# DESIGN & CONSTRUCTION NOTE STREET TREE SPECIFICATION

STREET TREE AND IRRIGATION DESIGN

# 702.09 REVIEWED: 15.03.2024

#### Imported Soil Mixes

# Samples and Certification

Sample of soil mixes (1kg) should be provided to the City's Representative for approval with testing
results and certification against the standards and specification at least 10 days prior to installation or
delivery (whichever is earlier). Certification of each new batch or delivery must be provided.

## Application

- All tree homes should be filled with the specified "Blended Soil", "Subsoil Sand" and "Drainage Layer"
  (as required) as per below instructions. This soil mix is suitable for tree homes in softscape,
  hardscapes and structural cells.
- Soil to be installed in layers and lightly compacted as per CoP details.

#### Drainage Layer

- In areas where a drainage layer is required, it must be installed as follows:
- Washed and screened aggregate (Greater than 20mm) to the prescribed depth as shown on the planting details;
- Aggregate to be overlayed with a geotextile (Bidim A14) that is covered by a minimum 100mm deep layer of Subsoil Sand.

### Blended Soil

- The "Blended Soil" to be installed to the top 300mm of the tree home excavation.
- The "Blended Soil" is to comprise of approximately 35% (by volume) of the prescribed "Compost Mix" (see below) with approximately 65% (by volume) of the specified "Sand" (see below) to produce a combined organic matter content of 5% 8% (by volume) in the final Blended Soil.
- The "Blended Soil is to have a neutral pH (5.5 7.5) with Electrical Conductivity (EC) < 2 ms/cm.</li>
- The "Blended Soil" to be thoroughly mixed by mechanical means prior to installation, to ensure an even distribution of materials throughout the final Blended Soil.
  - a) Compost Mix
- A commercially available Compost Mix, that conforms to AS 4454 for 'Mature Compost' with sieved particle size of maximum 5mm and organic carbon content ranging between 20% to 30% (by volume).
- Sample test results will need to be made available for each batch of 'Compost Mix' used to make the Blended Soil.
  - b) Sand
- Spearwood Sand (yellow sand);
- Devoid of topsoil organic matter;
- Neutral pH, and;
- Clay content less than 2%.
- Delivery of the Blended Soil to include test results that validate that the specified Compost Mix and Sand were used to make up the final "Blended Soil".

### Subsoil Sand

- The remainder of the excavation (above the "Drainage Layer" and below "Blended Soil" layer is to be "Subsoil Sand" comprised of:
- Spearwood Sand (yellow sand);
- Devoid of topsoil organic matter;
- Neutral pH, and;
- Clay content less than 2%.

# Soil Remediation:

Based on analysis of the soil samples collected from specified locations across the Nedlands/Crawley,
 West Perth and Perth CBD areas, the existing soils are predominately alkaline.

