

LANDSCAPE MANAGEMENT AND MAINTENANCE PLAN

**Guide to the Management of Landscape at
Barton Road, Barlestone, Leicestershire.**

**REF JBA 24/099
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**ON BEHALF OF
MyPad**

March 2024

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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 residential redevelopment of land at Barton Road, Barlestone, Leicestershire. 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 repairs and renewals. The Occasional Works are those that will be required on an irregular or cyclical basis, such as watering, weeding and cleaning.

1.2 THE GROUNDS

1.2.1 Location

The site comprises of land on the corner of existing development along Barton Road and the A447, within the village of Barlestone, north of Hinkley and other villages such as Newborn Verdon. The land is bordered to the east by existing residential development, adjoining to the back gardens of premises situated along Gregory Road, it also partially borders residential development to the south. To the west the site, there is a single adjacent dwelling with existing mature trees and vegetation partly associated with the neighbouring land leading onto the A447 roadway. The northern boundary of the site is open onto agricultural land, associated with other premises. See Fig's 1 and 2.

1.2.2 Site Description and Development Proposals

The proposals for the site consist of residential development, together with parking areas, amenity areas and landscaping, with the provision of vehicular access from Barton Road. The boundaries of the site are defined by existing hedgerows and trees to the west and partially to the north. With existing residential development to the east and south. All other vegetation is to be removed and replaced as part of a comprehensive detailed landscape scheme (refer to drawing JBA 24/099 – 01, 02, 03 & 04).

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

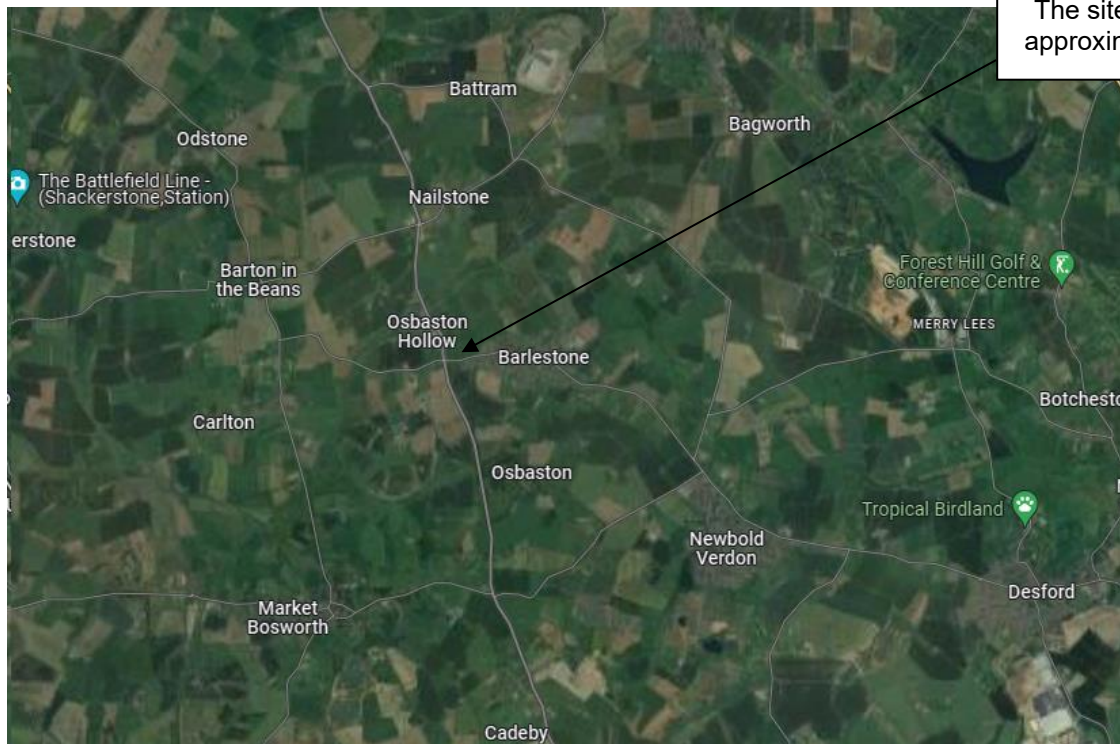


Fig 2. Location plan: Site Boundary: Not to scale



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 boundary vegetation 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 and ecological 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:** MyPad 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 Hinckley & Bosworth 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 Detailed Soft Landscape Proposals for Plots and connecting POS (drawing numbers JBA 24/099 – 01, 02 & 03), 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:
- Arboricultural Assessment, FPCR, May 2021.
 - Ecological Appraisal, FPCR, December 2020
 - 22025-70-001 (Rev P25), Proposed Site Plan (Hard Landscape Proposal), Another-kind Architects Studio, December 2024.
 - 22025-70-005 (Rev P8), Boundary Treatment Plan, Another-kind Architects Studio, September 2024.

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 long term functionality in perpetuity for the safety and visual appearance of all open spaces within the development creating a wellbeing community and encouragement of social interaction with the support of enhancing biodiversity and adding value to open spaces over time including providing usable habitats and recreational spaces. 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 landscape character and screening function of the existing trees on the western and southern boundary, and to incorporate locally indigenous species within screening/structural landscape areas, to provide an attractive and robust landscape setting for the residents accommodating the site, while reinforcing 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 and maintenance, 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 trees;
- Existing hedgerows;
- Proposed tree planting;
- Proposed native hedgerows;
- Proposed native whip/shrub planting;
- Proposed ornamental hedgerows;
- Proposed ornamental shrubs;
- Proposed amenity grass/lawns with bulbs;
- Proposed wildflower meadow;
- Proposed Attenuation Basin;
- Structures, walls, railings, fencing and gates;
- Playable Features; and
- Street Furniture.

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 / MATURE TREES

3.2.1 Description

- The majority of existing trees around the boundary of the site will be retained as part of the landscape strategy for the development. A few 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 Arboricultural Report. The Tree Survey Schedule and Tree Protection Plan (TPP) identify 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.

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 landscape structure, biodiversity, and screening/amenity value of the site; and
- Ensure that trees are healthy and safe, particularly in places in proximity to residential properties and with public access.

3.2.3 Seasonal Works

- Visual Inspection:** Trees should be regularly visually checked by users of the site (refer to maintenance schedule at the end of this document 5.2, for exact timings) and maintenance teams and then every 18 months by a suitably qualified arboriculturist 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.
- Bi-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

- 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 (with the exception of the removal of dead wood) 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).
- 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) or a source of local provenance where possible or if ornamental, then appropriate to the type of trees adjacent to them. 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. All trees should be a minimum stock size of standard (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)

3.3 EXISTING HEDGEROWS

3.3.1 Description

- The existing species poor hedgerow along the northern boundary is to be retained as a key component of the landscape and biodiversity strategy, providing screening and structure to the proposed development. The majority of the hedgerow will be retained in the rear gardens of the proposed houses in the northern part of the site (units 1, and 11-20) and will be subject to individual management.
- Prior to development, none of the hedgerows on the site were deemed "important" in the context of the landscape and wildlife criteria of the Hedgerow Regulations, 1997.

- The existing vegetation on and adjacent to the site is set out in the Arboricultural Report. The Tree Survey Schedule and Tree Protection Plan (TPP) identify the location, species, size and condition of the existing vegetation 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. This includes the reduction of the hedgerow to an approximate height of 3m and a formal shape as advised by the Arboricultural Report to aid future management.

3.3.2 Management Objectives

The management objectives for the existing hedgerow are to:

- To maintain and enhance where appropriate the screening value, augmenting any hedgerow gaps; and
- To traditionally manage the hedgerow to develop its structure and to develop its wildlife value, particularly for birds and bats.

3.3.3 Seasonal Works

- Annual Cutting of Native Hedgerows:** To maintain a natural profile, hand trim or cut the top and sides of native hedges once annually (consider changing to 3-year rotation, if hedge does not border road or footpath, to allow the development of thick hedgerows which provide cover for a variety of species) in late November (outside of the bird nesting season once leaves have started to drop) (Consider changing to January to allow fruiting tree species to finish fruiting, to allow birds to continue feeding further into winter), to an approximate height of 3m to form an even and tidy hedge line, retaining individual hedgerow trees. Cut larger stems, and prune any diseased rotten wood back to sound wood. Remove all cut material from site.
- Hedgerow Ground Flora:** Leave the vegetation beneath the hedge line uncut to allow ground flora to develop. Avoid the use of herbicides and pesticides in the vicinity of native hedgerows.
- Annual Arboricultural Assessment:** An Arboricultural Assessment should be undertaken once annually by a qualified Arboriculturist to inspect the condition of existing vegetation. The health of existing hedgerows shall be monitored and any works required for health and safety or to promote the health and sustainability of existing hedgerows shall be identified, scheduled and actioned at a suitable time of year, refer to Occasional Works in paragraph below.

3.3.4 Occasional Works

- i) **Occasional Works to Native Hedgerows:** Where identified by the annual Arboricultural Assessment e.g. where native hedgerows have become overgrown or require more extensive work, carry out recommended remedial work, including coppicing or hedge laying (in sections) to thicken and rejuvenate the hedge line. All extensive works shall be carried out by a skilled, qualified and approved Arboricultural Contractor in accordance with BS3998: 2010 'Tree Work - Recommendations'. All arisings that result from such management works shall be removed off site, unless needed to enlarge or renew hibernacula or eco piles.
- 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) **Gapping up native hedges:** Where sections of hedgerow become thin or fail, gap up hedgerows with an appropriate mix of native species to an approximate density of 6 plants/linear metre, planted in a double staggered row during the planting season (November through to mid-March inclusively). Plants should be a minimum size of open ground whips 600-900mm high or 3L container grown stock for evergreen species (such as holly). Gap up areas of less dense growth with additional plants as required to achieve a continuous hedge line taking due allowance for natural growth and regeneration of cut material. All plants should be native (from a source of local provenance where possible), appropriate to the character of the area and should be selected to increase the species diversity of the existing hedgerow and maximise ecological value.

3.4 PROPOSED TREE PLANTING

3.4.1 Description

- New tree planting is incorporated into the proposed development within front gardens, parking areas and public open space to provide landscape structure and amenity value. Such tree planting will define focal points, enclose streets and spaces and soften the built form.

3.4.2 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.

3.4.3 Seasonal 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. 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.

3.4.4 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) **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).

- iv) **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.

3.5 PROPOSED NATIVE HEDGEROWS

3.5.1 Description

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

3.5.2 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

3.5.3 Seasonal 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 June and, if required, again in November. 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.

3.5.4 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.

3.6 PROPOSED NATIVE WHIP/SHRUB PLANTING

3.6.1 Description

- Native whip and shrub planting has been proposed strategically around the public open space.
- Native species will be selected to provide general habitats and foraging for wildlife including flowering and fruiting varieties.

3.6.2 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.

3.6.3 Seasonal 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 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. **DO NOT HERBICIDE WITHIN CLOSE PROXIMITY OF SWALE.** 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.
- 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.

3.6.4 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:** 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.

3.7 PROPOSED ORNAMENTAL HEDGEROWS

3.7.1 Description

- New ornamental hedgerows are proposed throughout the site, within the housing area they provide enclosure to front gardens and define the street.
- 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).

3.7.2 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.

3.7.3 Seasonal Works

- i) **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.

3.7.4 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.

3.8 PROPOSED ORNAMENTAL SHRUBS

3.8.1 Description

- Ornamental shrubs, groundcover, herbaceous and climbing plants are proposed in the areas around the new 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 dwellings, provide visual interest and amenity value and to enhance the built form.
- Species will include a range of ornamental, specimen and climbing plants with a mix of evergreen and deciduous species.
- Although generally ornamental in character 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 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.

3.8.3 Seasonal Works

- 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.
- 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.

3.8.4 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 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.

3.9 PROPOSED AMENITY GRASS AND BULBS

3.9.1 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, refer to maintenance schedule in 5.2 and detailed soft landscape proposals. 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.

3.9.2 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.

3.9.3 Seasonal 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. 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 4.6.3). Any issues raised by residents with health and safety concerns will be dealt with within 1 working day if at a great risk to the public, for less sensitive cases allow for 1 working week for matter to be resolved.
- 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.

3.9.4 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 reseeded. 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 "EG22" Mix by Emorsgate Seeds 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.

3.10 PROPOSED WILDFLOWER MEADOW

3.10.1 Description

- The grassland will incorporate a diversity of wildflower and grass species (appropriate to the microclimate and soil type) to benefit a variety of species including birds, bats and invertebrates.
- In accordance with the ecologists recommendations the area will incorporate a number of hibernacula close to the site boundaries to provide refuges for amphibians, reptiles, invertebrates and small mammals.
- To maximise biodiversity, the area will cut once annually.

3.10.2 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.

3.10.3 Seasonal Works

- i) **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. A strip of wildflower shall be cut as a mown path to ensure the meadow aesthetics. This path shall be cut and maintained year-round once a fortnight. Any issues raised by residents with health and safety concerns will be dealt with within 1 working day if at a great risk to the public, for less sensitive cases allow for 1 working week for matter to be resolved.

- ii) **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.

3.10.4 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.

3.11 PROPOSED WET MEADOW

- The wet meadow grassland will incorporate a diversity of wildflower and grass species suitable for seasonally wet soils of species traditional found in water meadows (appropriate to the microclimate and soil type).
- Accommodate short periods of flooding in winter months, and well drained in summer months.

3.11.1 Management Objectives

The management objectives for wet wildflower meadow grassland areas will be to:

- To ensure the satisfactory establishment of the grass sward; and
- To maintain a healthy and biodiverse sward suitable for winter flooding and to be drained in summer months.

3.11.2 Seasonal Works

- Cutting of wet wildflower meadow areas:** Meadow grass and wildflower areas shall be strimmed 'hay cut' to a height of 50mm in late August. To ensure the seed is shed fully, leave arisings for 1-7 days then remove from site. During late autumn / winter strim again to 50mm and again in spring if required, leaving the wet meadow grassland uncut between spring and late July / August. 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.

3.11.3 Occasional Works

- Replacement of failed wet wildflower meadow grassland areas:** wet 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 maintain the soil in a moist condition, removing stones, weeding and mowing until the grass is established.

3.12 PROPOSED ATTENUATION BASIN

3.12.1 Description

- Small attenuation basin located in the western POS, with wet wildflower seeding.

3.12.2 Management Objectives

The management objectives for attenuation basins are to:

- Ensure drainage features are in working order.
- Maintain sustainable health and growth of marginal vegetation and ensure water bodies do not become overgrown with plant growth inhibiting drainage and storage functions.

3.12.3 Seasonal Work

- i) **Regular inspection and maintenance:** This will be undertaken by the Adopting Organisation and is important for the effective operation. Regular mowing in and around the area is required along maintenance access routes, amenity areas and across embankments. Maintenance activities should be detailed in the Health and Safety Plan and a risk assessment should be undertaken. Specific maintenance activities are detailed in the maintenance schedule attached (see appendix 5.1).

3.12.4 Occasional Work

- i) **Replacement planting:** For distressed and failing areas of vegetation, 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. 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.

3.13 RAILINGS, FENCING AND GATES

3.13.1 Description

- Throughout the site a combination of elements, such as railings and fencing have been used to define and enclose public and private spaces associated with the residential premises, such as front gardens and private drives backing onto public open space.

3.13.2 Management Objectives

The management objectives for these areas will be to:

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

3.13.3 Seasonal Works

- General maintenance for timber 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.
- 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.

3.13.4 Occasional Works

i) **Changes and renewals for structures, 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 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.

3.14 PLAYABLE FEATURES

3.14.1 Description

- A large community play and open space is situated to the west of the site which incorporates elements such as stepping stones, play bollards and other more typical play items available as play for local children.

3.14.2 Management Objectives

The management objectives for new playable features are:

- To ensure the soundness and safety of all playable features,
- To minimise the risk of injury to users of all ages and,
- To ensure that playable features are regularly monitored, and decommissioned if unsafe and repaired as soon as possible to a sound and satisfactory condition.

3.14.3 Seasonal Works

i) **Inspections:** Complete inspections of playable features as follows:

- i) Routine Visual Inspection: To assess the basic condition of play areas, features and surrounds including safety surfaces and surrounds, highlighting issues arising from vandalism, breakages and cleanliness.
- ii) Operational Inspection: A more detailed inspection of play features for quality control and to identify minor wear and tear. This shall include the inspection of posts, footings, fixings, joints, and woodwork for damage or any other defect.

All inspections should be carried out by a suitably experienced representative of either the Adopting Organisation or Landscape Management Contractor and recorded on a site checklist. The frequency of each operational inspection will vary according to the usage of the site and its risk but should take place at least monthly with routine visual inspections taking place at fortnightly intervals.

- ii) **General:** All play features shall be cleaned, removing dirt and any graffiti monthly at each visit as required. Safety surfaces in particular shall be inspected carefully at each visit for the presence of any sharp objects, litter and debris as well as general wear, tear or other defect. Any such items shall be removed off site immediately. Check that posts are upright and firm, that footings are intact and fixings are secure and in good repair. Ensure that wood work is complete and that there is no sign of damage.
- iii) **Defects and Repairs:** Any defect shall be carefully recorded and arrangements for repair made within seven days with the item supplier or other suitable and approved contractor. Make good wood work with a matching treatment and colour applied strictly in accordance with the manufacturer's instructions, product COSHH sheet and COSHH Regulations. All repairs must be carried out strictly in accordance with the supplier's instructions. If the defect to either play features or surrounds is anything more than superficial (e.g. damage to decoration), then temporary chestnut pale fencing shall be erected and fixed firmly in place around the area and a temporary sign erected warning that the area is unsafe to use. The area must be decommissioned at once, ensuring that items cannot be used in a dangerous state. Temporary protection measures shall be removed as soon as the item is made good.
- iv) **Contact Information:** The Adopting Organisation shall ensure that a representative is available for emergency call out 7 days per week to deal with dangerous items ensuring a response time of no more than 2 hours. A sign shall be erected on site stating the name and telephone number(s) of the representative so that emergencies and defects can be quickly and easily reported to minimise risk to users.

3.14.4 Occasional Works

- i) **Changes and renewals for playable features:** Playable areas and features should be subject to an Annual Inspection.

Such inspections shall identify issues relating to vandalism, minor and major wear, long-term structural problems, changes relating to health and safety and other Standards and design practices, and risk. The annual inspection shall be completed by a specialist contractor not employed by the Adopting Organisation, such as those approved by the Register of Play Inspectors (www.playinspectors.com). Following the inspection, the specialist contractor shall prepare and issue an independent written report for review. Any issues identified by the annual inspection shall be prioritised, with those deemed as urgent to be rectified as soon as possible. This shall include the replacement of play features and associated safety surfaces as required, where such items are found to be beyond repairable condition or where they do not meet current standards. Remove all arisings off site and make good any surfaces disturbed.

3.15 STREET FURNITURE

3.15.1 Description

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

3.15.2 Management Objectives

The management objectives for street furniture are:

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

3.15.3 Seasonal 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, seats, bins, bollards, 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. Additional collections to be made if overflows are reported during busy periods

3.15.4 Occasional Works

i) Changes and renewals for street furniture.

Where scheduled inspections report defects 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.

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 IMPLEMENTATION TIMINGS

– important note: all the below information is subject to change due to the site programme subject to prior approval by the LPA.

- 4.2.1 Commencement of works: Weeks 1 to Week 6,
 - Hard landscaping to play area to be installed between Week 12 and Week 18 of the development programme,
 - Equipped Play area to be installed Week 24 (once hard landscape is completed and site conditions allow),
 - Casual Informal Area to be implemented Week 26 (allowing for planting season and ground settlement),
 - Accessible natural green-space to be implemented Week 28,
 - Footpath links to be implemented by Week 30,
 - Balancing Ponds to be implemented during Week 3 to Week 9 (typically best done early to manage site drainage),
 - All hard and soft landscaping on the on-site open space will be completed prior to 50% occupation and available for use.

On-plot landscaping to be completed prior to occupation of each dwelling,
All on plot and communal areas to be completed prior to occupation of the final dwelling.

4.3 PROCESS FOR MONITORING AND REVIEW

- 4.3.1 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. Management company to be Stonewater, contact information below.

Stonewater

TEL: 01202 319119

E: customers@stonewater.org

- 4.3.2 Each review will be coordinated and completed by a suitably qualified representative of the Adopting Housing Association (Stonewater). 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 Housing Association and local residents.

4.3.3 **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.

- 4.3.4 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.

- 4.3.5 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.

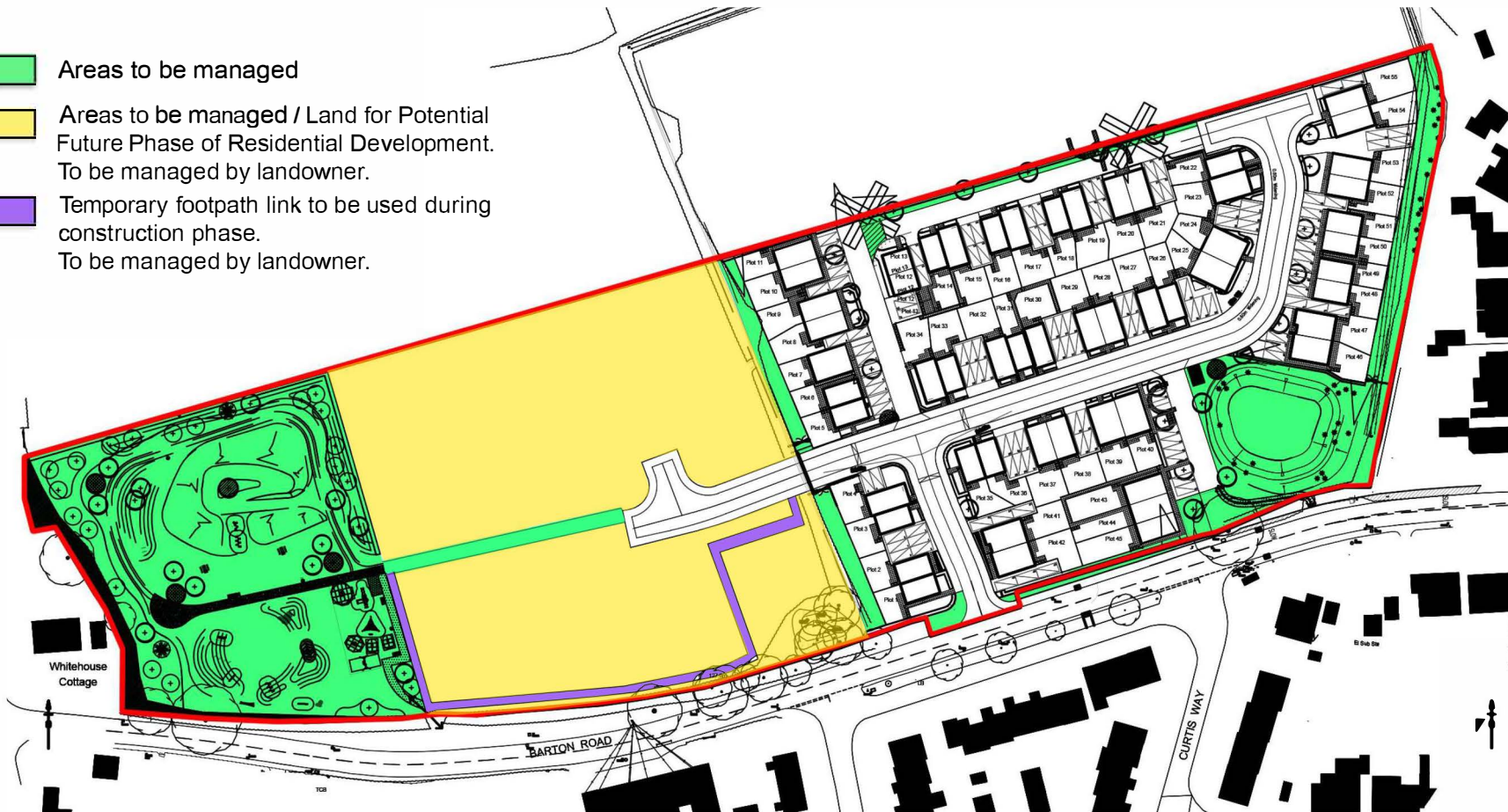
- 4.3.6 After the first five years the Landscape Management Plan will be reviewed every five years, or as required to ensure the satisfactory management of the landscape in perpetuity.



5.0 APPENDICES

5.1 MANAGEMENT AREAS PLAN (Not to Scale)

- Areas to be managed
- Areas to be managed / Land for Potential Future Phase of Residential Development. To be managed by landowner.
- Temporary footpath link to be used during construction phase. To be managed by landowner.



5.2 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.
Collection of litter bins	Once per fortnight	Once per week	Once per week	Once per fortnight	Once per fortnight	27	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

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)		
							nesting season and following advice from an ecologist.
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 fortnight with the allowance for two additional cuts depending on weather conditions.	Once every fortnight	Once per fortnight with the allowance for two additional cuts depending on weather conditions.	As required to finish of growing season	Max 27 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. Any issues raised by residents with health and safety concerns will be dealt with within 1 working day if at

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)		
							a great risk to the public, for less sensitive cases allow for 1 working week for matter to be resolved.
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 - Including Phase 2 land (marked yellow on 5.1)	* Once Year 1 kept short until following March (Year 1 only)	Spring cut to be carried out once to remove the initial flush of grass cover (50mm), prior to end of May	Once Year 1 of establishment, cut grassland from late summer. In Year 2 onwards, complete annual hay cut in August after flowering and seed dispersal.	* Autumn cut carried out to leave grassland short over the winter period (50mm) if required	To be maintained	5	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.

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
CONSERVATION:							
Wildlife refuges – strim adjacent wildflower and inspect for damage				Once		1	

5.2 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 years (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