

SPECIFICATION

PART 2 – TREE PLANTING SPECIFICATION

SCHEDULE OF SERVICES

1. The Contractor shall carry out the services required by the Council in accordance with a programme, which shall be provided to the Contractor during a pre-contract meeting in the first instance, and annually thereafter detailing;
 - a. List of sites
 - b. Species to be planted at each site
 - c. Sequence of planting
2. to successfully deliver the Councils tree planting programme of circa. 600 trees p.a.

TREE STOCK

2. The majority of trees supplied shall be 12/14 cms girth but a proportion may be smaller or larger (10/12 cm, 14/16 cm or 16/18cm). Trees may be bare-rooted or container grown. Trees will be available for collection from a central site (referred to hereafter as “the holding ground”). Trees shall be collected from the holding ground at the Contractors expense. Contractors shall make prior arrangement with the Arboriculture Section for collection of trees.

PLANTING SEASON

3. Planting shall take place through the winter, starting from 1st November up to and including 28th February or dates as specified by the Principal Arboricultural Officer.
4. Any outstanding works after/before dates specified by the Principal Arboricultural Officer shall not be completed without prior agreement with the contract supervisor.

TREE PLANTING SITES

5. Planting sites are widely distributed throughout the Borough; housing estates, parks, cemeteries, commons and streets each with varying factors, including ease of access, soil conditions and drainage. Trees shall be planted in accordance with the planting plans.

PROTECTION AND CARE OF TREES

6. When the Contractor has collected trees from the holding ground, the Contractor shall be responsible for their protection and care for a full 12-month period. Container grown trees shall be left in containers until immediately prior to planting. Trees that are removed before this shall be deemed as lost and the Contractor shall replace all such trees with trees of identical specifications in terms of species, size, quality and health at the Contractors expense and at no extra cost to the Council.

7. Bare root trees shall remain at the holding ground until immediately prior to being transported to their planting site.
8. Trees shall not be;
 - transported during icy weather;
 - allowed to fall;
 - held, or, supported by their stems.

TRANSPORTATION OF TREES

Trees shall be handled carefully and loaded in such manner that does not place undue lateral stress on their stems during carriage from the holding ground to their planting site. Container trees shall remain in their containers and bare root trees shall have their roots covered to prevent desiccation. This covering shall be in addition to any existing wrapping that may be around the roots of individual trees as supplied by the nursery. Where practically possible, tree canopies shall be covered during transportation. Trees still bearing foliage shall be covered during transportation.

TREE PITS

9. Tree pits shall be excavated. Pits shall be of a minimum width 1000mm (40 inches), except for street tree sites where the minimum will be 600mm (24 inches). They shall be at least 120mm deeper than the rootball height. The pit bottom shall be forked over to a depth of 100mm (4 inches), to break up the subsoil. The pit sides shall be forked over to roughen them and remove any glazed/smooth areas of soil. Tree pits shall be square unless specifically stated otherwise.
10. Once a tree is planted, the soil level of the finished pit (not including mulch) shall be 50mm (2 inches) below the surrounding ground level to create a water catchment area. However, the soil level of finished pits of street trees should be level (including mulch) with the surrounding paved surface.
11. For sites where fresh topsoil is specified the topsoil shall comply with BS3882 and shall be a high-quality loam of neutral pH value with a high humus content and good crumb structure free from stones, rubbish, roots of perennial weeds or any other injurious matter.
12. When planting in grass areas the Contractor shall ensure that soil removed from the pit does not damage surrounding areas.
13. The Contractor shall be responsible for disposing of all arisings including soil, tarmac, litter, paving stones, etc. resulting from the planting operation. Arisings shall be adequately protected at all times to avoid accidents.
14. All excavations shall be backfilled on the same day and adequately protected at all times to avoid accidents.
15. Where trees are being planted to replace failed saplings, the contractor shall be responsible for the disposal of the dead trees.

AGRICULTURAL POLYMER AND FERTILISER

- 16.** The contractor shall add the following to the backfill at the rates prescribed by the manufacturer:
 - a) An inorganic slow-release general fertiliser. The Contractor shall notify the Council of the type of fertiliser to be used and the proposed application rate and shall seek agreement from the Council for its use and application.
 - b) A water retentive polymer, e.g. Broadleaf P4.
- 17.** These materials shall be well and evenly mixed into the backfill.

PLANTING

- 18.** Planting shall comply with BS4428, 1989, incorporating Contract Specifications. Trees shall be planted so that stems are vertical.
- 19.** Trees shall be planted on the day of collection. Trees shall not be stored on site, or elsewhere. Planting shall not take place during periods of hard frost, drought, desiccating winds or waterlogged soils. Suitable weather conditions for planting shall mean open weather (i.e. mild, full and moist) when ground is moist and workable.
- 20.** Container grown trees; the container shall be gently opened to expose the rootball. Outer roots on the side and base of the rootball shall be gently eased out and left in the backfill. No roots shall be left spiralling around the edge of the rootball. Any broken roots shall be pruned back with secateurs to suitable points. Any weeds growing in the container shall be entirely removed by hand-pulling. All wrapping material shall be entirely removed from the roots of bare root trees. The roots shall be spread out according to their growth pattern. Broken and damaged roots shall be neatly pruned back.
- 21.** Trees shall be planted at the correct depth with the root collar at surrounding ground level.
- 22.** All rigid containers shall be returned to the holding ground. A service credit of £4.50 will be payable for each unreturned plastic container;
- 23.** All trees shall be watered within 10 days of being planted with at least 35 litres of clean water unless waterlogged site conditions prevail, in which case the Contractor shall notify the Arboriculture Section and carry out watering within an agreed period. After watering, the backfill shall be re-firmed and immediately "topped up" as necessary to maintain the specified soil level.
- 24.** After planting, the Contractor shall prune any snags and dead or broken branches back to suitable points in accordance with good nursery practice. The Contractor shall remove all string, labels, tags, etc. on or around trunk/branches of trees. The pits of newly planted trees shall be left in a weed free condition and shall remain so before planting will be accepted as completed.

STAKING

25. Trees shall be held securely by a single 80mm (3 inches) minimum diameter vertical stake, driven at least 600mm (24 inches) into the ground. The stake shall be cut off at a suitable point, normally in the middle of the crown in the case of feathered trees or just below the first branch of clear stemmed trees. Half stakes shall be cut off at a height of 1m. Stakes shall be of pressure-treated sawn timber, new, clean, straight and free from burrs, nails etc. Stakes shall be placed on the kerb side of street trees unless otherwise specified.
26. Trees shall be staked using a full-length stake plus two ties, or a 'half stake' plus single tie as directed. Where a short stake is specified the tree shall be supported by a single tie at the top of the stake at a point on the stem equal to one third of the tree's height.
27. The top 120mm (5 inches) of each stake shall be neatly painted at the time of planting with a permanent, quick drying, clearly visible paint of a colour to be specified by the contract supervisor.

TYING

28. When planted using a full-length stake each tree shall be firmly secured to a stake with two approved tree ties to prevent excessive movement. The tie shall be neatly nailed to the stake using 1" galvanised Clouts.
29. The top tie shall be positioned within 60mm from the top of the stake and the lower normally being halfway between the top tie and ground level but 600-900mm above ground level. Short stakes will require one tie positioned 20mm from the top of the stake. The ties shall be nailed to the stakes using three nails positioned at suitable points to prevent the tree and spacer moving. Spacers shall **not** be nailed to stakes.
30. The ties and spacers shall be of a type agreed and approved by the contract supervisor. The preferred ties shall be made of "rigid" plastic as opposed to rubber. Ties and spacers shall be suitable for the size of the tree but shall have a minimum width of 38mm. Spacers shall be of a size suitable for the ties used and shall be of the "block" type.
31. The ties on trees which are to be re-tied to an existing stake shall be fixed either just above or just below the old point of attachment. If it is lower, the top of the stake shall be cut off just above the tie to prevent chafing. Ties shall be of a type approved by the supervising officer.

MULCHING

32. Tree pits shall be mulched at the time of planting or within a period agreed by the supervising officer prior to the start of planting using wood chips, chipped bark or other organic mulch (to be agreed with the Contract Supervisor). The entire pit surface shall be covered to an even depth of 60mm. For street trees, the surface shall be level with the surrounding paving.

IRRIGATION PIPE

33. A 50mm (2 inch) diameter perforated drainage pipe of approximately 2 metres in length shall be incorporated into the backfill. The exposed end of the pipe shall extend not more than 50mm (2 inches) above the surface of the pit, and be sealed with a fitted cap. For street planting the exposed end of the pipe shall be in one of the kerbside corners of the tree pit.

WIRE GUARDS

34. The Council may request that the Contractor provides wire cage protection for some saplings. Cages shall be fitted at the time of planting, unless otherwise agreed with the supervising officer.
35. Tree guards shall be galvanised "weldmesh" type or similar welded wire mesh. The wire gauge shall be 2.5 - 3.0mm and the minimum guard size 1,775mm high x 225mm diameter. Guards shall be stapled to the stake using galvanised staples, minimum length 38mm (1.5 inches), leaving a 100mm (4") gap between the guard and pit surface. The make of guard to be used shall be approved by the Supervising Officer before being fitted. If guards are cut from a larger roll, the wire shall be cut neatly along the vertical wire. No protruding snags shall be left.

STRIMMER GUARDS

36. Where specified, strimmer guards shall be fitted to the base of trees. (They will normally be specified for any trees planted in grass or lawn areas). They shall be fitted at the time of planting unless otherwise agreed. Guards may be either a proprietary brand to be approved by the supervising officer, or a length of land drainage pipe cut to a length of 200-300mm and slit lengthwise. The latter shall be placed around the base of the tree and secured in place with a twist of ungalvanised wire.

UNPLANTABLE SITES

37. The Contractor shall inform the Supervising Officer if a site is deemed to be unplantable. An alternative site of a similar description may be allocated.
38. Any site found to be unplantable shall be left in a safe condition with the soil replaced and firmed down to 30mm (1 inch) below the surrounding soil level. If the site is in a grassed area it shall be re-turfed with the turf previously cut out.

OUTSTANDING PLANTING WORKS

39. Should the Contractor fail to complete planting requirements or timescales in accordance with the specification, they shall be advised by the Contract Supervisor of the work outstanding and shall provide a revised programme. For the purpose of this section, non-adherence to the specification under any or all of sections 1.8 to 1.33 will count as separate items.
40. Contractor failing to carry out this work within five calendar days of the date of notification shall be considered a failure to comply with the work schedule.

TREE MAINTENANCE

DEFECTS LIABILITY PERIOD

41. The Defects Liability Period shall commence from the day on which each tree is collected from the holding area and shall continue for a period of 12 months following that date.

42. During the 12-month Defect Liability Period, the Contractor shall be responsible for any defects arising through workmanship or materials not in accordance with this specification.
43. Should a tree die during the defects liability period as a result of the Contractor's failure to carry out any of the required operations, a replacement tree of identical specification; variety, size, quality and health will be provided and planted by the contractor at the contractor's own expense.
44. Maintenance payments shall not be released for dead or dying trees.

MAINTENANCE DURING DEFECTS LIABILITY PERIOD

45. The maintenance period shall commence on the day on which the whole of the Contractor's planting work has been accepted as completed. The maintenance period shall run for 12 months from this day. The Contractor will be required to provide the Supervising Officer with a programme of proposed maintenance visits before the maintenance may commence. The contractor shall, as instructed, attend to any recently planted trees that have not been planted in accordance with the instructions set out in this specification, including trees that are unstable in the ground or have fallen over.
46. Maintenance shall include watering, weeding, insect and disease control, adjustment or replacement of stakes and ties, pruning adjustments, soil level checks, removal of arisings resulting from maintenance work, dead-wooding, and other horticultural operations necessary for the survival and satisfactory growth of the trees.
47. Should saplings be protected by weldmesh (or other) guards during the maintenance period the Contractor responsible for the trees will ensure any litter, etc., deposited within the guards is removed during maintenance visits.

WEEDING

48. The pit bases shall be kept free at all times of all live weeds, dead weed growth and perennial roots. Weeding shall be carried out by hand pulling methods. Sites where residents have obviously planted bulbs or bedding plants shall be weeded but the contractor should take care to differentiate between the weeds and the planted material. If uncertain, the contractor should consult the Supervising Officer.

SOIL LEVEL CHECKS & MULCH

49. Tree pit soil levels shall be kept constant at all times so as to comply with paragraph 1.9 or paragraph 1.29. The required depth of mulch (60mm) shall be maintained throughout the 12-month maintenance period. Any added soil shall comply with BS 3882.

WATERING

50. Trees shall be regularly watered to ensure that they do not suffer from moisture stress at any time. Contractors are reminded that current guidelines suggest that watering should take place after 5 consecutive days without any appreciable rainfall and then not again until a further 5 consecutive days without rain have passed.

51. Regardless of rainfall, between April 1st and August 31st, the maximum interval between watering the trees shall be 14 days, with an application of 36 litres (8 gallons) of clean water per tree. Approximately $\frac{2}{3}$ of the water should be applied by pouring it down the irrigation pipe. The remainder should be poured onto the pit surface – but avoiding run-off.
52. Should seasonal variations indicate a need for supplementary watering in addition to the above requirements, the Contractor shall do so. The cost of supplementary watering shall be included in the unit rates for tree maintenance - no additional payment will be made.

MAINTENANCE VISITS

53. Maintenance visits shall be made to all tree sites at least every four weeks during the maintenance period. Payments for maintenance shall not be payable for sites where any of the above operations are not carried out when required.

OUTSTANDING MAINTENANCE WORKS

54. Should a contractor fail to carry out any of the maintenance requirements, they shall be advised by the Supervising Officer of the work outstanding. The contractor shall attend to and deal with any recently planted fallen trees within a 24-hr period.