



Land West of Pagham Road, Pagham

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**Landscape Management Strategy Framework**

March / PL06

## Document Control Sheet

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## Table of Contents

1.	Introduction	2
2.	General Site Description	2
3.	General Maintenance Conditions	4
4.	Grass Maintenance Specification [GC]	4
5.	Hedge Maintenance [HM]	9
6.	Herbaceous Borders Maintenance [HB]	10
7.	Leaf Clearance [LE]	12
8.	Litter Clearance [LC]	12
9.	Shrub Bed Maintenance [SB]	13
10.	Tree Management & Maintenance [TM]	16
11.	Attenuation & Detention Basin Maintenance [BM]	19
12.	Maintenance & Inspection of Play Areas [PA]	19

## Appendices

Appendix A - Typical Maintenance Schedule

Appendix B - Ecological Mitigation Measures

Appendix C - Bargate Homes Management Company Procedure

## 1. Introduction

- 1.1.1 fabrik have been appointed by Bargate Homes, working in association with FPCR on ecological matters, to prepare this Landscape Maintenance and Management Plan for the landscape associated with the proposed development of the land west of Pagham Road (the Site).
- 1.1.2 This document sets out the management and maintenance objectives and schedule of operations for the protection and enhancement of the landscape fabric of the Site, how the issues of landscape and ecological significance will be managed and the requirements of the management company that will undertake the work and oversee an ongoing review of the strategy.

## 2. General Site Description

- 2.1.1 The proposed development site is located approximately 1.5km of northeast from the centre of Pagham village. To the east of the Site Pagham Road the main road into Pagham forms the boundary and access to the surrounding road network, Mill farm Estate forms the southern and some of the western boundary. The extent of the western boundary is lined with a ditch along with an area of trees and scrub. Beyond this is the Pagham rife water body. This area also falls within or close to the Chichester Harbour Biodiversity Opportunity Area. The northern section of the boundary consists of arable farmland along the northwestern extent and dwellings to the northeastern section.

### 2.2. Ecology

- 2.2.1 Ecological matters have been addressed in accordance with FPCR's 2021 Ecological Appraisal. Subsequent ecological information submitted as part of the Reserved Matters application ref: P/114/24/RES should also be referred to, ensuring that the latest management requirements are complied with.
- 2.2.2 Please refer to Appendix B of this document for ecological mitigation measures.

### 2.3. Management Objectives

- 2.3.1 The key objective is to improve and maintain the existing and new landscape and ecology features in perpetuity. This will be achieved through the implementation of this management plan by the Management Company which shall be formed from the residents of the development. The procedure for establishing the Management Company is detailed in Appendix C.
- 2.3.2 All operations are to be carried out in accordance with the Maintenance Specification included in sections 4 - 12 of this document.
- 2.3.3 This document has been divided into vegetation types and habitat areas and includes a brief description of the influences and constraints associated with each. A plan illustrating the habitat types is included within Appendix B.

### 2.4. Schedule of Operations

#### 2.5. 1 – Trees and Woodland

A significant number of specimen trees are proposed across the Site, situated to ensure they reach their full, natural shape whilst adding to the landscape structure and giving a sense of differing character across the site.

Trees will be managed to enhance the biodiversity and ecology of the Site whilst ensuring the safety of both residents and visitors.

If trees are found to be dead or failing to thrive then they will be replaced with new tree planting. The replacement tree planting may be of an alternative and appropriate species if required,

Woodland areas may be subject to low intensity management, with selective thinning and coppicing to maintain a varied vegetation structure and well-developed understorey. Control of non-native species will be encouraged and in areas low public accessibility log and brash piles will be constructed for reptile refugia and hibernacula.

## 2.6. 2 – Buffer, Native and Ornamental Shrubs

It is intended to further establish the comprehensive planting regime for the Site by introducing buffer, native and ornamental shrub areas. A robust vegetative screen of native trees and shrubs will create a buffer reducing noise and visual intrusion and create a varied habitat mosaic. Native shrub expanses will be integrated to complement and enhance existing boundary hedgerows. Ornamental shrub species will be located at the site entrances for their amenity value. In addition:

Existing areas of hedgerow and scrub will be reviewed for management in winter, outside bird nesting season and controlled where necessary.

## 2.7. 3 – Amenity and Meadow Grassland and Wildflowers

Areas of amenity grass are proposed throughout the development this is to be cut over the growing season.

Areas of meadow grassland and wildflower areas are proposed across the Site. These will be established from existing improved and semi-improved grassland and arable land with sowing of additional species to increase biodiversity:

- Meadow grass mixes will be composed of 20% wildflowers and 80% grasses.
- Where existing grassland is present, areas of bare ground will be opened by light mechanical disturbance for sowing in a method known as 'over sowing'.
- Seed mixes are based on relevant NVC communities (Rodwell, 1991 and Rodwell, 1992) and are obtained from local or regional sources and native to the soil type.
- A medium length sward will be achieved by mowing two times a year in early spring and late summer (late July/early August) with approved rotary machinery.

## 2.8. 4 – SUDS and Attenuation Basins

A sustainable urban drainage system (SUDS) will be established within the Site. These will include the creation of an attenuation basin that will create seasonally damp conditions, upon which a damp tolerant meadow grassland and wildflower meadow will be established.

The attenuation basin will provide ecological enhancement by helping to clean and store surface water from adjacent development.

New planting beds will be installed along the banks of the basin adjacent to areas of concentrated recreational activity, such as the trim-trail stations, to discourage access to the SuDS basin.

## 2.9. 6 – Hedgerows

The site contains several existing hedgerows which may be improved by:

- Planting additional trees and shrubs, of local provenance, adjacent to existing hedgerows to strengthen their function as wildlife corridors.
- To encourage a bushy and fruiting hedgerow a less frequent pruning regime, as outlined in Section 10.3, shall be established allowing fruits to be consumed by birds and other wildlife and avoid impacts on breeding and nesting birds.

### 3. General Maintenance Conditions

#### 3.1. Landscape Contractor

A suitable specialist Landscape Contractor, employed by the Management Company, shall carry out the works described in this specification. The proposed Landscape Contractor shall be a full member of the British Association of Landscape Industries and shall only be selected from the list of approved Contractors.

The works shall be carried out to a professional standard and in accordance with good horticultural practice, including the relevant provisions of the current British Standards. Maintenance standards should be sufficient so as to maintain the original high quality design aspiration for the development.

#### 3.2. Machines and Tools

Machines and tools are to be used that are suitable for the site conditions and the work to be carried out. Use hand tools around trees, plants and in confined spaces where it is impracticable to use machinery.

#### 3.3. Liability for Damage of Existing Vegetation

Existing boundary trees or vegetation damaged during the works shall be replaced by trees or plants of similar size and maturity or numbers. The cost of the replacement shall be borne by the Contractor.

#### 3.4. Protection

The Landscape Contractor shall ensure that:

- Adequate protection of existing and newly planted/turfed areas is erected and maintained to prevent damage.
- There is appropriate making good on removal of any protective measures on completion.
- All hard surfaces used are kept, protected, clean and tidy.
- All protective fencing at the end of the 12/24 months defect liability period will be removed.

#### 3.5. Watering

After Practical Completion of the main contract the Landscape Contractor appointed shall supply all water and equipment necessary to keep the infrastructure landscape grass, planting and trees watered. Watering shall be undertaken as necessary to ensure that trees, grass, and plants remain healthy, establish, and grow.

#### 3.6. Arisings

The Landscape Contractor is to remove from the Site and dispose of weeds, prunings, leaves, litter, rubbish, dirt, and other arisings unless specifically described as to be left and spread over beds etc.

#### 3.7. Focal Areas

When carrying out maintenance operations the Landscape Contractor is to ensure focal areas are prioritised. These include the site entrance, SuDS basin, main access corridors, formal planting and landscaping to the site frontage.

### 4. Grass Maintenance Specification

[GC]

#### 4.1. Grass Cutting

The Contractor shall maintain all grass areas in accordance with the specifications set out below. For areas of amenity grassland around the play elements and the central space, 20% of the area is to be left uncut as refuge. The uncut area is to be rotated on each visit.

## 4.2. Grass Cutting Standards

### 4.2.1 Regime A – Proposed turf and Close-mown Amenity Grass

[AA4]

#### \*GCA1: Amenity Grass

(PP3 – PP12)

Performance Height 25 - 50mm

Cut grass with an approved tractor-drawn, ride-on or pedestrian guided cylinder mower. The Contractor shall allow for grass edge trimming from PP4 to PP10, with an early and late cut in PP3 and PP12. Within large areas of amenity grass around the play elements and to the central space 20% of the area is to be left uncut as refuge. This area is to be rotated on each visit.

### 4.2.2 Regime B – Long Sward Amenity

[BA4]

#### \*GCB1: Long Sward Amenity Grass

(PP3 – PP12)

Performance Height 40- 75mm

Cut grass with an approved tractor drawn ride-on or pedestrian guided cylinder mower. The Contractor shall allow for grass edge trimming from PP4 to PP10, with an early and late cut in PP3 and PP12. Within large areas of long sward amenity grass around the play elements and to the central space 20% of the area is to be left uncut as refuge. This area is to be rotated on each visit.

### 4.2.3 Regime C – Meadow Grass

[EW1]

#### \*GCC1: Meadow Grass

(PP5, PP9/PP10)

Performance Height 50mm (20% taller than 70mm)

Cut grass with approved rotary or flail machinery, rake, and removal all arisings to designated area for disposal. To maintain species-richness, the meadow grass areas that have been sown with a species-rich seed mix will be mown in late summer/early autumn and early spring if needed (late March/early April) with the aim to create a sward with 20% area taller than 70mm. This will allow wildflowers to set seed.

A second cut during the growing season may be required if growth is particularly vigorous.

### 4.2.4 Regime D – Proposed Pond Edge Mixture

[EP1F]

#### \*GCD1: Damp Meadow

(PP5, PP9/PP10)

Performance Height 50mm

To a natural height to all banked grass areas but without woody plant encroachment and a height of 25-50mm to the publicly accessible terraced areas during the growing period. Cut grass with an approved strimmer or mower capable of dealing with woody stems up to 25mm diameter.

Damp wildflower banks are to be cut twice a year, the cuts being end March/early April and September / October to 70mm, timing subject to whether damp areas are inundated.

### 4.2.5 Regime E – Bulbs

[BM]

#### \*GCE1: Bulbs

(PP5/PP7)

Performance Height 50mm

Bulbs can be found with amenity grass types across the site and should ideally be cut 6-8 weeks after their final flowering period. Bulb flowering times will vary from early spring (March) for example *Galanthus nivalis*- Snowdrops to late spring (May) for *Narcissus pseudonarcissus*-Daffodils. The cutting period for bulbs shall therefore from May to July dependent on the variety. Uncut Bulb areas to be taken into consideration as 20% uncut refuge areas.

## 4.3. Grass Replacement

### 4.3.1 Preamble

- (i) Physical damage is to be avoided, such as from machinery use or storage.
- (ii) Do not use machinery on grassland when ground is wet to avoid damaging the sward.
- (iii) Bare and damaged patches shall be identified by the Management Company for returfing and re-seeding works.
- (iv) The Contractor shall continue all operations necessary, to include top dressing, watering and further over-seeding, to achieve a 100% grass cover within eight weeks.
- (v) Where soil has been contaminated by chemicals, oils, etc., the Contractor shall remove to tip all such soil, replacing it with suitable soil, to enable re-seeding or turfing as specified and to ensure the pollutants do not affect the future growth of the vegetation.
- (vi) If the seed fails, due to any cause whatsoever. He shall be required to make good the soiling and repeat the seeding until a good sward is obtained.
- (vii) Grass areas will only be accepted as reaching practical completion when germination has proved satisfactory, and all weeds have been removed. Management will be necessary to prevent infestation by weed species after seeding an area. A weed species may be defined as a species that is undesirable to the purpose/ objective of the grassland; species considered to be weeds will depend on the grassland type.
- (viii) Damage, failure or dying back of grass due to neglect of watering, especially for seeding out of normal season, shall be the responsibility of the Contractor.
- (ix) Any settlement below the specified levels during the contract or defects liability period shall be rectified at the Contractor's expense.
- (x) The Contractor shall exercise care in the use of rotary cultivator and mowing machines to reduce to a minimum the hazards of flying stones and debris. All rotary mowing machines shall be fitted with safety guards.

### 4.3.2 GC05: Seed and Seeding

#### Preparation

During any fallow period prior to sowing seed, tilth shall be maintained free from weeds.

### 4.3.3 Fertilising

The Contractor shall use pre-seed fertilizer on formal amenity grass seeded areas only, British Seed House No.1 or equivalent approved by the Management Company prior to use, which shall be applied at the minimum rate of 70gm/m<sup>2</sup> (700kg per ha). No fertiliser is to be used on the species-rich wildflower or meadow seed mix areas.

### 4.3.4 Final Preparation

In preparation for sowing, the surface shall be lightly and uniformly formed and reduced to a fine tilth of a minimum depth of 25mm, by raking or harrowing with a spike and chain harrow. All large stones more than 50mm in any dimension, perennial weeds and rubbish shall be removed from the surface and removed to the designated location for disposal.

### 4.3.5 Finished Levels

- (i) Finished levels shall after allowing for settlement to marry in with adjacent grass levels, be just proud of adjacent hard surfaced areas (paving, kerbs, etc.) or as otherwise indicated on drawings.
- (ii) There shall be a minimum gradient for run-off of 1:60 and maximum of 1:3, or as indicated on drawings. The area shall be free of depressions.



#### 4.3.6 Seed

The seed mixture shall be selected according to the soil type, light conditions, and climate; the intended use of the area; and be from an approved source and of proven germination. Seed type is to be approved by the Management Company prior to work. Seed of local provenance should be used wherever possible.

#### 4.3.7 Sowing

(i) Season

Sowing operations shall be carried out from the end of August to mid-October, or the end of March to the beginning of May, or at any other time with the written approval of the Management Company.

(ii) Weather and Rate

Sowing shall be carried out during suitable calm weather conditions at a minimum rate of 45 gm/m<sup>2</sup>.

(iii) After Sowing

After sowing, the ground shall be raked, or chain harrowed. On light soils, the surface shall be rolled and cross-rolled with a suitable lightweight roller.

(iv) Pre-Emergent Weedkiller

Where the following has not been possible, the Contractor may apply a pre-emergent weedkiller after sowing, in accordance with the manufacturer's instructions. The herbicide shall be of an appropriate type and one which has no soil persistence and shall be approved by the Management Company.

#### 4.3.8 Initial Cut (Topping)

- (i) The Contractor shall remove all large stones (more than 50mm in any dimension) and roll all flat and terraced areas with a light roller to firm the grass and press in any remaining stones. This shall be done approximately 48 hours prior to topping.
- (ii) A rotary mower to the flat and terraced areas and a strimmer shall be used to top grass when it is 80mm high, to leave a height of 50mm to cut weeds, control the growth of coarser grass and encourage tillering.
- (iii) Where mowing without a box produces a swathe, this shall be spread evenly to prevent drainage to the growing grass beneath. This applies particularly to grass cut during periods of dull or wet weather.

#### 4.3.9 Protection of Seeded Areas

- (i) The Contractor shall protect newly grassed areas at vulnerable points, as necessary.
- (ii) For this purpose, the Contractor shall provide and fix a fence of three strands of wire supported on wooden posts 900mm out of the ground at approximately 1.8m centres. These fences shall be maintained by the Contractor and, when grass is established, shall be cleared away and the ground reinstated.
- (iii) Any damage to the grass shall be made good until the areas are handed over.

#### 4.3.10 Maintenance

- (i) The Contractor shall maintain all seeded areas to establish a varied (20% longer in open space areas) and healthy sward until notification by the Management Company. This shall include all necessary watering, weeding, cutting, repair of all erosion and settlement and re-seeding operations.
- (ii) The Contractor shall treat pernicious weeds with a suitable approved selective herbicide twelve weeks after seeding if the grass was sown in the spring. Grass sown in the autumn shall be treated similarly at the end of May the following year.

### 4.4. GCO6: Turf and Turfing

#### 4.4.1 The Contractor shall comply with British Standards BS 3969 and BS 4428.

(i) Condition of Turf

The Contractor shall provide good quality lawn turf complying with BS 3969, the grass being of close texture, even density and green in colour. The grass shall be closely mown, so the height does not exceed

25mm and show no visible sign of pest or disease. The turf shall be sufficiently fibrous for turves to hold together during handling and an excess of fibre of mat is desirable.

(ii) Dimensions

Turves shall be of a rectangular shape and of uniform thickness. They shall have a minimum soil thickness of 25mm and a width of 300mm, unless otherwise agreed by the Management Company.

(iii) Weedkiller

A selective weedkiller shall be applied to the turf no less than four weeks prior to lifting.

(iv) Lifting

Turves shall not be lifted in frosty weather or when waterlogged. They shall be packed to avoid drying out in transit and shall be rolled or laid flat.

(v) Delivery

Turf shall be delivered to site within 36 hours of lifting and offloaded by hand to be stacked to a maximum height of 1m, unless arranged on pallets for mechanical handling.

(vi) Stacking

Turves shall be placed grass to grass if stacked. Stacked turves shall be inspected at frequent intervals for deterioration. If kept for any period, the turves shall be laid out and maintained as turfed areas.

#### 4.4.2 Cultivation

- (i) The Contractor shall cultivate the area to be turfed to a depth of 100mm removing all large stones (over 50mm in any dimension), perennial weeds and rubbish to designated area for removal.
- (ii) All topsoil shall be conserved to provide a minimum depth of 100mm after re-leveling.

#### 4.4.3 Final Preparation

The Contractor shall reduce the surface to a fine tilth, to a minimum depth of 25mm and lightly and uniformly firm the surface.

#### 4.4.4 Laying Turf

(i) Season

Turf shall be laid when weather and soil conditions are suitable. No turf shall be laid in exceptionally dry or frosty weather, or in other unsuitable weather conditions. The Contractor shall give preference to autumn and early winter for this operation.

(ii) Laying

No turf shall be laid until topsoiling has been completed to the satisfaction of the Management Company.

(iii) At no time shall turves support workmen, barrows or provide access.

(iv) Turves shall be laid on the prepared soil bed and be firmed into position in consecutive rows with broken joints, closely butted and to the correct levels. The turves shall be laid off planks working over turves previously laid.

(v) A dressing of finely sifted topsoil or fine peat shall be applied to the joints and well brushed in. The Contractor shall adjust any inequalities in the finished levels, owing to variation in turf thickness or uneven consolidation of the soil, by raking and/or packing fine soil under the turf. Use of a roller is not permitted.

#### 4.4.5 Finished Levels

- (i) Finished levels shall, after allowing for settlement, be just proud of adjacent hard surfaced areas (paving, kerbs, etc.), or as otherwise indicated on drawings.
- (ii) Margins shall be laid with whole turves.

#### 4.5. Wildflower Grass Maintenance

Identical to that for seeded areas (Specification 6.10) except that wildflower meadows should be sown on a low nutrient soil or subsoil where possible.

## 4.6. Native wildflower grass and meadow grass seeding

### 4.6.1 Preamble

The purpose of seeding the native grassland meadow is to encourage an increase in the floral diversity of the grassland.

### 4.6.2 Preparation

Prior to seeding, the surface of the meadow is to be scarified using a tine harrow.

### 4.6.3 Sowing

- (i) *Season* - Sowing operations shall be carried out from the end of August to mid-October, or the end of March to the beginning of May, or at any other time with the written approval of the Management Company.
- (ii) *Rate* - The seed is to be applied to the grassland at the manufacturer's suggested rate.

### 4.6.4 Maintenance

- (i) The Contractor shall maintain all seeded areas to establish a varied and healthy sward until notification by the Management Company. This shall include all necessary watering, weeding, cutting, repair of all erosion and settlement and re-seeding operations.
- (ii) The Contractor shall treat pernicious weeds with a suitable approved selective herbicide or hand pulled twelve weeks after seeding if the grass was sown in the spring. Grass sown in the autumn shall be similarly treated at the end of May the following year.

## 5. Hedge Maintenance

[HM]

### 5.1. Pruning

- (i) Native hedgerows should be pruned to achieve an A-shaped cross section with a single side cut each year.
- (ii) The hedge shall be pruned back to the same height, width, and general shape as that which existed at the completion of the last approved pruning. The sides of the hedge shall be slightly inward sloping (i.e., wider at the bottom of the hedge than at the top to give more stability) with the top of the hedge level and at right angles to the ends.
- (iii) Generally, large-leaved plants, such as Laurel, shall only be pruned by using secateurs or similar approved equipment.
- (iv) No pruning shall take place when the hedges are in flower unless this has been approved by the Management Company.
- (v) Should the Contractor believe that they have been asked to do anything which, in their opinion, is detrimental to the hedge, an obstruction to pedestrians/vehicles, or they consider it appropriate to deviate from the specification, the Management Company shall be notified prior to the work commencing.
- (vi) The Contractor shall avoid cutting/pruning in March to November inclusive to cause minimum disturbance to nesting birds and wildlife, in compliance with the Wildlife and Countryside Act.

### 5.2. Pruning Regimes

- (i) Hedge cutting will be undertaken according to vigour and type, as listed in the Bills of Quantity. All hedges are to be cut once every two years when they are fully established.

### 5.3. HMA1: Prune Low Vigor Hedges

Pruning shall be carried out at times appropriate to each species, defined below: -

Species	Cutting regime	Time(s) of Cut
Mixed native hedge	Once every year	Late October (PP10)
Native single species	Twice every year	February and late October (PP10)

### 5.4. Associated Maintenance Work

#### 5.4.1 HMO2: Maintenance of Hedge Base

(PP1 – PP12)

The Contractor shall be required to leave the base of the hedge clean, tidy and weed free on every occasion that hedge maintenance operations are carried out, and this shall include the removal of all litter, leaves, debris and other such deleterious matter.

The soil shall be lightly cultivated (taking care not to damage the root system) to a distance of 0.5m from the centre of the hedge and all litter, leaves, debris and any other rubbish shall be removed to the designated area for disposal. The site shall be left clean and tidy.

For native hedges all herbaceous species at the base of the native hedgerows are to be retained to increase biodiversity and none of the above operations apply save the clearance of litter as defined. To achieve this, a minimum 1m buffer zone shall be left uncut/undisturbed at the base of the hedgerow. Mixed native hedgerows to the site boundaries should be managed to achieve an 'A' shape.

## 6. Herbaceous Borders Maintenance

[HB]

### 6.1. Litter

Herbaceous borders shall be kept free of litter, so that at no time shall litter coverage of 5% be tolerated, and in accordance with this strategy document.

#### 6.2. \*HBM1: Maintenance of Herbaceous Borders

(PP1-PP12)

The Contractor shall provide an all-inclusive rate HBM1 to include the undertaking of all operations from HB01 to HB05.

#### 6.3. \*HB01: General Maintenance Visits

(PP3 – PP10)

- (i) The Contractor shall provide a rate to carry out a minimum of 32 weekly visits for general maintenance at equally spaced intervals from March to October inclusive. The Contractor shall maintain the borders in a tidy and attractive appearance, ensuring maximum flowering. At each of these visits.
- (ii) All borders shall be kept clear of weeds by hoe, fork or hand weeding as required, avoiding excessive treading of the border. Care shall be taken not to damage the plants' root system. At no time shall weed growth more than 5% of the area of the border be tolerated.
- (iii) The Contractor shall ensure that all plants that require staking shall be staked and tied by using pea sticks or similar material and secured with twine or similar. All materials must be approved by the Management Company prior to use. This operation shall be undertaken, as necessary, in accordance with good horticultural practice.
- (iv) The Contractor shall immediately inform the Management Company of all insect or fungal attacks and damage caused by vandalism.

#### 6.4. \*HBO2: Cultivate and Supply and Apply Fertiliser (PP3)

The border shall be forked over lightly in March and a general fertiliser, approved by the Management Company, with an N.P.K. ratio of 7:7:7, shall be supplied and applied at a rate of 35gm per square metre and incorporated into the surface by fork or hoe.

#### 6.5. \*HBO3: Edging of Herbaceous Borders

The herbaceous borders shall be edged - once in November (PP11) and again in March (PP3).

#### 6.6. \*HBO4: Autumn Maintenance Visits (PP11 – PP12)

- (i) The Contractor shall carry out a minimum of eight weekly visits for autumn maintenance, at equally spaced intervals throughout November and December. The Contractor shall, on each visit, cut down all growth of the herbaceous perennials that have finished flowering and stems have died back and shall fork over the soil, minimising disturbance to plants.
- (ii) This operation shall be undertaken, as necessary, in accordance with good horticultural practice and the Contractor shall allow for the gradual treatment of the entire border over the full eight planned visits. All arisings shall be removed from site at the end of each work period and taken to the designated location for disposal.

#### 6.7. \*HBO5: Water Planted Areas (PP1 – PP12)

During periods of prolonged dry weather, the Contractor may be required to water herbaceous borders to achieve saturation of the soil to a depth of 225mm. The Contractor shall provide all equipment necessary to undertake watering and shall be responsible for arranging supplies of water. Care shall be taken that no soil erosion or plant damage occurs because of irrigation.

#### 6.8. Associated Works

##### 6.8.1 HBO6: Supply and Apply Pesticide

The Management Company may instruct the Contractor to treat an insect or fungal attack with pesticide approved by the Management Company. The Contractor shall supply and apply the pesticide at the rate of application, strictly in accordance with the manufacturer's recommendations.

##### 6.8.2 HBO7: Dig Up, Split and Replace Plants

- (i) The Contractor may be required to undertake the following operations on specified areas of border between November (PP11) and March (PP3).
- (ii) In these areas, plants shall be dug up and split in accordance with good horticultural practice, removing any perennial weed entwined within the plants. The Contractor shall dig over area disturbed by the lifting and splitting operations, using a spade to a depth of 275mm.
- (iii) The Contractor shall incorporate into the soil an approved, well-rotted manure. This shall be supplied and applied at a rate of 10kg per square metre and the soil shall then be consolidated and raked prior to planting. The Contractor shall then replant as per plan supplied by the Management Company.

#### 6.9. Vandalism

Damage caused by vandalism shall be immediately reported to the Management Company. The Management Company may instruct the Contractor to make good vandal damage.

## 7. Leaf Clearance

[LE]

### 7.1. Standard

- (i) The Contractor shall be responsible for the clearance of leaves, twigs, etc., from areas specified from leaf fall (normally October (PP10) until the end of December (PP12)). The Management Company will instruct the Contractor when leaf clearance commences.
- (ii) The Contractor shall ensure that all flowerbeds, shrub beds, grass areas, paths, channels, drains, designated driveways, steps and play areas, or other specified by the Management Company, are kept clear of leaves.
- (iii) Machines used for the clearance of leaves from large, grassed areas must be fitted with suitable tyres to prevent damage.
- (iv) Any damage caused by the Contractor's negligence shall be reinstated at the Contractor's expense.
- (v) The Contractor shall remove all collected leaves to the designated location for disposal, at the end of each work period. The Contractor shall not leave groupings of collected leaves on site for bulk removal unless specific approval from the Management Company has been issued in writing.
- (vi) All pieces of play equipment or trim trail elements are to be always kept free from leaves.

### 7.2. \*LEO1: Leaf Clearance

(PP10 – PP12)

The Contractor shall ensure that all leaves are not laying on the ground for any more than one week. The Contractor shall schedule operations to achieve this standard.

## 8. Litter Clearance

[LC]

### 8.1. Method of Litter Collection

- (i) All litter and arisings are to be collected from all soft landscaped areas and disposed off site. No burning on site will be permitted.
- (ii) Ensure all swales are kept free from litter at all times.
- (iii) All litter picking to be carried out monthly.
- (iv) Any damage caused due to litter picking/collection operations being carried out by the Contractor shall be made good at the Contractors expense and to the completed satisfaction of the Management Company.

### 8.2. LCO7: Remove Fly – Tipped Material

The Contractor shall price to collect and remove 'fly-tipped' material and remove to the designated location for disposal.

### 8.3. Emptying of Rubbish Bins

- (i) No litter bin is to be more than 75% full and all rubbish bins/baskets are to be emptied at least once a month. More frequent emptying may be required to prevent overflow.
- (ii) Every rubbish bin/basket shall be lined with an approved black plastic bag, which will be renewed at each time of collection. The Contractor shall include in their rate for the supply and installation of the black plastic bags, as detailed above.
- (iii) All arisings shall be removed from site at the end of each work period and taken to the designated location for disposal.
- (iv) All damaged or missing litter bins and baskets shall be reported to the Management Company within two working days.
- (v) The Contractor shall clean the bins as regularly as is necessary to ensure that they remain clean, do not smell or attract unwanted insects or animals or become insanitary.

### 8.3.2 LCO8: Standard

- (i) At no time shall there be litter protruding from the bin or around its base.
- (ii) Each time a bin is emptied; all litter that has fallen within a 2.0 metre radius of the bin shall be removed.

### 8.3.3 LCO9: Clean and Disinfect Bins

The Contractor shall price a rate to clean and disinfect a bin or basket following emptying, leaving the site clean and tidy, always ensuring public health and safety.

## 9. Shrub Bed Maintenance

[SB]

### 9.1. Litter

- (i) The Contractor shall remove all litter as detailed in Section 11.0 from all shrub areas.
- (ii) All arisings shall be collected and removed from site at the end of each work period and taken to the designated location for disposal.
- (iii) Remove, using correct horticultural practices, all fallen flowers, leaves and other debris. All cultivated areas shall be cleared of litter and other debris on each maintenance visit.
- (iv) Edging

### 9.2. \*SBO1: Maintain Edges of Shrub Beds

(PP1-PP12)

The Contractor shall maintain the edges of all shrub beds in a neat and tidy appearance by using a half-moon edging iron on one occasion between October (PP10) and March (PP3). Bed soil shall be pushed back and left at a 45-degree angle from the edge, starting slightly below surrounding levels. The edges of beds abutting grassed areas shall be slightly sloped to avoid a vertical or undercut appearance. The shape and size of the bed edge shall not be altered by this operation. All litter, arisings and similar debris shall be removed from the adjacent channel for disposal to leave the channel neat and tidy following each visit. This operation shall be carried out in conjunction with Specification 6.4 of the Grass Maintenance Regime.

### 9.2.1 \*SBO2: Trimming Grass Edges

(PP1-PP12)

The edges of grass areas which abut maintained beds and similar areas shall be trimmed with long handled shears or other approved mechanical means, at a frequency detailed in Grass Specification Section 6.4 of the Grass Maintenance Regime.

### 9.3. Shrub Beds Regime A - 'Ornamental'

[SBA]

Hand Weeding and General Maintenance

### 9.3.1 \*SBA1: Ornamental Shrub Area Maintenance

(PP1 - PP12)

- (i) The Contractor shall visit each shrub bed identified for Regime A Maintenance on a minimum of 26 occasions equally spaced through the year, i.e., fortnightly visits. The Contractor shall undertake the following operations on each visit.
- (ii) Remove, using correct horticultural practices, all fallen flowers, leaves and other debris. All cultivated areas shall be cleared of litter and other debris. The Contractor shall ensure that each maintenance visit coincides with a litter removal visit.
- (iii) The Contractor shall prune shrubs to prevent obstructions to paths, roads, signs, steps, sight lines, windows, doors and other similar situations and to allow access as directed by the Management Company.
- (iv) The Contractor shall at each visit remove all dead, damaged, infested, reverted or diseased branches and stems using correct horticultural practices. The Contractor shall otherwise prune all plant material at the correct pruning time. Any plants grown for winter stem colour or similar effects, as specified by the Management Company shall be pruned at the optimum time to provide the maximum display.

- (v) All dead shrubs and plants shall be removed. If replacement planting is required then the Management Company will advise in accordance with the Planting Specification.
- (vi) Remove weeds by pulling by hand, hoeing, and raking, avoiding damage to stems, branches and plant roots leaving a clean weed free surface cultivated to a medium tilth. No herbicides shall be used.

#### 9.3.2 \* SBA2: Cultivation Visit

(PP11)

- (i) The Contractor shall undertake the following works to the entire shrub bed on one occasion during November (PP11).
- (ii) The Contractor shall cultivate beds to relieve areas of compaction to a depth of 75mm to maintain a high standard of appearance, by forking or similar approved method. Care will be taken not to damage or disturb roots, branches, and stems, and avoid excessive treading of the surface. The Contractor shall break down any lumps and leave the surface weed free with a medium/fine tilth.

### 9.4. Shrub Beds Regime B - 'Native'

[SBB]

#### Hand Weeding and General Maintenance

#### 9.4.1 \*SBB1: Native Shrub Area Maintenance

(PP1 - PP12)

- (i) Ensure that no one species dominates and that at least 80% of the scrub is native. Ensure no invasive species are present.
- (ii) The Contractor shall visit each shrub bed identified for Regime B Maintenance monthly outside of the bird nesting season. The Contractor shall undertake the following operations on each visit.
- (iii) Remove, using correct horticultural practices, all fallen flowers, leaves and other debris once at the end of the growing season. All cultivated areas shall be cleared of litter and other debris. The Contractor shall ensure that each maintenance visit coincides with a litter removal visit.
- (iv) The Contractor shall at each visit remove all dead, damaged, infested, reverted or diseased branches and stems using correct horticultural practices. The Contractor shall otherwise prune all plant material that can be correctly pruned. Any flowering materials or plants grown for winter stem effect, that would have their display value reduced if pruned at this time, shall not be pruned. The Management Company will instruct the Contractor to prune such shrubs.
- (v) Create well developed, scalloped edges.
- (vi) All dead shrubs, plants and branches shall be retained in brash/log piles to create deadwood habitat. If replacement planting is required then the Management Company will advise in accordance with the Planting Specification.
- (vii) Remove weeds by pulling by hand, hoeing, and raking, avoiding damage to stems, branches and plant roots leaving a clean weed free surface cultivated to a medium tilth. No herbicides shall be used.

#### 9.4.2 \* SBB2, SBC2: Cultivation and Pruning Visit

(PP11 - PP3)

- (i) The Contractor shall visit each shrub bed on one occasion in the winter during November (PP11) to March (PP3). The Contractor shall undertake all the following operations during this visit.
- (ii) The Contractor shall cultivate beds to relieve areas of compaction to a depth of 75mm to maintain a high standard of appearance, by forking or similar approved method. Care will be taken not to damage or disturb roots, branches, and stems, and avoid excessive treading of the surface. The Contractor shall break down any lumps and leave the surface weed free with a medium/fine tilth.
- (iii) All arisings shall be collected and disposed of.
- (iv) The Contractor shall cut back shrubs when necessary to prevent obstructions to paths, roads, signs, steps, sight lines, windows, doors and other similar.



#### 9.4.3 \* SBB3/SBC3: Chemical Application

(PP1 - PP4)

Application of chemical weed control shall be kept to a minimum and only be used when instructed by the Management Company. It shall be the responsibility of the Landscape Contractor to ensure any application is in accordance with best practice and current legislation.

#### 9.4.4 \* SBB4/SBC4: Hand Weed Replanted Areas

(PP1 - PP12)

- (i) Following 'gap planting', normally November (PP11) to March (PP2), the Contractor shall hand weed, re-firm and prune any planted material as necessary until beds are deemed by the Management Company to have become established.
- (ii) Should the Contractor apply pesticide on site which results in damage to newly planted beds, the Contractor shall replace all plant material deemed to be damaged or dead due to the Contractor's negligence, at no extra expense.

### 9.5. Pruning

#### 9.5.1 Important Pruning Instructions

The following practices shall not be tolerated:

- (i) Never cut everything off at one level.
- (ii) Never prune up the stems of plants to access litter.
- (iii) Do not open shrub beds unnecessarily by pruning back each shrub all over. A natural looking shrub bed shall be achieved, not topiary.
- (iv) If pruning has been carried out incorrectly, replacement or remedial work shall be carried out at the Contractor's expense, unless the damage to the shrubs has resulted from acts of vandalism or theft.

#### 9.6. Pruning Schedule

##### 9.6.1 A Slow Growing Specimen

If pruning is required, it will only involve light shaping and shall be undertaken outside of the bird nesting seasons (March to September inclusive).

##### 9.6.2 B Spring Flowering

All wood which has borne flowers shall be removed. Young wood shall be retained to ripen and produce flowers in the following year. Thin out crowded and crossing shoots and remove weak growth. Pruning shall be carried out after flowering in May (PP5) to July (PP7).

##### 9.6.3 C Most Deciduous/Vigorous Evergreen

One or two old stems shall be removed completely, and the younger flowering shoots shall cut back to the fresh growth of the main branches. Thin out crowded and crossing shoots and remove weak growth. Pruning shall be carried out between November (PP11) and March (PP3).

##### 9.6.4 D Stem Effect/Marginal Hardiness

The previous season's wood shall be cut back to within two or three buds of the old wood. Thin out crowded and crossing shoots and remove weak growth during March (PP3) to April (PP4).

### 9.7. Remedial Pruning

The Management Company may instruct the Contractor to undertake remedial pruning to shrubs. The Contractor shall be required to liaise closely with the Management Company to ensure methods adopted are appropriate.

### 9.7.1 Solid Shrub Blocks Abutting Pavements

Where shrubs have been historically faced up, they may resemble hedges and may even have been cut accordingly. If the Management Company applies the remedial pruning rate to convert such beds back to a specified regime, then it may be carried out over two or more seasons, treating half or less of the bed at a time, adopting the following:

- (i) Branches which are strongly growing towards the pavement or road shall be cut off at ground level or back to the main trunk.
- (ii) The remaining branches shall be reduced beyond any twiggy front edge to expose the structure. Where possible, the branches shall be thinned as necessary to create a structure appropriate to its position.
- (iii) All dead, diseased, damaged and crossing branches shall be removed, and the resultant shape must be natural. Where possible, pruning cuts shall be above a bud.
- (iv) When pruning is complete, the structure shall be such that the shrub will not extend over the pavement after a season's growth.
- (v) To prevent the face of evergreen shrubs being cut back too hard in one season, the Management Company may specify that the work shall be extended over two growing seasons.
- (vi) During remedial pruning, the removal of berrying or flowering wood may be necessary but this will only take place with the Management Company authorisation.

### 9.7.2 Tall and Specimen Shrubs

- (i) Where such beds front the pavement and form impenetrable blocks access can be gained to the centre of the beds.
- (ii) At this stage, sufficient of the oldest, upright branches shall be removed at ground level or back to a main trunk to open up the canopy and encourage healthy, young wood.
- (iii) Work shall now continue using approved hand tools to produce a new structure of a size appropriate to its position to a maximum of 2.4m but this is dependent on species/cultivar. With vigorous shrubs, such as certain *Pyracantha* cultivars, pruning cuts shall be made to encourage less vigorous, down aimed shoots.
- (iv) The pruning shall be deemed complete when shrubs have a naturally shaped canopy, with the bulk of the growth being between 1.5m and 2.0m.

## 10. Tree Management & Maintenance

[TM]

### 10.1. Tree work

The Contractor shall allow a sum to maintain all tree stock in accordance with the specification set out below.

### 10.2. Generally

#### 10.2.1 \*TMSG01: Tree Stakes and Ties

(PP1 - PP12)

- (i) The Contractor should check on a two monthly basis the condition of Tree Stakes and Guys. In addition, further inspections should be carried out immediately after strong winds.
- (ii) Stakes - replace loose, broken, or decayed stakes to original specification. If longer than half of clear tree stem height, cut to this height in spring. Retie to tree firmly but not tightly with a single tie.
- (iii) Ties - Adjust, refix, or replace loose or defective ties, allowing for growth and prevent chaffing. Where chaffing has occurred, reposition, or replace ties to prevent further chaffing.
- (iv) Removal of Stakes and Ties - remove stakes and ties two years after planting. Fill stake holes with lightly compacted soil.

### 10.2.2 \*TMTGG01: Tree Guards and Grilles

(PP1/PP7)

- (i) Tree Guards – loose or defective guards; adjust, re-fix or replace to original specification and to prevent chafing. Visit on a minimum of two occasions per annum.
- (ii) Tree Grilles – lift grilles, remove weeds, adjust levels as necessary and lightly compact. Refit grilles, refill interstices and lightly compact to correct level. Material for making up levels and refilling should be horticultural grit.

### 10.2.3 \*TMFP01: Formative Pruning

(PP1–PP4)

- (i) Formative Pruning of young trees – This work should be undertaken to ensure the successful establishment of the trees. The works should not be carried out during the late winter/early spring sap flow period.
- (ii) Young trees up to 4m high should be crown pruned by removing dead branches and reducing selected side branches by one third to preserve a well-balanced head and ensure the development of a single strong leader. Remove duplicated branches and potentially weak or tight forks. In each case cut back to live wood.
- (iii) Extensive pruning of young trees and any surgery to larger trees must be carried out by an approved member of the Arboricultural Association or other approved specialist.

### 10.3. \*TMCOD01: Cleaning Out and Deadwooding

(PP4/PP10)

#### 10.3.1 Remove:

- (i) The majority of dead, dying, or diseased wood, broken branches, and stubs (the retention of some of these on native species is beneficial for wildlife). Ensure any retained dead, dying or diseased wood is done so safely.
- (ii) Fungal growths and fruiting bodies
- (iii) Rubbish, windblown or accumulated in branch forks.
- (iv) Wires, clamps, boards, and metal objects, if removable without causing further damage and not part of a support structure that is to be retained.
- (v) Other unwanted objects, e.g., tree houses, swings.
- (vi) Climbing plants

### 10.4. \*TMCP01: Cutting and Pruning Generally

(PP4/PP10)

- (i) Do not use chainsaws on branches of less than 50 cm diameter. When using handsaws, cut in one continuous operation to form a smooth cut surface.
- (ii) When removing branches do not damage or tear the stem.
- (iii) Keep wounds as small as possible, cut cleanly back to sound wood leaving a smooth surface, and angled so that water will not collect on the cut area.
- (iv) When cutting, cut at fork or at the main stem to avoid stumps wherever possible.
- (v) Large branches – remove only if unavoidable. Remove in small sections and lower to the ground with ropes and slings.
- (vi) Dead branches and stubs – when removing do not cut into live wood.
- (vii) Unsafe branches – remove epicormic shoots and potentially weak forks that could fall in adverse weather conditions.
- (viii) Disease of fungus – give notice if detected. Do not apply fungicide or sealant unless instructed.
- (ix) Bark Damage – wounds – do not attempt to stop sap bleeding. Gently remove ragged edges and remove splintered wood from deep wounds as small as possible. Give notice if there is any liquid or flux oozing from apparently healthy bark.
- (x) Cavities in Trees – Cavities should be investigated. Old cavities in mature trees should be left alone subject to health and safety audit. New cavities are likely to have been made by woodpeckers and may

reflect nesting in which case disturbance is illegal. Where the extent of a cavity is not visible, there is also a risk a bat or bats may be present. Such cavities should be notified but no further action taken without advice from a suitably qualified ecologist. For new small cavities in ornamental species, where bats or nesting birds are obviously absent, rubbish and rotten wood should be removed. The cavity should be probed to find the extent of any decay and give notice. The cavities should not be covered.

- (xi) Stack all wood arising from the works in neat piles in areas to be agreed with the ecologist to provide invertebrate habitat and reptile foraging opportunities, as per the Ecological Enhancements identified within Appendix B.

#### 10.5. TMCRS01: Crown Reduction/Shaping

- (i) In general cut back selectively to lateral or sublateral buds or branches to retain flowing branch lines without leaving stumps.

#### 10.6. TMCL01: Crown Lifting

- (i) Removing branches: remove whole branches back to the stem or cut lower portions of branches back to lateral or sublateral buds or branches. Do not leave stumps.
- (ii) The extent of the works will be as instructed by the Management Company. In general, for clearance remove branch systems to give clearances as follows: 2.5m above pathways, 3m above cycleways, above vehicle carriageways.

#### 10.7. TMCT01: Crown Thinning

- (i) When removing branches, remove inward growing, crossing, rubbing, dead and damaged branches. When thinning selectively remove an agreed percentage of secondary and small live branch growth evenly throughout the crown. When cutting make no cuts of more than 50mm diameter. Cut portions of branches back to lateral or sublateral buds or branches without leaving stumps. The appearance should be uniform with a well-balanced structure of branches and foliage.
- (ii) The extent of the works will be as instructed by the Management Company.

#### 10.8. TMSF01: Selective Tree Felling

Carry out selective felling of weaker specimens and replace with native trees.

#### 10.9. TMTI01: Tree Inspection

Review all trees at regular intervals to maintain the longevity of the tree stock on site. Remove all stakes and ties after year 2.

#### 10.10. TMEC01: Emergency Call Out

10.10.1 The Contractor shall price to provide a call out facility:

- (i) TMEC01a: 1 hour emergency call out (during working hours)
- (ii) TMEC01b: 1 hour emergency call out (out of working hours)

10.10.2 Normal working hours are deemed for the purpose of the Specification to be 7.30am - 6.00pm, Monday to Friday. Out of hours shall not include Bank Holidays.

## 11. SuDS Basin and Swale Maintenance

[BM]

### 11.1. Basin Maintenance

The Contractor shall regularly inspect and maintain detention basins to ensure their effective operation as designed. For information relating to SuDS basin and swale maintenance other than grass/meadow cutting, please also refer to Mayer Brown's document BHPAGHAM.10-DOC.

### 11.2. Mowing

Regular mowing in and around detention basins is required only along maintenance access routes, amenity areas (e.g., footpaths), across embankments and main storage area. The remaining areas can be managed as damp meadow grass (Section 6.3.5) unless additional management is required for landscaping purposes.

### 11.3. Schedule of Maintenance

Refer also to Appendix A - Typical Maintenance Schedule (17).

### 11.4. Regular Maintenance

#### 11.4.1 \*BMGC01: Grass Cutting

(PP1 - PP12)

Grass cutting for spillways and access routes.

#### 11.4.2 \*BMGC02: Damp Meadow Grass Cutting

(PP3, PP9/PP10)

Grass cutting damp meadow grass in and around basin.

#### 11.4.3 \*BMVM01: Vegetation Management

(PP1 - PP12)

Management of vegetation and removal of nuisance/invasive plants by hand pulling with PPE used where appropriate, such as when handling Giant hogweed.

### 11.5. Occasional Maintenance

#### 11.5.1 BMOM01: Occasional Maintenance

Re-seed areas of poor vegetation growth, prune and trim trees and remove cuttings.

## 12. Maintenance & Inspection of Play Areas

[PA]

### 12.1. Litter

Play areas shall be kept free of litter, so that at no time shall litter coverage of 5% be tolerated, and in accordance with Section 13.0 of this specification.

### 12.2. PAI: Play Areas Inspection

The Contractor shall allow a sum to maintain ensure that the play area is inspected **weekly** and any work required is carried out.

In addition to (i) the Contractor shall allow a sum to maintain ensure that the play area is inspected **annually** in accordance with ROSPA Guidance and EN1176/7.

Inspection should be by an independent specialist.

A report should be written covering site safety and condition of equipment, surfacing and ancillary safety items and compliance with EN1176 where relevant. The report should include any remedial action required with an assessment of the degree of risk.

Appendix A - Typical Maintenance Schedule

# Annual Maintenance Programme

Activity	J	F	M	A	M	J	J	A	S	O	N	D
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Section 4: Grass Maintenance												
Amenity Grass Cutting (GCA1)												
Long Sward Amenity Grass Cutting (GC81)												
Meadow Grass Cutting (GCC1)												
Wetland Wildflower Cutting (GCD1)												
Bulbs (GCF1)												
Edge Trimming												
Chemical Turf Care (GCO1)												
Arisings (GC04)												
Repairs (GC05 / GC06)												

Section 5: Hedge Maintenance												
Pruning - Mixed Native Hedge (HMA1)												
Pruning - Native Single Species (HMA1)												
Maintenance - Hedge Base (HM02)												

Section 6: Herbaceous Borders												
General Maintenance Visits (HB01)												
Cultivate / Fertilise (HB02)												
Edging of Herbaceous Borders												
Autumn Maintenance Visits (HB04)												
Water Planted Areas (HB05)												
Split / Replace Plants (HB07)												

Section 7: Leaf Clearance												
Leaf Clearance (LE01)												

Section 8: Litter Clearance												
Litter Clearance (LCA1 - LCB1)												
Emptying of Litter Bins (LC08 /												

Sections 9: Shrub Bed Maintenance												
Edging / trimming of Shrub Beds (SB01 / SB02)												
Shrub Area Regime A 'Ornamental'												
Cultivation Visit Regime A (SBA2)												
Shrub Area Regime B 'Native' (SBB1)												
Cultivation Visit Regime B (SBB2)												
Shrub Area Regime C 'Buffer' (SBC1)												
Cultivation Visit Regime C (SBC2)												

# Annual Maintenance Programme

Activity	J	F	M	A	M	J	J	A	S	O	N	D
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Winter Chemical Application (SBB3)												
Hand Weed (SBB4 / SBC4)												
Formative / remedial pruning												
Weed control												
Replacement planting												
Guards/fencing/supports												
Maintain woodchip/mulch												

Sections 10: Tree Management												
Formative / Remedial Pruning												
Refirming Trees (TMR01)												
Replacement Planting												
Stakes / Supports (TMSG01 /												
Tree Guards and Grilles (TMTGG01)												
Pruning / Deadwooding (TMCOD01												
Avoid Nesting Birds/Bat Roosting												

Sections 11: SuDS Management												
Grass Cutting (BMGC01)												
Meadow Grass Cutting (BMGC02)												
Vegetation Management (BMVM01)												

Sections 12: Play Areas												
Annual Play Inspection												



Appendix B – Ecological Mitigation Measures

## APPENDIX TO THE LEMP: ECOLOGICAL ENHANCEMENTS

### Bargate Homes

#### Land West of Pagham Road, Pagham

March 2025

### 1.0 INTRODUCTION

- 1.1 This Appendix has been prepared by FPCR Environment and Design on Behalf of Bargate Homes to support a Landscape and Environmental Management Plan Prepared by fabrik to detail long-term management prescriptions for Land West of Pagham Road, Pagham. The accompanying LEMP focuses on the long-term management of habitats and boundary treatments on the Site, with this supporting appendix provided to detail the installation/creation measures associated with specific enhancement measures. It also contains long-term management prescriptions for these faunal enhancements.
- 1.2 Following receipt of full planning permission, the proposed habitats will be managed in accordance with the condition criteria for their target conditions, as set forth in the Biodiversity Net Gain Report by FPCR, November 2024. The accompanying LEMP (or similar approved document) will also act as a Habitat Management and Monitoring Plan for the agreed scenario that is carried forward as part of a Biodiversity Gain Plan (BGP), in accordance with the requirements of the Environment Act. The LEMP (or similar document) will be tailored to provide details on how created and enhanced habitats across the Site that are significantly contributing to the Site's BNG will be managed for a minimum of 30 years.

### 2.0 ENHANCEMENTS FOR NOTABLE SPECIES

- 2.1 A range of site-specific faunal enhancements were proposed in the Ecological Appraisal by FPCR, December 2021, based on the results of ecological surveys that were undertaken. Bargate Homes have committed to delivering the scheme in accordance with the Future Homes Hub "Homes for Nature" Initiative, which also details requirements for ecological enhancements as part of the scheme. Indicative numbers and locations for these enhancements (apart from the hedgehog highways) are provided in *Figure 1: Ecological Enhancements Plan*, although the precise positionings will be agreed upon at working drawing stage.

#### Bats

- 2.2 Enhancements to increase the number of potential bat roost sites within the proposed development will be provided. These enhancements will comprise the provision of bat bricks/tubes on external walls, and roost boxes located in existing mature trees around the Site.
- 2.3 Bat tubes, such as the unrendered Habitat 001 bat box, will be incorporated into the brickwork of buildings that are closest to known commuting habitats, at a ratio of one per every two homes; they will be positioned facing to the southwest or southeast aspect to maximise natural heating and avoid overheating. These will be installed by experienced Site personnel under the instruction of an ecologist.

- 2.4 To maximise the potential for occupation, a range of six bat boxes will be installed at a minimum height of 5m, facing southwest to southeast aspect (avoiding direct south) on suitable retained trees. These will be installed by experienced Site personnel under the instruction of an ecologist and will consist of the following varieties:
- Two Schwegler 2F – suitable for small bat species
  - One Schwegler 2FN – suitable for larger bat species
  - One Schwegler 1FD – suitable for maternity roosts for small bat species
  - Two Schwegler 1FF – suitable for maternity roosts
- 2.5 Roost boxes and bricks/tubes will be checked and cleaned once every two years, for the length of the accompanying LEMP, to ensure that they are functional and are structurally sound, but also to assess their occupancy rate; these will need to be undertaken by a licenced bat ecologist and they will be done during May to August. Where they are damaged, they will be replaced on a like for like basis, or if they are not being used a different type or position maybe required.
- 2.6 The proposals for this development do not include artificial lighting, and so no sensitive lighting schemes will be required for the operational phase. However, due to the inclusion of bat bricks/tubes on dwellings, information will be included in the new home buyers' package explaining the importance of not installing any lighting over these features or directed towards them. If any temporary lighting is installed as part of the construction phase, consideration should be given to the placement of this to protect a range of species using the retained natural habitats from adverse indirect impacts, including bats.

### Birds

- 2.7 The provision of scrub, grassland, woodlands and native hedgerows will provide breeding and foraging habitat for a range of bird species. The attenuation basin will provide habitat for wetland species, such as Cetti's warbler *Cettia cetti* and mallard *Anas platyrhynchos* that were recorded onsite, as well as attracting others, such as reed bunting *Emberiza schoeniclus* which have not been utilising the Site previously.
- 2.8 Other enhancements for local breeding bird species will include universal bird bricks and a variety of bird boxes. Universal nest bricks will be built into the dwellings at a ratio of one per every two homes, following supplier instructions and by construction personnel under the instruction of an ecologist during the construction of housing. They will be installed facing different aspects to maximise the range of conditions provided; these are preferred to nest boxes as features on houses due to their better longevity, temperature regulation, and aesthetic integration, as well as their reduced maintenance requirements<sup>1</sup>.
- 2.9 A total of 14 Bird nest boxes will be erected by construction personnel under the instruction of an ecologist during the construction of housing, on suitable retained mature trees and new buildings, as close to natural habitats as possible. This will include the below:
- Two small hole (26mm and 32mm) boxes will be placed throughout the Site on suitable trees and buildings to provide nesting opportunities for blue tit *Cyanistes caeruleus* and great tit *Parus major*.

<sup>1</sup> Ketley, H. (2022, November 10). Universal nest bricks. NHBS. <https://www.nhbs.com/blog/universal-nest-bricks>

- Three larger nest boxes with a 45mm hole will be placed under the eaves of buildings or approximately 2.5m above ground in trees to provide nesting opportunities for starling *Sturnus vulgaris*.
- Three terraced-style or multiple single-holed 32mm nest boxes will be placed on buildings to attract house sparrows *Passer domesticus*.
- Two small open-fronted nest boxes should be placed throughout the site, especially on trees that support a climber such as ivy *Hedera helix*, which provides a degree of concealment for the nest. These boxes typically attract robin *Erithacus rubecula*.
- Four more specialised nest boxes should be placed on retained trees and new buildings, particularly on the edge of new residential areas and should include boxes suitable for stock dove *Columba oenas*, kestrel *Falco tinnunculus*, swallow *Hirundo rustica*, and swift *Apus apus*.

- 2.10 Bird nest boxes and bricks will be checked and cleaned once every two years, for the length of the accompanying LEMP, to ensure that they are functional and are structurally sound, but also to assess their occupancy rate; these will need to be undertaken by an experienced ecologist. Where they are damaged, they will be replaced on a like for like basis, or if they are not being used a different type or position maybe required.

### **Hedgehogs**

- 2.11 Wildlife-friendly boundaries will be installed wherever possible throughout the development, with at least one per property boundary, to allow for the free movement of hedgehog and other small mammals. This can be achieved by removing a section of timber or cutting a hole in the bottom of fences. Holes should be approximately 13cm<sup>2</sup> and provide linkages to the wider areas. The exact locations of these holes will be set through a planning condition.
- 2.12 The maintenance of these features should consist of keeping the holes clear to ensure continued usage potential. Due to the placement of these within private properties, the maintenance responsibilities can be secured through a number of ways:
- Include the retainment of these highway features in a legally binding contract on the properties when they are purchased.
  - Include information about the hedgehog highways in the new home buyers' package and explain the importance of keeping them clear.
  - Include signage above the features and/or provide information packages to residents to explain / remind residents what they are.

### **Insects**

- 2.13 Two insect mounds will be provided within the west part of the Site which will provide habitat for a range of invertebrate species. They will comprise of an insect hotel type structure which will be partially buried and turfed to give a more natural appearance. These provide considerable benefit to solitary and 'mining' invertebrate species in particular. The banks will be comprised of a mix of aggregates, for example sharp-stone, crushed concrete, subsoils, brick dust and/or river dredging to be mixed with a 1% cement powder to then be banded against a

retaining wall. Once the material has settled, the retaining wall will be removed to expose vertical south-facing wall.

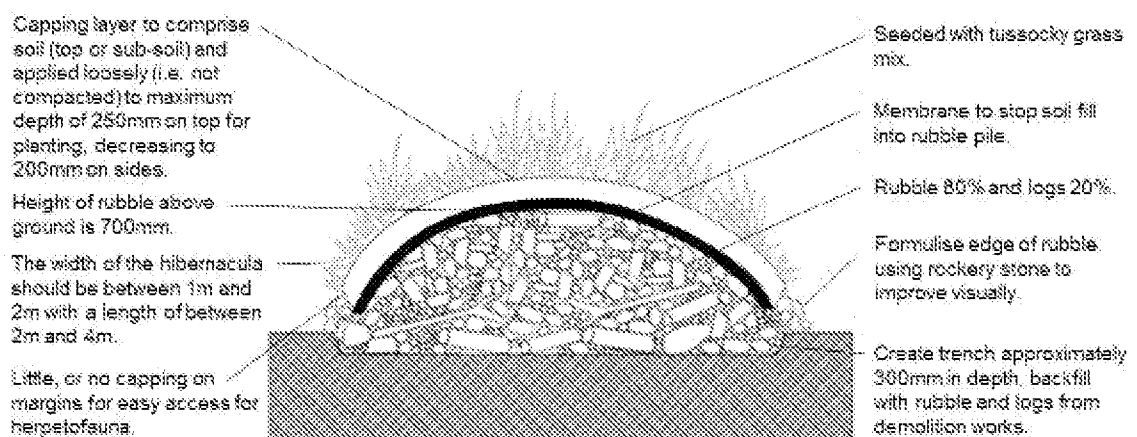
- 2.14 Once built, these structures require no maintenance other than habitat management to ensure the walls of the mounds remain exposed. They will be checked once every two years, for the length of the accompanying LEMP, to ensure that they are functional and are structurally sound, by an experienced ecologist. Where they are damaged, they will be replaced on a like for like basis.

## Reptiles

### Hibernacula / Refugia

- 2.15 Two artificial hibernacula will be created in the west of the Site as part of the mitigation for reptiles and to promote biodiversity. These will be situated in the areas of the most natural habitat and away from footpaths.
- 2.16 Hibernacula can provide a mix of refuge and wintering hibernation habitat for amphibians and reptiles. The hibernacula will be constructed out of loosely piled rubble and logs or similar, so that small crevices will be created between material that will allow refuge for amphibians, reptiles, invertebrates, and small mammals. Ideally, on sites with free-draining soils, the hibernacula should be constructed and built up within a pit, whereas on Sites with impermeable soils or high flood risk, hibernacula should be constructed as a pile on a gentle slope for drainage. The soil consistency will be assessed by site personnel under instruction of an ecologist to determine the final design of the feature.
- 2.17 For reptiles, the hibernacula must be positioned in a well-drained, sunny area, surrounded by tussocky grassland or scrub, where there is minimal public disturbance. The length of the banked hibernacula will also be orientated so that it is south facing with vegetation managed for basking. Where soils are assessed as being clay heavy, this can be alleviated through compacting the soil and adding sand drainage channels under the feature to improve drainage. Additional habitat features will be added around the hibernacula, such as log piles which supply a source of food and shelter.

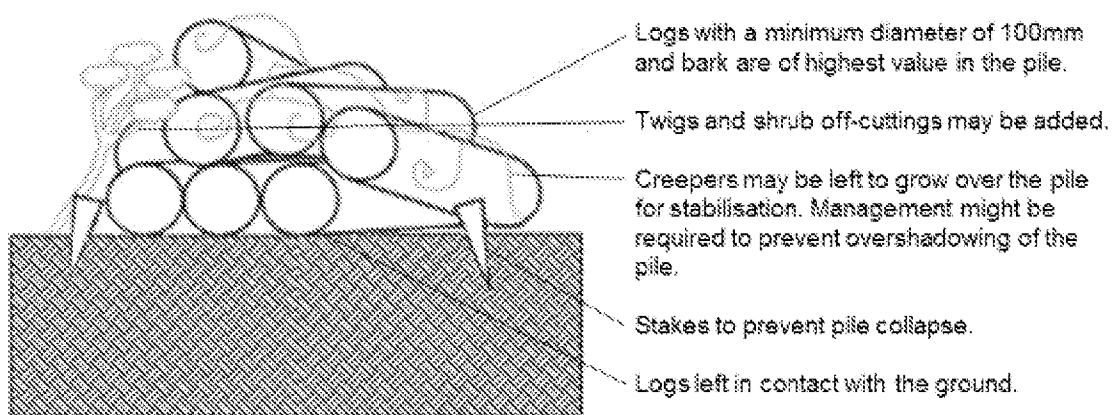
**Plate 1: Reptile / Amphibian Hibernacula Detail**



## Log Piles

- 2.18 Log piles will ideally be created from tree work arisings from Site and placed at the interface between woodland and grassland habitats, avoiding north facing areas. If there is not enough timber from the Site, this will be sought from a suitable supplier. The logs should be left in contact with the ground in dappled shade and built into a compact pile to maintain humidity. Stakes should be driven into the ground either side of the log pile to prevent the pile from collapsing.
- 2.19 Larger diameter logs (at least 100mm thick) with bark are of most value, particularly hard wood like oak and beech, whereas freshly cut willow and poplar may re-sprout. Twigs, stems and shrub off-cuttings may also be added. Climbers may be allowed to grow thinly over the dead wood pile for stabilisation and moisture. Full sun will dry and heat the wood, supporting little life, whereas dense shade will promote the growth of fungi but may be too cool for insects.

**Plate 2: Log Pile Detail**



- 2.20 Both the hibernacula and any log piles will not require continued maintenance, other than of the surrounding habitat to maintain a varied, tussocky sward, with glades for basking opportunities. They will be checked once every two years, for the length of the accompanying LEMP, to ensure that they are functional and are structurally sound, by an experienced ecologist. Where they are damaged, they will be replaced on a like for like basis.

### **Water Voles**

- 2.21 Enhancements to the two ditches (D1 and D2) associated with the Site boundary were proposed in the Ecological Appraisal written by FPCR in 2021, and the Biodiversity Net Gain Report written by FPCR in 2024. D1 has since been excluded from these proposals as it falls outside of the updated Site boundary, such that the developer is not at liberty to make alterations to, nor perform management practices on this ditch.
- 2.22 Following recent investigations, the proposed intervention to deepen the channel to facilitate a greater water-holding capacity for D2 has been removed. This is due to the identification of persistent localised flooding within the parish, and altering the hydrology of the waterbody could cause further problems with regards to this. The recommendation for channel-deepening was provided as an enhancement measure only, with a view of encouraging species such as Water Vole to potentially colonise the Site. Water Vole was considered as absent from the Site and so this enhancement is not deemed to be a necessary form of mitigation or compensation. Given the known incidence of local flooding, it is therefore no longer considered appropriate to target an enhancement for a likely absent species where this could lead to detrimental impacts

to residents and/or landowners in the local area. The soft landscaping enhancements are also no longer considered viable, due to the limited water retention of the ditch in its current condition.





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Appendix C - Bargate Homes Management Company Procedure



## Management Company Procedure

- Set up a Management Company – Limited Company with Companies House - for the purposes of securing the future management of the Common Areas in strict compliance with Management Company Plan. Management Company is typically named after the Sales Marketing name for the development.
- Initially, the Management Company will have two Bargate Homes Directors as named Directors.
- Bargate Homes, in accordance with S106 Agreement / Planning requirements, produce Management Plans which set out maintenance requirements for all managed areas e.g. LEMP, SUDs management plans. These are reviewed and approved by the Planning Authority.
- A Managing Agent - selected by Bargate Homes - is appointed to manage the communal areas adopting the Management Company's responsibilities. The appointment is on a 12-month Contract basis renewing annually, subject to a three month notice period both ways.
- The Managing Agent produces a site-specific Service/Estate Charge Schedule covering the developments management maintenance responsibilities, based upon the approved Management Plans, typically but not limited to: - communal estate landscaping, infrastructure (roads, footpaths, drainage including pumping stations), insurance, accounts, administration. Note, Apartments will generate additional fees related to the building maintenance and insurance.
- The Service/Estate Charge Schedule is provided to all future residents at Reservation.
- Service / Estate Maintenance charges are split equally between all homes on the development irrespective of tenure. Charges can vary between homes depending upon the maintenance service they receive e.g. a home not connected to a pumping station would not need to pay maintenance contribution for the pumping station, Apartments etc.



- All residents are compelled in the Sale Contract to become a Director of the Management Company (to enable the choice of Director on the Transfer of the Management Company referred to below) and sign the necessary form for this on completion of their purchase. Note, where Rented Affordable homes the Housing Association are appointed instead. Residents are given the option to opt out of being a Director, Bargate Homes would not recommend they do this.
- Upon Completion of the Property, the first year's charge is provided and held in an Escrow Account (or held by the Managing Agent – if in place) until the Management Company is transferred the Communal areas and becomes the Responsible Body.
- During the construction of the development, up to the occupation/completion of the final home, Bargate Homes arranges & takes financial responsibility for all maintenance.
- Upon completion of the final home, Bargate instruct the Managing Agent to take responsibility for the maintenance, at which point Bargate relinquish financial responsibility.
- All Management Company communal areas are audited for compliance with approved details. Where necessary, a tree audit/inspection will be undertaken and where play areas or SUDs features, a RoSPA inspection completed. Depending upon the requirements of the S106 Agreement, an inspection may be undertaken by the Local Authority.
- Upon the satisfactory completion of any snagging items which may arise from the various audits / inspections – the communal area is formally handed over to the Management Company – the Land is legally transferred and the Bargate Directors resign.
- In conclusion, the Management Company i.e. the Residents of the development, are solely responsible for the ongoing Management and Maintenance of the development, in accordance with all Management Maintenance plans approved by the Local Authority. The choice of Managing Agent employed by the Management Company, is at the discretion of the Residents. The Managing Agent Contract is subject to a three month notice period both ways.



Lorden House  
Lorden Street  
Alton  
Hampshire  
GU34 4BG

First Floor Studio  
The Old School  
4 Exton Street  
London  
SE1 8UE

[www.fabrikuk.com](http://www.fabrikuk.com)

