

Scottish Hospital Paddington

Client: The Presbyterian Church

Architect: JPR Architects

Checked: LN

June 2011

1. Soak trenches Buried Under Garden

A. Clean storm water roof catch as separate from water already captured for on site re use tanks. This additional water can be conveyed directly to subgrade soak lines in garden beds instead of going directly to stormwater system and directed off site. Sub grade soak trenches elevate the occurrence of available soil moisture for tree and garden planting and is designed to simply overflow back into existing stormwater system if soak system reaches capacity during high rainfall events. In this case the upper terraces and Stephen street tree plantings could benefit from light rainfall events captured from the additional 429m2 area of remaining roof catchment

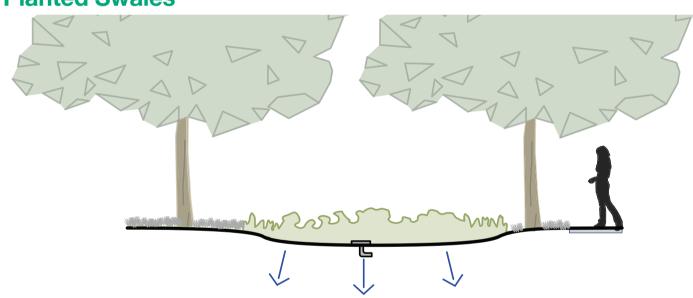
B. Overland and subgrade flow can be directed to grated pits and soak lines that send rainwater to gravel filled irrigation trenches installed to benefit trees and proposed lawn and garden areas. As above this system is designed to simply overflow back into existing stormwater system if soak system reaches capacity during high rainfall events.

C. Strip drains capture stormwater run off from paved drive areas and direct water to sub grade turf soak lines and ephemeral planted swales of suitable species for alternating wet dry conditions. Planted swales in lower park areas are set out along pedestrian paths to gather the additional storm run off from these areas.

D. Road graded to direct all rain catch to semi sunken (50mm) lush planted entry gardens. These beds can be mulched with inorganic crushed recycled materials to prevent floating or movement. Suitable materials include crushed recycled terra cotta, brick, sandstone and concrete of a 5-20mm aggregate size. High rainfall event overflow to standard stormwater

2. Planted Swales

Key Points



Symbols Key

Storm Overland Flow - Movement & Direction

■ ■ Subgrade Storm Water Pipe

■ ■ Agricultural Soak Line

Slot Drains

IIIIIII Soak Trenches Buried Under Garden

Manted Swales

Subgrade Soak Lines

Overflow Drain

Roof area for rainwater catchment as seperate to water already captured from site tanks.

