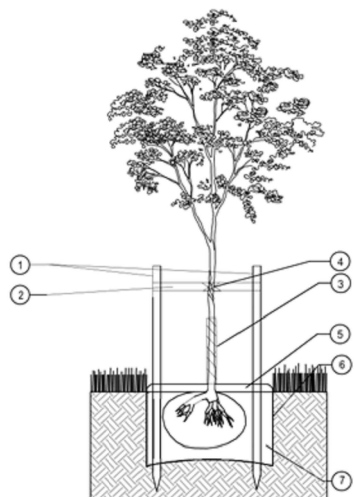


Tree Planting Detail 1 - Rootballed Trees to be planted in Open Space

- 1&2. 2x tanalised timber tree stake 2m, 75mm and crossbar driven into backfilled pit to provide support to the tree.
3. Clear spiral guard to be fitted to trunk to protect against animal browsing.
4. Use 50mm spacer block or similar and 25mm rubber belting to secure tree to support post.
5. Spread 50mm deep bark mulch layer evenly over a circular area 1000mm around the tree to prevent weed growth and retain moisture. Ensure mulch does not pile against tree stem.
6. Excavate tree pit to sufficient size to accommodate tree root ball. Loosen any compaction in base of excavated pit to aid drainage. The tree should be planted at a depth where the root flare is still visible just breaching the soil surface following backfilling.
7. Backfill tree pit with subsoil and topsoil excavated from pit as they were removed, if regarded as of sufficient quality to promote the healthy establishment of the tree. If either the top soil or sub soil excavated from the pit is of poor quality then soil ameliorants may be used sparingly or imported topsoil compliant with BS3882 should be used.

Immediately after planting, water the tree, saturating the tree pit to field capacity.

The notes above are intended as a basic guide only. For further guidance on tree planting refer to BS 8545:2014 Section 10.



New Tree Maintenance

Immediately following planting, the tree should be watered thoroughly. Following this, and with regard to prevailing weather conditions, newly planted trees should be watered regularly during periods of dry weather. If the tree pit has been specified with and irrigation pipe, this should be used as the primary method of watering. If no irrigation pipe is specified, the square metre of ground around the tree should be soaked to field capacity (refer to BS 8545:2014 for further detail) by surface watering.

Watering frequency is more important than quantity to prevent the root ball of the newly planted tree from drying out.

All trees are fitted with protective guards to prevent animal damage. These should be checked regularly to ensure they remain in place and are providing adequate protection against the animals in the area. If damage to trees from browsing by animals still occurs additional measures may be required.

A formal assessment of young tree health and development should be carried out annually by a qualified arborist who will be able to advise on solutions should any problems be picked up. During this assessment any stakes and ties should be checked to ensure they are providing support but not damaging the tree and that the tree is still firmly seated in the ground. If the tree has become loose in the ground the soil around the base should be re-firmed and stakes and ties adjusted accordingly.

The mulched area around the base of the tree should be kept clear of competing vegetation and weeds at all times.

Tree stakes and ties should be removed once the tree has established a strong enough root system to support itself, likely to be 1-2 years after planting. Strimmer guards should remain in place until the end of the 5 year establishment, with adjustments or segments added as necessary to facilitate tree growth. Tree guards should only be removed if they are beginning to restrict tree growth or if it is felt the risk of damage has significantly reduced due to strong tree growth and development or changes in the surrounding environment.

Formative pruning should be carried out in accordance with BS 3998 as required throughout the five year establishment period.

Irrigation of new tree planting

The timing and frequency of irrigation should take into account the prevailing weather conditions, soil moisture release characteristics, and the response of the tree species to water deficits or periods of prolonged soil saturation.

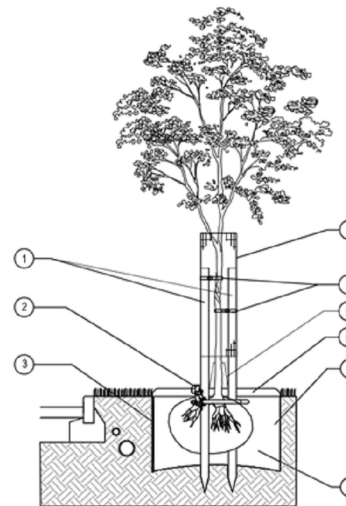
The water holding capacity varies between soils and should be assessed before determining irrigation needs.

The frequency of irrigation is more important than volume of water at any one time. Increased water volumes should not compensate for a lack of frequency.

Additional monitoring is recommended if there are 10 consecutive days during the growing season at >25 Celsius. Water should only be added if soil moisture probe/ tensiometer values indicate that it would be appropriate to do so.

Tree Pit Detail 2 - Rootballed Trees to be planted within 3m of Hard Surfaces or Services

1. 2x tanalised timber tree stake 2m, 75mm driven into backfilled pit to provide support to the tree.
 2. RootRain Metro irrigation system or similar. Place around top of root ball and nail to supporting stake ensuring filler cap finishes slightly above mulch level.
 3. ReRoot root barrier with root deflecting ribs installed between tree root ball and hard surfaces/services where there is a risk of root damage as the tree grows outward. As a general rule root barriers should be installed in locations where hard surfaces and/or services are located within four metres of the tree stem. Install closer to the paving/service than the tree, to allow space for the tree roots to grow into the space available, with the ribs facing the tree. Note this may mean not placing the barrier within the tree pit, but further away within its own trench. Root barriers must extend a minimum of 2m lengthways beyond the expected canopy of the mature tree. The top of the root barrier should be set as close to the soil surface as possible without being visible.
 4. Use 50mm spacer block or similar and 25mm rubber belting to secure tree to support post.
 5. 50mm deep bark mulch layer to be spread evenly over a circular area 1000mm around the tree to prevent weed growth and retain moisture.
 7. Excavate tree pit to sufficient size to accommodate tree root ball. Loosen any compaction in base of excavated pit to aid drainage. The tree should be planted at a depth where the root flare is still visible just breaching the soil surface following backfilling.
 8. Backfill tree pit with subsoil and topsoil excavated from pit as they were removed, if regarded as of sufficient quality to promote the healthy establishment of the tree. If either the top soil or sub soil excavated from the pit is of poor quality then soil ameliorants may be used sparingly or imported topsoil compliant with BS3882 should be used.
 9. Strimmer guard by Arbortech or similar to be fitted around base of tree to protect from damage by grass maintenance machinery primarily but also to provide an additional layer of defence against animal browsing.
- Immediately after planting, water the tree, saturating the tree pit to field capacity.



Ongoing Tree Maintenance and Management

- All trees are to be regularly inspected by a suitably qualified and experienced arboricultural consultant to ensure that they remain in a safe condition, do not obstruct access routes or visibility and do not cause nuisance.
- Replace dead or dying trees in the next planting season (November to March)
- All tree works are to be carried out in accordance with good arboricultural practice, and under the direction of a suitably qualified arborist in accordance with BS3998:2010
- Tree works must take place outside of the bird nesting season (March to August inclusive, for most British birds). If tree works need to be carried out between March and August seek ecological advice.
- Remove excess growth encroaching onto grassed areas, paths, roads, signs, sight-lines and lighting columns.

The contractors must ensure that there are no services present in the area before excavating planting pits.

Trees to be planted between October and March.

A full young tree management programme with budgetary provision should be in place for all planting schemes. This management programme should be in place for at least 5 years. Between the months of March and October monthly visits should be made to inspect tree specimens, and correct irrigation carried out in line with management information provided.

Trees should be watered to recommended field capacity percentage, and not allowed to drop below the permanent wilting point percentage where risk of failure is likely. Tree monitoring frequency should be increased accordingly in periods of hot weather.