

Clifton Road,
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LANDSCAPE SPECIFICATION

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For

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H O M E S

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Contents of Report

Section Number:	Contents:	Page Number:
1.0	Site Preparation and Earthworks	1
2.0	Topsoiling and Cultivation	4
3.0	Plants and Planting	6
4.0	Trees	8
5.0	Grass Works	11

1.0 Site Preparation and Earthworks

1.1 Programme of Operation: The exterior planting shall be installed over the minimum period to complete the whole of the works. Dates are subject to discussing and agreement with suitable environmental conditions prevailing. The Contractor must verify this programme of works before commencing on site

1.2 Protect Work: The Contractor shall provide adequate temporary protection to the work during the installation and shall include temporary coverings, and all other measures for protecting the work from damage.

Any work damaged or soiled by traffic or other causes due to inadequate temporary protection shall be removed and made good at the cost of the Contractor. If other work is damaged by the Contractor he will be held responsible for the cost of rectification.

1.3 Rubbish: All rubbish is to be immediately cleared and carted away as it accumulates during the course of the work. At completion the site is to be left clean and tidy.

1.4 Water must not be allowed to accumulate in any part of the works and the Contractor is to allow for providing for all necessary pumping or bailing that may be required to keep any excavations, or any part of the site free from water at all times.

1.5 Existing Vegetation: No existing trees, shrubs or other plants shall be removed or cut without specific instructions from the Architect. Existing trees are to be retained, protected and undisturbed throughout the contract in accordance with BS 5837 section 6. No branches are to be cut or damaged and no roots larger than 25mm in diameter are to be cut or damaged in accordance with BS 5837 7.2.3. No fires are to be lit under or anywhere near the trees. No debris, fuel, or building material of any sort to be stacked against or piled around the trunks.

1.6 Weed Control: All weeds shall be cut down and removed off site to a tip found by the contractor. One contact, approved, herbicide spray shall be applied to all areas of site to eliminate any remaining green weed vegetation.

1.7 Loose Debris: The site shall be cleared of all loose debris, rubbish and foreign matter of any kind and removed to a tip found by the Contractor.

1.8 Formation of Mounding: Prior to mounding operations, aerate sub soil in soft landscape areas to a depth of 250mm below top-soil.

1.9 Filling: Carry out all necessary filling to form new soil formation levels which will give finished levels as shown on drawings. Include for loading and depositing sub-soil on site, and for importing fill material. All material in making up levels shall be to the approval of the Architect and shall be spread and consolidated in layers not exceeding 300mm.

All imported fill material shall be free from metal, vegetable matter and any toxic wastes or pollutants. Rock and/or masonry of limited size will be permissible provided that the dimension does not exceed 50mm. A sample load shall be stored intact for comparison with further loads which shall be of similar standard.

1.10 Grading: Allow for grading and cross grading over the site to achieve final grades in accordance with the grading and contour drawings. All finished gradients are to be smooth flowing, marrying in with all existing levels (back of pavement etc.) eliminating all abrupt angles and changes of levels. All shaping works are to be carried out in consultation with the Architect on site. Minor fillings and excavations are to be made as necessary.

1.11 Measurements: Attention is drawn to the fact that all measurements of the above area are net measurements and the contractor shall allow in his prices for increases in bulk and for transporting material to and from temporary store as may be necessary.

1.12 Sub-Soil Preparation: All stone, brick, concrete, wood, wire, pipes debris, rubbish, weed roots and foreign matter of any kind above a maximum dimension of 150mm shall be removed from the sub-soil formation layer to a depth of 225mm.

The sub-soil shall be evenly graded to the appropriate formation levels below the finished levels of the top soil, i.e in the cases of grass areas 150mm and for shrub planting areas 450mm.

All sub-soil areas shall be broken up to a depth of 150mm immediately prior to top soiling. Allow for removing all vegetative matter and other rubbish from the areas concerned before topsoiling.

1.13 Removal of surplus excavated material: Remove all surplus excavated material from the site.

- 1.14 Re-Use of Top Soil: The re-use of existing top soil shall only be permitted with the strict approval of the Architect. Any surplus top soil is to be removed from site.

2.0 Topsoiling and Cultivation

2.1 Imported Top-Soil: Imported top-soil is to be a 'multipurpose topsoil' in accordance with BS 3882:2007, unless there is a requirement for a 'specific purpose topsoil' which will also be in accordance with BS 3882:2007.

2.2 As well as being in accordance with BS 3882:2007, the multipurpose topsoil should a quality loam and have the following properties:-

pH value	6.3 – 7.2	
Nitrogen (N)	0.15 min	
Phosphorous (P)	2% min	
Potash (K)	2% min	
Magnesium (Mg)	1% min	
Clay	15% min	35% max
Silt	20% min	30% max
Sand	30% min	55% max

2.3 The top-soil shall be free from stone, rubbish of any kind, roots of perennial weed or any other injurious matter.

2.4 The topsoil must be supplied with a BS3882:2007 declaration of analysis, analysis certificate and sampling protocol.

2.5 At the outset of the works a sample 5m load must be deposited on site for approval and comparison and all subsequent loads shall be at least equal in quality to the sample, which shall remain until top-soil spreading is completed.

2.6 Approved Chemicals: All chemicals used shall be non-toxic to human beings, birds and animals, under normal use and chemicals which are not on the "Agricultural Chemicals Approved Scheme" current list of Approved Products shall not be used.

2.7 Fertilizers: The bonemeal is to be medium coarse in texture and is to contain not less than 20% soluble P O (Phosphates) and between 3-5% N O (Nitrogen).

2.8 Compost: Peat free compost to be used such as Richmoor Soil Improver as supplied by Greentech or similar approved should be used

2.9 Soil-Improver: Tree pits and shrub beds will be treated as follows:

Alginure Soil Improver incorporated into tree pits at 1.5 Kg M3.

Alginure Soil Improver incorporated into the shrub beds at 75 g M2.

3.0 Plants and Planting

3.1 Planting Operations: Planting operations shall be carried out in general accordance with the requirements of Sections 7, 8 and 9 of B.S. 4428: 1989 "Recommendations for General Landscape Operations (Excluding Hard Surfaces)".

3.2 Damage: All plants shall be adequately and carefully packed and protected to survive transport, by whatever means, to the site without damage in loading, transit or unloading.

If in spite of these precautions, roots, branches or shoots suffer slight damage, they shall be carefully pruned. If major damage has occurred, the plant shall be rejected and replaced.

3.3 Container and Pot Grown plants: Container and pot grown shrubs must have grown in weed free containers of the sizes specified for at least one complete growing season and must be healthy, bushy, vigorous and well-rooted but not pot bound and equal to all clauses of this specification.

3.4 Species and Varieties: All plants are to be of the species and variety indicated on the schedules and drawings. If however, any plants are unobtainable at the time of ordering, the contractor is to inform the Employer immediately and submit a list of alternatives for consideration.

Container and pot grown plants which are not planted on arrival on site must be watered frequently to prevent drying out. Plants which have been allowed to dry out to the extent where their health is affected will be replaced at the Contractor's expense. Immediately before planting, all container and pot grown plants will be well watered. Care will be taken during planting not to break up the rootball. Where plants have become pot bound, the roots on the outside of the ball will be gently eased out before planting.

3.5 Heeling In: After delivery, if planting is not carried out immediately, root balled plants shall be placed cheek to cheek and the ball covered with sand or fine soil and watered to prevent drying out. Bare rooted plants shall be heeled-in by placing the roots in a prepared trench and covering them with fine soil which shall be watered in to avoid air pockets round the roots.

- 3.6 Shrubs: Shrubs shall comply, at least, with the requirements of B.S. 3936: Nursery Stock, Part 1 Trees and Shrubs or Part 2 Roses and the JCLI Standard Form for Tender for the Supply and Delivery of Plants (4th Edition 1982). Shrubs shall be to the minimum height or spread as specified and shall have at least 5 branches developed. Cutting back shall occur if necessary for the normal development of the plant.
- 3.7 Herbaceous Plants: Herbaceous plants shall be exactly true to name, well grown, healthy, vigorous clumps, in at least their second season of growth from division or propagation. They shall be planted to the correct depth in staggered rows at approximately equal centres and well watered in at the time of planting and subsequently, as necessary.
- 3.8 Planting shrubs, climbers and Herbaceous Plants: Dig out holes large enough to receive the roots of the plant fully extended and well spread out. Carefully work top-soil among roots and backfill. Plants to be well firmed by heeling and the surface left neat and even. Planting must be to the same depth as in the nursery. Care must be taken not to disturb the root balls of pot grown plants and not let any roots dry out at any time.
- 3.9 Watering: Shrubs and herbaceous plants shall be well watered in immediately after planting.
- 3.10 Mulch: Apply 75mm depth of mulch over whole of planting bed immediately after watering in. Mulch to consist of 'Melcourt Amenity Bark Mulch' available from, www.Melcourt.co.uk; 01666 504398 or similar. Free from pests, disease, weeds and additives. Rose beds shall have organic manure spread after planting in addition, at a rate of 1m cubed to every 20m squared, before applying mulch.

4.0 Trees

- 4.1 Tree Pits: Tree pits shall be of a diameter 600mm greater than the root ball. The depth of the pit shall be 225mm deeper than the root ball and not less than 600mm deep. The base of the tree pit shall be forked over to a depth of 225mm.
- 4.2 Tree Stock: All stock must comply in all respects with the current edition of B.S. 3936 except where superseded by the JCLI Standard Form for the Supply and Delivery of Nursery Stock (4th Edition 1982) when the latter shall apply.

Trees shall be well grown nursery stock free from disease, true to type and of a size scheduled in accordance with the approved method of measurement.

- 4.3 Planting Trees: Spread a minimum 75mm thick layer of well rotted manure in the bottom of each pit and fork over. Lay 50mm minimum mixture of peat substitute/leaf mould/sharp sand 6:3:1 by volume; the peat being well moistened. All the manure is to be covered so that none comes in direct contact with the tree roots. Soak the roots of bare-rooted trees in water for at least an hour before planting.

Continue backfilling with top-soil into which 170gm of bonemeal has been mixed (per tree). Firm down well by heeling as filling proceeds. The tree must be planted to the same depth as in the nursery, and to the same orientation.

- 4.4 Stakes: To be requisite length, pressure impregnated (with preservative non injurious to plants) de-barked softwood 100mm square or diameter.
- 4.5 Tree Ties: To be plastic ties "Toms" pattern, two per stake and nailed to stake with large head galvanised nails.
- 4.6 Planting Season: Unless otherwise specified all transplanting shall be carried out between the end of October and the end of March. Container grown trees may be transplanted at times other than these at the discretion of the Landscape Architect.

The transplanting shall be carried out when the weather is dull and the ground is moist and workable. On no account must the planting take place when there is freezing wind. Where approval is given by the developer to transplant between March and September, the trees shall be given a transplanting spray before transplanting and again between 7 and 10 days after planting, at the Contractor's expense.

In the case of evergreens, transplanting spray shall be applied both before and after transplanting whatever time of year.

- 4.7 Transplanting in Frosty Conditions: Planting of trees in frosty conditions will only be permitted if adequate precautions are taken. The prepared root balls must have additional wrapping. The bottom and sides of the tree pits, and the piles of top-soil, must be protected from freezing by the use of boards, tarpaulins or other approved materials.
- 4.8 Watering: At the time of planting, each tree shall be well watered in. If there is a risk of frost within 24 hours the watering shall be delayed until such risk has passed.
- 4.9 Mulch: Apply 75mm depth of mulch over whole of planting bed immediately after watering in. Mulch to consist of 'Melcourt Amenity Bark Mulch' available from, www.Melcourt.co.uk; 01666 504398 or similar. Free from pests, disease, weeds and additives.
- 4.10 Identification: Every specimen tree, and one tree from each group of similar trees, shall bear labels with the correct full botanical name. These to be of 6mm Dymo tape (or equal) stuck onto white plastic labels and tied loosely to tree in a position where it can be seen clearly.
- 4.11 Trees to Correspond with Varieties Specified: Trees supplied shall correspond exactly with the species, varieties and sizes stated.

No substitutes will be permitted unless expressly authorised in writing by the Local Planning Authority. Trees shall be of good stock, hardy and well rooted and where applicable shall be furnished with straight sturdy trunks, and well branched balanced heads.

Plants should have been regularly transplanted during growth in the nursery, and be generally in compliance with the requirements of the relevant parts of B.S. 3934. Any damaged plants must be replaced by the planting Contractor.

Trees brought onto the site shall have their roots protected from drying out until planting is carried out.

- 4.12 Protection of Planting Material: All trees shall be adequately and carefully packed and

protected to survive transportation to the site without damage.

Particular care must be taken that the roots are not allowed to dry out and plants must be protected by damp straw moss, sacking or the like. Trees which are not used immediately on site shall be heeled in to ready prepared trenches and shall be kept thus in a moist condition until planting on the same day. Trees not used on the same day of arrival may be heeled in and stored at a site to be agreed with the Architect. Plants so stored will not be subject to an extra cost on the contract.

5.0 Grass Works

Grass

- 5.1 Time of sowing: While grass seeding works may be carried out from May to September in appropriate weather conditions, a programme for sowing in either early or late summer will normally be agreed.
- 5.2 Grassing Works: Preparation and grassing works shall be carried out in general accordance with the requirements of Section 5 of B.S. 4428 (Recommendations for General Landscape Operations).
- 5.3 Top Soil: Minimum depth of top soil required for grass seeding areas is 150mm.
- 5.4 Grass Finished Levels: Grass finished levels at kerbs, gulleys, manholes and other horizontal surfaces will finish 25mm above these hard surfaces and be as indicated in the appropriate standard detail.
- 5.5 Cultivation: The top soil in areas to be seeded shall be ploughed or disc harrowed to a depth not exceeding 150mm, care being taken not to bring the subsoil to the surface. All weeds, rubbish and stones 75mm and above shall be removed from the site.
- 5.6 Preparation of Seed Bed: The areas shall be cultivated to produce a fine tilth suitable for seeding and firmed by lightly rolling.
- Fertiliser shall be granular fertiliser, obtained from an approved reputable horticultural supplier, stored in approved dry building until required for use.
- 5.7 Grass Seed Mixture: Seed shall be certified as to source, purity and germination, and the certificates shall be handed to the Architect.
- 5.8 Sowing: Seed shall be cross-sown in two directions at right angles to each other, (half the seed being used in each direction) at the rate of 35 gm per square metre and the ground lightly raked over on a still dry day when the top 25mm of soil is dry.
- 5.9 Rolling: After sowing areas are to be lightly rolled, weather permitting.
- 5.10 First roll and cut: When grass has grown to 38mm it shall be lightly rolled and, two days

later, mowed with an approved mower having no roller and sufficiently sharp to avoid root pulling.

- 5.11 Finished Grass Levels: Finished grass levels are to 40mm above surrounding kerbs, paving and plant bed edges and the addition of imported topsoil shall be undertaken where required. Minimum Topsoil depth for turfed areas to be 150mm when lightly consolidated.

Turf

- 5.12 Turf: Turfs shall be in accordance with BS 3969: Recommendations for Turf for General Landscape Purpose. Turfs shall be clean meadow or downland turfs, fibrous and well-rooted, free from matted dead grass and perennial weeds, and shall have been subject to proper maintenance and treatment with selective weed-killers and insecticides during the previous growing season.

On completion of laying, the whole turf shall be top dressed with finely sifted soil well worked into the joints.

No turf shall be laid during frost, exceptionally dry weather or on water-logged ground.

- 5.13 Correction of Hollows: Any slight hollows which appear within the aftercare period due to settlement or other causes are to be top dressed early in the growing season, with a mixture of fine compost and damp peat lightly rolled in and the grass allowed to grow through before cutting.

Deeper hollows are to be treated by neatly cutting out a square of turf, building up beneath with the same mix plus an equal quantity of sharp sand, and the turf replaced at the correct level for rolling. Cutting may proceed without interruption.

Hollows repaired as above are to be kept watered as necessary until the turf has fully married in.

- 5.14 Watering: On completion of laying and top dressing, turf areas shall be well watered.

Wildflower areas

- 5.15 Time of sowing: Seeds need warmth and moisture for optimum germination so can be sown whenever these conditions are present, usually August to September or March to April. Late autumn sowing should be avoided, particularly in waterlogged areas.
- 5.16 Cultivation: The top soil in areas to be seeded shall be ploughed or disc harrowed. All weeds, rubbish and stones 75mm and above shall be removed from the site. The 'stale seedbed technique' could be applied and is a good method for the reduction of annual weeds on the site. The area for sowing is cleared then left for a time until a flush of annual weeds appear. These are then treated before flowering. Perennial weeds should be removed as much as possible and treated with glycosphate or similar.
- 5.17 Preparation of Seed Bed: The areas shall be cultivated to produce a fine tilth suitable for seeding and firmed by lightly rolling. No fertilizer should be used.
- 5.18 Sowing: Seed shall be cross sown in two directions at right angles to each other (half the seed being used in each direction) at the rate of 1.5g per square metre for the 'Wildflowers for Wetlands' mix and 4g per square metre for the 'Pollen and Nectar mixture'.
- 5.19 Rolling: After sowing areas are to be lightly rolled, weather permitting.



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