

FREMANTLE PORTS

2015 SWALE
FACT SHEET

PLANNING BRANCH



Introduction

Vegetated swales are constructed open-channel drainage ways used to assist with stormwater run-off. Vegetated swales are a common alternate to stormwater pipes. They do not pond water for a long period of time and induce infiltration. Vegetated swales generally form a curved shape with relatively flat side slopes to assist in the water run-off.

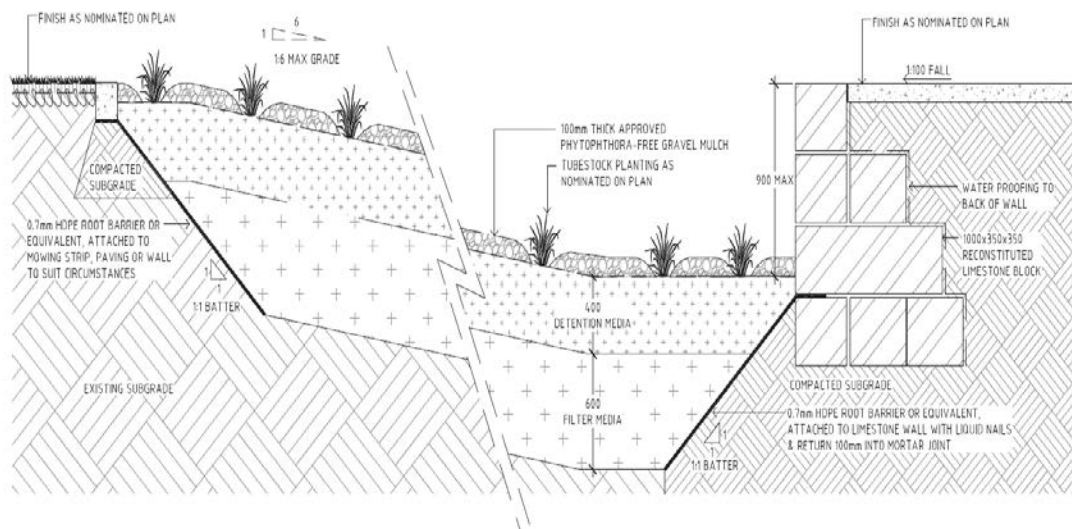
Benefits of swales

There are a number of benefits that arise from the use of swales including:

- effective drainage
- improved water quality
- cheaper construct compared to piped systems
- can be incorporated into the landscape as an attractive feature
- provide a low maintenance and visible demonstration of environmental care.

Effectiveness of swales

The longer the swale, the more effective its action, allowing plenty of time for settlement of solids contained in the run-off. To make swales work well they should be designed without sharp corners, shallow gradients and preferably no permanent water to allow vegetation to grow.



A typical drainage swale (Blackwell and Associates)

Species to be used in swales

Species	Common name	Location in swale
<i>Lepidosperma gladiatum</i>	Coastal Sword Sedge	Throughout swale, but focus on centre
<i>Ficinia nodosa</i>	Knobby Club Rush	Throughout swale
<i>Rhagodia baccata</i>	Berry Salt Bush	Top half of swale
<i>Scaevola crassifolia</i>	Cushion Fan Flower	Throughout swale, primarily in top half
<i>Sporobolus virginicus</i>	Marine Couch	Primarily in top half
<i>Lobelia alata</i>	Angled Lobelia	Throughout swale- but keep numbers low
<i>Baumea juncea</i>	Bare Twigrush	Throughout swale
<i>Juncus kraussii</i>	Sea Rush	Throughout swale
<i>Atriplex cinerea</i>	Grey Saltbush	Top half of swale



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