

ESTATE LANDSCAPE MANAGEMENT AND MAINTENANCE PLAN

**Guide to the Management of Landscape
Areas at Harefield Grove**

REF JBA 20/027-LMP1

**ON BEHALF OF
Comer Homes**

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1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE OF DOCUMENT

- 1.1.1 The Management Plan shall be taken to include this document and any supporting plans, reports and specifications approved as part of the planning application for the development at Harefield Grove, Hillingdon. This includes any documentation containing quantitative and qualitative information about the external areas of the site that will be useful to those responsible for managing and maintaining them.
- 1.1.2 The purpose of this document is to schedule all required maintenance regimes, operations and works necessary for the satisfactory management of the landscape in perpetuity. The Management Plan sets out the management aims and objectives for the site along with the specific management objectives for each landscape component, and the associated maintenance works required on an Annual and Occasional basis. The Annual Works are those works that will be required every year, such as watering, weeding and cleaning. The Occasional Works are those that will be required on an irregular or cyclical basis, such as repairs and renewals.

1.2 THE GROUNDS

1.2.1 Location

The site comprises the historic Grade II Listed building of Harefield Grove and the grounds that surround it. The site is surrounded by woodland and agricultural land, with the village of Harefield to the south.

Refer to Figure's 1 and 2.

1.2.2 Site Description and Development Proposals

The proposals for the site consist of redevelopment of the historic house, demolition of the attached 1980's office block and replacement with a separate new stable block with central courtyard, plus restoration of further existing residential dwellings to the south, with a Kitchen Garden, Orchard, Rose Garden, Central courtyard, Sports area and play features. The existing woodland on site will be managed and enhanced with a woodland walk for the residents on the site to enjoy. Existing trees and vegetation around the buildings are to be thinned and replaced as part of a comprehensive landscape scheme to reinstate the historic landscaped grounds and views out from the Main House.

Fig 1. Location plan: Road Map: Not to scale

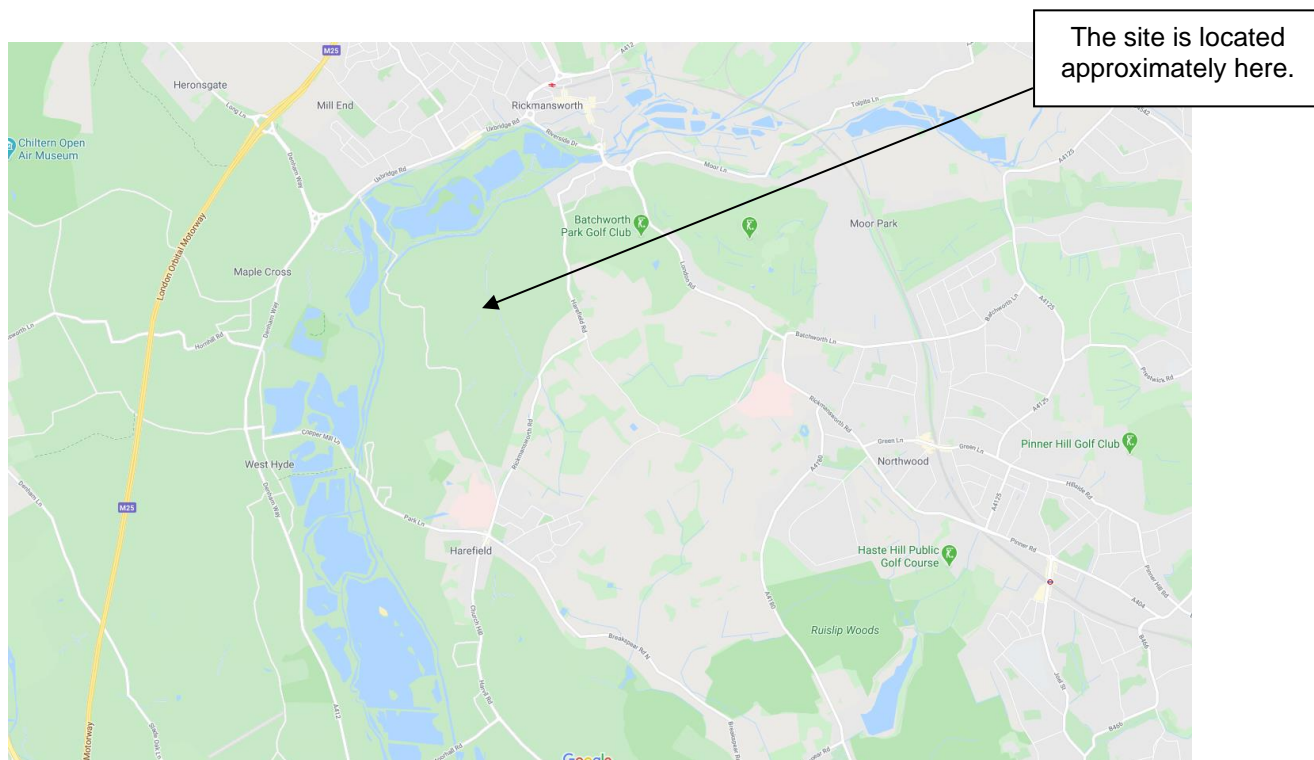


Fig 2. Location plan: Site Boundary: Not to scale



1.2.3 Management Plan Areas

The purpose of this management plan document is to ensure the appropriate management of the retained and proposed landscape areas on the site following the construction and completion of the development. The landscape areas include existing woodland, boundary vegetation and mature historic specimen trees, along with all new planting (trees, hedges, shrubs and grass) and other hard or soft landscape components outside of private gardens.

1.2.4 All of the landscape areas of the site, except for private gardens, will be the subject of the Landscape Management Plan. The landscape areas subject to this Management Plan are set out in Appendix 5.1.

1.3 RECITALS

1.3.1 Parties Involved

- **The Developer:** Comer Homes is responsible for the construction of this development. The developer will be responsible for the protection and management of existing landscape components through the construction phase and the implementation of the hard and soft landscape works in accordance with the planning drawings, including any contractual maintenance period associated with these works.
- **The Local Planning Authority:** This term (abbreviated to LPA) shall refer to Hillingdon Borough Council and its Planning and Landscape Officers who are involved in the process of the approval of landscape and other documentation.
- **The Adopting Organisation:** This is the organisation that will adopt ownership of the landscape areas and is therefore responsible for their management and maintenance including all landscape components and features within them. The Adopting Organisation for the site will be a Private Management Company to be appointed by the Developer. The Adopting Organisation shall also be taken to mean any employee or representative of the organisation in ownership of the grounds.
- **The Landscape Management Contractor:** the company who may be appointed by the Adopting Organisation to carry out the landscape maintenance works.

1.3.2 Status of the Landscape Management Plan

Prior to the commencement of development (or such other date or stage in development as may be agreed in writing with the LPA) a detailed long term Landscape Management and Maintenance Plan for all landscape areas shall be submitted to and approved by the LPA in writing. The plan shall include:

- Aims and Objectives;
- A description of Landscape Components;
- Management Prescriptions;

- Details of maintenance operations and their timing; and
- Details of the parties/organisations who will be maintain and manage the site, to include a plan delineating the areas that they will be responsible for.

The plan shall demonstrate full integration of landscape, biodiversity and arboricultural considerations. The areas of planting shall thereafter be retained and maintained in perpetuity in accordance with the approved Landscape Management and Maintenance Plan, unless any variation is approved in writing by the Local Planning Authority.

- 1.3.3 The LPA will approve this document as part of the planning process and this document therefore forms part of the approved planning documents. Management shall therefore be carried out in accordance with this document following completion of the implementation management plan (and any contractual maintenance periods associated with these works). This document will outline the minimum standard of maintenance to ensure a safe, comfortable, attractive, biodiverse and sustainable landscape is achieved in perpetuity.

1.3.4 **Supportive Information**

This Management Plan is submitted together with the Landscape Proposals the Management Areas and Responsibilities Plan and the Schedule of Maintenance Operations, attached as Appendices (5.1-5.3) to this document.

- 1.3.5 The document should be read in conjunction with the following planning documents:

- Tree Constraints Plans, James Blake Associates, July 2020
- Arboricultural Method Statement, James Blake Associates, Issue A, August 2023
- Arboricultural Impact Assessment, James Blake Associates, Issue A, August 2023
- Tree Survey Schedule, James Blake Associates, August 2023
- Tree Works Schedule, James Blake Associates, August 2020
- Landscape Masterplan, James Blake Associates, August 2020
- Hard / soft proposals...

2.0 AIMS AND OBJECTIVES OF THE LANDSCAPE MANAGEMENT PLAN

2.1 AIMS

2.1.1 The principal aims of this Landscape Management Plan are to secure a coordinated and high standard of landscape management for the landscape areas within the site, to ensure the successful integration of the residential development with the surrounding landscape and to protect and enhance nature conservation interests in accordance with the design objectives in the approved planning documents. This will include the appropriate maintenance of existing retained, and proposed landscape components.

2.2 OBJECTIVES

2.2.1 The main objectives of the Landscape Management Plan are as follows:

- **To maintain landscape character:** To protect and conserve the existing historic landscape character and screening function of the woodland, and to incorporate locally indigenous species within structural landscape areas, to provide an attractive and robust landscape setting for the buildings on the site and reinforce local distinctiveness;
- **The sustainable management of existing vegetation:** To retain existing trees, hedgerows and other vegetation that are worthy of retention, and to enhance their character, composition and age structure through positive management with consideration to long-term viability and health and safety;
- **To achieve a high standard of maintenance:** To take measures to ensure the successful establishment and growth of new structural and incidental planting and to take appropriate long-term management measures to ensure the satisfactory appearance and sustainability of vegetation. To ensure that landscape components are replaced, augmented and/or improved over time as appropriate;
- **To maintain and enhance biodiversity:** To protect and enhance the nature conservation interest of both existing and new habitats and to ensure the adoption of management practices that enhance the biodiversity value of the site. To fulfil all legal requirements in relation to the protection and management of ecological features and the protection and management of target species including bats and reptiles;
- **To ensure health and safety:** To uphold the duty of care that all landscape components are safe and that all reasonable steps are taken to minimise risk of injury and damage to people and property; and
- **To provide a mechanism or monitoring and review:** To ensure that management practices are monitored and where necessary reviewed on an annual basis in accordance with changing site circumstances and the views of key stakeholders (Adopting Authority, resident's representatives and LPA).

3.0 SPECIFIC ELEMENTS REQUIRING MANAGEMENT AND MAINTENANCE

3.1 LANDSCAPE AREAS AND LANDSCAPE COMPONENTS

3.1.1 The landscape areas subject to this Landscape Management Plan include the following components:

- Existing woodland and trees;
- Existing hedgerows;
- Existing brooks or ditches;
- Existing ponds;
- Existing grassland;
- Proposed tree planting;
- Proposed native hedgerows;
- Proposed native whip, shrub and buffer planting;
- Proposed ornamental hedgerows;
- Proposed ornamental shrubs;
- Proposed amenity grass/lawns with bulbs;
- Proposed orchard;
- **Proposed rose garden;**
- Proposed sports pitches (tennis courts/bowling green);
- Proposed wildflower meadow;
- Playable and fitness features;
- Street furniture;
- Structures, walls, railings, fencing and gates; and
- Hard landscape areas.

3.1.2 The information includes a description and specific management objectives for each component along with the annual and occasional management regimes required.

3.1.3 The extent and location of areas to be managed is shown on the Landscape Management Areas Plan in Appendix 5.1.

3.2 EXISTING WOODLAND AREAS AND TREES

3.2.1 Description

- A large number of existing trees on site will be retained as part of the landscape strategy. Some trees, predominantly towards the centre of the site, have been identified as being in need of removal – refer to the arboricultural report.
- The existing trees on and adjacent to the site are set out in the Tree Survey Schedule. The Tree Survey Schedule identifies the location, species, size and condition of the existing trees to be retained by the proposed development and identify any initial works to be completed by the Developer during the construction phase as well as any on-going monitoring which may be required.
- The historic parkland setting has numerous mature trees scattered throughout the site. Species include Giant sequoia, oak, lime, Deodar cedar, sweet chestnut, Lawson cypress, western red cedar, Scots pine and horse chestnut. There is also a veteran oak pollard situated west of the main house. Substantial areas are overgrown with laurel and rhododendrons, forming a dense subcanopy layer, inhibiting ground flora.
- Many of the trees are located within areas subject to the London Borough of Hillingdon Tree Preservation Order ref. TPO No.1 1951 W9.

3.2.2 Management Objectives

The management objectives for retained trees are to:

- Maintain the trees in as healthy and attractive condition for as long as possible, to ensure continuity in tree cover and their contribution to the Historic landscape surrounding the listed building.
- Mature trees will be managed to prolong their lives and management plans for these trees will be individual and bespoke based on each tree's age and condition.
- They will be managed to retain the historic parkland setting, but also to protect public safety.
- Maintain the woodland walks by cutting back overgrown laurel and rhododendron subcanopy vegetation to ensure a 5m wide clear route is afforded and weaves around mature tree trunks.

Maintain and enhance the woodland edge to the historic parkland surrounding the house by cutting back and grubbing out stumps of overgrown laurel and rhododendrons. This is to reinstate the noted historic native woodland ground flora, currently inhibited by shading out and leaf litter from laurel and rhododendrons.

3.2.3 Annual Works

- i) **Visual Inspection:** Trees should be regularly visually checked for the presence of any diseased or rotten wood; fungal or other

infections/disease; and stability. If any such issues are identified, then the advice of a qualified Arboriculturist should be sought immediately.

- ii) **Subcanopy Works to Woodland Walks:** All works shall be carried out by a skilled, qualified and approved Arboricultural Contractor in accordance with BS3998: 2010 'Tree Work - Recommendations'. Pull out by hand all young seedlings. All brushwood and logs that result from surgery and felling of laurel and rhododendron subcanopy vegetation on site can be utilised to enlarge or renew hibernacula or eco piles. Brushwood may be chipped on site, with chippings resulting from these operations to be spread along woodland walks to maintain bark mulch routes and suppress weed growth.
- iii) **Subcanopy Works to Woodland Edges:** All works shall be carried out by a skilled, qualified and approved Arboricultural Contractor in accordance with BS3998: 2010 'Tree Work - Recommendations'. Pull out by hand all young seedlings. The cutting will not prevent regrowth however as cut stems/stumps will regenerate. This needs to be addressed and there are three main ways of achieving this as follows:
 - a. Digging the stumps out; The effectiveness of this technique is increased by removing all viable roots. This can be done manually or with a tractor and plough. To avoid regrowth, stumps should be turned upside down and soil should be brushed off roots.
 - b. Direct stump treatment by painting or spot spraying stumps with a herbicide immediately after being cut. This is best undertaken using a handheld applicator to avoid herbicide killing non-target species. This should only be undertaken during dry (for next 12 hours) and frost-free conditions.
 - c. Alternatively stump treatment can be undertaken through stem injection, where the stem is drilled and herbicide poured into it.
- iv) All brushwood and logs that result from surgery and felling of laurel and rhododendron subcanopy vegetation on site can be utilised to enlarge or renew hibernacula or eco piles. Brushwood may be composted or chipped on site, with chippings resulting from these operations to be spread along woodland walks to maintain bark mulch routes and suppress weed growth. Leaf litter will be required to rake up and remove to compost on site, or spread within woodland areas, this is because the leaf litter inhibits growth of native ground flora.
- v) **Annual Arboricultural Assessment:** In any event, an Arboricultural Assessment should be undertaken once annually by a qualified Arboriculturist inspecting the condition of existing trees including any cause of increased risk to people or property. Furthermore, during the Arboricultural Assessment, the health of the trees shall be monitored and any works required for health and safety or to promote the health and sustainability of existing trees shall be identified, scheduled and actioned at a suitable time of year following application and granting of appropriate consents by the LPA (where required), refer to Occasional Works in paragraph 4.2.4 below.

3.2.4 Occasional Works

- i) **Tree Work Consents:** Any works recommended for each tree (such as crown raising, crown reduction, substantial pruning, removal of limbs, pollarding or felling) should be documented and a formal application made to the LPA for approval in advance of the works being undertaken wherever necessary. This includes trees protected by a Tree Preservation Order (TPO) or a condition of the planning consent (within 5 years).
- ii) **Timeframes & Specialist Advice:** All works should be completed at an appropriate time of year and in accordance with relevant EU and UK wildlife legislation. Where possible this should be outside of the bird nesting season (i.e. between October through to March inclusive). In any event according to the nature of the works, there may be an additional requirement for monitoring or a watching brief by a qualified ecologist to ensure there are no nesting birds or bats present.
- iii) **Tree Works:** All works shall be carried out by a skilled, qualified and approved Arboricultural Contractor in accordance with BS3998: 2010 'Tree Work - Recommendations'. All brushwood and logs that result from surgery and felling of trees on site shall be removed off site, unless needed to enlarge or renew hibernacula or eco piles. Brushwood may be chipped on site, but all wood chippings resulting from these operations shall be raked up, bagged and removed. Where surgery works affect a highway, the Arboricultural Contractor shall ensure the relevant permissions and road control permits are obtained, and all necessary health and safety parameters are met.
- iv) **Tree replacement and enhancement of tree cover:** Any tree that dies or is necessarily felled, but which is not removed as part of a programme of thinning or coppicing, shall be replaced with a tree of appropriate species and stock size. Such replacement shall be with a tree of either the same or similar species as those existing. The option for replacing with a different species is to allow some flexibility avoiding problems encountered with 'Same Species Disease' and to ensure sustainable tree cover in the interests of visual amenity. Possible damage to drainage/services and adjoining building foundations must be considered before choosing a replacement tree species and location. Where alternative species are being considered, then the species should be suitable to the character of the location, either native (in the case of structural planting on the boundary of the site) of a source of local provenance where possible or if ornamental, then appropriate to the type of trees adjacent to them.

3.3 EXISTING DITCHES

3.3.1 Description

- Various ditches and streams exist around the site, connecting lakes and ponds.

3.3.2 Management Objectives

The management objectives for the ditches will be:

- To provide a seasonal habitat for wildlife and enhance biodiversity. To protect the habitat around the brook in accordance with ecological recommendations while ensuring a safe environment.

3.3.3 Management Constraints

- All works within the site will be undertaken in accordance with the Environment Agency Pollution Prevention Guidelines PPG5. All personnel will be familiar with the content of these guidelines prior to commencing work within the site.

3.3.4 Annual Works

- i) **General maintenance for ditches:** Remove fallen leaves and debris from the ditches and swales in the autumn to allow free water flow. Clear patches of marginal vegetation each autumn in rotation so that there is always a succession developing from bare mud. If marginal plants start spreading noticeably from the margins into the centre, action will need to be taken to remove them. Manage vegetation on the banks of the brook, ditches and swales to maintain water flow and to create potential wildlife habitats. Check headwalls and outlets and remove any litter and debris at each visit ensuring no obstructions are present that restrict the flow of water. Monitor water quality and take remedial action if required.

3.3.5 Occasional Works

- i) **Monitoring of ditches and watercourses:** Management should be flexible. Monitoring should be an integral part of any management. The careful recording of information is necessary before, during and after any work:
 - Monitor the extent of marginal planting. If plants start spreading into the centre of the ditch, clear vegetation from its 'invading front', on the inner or waterside of the margin, leaving the landward side as undisturbed habitat. Retain a solid margin of vegetation to discourage access;
 - Dig out any accumulated silt in ditches in early autumn, clearing only a part of the area in a 12-month period;
 - Ensure there are sufficient areas of habitat (e.g. logs, stones and rough vegetation at the ditch edge), especially during winter when these will be used as hibernation sites by frogs, newts and others;
 - Ensure vegetation (trees and scrub) do not shade or substantially overhang the ditches, brook or swales; and
 - Clear any self-sown trees within the ditches or swales.

3.4 EXISTING PONDS

3.4.1 Description

- There are several existing ponds on site, one formal pond edged with coping stones, and a series of lakes connected via ditches and streams.

3.4.2 Specific Objectives

- To maintain sustainable health and growth of marginal vegetation and ensure water bodies do not become overgrown with plant growth inhibiting drainage and storage functions.

3.4.3 Annual Work

Regular inspection is important to assess health and safety, water quality and vegetation growth, and to remove any accumulated litter. There should be a minimum of 50% open water kept clear of vegetation growth. Maintenance activities should be detailed in the Health and Safety Plan and a risk assessment should be undertaken. Any works carried out should be preceded by an assessment by an appropriately qualified Ecologist and all recommendations adhered to. Specific maintenance activities are detailed in the maintenance schedule attached (see appendix 5.1).

3.4.4 Occasional Work

Maintain 50% open water across the pond surface by clearing vegetation as appropriate, focussing on the most vigorous species. Remove material by pulling, cutting or strimming and lay arisings on the pond side for 48 hours to allow any fauna to return to the pond, before removal off site. For distressed and failing areas of vegetation, remove dead material by the same method as above. Small areas of failed marginal vegetation may be replanted with plugs of appropriate marginal and aquatic species. Small areas to the upper banks of the pond may be reseeded following the autumn cut by spreading the cut arisings onto the bare soil to set seed. Evenly seed with an appropriate mix of wildflowers and grasses in either October/ November or February/ March, to a mix and at a rate as agreed with the landscape architect or consultant ecologist. Carefully rake in thoroughly to ensure that the seed is a few millimetres below the surface. Roll using a very light roller or a cylinder mower, ensuring the surface is even and level. In the event of unexpected dry weather water thoroughly to field capacity using a fine spray hose and continue to water to maintain a moist soil until complete establishment. Protect newly seeded areas by metal stakes and high visibility tape to restrict access and hand weed out persistent residual weeds and new germinated ruderal weed seed. Inspect inlets, outlets, overflows and grilles for blockages and clear if required. Inspect inlets for silt accumulation, and excavate if found to be impeding inlet function. Sediment to be disposed of in line with Environment Agency protocol, with sediment testing to be undertaken as required.

3.5 EXISTING GRASSLAND

3.5.1 Description

- Existing grassland will be retained on site where possible and enhanced where necessary for a healthy biodiverse sward.

3.5.2 Management Objectives

The management objectives for the existing grassland will be:

- To maintain the improved grassland providing informal amenity value to residents.
- To maintain a healthy and biodiverse sward suitable for a range of wildlife.

3.5.3 Initial Works

- Habitat and landscape enhancement:** As part of the wider landscape improvements to the site, the enhancements proposed for the existing grassland are limited to hand planting of proposed native trees (feathers) and mowing of informal paths through the grassland

3.5.4 Annual Works

- Cutting of retained grassland areas:** Grassland shall be strimmed only once a year to a sward height of 150mm in late August. To allow formation of a thatch layer arisings are to be left in situ. In a warm and wet year, a second cut may be required and if so this should be carried out in March. The timing of all cutting operations should take into consideration any protected species that may be present. There may be an additional requirement for monitoring or a watching brief by a qualified ecologist to ensure that no protected species are present.
- Mowing informal pathways:** Informal paths through existing grassland are to be mown regularly, in full accordance with clause 3.6.4 except to a sward height of 100mm.
- General care:** Hand weed pernicious, ruderal and aggressive or invasive weeds in in order to maintain the visual amenity of the area. Do not herbicide or fertilise.

3.6 PROPOSED TREE PLANTING

3.6.1 Description

- New tree planting is incorporated into the proposed development within the wider landscaped grounds as replacement specimens, parking areas, the kitchen garden, courtyard and orchard, to provide landscape structure and amenity value. The trees will help define the historic setting and be a buffer between the listed building and the new proposed development.

3.6.2 Management Objectives

The management objectives for new tree planting is to:

- Ensure the satisfactory establishment and growth of new tree planting typical of the respective species;

- Promote conditions so that trees are healthy and safe; and
- Ensure continuity of the design approach and amenity value of tree planting.

3.6.3 Annual Works

- General tree maintenance during establishment:** Check all trees for firmness and stability in the ground. Check and adjust tree ties, replacing if necessary. Top up bark mulch levels where necessary around the base of new trees, using the same or similar product to that previously supplied to maintain an approximate depth of 50mm to reduce competition from weeds and retain soil moisture. Where trees are in grass areas, remove weed growth by hand and retain a circle of bark mulch (approximate radius of 500mm) to aid mowing and prevent damage to the main stem. All trees shall be fertilised using a suitable and approved liquid feed (N10:P15:K10) at a rate of 60g/m² during early May and again in late September. Prune back any diseased or rotten wood (including the removal of main stems and limbs) back to sound wood as required. Remove all cut material from site.
- Watering trees:** Water trees during dry periods (being any period without substantial rainfall for 14 days or more), until trees are successfully established. Water at a rate of 25 litres per tree position into watering tubes. Apply water at a frequency of once per fortnight from April to the end of September (to a maximum of 15 visits). Increase watering frequency during any continuous hot weather lasting more than 7 days. The Landscape Management Contractor shall be entirely responsible for varying the frequency of these visits according to climatic conditions and for contacting the Adopting Organisation and agreeing the timing of any additional watering visits if required and where restrictions are placed on the use of water, sources and costs of obtaining second class water. The Landscape Management Contractor shall be responsible for any tree failures or excessive die back from drought stress during the management contract.

3.6.4 Occasional Works

- Checking and removal of tree stakes and ties:** Review the need for tree stakes and ties annually for up to 6 years. Remove stakes and ties between 4 to 6 years after planting, but be sure trees are firm and stable. Stakes and ties removed shall be cut at ground level, below lowest grass height (to prevent snagging mower blades) or pulled from the ground and the post holes filled with suitable topsoil. If the tree is found to be weak or unstable after the stakes have been removed, then check the base of the tree for signs of rot. If rotten or unlikely to stabilise, remove the tree and replace. If the tree is free from rot or other cause of its instability, then re-instate a tree support, using 100mm diameter chestnut stake and single tie. The stake should be pushed into the ground with a post rammer, to a depth of 600mm and cut to one third the height of the tree. Fix the tree stem with a rubber tie and spacing device attached to at a point no more than 25-35mm below the top of the post, in order to prevent chaffing against the post in high winds. Remove old posts and ties and arisings and dispose off site.

- ii) **Long-term tree surgery works:** After 10-20 years of maintenance as above (or earlier if required), newly planted trees will reach semi-maturity and at this time may be in need of corrective surgery. Trees should become subject to the annual Arboricultural Assessment and any works recommended shall be carried out in accordance with paragraphs 4.2.3 and 4.2.4.
- iii) **Tree replacement and enhancement of tree cover:** Any tree that dies or is necessarily felled, but which is not removed as part of a programme of tree removals, shall be replaced with a tree of appropriate species and stock size. Such replacement shall be with a tree of either the same or similar species as those existing. The option for replacing with a different species is to allow some flexibility avoiding problems encountered with 'Same Species Disease' and to ensure sustainable tree cover in the interests of visual amenity. Possible damage to drainage/services and adjoining building foundations must be considered before choosing a replacement tree species and location. Where alternative species are being considered, then the species should be suitable to the character of the location and adjoining trees. Once annually the site shall be considered for the need for any strategic replacement or enhancement planting, to broaden the age class of trees and tree groups, in the interests of the long-term sustainability of strategically important vegetation. Trees should be a minimum stock size of standards (10-12cm girth), and implemented and maintained in accordance with good horticultural practice. Replacement and enhancement planting is best undertaken during the planting season (November through to March inclusive).

3.7 PROPOSED NATIVE HEDGEROWS

3.7.1 Description

- Native hedgerows are proposed strategically throughout the site to enhance the rural character and provide soft landscape edge.

3.7.2 Management Objectives

- To maintain existing and new native hedgerows to a naturalistic appearance and to a given predetermined ultimate height, shape and width.
- To ensure continuity of form and density through under or inter-plant any gaps or sparse areas using species mixes to match as required.
- To ensure that leggy and unkempt growth is pruned back and maintained at a functional size so that the hedge does not hold litter or present Health and Safety problems.

3.7.3 Annual Works

- i) **General native hedge maintenance:** Top up mulch levels for new hedges where necessary, using the same or similar product to that previously supplied. Prune new native hedges once or twice annually; once in March and, if required, again in November to a height of no less than 3m high.

Single cuts will provide a more natural appearance and a second cut will ensure a neater profile – more suitable to urban areas. Native hedges associated with the urban Public Open Space areas will be maintained to an eventual height of **1.8m**.

- ii) **Pruning native hedges:** Prune any diseased or rotten wood (including the removal of main stems and limbs) back to sound wood. Remove all stems and limbs which are unsafe or are in danger of falling or breaking up during gales. Remove all cut material from site and cart away to tip. Do not site burn. Top out native hedgerows to the above intended eventual height, and face up the sides, using an electric hedge cutting device, to form an even and tidy hedge alignment. Cut larger stems with a shrub pruning tool. Long rural native hedges can be flailed once annually if there is suitable access.

3.7.4 Occasional Works

- i) **Gapping up native hedges:** Remove failed plants for new native hedges and replace with a plant of the same species, to a minimum size of an open ground whip, 0.9-1.2m high, planted between the months of December and mid-March inclusively, unless the plant is either Ilex, Ligustrum or other native evergreen species, when the height can be 500mm minimum and be supplied in a 3L pot. Gap up areas of less dense growth with additional plants as required to achieve a continuous hedge alignment, taking due allowance for natural growth and
- ii) **Occasional surgery to larger native hedges:** Native hedges which have grown out into tree lines, should be faced up only, retaining taller trees, unless there are weaknesses in the root stock and stumps from rot. Such trees shall be pollarded to the given hedge height above. Retain any sound stems.

3.8 PROPOSED NATIVE WHIP / SHRUB PLANTING

3.8.1 Description

- Shrub planting has been proposed strategically around site.
- Native species will be selected to provide general habitats and foraging for wildlife including flowering and fruiting varieties.

3.8.2 Management Objectives

The management objectives for native whip and shrub planting are to:

- Ensure the satisfactory establishment and growth of new planting;
- Maintain planting in a healthy and attractive condition and enhance the value of planting as a food source to wildlife; and
- Ensure continuity of the design approach and amenity value of planting.

3.8.3 Annual Works

- i) **Weeding:** Remove all weed growth by hand as necessary to ensure weed free and tidy planting areas. Six to eight visits are required per growing season. Visits should occur approximately monthly in the growing season, subject to weather conditions from April to October, with an extra visit

outside of the growing season in December or January to inspect the condition of the beds. Take great care not to disturb jute spat mats and replace where necessary for the first 3 years, using the same or similar product to that previously supplied. Note: For planting using a jute spat mat, reduce visits to 4 times per year in the growing season. Where a jute spat mat has been used, this will have disappeared within the establishment phase. Weeding frequency should therefore be varied according to the site and density of vegetation cover and in any event should be between 4 and 8 i.e. whatever is required to achieve a weed free scheme. All weeds shall be removed from the site.

- ii) **Spot Herbiciding:** Where required, persistent perennial weeds can be controlled using herbicide. For planting beds containing herbaceous plants and shrubs, apply a suitable folia-acting systemic translocated herbicide using a weed wiper device to avoid killing wanted plants. The use of herbicides should only be made following a risk assessment to consider potential effects on the environment and on human health, but also spray drift killing the wrong plants. The purchase, transport and storage of herbicides are regulated by Part III of the Food and Environment Protection Act 1985, Control of Pesticides (Amendment) Regulations 1997; the Health and Safety at Work Act 1974; the COSHH Regulations, the product COSHH sheet and EC Directive 91/414/EEC (the "Authorization Directive") and the Plant Protection Products Regulations 1995 as amended by the Plant Protection Products (Basic Conditions) Regulations 1997. All herbicides must have an appropriate full or "off-label" approval for use in a relevant situation. Refer to the Pesticide Safety Directive, for which the website is given here for your assistance: www.pesticides.gov.uk.

All pesticides shall be applied in suitable calm weather conditions; allow for repeat spraying as required to achieve a complete kill. **DO NOT HERBICIDE WITHIN CLOSE PROXIMITY OF WATERCOURSE OR ORCHARD.** Apply herbicide as required and at intervals to ensure no regeneration of weed, usually equating to four sprays per year during the growing season at 6 week intervals, from late April onwards. The timing of visits may vary according to weather conditions. Extreme care must be taken to avoid damage to surrounding plants and grass, and to avoid spray drift. Any damage resulting from incorrect usage, spillage, and spray drift, to be rectified at the Landscape Management Contractor's expense.

- iii) **General planting maintenance:** At each visit firm in and straighten any loose plants. Replace jute spat mats where necessary for the first 3 years, using the same or similar product to that previously reduce competition from weeds and retain soil moisture. Strim/mow between rows of planting to reduce weed ingress.
- iv) **Pruning of planting:** Prune back shrubs in the period between October to March in accordance with sound horticultural practices, pruning back to a node, shoot or bud; prune out dead, leggy and broken branches, without damage to the natural habit or appearance of plant without box clipping or rounding off plants. Prune out crossover branches, invasive suckers, dead wood, damaged stems, any spindly growths and any epicormic growth that will weaken the plant. Prune back Rosaceous and quick and leggy growing

plants much harder than other species, but prune back by no more than 30% in any one-year. Prune Cornus varieties back to 200mm above ground every 3rd year, but retaining any young growths.

- v) **Watering:** For the first year after planting water both shrubs and whips during dry periods (being any period without substantial rainfall for 14 days or more). Water all shrubs to field capacity (minimum 10 litres per m²) and water all large specimens at 10 litres each. Apply water at a frequency of up to 2 times per week from April to the end of September (to a maximum of 15 visits in any one calendar year) as required during any continuous hot weather lasting more than 7 days. The Landscape Management Contractor shall be entirely responsible for varying the frequency of these visits according to climatic conditions and for contacting the Adopting Organisation and agreeing the timing of any additional watering visits if required and where restrictions are placed on the use of water, sources and costs of obtaining second class water. The Landscape Management Contractor shall be responsible for any tree failures or excessive die back from drought stress during the management contract. Following the first year after planting watering should be unnecessary as all of the species are native and should be tolerant of drought conditions.

3.8.4 Occasional Works

- i) **Replacement and enhancement planting:** Cut back any shrubs and herbaceous plants where they have become old, misshapen, leggy or they have lost their vigour. Specimens, shrubs or herbaceous plants that fail to show growth or develop full foliage (including plants damaged during management operations), where such plant failure leaves a gap in the foliage not filled by adjacent plants, shall be replaced with stock of the size, species and quality originally specified. Include any plants that are destroyed by vandalism, theft or similar cause through no fault of the Landscape Management Contractor, up to and not exceeding 5% of the plant stock. Specimens, shrubs or herbaceous plants so replaced shall be the same as those specified, previously supplied and approved. Nursery stock shall be open grown whips (60-90 cm high) or where evergreen species a minimum stock size of a 3L pot. Planting should be implemented and maintained in accordance with good horticultural practice. Include any works necessary to enable planting to be properly carried out i.e. removal and disposal of dead material off site and for topping up/replacement of bark mulch. Once annually the site shall be considered for the need for any strategic replacement or enhancement planting, to broaden the age class of vegetation in the interests of the long-term sustainability of strategically important vegetation.
- ii) **Thinning and Coppicing:** Although the plant density has been lowered to reduce future thinning frequency and intensity. Some thinning and coppicing will allow trees and shrubs to develop diversity of form and different types of nesting, feeding and foraging habitat and extend the potential life of individual plants. Additional thinning of the buffer planting areas may be required at intervals following an initial selective thin. The timing of thinning should be informed by the arboricultural survey, which should include a visual inspection, checking if crowns are overlapping and

thinning is needed. Any trees, apart from understorey species, which have failed to reach the canopy and have been suppressed, will need removal. Thin on a phased basis in blocks. The aims should be to create a 'ring of sky' around each tree that is retained, into which it can spread. Protect coppice stools from deer/rabbit browsing by piling brash over them. Monitor coppice periodically, noting any stools that fail to regrow and replant the following autumn. Remove weeds and invasive species as required. A competent person, such as a qualified Arboriculturist should plan thinning and coppicing operations in advance by identifying and marking all trees for removal and coppicing in winter. All thinning operations should be undertaken between October and February.

3.9 PROPOSED ORNAMENTAL HEDGEROWS

3.9.1 Description

- New ornamental hedgerows are proposed throughout the site, to define areas.
- New hedgerows will use a range of ornamental species of value to wildlife (as a result of providing shelter and food e.g. flowers and berries).

3.9.2 Management Objectives

The management objectives for new hedgerow planting is to:

- Ensure the satisfactory establishment and growth of new hedgerow planting with a typical hedge height, form and density according to species;
- Maintain planting in a healthy and attractive condition of value to wildlife;
- Maintain natural and informal surveillance of the street from adjoining properties; and
- Ensure continuity of the design approach and amenity value of planting.

3.9.3 Annual Works

- Weeding and general maintenance:** Remove all weed growth by hand as necessary to ensure weed free and tidy planting areas. Seven visits are required per growing season. Visits should occur approximately monthly in the growing season, subject to weather conditions from April to October, with an extra visit outside of the growing season in December or January to inspect the condition of the beds. Take great care not to disturb sheet or bark mulch; top up bark mulch levels where necessary for the first 3 years, using the same or similar product to that previously supplied to maintain an approximate depth of 50mm to reduce competition from weeds and retain soil moisture. Note: For planting using a non-biodegradable weed suppressant membrane, reduce visits to 4 times per year in the growing season. Where a biodegradable weed suppressant fabric has been used, this will have disappeared within the establishment phase. Weeding frequency should therefore be varied according to the site and density of vegetation cover and in any event should be between 4 and 8 i.e. whatever is required to achieve a weed free scheme. All weeds shall be removed from the site.

- ii) **Cutting / trimming of ornamental hedges:** Cut ornamental hedges at least twice annually, once in June and again in late November. Ornamental hedges associated with front garden areas will be regularly maintained to an approximate height of between 1 and 1.5m to form a square, even and tidy hedge that is formal in character. Cut larger stems, and prune any diseased rotten wood back to sound wood. Remove all cut material from site.
- iii) **Watering of ornamental hedges:** Water ornamental hedges during dry periods (being any period without substantial rainfall for 14 days or more). Water shrubs to field capacity (minimum 10 litres per m²) applying water in the morning or early evening to reduce evaporation. Apply at a frequency of up to 2 times per week from April to the end of September (to a maximum of 20 visits in any one calendar year) as required during any continuous hot weather lasting more than 7 days. The Landscape Management Contractor shall be entirely responsible for varying the frequency of these visits according to climatic conditions and for contacting the Adopting Organisation and agreeing the timing of any additional watering visits if required and where restrictions are placed on the use of water, sources and costs of obtaining second class water. The Landscape Management Contractor shall be responsible for any tree failures or excessive die back from drought stress during the management contract.

3.9.4 Occasional Works

- i) **Gapping up and replacement of ornamental hedges:** Remove failed plants and replace with a plant of the same species, to a minimum size of a 3L pot with a minimum height and spread of 400mm (300mm if the plant is Box or Hebe). Gap up areas of less dense growth with additional plants as required planted in a single row to achieve a continuous hedge alignment, taking due allowance for the natural growth and regeneration of cut material. Include any works necessary to enable planting to be properly carried out i.e. removal and disposal of dead material off site and for topping up/replacement of bark mulch.

3.10 PROPOSED ORNAMENTAL SHRUBS

3.10.1 Description

- Ornamental shrubs, groundcover, herbaceous and climbing plants are proposed in the areas around the houses in conjunction with trees, hedges and lawns. The majority of this planting is domestic in character and is designed to contribute to the settling of the Historic house as well as the new buildings, provide visual interest and amenity value and to enhance the built form.

3.10.2 Management Objectives

The management objectives for new shrub and groundcover planting are to:

- Ensure the satisfactory establishment and growth of new ornamental planting;

- Maintain planting in a healthy and attractive condition and enhance the value of planting as a food source to wildlife; and
- Ensure continuity of the design approach and amenity value of planting.

3.10.3 Annual Works

- i) **Weeding:** Remove all weed growth by hand as necessary to ensure weed free and tidy planting areas. Eight visits are required per growing season. Visits should occur approximately monthly in the growing season, subject to weather conditions from April to October, with an extra visit outside of the growing season in December or January to inspect the condition of the beds. Take great care not to disturb sheet or bark mulch; top up bark mulch levels where necessary for the first 3 years, using the same or similar product to that previously supplied. Note: For planting using a non-biodegradable weed suppressant membrane, reduce visits to 4 times per year in the growing season. Where a biodegradable weed suppressant fabric has been used, this will have disappeared within the establishment phase. Weeding frequency should therefore be varied according to the site and density of vegetation cover and in any event should be between 4 and 8 i.e. whatever is required to achieve a weed free scheme. All weeds shall be removed from the site.
- ii) **Spot Herbiciding:** Where required, persistent perennial weeds can be controlled using herbicide. For planting beds containing herbaceous plants and shrubs, apply a suitable folia-acting systemic translocated herbicide using a weed wiper device to avoid killing wanted plants. The use of herbicides should only be made following a risk assessment to consider potential effects on the environment and on human health, but also spray drift killing the wrong plants. The purchase, transport and storage of herbicides are regulated by Part III of the Food and Environment Protection Act 1985, Control of Pesticides (Amendment) Regulations 1997; the Health and Safety at Work Act 1974; the COSHH Regulations, the product COSHH sheet and EC Directive 91/414/EEC (the “Authorization Directive”) and the Plant Protection Products Regulations 1995 as amended by the Plant Protection Products (Basic Conditions) Regulations 1997. All herbicides must have an appropriate full or “off-label” approval for use in a relevant situation. Refer to the Pesticide Safety Directive, for which the website is given here for your assistance: www.pesticides.gov.uk. All pesticides shall be applied in suitable calm weather conditions; allow for repeat spraying as required to achieve a complete kill. Apply herbicide as required and at intervals to ensure no regeneration of weed, usually equating to four sprays per year during the growing season at 6 week intervals, from late April onwards. The timing of visits may vary according to weather conditions. Extreme care must be taken to avoid damage to surrounding plants and grass, and to avoid spray drift. Any damage resulting from incorrect usage, spillage, and spray drift, to be rectified at the Landscape Management Contractor’s expense.
- iii) **General planting maintenance:** At each visit firm in and straighten any loose plants. Top up bark mulch levels where necessary for the first 3 years, using the same or similar product to that previously supplied to

maintain an approximate depth of 50mm to reduce competition from weeds and retain soil moisture. All shrubs shall be fertilised using an approved liquid feed (N10:P15:K10) at a rate of 60g/m² during early May and late September.

- iv) **Pruning of ornamental planting:** Prune back shrubs in the period between October to March in accordance with sound horticultural practices, pruning back to a node, shoot or bud; prune out dead, leggy and broken branches, without damage to the natural habit or appearance of plant without box clipping or rounding off plants. Prune out crossover branches, invasive suckers, dead wood, damaged stems, any spindly growths and any epicormic growth that will weaken the plant. Prune back Rosaceous and quick and leggy growing plants much harder than other species, but prune back by no more than 30% in any one-year. Prune Cornus varieties back to 200mm above ground every 3rd year, but retaining any young growths. Cut back Lavender after flowering. In terms of herbaceous plants cut back all deciduous grasses in spring by removing dead stems before new growth starts to appear. Prune Geraniums hard after flowering to reduce foliage by 80%.
- v) **Watering:** Water both shrubs and specimens during dry periods (being any period without substantial rainfall for 14 days or more). Water all shrubs to field capacity (minimum 10 litres per m²) and water all large specimens at 10 litres each. Apply water at a frequency of up to 2 times per week from April to the end of September (to a maximum of 15 visits in any one calendar year) as required during any continuous hot weather lasting more than 7 days. The Landscape Management Contractor shall be entirely responsible for varying the frequency of these visits according to climatic conditions and for contacting the Adopting Organisation and agreeing the timing of any additional watering visits if required and where restrictions are placed on the use of water, sources and costs of obtaining second class water. The Landscape Management Contractor shall be responsible for any tree failures or excessive die back from drought stress during the management contract.

3.10.4 Occasional Works

- i) **Replacement and enhancement planting:** Cut back any shrubs and herbaceous plants where they have become old, misshapen, leggy or they have lost their vigour. Specimens, shrubs or herbaceous plants that fail to show growth or develop full foliage (including plants damaged during management operations), where such plant failure leaves a gap in the foliage not filled by adjacent plants, shall be replaced with stock of the size, species and quality originally specified. Include any plants that are destroyed by vandalism, theft or similar cause through no fault of the Landscape Management Contractor, up to and not exceeding 5% of the plant stock. Specimens, shrubs or herbaceous plants so replaced shall be the same as those specified, previously supplied and approved. Nursery stock shall be container grown and shall be a minimum stock size of a 3L pot. Planting should be implemented and maintained in accordance with good horticultural practice. Include any works necessary to enable planting to be properly carried out i.e. removal and disposal of dead

material off site and for topping up/replacement of bark mulch. Once annually the site shall be considered for the need for any strategic replacement or enhancement planting, to broaden the age class of vegetation in the interests of the long-term sustainability of strategically important vegetation.

3.11 PROPOSED AMENITY GRASS AND BULBS

3.11.1 Description

- Areas of cultivated amenity grass are located across the open space and amenity areas, with incidental drifts of bulbs.
- The mowing frequency will be related to the grass mix and function of the area. Where bulbs are present these grass areas will generally be subject to a lower frequency cutting regime for aesthetic reasons. The height of the sward can be varied according to amenity and to ensure nature conservation benefits.

3.11.2 Management Objectives

The management objectives for amenity grass areas will be to:

- To ensure the satisfactory establishment of the grass sward and bulbs; and
- To maintain healthy and suitable grass areas appropriate to function and use.

3.11.3 Initial Works

- Habitat and landscape enhancement:** As part of the wider landscape improvements to the site, the enhancements proposed for the existing grassland are limited to hand planting of proposed native trees (feathers), mowing of informal paths through the grassland, and placement of hibernaculums. For further information, refer to Detailed Soft Landscape Proposals by JBA.

3.11.4 Annual Works

- Mowing and edging:** Amenity grass areas shall be mown in order to maintain the visual amenity of the area. Mowing frequency and height shall be adjusted the function and use of each area. All grass shall be mown initially with a rotary mower once during the spring (mid-March), to a height of 50mm and thereafter using a cylinder mower, collecting the arisings each time, and removing off site. Delay cutting of grass areas containing bulbs (including a 150mm margin) until late June once bulbs have finished flowering and the leaves have wilted after deadheading bulbs in May. Soft edges between grass areas and planting beds shall be kept free from grass by cutting the grass with a 'half moon' edging tool to ensure a neat, clean-cut finish once per year at the start of the growing season. The edge of paving and shrub beds shall be kept free of grass using trimmers or edge clippers once per month during the growing season.
- General lawn care:** Apply an approved turf fertilizer, selective weed killer and moss retardant in May and September, applying strictly in accordance with the manufacturer's instructions, Control of Pesticide Regulations, COSHH

Regulations and product COSHH sheet in suitable weather conditions. Otherwise amenity grass areas shall be weeded either by hand or (especially persistent weeds) herbicide treated in order to maintain the visual amenity of the area (refer to paragraph 4.5.3).

- iii) **Watering amenity grass areas:** During the first 3 years following initial seeding or following re-seeding operations, water amenity grass areas during periods of extreme drought (2 or more weeks without substantial rainfall) to a maximum of 15 occasions. After establishment continue to water only if deemed to be required. To aid the natural establishment of grass areas, only water where unavoidable, where the grass is going brown and appears to be suffering from severe drought stress. When watering, water to field capacity (minimum 20L/m²) in the morning or in the evening to reduce water evaporation, when the water is more likely to reach the roots. The Landscape Management Contractor shall be entirely responsible for varying the frequency of these visits according to climatic conditions and for contacting the Adopting Organisation and agreeing the timing of any additional watering visits if required and where restrictions are placed on the use of water, sources and costs of obtaining second class water.

3.11.5 Occasional Works

- i) **Replacement of failed turf:** Small areas of dead, dying or failing grass and bulbs shall initially be made good through changes to the mowing regime or through temporary protection of high wear areas using temporary fencing or similar. Larger areas of degradation may require re-cultivating and re-seeding. Cut out sections of distressed and failing or dead areas of turf using a suitable turf-stripping machine or for small areas by hand. Supply and lay new turf of a suitable standard and lay flush with existing sward, filling any cracks and top dressing with a 70:30 ratio mix of sand and screened topsoil. This sand/soil mix shall also contain grass seed of the same or similar species to the turf. For more wholesale degradation of the turf sward, the entire area will require to be re-seeded. Cultivate or power-harrow the affected area until a fine tilth is achieved (removing stones greater than 20mm) and grade until level with adjoining areas. Apply a pre-seeding fertilizer at a rate of 70g/m² and seed with a general amenity seed mix such as Barenbrug Bar 11 or other equal and approved, raking until the seed is a few millimetres below the surface. Water thoroughly and maintain the soil in a moist condition, removing stones, weeding and mowing until the grass is established.

3.12 PROPOSED ORCHARD

3.12.1 Description

- New orchard tree planting is incorporated into the proposed development within public open space to provide a wider bio diversity of tree planting, landscape structure and amenity value and restore the historic character of the grounds. Such tree planting will provide an enhanced wildlife

habitat. Orchard is identified as a high distinctiveness habitat. Within this area **a variety of fruit trees will be planted including apple *Malus* sp., pear *Pyrus* sp., cherry *Prunus* sp.**

3.12.2 Management Objectives

The management objectives for new tree planting is to:

- Ensure the satisfactory establishment and growth of new tree planting typical of the respective species;
- Promote conditions so that trees are healthy and safe; and
- Ensure continuity of the design approach and amenity value of tree planting.

3.12.3 Annual Works

- i) **General tree maintenance during establishment:** Check all trees for firmness and stability in the ground. Check and adjust tree ties, replacing if necessary. Top up bark mulch levels where necessary around the base of new trees, using the same or similar product to that previously supplied to maintain an approximate depth of 50mm to reduce competition from weeds and retain soil moisture. Where trees are in grass areas, remove weed growth by hand and retain a circle of bark mulch (approximate radius of 500mm) to aid mowing and prevent damage to the main stem. Organic matter should not be added as this can damage soil structure and create drainage sumps. Slow-release fertiliser should only be added to the topsoil on very poor soils as overfertilising discourages the roots from spreading beyond the planting pit into the surrounding soil. It may also prevent the young trees establishing a relationship with beneficial mycorrhizal fungi in the soil. If the site is on recently cultivated or fertilised ground some leaf mould or soil from land unaffected by agri-chemicals should be added to the planting pit to ensure the tree is inoculated with mycorrhizal fungi. Mycorrhizal powder can also be used, which should be sprinkled on and immediately around the roots. Prune back any diseased or rotten wood (including the removal of main stems and limbs) back to sound wood as required. All dead wood provides a great food source for foraging animals like shrews, voles and birds looking for larvae to eat. Small rodents in turn attract owls and other predators to your orchard. Log piles also provide overwintering sites and shelter for frogs, toads, beetles, hedgehogs and more. Prop or brace hollowing limbs to keep standing deadwood in the tree for as long as possible. Where unsafe decaying wood must be pruned out, consider stacking it nearby for the benefit of fungi and insects. If you also have space to accommodate a log pile, a brushwood pile or any other variation on the theme, then this will contribute to the range of habitats.
- ii) **Watering trees:** Water trees during dry periods (being any period without substantial rainfall for 14 days or more), until trees are successfully established. Water at a rate of 25 litres per tree position into watering tubes. Apply water at a frequency of once per fortnight from April to the end of September (to a maximum of 15 visits). Increase watering frequency during any continuous hot weather lasting more than 7 days. The Landscape Management Contractor shall be entirely responsible for

varying the frequency of these visits according to climatic conditions and for contacting the Adopting Organisation and agreeing the timing of any additional watering visits if required and where restrictions are placed on the use of water, sources and costs of obtaining second class water. The Landscape Management Contractor shall be responsible for any tree failures or excessive die back from drought stress during the management contract.

3.12.4 Occasional Works

- i) **Checking and removal of tree stakes and ties:** Review the need for tree stakes and ties annually for up to 6 years. Remove stakes and ties between 4 to 6 years after planting, but be sure trees are firm and stable. Stakes and ties removed shall be cut at ground level, below lowest grass height (to prevent snagging mower blades) or pulled from the ground and the post holes filled with suitable topsoil. If the tree is found to be weak or unstable after the stakes have been removed, then check the base of the tree for signs of rot. If rotten or unlikely to stabilise, remove the tree and replace. If the tree is free from rot or other cause of its instability, then re-instate a tree support, using 100mm diameter chestnut stake and single tie. The stake should be pushed into the ground with a post rammer, to a depth of 600mm and cut to one third the height of the tree. Fix the tree stem with a rubber tie and spacing device attached to at a point no more than 25-35mm below the top of the post, in order to prevent chaffing against the post in high winds. Remove old posts and ties and arisings and dispose off site.
- ii) **Pruning:** Fruit trees, as with any other tree, will grow quite happily and produce fruit without any pruning. However, there are a number of good reasons for pruning fruit trees. Formative pruning is necessary to develop a strong framework of branches capable of bearing the weight of future crops. Unpruned trees can develop large overcrowded crowns of criss-crossing branches and twigs. These trees are susceptible to damage and to being blown over in winter storms. Large crowns can also lead to the tree being rocked, which damages its roots. Removing branches that are damaged, crossing and badly placed The wind can cause close or touching branches to rub against each other, so damaging the bark and exposing the cambium layer leaving it vulnerable to disease. Touching branches may even graft together. Removing crossing branches and damaged wood reduces the risk of disease and encourages the development of stronger, better positioned branches. Increasing air-flow through the branches encourages healthy leaf growth and minimises the effect of fungal infections and air-borne diseases. Pruning notes should be in line with Arboricultural advice and/or in line with for example Natural England Technical Information Note TIN015-TIN021.
- iii) **Long-term tree surgery works:** After 10-20 years of maintenance as above (or earlier if required), newly planted trees will reach semi-maturity and at this time may be in need of corrective surgery. Trees should become subject to the annual Arboricultural Assessment and any works recommended shall be carried out in accordance with paragraphs 4.2.3 and 4.2.4.

- iv) **Tree replacement and enhancement of tree cover:** Any tree that dies or is necessarily felled, but which is not removed as part of a programme of tree removals, shall be replaced with a tree of appropriate species and stock size. Such replacement shall be with a tree of either the same or similar species as those existing. The option for replacing with a different species is to allow some flexibility avoiding problems encountered with 'Same Species Disease' and to ensure sustainable tree cover in the interests of visual amenity. Possible damage to drainage/services and adjoining building foundations must be considered before choosing a replacement tree species and location. Where alternative species are being considered, then the species should be suitable to the character of the location and adjoining trees. Once annually the site shall be considered for the need for any strategic replacement or enhancement planting, to broaden the age class of trees and tree groups, in the interests of the long-term sustainability of strategically important vegetation. Trees should be a minimum stock size as specified on the approved plans, implemented and maintained in accordance with good horticultural practice. Replacement and enhancement planting is best undertaken during the planting season (November through to March inclusive).

3.13 PROPOSED ROSE GARDEN

- v) Add text

3.14 PROPOSED SPORTS PITCHES (TENNIS COURTS / BOWLING GREEN)

3.14.1 Specific Objectives

- To maintain healthy, diverse and hard wearing grass with a consistent colouring. To ensure freedom from pests and diseases, water logging, drought and excessive wear that might cause degradation and failure. To ensure safe and comfortable use of amenity spaces.

3.14.2 Annual Works

- A regular mowing regime, geared to the growing season, shall be commenced on adoption, to maintain the playing surface quality. Mow to height of 20mm, at approximately 7-day intervals throughout the growing season, Set the frequency according to the weather conditions, and allow 25 cuts in total; the grass never being allowed to exceed 40mm in height. Vary the mowing frequency to ensure that there is no excessive cutting during dry periods, increasing the cutting height to 30mm, and ensure that mowing is continued until the grass stops growing. The Landscape Contractor shall take responsibility for the timing of these cuts to ensure that the grass always looks well maintained. Remove grass cuttings from site from May to August, to an approved composting facility. Strim all edges. Inspect monthly to maintain a healthy sward, free from disease, fungal growth, discolouration, scorch or wilt. Maintain grass reasonably free from moss, weeds, frost heave, worm casts and mole hills. Allow for repair damage caused by trampling, abrasion or scalping.

- Aeration is essential to relieve compaction and maintain surface drainage; it also promotes strong root growth and sward resilience. The aeration procedure shall include annual spiking with a spiking machine in suitable moist, but not wet, soil conditions during October, spiking to a depth of 50mm. Fill holes with sharp sand and brush in.
- Regular over seeding is necessary to repair damaged grass and prevent weed invasion. Over seed bare areas annually – incorporating seed into sand used for filling spiking holes.
- Scarify once annually to remove excessive thatch: Scarify by using a suitable scarifying machine, at the end of the summer (September).
- Roll grass in April, June and August. Apply an approved turf fertiliser/selective weed-killer/ moss retardant in May and September.

3.15 PROPOSED WILDFLOWER MEADOW

3.15.1 Description

- The wildflower in the parkland will give an edge to the woodland and allow for areas for mown paths and picnic areas.
- To maximise biodiversity, the area will cut once annually.

3.15.2 Management Objectives

The management objectives for wildflower grassland areas will be to:

- To ensure the satisfactory establishment of the grass sward; and
- To maintain a healthy and biodiverse sward suitable for a range of wildlife.

3.15.3 Annual Works

- Cutting of wildflower areas:** Meadow grass and wildflower areas shall be strimmed only once a year to a height of 100mm in late August. To ensure that soil fertility is reduced, rake up the arisings immediately, or in hot dry weather, they can be left in situ for a maximum of 2 days to set seed before raking. In a warm and wet year, a second cut may be required and if so this should be carried out either in October or March as appropriate. The timing of all cutting operations should take into consideration any protected species (such as reptiles) that may be present. There may be an additional requirement for monitoring or a watching brief by a qualified ecologist to ensure that no protected species are present. Once cut and raked up, all arisings shall be collected and removed off site as agreed.
- General care:** Hand weed pernicious, ruderal and aggressive or invasive weeds in in order to maintain the visual amenity of the area. Do not

herbicide or fertilise. Hibernacula should be left undisturbed. Arising's from tree surgery work can be retained on site and used to create new hibernacula as required.

3.15.4 Occasional Works

- i) **Replacement of failed wildflower grassland areas:** Meadow grass and wildflower sward that is species poor shall be enhanced. In areas of low fertility, closely strimming or mow the existing sward and remove all cuttings in August. Rake or scarify to disturb the ground and overseed with a suitable mix of wildflowers selected to the microclimatic and soil conditions and repeatedly tread over the area. After sowing mow the grass to a height of 60mm in height to allow light and air to the emerging seedlings for a full growing season. In areas where soil fertility is too high or the sward has failed the area will require re-cultivating and re-seeding. Remove dead material and re-cultivate the topsoil to a depth of 100mm. Small areas may be reseeded following the autumn cut by spreading the cut arisings onto the bare soil to set seed. For more wholesale degradation, cultivate the affected area until a fine, level tilth is achieved, removing stones greater than 20mm diameter. **Do not fertilise or herbicide.** Evenly seed with an appropriate seed mix (80% grasses: 20% wildflowers) selected to the microclimatic and soil conditions at the specified rate. Carefully rake in thoroughly to ensure that the seed is a few millimetres below the surface and roll using a very light roller or a cylinder mower, ensuring the surface is even and level. Water thoroughly and maintain the soil in a moist condition, removing stones, weeding and mowing until the grass is established.

3.16 STREET FURNITURE

3.16.1 Description

- Street furniture, such as seating and litter bins have been proposed within the site.

3.16.2 Management Objectives

The management objectives for street furniture are:

- To ensure these elements of street furniture, including benches, bins, signage, cycle hoops, etc., are safe, functional, clean and free from dilapidations, bird faeces dust, graffiti and grime.

3.16.3 Annual Works

- i) **General maintenance for street furniture.**

Inspect all elements of the street furniture monthly taking great care to inspect posts, footings, fixings and paint work for picnic benches, bins, signage etc., are safe, functional, clean and free from dilapidations, bird faeces dust, graffiti and grime. Check that posts are upright and firm and that footings are intact. Ensure that paint work is complete and that there is no sign of rust. Ensure that all fixings are secure and in good repair. Any defect shall be carefully recorded and arrangements for repair made within

seven days with the Street Furniture Company or other suitable and approved contractor. All painted, electrostatic powder coated, or stained surfaces (or other similar surface treatments) shall be closely inspected, and any damage, chipping, flaking, abrasion or fading made good with matching treatment, applied strictly in accordance with the manufacturer's instructions, product COSHH sheet and latest COSHH Regulations. All graffiti shall be removed and surfaces made good if necessary. Street furniture shall be cleaned monthly, removing dirt, bird faeces, and grime using detergent and scrubbing sponges or brushes – as appropriate, rinsing and drying to leave a clean surface. Litterbins shall be emptied at two-week intervals, including removal of any spilled litter and weekly between April and September inclusively, carting litter to licensed tip in sealed bags.

3.16.4 Occasional Works

i) **Changes and renewals for street furniture.**

Where scheduled inspections report detects to street furniture, that are in need of wholesale replacement or alteration in order to function satisfactorily and to minimise risk of injury or harm, and where such items are found to be beyond repairable condition, then these changes or renewals should be effected immediately. Demolish and remove defective elements and replace or add new items as appropriate - including for carting away the failed and excavated or broken out materials to skip, ensuring all new elements match those existing in all respects, both the material type and gauge/ dimensions and the decorative finish and colour, unless a suitable alternative is agreed with stakeholders and suitable.

3.17 STRUCTURES, WALLS, RAILINGS, FENCING AND GATES

3.17.1 Description

- Throughout the site a combination of elements, such as boardwalks, walls, railings and fencing have been used to define and enclose spaces associated.

3.17.2 Management Objectives

The management objectives for these areas will be to:

- To ensure structures, walls and fencing are safe, functional, sound, clean and free from dilapidations, hazards, rot, vandalism or damage, graffiti and grime.

3.17.3 Annual Works

- #### i) **General maintenance for structures and walls:**
- Inspect structures, walls monthly taking great care to inspect piers, masonry, pointing and jointing, copings, damp proof courses etc. Look for and record any cracking, loose elements, damage, graffiti, spalling cement, efflorescence or dampness issues, sapping, flaking or crumbling of masonry or units. All defect shall be carefully recorded and arrangements for repair made within seven days with an approved masonry contractor as appropriate.

- ii) **General maintenance for timber boardwalk and fences:** Inspect posts, footings, rails, styles, braces, fixings, latches, bolts, fasteners and paint or stain work. Check that posts are upright and firm and that footings are intact. Ensure that fixings show no signs of rust. Record all defects carefully and making arrangements for making good, repair adjusting, tightening or re-painting/ staining as required within seven days with an approved fencing, decorating or cleansing contractor as appropriate.
- iii) **General maintenance for railings:** Inspect posts, footings, rails, rods, braces, fixings, latches, bolts, fasteners, galvanising and paint work. Check that posts are upright and firm and that footings are intact. Ensure that fixings, metalwork and paint work show no signs of rust, chipping, flaking, abrasion or any other defect. Record all defects carefully and making arrangements for making good, repair adjusting, tightening or re-painting/ staining as required within seven days with an approved fencing, decorating or cleansing contractor as appropriate. Railings that have defective paintwork shall be painted with paint to match existing – apply with a suitable brush for the paint type (e.g. some metal work paints need a Turks-head brush, and ensure 100 Microns per coat, and a total of 3 coats, applied in dry open weather, above the dew point and following suitable preparation work, cleansing the surfaces with soap and water and then allowing adequate drying time. Re-painting shall take place at 5-10 year intervals or as required to keep paintwork in good condition.

3.17.4 Occasional Works

- i) **Changes and renewals for structures, walls, railings, fencing and gates:** Where scheduled inspections report defects to structures and other enclosing elements, that are in need of wholesale replacement, extension or alteration in order to function satisfactorily and to minimise risk of injury or harm, and where such items are found to be beyond repairable condition, then these changes or renewals should be effected immediately. Demolish and remove defective elements and replace or add masonry, panels, posts, timber work, or metalwork, as appropriate - including carting away the failed and excavated or broken out materials to skip, ensuring all new elements match those existing in all respects, both the material type and gauge/ dimensions and the decorative finish and colour.

3.18 HARD LANDSCAPE AREAS

3.18.1 Description

- A range of hard landscape areas will be incorporated into the development layout including footpaths and shared car parking areas.

3.18.2 Management Objectives

- To ensure that hard landscape surfaces are safe and comfortable to use and are clean from litter and other debris.

3.18.3 Annual Works

- i) **General cleanliness:** All paved surfaces shall be swept monthly to ensure that they are clean, tidy and free from dust, litter and debris (removing all arisings off site). Increase sweeping to fortnightly in autumn when leaves are falling.
- ii) **Condition of paved surfaces:** All hard landscape surfaces and edgings shall be inspected monthly checking for mechanical damage, vandalism, settlement, frost heave, staining, litter and debris or any other defect. Any such defects shall be documented, and a corrective methodology agreed with the Adopting Authority and implemented as appropriate by the Landscape Management Contractor.

3.18.4 Occasional Works

- i) **Repairs and renewals:** Where scheduled inspection detects paved areas are in need of replacement, extension or alteration to their original intended function or to minimise risk of injury, then such repair and/or renewals should be effected immediately. Remove defective paving, through excavation and make good base and sub-base materials as required, re-use salvageable paving units, and relay paving, buying in new products to replace any that are damaged or defective. Where there is differential settlement or the units wobble, or are not firmly bedded, jointed or pointed, ensure that the units are relayed firmly, re-bedding, jointing and where appropriate pointing, all to match the bonding pattern existing on site.

4.0 IMPLEMENTATION, MONITORING AND REVIEW

4.1 IMPLEMENTATION

- 4.1.1 A Private Management Company will be established for the site to undertake all management aspects relating to the external landscape areas that lie outside of private residential gardens.
- 4.1.2 The Private Management Company will coordinate all management of the site in perpetuity in accordance with this Landscape Management Plan and the accompanying maintenance schedules. A representative of the Private Management Company will be appointed as the main point of contact for residents, relating to the management of the site.
- 4.1.3 The Private Management Company may employ a Landscape Management Contractor to carry out general maintenance operations. Specialist Contractors may be used on an as needs basis to complete specialist operations and/or occasional works.
- 4.1.4 The Private Management Company may also appoint from time to time consultants to provide specialist advice, monitoring or to undertake a watching brief in relation to particular aspects of this site or specific maintenance operations. This may include suitably qualified ecologists, arboriculturists, landscape architects, engineers and/or health and safety executives.
- 4.1.5 All works, materials and operations will be in accordance with relevant legislation, British Standards, Regulations (including the CDM Regulations) and Codes of Practice.


4.2 PROCESS FOR MONITORING AND REVIEW

- 4.2.1 The Landscape Management Plan and maintenance schedules will be monitored and assessed for their effectiveness on an annual basis for the first five years following the completion of the development.
- 4.2.2 Each annual review will be coordinated and completed by a suitably qualified representative of the Adopting Authority. The review will include advice from specialist consultants as required (such as a qualified Arboriculturist and ecologist), the Landscape Management Contractor and other stakeholders including representative(s) from the LPA and local residents.
- 4.2.3 **To this end the review may include (as appropriate):**
 - Specialist reports - advising on particular aspects such as protected species, general silvicultural husbandry and health and safety issues;
 - Records or attendance sheets demonstrating the maintenance work undertaken; and
 - A walk over assessment of the landscape areas to assess landscape components and their condition, and the need for enhancement including minutes.

- 4.2.4 The review should identify any changes to site conditions and circumstances, whether the aims and objectives of the Landscape Management Plan are being met, and where identified changes are need to existing management practices and timeframes. Furthermore, any strategic enhancements, including new planting should be identified and priorities established for undertaking these works.
- 4.2.5 Within 1 calendar month of the review, a revised Landscape Management Plan shall be produced (if appropriate), and circulated to stakeholders. Within 5 years of the completion of the site, then the revised document shall be submitted to the LPA as a non-material amendment to the previously approved Landscape Management Plan.
- 4.2.6 After the first five years the Landscape Management Plan will be reviewed every five years, or as required to ensure the satisfactory management of the landscape in perpetuity.


5.0 APPENDICES

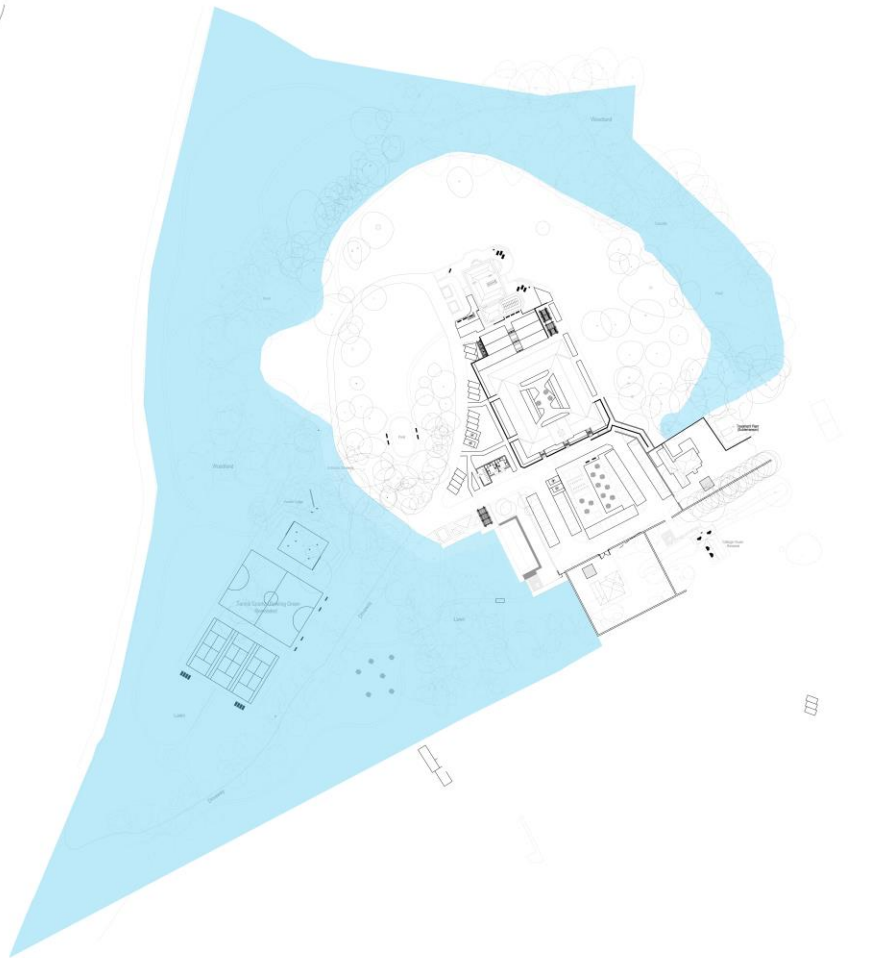
5.1 LANDSCAPE MANAGEMENT AREAS PLAN (Not to Scale)

 Areas to be managed



5.2 WOODLAND MANAGEMENT AREAS PLAN (Not to Scale)

 Areas to be managed



5.3 SCHEDULE OF MAINTENANCE OPERATIONS

Maintenance Operation	Number of Visits (to be dependent on season – where not dependent on season, if appropriate, the timing shall be agreed between the Adopting Organisation and the Contractor. Indicative timings are shown with a *)					Total number of visits per year	Additional Comments
	Jan – March (13 weeks)	April – June (13 weeks)	July – Aug (9 weeks)	Sept – Oct (9 weeks)	Nov –Dec (8 weeks)		
GENERAL							
Collection and removal of litter and other debris	Once per month	Once per month	Once per month	Once per month	Once per month	12	All hard and soft areas. Cart away litter/debris and remove off site to licensed tip.
PAVING							
Inspection and sweeping	Once per month	Once per month	Once per month	Once per month	Once per fortnight while leaves dropping	14	Document any defects, recommend methodology and carry out remedial works as required.
SOFT WORKS							
Visual inspection of mature trees	Once per month	Once per month	Once per month	Once per month	Once per month	12	On each visit or as required.
Annual Arboricultural Assessment of mature trees and hedgerows		*	*	*		1 (plus additional visits as required)	To be completed by a qualified Arboriculturist annually when trees are in leaf or as required when visual inspections identify a health and safety risk.
Tree Surgery and significant works to boundary vegetation/hedgerows	*				*	1	As identified by arboricultural assessment following approvals from LPA. To be carried out outside of the bird nesting season and following advice from an ecologist.

Maintenance Operation	Number of Visits (to be dependent on season – where not dependent on season, if appropriate, the timing shall be agreed between the Adopting Organisation and the Contractor. Indicative timings are shown with a *)					Total number of visits per year	Additional Comments
	Jan – March (13 weeks)	April – June (13 weeks)	July – Aug (9 weeks)	Sept – Oct (9 weeks)	Nov – Dec (8 weeks)		
Cutting/trimming of native hedgerows	*				*	1	To be carried out outside of the bird nesting season.
Cutting of ornamental hedgerows			Once in June	Once in late November		2	Or as required to maintain a formal appearance.
Hand weeding		Once per month	Once a month	Once per month	*	4-8	Weed by hand taking care not to disturb sheet or bark mulch. Remove arisings off site.
Spot herbiciding	Once in late March		Once in late June, once in mid-August	Once in mid-October		4	To occur at approximately 6 week intervals only if required.
Watering		Once per fortnight	Once per fortnight	Once per fortnight		15	Water once per fortnight from April to September until trees/plants/grass areas are established. Watering frequency should be adjusted by the Landscape Management Contractor depending on climatic conditions. Increase watering during hot and dry weather until plants have established.
General maintenance of planted areas	*	Optimum time for application of bark mulch	*	*	*	12	Check at each visit. Apply bark mulch as and when required within the first 3 years.

Maintenance Operation	Number of Visits (to be dependent on season – where not dependent on season, if appropriate, the timing shall be agreed between the Adopting Organisation and the Contractor. Indicative timings are shown with a *)					Total number of visits per year	Additional Comments
	Jan – March (13 weeks)	April – June (13 weeks)	July – Aug (9 weeks)	Sept – Oct (9 weeks)	Nov – Dec (8 weeks)		
Fertilising trees and shrubs		Once in early May		Once in mid-September		2	Fertilize new trees and planting, once in early May and once in late September. Use a slow release product, ideally granular.
Checking, adjusting, replacing or removing tree stakes and ties	*	*	*	*	*	12	At each visit as required
Pruning trees and shrubs	Optimum time for Buddleia & Cornus				Optimum time for most species	1	As required to sound horticultural practice between October and March. Cut back grasses in spring.
Cutting formal lawns	Only if required from start of growing season	Once per week	Once every fortnight	Once per week	As required to finish of growing season	Max 20 per year according	Mowing frequency to be adjusted according to climatic conditions and use. Reduce frequency to fortnightly in hot and dry weather. Collect and remove arisings at each cutting.
Cutting amenity grass areas	Only if required from start of growing season	Once every fortnight	Once every 3 weeks	Once every fortnight	As required to finish of growing season	12-15 times per year	Mowing frequency to be adjusted according to climatic conditions and use. Reduce frequency to every 21 days in hot and dry weather.

Maintenance Operation	Number of Visits (to be dependent on season – where not dependent on season, if appropriate, the timing shall be agreed between the Adopting Organisation and the Contractor. Indicative timings are shown with a *)					Total number of visits per year	Additional Comments
	Jan – March (13 weeks)	April – June (13 weeks)	July – Aug (9 weeks)	Sept – Oct (9 weeks)	Nov – Dec (8 weeks)		
Edging lawns and amenity grass areas		Once per month	Once per month	Once per month		7	Re-profile and edge shrub beds at start of growing season with half moon tool, then strim or cut margins with edging shears throughout growing season.
General lawn care		Once		Once		2	Apply a fertiliser, selective weed killer and moss retardant in May and September.
Cutting wildflower grassland	*		Once in late August	*		1	In hot dry weather leave cuttings to set seed for 2 days before collecting and removing off site. Cut again in October or in March if required due to weather conditions. Cutting may be varied by ecologist if reptiles are present.
Replacement of tree, hedgerow and shrub planting	*				Optimum time for most species	1	As required. To include enhancement planting.
Replacement of amenity grass and wildflower areas				Optimum time		1	As required.
Ponds – remove leaves and debris & clear up to 1/3 of marginal/aquatic vegetation.				Once		1	Clearance on a rotational basis to maintain 50% open water.
Ponds – strim wildflower margins					Once	1	On a 2-4 year rotation

Maintenance Operation	Number of Visits (to be dependent on season – where not dependent on season, if appropriate, the timing shall be agreed between the Adopting Organisation and the Contractor. Indicative timings are shown with a *)					Total number of visits per year	Additional Comments
	Jan – March (13 weeks)	April – June (13 weeks)	July – Aug (9 weeks)	Sept – Oct (9 weeks)	Nov – Dec (8 weeks)		
Scrub clearance						1	As required and informed by the ecologist and Arboriculturist
Thinning & coppicing							To be informed by the annual arboricultural survey
PLAY AREAS:							
Visual Inspection of playable features & safety surfacing	Once every 2 weeks	Once every 2 weeks	Once every 2 weeks	Once every 2 weeks	Once every 2 weeks	24	To be adjusted as required
Operational Inspection of playable features & safety surfacing	As recommended	As recommended	As recommended	As recommended	As recommended		To be adjusted as required
Visual and Operational Inspection of playable features & safety surfacing	Once every 2 weeks	Once every 2 weeks	Once every 2 weeks	Once every 2 weeks	Once every 2 weeks	1	Any defect recorded and arrangements for repair made within seven days

5.4 Indicative Pruning Schedule for Plants

Plant Species	Pruning dates	Pruning amount	Crown raising	Additional Comments
<i>Betula pendula</i>	Dec/Jan	n/a	every 5 years	Thin by 50% in year 15
<i>Buxus sempervirens</i>	Dec/Jan	Reduce by 5%	Never	Prune leggy growth only
<i>Cornus sanguinea</i>	Feb/March	Reduce by 20%	Never	Coppice - 4 years
<i>Corylus avellana</i>	Dec/Jan	Reduce by 10%	If required	Coppice - 8 years
<i>Crataegus monogyna</i>	Dec/Jan	Reduce by 5%	Every 5 years	Thin at 15 yeas (30%). Coppice 8 years
<i>Cytisus praecox</i>	Dec/Jan	Reduce by 10%	Never	Prune leggy growth only
<i>Frangula alnus</i>	Dec/Jan	Reduce by 5%	If required	Coppice - 8 years
<i>Fraxinus excelsior</i>	Dec/Jan	n/a	Every 5 years	Thin at 15 years
<i>Ligustrum vulgare</i>	Dec/Jan	Reduce by 10%	Never	Prune leggy growth only
<i>Prunus spinosa</i>	Dec/Jan	Reduce by 5%	If required	Coppice - 8 years
<i>Prunus avium</i>	Dec/Jan	n/a	Every 5 years	Thin at 15 years
<i>Quercus robur</i>	Dec/Jan	n/a	Every 5 years	Thin at 15 years
<i>Rhamnus cathartica</i>	Dec/Jan	Reduce by 10%	Never	Coppice - 8 years
<i>Rhamnus frangula</i>	Dec/Jan	Reduce by 10%	Never	Coppice - 8 years
<i>Rosa canina</i>	Dec/Jan	Reduce by 10%	Never	Coppice - 4 years
<i>Rubus tricolor</i>	Dec/Jan	Reduce by 10%	Never	Prune leggy growth only
<i>Sorbus aucuparia</i>	Dec/Jan	n/a	Every 5 years	Thin at 15 years
<i>Salix viminalis</i>	Dec/Jan	Reduce by 10%	Never	Coppice - 8 years
<i>Ulex europeus</i>	Dec/Jan	Reduce by 10%	Never	Coppice - 8 years
<i>Viburnum lantana</i>	Dec/Jan	Reduce by 5%	Never	Coppice - 8 years
<i>Viburnum opulus</i>	Dec/Jan	Reduce by 5%	Never	Coppice - 8 years