

Landscape management and maintenance plan

The following are the short term aims and objectives of this Management Plan.

- To manage the existing vegetation within the site so as to maintain or improve its long term viability and contribution to the character
- To manage the site in a beneficial way for wildlife and so as to encourage wildlife to the site.
- To replace any plants that fail to show growth or develop full foliage within the next planting season.

Planting, Establishment and Maintenance

The following specifications will be used in the planting, establishment and maintenance of the landscape proposals. All planting will take place between November-March. All works to be undertaken under the direction of the current or future site owner.

Soil

Topsoil will be specified for use in formal planting areas and for tree and hedgerow planting areas.

Imported Topsoil (If applicable)

This shall comply with BS 3882 (2007): good quality medium to light loam, free of perennial weeds. Stone content 20% dry weight.

Spreading Imported Topsoil (If applicable)

To achieve a depth of at least 150 mm in grass areas, 300 mm for shrub beds and 600 mm for tree planting areas. Remove existing topsoil if necessary - for instance due to poor structure or contamination. Break up the depth of the surface on which the topsoil is to be laid to 150 mm. Spread topsoil in layers of 150 mm in suitable weather conditions or ground conditions. All layers are to be levelled and lightly rolled to avoid slippage or localised collapse. Avoid compaction and destruction of tilth. All levels to marry in with existing levels.

Shrub Bed(s)

Establishment and Maintenance

All plant material shall be as specified in the plant schedule. Plants to be well formed and healthy with a vigorous rooting system and true to size and type. Planting bed(s) shall be cultivated to a depth of 150 mm, cleared free of weeds and other rubbish, and stone picked to remove stones over 25 mm in diameter. Consolidate and rake to a fine tilth. It may be necessary to carry out several cultivations in some areas to achieve the required standard of tilth. Place species as shown.

Allow for watering immediately after planting. Until establishment after a period of 7 continual days when there has been less than 20 mm of rainfall the areas shall be carefully watered to avoid scorching of plants, surface capping and run-off until the soil is moist to a depth of 300 mm.

Undertake weed control to ensure good growth and survival of plants. The necessity for weeding should reduce as plants become established. Weed control will incorporate a mixture of:

- hand weeding

- wood chip mulch to 75 mm consolidated depth. Mulch would be laid at the time of planting. Mulch will be medium textured decorative grade natural pine bark. The mulch will be topped up to 75 mm depth (if required) on an annual basis in the spring or autumn.

- chemical means. A contact herbicide such as Glyphosate will be used for persistent or excessive weed growth. Spraying to be undertaken with care so as not to damage plants. Spraying will take place in still weather to avoid spray drift.

Prune species where required to maintain vigour and form. All pruning to be undertaken according to species type. Losses will be replaced where required to fill gaps in the canopy

Grass Areas

Sowing, Establishment and Maintenance of New Areas

Sow seed or lay turf in autumn or spring into areas of topsoil as established above (if required).

Grass areas shall be cultivated to a depth of 150 mm, cleared free of weeds and other rubbish, and stone picked to remove stones over 25 mm in diameter. Consolidate and rake to a fine tilth - it may be necessary to carry out several cultivations in some areas to achieve the required standard of tilth. Apply 50g/m² of an approved pre-seeding fertiliser such as Miracle Long Life preseeded.

Apply in two equal applications in transverse directions and work into a depth of 50 mm. Seed area at 35 g/m² with a rye grass based seed mixture such as Perryfields Pro80. Gently rake in.

Grass finished levels at kerb, gulleys, manholes and other horizontal surfaces will finish 25mm above these hard surfaces and be as indicated in the appropriate standard detail.

Allow for watering immediately after planting. Until establishment after a period of 7 continual days when there has been less than 20 mm of rainfall the areas shall be carefully watered to avoid scorching of plants, surface capping and run-off until the soil is moist to a depth of 300 mm.

At a height of 100 mm (approximately 6-8 weeks after sowing) the area should be cut using a rotary mower. The sward should be reduced in two stages down to 80 mm and then 60 mm.

All amenity grass areas (including existing areas) will then be maintained at between 50-75 mm.

Any gaps in the sward will be filled by preparing and seeding as set out above.

Hedgerows (existing)

Maintenance

Maintenance of the existing native hedgerows on three boundaries will become the responsibility of the new owners. Hedges to be reduced as shown on the plans.

If there are any gaps within the hedge line the following methodology is proposed to regenerate the hedge and ensure its long term survival. Over mature or leggy small trees and shrubs should be reduced to at least 1.2-1.5 m and allowed to regenerate. Subsequently maintain hedge at 2.0 m height. Gaps in the hedge would then be planted as set out in the specification below. Plants may need to be protected with tree guards or fencing (for instance) if predation by species such as rabbits is assessed as being a problem.

Native Hedge Specification

Plant the native hedge mix to fill gaps in existing hedge. Plant species at 50 cm centres in a double row where possible. Plants to be 60-90 cm height and supplied bare root. Species to be used: Crataegus monogyna (Common Hawthorn) - 70%, Acer campestre (Field Maple) - 10%, Dogwood (Cornus sanguinea) - 5%, Lonicera periclymenum (Common Honeysuckle) - 5%, Guelder Rose (Viburnum opulus) - 5 % and Rosa canina (Dog Rose) - 5%

Maintain within legal constraints such as the Wildlife and Countryside Act (1981). For instance all main pruning works will be undertaken between September and February to avoid the main bird nesting season.

New Hedgerows

Planting

This should be undertaken between November and March avoiding bad weather conditions or when the soil is frozen. Plant species as set out on Landscape Plan - in a cultivated strip, approximately 600 mm wide by 300 mm deep. This ensures that the roots of each plant are placed into the optimum cultivated conditions for good root development. Plant in the soil to the same depths that the plants were in the nursery.

Establishment and Maintenance

If required use spiral guards or similar to protect plants from damage by rabbits and other rodents. Establish the hedge guards firmly in the ground using a stake or cane as they are otherwise liable to blow over in strong winds. Guards will be checked periodically to ensure that they have not fallen over and are not damaging the plant.

Allow for watering immediately after planting. Until establishment (2-3 years) after a period of 7 continual days when there has been less than 20 mm of rainfall the areas shall be carefully watered to avoid scorching of plants, surface capping and run-off until the soil is moist to a depth of 300 mm.

Undertake weed control during the first three years after planting to ensure good growth and survival of hedge plants. This will incorporate a mixture of:

- hand weeding
- wood chip mulch to 75 mm consolidated depth. Mulch would be laid at the time the hedge is planted. Mulch will be medium textured decorative grade natural pine bark.
- chemical means. A contact herbicide such as Glyphosate will be used for persistent or excessive weed growth. Spraying to be undertaken with care so as not to damage hedging plants. Spraying will take place in still weather to avoid spray drift.

Once the hedges are established (2-4 years) they will be lightly trimmed, taking off only a few centimeters of growth to encourage the stems to branch out the following season. Hedge guards will be removed from the plants once they have grown beyond the reach of browsing rodents.

Gapping Up

Where hedge plant losses total over 5% of total hedge length or are concentrated such that a section of hedge over 0.5 m is affected then these losses will be replaced in the next planting season.

Trees (existing)

Existing trees shall be maintained in a safe and healthy condition. They will be maintained by the new owners in the future.

Any work subsequently required to existing trees shall be undertaken in accordance with recommendations set out in BS3998 - 'Tree Works - Recommendations'.

The trees to be retained on the site shall be protected, and in particular the following:

A. All trees to be retained should be protected to British Standard BS 5837: 2012 before any heavy equipment is brought on site for clearance. This is to protect tree canopies and also their roots. The roots can easily be damaged due to the effects of soil compaction, which can alter the amount of oxygen and water which reaches them. Feeder roots are generally in the top 18 inches of soil, and there is often a concentration of roots near the canopy drip line. The roots and canopies of those bordering the site should also be taken into account with respect to this.

B. Cement washings must not be deposited and no equipment should be stored beneath the canopies of trees, nor fires lit beneath trees.

C. Service trenches should not be constructed under the canopies of trees.

D. New drains and soak-aways should be avoided under the canopies of trees.

E. Archaeological excavations should be avoided below the canopies of trees.

F. In the unlikely event that excavation under the tree canopy is unavoidable please note:

i) Excavations must be carried out by hand and any roots encountered over 25 mm in diameter should be retained. (Where possible, smaller roots should also be retained, and great care taken to minimise damage to them). If severance is unavoidable, roots must be cut back using a sharp tool to leave a clean wound to encourage healing.

ii) Exposed roots must not be allowed to dry out during works.

iii) Should the roots be exposed overnight with the likelihood of frost, they must be covered / wrapped with dry sacking for protection. All sacking should be removed before the trench is backfilled.

G. Backfilling.

When backfilling with soil; care must be taken to protect the roots.

i) In a highway situation, or where tar macadam or a hard surface is being laid the addition of a granular material mixed with the topsoil or sharp sand (not builders' sand as it is too fine) around the retained roots is suggested. This should allow the surface to be compacted for resurfacing without damage to the roots, and should secure a local aerated zone enabling the roots to survive in the longer term.

ii) In a non highway situation or where tar macadam or a hard surface is not being used, excavated soil should be backfilled and be lightly 'tamped' and usually left 'proud' to the surrounding surface to allow natural settlement.

iii) In some circumstances trenches should be backfilled and compacted by hand to minimise the damage to tree roots.

H. The soil levels should not be altered around the base of trees. An increase in soil level around the base of a tree can make conditions adjacent to the trunk damp and suitable for fungal growth. It can also increase the distance for water / gaseous exchange to the tree's roots. Obviously a lowering of the soil level can expose tree roots. Both can be detrimental to the health of the tree.

New Trees

Planting

Standard trees and whips will be planted in tree pits or trenches which are to be dug at least 300 mm wider than the root spread to avoid cramping of roots. The base of the pit to be broken up to at least 150 mm to allow for root penetration. The sides of the pit or trench to be scarified to remove smearing and allow root penetration. For standard trees a softwood stake shall be driven into the windward side of the tree and secured using a tree tie. The stake to be approximately a third of the height of the tree, pointed at one end and 75 mm diameter. The stake to be protected with non-toxic preservative.

Establishment and Maintenance

Allow for watering immediately after planting. Until establishment (3-5 years) after a period of 7 continual days when there has been less than 20 mm of rainfall the areas shall be carefully watered to avoid scorching of plants, surface capping and run-off until the soil is moist to a depth of 300 mm.

If required use spiral guards or similar to protect plants from damage by rabbits and other rodents. Establish the tree guard firmly in the ground using a stake or cane as they are otherwise liable to blow over in strong winds. Guards will be checked periodically to ensure that they have not fallen over and are not damaging the plant.

Undertake weed control during the first three years after planting to ensure good growth and survival of trees. This will incorporate a mixture of:

- hand weeding
- wood chip mulch to 75 mm consolidated depth. Mulch would be laid at the time the hedge is planted. Mulch will be medium textured decorative grade natural pine bark.
- chemical means to create a 1.0 m wide weed free area around the tree stem. A contact herbicide such as Glyphosate will be used for persistent or excessive weed growth. Spraying to be undertaken with care so as not to damage trees or adjacent plants. Spraying will take place in still weather to avoid spray drift.

Monitor and adjust stakes and ties regularly - at least twice a year. Remove stakes and ties when trees are established (3-5 years).

Replacement trees

All tree losses will be replaced within the next planting season with a tree of the same specification as that removed.

Pruning

Unless specified otherwise, pruning shall be limited to the minimum necessary to maintain good form and vigour and to remove dead, diseased or damaged branches. This work will conform to BS 3998 'Tree Works - Recommendations'.

Trees will be checked annually and after bad weather - such as storm events – to check for any pruning requirements.

Thinning of Whips

Areas of whip planting shall be thinned to remove poor quality or dead trees and to allow the establishment of trees to form a 'natural' wooded area. Trees to be removed and the ultimate density of trees shall be based on an assessment of the area on an annual or biannual basis.

Landscape Management and Maintenance Plan Review

Once annually in September, the site owner in consultation with the landscape contractor any specialist consultants required, shall assess and review the management procedures for the site. This shall include the condition of the trees, shrubs, hedgerows and grass areas within the site. Any measures to ensure the continued health and vitality of these elements and their wildlife benefits will be considered and implemented as required. This may include changes to the management of these elements and replacement of dead or dying plant material where required.

Furthermore this review shall address issues of general horticultural husbandry such as the removal of stakes and ties from trees and new hedging material.