

1.0 NATURE OF WORKS

The work consists of landscape maintenance of all public grassed and planted areas and hard landscape areas within.....



Association
of Landscape
Contractors
of Ireland

This is a one year maintenance contract. The contract commences on the 1st Jan 2013 until 31st December 2013, renewable for 2x12 months periods, subject to satisfactory performance on an annual basis.

2.0 SPECIFICATIONS

2.1 General

The following items are general requirements throughout the contract period:

- (a) Prior to executing weed control involving the use of herbicides details of the products to be used including a Material Safety Data Sheet (MSDS) for each product is to be provided to the landscape architect for each of the herbicides proposed.
- (b) Application of slow release, broad-spectrum granular herbicides are to be avoided for the first year following planting.
- (c) It is the Landscape Contractors' responsibility to report any evidence of dead, diseased plants or ground disturbance to the Landscape Architect.
- (d) Any waterlogging or drainage problems should be reported to the employer immediately.
- (e) The Landscape Contractor shall replace all plants damaged by his operatives at his own cost.
- (f) The Landscape Contractor must notify the Landscape Architect and report any outbreak or build-up of insect pest, fungus disease or disorder affecting the plants as soon as it is noticed.
- (g) Weed control:
Where translocated herbicides are applied, spray drift should be avoided and spray guards fitted to apparatus. Use of Caseron G or other residual herbicides shall not be used in areas of herbaceous planting, in the initial year following planting of new shrubs or over areas of bare ground within shrub beds where replacement planting is to be carried out. Hand weeding in planting beds will be required where there is a large component of herbaceous material, bulbs or prostrate groundcover plants.
- (h) Re-fix litter bins where leaning or dislodged.
- (i) The Landscape Contractor must notify the client of any incidents of vandalism or disturbance known to them when they occur.
- (j) Minimum, quarterly meetings will be required between. and the Landscape Contractor to review progress.
- (k) Landscape Contractor to provide a copy of Employers Liability Insurance, Public Liability Insurance, Tax Clearance Certificate, Health & Safety statement and full method statements/ risk assessments prior to commencing work.

2.2 Programme of yearly maintenance to trees and shrubs

The following items are to be taken each year. With approval from the landscape architect it is allowed that the timing of individual operations may vary from this prescribed program. Pruning to be carried out using sharp secateurs, pruning saws, loppers etc., by a competent operator with recognised horticultural training.

2.2.1 Spring

- (a) Form 1.0m diameter (500mm radius) weed free circle at the base of each tree in fine cut grass grassed areas. Trees in meadow grass areas are excluded from this treatment. This must be carried out by hoeing (or the use of an approved herbicide other than a residual).
- (b) Apply mulch (green manure) including organic fertiliser (see item d) to a depth of 50mm to tree circles in fine cut grass areas (fork –in but leave ground surface level).
- (c) Cut out dead,diseased or damaged wood from avenue and specimen trees, including trees encroaching onto footpaths back to point of branching.
- (d) Apply spring fertiliser, Sierrablen Flora 15+9+9 to trees in fine cut grass areas. One application in first year, second application in third year.
- (e) Renovate deciduous shrubs, and cut back shrubs that flower on this seasons growth e.g Rosa rugosa, Cornus Alba siberica that are overhanging kerbs, footpaths etc. Cut to 50cm from back of corresponding footpath or kerb.
- (f) Apply spring fertiliser, Sierrablen Flora 15+9+9 to shrub maintenance areas. One application in first year, second application in third year.
- (g) Apply broad-spectrum herbicide e.g. *Roundup Bi-Active* , or similar approved to all shrub planted areas, and ornamental woodland planting.
- (h) Allow for hand weeding of shrub beds containing plants sensitive to herbicide application or where such herbicide application is not possible due to growth near ground level.

*In areas of mature planting, a residual, granular herbicide such as Casaron G may be used in accordance with manufacturer's instructions.

2.2.2 Summer

- (i) In early summer trim evergreen trees to shape, removing all dead and damaged branches including trees encroaching onto footpaths back to point of branching.
- (j) In late summer prune managed deciduous and evergreen hedgerows to shape. Trim back by av. 15-25cm of growth.
- (k) Make provision for watering all specimen trees in fine cut grass areas during periods of low rainfall, when signs of stress are shown (see clause 2.7).
- (l) Ensure weed free circles are maintained around each tree in fine cut grass areas.
- (m) Apply broad-spectrum herbicide e.g. *Roundup Bi-Active*, or similar approved to all shrub planted areas, and ornamental woodland planting.

- (n) Allow for hand weeding of shrub beds containing plants sensitive to herbicide application or where such herbicide application is not possible due to growth near ground level.
- (o) Remove self-seed saplings from all shrub areas.
- (p) Prune suckers from all avenue, street and specimen trees in open spaces
- (q) Prune back tree branches overhanging footpaths, on main avenues or those interfering with car park turning areas or car park spaces including those within ornamental woodland blocks. In addition, prune back tree branches interfering with fire escapes at North Ring (rear of each unit). Prune tree branches interfering with fencing. All trees to be cut back to point of branching.
- (r) Prune back all deciduous shrubs encroaching in to fine cut areas e.g. Cornus. Cut to 25cm back from rear edge of grass area.
- (s) Prune back briars encroaching through fencing, or that are becoming prominent in hedgerows/ ornamental woodland areas.

2.2.3 Autumn

- (t) Check stakes and ties to all trees. Adjust, replace stakes and ties and or remove as necessary to avoid restriction. Generally, tree stakes should be removed where the diameter of the tree trunk is greater than the stake. Replacement stakes should be peeled larch, pine or douglas fir, preserved with a water borne copper / chrome / arsenic composition. Stakes for standard and half-standard trees should be 75mm minimum diameter, 2.7 meters length, pointed one end and driven approximately 900mm into the ground.

Tree ties should be of rubber, PVC or proprietary fabric laminate composition, and should strong and durable enough to hold the tree securely in all weather conditions for period of three years. They should be flexible enough to allow proper tightening of the tie. Ties should be min. 25mm for standard trees. They should be fitted with a simple collar spacer to prevent chafing, and with a buckle for adjustment. Non adjustable, buckle less types will not be permitted.

- (u) Renovate summer flowering deciduous shrubs after flowering. Remove dead or diseased branches, trim back and shape by av. 15-25cm.
- (v) Prune all evergreen ground cover and low hedgerows after flowering e.g. Hebe, Hypericum, Lonicera, Prunus, Cotoneaster, Berberis, Spiraea, Pyracantha etc. shrubs to re-shape, and renovate the planting block and to trim back where encroaching kerb lines, footpaths, grass areas etc. Trim back 25cm from back of kerb line, grass area, roadway etc. Remove leggy branches and an overall average of 15-25cm of growth where a general shaping exercise is involved.
- (w) Apply broad-spectrum herbicide e.g. *Roundup Bi-Active* , or similar approved to all shrub planted areas, and woodland planting blocks.
- (x) Allow for hand weeding of shrub beds containing plants sensitive to herbicide application or where such herbicide application is not possible due to growth near ground level.
- (y) Ensure weed free circles are maintained around each tree in fine cut grass areas.

2.2.4 Winter

- (z) Carry out formative pruning of managed hedgerows
- (aa) Thin out woodland planting areas removing a maximum of 5% of plant material to provide space for healthy specimens, including dead, diseased or damaged plants. Remove any dead tree specimens from fine cut grass areas.
- (bb) Ensure weed free circles are maintained around each tree in fine cut grass areas.

2.3 Grassed Areas (Fine Cutting)

- (a) Fine cutting shall mean mowing to 1" (25mm) high. This operation is to be carried out 27 times per annum to all areas as detailed on dwg. no.s. A rough schedule is as follows:
March – 1 cut, April – 3 cuts, May – 4 cuts, June – 4 cuts, July 4 – cuts, August 4 – cuts, Sept – 3 cuts, Oct – 2 cuts, Nov 2 cuts
- (b) The rate for the fine cut grass areas should include for the removal of loose heavy grass (after cutting) from the respective areas after the first two cuts in early season. Additional cutting of fine cut grassed areas may be instructed by the client from time to time, at various locations.
- (c) Fine cutting shall be deemed to include for:-
 - (i) Removal and disposal of grass cuttings from adjoining roads and paving.
 - (ii) Removal and disposal of stones and other obstructions from the area of grass to be cut.
- (d) Grass shall be trimmed from around the bases of walls and fences, back of footpaths and kerbs, litter bins, sluice valves and hydrant markers, trees, poles and public lighting columns, etc., and this interface between grass and walls, fences, etc., as noted above, kept in a neat and tidy condition. This trimming shall be deemed to be included for min. 10 no. times per annum. *The Landscape Contractor is bound to comply with this instruction and large patches of sprayed off ground around the above mentioned objects/areas is prohibited.*
- (e) The edging between grassed areas and the back of footpaths and kerbs shall be trimmed back, as required to maintain a clean line between the grassed area and the respective line of footpath or kerbing. Typically a gap of 25mm (1inch) should exist between the edge of the footpath / kerbing and the grassed area. *This edging shall be deemed to be included for a min. 2 no. times per annum. Spraying to achieve this effect is prohibited.*
- (f) *Once the grass has been trimmed at the beginning of the grass cutting season and at a time to be agreed with or his authorised representative, the Landscape Contractor shall apply a suitable broad-spectrum selective weed killer to maintain broad-leaved weed control in the grassed areas

during the growing season. A second application will be applied to selectively control clover infestation in grassed areas.

- (g) All grass cuttings shall be collected, removed from site and deposited at a green waste recycling facility (for composting), all in accordance with the local authority regulations for waste disposal.
- (h) Mowing shall be carried out with machines in good repair, sharp and evenly set, avoid laying flat or pulling of the grass.
- (i) *2 no. fertiliser applications to be made per annum to all fine cut grass areas, once in the spring and once in autumn. Fertilisers to be applied in the period March to April and in the period September to October to provide 30kg N, 15kg P and 30kg K, per hectare annually. Each application is to be applied in two equal passes in transverse directions, giving an even distribution across the site surface.
- (j) The Landscape Contractor shall be held responsible for the reinstatement of any areas of damage arising from the use of inappropriate heavy mowing apparatus on waterlogged ground. Should prolonged wet weather conditions persist the Landscape Contractor shall advise the employer and make arrangements for use of appropriate machinery to achieve a fine cut sward.
- (k) Borders are to be defined between grass and shrub beds using an appropriate edge tool. This operation is to be carried out 2 no. times per annum.

* The weed control and fertiliser applications may be carried out in combination as a weed-and-feed application. The landscape contractor shall submit proposals for this operation to Rohan Holdings, for approval, prior to proceeding with this method of work.

2.4 Grass Cutting (Rough Cutting)

- (a) Rough cutting shall mean mowing to a height of 3" (75mm). This operation is to be carried out 4no. times per annum.
- (b) Rough cutting shall be deemed to include for:-
 - (i) Removal and disposal of grass cuttings from adjoining roads and paving.
 - (ii) Removal and disposal of stones and other obstructions from the area of grass to be cut.
- (c) All grass cuttings shall be collected, removed from site and deposited at a green waste recycling facility (for composting), all in accordance with the local authority regulations for waste disposal.

- (d) In mid to late spring spot treat emerging thistles and Ragwort through meadow grass and rough grass cut areas.

2.5 Grass Re-instatement

- (a) Where grass has been damaged and requires re-instatement the contractor shall cultivate the ground to remove compaction at the surface (to 100mm depth), removing all stone, debris and any subsoil material, to 100mm depth, apply topsoil to dress the verge levels to achieve a height of 25mm above the height of the adjacent kerb, apply grass seed, Coburns Irish premier low maintenance mixture at a rate of 25 grams per m² with fertiliser, 10:15:10 ratio or equivalent at a rate of 25 grams per m². Seed to be sown in the season March to April or September to October.

2.6 Hard Standing Maintenance and cleaning

The Contract also caters for sweeping and cleaning service in all locations. . This sweeping and cleaning must be done to a high standard.

- (a) All paved areas such as footpaths, kerb lines, feature paving, stone chipped areas, etc., throughout the site are to be maintained weed free at all times. The application of a suitable broad spectrum herbicide e.g. Roundup Bi-Active or similar approved shall be applied three times per annum to achieve this. Once per annum a suitable chemical to treat moss shall be applied where it has established on hard surfaces.
- (b) Sweeping shall mean sweeping of feature paving areas, footpaths and kerb lines along all public roads and removal of all grit, rubbish and leaves from these areas. Soil wash from beds on to paved areas should also be swept. This work to be executed once every three months, or 4 no. times per year to all sites.
- (c) Cleaning shall mean the removal of paper, plastic bags and all other rubbish from fine cut grass areas, rough cut grass areas, tree groups, boundary tree areas, shrub maintenance areas, hard standing, footpaths and kerb lines. This work to be executed prior to grass cutting on each grass cutting visit. There are also additional cleanings required outside the grass cutting season. A total of 36 attendances should be made for cleaning. All dirt and rubbish is to be removed off site and disposed of according to local authority regulations and clause 6.17 hereof.

Cleaning shall also include the removal of grit and rubbish from road gullies and drains once per year.

- (d) The contract caters for the emptying of all litter bins 36 times per annum.
- (d) Pavoir areas (e.g in Airways cluster) to be power washed twice per annum, April and October. The power wash should be applied at an oblique angle in order to avoid un-necessary removal of sand

and grit from pavior joints. Any sand removed shall be replaced by brushing in appropriate and approved paving sand.

2.7 Watering

Water newly planted standard trees (<5 years old) and container grown and specimen shrubs (<2years old) throughout the summer months (May to August) after any period of three weeks without significant rainfall (less than 5mm). Watering is a provisional item to be undertaken only by instruction from Rohan Holdings, with an allowance to be made for 6no. Applications of water per annum .

Whips and transplants in ornamental woodland blocks are excluded from watering. General woodland planting is excluded from watering.

Apply sufficient water to thoroughly wet the top 300mm of soil around the roots of container grown shrubs (5L of water per shrub).

Apply sufficient water to thoroughly wet the top 500mm of soil around standard trees (90L per tree).

The landscape contractor shall make allowance for the provision of a water bowser or similar in order to undertake the watering.

3.0 Specifications for supply.

3.1 Schedule of supply:

The nursery stock material will be delivered following consultation between the, landscape contractor and the selected nursery,. Delivery will be at all times by means of covered vehicles, and all plant material will be clearly labelled. The source of origin must be from the selected nursery as no other additional stock from other nurseries will be permitted without prior inspection and approval.

3.2 Nursery stock:

All plant material shall be good quality nursery stock, free from fungal, bacterial or viral infection, aphids, red spider or other insect pests and any physical damage. It shall comply with the requirements of B.S. 3936: Parts 1-10: 1965 Specification for Nursery Stock, where applicable.

All plants shall have been nursery grown in accordance with good practice and shall be supplied through the normal channels of the wholesale nursery trade. They shall have the habit of growth that is normal for the species. Country of origin must be shown in all cases for species grown from seed.

Unless otherwise stated, the plant materials shall be supplied in accordance with the following codes where stated:

1+0	1 Year old seedling
1+1	1 Year old seedling lined out for 1 year
1+2	1 Year old seedling lined out for 2 years
1+1+1	1 Year old seedling lined out for 1 year, lifted and lined out for one further year
1u1	1 Year old seedling undercut then 1 more year in seedbed.
1u2	1 Year old seedling undercut then 2 more years in seedbed.
0/1	1 Year old Hardwood cutting
0/2	2 Year old Hardwood cutting
2X	Twice transplanted tree

3X	Three times transplanted tree
4X	Four times transplanted tree
P9	Containerised plant in 9cm pot

3.3 Species:

All plants supplied shall be exactly true to name as shown in the plant schedules. Unless stipulated, varieties with variegated and/or coloured leaves will not be accepted, and any plant found to be of this type upon leafing out shall be replaced by the contractor at his/her own expense.

Bundles of plants shall be marked in conformity with B.S. 3936: Part 1: 1965 and B.S. 3936: part 4: 1966. The nursery supplier shall replace any plants which, on leafing out, are found not to conform to the labels. Definitions of all terms used are in accordance with the following British Standards: -

B.S. No. 3936: Part 1: 1965 entitled "Nursery Stock- Trees and Shrubs"

B.S. No. 3936: Part 4: 1966 entitled "Nursery Stock- Forest Trees"

B.S. No. 3936: 1967 entitled "Specification for Nursery Stock"

3.4 Tree specifications:

Trees shall have a sturdy, reasonably straight stem, and a well-defined straight and upright central leader, with branches growing out of the stem with reasonable symmetry. The crown and root systems shall be well formed. Roots shall be in reasonable balance with the crown and shall be conducive to successful transplantation.

Standard trees shall have a clear stem 1.70m in height from ground level to the lowest branch, a minimum girth of 8cm measured at 1.00m above ground level and a total height of 2.75-3.00 m.

Light Standard trees have a clear stem 1.30m in height from ground level to the lowest branch, a minimum girth of 6cm measured at 1.00m above ground level and a total height of 1.80-2.40m.

Select standard trees shall have a clear stem 1.70 m in height from ground level to the lowest branch, a minimum girth of 10 cm. measured at 1.00.m. above ground level and a total height of 3.0 to 3.5 metres.

Heavy standard trees shall have a clear stem 1.80-1.90m in height from ground level to the lowest branch, a minimum girth of 14 cm. measured at 1.00.m. above ground level and a total height of 4.0 to 4.5 metres. All trees shall have been undercut a minimum of three times.

Extra Heavy standard trees shall have a clear stem 2.0m in height from ground level to the lowest branch, a minimum girth of 16 cm. measured at 1.00.m. above ground level and a total height of 4.5 to 5 metres. All trees shall have been undercut a minimum of three times.

Semi-mature trees shall have a clear stem 2.0m in height from ground level to the lowest branch, a minimum girth, as specified in the Bill of Quantities, measured at 1.00.m. above ground level and a total height of min. 5 metres. All trees shall have been undercut a minimum of three times.

All standards shall be clearly labelled.

3.5 Feathered Trees 180-240cm

Feathered trees shall be not less than four years old, and shall have been transplanted at least three times. Trees of species not listed in BS 3936: Part 4: shall be sturdy, with a balanced root and shoot development. Size shall conform to the schedules.

Trees shall be well furnished with lateral fibrous roots, and shall be lifted without severance of major roots. Roots shall be of the habit normal for the species, without deformation. Transplants shall be wrapped in polythene in bundles of 50 no. and clearly labelled from the time of lifting until planting to conserve moisture.

3.6 Transplants 120-150cm

Transplants shall be not less than two years old, and shall have been transplanted at least once. Trees of species not listed in B.S. 3936: Part 4: shall be sturdy, with a balanced root and shoot development. Size shall conform to the schedules.

Trees shall be well furnished with lateral fibrous roots, and shall be lifted without severance of major roots. Roots shall be of the habit normal for the species, without deformation. Transplants shall be wrapped in polythene in bundles of 50 no. and clearly labelled from the time of lifting until planting to conserve moisture.

3.7 Transplants 90-120 cms, 60-90 cm, 40-60 cm, 30-40 cm

Transplants shall be not less than one year old. Trees of species not listed in B.S. 3936: Part 4: shall be sturdy, with a balanced root and shoot development. Size shall conform to the schedules. Trees shall be well furnished with lateral fibrous roots, and shall be lifted without severance of major roots. Roots shall be of the habit normal for the species, without deformation. Transplants shall be wrapped in polythene in bundles of 50 no. and clearly labelled from the time of lifting until planting to conserve moisture.

3.8 Shrubs

(1) Containerised Shrubs shall be of the size specified in the schedules, with several stems originating from or near ground level and of reasonable bushiness, healthy, vigorous and with a sound root system. Pots or containers shall be appropriate to the size of shrub supplied and clearly labelled. Shrubs shall not be pot bound or with girdled or restricted roots.

(2) Bare Root Shrubs shall be of size specified in the schedules, with several stems originating from or near ground level, with reasonable bushiness, healthy, and vigorous. They shall be well furnished with fibrous roots and shall be lifted without severance of major roots. All bare root shrubs shall be wrapped in polythene in bundles of 50 no. and clearly labelled from the time of lifting until planting to conserve moisture.

3.9 Container Grown Conifers:

Conifers shall be of the size specified in the schedules, with one main stem originating from or near ground level and of reasonable bushiness and health, with a well-grown, root system. Pots or containers, where required, shall be appropriate to the size of plant supplied and clearly labelled. Plants shall not be pot bound, or with deformed or restricted roots.

3.10 Protection:

The interval between the lifting of stock at the nursery and planting on site is to be kept to an absolute minimum. Plants shall be protected from drying out and from damage in transport. All stock awaiting transport shall be protected from the wind and frost and from drying out.

3.11 Damage

On completion of lifting of plants in the nursery, any broken shoots or severed roots shall be pruned, areas of damaged bark neatly pared back to sound tissue.

3.12 Inspections

The Landscape Architect may inspect the hardy nursery stock in the selected nursery during the execution of the works.

3.13 Delivery and heeling in

All plants will be delivered on a phased basis as called up in advance in agreement with the Landscape Architect and the appointed Landscape Contractor. In the event of the Landscape Architect being dissatisfied with the care and attention given to the stocks, following heeling-in, he shall notify the Landscape Contractor who shall take steps to ensure careful heeling-in procedures.

The preparation of the heeling-in area and its subsequent maintenance is the sole responsibility of the Landscape Contractor.

4.0 Specifications for site operations:

4.1 Setting out:

Setting out shall be in accordance with site meetings with the Landscape Architect. No planting works shall take place when the soil /fill is in a waterlogged condition.

4.2 Finished grading:

All planting pits and topsoiled areas disturbed by the landscape contractor shall be left in an even state, with all soil clumps broken up and stones of greater than 50mm diameter shall be removed.

4.3 Specifications for Planting and Plant Materials

4.3.1 Stakes:

Round stakes shall be of peeled larch, pine or Douglas fir, preserved with a water-borne copper chrome arsenic composition in accordance with I.S. 131. For standard and select standards stakes shall be 1.8m long, 75mm in diameter. Stake all whips and transplants greater than 120cm in height. For all transplants exceeding 120cm height stakes shall be 1.2m long, 37mm x 37mm square. Stakes shall be pointed at the butt end. Set stakes vertically in the pit, to the western side of the tree station, and drive before planting. Drive stake with a wooden maul or cast-iron headed drive. Stakes shall be driven into the excavated planting pit to a depth of:

800mm for Standards/Light Standards/Feathered Trees

1000mm for Heavy Standards

500mm for Whips/Transplants

4.3.2 Canes:

Bamboo canes or similar approved shall be used to provide spot spraying location markers for small plants including Pinus, species.

4.3.3 Tree ties:

For standard and select standards, tree ties shall be of rubber, PVC or proprietary fabric laminate composition and shall be strong and durable enough to hold the tree securely in all weather conditions for a period of three years. They shall be flexible enough to allow proper tightening of the tie. Ties shall be min. 25mm wide for 120cms height trees and min. 38mm for larger sizes. They shall be fitted with a simple collar spacer to prevent chafing. Two ties per tree shall be applied to standards; for staked transplants, one tie per tree is required.

Ties shall be nailed to the stake with one galvanised nail.

4.4 Protection:

The interval between the lifting of stock at the heeling-in area and planting on site is to be kept to an absolute minimum. Plants shall be protected from drying out and from damage in transport. All stock awaiting planting on site shall be stored in a sheltered place **protected from the wind and frost and from drying out.**

All transplants shall be wrapped in polythene from the time of lifting to conserve moisture. Except when heeled-in, they shall be protected in polythene at all times until planted into their final position on site.

4.5 Damage:

On completion of planting any broken branches shall be pruned, areas of damaged bark neatly pared back to sound tissue.

4.6 Watering / Alginure / Fertilisers:

All bare rooted light standards and select standards shall be soaked in water overnight, on site, before planting in a liquid solution containing "Alginure" at the recommended dilution rate. Fertilisers shall conform to BS 5581: 1981. In the case of granular fertiliser being added to plantings, it must be mixed through and incorporated into the base of the planting hole and covered over in order to avoid roots of plants coming in direct contact.

- 4.7 Setting out:**
No planting shall take place when ground conditions are frozen or waterlogged. All planting holes shall be opened and closed on the same day.
- 4.8 Tree planting:**
Trees shall be planted at the same depth as in the nursery, indicated by the soil mark on the stem of the tree. They shall be planted in the centre of the planting pit and planted upright. Stones or other rubbish over 50mm shall be removed. Supply and drive the stake 800mm into the ground for standards, 500mm for other transplants. Backfill planting hole with excavated topsoil, add in additional topsoil, as required, and remove all stones and debris, firming plant into position
- 4.8.1 Select Standards/Standards**
Excavate tree pits to 800mm x 800mm x 600mm deep, or as approved. The base of the pit shall be broken up to a depth of 80mm and glazed sides roughened. F.Y.M. at the rate of 0.047 cu.m.(equivalent to 60mm deep) and 100gms of 0.10.20 shall be applied to each tree pit prior to planting. Farm manure shall consist predominantly of faecal matter and shall be free of loose, dry straw and undigested hay. It shall be free of surplus liquid effluent. Backfill planting hole with excavated topsoil, and additional topsoil as required, and remove all stones and debris, firming plant into position.
- 4.8.2 Heavy and Extra Heavy Standards**
Excavate tree pits to 1000mm x 1000mm x 800mm deep, or as approved. The base of the pit shall be broken up to a depth of 100mm and glazed sides roughened. F.Y.M. at the rate of 0.047 cu.m. (equivalent to 60mm deep) and 100gms of 0.10.20 shall be applied to each tree pit prior to planting. Farm manure shall consist predominantly of faecal matter and shall be free of loose, dry straw and undigested hay. It shall be free of surplus liquid effluent. Backfill planting hole with excavated topsoil, and remove all stones and debris, firming plant into position.
- 4.8.3 Semi-mature trees**
Excavate tree pits to 1200mm x 1200mm x 1000mm deep, or as approved. The base of the pit shall be broken up to a depth of 200mm and glazed sides roughened. F.Y.M. at the rate of 0.047 cu.m. (Equivalent to 60mm deep) and 100gms of 0.10.20 shall be applied to each tree pit prior to planting. Farm manure shall consist predominantly of faecal matter and shall be free of loose, dry straw and undigested hay. It shall be free of surplus liquid effluent. Backfill planting hole with excavated topsoil, and remove all stones and debris, firming plant into position.
- 4.8.4 Light Standard Trees**
Excavate tree pits to 500mmx500mmx500xx deep, or as approved. The base of the pit shall be broken up to a depth of 80mm and glazed sides roughened. F.Y.M. at the rate of 0.047 cu.m. (Equivalent to 60mm deep) and 100gms of 0.10.20 shall be applied to each tree pit prior to planting. Farm manure shall consist predominantly of faecal matter and shall be free of loose, dry straw and undigested hay. It shall be free of surplus liquid effluent. Backfill planting hole with excavated topsoil, and remove all stones and debris, firming plant into position.
- 4.8.5 Feathered Trees 180-240cm, container grown conifers (>2l)**
Excavate tree pits to 400mm x400mm x 400 mm deep, or as approved (slit or notch planting are not acceptable planting methods). The base of the pit shall be broken up to a depth of 80mm and glazed sides roughened. Trees shall be planted at the same depth as in the nursery and backfilled with compound fertiliser 0.10.20 at the rate of 50gm per tree and 0.020m³ of Mushroom Compost or similar approved. Backfill planting hole with excavated topsoil, and remove all stones and debris, firming plant into position.
- 4.8.6 Feathered Whips 120-150 cm:**
Excavate tree pit to depth of 300mm x 300mm x 300mm deep, or as approved. The base to be broken up to a depth of 60mm and glazed sides roughened. Whips to be planted at same size as in the nursery. Apply 60gm 0.10.20 and 0.020m³ of Mushroom Compost or similar approved. per tree pit to plants. Stakes 1.2m high x 37mm dia. Backfill planting hole with excavated topsoil, and remove all stones and debris, firming plant into position.
- 4.8.7 Feathered Whips and Transplants 90-120cm, 60-90 cm, 40-60cm, 30-40cm, container grown conifers (<2l size) and container grown shrubs (<2l size):**

Excavate planting hole to a depth of 300mm x 300mm x 300mm deep; the base to be broken to a depth of 50mm and glazed sides roughened. Apply 30gm 0.10.20.per planting pit. Backfill planting hole with excavated topsoil, and remove all stones and debris, firming plant into position.

4.9 Topsoil Specification and Quality.

Topsoil supplied shall comply with BS standard 3882:1994, minimum General Purpose Grade. Soil not to be handled when wet. Soil to be free of propagates of aggressive weeds, debris and stones >25mm. Landscape contractor shall include for supply and delivery of topsoil sufficiently to undertake all work detailed in the schedules.

4.9 General

Upon completion of planting, all pits shall be raked over lightly to leave an even surface and neat appearance. All stones greater than 50mm dia. to be removed. Provision should be made for the watering of light and select standards during periods of prolonged drought in the first year following planting.

4.10 Performance Standards

Planting undertaken in Year No. 1 shall be inspected in October of Year No. 1 to ascertain replacement planting. Any tree or shrub found to have died from any cause except as provided below, or the work of another contractor, shall be replaced by the Contractor at his own expense. Replacement planting shall conform in all respects with this Specification, including all specified excavation, provision and incorporation of all fertilisers and ameliorants, and weed killer treatments. Failures will not be charged to the Contractor in the following cases:-

- Damage by hares or rabbits, where not protected by fencing of shelters.
- Damage by livestock, where not protected by fencing.
- Losses due to theft, vandalism or disturbance by other contractors.

Persistence of weed in planted areas will be regarded as a contributory cause of failure due to drought. Prolonged dry weather will not exonerate the Contractor if the scheduled aftercare operations have not been carried out as programmed.

4.11 Critical Inspection Date

As part of the management of this contract, a critical inspection date shall be arranged for **4 no. visits**. It is at such dates that an overall detailed inspection shall take place between the Rohan Holdings Ltd Property Manager and the appointed contractor to determine standards, rectify problems arising and settle issues of dispute arising from the concerned parties. It will therefore be the duty and the responsibility of the appointed landscape contractor to ensure that all areas are in prime condition for inspection at these times. Minor on-site repairs will be required as part of this contract and the contractor should therefore include an item for such repairs e.g. hedge damaged, boulders moved etc. The appointed Landscape Architect shall attend two no. such visits per annum.