

Appendix G - Planting Pits, Underground Tree Guying and Mulching diagrams

Underground guying has many advantages over traditional staking and is suitable for large root-balled trees. Discreet and effective, this underground guying system holds the root ball in position by driving three tree guying anchors into the base of the tree pit and then fastening a ratchet strap. These 'drive-in' anchor systems allow natural trunk movement for the tree, helping the formation of a strong trunk structure.

This particular system is from Green Blue Urban, due to the large size of tree being transplanted it would require the large anchor strap system with drive in large heavy duty anchors, the product code SASLCB. Please use the companies method statement on how to install correctly.

<https://www.greenblue.com/gb/products/arborguy/>

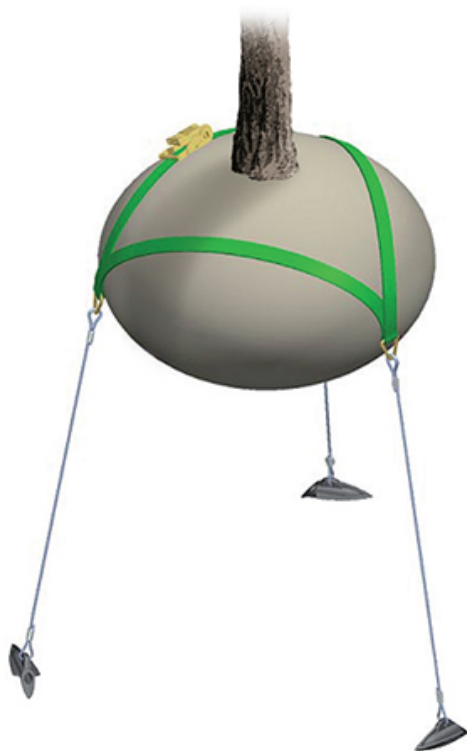
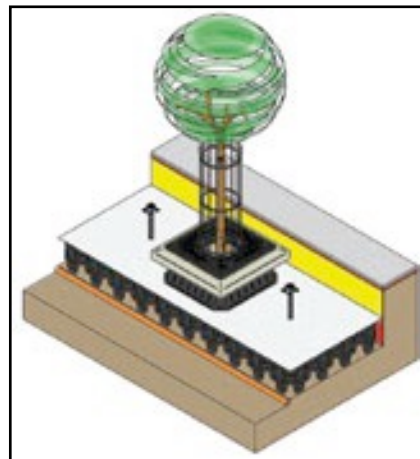
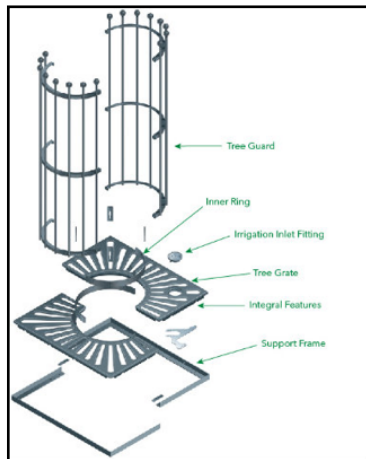
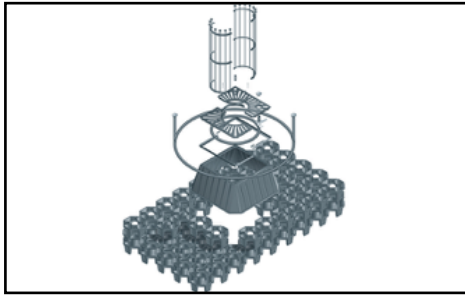


Diagram of the Green Blue Urban Strata Cell Arborsystem®



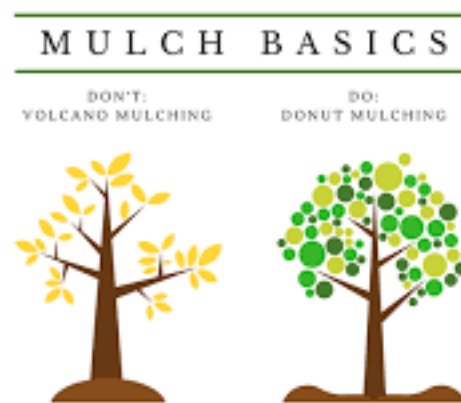
This system would be implemented across the frontage and the car parking area. This will facilitate lateral growth of the roots such that the area of soil available to each tree is maximised, and results in little if any compaction in the root zones, as shown in the photograph and diagram below.

<https://www.greenblue.com/gb/products/arborsystem/>

Wood Chip/Mulching Application

Biodegradable mulches- an area of ground over the root system of a tree or group of trees may be mulched in order to provide the following benefits, which would occur under natural conditions where organic matter (e.g. dead leaves) accumulates on the ground under trees:

- moisture retention;
- weed suppression;
- encouragement of beneficial soil flora and fauna;
- relief from or prevention of compaction (especially by encouraging earthworm activity);
- mitigation of extremes of soil temperature;
- absorption of toxic materials;
- release of nutrients into the soil.



This should be applied from mid to late spring and autumn when soil is moist and warm. The materials that may be used for mulching include coarsely divided plant matter, such as wood chip, pulverized bark, or leaf mold, any of which may be combined with well-rotted animal manure. If the sole intention is to conserve moisture, a layer of gravel or well-secured sheets of material such as perforated plastic film, geotextile fabric, carpet or cardboard may be used and may be covered for cosmetic purposes. Any such sheets should be maintained to avoid damage to the tree (e.g. by clogging, weed growth, restriction of air movement or constriction of the stem). Materials derived from plant species that have naturally occurring toxicity, such as couch grass or black walnut, should be composted for at least a month, preferably at a high temperature (c. 60 °C), in order to make them innocuous. High-temperature composting should also be used to kill pests and pathogens. Materials that cannot be detoxified, including those that have been contaminated by herbicides or other chemicals, should not be used for mulching. The mulched area should extend over as much of the root system as can be allowed by other site-usage requirements. The depth of organic mulch should not be so much as to inhibit aeration of the root system or to cause overheating of none composted material (normally no more than 80 mm to 100 mm). The mulch should be periodically replenished as it decomposes, so that it does not become depleted.

NOTE 1 Mulches that retain water encourage the development of roots near the soil surface and in the mulch itself. Mulches should be kept away from direct contact with the bark of the stem, or of major roots, since this might encourage infection by pathogens by maintaining wet conditions.

NOTE 2 Although, by improving the soil texture and acting as a buffer for rainfall, mulches generally help to prevent extremes of soil wetness and dryness, they can prolong waterlogging on sites where drainage is seriously impeded. This in turn can harm tree roots and make them more susceptible to certain pathogens such as *Phytophthora* spp