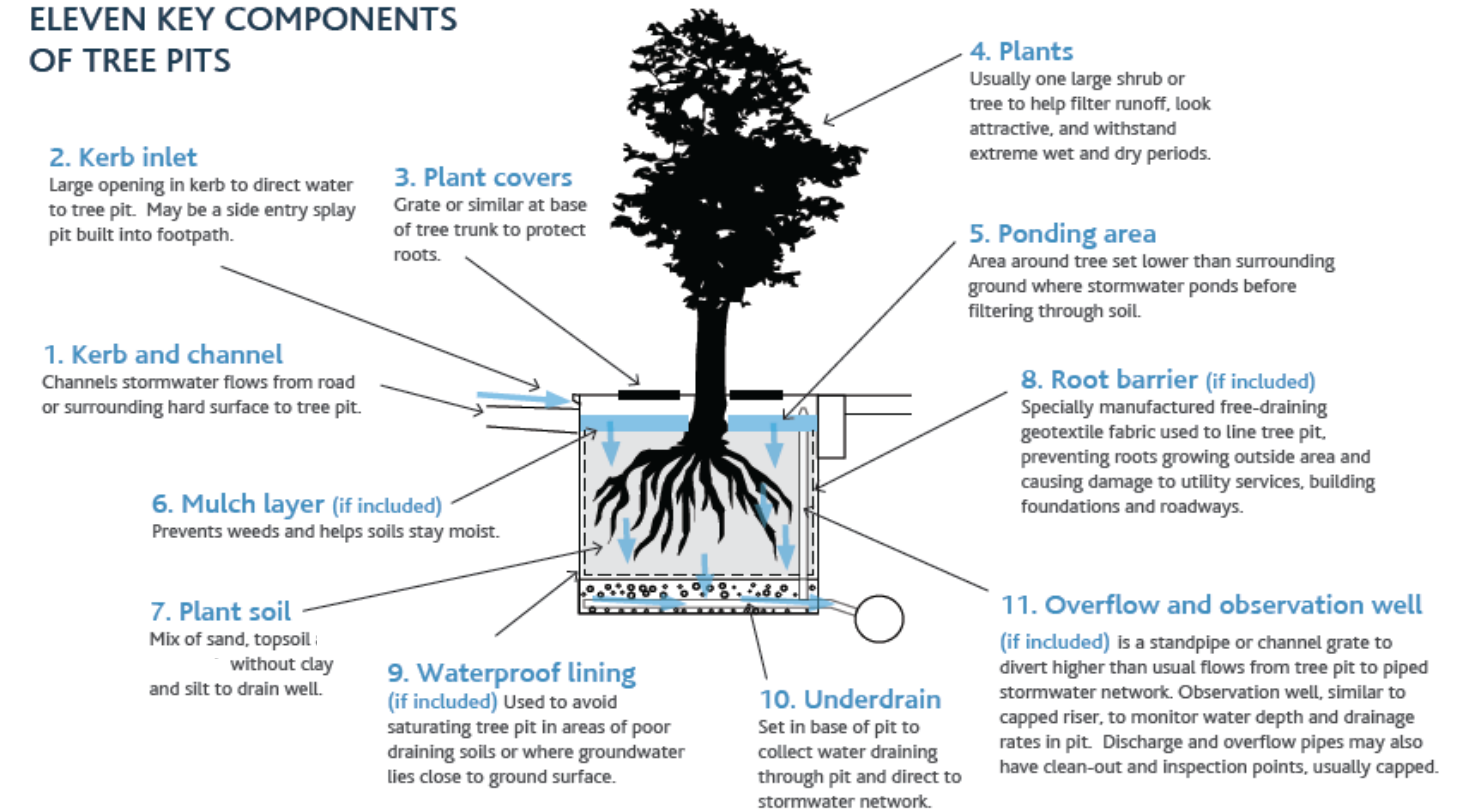
What is a tree pit?

Tree pits provide a great alternative design for planting street trees. They reduce demand on potable water and provide an opportunity to treat stormwater. Tree pits can sometimes be referred to as bio-retention systems as they provide treatment through fine filtration, extended detention and some biological uptake. Careful and considered designs will allow easy access for maintenance – litter and sediment removal and be safe for pedestrians to move around.

Good design elements



ELEVEN KEY COMPONENTS OF TREE PITS



Source – Auckland Council Tree Pit Operation and Maintenance Guide – November 2009

A few planning tips

- Discuss the design with council maintenance staff to ensure easy access for maintenance and litter removal
- Incorporate early in the streetscape design
- Dial before you dig – find out the location of underground services and understand when/if permits are required
- Chose an appropriate tree species to suit wet and dry conditions
- Understand that additional watering may be required during plant establishment and/or in dry summer month

For technical guidance

- FAWBs Guidelines for designing the correct detention area and slope incline - <http://www.clearwater.asn.au/content/facility-advancing-water-biofiltration-fawb-guidelines-version-301>
- Melbourne Water WSUD Maintenance Guidelines <http://clearwater.asn.au/resource-library/policy-and-guidelines/wsud-maintenance-guidelines.php>