Design Guidelines & Procedures Version 18 ©

#### 24.06 Topsoil & Planting Soil

Material - All soil for grassing and planting shall comply with AS 4419 and generally be an approved friable sandy loam with a sand content of between 50% and 70% by volume and a humus content of between 5% and 10% by volume. The pH shall be 6.0 to 7.0. All soil shall be free from stones, weeds, sticks and rubbish.

Subsoil Preparation – Before placing soil, the subsoil shall be properly prepared by ripping, cultivating and removing unwanted materials including any necessary treatment of acid or alkali content.

Cultivate the sub grade of all garden areas prior to placement of soil by ripping to a minimum depth of 400mm to loosen the compacted ground. Do not disturb services or existing tree roots. If necessary, cultivate these areas by hand.

Placing – Soil shall be spread on the prepared subsoil including mixing in any required fertiliser and making allowance to achieve minimum soil depths after light compaction.

Soil Depth For Gardens and Turfed Areas - A minimum depth of 300mm of topsoil is required for garden beds and a minimum depth of 100mm topsoil for turfed or seeded areas.

Soil Depth for Planter Boxes and Beds within Paved Areas - A minimum depth of 1 metre of topsoil is required for planter boxes and beds.

# 24.07 Turf

Turf shall be of an approved species of good quality and free from weeds.

The area to receive turf shall be lightly consolidated after preparation to avoid settlement and be graded to an even slope. Topsoil shall be spread over the area so that grass finishes level with adjoining paving and kerbs. Turf shall be laid along the contours with the joints staggered. The turfed surface shall be lightly and evenly top dressed with sandy loam or sand to fill any depressions. Turf shall be well and regularly watered after laying. All turfed areas are to be irrigated with a system designed to suit the turf zone for efficient watering.

#### 24.08 Planting

A Plant Species List for all campuses is available from PD&C. Preference shall be given to the use of drought tolerant plants which do not require regular watering.

Plants shall be sun-hardened nursery stock, grown in soil, and free from weeds.

If there is doubt about adequate drainage, the holes need to be water-tested prior to planting to ensure proper drainage.

Partly fill holes with soil containing blood and bone well mixed in to manufacturer's recommendation and covered with 25-50mm of fertiliser-free soil.

Water all plants before and immediately after planting.

## 24.09 Garden Mulch

Mulch shall be free from soil, weed growth and green material or other matter.

Mulch may be of the following types:

- x Timber Chips Derived from trees and vegetation removed from the site during site clearing and stockpiled on the campus.
- x Pine Bark Mulch Medium grade with minimum bark size of 20mm square and maximum of 75mm square.
- x Hoop Pine Bark Mulch For use on steep slopes to the approval of CLF.

- x Riverstone Mulch Smooth, washed river stones in sizes varying from 100mm to 25mm to a minimum depth of 150mm.
- x Gravel Mulch Washed river gravel of 30mm maximum size to a minimum depth of 75mm. Use in external areas (other than under buildings) shall be avoided.

Generally mulch is to be placed to a minimum depth of 75mm unless noted otherwise and in all cases shall finish flush with edge retainer or adjoining surfaces. Black plastic is not to be used below mulch.

The selection of the garden mulch type is to be approved by CLF.

## 24.10 Landscape Timber

All timber shall be LOSP (Light Organic Solvent Preservative) treated to AS 1604 – 1993 with a minimum stress grade of F5. All timber faces are to receive 2 no. coats of clear water repellent timber preservative after cutting, arising etc. and prior to assembly. All exposed edges are to receive a 5mm wide arris. All fixings to be hot dipped galvanised.

Timber edges to gardens are not permitted.

## 24.11 Garden Edges

Design pavements and locate them in such a manner as to reduce stormwater velocity. The surface of paving should be finished to falls and cross-falls to allow drainage to gardens or grassed areas where possible.

Gratings to sumps in courtyards and feature paving shall be stainless steel of a type that is compatible with wheelchair traffic.

Paving types may be as follows;

- X Concrete Footpaths and general paving may be either exposed aggregate or broom finished and set out with jointing or patterning. The concrete colour should generally be to match any adjoining paving however the use of coloured concrete is desirable. Refer to GU Standard Detail Drawing No. GSD-100 for expansion and contraction joints in concrete paving.
- x Clay or Concrete Paving Units (including quarry tiles) Where existing unit paved areas are to be extended or modified, paving units shall be to match existing. If no matching paving units are available, then consideration shall be given to removing all existing paving units and replacing with an alternative approved by the Superintendent. Refer to Section 6.00 Staircases & Ramps Clause 6.06 for details of permitted tactile indicators in existing paving.
- Stone Paving GU has selected Australian granite as its preferred unit paving for all campuses. The selected stone is 'Austral Juparana' in 605 x 300 x 20mm thick units as the main base colour, with 'Austral Coffee' in 148 x(mm u-[xn7r.6(e)dm)]TJ /t(e,)5.4()h-[xn76.5(e'-7.2ka)6.5(r.6)

Sprinklers  $\,$  - Spray heads must be Toro, Hardie or approved equivalent. Use 12" Pop-up for shrubs and 6" Pop-up for ground covers. Sprinkler heads shall be as follows;

- х
- Small Rotor Heads 'Toro 300' series. Small Spray Heads 'Toro 570' series х
- х



Trench widths must be equivalent to 3 nominal pipe diameters to provide working room and to ensure ample sand bedding all round the pipes.

All piping, wiring and major components must be shown using triangulation from at least two fixed ground permanent points.

Provide a list of components and show typical layouts and fittings.

24.17 Landscape Furniture