

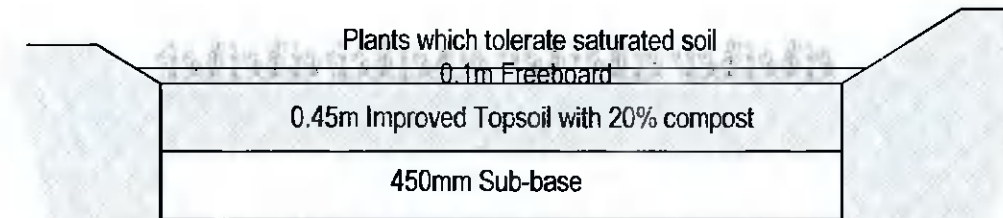
SuDS Rain Garden Design

Area of rain garden = 20m²
 Catchment area = 80m²
 Depth of Freeboard = 0.1m
 Depth of Sub-base = 0.45m

Depth of storage = Depth of Freeboard + 30% Depth of sub-base
 = 0.1m + 0.45m = 0.235m

Volume of storage = Depth of storage x area of Rain Garden
 = 0.235m x 20m = 4.7m³

| Design standard | Depth of rainfall | Volume of rainfall | Volume of Storage | Result |
|---------------------|-------------------|--------------------|-------------------|--------|
| First flush | 5mm | 0.4m ³ | 4.7m ³ | pass |
| 1 in 5 year event | 20mm | 1.2m ³ | 4.7m ³ | pass |
| 1 in 100 year event | 50mm | 4.0m ³ | 4.7m ³ | pass |



Rain garden cross section