

SOFT LANDSCAPING: PLANTING & MAINTENANCE SPECIFICATION

HILLCROFT LLANDEVAUD LLANDEVAUD LANE, NEWPORT NP18 2AD

1.1 QUALITY AND SAFETY

1.1.01 BRITISH STANDARDS AND CODES OF PRACTICE

The works should comply with current good practice as defined by:

- BS4428 '*Recommendations for general landscape work*' and other relevant British Standards;
 - *National Plant Specification* published by the Horticultural Trade Association;
- Any other Code issued by a relevant Trade organisation.

1.1.02 EXISTING TOPSOIL

Existing topsoil is to be removed from areas of hard landscape and areas which are to be regraded. Keep free from contamination and store in heaps less than 1.0 m high.

1.1.03 SUB-SOIL

Store sub-soil clear of top soil in separate heaps. Soil in excess of requirements or deemed unsuitable for back-filling to be removed from site.

1.1.04 IMPORTED TOPSOIL

Imported topsoil to be:

- Medium loam with a pH value to match that of the site;
 - Stone size to pass a 40 mm sieve, and stone content to be less than 10%;
 - Free of sub-soil, weed seed, perennial weeds or poisonous substances;
- If stored in temporary heaps, stacked less than 1.0 m high.

1.1.05 SPREAD TOPSOIL

Topsoil is to be spread to the following minimum depths:

- grassed areas 100 mm;
- shrub areas 400 mm;
- tree stations 600 mm;

graded slopes to be of even gradient without puddles and kept 50 mm above bordering hard surfaces to allow for settlement.

1.1.06 CONSOLIDATION OF FILL

Spread and consolidate approved fill in layers not exceeding 200 mm deep. General levels to be within ± 50 mm of design levels. Finished levels adjacent to hard landscape features and buildings to be ± 20 mm of design levels after settlement.

1.2 SHRUBS, HERBACEOUS & GROUND COVER

1.2.01 NURSERY STOCK:

As specified in the National Plant Specification (NPS) last published by the Horticultural Trades association.

1.2.02 PREPARATION FOR PLANTING

- Apply approved weedkiller.
- Rotavate ground and remove stones over 50 mm in any dimension.
- Remove existing unwanted plants including their roots.

1.2.03 SOIL CONDITIONING

Apply and lightly dig into the surface one of the following:

- Well-rotted farmyard manure at a rate of 5kg/sq m.
- Concentrated bagged animal manure at the rate recommended by the supplier (usually 100 gms/sq m).

1.2.04 MYCORRHIZAL FUNGI

Sprinkle evenly onto the bottom of planting hole or directly onto plant roots 25gms/3 litre pot, 100 gms/tree.

1.2.05 PLANT HANDLING, DELIVERY & STORAGE:

To be as recommended in the National Plant Specification. Phase the delivery of plants so that there is only sufficient for planting within 48 hours of delivery or, if necessary ensure suitable temporary storage before final planting by heeling in or lining out.

1.2.06 PREPARATION OF PLANTS

- Remove inorganic containers.
- Check for damage, disease or pest infestation.
- Reject seriously damaged plants.
- Carefully prune any minor root damage.

1.2.07 PLANT:

- In position shown on the drawings or in the absence of drawings evenly;
- At the rate specified, avoiding regimented rows;
- In holes large enough to allow adequate root spread and tease congested root balls of container-grown plants;
- Excavate holes at least 75 mm below the root system;
- Set plants so that their original soil level matches the new; and
- With their best side displayed.

1.2.08 BACKFILLING

To be selected existing topsoil. Any additional imported organic matter should be well mixed with at least equal quantity of existing soil. The backfill is to be evenly worked round the roots and well heeled in after applying mycorrhizal fungi.

- 1.2.09 **IMMEDIATELY AFTER PLANTING**
- Lightly prune back any damaged or malformed growth.
 - Rake soil to an even, fine tilth to the required levels.
- 1.2.10 **PLANTING SEASON**
- Plant out non-container grown plants only between October and March inclusive unless otherwise agreed.
 - Container grown or containerised plants may be planted out at any time of year except when the temperature is below 4°C on a falling thermometer, in frozen or waterlogged ground or in drought conditions.
- 1.2.11 **WATERING**
- Saturate the root ball of container grown plants before planting.
Thoroughly water plants immediately after planting and again before mulching where applicable.
- 1.2.12 **MULCHING**
- Where applicable fork soil to a medium tilth in areas to be mulched. Apply 75 mm of mulch with mature and coarse wood or bark chips.
- 1.3 TREES**
- 1.3.01 **TREE QUALITY**
- To the National Plant Specification with sizes as noted on the drawing or schedule.
- 1.3.02 **TREE STAKES:**
- 75 mm diameter, free of bark with one end pointed.
- 1.3.03 **STAKING FOR TREES UP TO 'STANDARD' SIZE**
- Drive stake upright 450 mm into bottom of excavated pit close to the tree stem on the windward side. Cut off at one third the height of the tree and secure tree with approved ties and space at the top of the stake.
- 1.3.04 **PLANT TREES:**
- upright and in the exact positions shown on the drawing;
 - in holes large enough to allow adequate root spread;
 - so that their original soil level matches the new surrounding ground;
 - so the original orientation is maintained.
- Excavate holes at least below the root system and loosen soil in base of hole.
For root-balled or bare-root stock, cut back any damaged roots to sound growth and apply mycorrhizal fungi.

1.3.05 **BACK-FILLING**
To be selected existing topsoil where available. Any imported soil/organic matter should be well mixed with at least equal quantities of existing soil. The back-fill is to be evenly worked round the roots and well heeled in leaving the top slightly proud of the existing level to allow for settlement.

1.3.06 **WATERING & PROTECTION**
Water thoroughly immediately after planting and at intervals as necessary. After the first watering mulch with 50 mm of composted coarse wood or bark chippings over the excavated area.

1.4 **PLANTING SHEDULE**

TREES

No.	Name	Pot/Plant Size, Density
3	Betula utilis "Jacquemontii"	Half standard, 1.5-2.0 m rootballed or container.
1	Crataegus x lavalleei	Half standard, 1.5-2.0 m rootballed or container.

SHRUBS & PERENNIALS

No.	NAME	Pot/Plant Size, Density
10	Choisya x dewitteana 'White Dazzler'	2 litre pots, 1/sq m
18	Hebe albicans 'Red Edge'	2-3 litre pots, 1.5/sq m
48	Lavandula 'Hidcote'	2-3 litre pots, 4/sq m
17	Prunus lusitanica	2 litre pot, 0.4 - 0.6m tall, Single row 0.5m apart
3	Rosa 'Tam 'O' Shanter'	David Austin, bare root or pot, 0.6m apart.
3	Rosa rugosa 'Hanza'	David Austin, bare root or pot, 0.6m apart.

2.1 **MAINTENANCE SPECIFICATION**

2.1.01 **OBJECTIVES**
The objectives of this maintenance specification centre on the maintenance and establishment of the soft landscape scheme, as shown on the drawing. The soft landscape scheme comprises:

- Specimen trees
- Hedgerow planting;
- Ornamental shrubs and grasses.

2.1.02 SPECIFICATION FOR THE MAINTENANCE OF SOFT LANDSCAPE AREAS
The maintenance of the proposed landscape scheme covers the initial 5-year aftercare period.

2.2 GENERAL REQUIREMENTS

2.2.01 REINSTATEMENT
Reinstate to original condition any damage or disturbance to soil structure, planting, grass, fencing, hard landscaping, structures or buildings.

2.2.02 WATERING GENERALLY
· Ensure full depth of topsoil is thoroughly wetted to aid plant establishment.
Do not damage or loosen plants.
· Where required, loosen soil to direct water to rootzone.

2.2.03 DISPOSAL OF ARISING
Unless specified otherwise, dispose of arisings from all operations and remove from site to a suitably licensed tip.

2.2.04 LEAF REMOVAL
Collect fallen leaves from lawns, ornamental planting beds and swale and remove from site for recycling.

2.2.05 PRUNING GENERALLY
Prune in accordance with good horticultural and arboricultural practice:
· Do not damage or tear the stem or bark when removing branches
· Keep wounds as small as possible and cut cleanly back to sound wood.
· Make cuts above and sloping away from an outward facing healthy bud, angled so that water will not collect on cut area.
· Prune larger branches neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide.
· Thin, trim and shape each specimen appropriately to species, location, season, and stage of growth, leaving a well balanced natural appearance.
· Use clean sharp secateurs, hand saws or other approved tools. Trim off ragged edges of bark or wood with a sharp knife.

2.2.06 PRUNING OF EXCESSIVE OVERHANG
Remove any growth annually, as outlined in Maintenance Schedules, encroaching onto grassed areas, paths, roads, signs, sightlines and light fittings.

2.3 PROPOSED SPECIMEN TREES

2.3.01 WATERING

Water Twice Monthly from April to October.

- Each tree to receive 40L of water at each scheduled watering operation to ensure roots are well irrigated
- Soil moisture: To ensure trees are well irrigated in dry conditions.
- o Omit or increase scheduled watering operations subject to assessment of prevailing weather conditions and soil moisture levels.

2.3.02 TREE STAKES AND TIES

Check stability of trees, especially after severe winds and firm as necessary (at least 4 inspections per year).

- Replace loose, broken or decayed stakes to original specification.
- If longer than half of clear tree stem height, cut to this height in spring. Retie to tree firmly but not tightly with a single tie.
- Adjust, refix or replace loose or defective ties, allowing for growth and to prevent chafing. Where chafing has occurred, reposition or replace ties to prevent further chafing.
- stakes and ties shall be removed during spring when no longer required to support the tree. Fill stake holes with lightly compacted soil.

2.3.03 WEEDS

Maintain a 1 m radius around each plant free from vegetation by hand weeding or spraying with glyphosate as scheduled. Remove dead vegetation 3 weeks after application.

2.3.04 REFIRMING OF TREES

Refirm trees after strong winds, frost heave and other disturbances.

- Tread around the base until firmly bedded.
- Collars in soil at base of tree stems, created by tree movement shall be broken up by fork, avoiding damage to roots. Backfill with topsoil and refirm.

2.3.05 FERTILIZER

Apply Multi purpose plant food and soil improver fertiliser each season in March or April.

- Spread evenly.
- Carefully lift and replace any mulch materials.
- Apply at manufacturer's recommended rate.

2.3.06 REPLACEMENT PLANTING

Replace any trees that have failed (between 1 November and 31 March).

2.3.07 DISEASE

Carry out annual check for signs of disease and undertake treatment as required.

2.3.08 PRUNING Carry out pruning as and when necessary to maintain natural habit of the tree, in keeping with good horticultural practice.

- 2.3.09 TREE WORK GENERALLY
- Before starting work agree which trees, shrubs and hedges are to be removed or pruned. Avoid damage to neighbouring trees, plants and property. · Standards: To BS 3998:2010 Recommendations for Tree Work, and Health & Safety Executive (HSE) 'Forestry and arboriculture safety leaflets'
 - Cut branches as Arboricultural Association Leaflet 'Mature tree management'.
 - Cut vertical branches similarly, with no more slope on the cut surface than is necessary to shed rainwater.
 - Leave trees with a well-balanced natural appearance.
 - All tree work is to be carried out by an approved member of the Arboricultural Association.
- 2.3.10 PREVENTION OF WOUND BLEEDING To BS 3998.
- 2.3.11 PREVENTION OF DISEASE TRANSMISSION To BS 3998.
- 2.3.12 CLEANING OUT AND DEADWOODING
- Remove:
- Dead, dying, or diseased wood, broken branches and stubs.
 - Fungal growths and fruiting bodies.
 - Wires, clamps, boards and metal objects, if removable without causing further damage and not part of a support structure that is to be retained.
- 2.3.13 CUTTING AND PRUNING GENERALLY
- Use appropriate, well maintained and sharp tools
 - Removing branches: Do not damage or tear the stem.
 - Wounds: Keep as small as possible, cut cleanly back to sound wood leaving a smooth surface, and angled so that water will not collect on the cut area.
 - Cutting: Cut at a fork or at the main stem to avoid stumps wherever possible.
 - Large branches:
 - o Remove in small sections and lower to ground with ropes and slings.
 - Dead branches and stubs: When removing, do not cut into live wood.
 - Unsafe branches: Remove epicormic shoots and potentially weak forks that could fail in adverse weather conditions
- 2.3.14 BARK DAMAGE
- Do not attempt to stop sap bleeding from wounds
 - Remove ragged edges and splintered wood from wounds using a sharp knife. · Keep wounds as small as possible.
- 2.3.15 MAINTENANCE OF MULCH
- Top up with same type of mulch to 50 mm thickness
 - Sweep and replace mulch spill on adjacent areas, if not contaminated with weeds and rubbish, return to planted area.

2.4 PROPOSED HEDGEROWS

2.4.01 WATERING

Water Twice Monthly from April to October.

- Ensure full depth of topsoil is thoroughly wetted to aid plant establishment.
- Soil moisture:
 - o To ensure plants are well irrigated in dry conditions.

2.4.02 WEEDS

Remove any weed growth within plant guards by hand and maintain a 0.3 m wide strip (on each side of the hedgerow) free from vegetation by weeding or spraying with glyphosate in early summer and late spring.

2.4.03 REFIRMING OF PLANTS

Refirm after strong winds, frost heave and other disturbances.

- Tread around the base until firmly bedded.
- Collars in soil at base of tree stems, created by tree movement shall be broken up by fork, avoiding damage to roots. Backfill with topsoil and refirm.

2.4.04 FERTILIZER

Apply Multi purpose plant food and soil improver fertiliser each season in March or April.

- Spread evenly.
- Carefully lift and replace any mulch materials.
- Apply at manufacturer's recommended rate.

2.4.05 REPLACEMENT PLANTING

Replace any plants that have failed (between 1 November and 31 March).

2.4.06 DISEASE

Carry out annual check for signs of disease and undertake treatment as required.

2.4.07 HEDGEROW PRUNING

New hedgerows will be pruned for the first 2 to 3 years to encourage dense bushy growth, in keeping with good horticultural practice

- Allow to reach planned dimensions only by gradual degrees, depending on growth rate and habit.

2.5 PROPOSED ORNAMENTAL SHRUBS AND GRASSES

2.5.01 WATERING Water Twice Monthly from April to October.

- Ensure full depth of topsoil is thoroughly wetted to aid plant establishment.
- Soil moisture:
 - o To ensure plants are well irrigated in dry conditions.

- 2.5.02 **ESTABLISHMENT OF NEW PLANTING**
Duration the initial establishment period of newly planted shrubs and grasses, carry out maintenance operations as follows:
- Keep planting beds clear of weeds by use of hand weeding and by maintaining full depth of mulch.
 - Maintain weed free beds, ensuring a weed free area around each shrub, minimum diameter the larger of 1 m or the surface of the original planting pit.
 - Fork over beds to keep soil loose, with gentle cambers and no hollows. Do not reduce depth or effect of mulch.
- 2.5.03 **FERTILIZER**
Apply Multi purpose plant food and soil improver fertiliser each season in March or April.
- Spread evenly.
 - Carefully lift and replace any mulch materials.
 - Apply at manufacturer's recommended rate.
- 2.5.04 **REFIRMING OF PLANTS**
Refirm after strong winds, frost heave and other disturbances.
- Tread around the base until firmly bedded.
 - Collars in soil at base of tree stems, created by tree movement shall be broken up by fork, avoiding damage to roots. Backfill with topsoil and refirm.
- 2.5.05 **PRUNING ORNAMENTAL SHRUBS AND GRASSES**
- Prune to encourage healthy and bushy growth and desirable ornamental features, e.g. flowers, fruit, autumn colour, stem colour.
 - Remove suckers by cutting back level with the source stem or root.
- 2.5.06 **PRUNING FLOWERING SPECIES**
- Winter flowering shrubs in Spring.
 - Shrubs flowering between March and July, immediately after the flowering period.
 - Shrubs flowering between July and October, back to old wood in winter.
 - Rose bushes in early spring to encourage basal growths and a balanced, compact habit.
- 2.6.07 **REMOVAL OF DEAD PLANT MATERIAL**
At the end of the growing season, check all shrubs and remove all dead foliage, dead wood, and broken or damaged branches and stems.
- 2.6.08 **DEAD AND DISEASED PLANTS**
Remove plants as soon as possible and replace in the next scheduled round of replacement planting.

- 2.6.09 REINSTATEMENT OF SHRUBS AND GRASSES
- Remove dead and damaged plants:
 - o Carefully move mulch to one side and dig over the soil, leaving it fit for replanting.
 - o Do not disturb roots of adjacent plants.
 - Replacement plants:
 - o To original specification or to match the size of adjacent or nearby plants of the same species, whichever is the greater.
 - o Submit details and cost of plants for approval before ordering.
 - o Dressing with soil Association certified organic granular slow release fertiliser applied at manufacturer's recommended rate.

- 2.6.10 HAND WEEDING
- Remove weeds entirely, including roots.
 - Remove the minimum quantity of soil, and disturb plants, bulbs and mulched surfaces as little as possible.
 - Upon completion, rake area to a neat, clean condition.
 - Reinstate mulch to original depth.

- 2.6.11 SOIL AERATION
- Prick up to aerate the soil of root areas and break surface crust and reduce to crumb and level off. Do not damage plants and their roots.

- 2.6.12 SOIL LEVEL ADJUSTMENT
- Reduce level of soil/mulch at edges of beds to 50 mm below adjacent grass or hard surface. Spread arisings (if any) evenly over the bed.

- 2.6.13 MAINTENANCE OF MULCH
- Top up with same type of mulch to 50 mm thickness
 - Sweep and replace mulch spill on adjacent areas, if not contaminated with weeds and rubbish, return to planted area.

2.7 PROPOSED GRASS AREAS

- 2.7.01 MAINTENANCE OF GRASSED AREAS
- Maintain grass areas in a manner appropriate to the intended use.
- Maintain a healthy vigorous sward, free from disease, fungal growth, discolouration, scorch or wilt.
 - Prevent waterlogging and compaction.
 - Repair damage from trampling, abrasion or scalping.
 - Maintain grass areas so as to be reasonably free from moss, excessive thatch, weeds, frost heave, worm casts and mole hills.
 - Edges to be kept neat and well defined, in clean straight lines or smooth flowing curves.

- 2.7.02 **MAINTENANCE OF GRASSED AREAS**
Maintenance to be carried out to BS 7370-3. Carry out maintenance appropriate to each category of turf, as follows:
- To achieve maintenance objectives to BS 7370-3, table 6.
 - To a maintenance programme to BS 7370-3, clause 11.
 - Using appropriate mowing methods to BS 7370-3, table 3.
- 2.7.03 **GRASS CUTTING GENERALLY**
- Finish to be neat and even, without surface rutting, compaction or damage to grass.
 - Leave edges neat and well defined. Neatly trim around obstructions.
 - Adjoining hard areas are to be swept clear and arisings removed.
 - Avoid grass cutting during periods of extreme rainfall and drought.
- 2.7.04 **TREE STEMS**
Do not use mowing machinery closer than 100 mm to tree stems. Use nylon filament rotary cutters and other handheld mechanical tools carefully to avoid damage to bark.
- 2.7.05 **MOWING GRASS AREAS**
Maintain grass height: between 25 and 50 mm.
- 2.7.06 **RE-FORMING GRASS EDGES**
For all edges abutting paths, manhole covers, borders and the like:
- Draw back soil and re-form edges to clean straight lines or smooth flowing curves, sloping slightly back from vertical.
- 2.7.07 **FERTILIZER**
Apply approved appropriate lawn fertiliser each Spring and Autumn.
- Spread evenly.
 - Apply at manufacturer's recommended rate.
- 2.7.08 **REINSTATEMENT OF DAMAGED LAWN**
Reinstate worn areas as follows:
- Remove damaged turf to a depth of 150 mm.
 - Cultivate substrate to a fine tilth.
 - Reinstatement with either:
 - o turfing with turf of a quality and appearance to match existing. or
 - o topsoiling to BS 3882 multi-purpose class, free from stones, debris and weeds, and reseed with a seed mix to match existing grass in quality and appearance.

Gareth Price Architect

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