Landscape and Habitat Enhancement & Maintenance Plan

Foxlow Farm, Buxton Keepmoat

BM3 Architecture

53016

Planning Issue

JULY 2018

Revised

Contents

1.0	Introduction	1
2.0	Aims & Objectives	1
3.0	Maintenance Contract	1
4.0	Management Specification	2
5.0	General Arrangements	2
6.0	General Information / Requirements	3
7.0	The Schedule	9

Appendix

- A National Building Specification, Q35 Landscape Maintenance
- **B** BM3 Drawing Maintenance Responsibility Plan & Planting Plan

Prepared for

Keepmoat

March 2018

All enquiries regarding this Specification should be directed to Ross Pritchard, Principal Landscape Architect

BM3 Architecture Ltd,

28 Pickford Street, Digbeth, Birmingham, B5 5QH T. 0121 633 0000 E. rossp@bm3.co.uk

1.0 Introduction

This document has been prepared by BM3 Architecture on behalf of Keepmoat in support of landscape proposals for a residential development at Foxlow Farm, Buxton. The document should be read in conjunction with BM3 drawings: Soft Landscape –& Maintenance Responsibility Plan.

This specification sets out the maintenance and aftercare regimes required for the establishment of landscape components, habitats and infrastructure for the Public Open Space (POS) as part of the planned proposals for Foxlow Farm, Buxton.

The specification is comprised of several elements including; aims and objectives, maintenance prescriptions and scheduling of works. Combined, these aspects will assist in regulating the management and maintenance regimes of the operators at Foxlow Farm, Buxton.

New homeowners and tenants should be provided a copy of this report as part of their operation and maintenance package upon purchase or occupation of their home.

2.0 Aims & Objectives

The aim is to offer the appropriate maintenance techniques to both existing landscape features and the proposed landscape works.

The overall objectives of the management specification are as follows:

- To improve the overall biodiversity value of the Site and encourage the long term health of all new landscape elements for the benefit of the users and the local wildlife;
- To maintain and enhance the copses around the site to ensure their longevity.
- To maintain a clean and tidy finish to all external areas including all elements of soft landscaping, grass sward and tree planting;
- To ensure best horticultural and health and safety practices at all times;
- To ensure methods employed to enhance and encourage wildlife, wherever possible (ie Glyphosate and Neonicotinoids should not be used on site);
- To identify early defects in the landscaping and address these quickly by working collectively with the Land Owner.

3.0 Maintenance Contract

The Site is comprised of four key end users (excluding areas adopted by highways). The private drives, the private tenants/owners of the Dwellings, The Allotments and the privately managed Open Spaces. The maintenance of the site will be split into two key parts that which will be maintained by tenants/owners of the dwellings and that by a management company. Upon completion of the rectification period the private drives & the private tenants/owners of the Dwellings will be privately maintaining their land. The Allotments will be leased to a residents / allotment group on a peppercorn agreement being maintained and operated by them in perpetuity, The Open Spaces and Incidental Spaces will be owner by Keepmoat and maintained by a Management Company. Maintenance works will be inspected regularly on Site during this time by an official representative of the Land Owner. See Maintenance Responsibility Plan for details. In addition the offsite offsetting will be maintained by the current landowner.

The landscape maintenance appointment will be made with a Standard Term Contract; JCLI Contract for Landscape Maintenance Works 2012. The contractor must be a current member of BALI, Constructionline and/or CHAS.

It is the responsibility of the contractor to fully understand the location, context, access / egress and types of maintenance works required before tendering and undertaking works on site. It is the responsibility of the contractor to ensure all works are carried out in full compliance with wildlife legislation, including giving full consideration to Species such as nesting birds, roosting bats, sheltering hedgehogs and badgers during all maintenance works.

4.0 Management Specification

The contractor is to produce Health & Safety Method Statements for all operations including the composting of materials and disposal of arisings off site.

Contractors should be aware of ecological implications of management, such as how to maintain a viable wildflower meadow, wetland and the woodland habitat.

All materials and workmanship are to be to the highest possible standards in accordance with relevant good practice and cost effectiveness.

All operatives are to be appropriately skilled and experienced for the type and quality of work required and its context, especially where Control of Substances Hazardous to Health (COSHH) is applicable.

Only tools and machinery suitable for the defined tasks are to be utilised. All machinery must be correct and in optimum condition to carry out the works.

All arisings are to be carted off site and disposed of appropriately under current legislation at a tip sourced by the contractor. All grass clippings, unless otherwise instructed, are to be collected and also disposed of offsite.

All planting and grass sward areas are to be watered as necessary to ensure their continued thriving especially during drought conditions. Contractor will be able to access clean water supply via external stand pipes or taps.

5.0 Management Objectives

The list of management aims and objectives most of which are achievable within the 5 year time frame of this Management Plan are listed below. Specific maintenance objectives have been added where the habitat is expected to take longer to achieve the target condition. The aims are to safeguard and enhance the wildlife habitats so that they provide suitable habitats for faunal species.

The aim is to offer the appropriate maintenance techniques to both existing landscape features and the proposed landscape works.

The general objectives of the management specification are as follows:

- To maintain a clean and tidy finish to all external areas including a to all elements of soft landscaping, grass sward and tree planting within the residential area;
- To ensure best horticultural and health and safety practices at all times;
- To identify early defects in the landscaping and address these quickly by working collectively with the Landowner.

The rationale for the objectives and policies is detailed in later in this section and the management prescriptions and a plan of work is provided in Section 6 & 7.

The ecological management aims and objectives are:

- 1) To maintain the woodland / copse in its current condition.
- 2) To maintain and enhance the biodiversity on site.
- 3) To maintain and enhance the trees and shrubs.
- 4) To maintain and enhance the new wildflower grassland.
- 5) To maintain and enhance the new native/ornamental hedgerow.

- 6) To maintain and enhance the new SUDS.
- 7) To maintain the bat roosting boxes, bird nesting boxes and insect boxes.
- 8) To preserve the character of the offsite copses with offsite enhancement works.

OBJECTIVE 1 – WOODLAND / COPSE

To maintain the woodland / copse

Rationale

The strip of woodland adjacent to Ashbourne Road is covered by a TPO and provides potential habitat for a variety of faunal species including foraging and commuting bats, nesting birds and the woodland ground flora and logs provide potential cover and sheltering habitat and resting places for mammals.

Woodland is a conservation priority on the national BAP.

Policy

- 1) The woodland / Copse should be left as a non-intervention area. The working area will start 15m from this line as marked on the TPP. This area will help create a buffer between the development and Woodland / Copse. There will be permanent fencing between the woodland/ copse and the development, therefore, this will ensure interference is minimal.
- 2) All fallen dead wood will be retained within the woodland area.
- 3) Any standing dead wood will be retained where it is safe to do so; however, if a qualified arborist identifies the dead wood as unsafe then it will be removed by an experienced tree surgeon. Firstly a bat roost scoping survey would be carried out by a licensed bat ecologist prior to felling to determine the presence/absence of roosting bats. If roosting bats were present, the bat ecologist will provide appropriate advice.
- 4) Prior to any works affecting the woodland / copse, e.g. tree work due to health and safety considerations, we recommend further surveys for bats and nesting birds are carried out by a suitably qualified ecologist. In addition any works to these trees will require formal permission from the local planning authority.
- 5) In the event that any of the new planting around the copse fails in the first five years the management company will replace the tree with the same species and specification that was planted as part of the planning permission. The Copse itself will be restocked with whips to replace any dead / dying trees as necessary within the scope of this permission.

OBJECTIVE 2 – ORCHARD PLANTING

To maintain and enhance the new orchard planting

Rationale

The new orchard planting adjacent to the new allotments will provide potential foraging habitat for a variety of invertebrate and faunal species including foraging and commuting bats, nesting birds and the ground flora provides potential cover and shelter for mammals, amphibians and reptiles.

Policy

- 1) For the new orchard planting the health of the new shrubs and trees will be monitored for the first ten years after planting and all failures replaced, as necessary.
- 2) The tree planting will be pruned as necessary.
- 3) Following pruning the planting should be left as non-intervention areas.
- 4) All fallen dead wood will be retained within the areas.
- 5) The wildflower meadow beneath the trees will be maintained as per Objective 4.

OBJECTIVE 3 – TREES AND SHRUBS

To maintain and enhance the retained and new trees and shrubs

Rationale

The retained trees and shrubs and new tree and shrub planting throughout the site will provide potential habitat for a variety of faunal species including roosting and foraging bats, nesting birds and the ground flora beneath will provide potential cover and shelter for mammals, amphibians and reptiles.

Landscaping works will include native shrubs and herbaceous species. Native species will be more attractive to wildlife than non-native species. They will provide food and nesting sites for birds and nectar for insects.

As any landscaping areas within the new building development area are not to be 'wild' as such, species recommended are generally either low-growing or not invasive. The shrubs species will also be underplanted with native herbaceous species. Some non-native shrubs (which are also considered to be beneficial to wildlife) are also to be planted.

Policy

- 1) The existing trees and shrubs will be allowed to grow naturally and be non-intervention areas.
- 2) If any tree management is required by an experienced tree surgeon, firstly a bat roost scoping survey would be carried out by a licensed bat ecologist prior to felling to determine the presence/absence of roosting bats. If roosting bats were present, the bat ecologist will provide appropriate advice.
- 3) For the new tree and shrub planting the health of the new shrubs and trees will be monitored for the first five years after planting and all failures replaced, as necessary.
- 4) The new planting will be left to grow to maturity.
- 5) Trees should be checked for nesting birds by a suitably qualified ecologist prior to maintenance works occurring.

OBJECTIVE 4 – NEW WILDFLOWER GRASSLAND

To maintain and enhance the new wildflower grassland

Rationale

The new wildflower grassland areas will provide potential habitat for a range of faunal species including mammals, amphibians, reptiles and invertebrates. The aim of management is to provide invertebrate-rich and structurally varied habitat. Mowing will be carried out on rotation to provide some continuous grassland cover throughout the year. A wide variety of native grasses and broadleaved herbaceous species appropriate for the soils and area, will be sown.

Species-rich unimproved neutral grassland is a conservation priority on the national and county BAPs.

The lawns within the proposed building development are not included in this plan, as the management for these areas are the responsibility of the home owners/tenants.

Policy

The new wildflower grasslands will require annual mowing to maximise their wildlife potential and prevent scrub and tree encroachment. The grassland areas will be mown on rotation once a year in August (i.e. half the grassland area will be mown in the first year and the second half of the grassland mown in the second year, and so on). Mowing on rotation will provide continued long grass areas suitable for cover and shelter for faunal species. This regime will allow the plants to flower and set seed, increasing the grassland areas value by providing a food resource for invertebrates.

- 2) The grass cuttings will be raked up and removed from the grassland areas after 24 hours to allow seeds to drop and to prevent nutrient enrichment of the soil, which could lead to a reduction in plant diversity by favouring the growth of coarse grass species. The grass cuttings will be stored in designated habitat piles near the new hibernaculum along the swale.
- 3) Cutting regime will take place annually for a period of 15 years.

OBJECTIVE 5 - NATIVE HEDGEROW

To maintain and enhance the new native hedgerow

Rationale

Hedgerows provide potential bat foraging and commuting habitat and nesting bird habitat and the bases of the hedgerows provide potential cover and shelter for mammals, amphibians and reptiles. Hedgerows provide potential wildlife/green corridors for commuting and dispersing faunal species.

A diverse mix of native shrub species, with climbing plant and herbaceous species will be planted. The new hedgerow will subsequently be managed sympathetically for wildlife.

Native species-rich hedgerow is a conservation priority on the national and county BAPs.

Policy

- 1) For the new hedgerow the health of the new shrubs will be monitored for the first five years after planting and all failures replaced, as necessary.
- 2) The hedgerow will be lightly trimmed annually until the required size and shape i.e. 2m in an 'A' shape, is achieved. Cutting in an 'A' shape also prevents self-shading. All trimming work should be carried out outside the bird breeding season, which runs from March to September. Ideally it should be carried out in February to allow berries to overwinter to provide winter food for birds.
- From about year 6 the hedgerow will be trimmed once every two years into an 'A' shape to a height of 2m. All trimming work will be carried out outside the bird breeding season, which runs from March to September. Ideally it should be carried out in February.

OBJECTIVE 6 - SUDS - Attenuation Pond

To maintain and enhance the new SUDS

Rationale

The new suds may provide some potential amphibian breeding opportunities during wet conditions in the spring. The aim of management is to maintain the swale to support a wide range of invertebrates, with a good quantity of marginal, floating and submerged vegetation but also retaining open water areas for amphibians. The aim is also to do this with a minimum disturbance to amphibians.

Policy

- Best practice will be used to ensure that water quality in the swale is not affected by leakage of oil or diesel from machinery or tools. All works will adhere to Environment Agency guidelines for works in or near water (Environment Agency 2007).
- 2) The establishment of marginal and aquatic vegetation naturally in the new swale will be assessed each year to ensure that plants are colonising well.
- In future years the colonised plants will be assessed each year to ensure that they do not spread over the entire surface of the swale. If vegetation starts to cover more than half of the swale surface then the plants will be cut back/removed, to ensure that there is sufficient open water areas for amphibians. If plant removal is required this should be carried out in October, when amphibians have emerged from the swale and before amphibian hibernation (as some amphibians, such as frogs can over-winter in swales/ditches). The plants should be left close to the swale for one to two days to allow any

- invertebrates to climb back into the swale. Then the plants should be placed near the hibernaculum to provide additional habitat opportunities for invertebrates and amphibians.
- 4) Any rubbish dumping and litter in the swale/banks will be assessed over the winter months and any litter and rubbish present will be removed.
- 5) In the long-term de-silting and clearance of leaf fall may be required.

OBJECTIVE 7 - HIBERNACULUM

To maintain the hibernaculum

Rationale

The hibernaculum will provide potential cover, shelter and hibernation opportunities for amphibians, reptiles, small mammals and invertebrates.

Policy

- 1) It is essential that the edges of the hiberaculum are exposed revealing the stones, so that cracks and fissures are available for animals to access the structures.
- Any significant clumps of vegetation growing over the cracks will be removed by hand, thus allowing unhindered access for animals.
- 3) The grassland vegetation on the top of the hibernaculum will also be maintained by strimming once a year in October. The cuttings will be raked up and placed in designated habitat piles adjacent to the hibernaculum.

OBJECTIVE 8 – BAT, BIRD AND INSECT BOXES

To maintain the bat roosting boxes, bird nesting boxes and insect boxes

Rationale

Bat roosting boxes, bird nesting boxes and insect boxes will be installed on the site to provide additional and enhanced habitat for such species on the site.

Bird boxes will include those for house sparrow (*Passer domesticus*), swift (*Apus apus*) and general species such as tits and robin (*Erithacus rubecula*). House sparrow and swift boxes will be installed on new buildings, whilst the robin and tit boxes (general bird boxes) will be installed on the retained mature trees in the woodland.

Insect boxes will be installed in shrubs in the woodland.

In summary the following will be installed:

- o 10 No. of Schwegler 1WQ bat box
- o 10 No. of Schwegler 1FQ bat box
- 10 No. of Schwegler 1B Nest Box (32mm entrance hole)
- o 10 No. of Schwegler 1B Nest Box (26mm entrance hole)
- o 5 No. of Schwegler 2H Open Fronted
- o 10 No. of Schwegler 1SP Sparrow Terrace
- o 5 No. of Schwegler 17 Swift Nest Box
- 15 No. of Schwegler insect boxes

Schwegler boxes will be used as these are made from 'Woodcrete', a long lasting material and a specification suitable for use on buildings and trees.

All bird and bat boxes will be positioned to have a clear flight path for exit and entry of bats/birds into the

boxes.

All bird nest boxes will be positioned on the North, North East or North West sides of buildings and trees, avoiding strong sunlight and strong winds. The boxes will NOT face south due to direct sunlight. The general bird boxes, i.e. 1B and 2H will be positioned at least 2m to 4m above the ground on mature trees. The house sparrow boxes will be positioned 2m to 4m above the ground or under the eaves on the buildings. The swift boxes will be positioned at least 5 metres above the ground and sited under the shelter of eaves or overhanging roofs on the buildings.

All bat boxes will be positioned at least 3m above the ground and on the buildings they should be as high as possible near the eaves to prevent disturbance. They will be positioned facing North West, south east and south west.

Policy

- The bat boxes will be checked for damage and occupancy annually by a licensed bat ecologist either in April or October to avoid the bat maternity season and hibernation periods.
- The bird boxes will be checked for damage and occupancy annually by an ecologist. This should be carried out October to February, outside the nesting bird season.
- 3) The insect box will be checked for damage.

OBJECTIVE 9 – OFFSITE MANAGEMENT REQUIREMENTS

A series of management objectives that solely relate to the off-site works.

Overall Objectives:

To reinforce the existing shelter belts to the north with 80-100cm feathers to guarantee the future longevity of the shelter belt.

All feathers to be staked, tied and have a rabbit spiral guard around the base. Trees to be contained within a post and wire stock proof fence. Feathers to be checked annually for defects and loosening of ties.

Any tree / shrub planting will be required to be replaced upon the event of failure / damage / removal by the land owner within the first five years. Replacements should be the same size and species as specified within the planning application.

OBJECTIVE 10 – PUBLICLY ACCESSIBLE OPEN SPACE MANAGEMENT REQUIREMENTS

A series of management objectives that solely relate to the publicly accessible open space works.

Overall Objectives:

Any tree / shrub planting will be required to be replaced upon the event of failure / damage / removal by the land owner within the first five years. Replacements should be the same size and species as specified within the planning application.

The Play Area will be inspected annually by ROSPA to ensure safety and any required maintenance / defects with regard to equipment / surfacing will be rectified by the management company. Signage will be provided within the space with contact details for reporting of defects / maintenance issues.

Planting will generally be maintained as per the other objectives where there is cross over, the schedule later in the document outlines frequency of each maintenance action.

All trees / feathers to be staked, tied and have a rabbit spiral guard around the base. Trees / feathers to be checked annually for defects and loosening of ties.

OBJECTIVE 11 – RESIDENTIAL MANAGEMENT REQUIREMENTS

A series of management objectives that solely relate to the Residential Area and its gardens / incidental public spaces.

Overall Objectives:

To encourage stable and healthy tree growth as well as enhancing the amenity value and ecological benefit. Generally, tree, shrub and hedge planting will be required to be replaced upon the event of failure / damage / removal by the land owner within the first five years. Replacements should be the same size and species as specified within the planning application.

TREES (EXISTING AND PROPOSED)

Management Objective:

Annual inspection of the trees should be undertaken concurrently with the inspection of trees on the wider site. If additional works are required to promote healthy growth these should be agreed with the Land Owner and actioned as a separate work order.

Existing Trees

There are various existing trees on site as identified in the Arboricultural Method Statement. The copse to Ashbourne Road and the Trees within the proposed Open Space are protected by a Tree Preservation Order. There are a few other scattered trees and along the site boundary that will remain. Trees should be inspected annually to ensure good health.

Generally

To encourage the health and vigor of new trees maintaining a well-shaped, neat and overall tidy appearance including around base of the tree.

To prevent overcrowding of tree groups, selective thinning may be applicable and stump removal may be required.

To ensure a balanced age structure within existing tree planting and to plant new trees as directed to prevent group senility.

Tree works are to be undertaken in line with best practice BS 3998.

All operations shall be carried out carefully to avoid damage to the existing trees, new planting or any existing landscape features. These trees shall not at any time be used for anchorage or winching purposes. If working with the tree root zone of any existing trees or new trees observe best working practice guidance of BS 5837:2012, with a standoff of 12 times the diameter of the tree stem.

Any defects or other faults other than tree, shrub or other plant failures which appear within the maintenance period, and are due to materials or workmanship not in accordance with the specification shall be made good by the contractor entirely at his own cost.

Management Operations:

Pruning

If applicable, and as directed, all works to be done in accordance with BS 3998 and should be undertaken by a qualified and professional Arboriculturalist as recognised either by the local authority or the Arboriculturalist Association list of Registered Contractors.

Proof of experience and insurance should be sought by the contractor and evidenced to the Land Owner.

Prune any trees as necessary to remove dead, diseased or damaged shoots to create a balanced form for future growth. Ensure action is agreed in advance with Land Owner with 7 working days notice.

Watering

Water trees with adequate, clean water supplied by the Land Owner throughout summer months (May-

September) at minimum fortnightly intervals after any period of four weeks without significant rainfall (less than 5mm). Heavy watering will be required in dry periods.

Water should be kept free from impurities at all times.

Inspect trees to ensure that they are not over watered at any time. Any plants lost due to water-logging or drought shall be replaced at no extra cost to the Land Owner.

Ivy Infestation

Ivy infestations are not acceptable where wind risk may be a concern. The form of the tree can also be affected and it is therefore proposed to remove Ivy infestation on trees if evident on site during this period.

Arisings

Remove all arisings off site for appropriate disposal as per current legislation.

Inspection

Monitor all trees at each maintenance visit and report any anticipated issues, defects, damage or works to the Land Owner for consideration and action. Ensure this monitoring is undertaken by suitably experienced operative.

SHRUB & HEDGE PLANTING

Management Objective:

To establish healthy thriving plants and encourage strong growth. Prune shrubs/hedge to encourage dense, bushy growth and maintain planting areas feed free at all times.

Water shrubs/hedges with adequate, clean water supplied by the Land Owner throughout the summer months (May - September) at minimum fortnightly intervals after any period of four weeks without significant rainfall (less than 5mm). Heavy watering will be required in dry periods.

Management Operations:

The hedges will be cut twice a year winter pruning programme (November to March inclusive) undertaken before 31st October and Spring/Summer pruning programme undertaken before 31st January.

The native hedge will be cut once during the Spring/Summer pruning programme undertaken before 31st January.

Minor pruning to shrubs for dead or damaged wood shall be carried out as necessary; an inspection for this will be undertaken at each inspection and actioned appropriately at that visit. Wounds exceeding 25mm diameter must not be treated with a sealant.

All plants will be regularly inspected for wind firmness and firmed in as necessary at the same time. This shall be undertaken at each maintenance visit. Stakes shall likewise be checked for firmness.

Where feasible, an application of an approved residual weed killer will be permitted, applied as per the manufacturer's instructions, on areas that have been cleared of all weed growth and before further germination takes place.

All planting must be watered as required to maintain healthy growth following planting, during the maintenance period and substantially during periods of hot weather and drought. Remove all arisings off site and dispose at tip found by contractor as per current legislation.

Ensure all tools used are sharp and cut the shrubs/hedge so that top is narrower than the base to ensure base will remain clothed in leaves.

Replace any dead or damaged planting matching species and size.

Water planted trees with adequate, clean water supplied by the Land Owner throughout summer months (May - September) at minimum fortnightly intervals after any period of four weeks without significant rainfall (less than 5mm). Heavy watering will be required in dry periods.

Water should be kept free from impurities at all times.

GRASS SWARD AREAS

Management Objectives:

To provide an even stand of vegetation of uniform height and colour comprising of grass species predominantly, although a small percentage of dicotyledonous plants – no more than 5% would be acceptable.

To ensure no damage is inflicted on existing tree trunks whilst undertaking the grass sward maintenance works.

To ensure existing pathways and hard standings are not encroached by grass which would be detrimental to the overall quality or integrity of the features. Remove any self-set grass which would threaten these features for the same reasons.

Management Operations:

Mowing

Mowing is to be carried out using approved machinery to maintain the vegetation height no less than 25mm and no greater than 50mm during April to August. This is to be carried out mowing once in March and October of each year and every 11 days from April to June and then fortnightly until September in the first year. In the second year cutting is to be every fortnight.

Any damage from scalping, trampling or abrasion during mowing are to be re-seeded or re-turfed.

Do not allow any mechanised mowing equipment within 100mm of any tree trunk and do not take mowers across hard surfacing whilst operational i.e. cutting.

Any slight hollows which appear within the maintenance period due to settlement or other causes shall be top dressed, early in the growing season, with a mixture of fine compost and topsoil lightly rolled in and the grass allowed to grow through.

Hollows repaired in this manner shall be kept watered as necessary until the turf has fully 'married' in.

Grass to be cut to a nominal height of 30mm around obstacles.

Preferred Equipment

Preferred mower would be a rotary mower. All machinery shall be size and type appropriate to the size of the area being mown i.e. best professional practice.

Grass Edge

Before the start of the mowing season in March, grass edge lines including those surrounding obstacles, shall be reformed back to the original edge for a sharp vertical face.

Edges to planting areas or adjacent hard standing areas are to be cut and trimmed with each mowing operation, arisings are to be collected and removed from site to be disposed of at a tip found by the contractor.

Grass around obstacles will be edged with an appropriate mechanical or manual tool.

Dressing

A dressing of fine fishmeal shall be applied as identified in the accompanying maintenance schedule of works at the rate of 60gms/m.

Weeds

The sward shall be maintained weed free by selective weed killer or other equal.

Arisings

Litter, debris and larger accumulated items shall be collected prior to mowing and disposed of off-site at a tip found by contractor.

Leaf collection when necessary during (October to December inclusive) or when health of the sward maybe affected to be removed off site and disposed of at tip found by contractor.

Grass cuttings which fall into planting beds and hard surfaces shall be removed within one hour of cutting.

PERNICIOUS WEEDS / PEST CONTROL

Management Objectives:

All trees and grass area are to be maintained weed, pest and disease free at all times. The contractor is expected to adopt a pro-active approach to pests, diseases and treat accordingly. Any plant losses as a result of pest and disease infestation will be replaced by the contractor.

To ensure existing pathways and hard standings are not encroached by pernicious weeds which would be detrimental to the overall quality or integrity of the features. Remove any self set grass which would threaten these features for the same reasons.

Management Operations:

Herbicide

Where feasible, an application of approved residual weed killer (Glyphosate or Neonicotinoides are not to be used) will be permitted, applied as per the manufacturer's instruction and specified frequency.

Inspection

Undertake bi-annual inspection of site once in April / May and again in August / September to monitor any areas of suspected Japanese Knotweed and Himalayan Balsam and pernicious weeds. Report any new findings to the Land Owner for their action.

Reporting

Report any new Japanese Knotweed and Himalayan Balsam findings to Local Authority Landowner for their record. Action may be instructed under this contract through mutual negotiation with the Contractor.

HARD SURFACES - PATHWAYS & PAVING

Management Objectives:

To ensure that all hard surfaced areas are kept in a neat and tidy condition. Ensure pathways and hard standings are not encroached by pernicious weeds which would be detrimental to the overall quality or integrity of the features. Remove any self set grass/vegetation which would threaten these features for the same reasons.

Management Operations:

Sweeping, Litter, Refuse and Deleterious Material

Areas to be swept and cleared once inclement weather has ceased.

At each maintenance visit the contractor must keep surfaces free of litter, leaves and other debris, remove mud, silt and debris from surface gutters and channels in hard surfaces and empty drainage

gullies.

Remove all arisings off site and dispose of at tip found by contractor as per current Legislation at tip found by contractor.

Herbicide

Where feasible, an application of approved foliar acting residual weed killer will be permitted, applied as per the manufacturer's instructions on hard areas twice yearly. The paving should be swept thoroughly twice yearly to remove any debris, once in spring and again in autumn.

<u>Salting – To be undertaken by Land Owner as separate item.</u>

All hard surfaces to be salted before imminent snow and frosty weather, during and after these events as would seem reasonable to ensure reasonable safe pedestrian passage.

Salt shall be applied to all hard surfacing for general public use as per recommended specification and rates prescribed by the Land Owner.

Inspection

Twice yearly, once in the spring and again in the autumn, the contractor is to inspect the existing hard surfaces for wear and tear, failure or fault.

Reporting

Report any damage or deterioration to the Land Owner for immediate action.

REPORTING AND REVIEW PROCESS

In order to monitor and review standards making amendments where required, it is expected that the Land Owner will review the management work (with reference to this document) at least quarterly with the landscape contractor.

All plant failures should be logged and reported to the Land Owner at the first opportunity. Particular attention will be paid to the condition of any hard surfacing, fenced and gates areas, specifically to any collision or damage incurred from the maintenance operation.

Following this annual review any changes or amendments will be made either through additional works clauses or written instruction.

HEALTH AND SAFETY

All workers must exhibit due care and attention at all times when on-site and the employer must conform to all Health and Safety at Work Act responsibilities.

A full risk assessment must be carried out by the contractor to ensure all hazards are identified. This will include identification of potential hazards.

As with any Risk Assessment an action plan should be drawn up and a responsible person identified. Access points should be identified to workers to allow safe access and egress to the site.

CHEMICAL USE

Anyone who uses professional pesticides/herbicides must hold a certificate of competence if using a pesticide if they:

- -were born after 31st December 1964; or
- -are providing a commercial service e.g contractors spraying on someone's on land that is not their employers.

Currently, this certificate of competence is the National Proficiency Tests Council (NPTC).

(Glyphosate or Neonicotinoides are not to be used)

A full risk assessment should be undertaken for each planned chemical application and guidance / best practice issued by the Environment Agency should be regularly updated to staff and observed for each planned chemical application.

TRAINING

The landscape contractor should be required to demonstrate their investment in internal training programmes through Lantra, NPTC and / or CPD records, ensuring the best working practices are complied with.

All staff employed to undertake this prescribed maintenance regime should be trained or training towards NVQ Level 1. Ongoing NVQ training should be encouraged.

At least 1 no. registered and currently accredited First Aider should be on site at any one time throughout the prescribed maintenance during working hours.

Obj.	Prescription	Year	Timing
	land / Copse	I	1
1/1	Non-intervention area.	Every year	N/A
1/2	Retain fallen dead wood within woodland.	Every year	As
			necessary
1/4	Retain standing dead wood, if safe. Tree surgeon to assess if safe. If not and needs to	Every year	As
	be felled, firstly a bat ecologist will carry out a bat scoping survey to determine		necessary
	presence/absence of roosting bats.		
Orcha	rd Planting	1	1
2/1	Monitor the health of the planted trees and shrubs and replace any failures as necessary.	Every year	April or Sept
2/2	Prune trees and shrubs.	From 2022	Oct to Feb
2/4	Retain fallen dead wood within the area.	Every year	As
			necessary
Trees	and Shrubs		
3/1	Existing trees and shrubs will be allowed to grow to maturity and be non-intervention	Every year	N/A
-	areas.	, ,	
3/2	If any tree management is required firstly a bat ecologist will carry out a bat scoping	Every year	As
•	survey to determine presence/absence of roosting bats and provide advice.	, ,	necessary
3/3	Monitor the health of the planted trees and shrubs and replace any failures as	Every year	April or Sept
	necessary.	, , ,	
3/4	Allow new trees and shrubs to grow to maturity.	Every year	N/A
	Neadow Grassland		,
4/1	Mow the wildflower grassland vegetation, carefully rake up the cuttings and place in	Twice a year	August and
., _	designated habitat piles adjacent to the hibernaculum.	· · · · · · · · · · · · · · · · · · ·	early spring
New N	lative Hedgerow		carry spring
5/1	Monitor the health of the planted shrubs in the new hedgerow and replace any	Every year	April or Sept
3, 1	failures as necessary.	Lvery year	April or sept
5/2	Lightly trim the sides of the new hedgerow until required size and shape (i.e. 2m in	Annually to	Oct-Feb
3/2	an 'A' shape) is achieved. Outside the bird breeding season.	about	(x 1)
	an it shape, is define teal outside the sha breeding season.	2021	(// 1/
5/3	Trim new hedgerow into an 'A' shape to a height of 2m. This should be carried out	Every two	Feb
5,5	outside the bird breeding season.	years from	(x 1)
		approx.	()
		2022	
Swale			l
6/1	Best practice to ensure water quality in the SUDS is not affected by leakage or oil or	Every year	N/A
0, 1	diesel from machinery or tools. Works to adhere to EA guidelines (EA 2007).	Lvery year	1,7,7
6/2	Assess the coverage of marginal and aquatic vegetation and remove a proportion if it	Every year	Oct
0, 2	covers more than half of the open water area.	Lvery year	000
6/3	Remove any rubbish or litter, as required.	Every year	Oct-Feb
0/3	Remove any rubbish of ficter, as required.	Lvery year	Octifeb
Hiherr	l naculum	l	<u> </u>
7/1	Ensure that cracks and fissures are accessible for animals by removing any clumps of	Every year	Any time
, , <u>T</u>	vegetation growing over the cracks, as necessary.	Lvery year	Any time
7/2	Strim the grassland vegetation on top of the clean stone/rubble hibernaculum,	Every year	Oct
1/2	carefully rake up the cuttings and place in designated habitat piles adjacent to the	Lvery year	(x 1)
	hibernaculum.		(× 1)
Rat Pi	ird and Insect Boxes	<u> </u>	<u> </u>
	Check bat boxes for damage and occupancy by a licensed bat ecologist.	Everyyear	April or
8/1	Check bat boxes for damage and occupancy by a licensed bat ecologist.	Every year	April or
0/2	Charly hind have a few damage and assumance by a resist	F	October
8/2	Check bird boxes for damage and occupancy by an ecologist.	Every year	October to
0./2	Charle in a state of a decrease by an area is it	F	February
8/3	Check insect boxes for damage by an ecologist.	Every year	Any time.

7.0 The Schedule

The schedule is based upon a full 52 weeks and should be repeated on an annual basis for a minimum of five years.

The landscape maintenance should include all aspects from the adjacent schedule works. These aspects are included as a minimum; however, scope is not limited to this.

All aspects should be priced on a per visit basis, so that if additional visits are required invoices can be adjusted in a transparent manner.

	Month	Ja	n	T	Feb	T	Mar	-1	-	\pr	T	Ma	ay	1		Jun		T	Ju	ıl	1		Aug		Ī	Se	ep	T	Oct		<u> </u>	VoV	\neg	_	Dec	
Action	Description of works	95.0	120	10.10		- 1	100013000			•	3.0	50.000		19		500000		*		200	7.4			1		102-01			2002000	-					1,100,000	
Meadow Grass- G75 (Park area)	General cut for meadow grass within POS. Grass to be reduced in height to between 75 & 100mm cut twice annually.				e e e																															
Grass- G25 (Park area)	General amenity cut for open space. Grass sward to be maintained fortnightly to length of between 25-50 mm. Edge lawn as required (allow for twice annual min.).						Х)	ĸ	X	x	>	K	X	X		х		х	х)	(Х	х		x	x									
Wildflower Planting	Twice yearly cut, to encourage longer flowering period. Sward to be cut to 75-150mm and left to grow long in interim. (Care should be taken in cutting bund slopes)																																			
Beds - shrub prune	Formative Pruning, cut back annual growth and ensure access and benches are not obstructed.																											П			П					
Bed - watering	Fortnightly watering (plus extra over in periods of prolonged heat).																											П	П		П		П			
Bed - mulching	Top up bark mulch as required to 75mm depth minimum.																														П		\Box			
Inspect trees	Visual inspection of trees both on-site and along boundaries			37 (2									2 2						i i i i	36					100											
Hedge - New	General prune and shape for hedge. Adjust stakes ties and spiral guards. Hand pick weeds from guards and within 150mm of each plant.																																П			
Trees - general	Deadwood and crown lift trees where appropriate.			\Box		\Box							\Box			\Box		П					П					П	П		П		\Box	Т		\Box
Trees - watering	Fortnightly watering (plus extra over in periods of prolonged heat).																					8														
Trees - epicormic	Inspect for and remove epicormic growth.																									100			П		П		\Box	$oldsymbol{\Box}$		
Tree / shrub replacement	Replace all dead / dying trees and shrubs during the first 5 years within following planting season.														io bi																					
Site risk assessment-annual	Inspection of trees, surfacing and boundary treatments for possible additional maintenance requirements.																												П		Π		\prod			
Hard surfaces	During periods of leaf and blossom fall hard surfaces to be kept leaf and blossom free. Weed growth around street trees to be kept to a minimum. General litter pick to be done weekly or as required.																																			

Appendix A - National Building Specification, Q35 Landscape Maintenance

GRASSED AREAS - GENERAL INFORMATION/ REQUIREMENTS

115 SEEDED AND TURFED AREAS

- Growth and development: Healthy, vigorous grass sward, free from the visible effects of pests, weeds and disease.
- Appearance: A closely-knit, continuous ground cover of even density, height and colour.

120 CLIMATIC CONDITIONS

General: Carry out the work while soil and weather conditions are suitable.

145 WATERING

- Quantity: Wet full depth of topsoil.
- Application: Even and without displacing seed, seedlings or soil.
- Frequency: As necessary to ensure the establishment and continued thriving of all seeding/turfing.

150 WATER RESTRICTIONS

 Timing: If water supply is or is likely to be restricted by emergency legislation do not carry out seeding/ turfing until instructed. If seeding/ turfing has been carried out, obtain instructions on watering.

160 NOTICE

- Give notice before:
 - Setting out.
 - Applying herbicide.
 - Applying fertilizer.
 - Preparing seedbed.
 - Seeding or turfing.
 - Visiting site during maintenance period.
- Period of notice: One week

170 SETTING OUT

- Boundaries of seeding/turfing areas: Mark clearly.

PREPARATION

180 CHEMICALS GENERALLY:

- Use only where specified or approved, and then only products on the current list of the Agricultural Chemicals Approval Scheme.
- Where work is near water, drainage ditches or land drains, comply with the Ministry of Agriculture,
 Fisheries and Food 'Code of Practice for the use of herbicides on weeds in water courses and lakes'.
- Observe all precautions recommended by the manufacturer and remove containers from site immediately they have been emptied or are no longerrequired.

210 HERBICIDE GENERALLY:

Type: Suitable for suppressing perennial weeds. (Glyphosate or Neonicotinoides are not to be used)

231 PEAT

Peat or products containing peat: Do not use.

270 FERTILIZER FOR ALL GRASSED AREAS:

- Types: Apply both:
 - Superphosphate with a minimum of 18% water-soluble phosphoric acid.
 - A sulphate of ammonia with a minimum of 20% nitrogen.
- Application: Before final cultivation and three to five days before seeding/turfing.

Coverage: Spread evenly, each type at 70 g/m², in transverse directions.

MAINTENANCE

310 MAINTENANCE:

 Duration: Carry out the operations in clauses 610 to 685 from completion of seeding/ turfing until handover or as instructed by the CA.

320 FAILURES OF SEEDING/TURFING:

- General: Grassed areas that have failed to thrive (unless due to theft or malicious damage), during the period stated in clause 590+591, will be regarded as defects due to materials or workmanship not in accordance with the Contract. Make good by re-cultivation and reseeding/ re-turfing.
- Timing of making good: Submit proposals.

330 MAINTAINING GRASSED AREAS:

- Maximum height of growth at any time: 50mm
- Preparation: Before each cut remove all litter and debris.
- Cutting: As and when necessary to a height of 25mm
- Arisings: Remove
- Trimming: At the time of each cut, trim all grass edges, including round the base of trees, manholes, etc. and remove arisings.
- Weed control: Keep the sward substantially free of broad leaved weeds by applying a suitable selective herbicide.
- Stones brought to the surface: Remove regularly.
- Areas of settlement: Make good.
- Watering: As clause 145

350 FERTILIZER FOR ALL GRASSED AREAS:

- March application: 15:10:10 Spring turf fertilizer at 35 g/m².
- September application: 5:10:10 Autumn turf fertilizer at 50g/m².

REMEDIATION WORKS PREPARATION

410 CHEMICALS GENERALLY:

- Use only where specified or approved, and then only products on the current list of the Agricultural Chemicals Approval Scheme.
- Where work is near water, drainage ditches or land drains, comply with the Ministry of Agriculture,
 Fisheries and Food 'Code of Practice for the use of herbicides on weeds in water courses and lakes'.
- Observe all precautions recommended by the manufacturer and remove containers from site immediately they have been emptied or are no longerrequired.

420 PREPARATION MATERIALS

- General: Free from toxins, pathogens or other extraneous substances harmful to plant, animal or human life.
- Certification: Submit certificate giving supply source, content analysis, confirmation of suitability for purpose and confirmation of absence of harmfulsubstances:
 - Certified materials: Sewage sludge
 - Give notice before ordering or using.

430 HERBICIDE GENERALLY:

Type: Suitable for suppressing perennial weeds. (Glyphosate or Neonicotinoides are not to be used)

440 FERTILIZER FOR ALL GRASSED AREAS:

- Types: Apply both:
 - Superphosphate with a minimum of 18% water-soluble phosphoric acid.
 - A sulphate of ammonia with a minimum of 20% nitrogen.

- Application: Before final cultivation and three to five days before seeding/turfing.
- Coverage: Spread evenly, each type at 70 g/m², in transverse directions.

450 GRASS SEED FOR GENERAL GRASS AREAS:

- Mixture: BSH A16
- Supplier and reference: British Seed Houses mix A16 or similar
- Rate of application: 18 30g/m²
 - Increase rate of application by 50% for slopes exceeding 1:3.

451 MEADOW GRASS SEED FOR ORNAMENTAL GRASS AREAS:

- Mixture: BSH UK Native 1
- Supplier and reference: British Seed House UK Native Mix 1 or similar
- Rate of application: 3-5 g/m²
 - Increase rate of application by 50% for slopes exceeding 1:3

452 QUALITY OF SEED FOR GENERAL GRASS AREAS:

- Freshness: Produced for the current growing season.
- Certification: Blue label certified varieties to EC purity and germination regulations and the Department for Environment, Food and Rural Affairs Higher VoluntaryStandard.
- When requested, submit an Official Seed Testing Station certificate of germination, purity and composition.
- Samples of mixtures: Submit when requested.

460 SOWING:

- General: Establish good seed contact with the root zone to promote healthy, consistent growth.
- Method: To suit soil type, proposed usage of grassed area, location and weather conditions during and after sowing.

470 SOWING SEASON:

- Grass seed generally: Sow seed in calm weather during April or September/October

480 PRE-EMERGENT HERBICIDE:

 General: Where soil has not been allowed to lie fallow apply a suitable pre-emergent herbicide immediately after sowing. (Glyphosate or Neonicotinoides are not to be used)

490 EDGES TO SEEDED AREAS

- Location: Planting beds and around newly planted trees.
- Timing: After seeded areas are well established.
- Edges: Cut to clean straight lines or smooth curves. Soil drawn back to permitedging.
- Arisings: Remove.

PLANTING - GENERAL INFORMATION/ REQUIREMENTS

- 510 CLIMATIC CONDITIONS: Carry out the work while soil and weather conditions are suitable for the relevant operations. Planting shall only be carried out during the period Nov. 1st 31st March. Exceptionally the CA may extend this period if ground, weather and conditions for planting are favourable.
- MACHINES AND TOOLS: Use only machinery and tools suitable for the site conditions and the work to be carried out. Use hand tools around trees, plants and in confined spaces where it is impracticable to use machinery.
- 530 WATER: The contractor shall allow for the provision of water, water carts, or hoses with a fine hose attachment or sprinkler which shall be allowed to run until the full depth of the top soil in the tree pits, plant beds and trenches, has reached field capacity i.e. 'The amount of water required by previously saturated soil once full drainage has ceased.'

- DROUGHT CONDITIONS: If water supply is or is likely to be restricted by emergency legislation:
- Inform CA without delay and ascertain availability and additional cost of second class water from a sewage works or other approved source.
- If planting has not been carried out, do not do so untilinstructed.
- If planting has been carried out, obtain instructions on supply of water.
- NOTICE TO CA: Make advance arrangements with CA to give them the opportunity of being present during:
 - Application of fertiliser
 - Each site visit during maintenance period.

550 CHEMICALS GENERALLY:

- Use only where specified or approved, and then only products on the current list of the Agricultural Chemicals Approval Scheme.
- Where work is near water, drainage ditches or land drains, comply with the Ministry of Agriculture, Fisheries and Food 'Code of Practice for the use of herbicides on weeds in water courses and lakes'.
- Observe all precautions recommended by the manufacturer and remove containers from site immediately they have been emptied or are no longer required. (Glyphosate or Neonicotinoides are not to be used)
- PROTECT existing grass during planting operations by laying boards or tarpaulins. Do not place excavated material directly on to grass.
- 570 CLEANLINESS: Remove soil from all hard surfaces and grassed areas and leave the works in a clean tidy condition at Completion.

580 ORGANIC BARK MULCH:

- The organic mulch shall comprise of composted wood chips or bark free of fungi, diseases, Methyl Bromide contamination and foreign material. It shall be matured for a minimum of 16 weeks, naturally heat treated where temperatures have exceeded 50°C for a minimum period of 14 days followed by a period of stabilisation pH range to be of 4.5-5.8.
- Where required organic bark mulch shall be maintained at a depth of 75mm after settlement, care being taken to dish the mulch around the base of each plant. Where shown trees and shrubs in grassed areas shall be mulched to a minimum depth of 75mm after settlement and minimum diameter of 500mm. Particle size shall be 15-125mm. there shall be no dust or fine material and shall contain less than 5% wood material.
- A 1kg sample shall be submitted to the CA for approval before the bark is delivered in bulk. The sample shall be accompanied by a certificate certifying source, grade and freedom from disease and contamination. The certificate shall also state that the mulch has not been chemically treated or sterilised.
- In the event of dry conditions, individual tree pits and entire planting beds shall be thoroughly watered **before** the mulch is applied in addition to watering in on planting. The Contractor will be deemed to have allowed for this possibility in his tender rates.
- The Contractor shall supply and spread any additional mulch needed which shall conform to the Specification.
- FAILURES OF PLANTING (Post Completion): Any trees/shrubs/plants which are dead, dying or otherwise defective at the end of the relevant period(s) stated in the Contract will be regarded as defects due to materials or workmanship not in accordance with the Contract. They must be replaced by approved equivalent trees/shrubs/ plants at the next suitable planting season unless otherwise instructed.
- FAILURES OF PLANTING: Post Completion maintenance of the planting is to be carried out by the Landscape Contractor as specified in this section. Any trees/shrubs/plants which are dead, dying or otherwise defective at the end of the Maintenance Period will be regarded as defects due to materials or workmanship not in accordance with the Contract. They must be replaced by approved equivalent trees/shrubs/plants at the next suitable planting season unless otherwise instructed. This will not apply if the defects are caused by malicious damage after Completion.

MAINTENANCE

- 610 PLANTING MAINTENANCE: During the Maintenance Period carry out maintenance of the planted areas as follows:
- Make visits during the growing season and as necessary to fulfil the requirements of this specification (March, May, June, August, September and December).
- Prune plants at appropriate time to remove dead or dying and diseased wood and suckers, to promote healthy growth and natural shape. Dress cut ends exceeding 25 mm diameter with fungicidal sealant.
- Ensure that sufficient water is applied to maintain healthy growth. Suggest to CA when watering may
 be required and when instructed carry out using a fine hose or sprinkler until full depth of topsoil is
 saturated. Allow for 9 No. waterings.
- Spray crown of trees when in leaf during warm weather. Carry out in the evening.
- MAINTENANCE INSTRUCTIONS: Before the end of the Maintenance Period, submit typewritten instructions recommending procedures to be established by the Land Owner for maintenance of the planting work for one fullyear.

700 TREE PIT IRRIGATION:

- Semi-mature trees to have 1 N° irrigation/aeration pipe per tree installed at the time of planting.
- Inlet to finish with ground surface in planted areas.
- Inlet to be set 30mm below adjacent grass areas to allow maintenance mowing/strimming.

710 WATERING:

- The Contractor shall water in all plants at his own discretion and shall maintain the healthy growth of all plant material. Watering shall be sufficient to return the planting pit or trench to field capacity, i.e. "the amount of water retained by previously saturated soil once full drainage has ceased".

720 FIRMING UP:

- All trees and shrubs to be firmed up during the first week after planting.

STAKING GENERAL

800 PRESERVATION OF TIMBER:

- A staining treatment shall be applied to the wood surface of tree stakes. One coat shall be applied annually, according to manufacturer's instructions. One coat shall be applied at appropriate time / date in March or April (do not apply in rain, snow or frosty weather). Any new cuts in timber shall receive two coats of stain. Stain to be used shall be: Sadolin's 'Ebony' woodstain or similar approved.

810 STAKING: General

- Stakes to be made firm in a vertical position.

REMEDIATION WORKS

900 TREES/PLANTS GENERALLY:

- Obtain from approved source(s) with soil and climatic conditions similar to those prevailing on site.
- Adequately and carefully pack and protect against mechanical damage, extremes of temperature and drying out.
- When requested by CA to provide a certificate that plants comply with this specification.

910 PLANT MATERIAL:

- Plant material shall comply with BS 3936: Part 1, Part 4, Part 5.
- Where requested by the CA, the Contractor shall provide a certificate to the effect that all materials, trees, shrubs and plants supplied are in accordance with the specification. Trees shall be true to size

and description, and shall be good well-formed, healthy specimens free from disease and damage to stems, branches, roots and foliage. They shall be nursery grown in the United Kingdom (unless otherwise agreed with the CA) and shall have been regularly transplanted. The Contractor shall inform the CA of the location of supply, so that the plants can be inspected prior to delivery to site, if the CA so wishes.

- The Contractor shall obtain plants and plant material, from approved suppliers, (The supplier is to be approved by the CA in writing before ordering commences), ordering early enough to ensure that specified plants are available for planting at the correct times. No extension of time will be granted because of late ordering. Proof of ordering may be asked for by the CA.
- All stock shall be fully hardy and at least one plant from each species in each delivery batch shall be clearly marked using a permanent marking system.
- Only where certain species of plant material can be proved unavailable will the contractor be permitted
 to substitute alternative species of equal quality and cost, or make an equitable adjustable of price for
 any cost differential.
- All substitutions shall be of the nearest equivalent species and variety to that originally specified and subject to prior approval in writing of the CA and approval for any cost differential.
- Any approval should be obtained at the earliest possible date, and if requested after the acceptance of the tender, then the CA retains the right to:
 - a) Locate an alternative source that the Contractor must use.
 - b) Substitute for an alternative plant if available, or
 - c) Instruct the Contractor to delay the planting of that particular species until the following planting season, at no extra cost.

920 PLANT HANDLING:

- All plants shall be lifted, packed and handled in accordance with BS 3936: Part 1, Part 4, Part 5, BS 4043, the CPSE recommendations for Plant Handling, with this Clause.
- Prior to planting all plant material shall be stored and sorted at a location approved by the CA.
- All bare root stock including that in sealed airtight packaging shall be heeled into moist soil immediately upon delivery.
- During storage the Contractor shall ensure that the plants do not dry out and that they are adequately protected from physical or frost damage.
- Barerooted plants shall have their entire root system dipped via thoroughly mixed Broadleaf Fine Rootdip/water solution immediately on lifting at the nursery. Dilution is to be strictly in accordance with the manufacturer's instructions. A certificate from the supplier will be required verifying that the specification has been adhered to.

Broadleaf Fine Root Dip or equal approved may be obtained from:

Agricultural Polymers International Limited Waverley House Waverley Road Gloucester CL2 OSZ

Telephone: 01452 521733

- All materials are to be adequately and carefully packed and protected to survive transport to the site
 without damage or desiccation during loading, transit, unloading or storage. If any roots, branches or
 shoots are slightly damaged they are to be carefully pruned. If major damage occurs, the plants shall be
 rejected and replaced.
- Planting must be carried out as soon as possible after the plants are delivered to the site. Where delay is incurred, plants must be protected against damage. Plants with bare roots should be heeled into moist soil as soon as received. Bare root stock left unprotected from root desiccation will be rejected.
- All trees, (standard and feathered) are to be stored in an upright manner in such a way as to cause no damage to its form or health.
- Container grown stock is to be unloaded from delivery crates and set closely together, protected from wind and watered to stop pots drying out. Plants showing signs of having been crated for more than 48 hours will be rejected. Containerised plants with dry root balls and loose pots will be rejected.

- 930 SUBSTITUTES: The tender must be based on plants that are available. If specified plants are unobtainable alternatives may be submitted with tender, stating price and how they differ from the specification. Such substitutions may not be acceptable and submission of further alternatives may be required. Obtain approval before making any substitution.
- 940 STORAGE: Plants which are not to be planted on day of delivery to site to be stored as follows or by other approved methods:
- Root balled plants: Place close together and cover root balls with sand, moist peat or wet straw.
- Bare rooted plants: Heel in prepared trenches, cover with soil and water thoroughly.

950 ANTI DESICCANT SPRAY:

- Evergreen species are to be sprayed with anti-desiccant applied in accordance with manufacturer's instructions prior to planting and again 3 weeks after planting. Allowance for this operation will be deemed as included in the price. The anti-desiccant shall be 'Wilt Pruf S600' as supplied by Synchemicals Limited, Owen Street, Coalville, LE6 2DE (Telephone 0530 510060) or alternative to be approved by the CA.
- 960 PROTECT existing grass during planting operations by laying boards or tarpaulins. Do not place excavated material directly on to grass.
- 970 PLANTING and associated operations shall comply with this clause and with BS 4043, BS 4428, BS 5837.
- 980 SURPLUS MATERIAL, including subsoil, stones, debris, wrapping material and prunings to be removed from site.

WEED CONTROL

990 VEGETATION CONTROL:

- The Contractor shall maintain total vegetation control to each ornamental planting area, in compliance with Clause D20/194 and D20/195.
- Vegetation control shall be carried out on all planted areas.

991 SELECTIVE WEED CONTROL:

 The Contractor shall carry out selective weed control treatment on all Injurious Pernicious and Noxious Weeds in accordance with Clause D20/195.

992 FIRMING OF STAKES AND PLANTS: The Contractor shall:

- Re-firm the ground around all plants that have been disrupted by frost, winds, ground disturbance etc.;
- Spread topsoil, obtained from the surrounding ground, as necessary to protect the plants. Plants shall be re-firmed and straightened to an upright position;
- Re-firm all stakes and tree shelter/stakes or adjust where necessary;
- Any surplus discarded materials from the above items shall be removed to the Contractor's tip off site.

930 WATERING:

- The Contractor shall water in all plants at his own discretion and shall maintain the healthy growth of all plant material. Watering shall be sufficient to return the planting pit, trench or bed to field capacity, i.e. "the amount of water retained by previously saturated soil once full drainage has ceased".
- PRUNING: The Contractor shall allow for general pruning to remove vandalised, diseased, dangerous or malformed growth. Pruning operations shall be agreed with the CA before work commences.
- LITTER REMOVAL: The Contractor shall maintain all of the plot areas free from all kinds of litter. All arisings shall be removed to the Contractor's tip offsite.

960 REMOVAL OF TREE STAKES:

- The Contractor shall remove stakes and ties from all trees unless directed by the CA to leave them in place.
- The Contractor shall ensure that the trees are not damaged and that the post holes are closed over.

- All arisings shall be removed and disposed of to the Contractor's tip offsite.

970 HARD SURFACES AND GRAVEL AREAS

- Apply a suitable foliar acting or residual herbicide to all hard surfaces and gravel areas. Allow recommended period before clearing arisings
- Sweep hard surfaces to keep free of litter, leaves and other debris
- Remove mud, silt and debris from surface gutters and channels in hard surfaces and empty drainage gullies
- Rake gravel areas to remove litter, leaves and other debris and to reduce potential weed growth. Leave gravel level.

Appendix B - BM3 Drawings - Maintenance Responsibility Plan b& Planting Plan