



LIZARD

Landscape Design and Ecology

ECE PLANNING

THE COTTAGE

SHRIPNEY ROAD, BOGNOR REGIS, WEST SUSSEX

Landscape Management Plan

Prepared by	ML
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FIGURE NO.1 - MANAGEMENT RESPONSIBILITY - NON-DOMESTIC AREAS

1.0 INTRODUCTION

- 1.1 Lizard Landscape Design and Ecology has been commissioned to prepare a Landscape Management Plan (*LMP*) for the proposed development at The Cottage, Shripney Road, Bognor Regis, West Sussex. The LMP has been prepared by Mary Lannia (*B.Arch MLA*) – Assistant Landscape Architect - Lizard Landscape Design and Ecology, Worthing.

The Site

- 1.2 The site is located at Grid Reference: SU 93834 02327, in the village of Shripney some 4.5km north of the centre of the town of Bognor Regis in the West Sussex county in England. The site comprises a large cottage and several smaller buildings including greenhouses and sheds spread across the site.
- 1.3 Covering approximately 0.9ha in area, the site slopes marginally towards the east and is approximately 1.3m above the level of the A29 which it abuts on the west.
- 1.4 Soils on site are described as '*Loamy soils with naturally high groundwater*' through reference to the 'Soilscapes' map developed by Cranfield University sponsored by DEFRA (accessed 13.11.2019).

Surrounding Site

- 1.5 The site is bounded by a Premier Inn and a Robin Hood Public House to the north and bordered along the south by a PRow beyond which are residential properties. To the east of the site is an agricultural farm and to the west across the A29 are residential properties.
- 1.6 Shripney lies along the A29. The locality of the site comprises of medium-density housing concentrated to the west surrounded by areas of large agricultural fields. The Bersted Brooks Nature Reserve with an LNR statutory designation lies about 1.5km south of the site.

Existing Site Vegetation

- 1.7 The site consists of a number of trees, most of which are located close to the site boundaries. The north eastern part of the site comprises several visually prominent Cypress that line the western boundary along the A29 amongst other Ash, Sycamore, Poplar and Plum. Centrally located along the northern boundary of the site are two large Cypress, a group of Western Red Cedar and Eucalyptus among other smaller trees.
- 1.8 The eastern boundary of the site has a group of locally significant trees including a well-established Cypress and several Ash and Oak in the north, whereas the south is relatively thinner with an Ash and smaller Birch among a few others.
- 1.9 To the east of a group of centrally located ornamental trees and a row of circularly pruned hawthorn stands a Willow with a wooden structure around it. Several fruit trees are scattered centrally along the southern boundary adjacent to a Hawthorn topiary bush, east of which two Cedars of Lebanon stand prominent.
- 1.10 The southern boundary of the site is bordered by a privet hedge about 2m high along the western part which also boasts two well established Sycamores.

Proposed Development

- 1.11 The proposed residential development consists of a Flat Block consisting of 4 flats and 14 other individual dwellings with associated access arrangements and parking.

Proposed landscape Scheme

- 1.12 The Proposed landscape scheme provides visual and habitat enhancements to site with carefully selected hard and soft landscape materials. The soft landscape proposal adds colour, texture and seasonal interest through planting of a variety of trees, shrubs, grasses, bulbs, climbers and grasslands enhancing and protecting the biodiversity on site. The incorporation of a Sustainable Drainage System further enhances the quality of the development. Hard landscape materials are chosen to assist the design functionally and tones are chosen to match the colour palette of the dwellings.

Purpose of the Management Plan

- 1.13 The proposed development presents an opportunity to provide areas of public open space for resident's use. These areas, together with the planting proposals within residential gardens, comprise soft landscape elements which would require active management to ensure they deliver the anticipated levels of visual amenity and genuine landscape and biodiversity gains.
- 1.14 The purpose of the LMP is to provide detailed management prescriptions for the proposed soft landscape and open spaces within the scheme in terms of the works to be carried out; when specific tasks are to be undertaken; and the method of undertaking the prescribed tasks.
- 1.15 The LMP will additionally specify subsequent management and monitoring for the landscape areas. It is intended that the LMP functions as a 'living document', with a process for continually reviewing, monitoring, revising, editing and updating.

Management Responsibility

- 1.16 The LMP (together with *Hard and Soft General Arrangement Drawing, Detailed Planting Plans and Detailed Plant Schedule and Specification*) has also been produced to inform the Clients Managing Agent and aid the preparation of an annual management budget for the long-term landscape management of the scheme.

- Non-domestic Areas

- 1.17 The long-term management and maintenance of the external, non-domestic areas (*i.e. open spaces and landscape*) shall be undertaken by the Client appointed, fully insured landscape management contractor, with the skills, knowledge, experience and capability to do so. The management of these landscape elements shall be undertaken as set out and prescribed. Non-domestic areas are shown at **Figure No.1** on the following page.

- Domestic Area (*Private Gardens*)

- 1.18 Most of the landscape areas associated with houses would be in the control of the householders as their private gardens, by way of the division of ownerships across the scheme.

Figure No.1 below indicates the non-domestic areas, as described above. The areas where the long-term management and maintenance would be undertaken by the landscape contractor are shown in light blue.

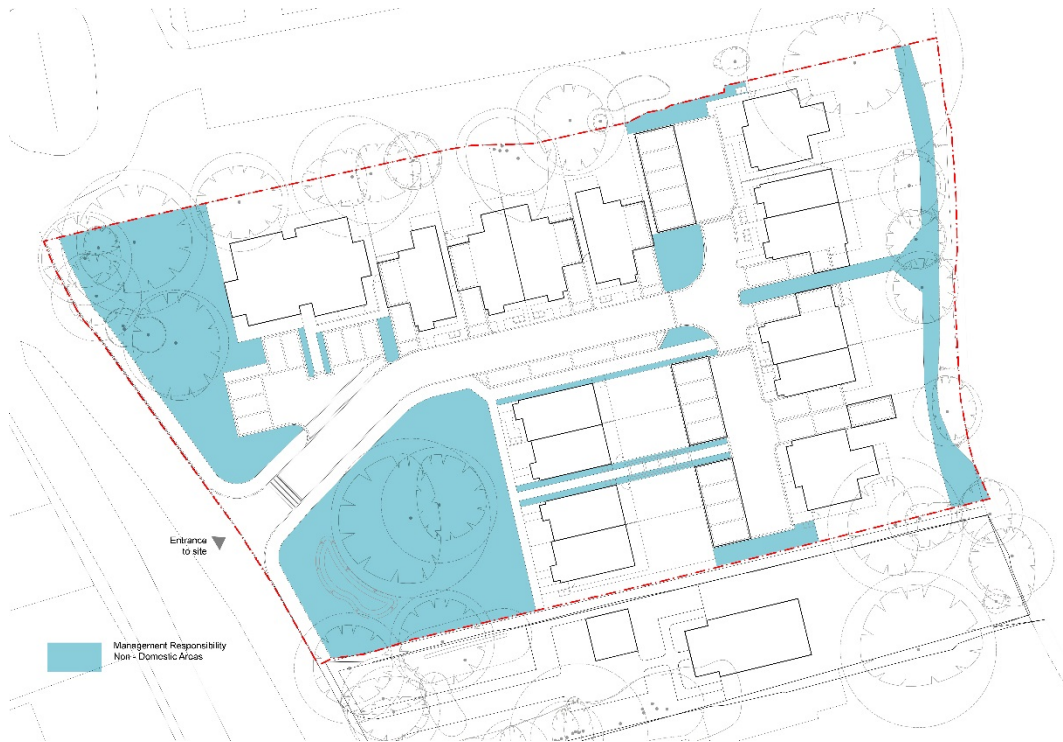


Figure No.1 - Management Responsibility - Non-domestic Areas.

Report Structure

- 1.19 **Section 2** will introduce the landscape elements / prescriptions. **Section 3** will provide the method of implementation to each landscape element / prescription. **Section 4** will provide the long-term management for each landscape element / prescription. **Section 5** will provide information for monitoring existing and recently implemented landscape elements. **Appendix A** and **Appendix B** comprise Management Schedules.

Drawings and Reports

1.20 The Landscape Management Plan is accompanied by, and should be read alongside, the following documentation:

- *LLD1851-LAN-DWG-100 – Hard and Soft Landscape General Arrangement Drawing;*
- *LLD1851-LAN-DWG-200 – Soft Landscape layout;*
- *LLD1851-LAN-DWG-201 – Detailed Planting Plan 1 of 7;*
- *LLD1851-LAN-DWG-202 – Detailed Planting Plan 2 of 7;*
- *LLD1851-LAN-DWG-203 – Detailed Planting Plan 3 of 7;*
- *LLD1851-LAN-DWG-204 – Detailed Planting Plan 4 of 7;*
- *LLD1851-LAN-DWG-205 – Detailed Planting Plan 5 of 7;*
- *LLD1851-LAN-DWG-206 – Detailed Planting Plan 6 of 7;*
- *LLD1851-LAN-DWG-207 – Detailed Planting Plan 7 of 7;*
- *LLD1851-LAN-SCH-001 – Detailed Plant Schedule and Specification;*
- *LLD1851-LAN-SPE-001 – Hard and Soft Landscape Specification.*

2.0 LANDSCAPE MANAGEMENT ELEMENTS / PRESCRIPTIONS

2.1 Each landscape element has been given a 'Prescription' (*i.e. P1*), addressing elements individually. Landscape management elements incorporated within the scheme are addressed within the following management prescriptions:

- P1 – Proposed Native and Ornamental Tree Planting;
- P2 – Proposed Native Mixed Species Hedgerow Planting;
- P3 – Proposed Ornamental Hedgerow;
- P4 – Proposed Native Mixed Species Shrub Planting;
- P5 – Proposed Ornamental Planting;
- P6 – Proposed Mixed Species Climbers;
- P7 – Proposed Mixed Species Native Bulb Planting;
- P8 – Proposed Native Wildflower Grassland;
- P9 – Proposed Amenity Grassland;
- P10 – Existing Mature Trees;
- P11 – Existing Vegetation.

2.2 For the location of proposed open spaces and soft landscape elements (*prescriptions P1 – 11*); refer to the following drawing:

- *LLD1851-LAN-DWG-100 – Hard and Soft Landscape General Arrangement Drawing;*
- *LLD1851-LAN-DWG-200 series – Soft Landscape Layout and Detailed Planting Plans;*
- *LLD1851-LAN-SCH-001 – Detailed Plant Schedule and Specification.*

3.0 IMPLEMENTATION OF SOFT LANDSCAPE ELEMENTS

3.1 Within this section, the method by which the landscape elements should be implemented is described through prescriptions.

Generic information on soil preparation

3.2 Soil shall be tested and certified by a Soil Scientist, and advice sought on how the soil onsite may best be improved prior to and during planting.

P1 - PROPOSED NATIVE AND ORNAMENTAL TREE PLANTING – IMPLEMENTATION

3.3 Native and ornamental tree planting is proposed throughout the development; to the street scenes, about the car port structures, and within areas of public open space. Tree planting would provide enhanced levels of visual amenity and increase the habitat and foraging potential for birds and invertebrates.

Tree Planting Preparation

3.4 For trees planted in grassland; all grassed areas shall be cut before any pit preparation is undertaken to a maximum height of 75mm. All tree planting pits are to be cut by removing the existing grass or vegetation. Planting pits shall be dug by hand and any major existing tree or shrub roots found within the pits shall not be severed prior to seeking arboricultural advice (*in accordance with BS5837:2012*).

3.5 Refer to '*BS 8545: 2014 - Trees: from Nursery to Independence in the Landscape - Recommendations*' for details on tree planting. Any source of topsoil (*including soils to be retained on site*), whether natural or manufactured, should be investigated carefully with respect to its suitability for the intended use, and certified in accordance with *BS 3882:2015*.

Planting

- 3.6 Planting shall take place any time from mid-autumn until late winter, while the trees are without leaf. Planting is best undertaken when soil can be worked easily; delay planting if the ground is frozen or waterlogged.

Tree Planting Pits

- 3.7 Proposed specimen tree planting shall be in accordance with the following guidance:
- Planting pits should be excavated to the same depth as the tree root system with the root flare / root collar to be level with the surface of surrounding soil;
 - The planting pit shall have a slightly raised centre and be broken up to a depth of 150mm. The width of the tree pit should be excavated to be 150 - 300mm larger than the root ball or container;
 - If the tree pit sides are compacted, smooth or smeared they should be scarified to loosen the soil. During excavation the soil should be separated into topsoil and subsoil in order that during backfilling the soil can be replaced in the same order;
 - The trees root system should be lightly wetted prior to planting;
 - The tree should be planted at the correct depth ensuring the root flare is just visible above the soil level and allowance made for any settling of soil levels;
 - Backfilling should be added gradually in layers of 150mm ensuring the tree is held upright;
 - Each layer should be firmed down to remove air pockets within the soil and to aid tree stability but not to excessively compact the soil. The final layer of backfilling should not be consolidated, but should be of a sufficient depth to allow for settlement and mulching.

Tree Staking – Generally

- 3.8 Stakes are an aid to the successful establishment of new tree planting; ensuring the tree retains good root / soil contact, which might be otherwise compromised through lateral movement of the canopy normally caused by strong wind.

Staking for Extra Heavy Standard and Ornamental Tree Stock

- 3.9 Tree staking is to be Long Double Staking for Extra Heavy Standard with stakes driven vertically to a minimum of 300mm into bottom of pit on either side of tree position before planting. The stakes should be placed to allow the fixing of the cross bar to the windward side of the tree and as close to the stem as possible. Backfilling should seek to consolidate material around stakes. The stake shall extend above ground level to a maximum 600mm. The crossbar shall be no more than 40mm away from the stem of the planted tree and the tree shall be tied firmly but not rigidly to the cross bar with one adjustable tie plus spacer with 50mm of the top of the stake and secured in place with a 25mm long galvanised clout nail.

Staking for Multi-stem Tree Stock

- 3.10 Tree staking for 'Multi-stem' trees shall be Single Staking with the stake driven into the ground diagonally (*at 45 degrees*). The top of the stake shall be no more than 40mm away from the dominant / central stem of the planted tree. The tree shall be tied with one adjustable tie plus spacer within 50mm of the top of the stake and secured in place with a 25mm long galvanised clout nail.

Tree Protection

- 3.11 Tree shelters shall be provided for all new tree plant material; to be 'Acorn Planting Products Shelterguard Plus for Shrubs' or equal and approved; Height; 600mm; Diameter; 130 - 200mm diameter circular in section; Colour; specially blended green; Material; UV stabilised polypropylene; Support; one hardwood stake; 1200mm x 25mm x 25mm, attached to the shelter with 1 no. nylon ratchet tie. Whip / tree shelters shall be carefully placed over the plant and the entire base pushed a minimum of 25mm into the ground.

Watering

- 3.12 A newly planted trees should be watered in when planted; apply 20 to 40 litres of water to the rootball area - depending on climatic / ground conditions (i.e. if rain is expected and ground conditions are moist, apply approx. 20 litres; if rain is not expected and ground conditions are dry, apply approx. 40 litres)

Mulching

- 3.13 Tree planting shall be planted within mulched planting beds, maintained at a consistent depth of 75mm.

P2 – PROPOSED NATIVE MIXED-SPECIES HEDGEROW PLANTING-IMPLEMENTATION

- 3.14 Mixed-species native hedgerow is proposed to the boundary of the site to provide a soft visual screen whilst also forming part of a layering habitat to provide increased wildlife benefits and the potential to connect to a wider green corridor network.

Preparation

- 3.15 Multi-branched hedging stock shall be planted in mulched beds; which should be kept clear of all weeds at the base of the plant material.

Planting

- 3.16 Planting shall take place any time from mid-autumn until late winter, while the plants are without leaf. Planting is best undertaken when soil can be worked easily; delay planting if the ground is frozen or waterlogged.
- 3.17 The contractor shall form a planting pit for bareroot stock to enough depth and width to allow roots to spread without cutting or bending. The hedging material is to be inserted into the planting pit, firming the soil by treading with the heel, ensuring that the plant material remains in an upright position.

Watering

- 3.18 Newly planted hedging plants should be watered in when planted; apply 5 to 10 litres of water per metre square depending on climatic / ground conditions (i.e. if rain is expected and ground conditions are moist, apply approx. 5 litres; if rain is not expected and ground conditions are dry, apply approx. 10 litres).

Mulching

- 3.19 Hedgerow plant material beds should be topped up with an ornamental bark mulch to assist with the suppression of weeds to these hedgerow planting areas. Mulch levels should be maintained at a consistent depth of 75mm.

P3 – PROPOSED ORNAMENTAL HEDGEROW-IMPLEMENTATION

- 3.20 Ornamental hedgerows are proposed within property lines of frontage gardens to provide a softer aesthetic barrier, along bin stores for screening and to delineate pedestrian pathways from vehicular driveways.

Preparation

- 3.21 Multi-branched hedging stock shall be planted in mulched beds which should be kept clear of all weeds at the base of the plant material.

Planting

- 3.22 Planting can be undertaken during any time of the year but preferably between October and April. Planting is best undertaken when soil can be worked easily; delay planting if the ground is frozen or waterlogged.
- 3.23 The contractor shall form a planting pit to sufficient depth and width. The plant material is to be inserted into the planting pit, backfilled with topsoil, firming the soil gently ensuring that the plant material remains in an upright position.

Watering

- 3.24 Newly planted hedging plants should be watered in when planted; apply 5 to 10 litres of water per metre square depending on climatic / ground conditions (i.e. if rain is expected and ground conditions are moist, apply approx. 5 litres; if rain is not expected and ground conditions are dry, apply approx. 10 litres).

Mulching

- 3.25 Hedgerow plant material beds should be topped up with an ornamental bark mulch to assist with the suppression of weeds to these hedgerow planting areas. Mulch levels should be maintained at a consistent depth of 75mm.

P4 – PROPOSED NATIVE MIXED SPECIES SHRUB PLANTING- IMPLEMENTATION

- 3.26 The proposed native mixed species shrub planting reinforces the boundary treatment by abutting the proposed mixed species native hedgerow and populating the landscape buffer zone along the eastern boundary of the site. The proposed planting would form an association with the existing mature boundary vegetation to soften views into the site and provide additional habitat connectivity to the wider landscape.

Planting

- 3.27 Planting shall take place any time from mid-autumn until late winter, while the plants are without leaf. Planting is best undertaken when soil can be worked easily; delay planting if the ground is frozen or waterlogged.
- 3.28 The contractor shall form a planting pit for bareroot stock to enough depth and width to allow roots to spread without cutting or bending. The shrub plant material is to be inserted into the planting pit, firming the soil by treading with the heel, ensuring that the plant material remains in an upright position.

Native Shrub Planting Pits

- 3.29 The size of shrub planting pits shall be as follows;
- Whips / Transplant / Shrubs 300 x 300 x 300mm;
 - Or 20% wider in any direction than the root ball whichever is the greater.

Soil Preparation

- 3.30 Soil should be in line with NBS and certified by soil scientist.

Watering

- 3.31 Newly planted native shrubs should be watered in when planted; apply 5 to 10 litres of water per metre square (depending on climatic / ground conditions i.e. if rain is expected and ground conditions are moist, apply approx. 5 litres; if rain is not expected and ground conditions are dry, apply approx. 10 litres).

P5 – PROPOSED ORNAMENTAL PLANTING - IMPLEMENTATION

- 3.32 Ornamental planting has been proposed to frontages of dwellings, facades of dwellings that line pedestrian pathways and adjacent to the turning table. The planting would comprise of flowering shrubs, grasses and herbaceous perennials that would enhance visual amenity across the site whilst providing nectar and pollen for wildlife.

Planting

- 3.33 Planting is best undertaken between October and April. Planting is best undertaken when soil can be worked easily; delay planting if the ground is frozen or waterlogged.
- 3.34 The contractor shall form a planting pit to sufficient depth and width. The plant material is to be inserted into the planting pit, backfilled with topsoil, firming the soil gently ensuring that the plant material remains in an upright position.

Watering

- 3.35 Newly planted ornamental shrubs should be watered in when planted; apply 5 to 10 litres of water per metre square (depending on climatic / ground conditions i.e. if rain is expected and ground conditions are moist, apply approx. 5 litres; if rain is not expected and ground conditions are dry, apply approx. 10 litres).

Mulching

- 3.36 Planting areas are to be mulched with an ornamental bark mulch, checked and maintained to a consistent depth of 75mm. The mulch cover should assist with suppressing weed growth and reduce evaporation from soil. Mulch layer should be checked and topped up annually in the Autumn.

P6 – PROPOSED MIXED SPECIES CLIMBERS - IMPLEMENTATION

- 3.37 Mixed species climbers are proposed to the pergola structure between Plots 18 and 19 and species are chosen to maximize the habitat potential for wildlife on site.

Planting

- 3.38 Planting is best undertaken during autumn. Planting is best undertaken when soil can be worked easily; delay planting if the ground is frozen or waterlogged.
- 3.39 The contractor shall form a planting pit to sufficient depth and width. The plant material is to be inserted into the planting pit, backfilled with topsoil, firming the soil gently. The climbers should be tied to the pergola posts with plastic ties.

Watering

- 3.40 Newly planted ornamental shrubs should be watered in when planted; apply 5 to 10 litres of water per metre square (depending on climatic / ground conditions i.e. if rain is expected and ground conditions are moist, apply approx. 5 litres; if rain is not expected and ground conditions are dry, apply approx. 10 litres).

Mulching

- 3.41 Planting areas are to be mulched with an ornamental bark mulch, checked and maintained to a consistent depth of 75mm. The mulch cover should assist with suppressing weed growth and reduce evaporation from soil. Mulch layer should be checked and topped up annually in the Autumn.

P7 – PROPOSED MIXED SPECIES NATIVE BULB PLANTING - IMPLEMENTATION

- 3.42 Proposed mixed species native bulb planting to the public open space adds a dynamic quality by blooming at different times during the year whilst providing habitat opportunities for invertebrates and insects.

Planting

- 3.43 Planting for *Anemone nemorosa*, *Eranthis hyemalis*, *Lilium martagon*, *Hyacinthoides non-scripta*, is best undertaken in autumn. *Galanthus nivalis* can be planted in the autumn or in the spring and *Scilla autumnalis* can be planted in autumn or in late

summer. Planting is best undertaken when soil can be worked easily; delay planting if the ground is frozen or waterlogged.

- 3.44 The contractor shall dig out a planting block using a spade to required depth and width, position the bulbs and replace the excavated soil firming it gently. Under trees plant singly as large excavation can cause damage to tree roots and may encourage suckering. Refer to the Royal Horticultural Society (RHS) and *Detailed Planting Plans (LLD-LAN-DWG-200 series)* for depth and spacing of bulbs. The bulb should be planted with the nose at the top and the basal plate at the bottom.

Watering

- 3.45 Water application should be sufficient to avoid drying out of bulbs planted especially in the autumn.

P8 – PROPOSED NATIVE WILDFLOWER GRASSLAND - IMPLEMENTATION

- 3.46 Native wildflower grassland mix *EP1 – Pond Edge Mixture* is proposed to the attenuation overflow pond and mix , along the border of the public open spaces and to the landscape buffer zone on the east to provide a rich nectar resource and foraging opportunities for insects, birds and bats.
- 3.47 Through reference to guidance provided on the Emorsgate Seeds website, information on soil preparation and sowing wildflower grassland seed are provided below.

EH1 - Hedgerow Mixture

Soil Preparation

- 3.48 Soils can usually be prepared for seeding in either the autumn or spring (*spring is preferred*).
- 3.49 Areas of ground proposed for wildflower grassland seeding should not be highly fertile. Additionally, the areas should be free of perennial weeds; good preparation is essential to success - aim to control weeds and produce a good quality seed bed before sowing. Use repeated cultivation or consider controlling weeds by the spot application of appropriate herbicides, in accordance with manufacturer's instructions and by a certified user if needed, to eradicate perennial weeds. Do not dig too deep,

cultivation close to established trees and shrubs can be damaging to their root systems, keeping disturbance to the minimum required to expose fresh soil.

Seed Sowing

- 3.50 Seed is best sown in the autumn or spring but can be sown at other times of the year if there is sufficient warmth and moisture. August-September and March-April usually produce the best conditions for sowing meadow wildflower and grass species.
- 3.51 The seed must be surface sown. The seed shall be applied by machine or broadcast by hand. The seed must not be incorporated within the soil, or covered by the soil, but should be firmed in with a roller. This will result in optimum soil / seed contact.

EP1 - Pond Edge Mixture

Soil Preparation

- 3.52 Soils can usually be prepared for seeding in either the autumn or spring (*spring is preferred*).
- 3.53 Areas of ground proposed for wildflower grassland seeding should not be highly fertile. Additionally, the areas should be free of perennial weeds; good preparation is essential to success - aim to control weeds and produce a good quality seed bed before sowing. Use repeated cultivation or consider controlling weeds by the spot application of appropriate herbicides, in accordance with manufacturer's instructions and by a certified user if needed, to eradicate perennial weeds. Plough or dig the soil to bury the surface vegetation; then harrow or rake to produce a medium tilth; then roll or tread to produce a firm surface.

Seed Sowing

- 3.54 Sowings on ground prone to winter flooding are safest either in late summer or in spring once the land has drained. Most plants need time to grow mature enough to withstand flooding.
- 3.55 The seed must be surface sown. The seed shall be applied by machine or broadcast by hand. The seed must not be incorporated within the soil, or covered by the soil, but should be firmed in with a roller. This will result in optimum soil / seed contact.

P9 – AMENITY GRASSLAND - IMPLEMENTATION

- 3.56 Amenity grassland including proposed shade tolerant lawn '*A6 Supreme Shade* by *Germinal* is seeded to the public open space areas including bulb planting areas and shade tolerant turf '*Shade Tolerant Turf*' by *Bourne Amenity* is proposed to private residential gardens.

Turfing

Soil Preparation

- 3.57 The soil shall be dug over thoroughly to a depth of 150mm. All waste material shall be cleared from the area to be turfed, including all construction debris, either by hand or machine. If weeds, particularly pernicious weeds such as docks encompass the area to be turfed, a total non-residual herbicide should be applied by a suitably qualified landscape contractor, to manufacturer's recommendations. The area should be raked to produce a smooth, level surface. The area should then be trodden lightly to reveal any soft patches which can then be raked level. This process should be repeated until the area is firm and level.

Laying

- 3.58 One strip of turf shall be unrolled at the perimeter of the lawn. Small pieces of turf should not be used at the edges, as these are likely to dry out and perish. The underside of turf should be in full contact with the soil below. The next strip of turf should be laid along the longest straight edge. Edges should be butt joined. This process should be repeated across the lawn, strip by strip, producing a brick bond type pattern. Overlapping pieces and ends of rows shall be cut cleanly using a sharp knife or a half-moon lawn edger.

Watering

- 3.59 Water application should be enough to enable rooting. The amount of watering will be dependent on the time of year that the turf is laid, with much more water needed during the summer period.

Seeding

Soil Preparation

- 3.60 Soil preparation shall take place before sowing.
- 3.61 All waste material shall be cleared from the area to be seeded, including all construction debris, either by hand or machine. If weeds, particularly pernicious weeds such as docks encompass the area to be seeded, a total non-residual herbicide should be applied by a suitably qualified landscape contractor, to manufacturer's recommendations. If necessary, the application should be repeated to ensure a good quality seedbed is achieved.
- 3.62 An even surface to the correct levels shall be achieved by alternate hand-raking and heeling. Apply a pre seed fertiliser Agrosil LR 0-20-0 at 25 - 35g/m² or equal and approved. This shall be carried out between March and September. Carry out two equal spreading at right angles to each other and diagonally to the main axis. The spreader should be calibrated prior to application to ensure accuracy. Refer to Germinal Amenity for guidance on spreader usage.

Seed Sowing

- 3.63 Seeding can be undertaken March to October.
- 3.64 Create a fine friable seedbed down to 150mm in depth. Carry out two equal sowings at right angles to each other and diagonally to main axis. Seed shall be broadcast manually or by using a seed drill, rake level and roll ensuring that the required sowing rate of 40g/m² is achieved. The seed should have good contact with the soil and should be closely surrounded by soil so that it is consistently moist and warm and has a good anchorage once germination has occurred. As a general guide this should be at approximately 10mm depth. The area should be raked lightly to ensure the majority of seed is covered with soil. The seedbed shall then be tread lightly or rolled to firm the soil around the seeds.

Watering

- 3.65 Seed shall not be sown during times of drought. If it does not rain immediately after sowing, the seedbed shall be watered little and often. Pools of water laying on the surface should be avoided.

P10 - EXISTING MATURE TREES

- 3.66 Several mature trees along the boundaries of the site are proposed to be retained and protected through the development proposals.

P11 - EXISTING VEGETATION

- 3.67 The Privet hedgerow along the western part of the southern boundary of the site is to be retained and would form a part of the boundary treatment reinforced with proposed vegetation.
- 3.68 The sparsely vegetated linear patch along the eastern part of the northern boundary of the site is to be retained and is proposed to be reinforced with native mixed species shrubs.

4.0 MANAGEMENT PRESCRIPTIONS

- 4.1 A range of management prescriptions are to be employed within the site aimed at successfully delivering the landscape scheme, as set out in the previous section. Management prescriptions include all measures required for the management and aftercare period of 1-5 years with respect to landscape planting, newly created habitats and management, aimed at maximising the landscape and biodiversity value of the scheme.
- 4.2 Monitoring of the soft landscape elements would be undertaken on an annual basis by a suitably qualified landscape professional to ensure that the new planting throughout the areas of the scheme have established successfully, and that the tree, shrub, hedgerow, bulb and wildflower grassland plantings are in a good state. The results of the annual monitoring would be used to inform any necessary changes to the management which would be incorporated into subsequent versions of the LMP.

P1 - PROPOSED NATIVE AND ORNAMENTAL TREE PLANTING – MANAGEMENT

Water

- 4.3 In order to ensure successful establishment, the newly planted trees must be watered for a minimum of three years following planting. Watering should occur weekly throughout the early to late summer period; May / June / July / August / September with 20 litres applied at each watering visit. Thereafter, water as deemed necessary only where natural precipitation levels are insufficient in order to maintain healthy dense growth.

Tree Works

- 4.4 The trees are to be inspected every year during the spring for dead, dying, or damaged branches; including any diseased wood or wounds. Any dead, dying, or damaged branches should be removed from the tree trunk by a Qualified Tree Surgeon, removing all dead wood back to the tree trunk; the works shall be conducted in accordance with *BS3998: 2010 Tree Work – Recommendations*.

Tree Ties

- 4.5 All rubber tree ties should be checked bi-annually; Spring / Autumn. Tree ties should accommodate the tree girth and should not draw the tree stake into the trunk of the tree, potentially causing abrasion. Tree ties should be fitted so that the tree trunk and tree stake are located comfortably side by side and aligned. Replace and refit rubber tree ties / tree stakes and tree guards if necessary.

Pruning

- 4.6 Trees should be checked bi-annually for shape, form and should be formatively pruned accordingly during the Spring and Autumn, whilst they are still in leaf. Pruning tools should be clean and sterile to prevent potential spread of disease between specimens; and carried out in such a manner as to avoid excessive damage / wounding which would be detrimental to the health and vigour of the tree.

Weeding

- 4.7 A 500 - 700mm diameter weed / grass-free zone should be achieved by either hand-weeding or application of a non-residual herbicide. This should be undertaken bi-annually; Spring / Autumn. The use of a suitable mulch may additionally assist.

Mulching

- 4.8 Tree planting may be located within mulched planting beds. Beds should be topped up with a bark mulch to assist with the suppression of weeds to these planting areas. A mulch top-up should be undertaken and checked annually in the autumn. Mulch levels should be maintained at a consistent depth of 75mm.

Tree Stake Removal

- 4.9 The tree stakes should be removed following successful establishment, whereby the roots have extended within the surrounding soils and the tree is self-supporting. This usually takes eighteen months to three years but may take longer for larger Stock Size trees.
- 4.10 Failure to remove the tree stakes may lead to stem abrasion and potential failure. Once the roots are well established, it is important to allow the tree to move freely in the wind. This encourages a natural strengthening of the tree trunk so it can support the weight of the branches as they begin grow and spread out.

1 -3-year check

- 4.11 Tree planting shall be checked at least twice a year by a landscape contractor during years 1 – 3. The visit would be aimed at ensuring successful establishment and to monitor the developing structure of the vegetation.

Defects

- 4.12 Replace all failures: irrecoverably damaged, diseased / dead trees within the next planting season with stock of similar size and species.

Litter Collection

- 4.13 Planting areas should be checked on a fortnightly basis for litter and leaf collection. All planting areas should be maintained clear of litter.
- 4.14 P1 – Proposed Tree Planting Management Prescriptions:
- Watering: Water Tree Planting weekly throughout May / June / July / August / September; and as deemed necessary after the establishment period, only where natural precipitation levels are insufficient; provide 20 ltr / tree / visit;

- Tree Stakes and Tree Ties: Check position and fitting of tree stakes and rubber tree ties; check bi-annually in Spring / Autumn and after strong winds; remedy and replace where necessary;
- Pruning: Prune dead and damaged branches bi-annually; Spring and Autumn whilst the trees are still in leaf;
- Weeding: Maintain a weed / grass free zone at the base of the tree; weeding should be undertaken bi-annually; Spring / Autumn;
- Mulching: Trees should be maintained with a mulch zone 500 – 700mm diameter to the base of the trees. Mulch layer to be checked annually; maintained at a consistent depth of 75mm;
- Tre Stake Removal: Stakes should be removed following successful establishment, whereby the roots have extended within the surrounding soils and the tree is self-supporting.
- 1 -3-year check: Tree planting shall be checked at least twice a year by a landscape contractor during years 1 – 3. The visit would be aimed at ensuring successful establishment and to monitor the developing structure of the vegetation.
- Defects: Replace failed / dead / and irrecoverably damaged trees.

P2 – PROPOSED NATIVE MIXED-SPECIES HEDGEROW PLANTING – MANAGEMENT

Mulching

- 4.15 Hedgerow plant material beds should be topped up with an ornamental bark mulch to assist with the suppression of weeds to these hedgerow planting areas. A mulch top-up should be undertaken and checked annually in the Autumn. Mulch levels should be maintained at a consistent depth of 75mm.

Watering

- 4.16 To ensure establishment, the plants should be watered fortnightly throughout the summer season in the first two years of establishment during May / June / July / August / September. Quantity of water to be 10 litres per metre square during each visit. Thereafter, water as necessary where natural precipitation levels are insufficient in order to maintain healthy dense growth.

Trimming / Pruning

- 4.17 Hedge planting should be lightly trimmed to maintain shape and form. Light trimming shall encourage vigorous and dense growth. Formative trimming during the first three years of establishment should be undertaken annually during the late Winter (early February to mid-March). Long-term maintenance pruning should be carried at the same time of the year to avoid bird nesting season and enable successful flowering and fruit formation to encourage local wildlife.

Weeding

- 4.18 Hedge planting areas should be kept clear of all weeds at the base of the plant material. The hedge planting should be kept weed free by hand weeding twice a year in the Spring and Autumn.

Long-Term Management

- 4.19 Where the hedgerow is a newly established feature the management objective for the hedgerow planting should be to achieve the a dense hedgerow of approximately 1.8 metres height.

1 -3-year check

- 4.20 Hedgerow planting shall be checked at least twice a year by a landscape contractor during years 1 – 3. The visit would be aimed at ensuring successful establishment and to monitor the developing structure of the vegetation.

Defects

- 4.21 Replace all dead / dying plant material. Replacement planting should be undertaken on an annual basis.

Litter Collection

- 4.22 Planting areas should be checked on a fortnightly basis for litter and leaf collection. All planting areas should be maintained clear of litter.
- 4.23 P2 - Proposed Hedgerow Planting Management Prescriptions:
- Mulching: Maintain mulching to hedge planting areas at a consistent depth of 75mm. Mulch layer to be checked annually; Autumn;

- Watering: Water fortnightly during May / June / July / August / September for the first two years of establishment; and as deemed necessary after the establishment period, only where natural precipitation levels are insufficient; provide 10 ltr/ m2/ visit;
- Pruning: Carry out formative pruning annually; February to mid-March;
- Weeding: Maintain hedge planting areas as weed free; check and weed bi-annually, Spring / Autumn;
- 1 -3-year check: Hedgerow planting shall be checked at least twice a year by a landscape contractor during years 1 – 3. The visit would be aimed at ensuring successful establishment and to monitor the developing structure of the vegetation;
- Defects; Replace all dead / dying plant material. Replacement planting should be undertaken on an annual basis;
Long-term Management: Maintain hedgerow at 1.8m height; check annually;
Prune February to mid-March.

P3 – PROPOSED ORNAMENTAL HEDGEROW – MANAGEMENT

Mulching

- 4.24 Hedgerow plant material beds should be topped up with an ornamental bark mulch to assist with the suppression of weeds to these hedgerow planting areas. A mulch top–up should be undertaken and checked annually in the Autumn. Mulch levels should be maintained at a consistent depth of 75mm.

Watering

- 4.25 To ensure establishment, the plants should be watered fortnightly throughout the summer season in the first two years of establishment during May / June / July / August / September. Quantity of water to be 10 litres per metre square during each visit. Thereafter, water as necessary where natural precipitation levels are insufficient in order to maintain healthy dense growth.

Trimming / Pruning

- 4.26 Hedge planting should be lightly trimmed to maintain shape and form. Light trimming shall encourage vigorous and dense growth. Formative trimming during the first three years of establishment should be undertaken annually. Long-term maintenance pruning should be carried out to avoid bird nesting season and enable successful flowering and fruit formation to encourage local wildlife.
- 4.27 Pruning and trimming should be undertaken according to individual species requirements. Refer to guidance provided by the Royal Horticultural Society (RHS) to ensure horticultural best practice is adhered to.

Weeding

- 4.28 Hedge planting areas should be kept clear of all weeds at the base of the plant material. The hedge planting should be kept weed free by hand weeding twice a year in the Spring and Autumn.

Long-Term Management

- 4.29 Where the hedgerow is a newly established feature the management objective for the hedgerow planting should be to achieve a dense hedgerow of approximately 1.2 metres height.

1 -3-year check

- 4.30 Hedgerow planting shall be checked at least twice a year by a landscape contractor during years 1 – 3. The visit would be aimed at ensuring successful establishment and to monitor the developing structure of the vegetation.

Defects

- 4.31 Replace all dead / dying plant material. Replacement planting should be undertaken on an annual basis.

Litter Collection

- 4.32 Planting areas should be checked on a fortnightly basis for litter and leaf collection. All planting areas should be maintained clear of litter.

4.33 P3 - Proposed Hedgerow Planting Management Prescriptions:

- Mulching: Maintain mulching to hedge planting areas at a consistent depth of 75mm. Mulch layer to be checked annually; Autumn;
- Watering: Water fortnightly during May / June / July / August / September for the first two years of establishment; and as deemed necessary after the establishment period, only where natural precipitation levels are insufficient; provide 10 ltr/ m2/ visit;
- Trimming / Pruning: Hedge to be lightly trimmed to keep shape and encourage dense growth. Formative trimming during the first three years of establishment should be undertaken annually. Long-term maintenance pruning should be carried out to avoid bird nesting season and enable successful flowering and fruit formation. Pruning and trimming should be undertaken according to individual species requirements by following guidance provided by the Royal Horticultural Society (RHS).
- 1 -3-year check: Hedgerow planting shall be checked at least twice a year by a landscape contractor during years 1 – 3. The visit would be aimed at ensuring successful establishment and to monitor the developing structure of the vegetation;
- Defects; Replace all dead / dying plant material. Replacement planting should be undertaken on an annual basis;
Long-term Management: Maintain hedgerow at 1.2m height; check annually;
Carry out long term maintenance pruning in accordance with RHS guidance.

P4 – PROPOSED NATIVE MIXED SPECIES SHRUB PLANTING – MANAGEMENT

Watering

- 4.34 In order to establish the native shrub planting, the transplants should be watered fortnightly throughout the summer season in the first year of initial establishment during May / June / July / August / September. Quantity of water to be 10 litres per metre square during each visit, for the first initial year of establishment only.

Weeding

- 4.35 Native understory shrub plant material would be planted in planting pits, which should be kept clear of all weeds at the base of the plant material. The native shrub plant material should be kept weed free by either hand weeding or application of a non-residual herbicide application, taking care not to spray or scorch existing plant material. The native shrub plant material to the site boundaries and about the open spaces should be cleared of all weeds bi-annually; Spring and Autumn.

Pruning

- 4.36 During the first three years of establishment the native shrub transplants should be lightly trimmed to maintain shape and form. Light trimming should encourage vigorous and dense growth. Trimming during the first three years of establishment should be undertaken annually during the late winter / early spring to maintain size, shape, and vigorous growth.

Long-Term Management

- 4.37 Long-term, the management objective for the Native Mixed Species Shrub plant material should be to achieve a boundary screen / habitat area approximately 1.5 metres height. After three years of establishment and light trimming, the Native Mixed Species Shrub plant material should be managed on a rotational basis. Hard pruning only some of the plants annually, over a 3 - 4-year management period, would mean fruit would be retained as much as possible.
- 4.38 Native Mixed Species Shrub plant material should be trimmed in winter months, preferably January or February, to retain fruit for wildlife, unless ground conditions prevent this.
- 4.39 Native Mixed Species Shrub planting areas once established are to be thinned on a routine basis. The proposed native shrub planting mix includes a number of larger shrub species. The native shrub species should be selectively thinned out to allow a selection of shrub specimens to emerge and establish as the dominant understory specimens. Selective shrub thinning should be undertaken every five years to assist establishment.

1 -3-year check

- 4.40 Shrub planting shall be checked at least twice a year by a landscape contractor during years 1 – 3. The visit would be aimed at ensuring successful establishment and to monitor the developing structure of the vegetation.

Defects

- 4.41 Replace all dead / dying plant material. Replacement planting should be undertaken on an annual basis.

Litter Collection

- 4.42 Planting areas should be checked on a fortnightly basis for litter and leaf collection. All planting areas should be maintained clear of litter.

4.43 P4 – Native mixed species shrub Planting Management Prescriptions

- Watering; transplants should be watered fortnightly throughout the summer season in the first year of establishment during May / June / July / August / September. Quantity of water to be 10 litres per metre square during each visit;
- Weeding; mulched planting pits to be kept clear of weeds to the base of each plant. Planting pits to be cleared of weeds bi-annually; Spring and Autumn;
- Pruning; during the first three years of establishment the native shrubs should be lightly trimmed to encourage vigorous and dense re-growth. Trimming during the first three years of establishment should be undertaken annually; during January or February, to retain fruit for wildlife.
- 1 -3-year check: Shrub planting shall be checked at least twice a year by a landscape contractor during years 1 – 3. The visit would be aimed at ensuring successful establishment and to monitor the developing structure of the vegetation;
- Defects; Replace all dead / dying plant material. Replacement planting should be undertaken on an annual basis.
- Long-Term Management; Native Mixed Species Shrub plant material should be trimmed in winter months, preferably January or February, to retain fruit for wildlife, unless ground conditions prevent this;
- Long-Term Management; Hard-Trimming; after three years of establishment and light trimming, shrub plant material should be maintained to a maximum height of 1.5 metres; Shrub plant material should be managed on a rotational basis. Hard

pruning only some of the plants annually, over a 3 - 4 year management period, would mean fruit would be retained as much as possible;

- Long-Term Management; Thinning; planting areas to be thinned on a routine basis. Native Mixed Species tree and shrub species should be selectively thinned out. Selective shrub thinning should be undertaken every five years.

P5 – PROPOSED ORNAMENTAL PLANTING – MANAGEMENT

Watering

- 4.44 To ensure establishment, the planting material should be watered fortnightly throughout the summer season in the first two years of establishment during May / June / July / August / September; 10 litres per metre square should be applied fortnightly throughout the summer season at each maintenance visit. Thereafter, water as required necessary, only where natural precipitation levels are insufficient to maintain healthy dense growth.

Pruning

- 4.45 Pruning should be undertaken according to individual species requirements. Refer to guidance provided by the Royal Horticultural Society (RHS) to ensure horticultural best practice is adhered to.

Weeding

- 4.46 Planting areas should be maintained weed free throughout the maintenance period. It is recommended that planting areas should be cleared of all weed growth by hand weeding. Maintain planting areas weed free from Spring to Autumn; March / April / May / June / July / August / September / October.

1 -3-year check

- 4.47 Planting shall be checked at least twice a year by a landscape contractor during years 1 – 3. The visit would be aimed at ensuring successful establishment and to monitor the developing structure of the vegetation.

Defects

- 4.48 Replace all dead / dying plant material. Replacement planting should be undertaken on an annual basis.

Litter Collection

4.49 Ornamental planting areas should be checked on a fortnightly basis for litter and leaf collection. All planting areas should be maintained clear of litter.

4.50 P5 – Ornamental Planting Management Prescriptions

- Watering: Water all plant material fortnightly during the summer season for the first year of establishment and as deemed necessary after the establishment period where natural precipitation levels are insufficient; provide 10 ltr/ m2/ visit;
- Pruning should be undertaken in accordance with guidance provided by the Royal Horticultural Society (RHS) to ensure horticultural best practice is adhered to.
- Weeding: Maintain planting areas weed free; Spring to Autumn. Hand-weed throughout the Spring / Summer; March / April / May / June / July / August / September / October; repeat where necessary;
- Mulching: Mulch Top Up; Maintain mulch to all planting areas; check annually; Autumn;
- Defects; Replace all dead / dying plant material. Replacement planting should be undertaken on an annual basis.
- Litter collection: All planting areas should be maintained clear of litter and checked on a fortnightly basis.

P6 – PROPOSED MIXED SPECIES CLIMBERS – MANAGEMENT

Mulching

4.51 Climber plant material beds should be topped up with an ornamental bark mulch to assist with the suppression of weeds to these planting areas. A mulch top–up should be undertaken and checked annually in the Autumn. Mulch levels should be maintained at a consistent depth of 75mm.

Watering

4.52 To ensure establishment, the planting material should be watered fortnightly throughout the summer season in the first two years of establishment during May / June / July / August / September; 10 litres per metre square should be applied fortnightly throughout the summer season at each maintenance visit. Thereafter,

water as required necessary, only where natural precipitation levels are insufficient to maintain healthy dense growth.

Pruning

4.53 Pruning and trimming should be undertaken, according to individual species requirements:

- *Hydrangea anomala subsp. Petiolaris* – Prune in late winter or spring after flowering happens from previous year's growth. Avoid drastic pruning as this may restrict flowering the following year.
- *Clematis tangutica*
 - Initial pruning and training - Unless the plant already has three or four healthy stems growing from the base, the new plant should be cut down to a strong pair of leaf buds about 30cm above soil level after the first spring. New growth to be tied in the spring or summer spacing stems evenly on support.
 - Pruning established plant – In February or March, thin out and trim back to main framework of branches
- *Lonicera fragrantissima* - After flowering, cut back flowering growth to strong young shoots lower down. Cut upto 20 percent of ageing stems near the base.

4.54 The landscape contractor shall refer to guidance provided by the Royal Horticultural Society (RHS) to ensure horticultural best practice is adhered to.

Weeding

4.55 Planting areas should be maintained weed free throughout the maintenance period. It is recommended that planting areas should be cleared of all weed growth by hand weeding. Maintain planting areas weed free from Spring to Autumn; March / April / May / June / July / August / September / October.

1 -3-year check

4.56 Planting shall be checked at least twice a year by a landscape contractor during years 1 – 3. The visit would be aimed at ensuring successful establishment and to monitor the developing structure of the vegetation.

Defects

- 4.57 Replace all dead / dying plant material. Replacement planting should be undertaken on an annual basis.

Litter Collection

- 4.58 Ornamental planting areas should be checked on a fortnightly basis for litter and leaf collection. All planting areas should be maintained clear of litter.

4.59 P6 – Ornamental Planting Management Prescriptions

- Watering: Water all plant material fortnightly during the summer season for the first year of establishment and as deemed necessary after the establishment period where natural precipitation levels are insufficient; provide 10 ltr/ m2/ visit;
- Pruning and trimming to be undertaken in accordance with guidance provided by the Royal Horticultural Society (RHS) to ensure horticultural best practice is adhered to.
- Weeding: Maintain planting areas weed free; Spring to Autumn. Hand-weed throughout the Spring / Summer; March / April / May / June / July / August / September / October; repeat where necessary;
- Mulching: Mulch Top Up; Maintain mulch to all planting areas; check annually; Autumn;
- Defects; Replace all dead / dying plant material. Replacement planting should be undertaken on an annual basis.
- Litter collection: All planting areas should be maintained clear of litter and checked on a fortnightly basis.

P7 – PROPOSED MIXED SPECIES NATIVE BULB PLANTING – MANAGEMENT**Pruning**

- 4.60 Pruning and trimming should be undertaken, according to individual species requirements, generally this is as follows:
- Deadheading – Cut back spent flowers to the base of the flower stalk to allow the plant to conserve resources for bulb display the following year.

- Cutting back bulb foliage should be carried out six weeks after the end of the flowering season and foliage should be removed only when it is yellow and straw-like.

4.61 The landscape contractor shall refer to guidance provided by the Royal Horticultural Society (RHS) to ensure horticultural best practice is adhered to.

1 -3-year check

4.62 Planting shall be checked at least twice a year by a landscape contractor during years 1 – 3. The visit would be aimed at ensuring successful establishment and to monitor the developing structure of the vegetation.

Defects

4.63 Replace all dead / dying plant material. Replacement planting should be undertaken on an annual basis.

Litter Collection

4.64 Ornamental planting areas should be checked on a fortnightly basis for litter and leaf collection. All planting areas should be maintained clear of litter.

4.65 P7 – Mixed Species Native Bulb Planting Prescriptions

- Pruning: Deadheading to be done after flowering period. Cutting back of bulb foliage to be done six weeks after end of flowering period and foliage removed when yellow and straw like.
- Defects; Replace all dead / dying plant material. Replacement planting should be undertaken on an annual basis.
- Litter collection: All planting areas should be maintained clear of litter and checked on a fortnightly basis.

P8 – PROPOSED NATIVE WILDFLOWER GRASSLAND – MANAGEMENT

- 4.66 Through reference to guidance provided on the *Emorsgate Seeds* website, information on management of wildflower grassland is provided below.

EH1 – Hedgerow Mixture

First Year Management

- 4.67 Most sown meadow wild flower and grass species are perennial; they will be slow to germinate and grow and will not usually flower in their first growing season. There will often be a flush of annual weeds from the soil in the first growing season which may grow up and obscure the meadow seedlings beneath. Topping or mowing is required to control annual weed growth.
- 4.68 Mow newly sown meadows regularly throughout the first year of establishment to a height of 40-60mm, removing cuttings if dense. This will control annual weeds and help maintain balance between faster growing grasses and slower developing wild flowers.
- 4.69 Carefully dig out or spot treat any residual perennial weeds such as docks.

Management Once Established

- 4.70 Zoned management of hedgerow margins frequently produces the best diversity of habitat structure: areas closest to the hedge and those which are more shaded shall be left uncut in most years. Areas that are further from the margin and more open shall be managed as grassland habitat. For example in a 6 metre sown margin the 2-3 metres against the boundary could be left uncut, the next 3-4 metres cut once or twice a year.
- 4.71 Hedgerow vegetation in corner grassland areas shall not be mown or grazed each year to become rough and "tussocky" in character. It can form useful refuge habitat on corners and margins of a site. To control scrub and bramble development these tussocky areas may need cutting every 2-3 years between October and February. For wildlife this cutting is best done on a rotational basis so that no more than half the area is cut in any one year leaving part as a undisturbed refuge.

EP1 – Pond Edge Mixture

First Year Management

- 4.72 In the first year, annual weed growth should be cut back to encourage the development of a good perennial ground cover. Establishment on sites prone to flooding may be patchy and may take several years to fully colonise.

Management Once Established

- 4.73 The habitat value of pond edge sowings is enhanced if there are a variety of vegetation structures from dense tussock stands to bare and recently colonised mud. Variation in structure is to be achieved by cutting back and removing short sections of vegetation every 2-3 years in rotation. With ponds, remove vegetation as a wedge, like removing a slice of cake.
- 4.74 Dense stands of single species (eg yellow iris) may benefit from selective thinning. Vegetation removal should be carried out between September and November as this causes the least disruption to wildlife. Machines and heavy equipment should be used with care on wet sites to avoid damage to soil and vegetation.

Subsequent Years

- 4.75 Management shall be dependent on the results of monitoring. If growth is vigorous or dominated by invasive species i.e. by dock and nettle, then the management prescription for the establishment year to be repeated until the desired sward is established.
- 4.76 Consideration shall be given to controlling noxious weeds by the spot application of appropriate herbicides in accordance with manufacturer's instructions and by a certified user if needed.

Litter Collection

- 4.77 Meadow planting areas should be checked on a fortnightly basis for litter and leaf collection. All planting areas should be maintained clear of litter.
- 4.78 P8 – Wildflower Meadow Management Prescriptions:
- EH1 Hedgerow Mixture; Management Year 1; Control annual weed growth by topping or mowing;

- EH1 Hedgerow Mixture; Management Year 1; Newly sown meadows shall be mown regularly throughout the first year of establishment to a height of 40-60mm;
- EH1 Hedgerow Mixture; Management Year 1; Carefully dig out or spot treat any residual perennial weeds;
- EH1 Meadow Mixture; Management Year 1; Areas more shaded closest to hedge should be left uncut in most years whereas areas further from the margin and more open shall be managed as grassland habitat.
- EH1 Meadow Mixture; Management Year 1; Hedgerow vegetation in corner grassland areas shall be mown only every 2-3 years between October and February to create a "tussocky" grassland. This is to be done on a rotational basis so that no more than half the area is cut in any one year.
- EP1 Pond Edge Mixture: Management Year 1: Annual weed growth should be cut back.
- EP1 Pond Edge Mixture: Management Year 1: Variation in structure is to be achieved by cutting back and removing short sections of vegetation every 2-3 years in rotation.
- EP1 Pond Edge Mixture: Management Year 1: Vegetation removal for selective thinning should be carried out between September and November
- Litter collection: All meadow areas should be maintained clear of litter and checked on a fortnightly basis.

P9 – AMENITY GRASSLAND – MANAGEMENT

First Lawn Cut of Newly Sown Lawn

- 4.79 No cutting should occur until seedlings are approximately 50mm in height. Before cutting, the grass should be lightly firmed using a roller to ensure the new seedlings have a firm anchorage. A few days after rolling, the new lawn may be mown to approximately at 50mm length.
- 4.80 The lawn has to be cut a minimum of 10 number of times per year.
- 4.81 Once established an organic based GSR Tri-Phase 18-3.5-8 + 1MgO+TE can be applied at a rate of 25 – 35g/m² or equal and approved. This can be undertaken March-September. Carry out two equal spreading at right angles to each other and diagonally to the main axis. The spreader should be calibrated prior to application to ensure accuracy. Refer to Germinal Amenity for guidelines on spreader usage.

First Lawn Cut of Newly Laid Turf

- 4.82 Newly laid turf grass can be pulled up slightly at the edge of one roll, to test if rooting has occurred; this may be within 10 to 14 days of laying in warmer temperatures. Mowing shall take place once the roots of the turf grass have begun to grow into the topsoil it was laid onto.

Grass Cutting Specification – General

- 4.83 The landscape contractor shall cut the grass at their discretion if the grass does not grow due to drought or grows faster than normal due to wet and warm conditions. It would be the contractor's responsibility to determine the time to start and finish cutting depending on each season.
- 4.84 The expectations under normal conditions for areas of Public Open Space are to cut the grass as per conditions in below:
- There shall be 14 cuts between April and October;
 - Grass to be cut to approximately 35mm to 40mm height;
 - Clippings either removed from site or evenly distributed (*and not left in piles*);
 - Arisings to be brushed or blown to remove from path and roads;
 - There shall be a 60cm diameter band left uncut around trees located within grassland areas.

P10 - EXISTING MATURE TREES & P11 - EXISTING HEDGEROWS – MANAGEMENT

- 4.85 There should be an annual inspection and monitoring of the health of existing trees and boundary hedgerow vegetation in order to identify any dead or dying branches within the existing canopy or any areas of significant die-back. Changes in vegetation structure and condition should be monitored and recorded, and appropriate action taken by a suitably qualified landscape / arboricultural contractor if required.
- 4.86 For areas of tree and hedgerow vegetation where no active management has been specified, changes should still be monitored to ensure 'benign neglect' does not become 'decline through neglect'.

5.0 MONITORING

5.1 Monitoring shall be undertaken on an annual basis to ensure that new planting and new habitats are in a state of good condition and have successfully established.

5.2 The results of monitoring would be used to adjust and adapt the management and aftercare as required and would be incorporated fully into subsequent versions of the LMP. Monitoring would comprise the following:

- Tree, hedgerow, shrub, bulb and wildflower planting to be checked at least twice a year by a landscape contractor during years 1 - 3 aimed at ensuring successful establishment. These checks would be undertaken at the same time as weed control measures and replacement of failures;
- Monitoring of existing tree and hedgerow species is to be undertaken once a year to check the condition of the existing mature trees to the development site boundaries, in order to identify any dead or dying branches within the existing canopy or any areas of significant die-back.

APPENDIX A – MANAGEMENT SCHEDULE

Provisional Management Tasks Implementation

Operation	Frequency	Implementation Stage												Year 2	Year 3	Year 4	Year 5
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
P1 – PROPOSED NATIVE AND ORNAMENTAL TREE PLANTING – Implementation																	
Tree planting – including: preparation / staking / protective shelters / initial watering / mulching	Once during implementation of soft landscape scheme	✕	✕									✕	✕				
P2 – PROPOSED NATIVE MIXED-SPECIES AND NATIVE SINGLE SPECIES HEDGEROW PLANTING - Implementation																	
Hedge planting – including: preparation / initial watering / mulching	Once during implementation of soft landscape scheme	✕	✕								✕	✕	✕				
P3 – PROPOSED ORNAMENTAL HEDGEROW - Implementation																	
Hedge planting – including: preparation / initial watering / mulching	Once during implementation of soft landscape scheme. Planting undertaken during any time of the year but preferably between October and April	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕				
P4 – PROPOSED NATIVE MIXED SPECIES SHRUB PLANTING- Implementation																	
Native mixed species shrub planting – including: preparation / watering	Once during implementation of soft landscape scheme	✕	✕								✕	✕	✕				
P5 – PROPOSED ORNAMENTAL PLANTING - Implementation																	
Ornamental planting – including: preparation / watering etc	Once during implementation of soft landscape scheme	✕	✕	✕	✕						✕	✕	✕				

Operation	Frequency	Implementation Stage												Year 2	Year 3	Year 4	Year 5
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
P6 – PROPOSED MIXED SPECIES CLIMBERS - Implementation																	
Proposed mixed species climbers – including: preparation / watering etc	Once during implementation of soft landscape scheme									✕	✕	✕					
P7 – PROPOSED MIXED SPECIES NATIVE BULB PLANTING - Implementation																	
Proposed mixed species native bulb planting – including: preparation / watering etc	Once during implementation of soft landscape scheme			✕	✕				✕	✕	✕	✕					
P8 – PROPOSED NATIVE WILDFLOWER GRASSLAND - Implementation																	
Preparation of the Seed Bed	Once before Sowing (either autumn or spring)				✕ (preferred timing)						✕						
Sow wildflower mix	Once (either autumn or spring)				✕						✕						
P9 – AMENITY GRASSLAND – Implementation																	
Seeding Preparation of the Seed Bed and Pre - fertilising	Once (March – October)			✕	✕	✕	✕	✕	✕	✕							
Seeding Sow seed	Once (March – October)			✕	✕	✕	✕	✕	✕	✕	✕						
Turfing Preparation of the Turf Bed	Once (mid-autumn to late winter)	✕									✕	✕	✕				
Turfing Laying the turf	Once (mid-autumn to late winter)	✕									✕	✕	✕				

APPENDIX B - MANAGEMENT FOR AFTERCARE PERIOD 1 - 5 YEAR PERIOD

Operation	Frequency	Year 1												Year 2	Year 3	Year 4	Year 5
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
P1 - PROPOSED NATIVE AND ORNAMENTAL TREE PLANTING – Management																	
Watering	1 x every week					✕	✕	✕	✕	✕				✕	✕	As demanded	As demanded
Weeding	2 x year				✕						✕			✕	✕	✕	✕
Mulching	1 x year										✕			✕	✕	✕	✕
Checking Tree Ties / Stakes	2 x year				✕						✕			✕	✕	✕	✕
Pruning native trees: dead or damaged branches	2 x year				✕						✕			✕	✕	✕	✕
Removal of Tree Stakes	Once (between 18 months and 3 years after planting (may take longer for larger stock size trees)).				✕										✕		
Monitoring visit / check	2 x year				✕						✕			✕	✕		
Litter Collection	1 x every 2 weeks	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕
P2 – PROPOSED NATIVE MIXED-SPECIES PLANTING - Management																	
Watering	1 x every 2 weeks					✕	✕	✕	✕	✕				✕	As demanded	As demanded	As demanded
Weeding	2 x year				✕						✕			✕	✕	✕	✕
Mulching	1 x year										✕			✕	✕	✕	✕
Pruning	1 x year		✕											✕	✕	Maintain to 1.8m height	
Monitoring visit / check	2 x year				✕						✕			✕	✕		
Litter Collection	1 x every 2 weeks	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕

Operation	Frequency	Year 1												Year 2	Year 3	Year 4	Year 5
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
P3 – PROPOSED ORNAMENTAL HEDGEROW PLANTING - Management																	
Watering	1 x every 2 weeks					✕	✕	✕	✕	✕				✕	As demanded	As demanded	As demanded
Weeding	2 x year			✕							✕			✕	✕	✕	✕
Mulching	1 x year		✕									✕		✕	✕	✕	✕
Pruning	1 x year		✕											✕	✕	Maintain to 1.2m height.	
Monitoring visit / check	2 x year				✕						✕			✕	✕		
Litter Collection	1 x every 2 weeks	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕
P4 – PROPOSED NATIVE MIXED SPECIES SHRUB PLANTING - Management																	
Watering	1 x every 2 weeks					✕	✕	✕	✕	✕				As demanded	As demanded	As demanded	As demanded
Weeding	2 x year				✕						✕			✕	✕	✕	✕
Trimming / Pruning	1 x year		✕											✕	✕	Maintain to 1.5m to height thereafter	Manage on a rotational basis so fruit can be retained.
Selective Thinning			✕														✕
Monitoring visit / check	2 x year				✕						✕			✕	✕		
Litter Collection	1 x every 2 weeks	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕

Operation	Frequency	Year 1												Year 2	Year 3	Year 4	Year 5
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
P5 – PROPOSED ORNAMENTAL PLANTING – Management																	
Watering	1 x every 2 weeks					✕	✕	✕	✕	✕				✕	As demanded	As demanded	As demanded
Weeding	2 x year			✕	✕	✕	✕	✕	✕	✕	✕			✕	✕	✕	✕
Trimming / Pruning (in accordance with RHS Guidance)	2 x year		✕									✕		✕	✕	✕	✕
Selective Thinning			✕														✕
Monitoring visit / check	2 x year				✕						✕			✕	✕		
Litter Collection	1 x every 2 weeks	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕
P6 – PROPOSED MIXED SPECIES CLIMBERS – Management																	
Watering	1 x every 2 weeks					✕	✕	✕	✕	✕				✕	As demanded	As demanded	As demanded
Weeding	2 x year			✕	✕	✕	✕	✕	✕	✕	✕			✕	✕	✕	✕
Trimming / Pruning (in accordance with RHS Guidance)	2 x year	✕	✕	✕	✕	✕						✕	✕	✕	✕	✕	✕
Selective Thinning			✕														✕
Monitoring visit / check	2 x year				✕						✕			✕	✕		
Litter Collection	1 x every 2 weeks	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕

Operation	Frequency	Year 1												Year 2	Year 3	Year 4	Year 5
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
P7 – PROPOSED MIXED SPECIES NATIVE BULB PLANTING – Management																	
Watering	1 x every 2 weeks					✕	✕	✕	✕	✕				As demanded	As demanded	As demanded	As demanded
Trimming / Pruning (in accordance with RHS Guidance)	2 x year				✕	✕	✕	✕		✕							
Monitoring visit / check	2 x year				✕						✕			✕	✕		
Litter Collection	1 x every 2 weeks	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕
P8 – PROPOSED NATIVE WILDFLOWER GRASSLAND – Management																	
‘EH1 – Hedgerow Mixture’ Year 1	Cut regularly in Year 1							✕									
‘EP1 – Pond Edge Mixture’ Once Established	Cut every 2-3 years								✕						✕		✕
Litter Collection	1 x every 2 weeks	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕
P9 – AMENITY GRASSLAND – Management																	
Mowing Amenity Grassland	The expectations under normal weather conditions for areas of Public Open Spaces are: 14 cuts between April and October				✕	✕	✕	✕	✕	✕	✕			✕	✕	✕	✕

Operation	Frequency	Year 1												Year 2	Year 3	Year 4	Year 5
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
P10 - EXISTING MATURE TREES – Management																	
Monitoring of existing trees	1 x year				✕									✕	✕	✕	✕
P11 - EXISTING VEGETATION – Management																	
Monitoring of existing native shrub and hedgerow planting	3 x year			✕				✕				✕		✕	✕	✕	✕



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