

AA21280 – WHITEHILL ROAD, MEOPHAM

SOFT LANDSCAPE MAINTENANCE SCHEDULE

1. INTRODUCTION

- 1.1. This document has been prepared to define the maintenance requirements for soft landscape areas.
- 1.2. This document should be read in conjunction with the respective drawings.
- 1.3. This maintenance specification sets out the following:
 - Specification for the Landscape Operations; and
 - Annual Maintenance Schedules of Operations.

2. OBJECTIVES

2.1. The objectives of this maintenance specification are the successful installation, maintenance and establishment of the soft landscape scheme for the project.

2.2. The proposed landscape scheme aims to provide an attractive environment and setting for the project

2.3. The soft landscape scheme generally comprises, as applicable:

- Specimen trees
- Hedgerow planting;
- Ornamental shrubs and grasses;
- Areas of grass, and
- Bulb planting.

2.4. The maintenance specification requirements of each soft landscape component are described in more detail in Section 3.

3. SPECIFICATION FOR THE MAINTENANCE OF SOFT LANDSCAPE AREAS

3.1. The maintenance of the proposed landscape scheme covers the initial 5-year aftercare period.

General and detailed requirements for each landscape feature and habitat type are provided below:

3.2. GENERAL REQUIREMENTS

3.2.1. NOTICE TO Client

Give 2 days' notice before the following operations:

- Application of fertilizer.
- Watering.
- Tree works

3.2.2. REINSTATEMENT

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

3.2.3. CONTROL OF MAMMALIAN PESTS

Only approved specialist firms and methods to be used. Contractor to submit proposals to Client for written approval.

3.2.4. WATERING GENERALLY

For specific watering requirements and frequency to individual areas refer to Schedules 1 to 5.

- Obtain Client's written approval before using a supply other than Potable mains water.
- 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.

3.2.5. WATER RESTRICTIONS

If water supply is, or is likely to be, restricted by emergency legislation, submit proposals for an alternative suitable source of water. Obtain instructions before proceeding.

3.2.6. DISPOSAL OF ARISING

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

3.2.7. CHIPPING OR SHREDDING ON SITE

Chipping or shredding on site is not permitted on site.

3.2.8. LITTER

Collect and remove from site all extraneous rubbish not arising from the contract work and detrimental to the appearance of the site.

3.2.9. PROTECTION OF EXISTING GRASS

Protect areas affected by maintenance operations using boards/tarpaulins. Do not place excavated or imported materials directly on grass.

3.2.10. CLEANLINESS

Remove soil and arisings from hard surfaces and leave the works in a clean, tidy condition at completion and after any maintenance operations.

3.2.11. LEAF REMOVAL

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

3.2.12. 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.
- Give notice to Client if disease or infection is detected.
- Do not use growth retardants, fungicide or pruning sealant unless instructed.

3.2.13. PRUNING OF EXCESSIVE OVERHANG

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

3.3. PROPOSED SPECIMEN TREES

3.3.1. 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, Client to instruct additional watering operations as required
 - Client may omit scheduled watering operations subject to assessment of prevailing weather conditions and soil moisture levels
- Crown spraying. During evening hours, when instructed by Client

3.3.2. 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.

3.3.3. WEEDS

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

3.3.4. 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.

3.3.5. 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.

3.3.6. REPLACEMENT PLANTING

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

3.3.7. DISEASE

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

3.3.8. PRUNING

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

3.3.9. 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.
- Operatives must hold a Certificate of Competence for chain saw work.
- All tree work is to be carried out by an approved member of the Arboricultural Association.

3.3.10. ADDITIONAL WORK

Defective, diseased, unsafe or weak parts of trees additional to those scheduled for attention: Give notice if detected.

3.3.11. PREVENTION OF WOUND BLEEDING

To BS 3998, clause 8.

3.3.12. PREVENTION OF DISEASE TRANSMISSION

To BS 3998, clause 9 and Appendix B.

3.3.13. CLEANING OUT AND DEADWOODING

Remove:

- Dead, dying, or diseased wood, broken branches and stubs.
- Fungal growths and fruiting bodies.
- Rubbish, windblown or accumulated in branch forks.
- Wires, clamps, boards and metal objects, if removable without causing further damage and not part of a support structure that is to be retained.
- Other unwanted objects, e.g. tree houses, swings.

3.3.14. CUTTING AND PRUNING GENERALLY

- Use appropriate, well maintained and sharp tools
- For final pruning cuts:
 - Do not use chainsaws on branches of less than 50 mm diameter.
 - When using handsaws, form a smooth cut surface.
 - Do not use anvil type secateurs.
- 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: Remove only with prior approval from Client

- 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.
- Disease or fungus: Give notice if detected. Do not apply fungicide or sealant unless instructed.

3.3.15. CROWN REDUCTION/ SHAPING

Cut back selectively to lateral or sub-lateral buds or branches to retain flowing branch lines without leaving stumps.

3.3.16. CROWN LIFTING

- Remove branch systems to give clearance to a height as instructed by Client.
- Remove whole branches back to the stem or cut lower portions of branches back to lateral or sub-lateral buds or branches. Do not leave stumps.

3.3.17. 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.
- Inform Client immediately if liquid or flux oozing from apparently healthy bark.

3.3.18. 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.

3.4. PROPOSED HEDGEROWS

3.4.1. WATERING

Water Twice Monthly from April to October.

- Ensure full depth of topsoil is thoroughly wetted to aid plant establishment.
- Soil moisture:
 - To ensure plants are well irrigated in dry conditions, Client to instruct additional watering operations as required
 - Client may omit scheduled watering operations subject to assessment of prevailing weather conditions and soil moisture levels

3.4.2. PLANT GUARDS

Plant guards to be straightened and ties checked during each inspection (at least 4 inspections during the year) and adjust to avoid chaffing and other damage.

- Guards to be removed at the appropriate time, typically during 4th or 5th year, dependent on the mammal population.

3.4.3. 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 spraying with glyphosate in early summer and late spring.

3.4.4. 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.

3.4.5. 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.

3.4.6. REPLACEMENT PLANTING

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

3.4.7. DISEASE

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

3.4.8. 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. Refer to respective drawings for planned heights.

3.5. PROPOSED ORNAMENTAL SHRUBS AND GRASSES

3.5.1. WATERING

Water Twice Monthly from April to October.

- Ensure full depth of topsoil is thoroughly wetted to aid plant establishment.
- Soil moisture:
 - To ensure plants are well irrigated in dry conditions, Client to instruct additional watering operations as required
 - Client may omit scheduled watering operations subject to assessment of prevailing weather conditions and soil moisture levels

3.5.2. 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 planting 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.
- Watering: as outlined in Maintenance Schedule 6.

3.5.3. 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.

3.5.4. 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.

3.5.5. 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.

3.5.6. 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.

3.5.7. 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.

3.5.8. DEAD AND DISEASED PLANTS

Remove plants as soon as possible and replace in the next scheduled round of replacement planting.

3.5.9. REINSTATEMENT OF SHRUBS AND GRASSES

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

3.5.10. THINNING BY REMOVAL OF SURPLUS PLANTS

- Thin all plants except hedge planting using methods within BS 7370-4.
- Begin when foliage of adjacent plants has begun to touch.
- Minimise disturbance to adjacent plants
- Refill holes with topsoil to leave an even graded surface.
- Maintain mulch as original specification.
- Make good any minor damage to adjacent plants immediately.
- Select plants for retention that have a strong healthy habit.
- Mature planting density to be agreed with Client.

3.5.11. 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.

3.5.12. 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.

3.5.13. 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.

3.5.14. 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.

3.6. PROPOSED AMENITY GRASS AREAS

3.6.1. 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.
- Remove Litter and fallen leaves regularly to maintain a neat appearance.

3.6.2. 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.

3.6.3. GRASS CUTTING GENERALLY

- Before mowing remove litter, rubbish and debris.
- 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.
- Obtain instructions from Client in drought or wet conditions.

3.6.4. 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.

3.6.5. MOWING GRASS AREAS

Maintain grass height: between 25 and 50 mm. Use Mulching mower to allow cut and drop of arisings

3.6.6. 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.

3.6.7. FERTILIZER

Apply approved appropriate lawn fertiliser each Spring and Autumn.

- Spread evenly.
- Apply at manufacturer's recommended rate.

3.6.8. 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:
 - returfing with turf of a quality and appearance to match existing. or
 - 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.

3.7. PROPOSED BULB AREAS

3.7.1. BULBS IN GRASSED AREAS

Do not cut bulb areas before flowering

- Interval between end of bulb flowering and start of grass cutting (minimum): Six weeks.
- Box and remove arisings from site after first cut
- Following first cut, bulb areas shall be maintained as noted.

Maintenance Schedules: List of Operations, Timing and Frequency. To be repeated each year for duration of maintenance period.

The schedules below list the timing of key annual operations for specific soft landscape types, as shown on the respective drawings. For the required standard, the schedules should be read in conjunction with Specification for Maintenance and BS7370: Part 4 Grounds maintenance - Recommendations for maintenance of soft landscape.

The contractor shall provide rates for completion of a single operation, for the items where spaces are provided.

N.B. Rates given may be used to omit items by the Client as deemed appropriate based on prevailing weather and site operational requirements

Schedule 1: General															
	Operation	Frequency	J	F	M	A	M	J	J	A	S	O	N	D	Rate per operation
1	Litter pick	Monthly	x	x	x	x	x	x	x	x	x	x	x	x	
2	Removal of fallen leaves	Twice a year										x	x	x	

Schedule 2: Specimen Trees															
	Operation	Frequency	J	F	M	A	M	J	J	A	S	O	N	D	Rate per operation
1	Tree inspection for damage and disease	Annually							x						
2	Assessment of dead/missing trees	Annually									x				
3	Replace dead/missing trees	Annually												x	
4	Weed Control to all tree surrounds	Monthly from March to October			x	x	x	x	x	x	x	x			
5	Watering	Twice Monthly from April to October				x	x	x	x	x	x	x			
6	Spray Crown	As instructed in spells of dry weather during the evening (First two years after planting only)				x	x	x	x	x	x				
7	Re-firming	Monthly	x	x	x	x	x	x	x	x	x	x	x	x	
8	Pest & disease control	When required	x	x	x	x	x	x	x	x	x	x	x	x	
9	Check tree support (adjust & replace as required)	Monthly	x	x	x	x	x	x	x	x	x	x	x	x	
10	General pruning (subject to species)	As instructed											x		
11	Fertilizer	One application annually (in March or April)			x	x									
12	Mulching – topping up	Twice a year				x						x			

Schedule 3: Hedgerows															
	Operation	Frequency	J	F	M	A	M	J	J	A	S	O	N	D	Rate per operation
1	Assessment of dead/missing plants	Annually									x				
2	Replace dead/missing plants	Annually												x	
3	Weed Control to all plants	Monthly from March to October			x	x	x	x	x	x	x	x			
4	Watering	Twice Monthly from April to October				x	x	x	x	x	x	x			
5	Re-firming	Monthly	x	x	x	x	x	x	x	x	x	x	x	x	
6	Pest & disease control	Once during growing season				x	x	x	x	x					
7	Check plant guards (adjust & replace as required)	Monthly		x			x			x			x		
8	Formative pruning	When required								x			x		
9	Fertilizer	One application annually (in March or April)			x	x									

Schedule 4: Ornamental Shrubs and Grasses															
	Operation	Frequency	J	F	M	A	M	J	J	A	S	O	N	D	Rate per operation
1	Assessment of dead/missing plants	Annually									x				
2	Replace dead/missing plants	Annually										x			
3	Weed Control to all plants	Monthly from March to October			x	x	x	x	x	x	x	x			
4	Watering	Twice Monthly from April to October				x	x	x	x	x	x	x			
5	Re-firming	Monthly	x	x	x	x	x	x	x	x	x	x	x	x	
6	Fertilizer	One application annually (in March or April)			x	x									
7	Soil Aeration	Twice a year			x							x			
8	Remove dead/faded flowers throughout season (dependent upon species) to prolong flowering period	Monthly	x	x	x	x	x	x	x	x	x	x	x	x	
9	Cut dead growth back to ground level (dependent upon species).	Annually (February or March)		x	x										
10	Mulching – topping up	Twice a year				x						x			

Schedule 5: Grass Areas (Including Bulb Areas)															
	Operation	Frequency	J	F	M	A	M	J	J	A	S	O	N	D	Rate per operation
1	Weed Control	Twice a year					x				x				
2	Fertilizer application	Two applications annually (in April or September)				x					x				
3	Mowing (For bulb areas, mowing to commence 6 weeks after end of bulb flowering period - typically July to October)	Weekly from March to October			x	x	x	x	x	x	x	x			
4	Trim/re-form edges	Monthly from March to October			x	x	x	x	x	x	x	x			
5	Re-cultivation and seeding of any failed or worn areas	When required									x				
6	Thatch/moss removal	Annually			x										