

Shinfield Park, Whitley Wood Lane,
Shinfield, Wokingham

Habitat Management and Monitoring Plan (HMMP)

(to address Condition 19 of
Planning Permission 250415)

February 2026

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Contents

Text:

1 Introduction 1

2 Ecological Trends and Constraints On-site that may Influence Management.....3

3 Framework for Implementing the HMMP4

4 Planned Habitat Creation Works5

5 Proposed Habitat Management Measures.....6

6 Monitoring21

Plans:

Plan 6856/ECO1	Site Location
Plan 6856/BNG1	Pre-development Habitat Measurements
Plan 6856/BNG2	Post-development Habitat Measurements

Appendices:

Appendix 6856/1	Legislation Summary
Appendix 6856/2	Work Schedule

1 Introduction

1.1 Background and Proposals

1.1.1 Shinfield Park, Whitley Wood Lane, Shinfield, Wokingham ('the site'), was granted planning consent by Wokingham Borough Council on 14/10/2025, for the redevelopment of the site for flexible employment use (Use Class E(g)(ii)-(iii)/B2/B8) together with servicing areas, parking, landscaping and other associated works, including demolition (Planning ref: 250415, as amended by application 252635).

1.1.2 The planning consent is subject to a number of conditions, of which Condition 19 relates to ecology and states:

'A habitat management and monitoring plan (HMMP) shall be submitted to, and approved in writing by, the Local Planning Authority prior to commencement of the development. The content of the HMMP shall include the following:

- a) Description and evaluation of features to be managed*
- b) Ecological trends and constraints on site that might influence management*
- c) Aims and objectives of management – to include on-site measures necessary to deliver biodiversity net gain*
- d) Appropriate management options for achieving aims and objectives*
- e) Prescriptions for management actions*
- f) Preparation of a work schedule (including an annual work plan capable of being rolled forward over a five-year period)*
- g) Details of the body or organisation responsible for implementation of the plan*
- h) Ongoing monitoring and remedial measures*
- i) Long term design objectives, management responsibilities, timescales and maintenance schedules for all landscape areas*

The HMMP shall also include details of the legal and funding mechanism(s) by which the long-term implementation of the plan will be secured by the developer with the management body(ies) responsible for its delivery. The plan shall also set out (where the results from monitoring show that conservation aims and objectives of the HMMP are not being met) how contingencies and/or remedial action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme. The approved plan will be implemented in accordance with the approved details.'

1.1.3 Aspect Ecology has been commissioned by Wrenbridge (FRELD Reading LLP) to prepare an HMMP to help address Condition 19 of the planning consent.

1.1.4 Biodiversity Net Gain became mandatory for major developments on 12th February 2024 and smaller developments on 2nd April 2024 under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021), with the minimum level set at 10%. Therefore, the application is subject to delivering a minimum 10% net gain. The Metric calculates >10% net gain will be achieved on-site, however there are trading errors with respect to the unmitigated loss of lowland mixed deciduous woodland, other woodland; broadleaved and individual trees. As such, off-site BNG units are required to satisfy trading rules.

- 1.1.5 Details of the faunal enhancement measures to be provided at the site and their long-term management are set out separately within the Biodiversity Enhancement Strategy prepared in respect of Condition 22 of the planning consent (Aspect Ecology, January 2026).

1.2 Site Context

- 1.2.1 The site context is described in detail in to Aspect Ecology's 2025 Ecological Appraisal. In summary, the site is currently dominated by buildings and hardstanding, which are not important ecological features. Features of ecological importance within / adjacent the site include native hedgerows / tree-lines, ancient woodland, lowland mixed deciduous woodland (Priority Habitat) and a single veteran tree. Shinfield Park, Nore's Hill Local Wildlife Site (LWS) is located adjacent to the southern and western site boundaries.
- 1.2.2 Survey work completed between 2024 and 2025 recorded the site to support foraging and commuting bats including Common Pipistrelle *Pipistrellus pipistrellus*, Soprano Pipsitrelle *Pipistrellus pygmaeus*, Brown Long-eared Bat *Plecotus auritus*, *Myotis* sp. and Barbastelle *Barbastella barbastellus* within the LWS. The site was also confirmed to support breeding territories of Stock Dove, Woodpigeon, Moorhen, Wren, Dunnock and Song Thrush, all of which are species of conservation concern. Survey work confirmed likely absence of reptiles, Great Crested Newt and Dormice from the site (refer to Aspect Ecology's 2025 Ecological Appraisal for further details).

2 Ecological Trends and Constraints On-site that may Influence Management

2.1 Climate change

2.1.1 Climate change has the potential to affect the distribution of habitats and fauna within the UK and alter the timing of seasonal events. Increased temperatures and decreased rainfall in the summer months would also increase the likelihood of drought impacting grassland habitats within the site. As such, plant species tolerant of drought are to be included within the proposed planting plans. In addition, the consented development will increase the diversity of habitats available on-site compared to the existing situation, allowing for a corresponding increase in resilience of associated faunal species and an increased potential for the site to support additional species. Faunal species ranges may shift slightly due to climate change, however this is not expected to significantly influence the proposed management of habitats within the site.

2.1.2 A number of species protected under both national and European legislation will need to be considered during the creation and management of habitats within the site (see Appendix 6856/1 for legislation summary), as described below.

2.2 Nesting Birds

2.2.1 All wild birds and their nests receive protection under Section 1 of the Wildlife and Countryside Act 1981 (as amended) in respect of killing and injury. In addition, their nests, whilst being built or in use, cannot be taken, damaged or destroyed. This species group will therefore need to be given consideration when carrying out management activities within the nesting bird season (1st March to 31st August inclusive).

2.3 Bats

2.3.1 An Ash *Fraxinus excelsior* tree was noted to exhibit features with potential to support roosting bats. All British bats are classed as European Protected Species under the Conservation of Habitats and Species Regulations 2017 (as amended) and are also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). As such, both bats and their roosts (breeding sites and resting places) receive full protection under the legislation. Any necessary works on the identified tree which exhibits features with potential to support roosting bats will be reviewed by a suitably qualified ecologist.

3 Framework for Implementing the HMMP

3.1 Areas Covered by the HMMP

- 3.1.1 The measures set out within this document relate to the implementation of proposed development within the application site boundary (see Plan 6856/ECO1). Management of the off-site habitat units required to satisfy trading rules, is anticipated to be secured through a Conservation Covenant and therefore not covered by this HMMP.

3.2 Roles and Responsibilities for Implementation

- 3.2.1 In the first instance, Wrenbridge (FRELD Reading LLP) will be responsible for funding and implementation of the proposed development, including the habitat creation works. It is anticipated that the required habitat creation measures will be implemented by a landscape contractor under the direction of the main contractor. The landscape contractor will be responsible for the successful establishment of the proposed habitat creation areas during the initial defect's liability period (12 months from the completion of the landscaping works) and funding of such works.
- 3.2.2 Ongoing management of the habitats per the prescriptions set out in this HMMP will be the responsibility of the duly appointed Management Company - Avison Young (located at The Met, 24 Percy St, London, W1T 2BS, contactable on 08449 020304). The Management Company will also be responsible for ongoing monitoring of the habitats, assisted by a suitably qualified ecologist as necessary (see Chapter 6 below on monitoring). The local planning authority will be notified if the management company responsible for landscape maintenance changes.

4 Planned Habitat Creation Works

4.1 Habitat Creation

4.1.1 As set out in the Biodiversity Net Gain Assessment, the habitat creation will contribute to the proposed development's net gain, relative to the pre-development biodiversity value, and includes the following:

- Other Neutral Grassland;
- Modified Grassland;
- Mixed Scrub;
- Other woodland broadleaved;
- Species-rich native hedgerows;
- Native hedgerows; and
- Individual Trees.

4.1.2 The proposed development also includes areas of introduced shrub, other green roof and rain garden however, these features are of limited ecological value and do not contribute significantly to the proposed development's BNG score. Therefore, maintenance and monitoring of these features do not need to be secured, however, anticipated management prescriptions have been included within this HMMP for completeness. The areas of habitat creation are illustrated on the post-development habitat areas plan (see Plan 6856/BNG2) and detailed on the Detailed Planting Plans (drawing numbers RG-LD-400 T4, RG-LD-401 T3, RG-LD-402 T3, RG-LD-403 T2, and RG-LD-404 T2) and Detailed Planting Schedule (RG-LD-400 T4).

5 Proposed Habitat Management Measures

5.1 Aims and Objectives

- 5.1.1 The key aim of the management measures is to ensure the habitats achieve the predicted condition scores set out within the associated Biodiversity Net Gain Assessment (Aspect Ecology, February 2025), as summarised below, and to deliver a minimum 10% net gain in habitat and hedgerow units within the site, which is maintained in the long term (minimum of 30 years).

5.2 Habitat Condition Targets

- 5.2.1 The key aim of the proposed management measures for individual habitats will be to satisfy the relevant condition criteria set out in Table 5.1 below.

Table 5.2. Relevant habitat condition criteria for significant habitat creation

Habitat Type (Ref: Plan 6856/BNG2)	Criteria and condition to be targeted (Ref: Statutory Biodiversity Metric condition assessments)
Other Neutral Grassland (g3c)	Criterion A: The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type. No characteristic indicator species are listed for g3c within the UKHab description, however in order to be classified as g3c the grassland must pass at least 3 of the following: • >20% cover of broadleaved herbs and sedges • >8 species per m² (including forbs, grasses, sedges and rushes, and excluding bryophytes) • ≥1 grass species that is not generally sown for intensive agricultural production (i.e. Rye-grasses <i>Lolium</i> spp., Timothy <i>Phleum pratense</i>, Cock's-foot <i>Dactylis glomerata</i>, Meadow Fescue <i>Festuca pratensis</i>) is at least abundant • Cover of Rye-grasses <i>Lolium</i> spp. and White Clover <i>Trifolium repens</i> where present is <30% Additional criteria: Criterion B: Varied sward height (at least 20% >7cm and 20% <7cm) Criterion C: Cover of bare ground 1% - 5% Criterion D: <20% Bracken <i>Pteridium aquilinum</i> cover and <5% scrub Criterion E: Combined cover of species indicative of suboptimal condition¹ and physical damage accounts for <5% of total area. Absence of invasive non-native plant species (as listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended)) <i>Footnote 1:</i> Species indicative of suboptimal condition for this habitat type include: Creeping Thistle <i>Cirsium arvense</i>, Spear Thistle <i>Cirsium vulgare</i>, Curled Dock <i>Rumex crispus</i>, Broad-leaved Dock <i>Rumex obtusifolius</i>, Common Nettle <i>Urtica dioica</i>, Creeping Buttercup <i>Ranunculus repens</i>, Greater Plantain <i>Plantago major</i>, White Clover <i>Trifolium repens</i> and Cow Parsley <i>Anthriscus sylvestris</i>. There may be additional relevant species local to the region and or site.

	Targeted condition: <i>Moderate:</i> – <i>minimum of three of Criteria A – E must be passed, including essential Criterion A.</i>
Modified Grassland (g4)	Criterion A: There are 6-8 vascular plant species per m2 present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition. Criterion B: Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed. Criterion C: Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Criterion D: Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities. Criterion E: Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)¹. Criterion F: Cover of Bracken is less than 20%. Criterion G: There is an absence of invasive non-native plant species² (as listed on Schedule 9 of WCA³). <u>Footnote 1:</u> For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover <u>Footnote 2:</u> Assess this for each distinct habitat parcel. If the distribution of invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement <u>Footnote 3:</u> Wildlife and Countryside Act 1981 Targeted condition: <i>Moderate:</i> – <i>Minimum of four of Criteria A – G must be passed including essential Criterion A.</i>
	Targeted condition: <i>Poor:</i> - <i>Essential criterion A failed</i>
Mixed Scrub (h3h)	Criterion A: The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range). ✓ At least 80% of scrub is native ✓ There are at least three native woody species ✓ No single species comprises more than 75% of the cover (except Hazel <i>Corylus avellana</i>, Common Juniper <i>Juniperus communis</i>, Sea Buckthorn <i>Hippophae rhamnoides</i> (only in its restricted native range), or Box <i>Buxus sempervirens</i>, which can be up to 100% cover).

	Criterion B: Seedlings, saplings, young shrubs and mature (or ancient or veteran) shrubs are all present. Criterion C: There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA) and species indicative of suboptimal condition¹ make up less than 5% of ground cover. Criterion D: The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat. Criterion E: There are clearings, glades or rides present within the scrub, providing sheltered edges. <u>Footnote 1:</u> Species indicative of suboptimal condition for this habitat type may include: non-native conifers, Tree-of-heaven <i>Alnus altissima</i>, Holm Oak <i>Quercus ilex</i>, European Turkey Oak <i>Quercus cerris</i>, Cherry Laurel <i>Prunus laurocerasus</i>, Snowberry <i>Symphoricarpos</i> spp., Shallon <i>Gaultheria shallon</i>, American Skunk Cabbage <i>Lysichiton americanus</i>, Buddleia <i>Buddleja</i> spp., Cotoneaster <i>Cotoneaster</i> spp., Spanish Bluebell <i>Hyacinthoides hispanica</i> and Hybrid Bluebells <i>Hyacinthoides x massartiana</i>. There may be additional relevant species local to the region and or site. Targeted condition: Moderate : – <i>Minimum three of the above criteria must be passed</i>			
Other woodland; broadleaved (w1g)	Criteria	Good (3 points)	Moderate (2 points)	Poor (1 point)
	A	Three age-classes ¹ present.	Two age-classes ¹ present.	One age-class ¹ present.
	B	No significant browsing damage evident in woodland ² .	Evidence of significant browsing pressure is present in less than 40% of whole woodland ² .	Evidence of significant browsing pressure is present in 40% or more of whole woodland ² .
	D	Five or more native tree or shrub species ⁴ found across woodland parcel.	Three to four native tree or shrub species ⁴ found across woodland parcel.	Two or less native tree or shrub species ⁴ across woodland parcel.
	E	>80% of canopy trees and >80% of understory shrubs are native ⁵ .	50 - 80% of canopy trees and 50 - 80% of understory shrubs are native ⁵ .	<50% of canopy trees and <50% of understory shrubs are native ⁵ .
	F	10 - 20% of woodland has areas of temporary open space ⁶ . Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted ⁷ .	21 - 40% of woodland has areas of temporary open space ⁶ .	<10% or >40% of woodland has areas of temporary open space ⁶ . But if woodland <10ha has <10% temporary open space, please see Good category ⁷ .
	G	All three classes present in woodland ⁸ ; trees 4 - 7 cm Diameter at Breast Height (DBH), saplings and	One or two classes only present in woodland ⁸ .	No classes or coppice regrowth present in woodland ⁸ .

		seedlings or advanced coppice regrowth.		
	H	Tree mortality 10% or less, no pests or diseases and no crown dieback ⁹ .	11% to 25% tree mortality and or crown dieback or low-risk pest or disease present ⁹ .	Greater than 25% tree mortality and or any high-risk pest or disease present ⁹ .
	I	Recognisable NVC plant community ¹⁰ at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community ¹⁰ at ground layer present.	No recognisable woodland NVC plant community ¹⁰ at ground layer present.
	J	Three or more storeys across all survey plots, or a complex woodland ¹¹ .	Two storeys across all survey plots ¹¹ .	One or less storey across all survey plots ¹¹ .
	K	Two or more veteran trees ¹² per hectare.	One veteran tree ¹² per hectare.	No veteran trees ¹² present in woodland.
	L	50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, branch stubs and stumps, or an abundance of small cavities ¹³ .	Between 25% and 50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities ¹³ .	Less than 25% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities ¹³ .
	M	No nutrient enrichment or damaged ground evident ¹⁴ .	Less than 1 hectare in total of nutrient enrichment across woodland area, and or less than 20% of woodland area has damaged ground ¹⁴ .	1 hectare or more of nutrient enrichment, and or 20% or more of woodland area has damaged ground ¹⁴ .
Footnote 1 - See EWBG method INDICATOR 1 for more information. If tree species is not a birch <i>Betula</i> sp., cherry <i>Prunus</i> sp. or <i>Sorbus</i> sp.: 0 – 20 years (Young); 21 - 150 years (Intermediate); and >150 years (Old). For birch, cherry or <i>Sorbus</i> species; 0 - 20 years = Young; 21 - 60 years =Intermediate; >60 years = Old. A recognisable age-class should be a consistent recognisable layer across the woodland or stand being assessed. Presence of a few saplings would not indicate that the woodland has an 'age-class' of young trees. Footnote 2 - See EWBG method INDICATOR 2 for more information. Browsing pressure is considered to be significant where >20% of vegetation visible within each survey plot shows damage from any type of browsing pressure listed. Footnote 3 - See EWBG method INDICATOR 3 for more information. Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly.				

	Check for the presence of all plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), particularly the following invasive non-native species: American Skunk Cabbage <i>Lysichiton americanus</i>; Himalayan Balsam <i>Impatiens glandulifera</i>; Japanese Knotweed <i>Reynoutria japonica</i>; Cherry Laurel <i>Prunus laurocerasus</i>; Shalloon <i>Gaultheria shallon</i>; Snowberry <i>Symphoricarpos albus</i>; Variegated Yellow Archangel <i>Lamium galeobdolon</i> subsp. <i>argenteum</i>; Rhododendron <i>Rhododendron ponticum</i>; and Tree-of-heaven <i>Ailanthus altissima</i>. <u>Footnote 4</u> - See EWBG method INDICATOR 4 and Table 2 for more information. The number of different native tree or shrub species including young trees and shrubs. A list of commonly found native tree and shrub species is provided in Table 2. Not all species listed are native to all parts of the UK. Note a list of commonly found non-native tree species are also included and should be recorded if present. <u>Footnote 5</u> - See EWBG method INDICATOR 5 and for more information. The abundance of native tree species in upper (>5 m) and understorey (up to 5 m) layers including young trees and shrubs. <u>Footnote 6</u> - See EWBG method INDICATOR 6 for more information. Open space within woodland in this context is temporary open space in which trees can be expected to regenerate (for example, glades, rides, footpaths, areas of clear-fell). This differs from permanent open space where tree regeneration is not possible or desirable (for example, tarmac, buildings, rivers). Area is at least 10 m wide with less than 20% covered by shrubs or trees. <u>Footnote 7</u> - Given the increased ratio of edge habitat to woodland where the woodland is <10ha. <u>Footnote 8</u> - See EWBG method INDICATOR 8 for more information. This indicator measures regeneration potential of the woodland by considering three classes: seedlings; saplings; and young trees of 4-7 cm DBH. All three classes would fall in the 'young' category of the 'age distribution of trees' indicator, but the regeneration indicator gathers additional information by considering regeneration potential - if seedlings, saplings and young trees are all present that means natural regeneration processes are happening. <u>Footnote 9</u> - See EWBG method INDICATOR 9 for more information and Table 3 for a list of diseases and pests and their risk level. <u>Footnote 10</u> - See EWBG method INDICATOR 10 directing to NVC key for more information. The 'UKHab to NVC translation table' in the UK Habitat Classification resources may also be useful to assess this. <u>Footnote 11</u> - This criterion looks at structural diversity and is useful to understand in conjunction with the age of trees in a woodland. Vertical structure is defined as the number of canopy storeys present. Possible storey values are: 1) Upper; 2) Complex: recorded when the stand is composed of multiple tree heights that cannot easily be stratified into broad height bands (such as upper, middle or lower); 3) Middle; 4) Lower; and 5) Shrub layer. There might be no storeys where the woodland has been felled. See EWBG INDICATOR 11 for more information. <u>Footnote 12</u> - See EWBG method INDICATOR 12 for more information. See gov.uk standing advice on ancient and veteran trees. Available from: Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk) and: Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk) EWBG INDICATOR 12 is the relevant indicator. <u>Footnote 13</u> - See EWBG method INDICATOR 13 for more information. This includes logs, large dead branches on the forest floor and stumps (<1 m tall) >20 cm diameter at narrowest point and >50 cm long. Also includes standing dead trees (>1 m tall) and
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	also deadwood on standing live trees. Diameter is measured at the narrowest point on the stem. Minimum diameter of 20 cm. <i>Footnote 14</i> - See EWBG method INDICATOR 15 for more information. Examples of disturbance are: significant nutrient enrichment; soil compaction from trampling, machinery, animal poaching or litter. Targeted condition: <i>Moderate</i>: – <i>Total minimum score of 26 must be achieved</i>
Species-rich native hedgerow ((h2a5) & Native hedgerow (h2a)	Criterion A1 - Height: >1.5 m average along length Criterion A2 - Width: >1.5 m average along length Criterion B1 – Gap – hedge base: Gap between ground and base of canopy <0.5 m for >90% of length Criterion B2 – Gap – hedge canopy community: Gaps make up <10% of total length; and No canopy gaps >5m Criterion C1 – Undisturbed ground and perennial vegetation: >1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: - Measured from outer edge of hedgerow; and - Is present on one side of the hedgerow (at least). Criterion C2 – Nutrient-enriched perennial vegetation: Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground. Criterion D1 – Invasive and neophyte species: >90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA¹) and recently introduced species. Criterion D2 – Current damage: >90% of the hedgerow or undisturbed ground is free of damage caused by human activities. <i>Footnote 1:</i> Wildlife and Countryside Act 1981 (as amended). Targeted condition: <i>Poor</i>: – <i>(Fails a total of more than 5 attributes; OR Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition))</i>
Urban tree (secondary code 32)	Criterion A: The tree is a native species (or at least 70% within the block are native species). Criterion B: The tree canopy is predominately continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5m wide (individual trees automatically pass this criterion). Criterion C: The tree is mature (or >50% within the block are mature¹). Criterion D: There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.

	Criterion E: Natural ecological niches for vertebrates and invertebrates are present (e.g. deadwood, cavities, ivy or loose bark). Criterion F: More than 20% of tree canopy is oversailing vegetation beneath. <i>Footnote 1:</i> See gov.uk standing advice on ancient and veteran trees. Available from: Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk) Targeted condition: Poor: – <i>passes minimum one or two of criteria A-F</i>
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- 5.2.2 There are no relevant condition assessment criteria for the non-significant introduced shrub, and other green roof habitats are assigned 'poor' condition within the Statutory Metric by default. The condition criteria for rain gardens are provided in Table 5.2 below purely for information and are not mandatory; as explained previously, this is non-significant habitat creation and therefore sits outside the legislative BNG requirements, and if the habitat fails to meet its target condition there will be no impact on achieving the minimum 10% net gain in habitat units.

Table 5.2. Relevant habitat condition criteria for non-significant habitat creation

Habitat Type (Ref: Plan 6857/BNG2)	Criteria and condition to be targeted (Ref: Statutory Biodiversity Metric condition assessments)
Rain garden	Criterion A: Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area. Criterion B: The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year. Criterion C: Invasive non-native plant species (listed on Schedule 9 of WCA) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of the total vegetated area. Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover). Targeted condition: Poor: - must pass one of the three criteria

5.3 Habitat Management Measures/Specifications

General Maintenance

- 5.3.1 All landscape maintenance operations, where they do not conflict with ecology objectives, will be in accordance with BS 4428:1989 'Code of practice for general landscape operations'. Ongoing landscape maintenance operations are to be in accordance with sound ecological principles, and where relevant to be in accordance with BS 7370-4:1993 'Grounds Maintenance Recommendations for maintenance of soft landscape'. Removal of all litter will take place at quarterly intervals throughout the year.

- 5.3.2 The Landscape Contractor/Management Company shall eradicate weed growth of planted and seeded areas either by manual, mechanical or chemical means. Perennial weeds must be treated with glyphosphate or other similar approved product. The Landscape Contractor/Management Company will apply the herbicide in strict accordance with the relevant best practice guidance (*e.g.* DEFRA – Pesticides: Code of practice for using plant protection products 2006), during suitable weather conditions. All relevant Acts of Parliament and the manufacturer's instructions must be followed, and containers and other contaminated equipment must be cleared from the site after each day's work. The application of herbicides and fertilisers will be avoided within the vicinity of any areas of wildflower grassland (other neutral grassland).
- 5.3.3 During routine maintenance visits, the Landscape Contractor/Management Company shall:
- Remove all litter or surplus discarded materials;
 - Check all plants for damage, security, firmness, fixing and support, and replant in an upright position and re-firm if required;
 - Prune back any damaged shoots/branches to healthy wood and remove encroaching scrub growth from wildflower areas;
 - Keep all planting areas free from weed growth and hoe over and level all cultivated areas and remove weeds to tip, reinstating mulch as necessary;
 - Re-fix displaced, ease where necessary, or replace where damaged, tree ties and shelters.
- 5.3.4 At the end of the first growing season, an inspection of all planting areas shall be carried out by the Management Company to identify plants that have died or are failing to thrive or, in the opinion of the Management Company are likely to die or fail to thrive.
- 5.3.5 The Management Company is responsible for the health and establishment of all plants and therefore should ensure the appropriate amount of fertiliser is applied. Any dead plants shall be removed from the site; replacement plant material shall be of the same size and species.
- 5.3.6 Replacement planting shall be carried out by the Management Company in the planting season following the discovery of the defect. Condition 16 of the planning consent requires annual landscape audit to be undertaken for a period of 5-years following completion of landscaping works, which will help capture the above recommendations.

Retained Habitats

Line of Trees

- 5.3.7 Management of the line of trees will take place outside of the bird nesting season (*i.e.* outside 1st March to 31st August inclusive). The management regime will be as per ongoing management (after 5 years) for the new native hedgerows (see below).

Trees

- 5.3.8 The retained trees will be managed through a low-intervention but proactive approach to maintain their structural integrity, longevity and ecological function, thereby contributing to the maintenance of moderate condition.

- 5.3.9 A detailed visual inspection of all retained trees will be undertaken by the Management Company at two-year intervals, and following any extreme weather events. Inspections will assess tree health, structural condition, canopy continuity and the presence of defects that could affect long-term viability or public safety. Where necessary, proportionate remedial tree surgery will be undertaken to extend tree lifespan and maintain habitat function, informed by a suitably qualified arboriculturalist.
- 5.3.10 All tree works will be undertaken by an approved contractor in accordance with BS3998:2010 and with Local Planning Authority consent where required.
- 5.3.11 Tree works will be programmed outside the bird nesting season wherever practicable. Where retained trees exhibit features with potential to support roosting bats, works will be reviewed by a suitably qualified ecologist. If emergency works are required during the nesting season, a nesting bird check will be undertaken immediately prior to commencement.

Woodland

- 5.3.12 Retained woodland parcel W6 will be managed to ensure moderate condition is retained, in accordance with the following relevant condition assessment criteria:
- maintaining presence of at least two age classes
 - ensuring no significant browsing damage occurs
 - maintaining an absence of invasive species
 - maintaining >80% of canopy trees and understorey shrubs as native species
 - maintaining 0 – 20% temporary open space
 - maintaining three classes of woodland regeneration, i.e. trees 4 – 7cm DBH, saplings and seedlings or advanced coppice regrowth
 - ensuring tree mortality is 10% or less, with no pests or diseases and no crown dieback
 - ensuring no nutrient enrichment or damaged ground occurs, e.g. significant compaction from machinery, litter, etc.
- 5.3.13 Management will be based on low-intensity continuous cover principles to maintain structural diversity while protecting soil and vegetation condition. Selective thinning and small-scale group felling will be undertaken where necessary on a rolling cycle to retain at least two distinct age classes at all times and to maintain temporary open space within the 0–20% target. Canopy retention will involve preferential retention and recruitment of >80% native canopy and understorey species; any non-native individuals will be gradually removed where they threaten composition targets. Natural regeneration will be favoured, supported where necessary by enrichment planting using locally appropriate native stock to ensure the continuous presence of seedlings, saplings, and trees in the 4–7cm DBH class. All interventions will be spatially dispersed to avoid excessive canopy loss or habitat simplification.
- 5.3.14 Browsing pressure is not currently an issue. Should it become an issue, pressure will be controlled through a combination of adaptive deer and/or livestock management,

temporary fencing around regeneration hotspots, and maintenance of dense shrub layers to provide natural protection. Browsing impacts will be monitored annually, with control measures intensified if leader damage or suppressed regeneration is recorded. Invasive non-native species will be actively excluded through routine surveillance and rapid eradication by manual or low-impact mechanical methods before establishment or spread occurs. Tree health will be safeguarded by retaining species and provenance diversity, avoiding wounding during operations, and removing only structurally unsafe or severely diseased individuals, ensuring overall mortality remains below 10% with no widespread crown dieback.

5.3.15 All works will be undertaken using best-practice forestry operations to protect soils and nutrient status. Machinery use will be minimised and restricted to dry or frozen ground, with mats and existing access routes used to prevent compaction or rutting. No fertilisers, soil amendments, or waste materials will be introduced, and arisings will be managed to avoid nutrient enrichment. Ground condition, regeneration success, canopy composition, and tree health will be reviewed on a regular monitoring cycle, allowing prescriptions to be refined to maintain compliance with structural, compositional, and ecological targets over time.

5.3.16 Standing and fallen deadwood will be retained where safe to do so, recognising its importance for woodland species.

Newly Created Habitats

Other Neutral Grassland

5.3.17 Prior to sowing with suitable wildflower mixtures, such as Emorsgate EM3 'Special General Purpose Meadow Mix' or Emorsgate EH1 'Hedgerow Meadow Mix', or similar, the topsoil shall be cultivated to produce, as far as possible, a fine, firm tilth and left to allow any weeds in the soil to germinate. Any weeds or re-growth shall be sprayed with a broad-spectrum herbicide such as glyphosate, and the effectiveness of the application will be reviewed two weeks after the first application. A second herbicide application may be required if any re-growth occurs and this process repeated as necessary to produce a sterile seed bed free from injurious weeds.

5.3.18 Prior to sowing, the seed mix shall be combined with sawdust or barleymeal in the ratio of 1:3. This will aid with a more even sow, especially as the seed mix contains seed of varying sizes, and also allows the areas already sown to be easily identified. Sowing is most effective for the proposed seed mixes at a density of 4g/m² (40 kg per hectare) onto cultivated soil. The wildflower seed shall be broadcast by hand or machine (e.g. fertiliser spreader) onto the soil surface. To achieve a good soil to seed contact, the seed can be lightly rolled or trodden immediately after sowing. The seed must not be buried as wild seed requires light to germinate. The seed will be sown in late summer/early autumn (between August and September), which is when the majority of the sown species would naturally germinate, and those species that require a winter cooling period (vernalisation) to trigger germination are also favoured. If necessary, the seed could be sown in the spring, although the new seedlings will face greater competition from weeds and the germination of species requiring vernalisation will be delayed until the following year.

5.3.19 Within the first year following sowing, wildflower grassland will be cut twice in each growing month, to control weed growth and ensure successful establishment. Areas of wildflower grassland shall be cut back to a height of 40-60mm with cutting in the early summer avoided.

- 5.3.20 Any annuals shall be allowed to flower prior to cutting in mid-summer and cutting of hedgerow margin areas will be avoided (unless height exceeds 500mm, as above under hedgerow management description). All cuttings will be removed from the areas directly following a cut, and no fertiliser or herbicide shall be applied to these areas.
- 5.3.21 Once established, the new areas of wildflower grassland will be subject to a low intensity and varied cutting regime for the second and subsequent years to establish and maintain their ecological value and diversity. The regime comprises an annual or bi-annual hay cut after flowering in July or August, allowing plants to flower and set seed. The cuttings shall be left in place to dry and shed seed for 1-7 days before being removed off-site. The proposed management of the grassland will reduce the soil nutrient levels over time (no fertilizer shall be applied).
- 5.3.22 All open or poorly germinated areas will be repaired and reseeded using the same seed mix during April and September, to ensure the cover of bare ground is kept to a minimum (1% - 5% of total area).
- 5.3.23 Long-sward grassland areas to be maintained along the woodland edge, around the base of trees and around obstructions. These areas are to be strimmed to a minimum height of 150mm every 1-2 years as required.
- 5.3.24 Any encroaching Bracken and scrub will be controlled through hand pulling or digging out to ensure cover remains at <20% and <5% respectively.
- 5.3.25 Species indicative of suboptimal condition (see Table 5.1) shall be controlled through hand pulling or herbicide spot treatment (e.g. Glyphosate) to ensure the combined cover of these species' accounts for <5% of the total area. Similarly, any invasive non-native plant species shall be controlled in the same manner to ensure their continued absence.
- 5.3.26 Remedial measures for newly created wildflower grassland will focus on the species diversity and structural heterogeneity of the sward. This may include additional overseeding with a wildflower seed mixture, should the grassland fail to establish initially, followed by seeding with an alternative wildflower seed mixture should this issue persist. The sward will be maintained with the removal of injurious weeds, Bracken, scrub and invasive non-native species, as necessary, as outlined above. The above management prescriptions will continue for a minimum of 30 years.

Modified Grassland

- 5.3.27 New public amenity grassland areas will be created using Emorsgate EL1 'Flowering Lawn' mixture, or similar, which provides greater foraging opportunities to pollinating invertebrates than typical species-poor amenity lawns, whilst also being able to withstand regular mowing.
- 5.3.28 All open or poorly germinated areas will be repaired and reseeded using the same seed mix during April and September, to ensure the cover of bare ground is kept to a minimum (1% - 10% of total area) and 6-8 vascular plant species are present within the sward per m², where this condition criterion is targeted. Any encroaching Bracken and Bramble will be controlled through hand pulling or digging out to ensure cover accounts for <20% of the total area. Any invasive non-native plant species shall be controlled through hand pulling or herbicide spot treatment (e.g. Glyphosate) to ensure their continued absence.

- 5.3.29 Remedial measures for newly created modified grassland will focus on the species diversity. This may include additional overseeding with a flowering lawn seed mixture, should the grassland fail to establish initially, followed by seeding with an alternative seed mixture should this issue persist. The sward will be maintained with the removal of Bracken, Bramble and invasive non-native species, as necessary, as mentioned above. The above management prescriptions will continue for a minimum of 30 years.

Mixed Scrub

- 5.3.30 Management is unlikely to be required for the first 5 years following planting, pending the results of ongoing monitoring (see Chapter 6 below), aside from routine annual weeding to control undesirable species and non-natives as necessary (see Table 5.1).
- 5.3.31 From Year 5 onwards, occasional control / cutting (approximately every 5 – 10 years) will be carried out to maintain variation in height (up to a maximum of 5m) and structure, to create areas of young regrowth by coppicing, to ensure no single species comprises more than 75% of the cover, and to prevent the areas of scrub encroaching into adjacent habitats. Such management will be on a 5-year cycle, with no more than 25% of the area cut in any one management cycle.
- 5.3.32 No cutting of scrub (once established) will take place within the bird nesting season (*i.e.* between 1st March to 31st August inclusive), in order to safeguard nesting birds.
- 5.3.33 The above management prescriptions will continue for a minimum of 30 years.

Individual Trees

- 5.3.34 Suitable tree species have been selected corresponding to their location on site and a review of soil volumes has also been conducted; producing a soil volume plan to provide further detailed recommendations to increase the likelihood of tree success. Where space is limited, columnar species have been specified including *Carpinus Betulus* 'frans fontaine' and pioneer species have also been specified including *Betula pendula* (Silver Birch) that are resilient to being planted more densely; forcing a higher crown. Accordingly, no requirement to thin trees within the 30-year management period is anticipated.
- 5.3.35 Only 'poor' condition is required for the new individual trees to achieve the required 10% net gain in habitat units. Accordingly, no specific management is technically required beyond the initial establishment phase of the planting. Nonetheless, appropriate management will be implemented, as described below, which will likely improve the condition scoring above 'poor' over time.
- 5.3.36 New tree planting within open space will initially be managed so as to control weeds and promote the development of good specimens. Tree guards or shelters will be used to protect new trees from potential grazing damage (*e.g.* Rabbits). Mulch will be applied to new trees in spring (April) or mulch mats placed around the base. New planting growth will be monitored every six months during the first year following planting and annually thereafter, with weed control, watering, and replanting of failed specimens undertaken as required. Once established, tree shelters and stakes will be removed. Should newly planted trees fail to establish, replacement planting shall be carried out in the following planting season, as necessary.
- 5.3.37 No substantial works to trees (other than trimming of minor growth) will take place within the bird nesting season (between 1st March to 31st August inclusive), in order

to safeguard nesting birds. In the event any management of trees is required within nesting season, e.g. for urgent health and safety reasons, works will be preceded by a nesting bird check carried out by a suitably qualified ecologist no more than three days in advance. Any active nests identified will be cordoned off and protected under chicks have fledged.

- 5.3.38 The above management prescriptions will continue for a minimum of 30 years.

Other Woodland; Broadleaved

- 5.3.39 New native woodland planting will be created within the north of the site. The woodland will comprise at least five or more native tree or shrub species, which are of local provenance.
- 5.3.40 Where appropriate, planting will be conducted at varying densities to create a varied structure and avoid formal regimented lines. Woodland understory planting will be planted at varying densities to improve the structure and diversity of the woodland shrub layer.
- 5.3.41 New woodland planting will initially be managed so as to control weeds and promote the development of good specimens. Newly planted areas in particular will not be subject to any substantial works in the short-term to allow establishment. Ongoing management will ensure the planting does not encroach into adjacent habitats. New woodland planting will generally only be subject to ongoing management on an 'as needed' basis, which may include pruning of tree and shrub species to enhance habitat structure, but will be guided by the management company.
- 5.3.42 The woodland ground-flora will be created through the sowing of a suitable woodland mixture such as Emorsgate's EW1F – Wild Flowers for Woodland mixture, which comprises native herb species which are tolerant of the moderately shady conditions which will be provided within the woodland. This will create a diverse woodland ground flora which flowers in spring and early summer providing additional opportunities for invertebrates, which in-turn provide an additional prey resource for bats and birds. The seed mix should be surface sown and broadcast by hand so as to not damage the tree and shrub root systems, where adjacent to established woodland, trees and hedgerows. Seed is best sown in autumn or early spring and should be left uncovered. During establishment little management is required except for the selective thinning of ruderal species and Bramble in the areas within which seed has been sown. In the long-term ground flora will benefit from good tree management practices. The above will help to establish a recognised woodland plant community and create multiple storeys within the woodland structure.
- 5.3.43 Remedial measures for woodland ground flora will focus on the species diversity. This may include additional overseeding with the same seed mixture, should the ground flora fail to establish initially, followed by seeding with an alternative seed mixture should this issue persist.
- 5.3.44 Remedial measures for newly created woodland will focus on the maintenance of good specimens and maintenance of woodland structure. Any failed trees and shrubs will be replaced. No works to trees (once established) will take place within the bird nesting season (*i.e.* between 1st March to 31st August inclusive).
- 5.3.45 The creation of log piles within the woodland will help create deadwood features which can be topped up overtime as part of ongoing management.

5.3.46 Once the woodland is established, ongoing management will mirror the above management prescriptions for the retained, existing woodland in order to satisfy the criteria to achieve moderate condition.

5.3.47 The above management prescriptions will continue for a minimum of 30 years.

Hedgerows

5.3.48 Only 'poor' condition is required for the new species-rich native hedgerow and native hedgerow planting to achieve the required 10% net gain in hedgerow units. Accordingly, no specific management is technically required beyond the initial establishment phase of the planting. Nonetheless, appropriate management will be implemented, as described below, which will likely improve the condition scoring above 'poor' over time.

5.3.49 New native hedgerows will be regularly monitored following planting so developing gaps are filled with replacement plants, ensuring a dense structure. The hedgerows will be allowed to grow to a height of approximately 1.5m-2m, with an 'A'-shape or chamfered profile to provide a wide base beneficial as cover for wildlife. Once established, most likely after 5-6 years (subject to monitoring), the hedgerows will be cut every 3 years so as to achieve the desired dense hedgerow structure and also to maximise fruit production of fruit-bearing shrub species. Hedgerows will be managed rotationally in alternate years (*i.e.* meaning all hedgerows are not trimmed in the same year) to maintain fruit crops at the site throughout the management rotation. The hedgerow bases will essentially be managed as wildflower grassland, with hedgerow bases subject to an annual cut of 300mm in height. Once established, hedgerow management will take place outside of the bird nesting season (*i.e.* outside 1st March to 31st August inclusive).

5.3.50 Hand pulling or spot treatment with a suitable herbicide will be undertaken as required to ensure >90% of the hedgerows and associated undisturbed ground is free of invasive non-native plant species and recently introduced species.

5.3.51 The above management prescriptions will continue for a minimum of 30 years.

Introduced Shrub, Rain Garden and Other Green Roof

5.3.52 As set out previously, the introduced shrub is a non-significant habitat, and specific management is not required from a BNG perspective. Nonetheless, management of introduced shrub areas is expected to be of a regular, formal nature designed to ensure a tidy and well-kempt appearance, in keeping with their function as ornamental areas, whilst also ensuring that new planting thrives and develops into quality specimens, which will also provide a variety of benefits to wildlife such as pollinating insects. Should newly planted shrubs fail to establish, replacement planting shall be carried out in the following planting season, as necessary. Where significant clipping of mature vegetation is required, this shall be undertaken outside of the bird nesting season (*i.e.* outside of 1st March to 31st August inclusive).

5.3.53 Other green roofs and rain gardens are also non-significant habitats. During the first year following installation of the green roofs on cycle shelters, which will be achieved using a suitable native seed mix or pre-vegetated 'blanket', management is anticipated to be undertaken by the installing contractor or their agent in order to ensure suitable establishment and development, including re-seeding of any failed areas as appropriate.

- 5.3.54 Following initial establishment, the green roofs typically require minimal management, albeit regular (at least annual) maintenance/inspection visits would be anticipated. During inspection visits, any gutters, drains and rainwater outlets will be checked for clogging and unwanted weed species will be removed by hand.
- 5.3.55 Management and maintenance of new rain gardens will focus on ensuring effective drainage performance, healthy vegetation establishment, and long-term visual quality. During the first 2–3 years, maintenance will include regular inspections, removal of litter and sediment, control of weeds and invasive species, and replacement of any failed plants using appropriate native or climate-resilient species. Inlets, outlets, and overflow structures will be kept clear to maintain hydraulic function, and soil surfaces will be lightly cultivated if surface sealing occurs. Thereafter, maintenance will be low-intensity, comprising periodic vegetation management, removal of accumulated debris, and monitoring to ensure infiltration capacity is maintained, with no compaction, nutrient enrichment, or use of fertilisers that could compromise water quality or system performance.

6 Monitoring

6.1 Monitoring Strategy

- 6.1.1** Upon practical completion of the soft landscape / habitat creation works, representatives of the developer, management company and LPA will meet on-site to agree works have been completed and that the 30-year maintenance period can commence.
- 6.1.2** Monitoring of the on-site significant habitats will be undertaken at least annually by the Management Company, to ensure appropriate management is being implemented to achieve the required habitat condition. During the annual inspection all newly created habitats will be checked to ensure that the management objectives are being achieved, and the Management Company will highlight the requirement for and implement any remedial action, as necessary.
- 6.1.3** Periodic monitoring at key milestones will also be undertaken by a suitably qualified ecologist (SQE), where indicated in Table 6.1 below. Monitoring by the SQE will involve a habitat condition assessment of each habitat using the statutory condition assessment sheets. Where necessary, these surveys will inform the need for any changes to the management regime, to ensure the successful development of the habitat creation areas. Monitoring of the other neutral grassland and woodland will take place from May to August, whereas monitoring of all other habitats can take place year-round.

Table 6.1. Monitoring frequency for significant on-site habitat creation

Habitat Type (Ref: Plan 6856/BNG2)	Target Condition	Time to Target Condition	Monitoring Schedule							
			Y1	Y3	Y5	Y10	Y15	Y20	Y25	Y30
Other neutral grassland	Moderate	5 years	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE
Modified grassland	Moderate	4 years	-	✓ SQE	✓ SQE	✓ SQE	-	✓ SQE	-	✓ SQE
Mixed scrub	Moderate	5 years	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE
Other woodland; broadleaved	Moderate	15 years	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE
Urban trees	Poor	10 years	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE
Hedgerows	Poor	1 year	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE
Rain Garden, Other Green Roof, Introduced Shrub	N/A - Poor	1 year	✓ SQE	-	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE	✓ SQE

6.2 Monitoring Reports

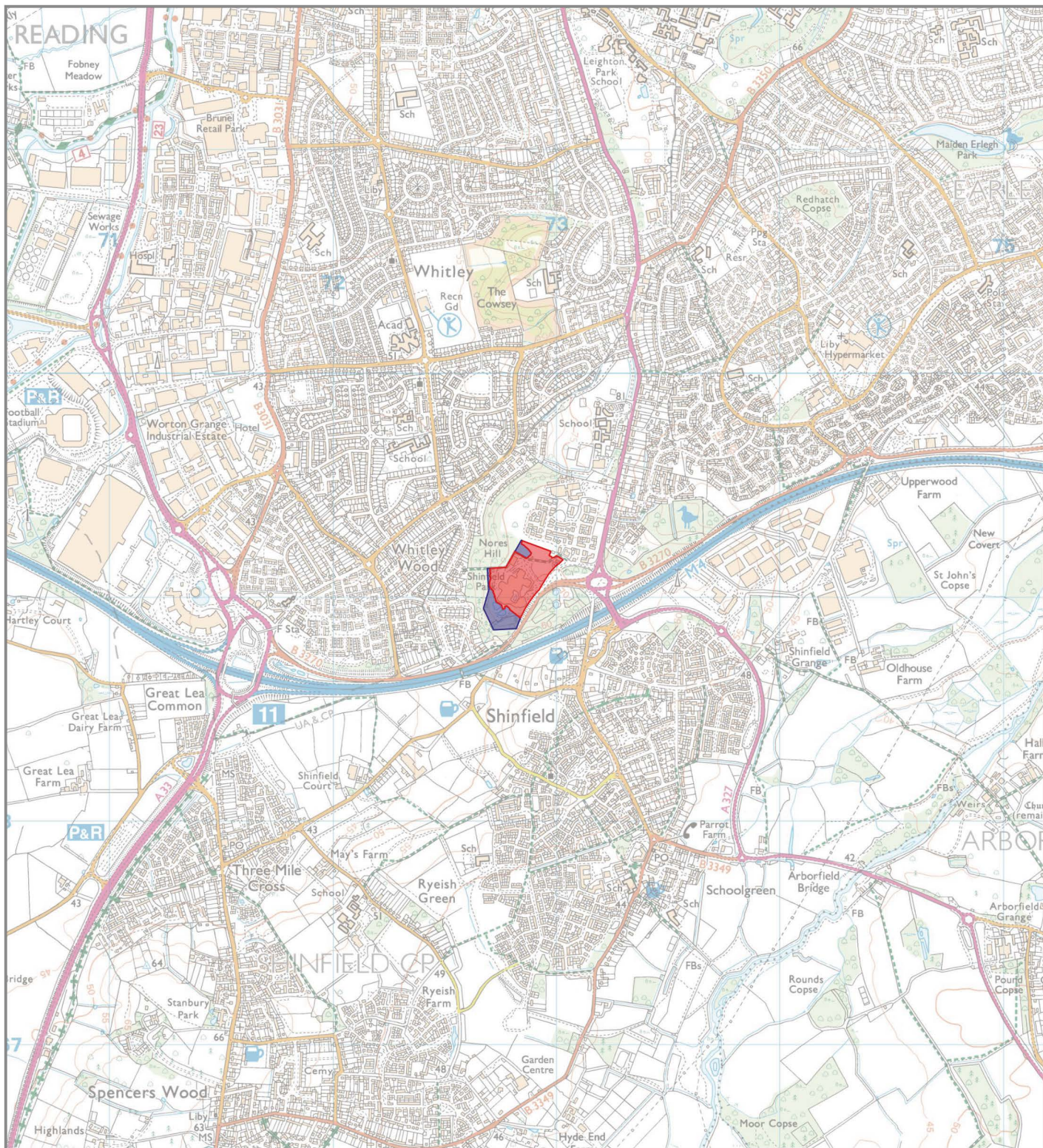
- 6.2.1 A formal record/log of management activities undertaken will be kept by the Management Company, along with details of vegetation development, which shall be used to inform and provide suitable justification for any alterations to the management activities undertaken.
- 6.2.2 Condition assessment sheets will be completed and retained by the SQE. A copy of all monitoring reports and condition assessments will be submitted to the Local Planning Authority by the end of each monitoring year.

6.3 Remedial Measures

- 6.3.1 Where monitoring indicates the required conditions are not being met, or habitat failures or damage are recorded, actions to remedy these (including dates, timelines and responsibility) shall be documented within the monitoring report and implemented. This information will be updated within the HMMP which will then be re-submitted to the local planning authority for written approval. In addition, a suitably qualified ecologist will be contacted for further advice where necessary, for example if works could potentially affect protected species.
- 6.3.2 All rubbish, cuttings, surplus excavated material, *etc.* shall be removed off site. Dead plants shall only be removed after a record of their number and location has been made.

Plan 6856/ECO1:

Site Location



Key:

- Site Location
- Wider Survey Area

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Shinfield Park, Reading

Site Location

6856/BNG1

B/LS

January 2025

CK/BG

PROJECT

TITLE

DRAWING NO.

REV

DATE

QC



Plan 6856/BNG1:

Pre-development Habitat Mapping



- Key:
- Sit e Boundary
 - Artificial unvegetated, unsealed surface (0.0375ha)
 - Developed land; sealed surface: Building (1.4025ha)
 - Developed land; sealed surface: Hardstanding (2.9400ha)
 - Introduced shrub (0.2900ha)
 - Lowland mixed deciduous woodland - Moderate Condition (0.0150ha)
 - Mixed scrub - Poor Condition (0.0075ha)
 - Modified grassland - Moderate Condition (0.4775ha)
 - Ornamental lake or pond (0.0175ha)
 - Other neutral grassland (0.0550ha)
 - Other woodland; broadleaved - Moderate Condition (0.1875ha)
 - Other woodland; broadleaved - Poor Condition (0.0950ha)
 - Line of trees (0.135km)
 - Species-rich native hedgerow (0.035km)
 - Large Urban tree [4]
 - Medium Urban tree [46]
 - Small Urban tree [48]

0 10 20 30 40 m
Scale at A3 - 1:1300

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Shinfield Park, Reading

Pre-development Habitat Mapping

6856/BNG1

K/LS

February 2026

CK/LS



Plan 6856/BNG2:

Post-development Habitat Mapping



- Key:
- Site Boundary
 - Proposed Artificial unvegetated, unsealed surface (0.1625ha)
 - Proposed Developed land; sealed surface: Building (1.7900ha)
 - Proposed Developed land; sealed surface: Hardstanding (1.9850ha)
 - Proposed Introduced shrub (0.1150ha)
 - Proposed Mixed scrub (0.1400ha)
 - Proposed Modified grassland - Moderate Condition (0.0100ha)
 - Proposed Modified grassland - Poor Condition (0.2300ha)
 - Proposed Other green roof (0.0075ha)
 - Proposed Other neutral grassland (0.7650ha)
 - Proposed Other woodland; broadleaved (0.2475ha)
 - Proposed Rain garden (0.0125ha)
 - Retained Other woodland; broadleaved (0.0600ha)
 - Proposed Small Urban Tree [265]
 - Retained Large Urban Tree [1]
 - Retained Medium Urban Tree [27]
 - Retained Small Urban Tree [18]
 - Proposed Native hedgerow (0.17km)
 - Proposed Non-native and ornamental hedgerow (0.445km)
 - Proposed Species-rich native hedgerow (0.17km)
 - Retained Line of trees (0.135km)

0 10 20 30 40 m
Scale at A3 - 1:1300

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Shinfield Park, Reading

Post-development Habitat Mapping

6856/BNG2

M/DO

February 2026

CK/DO



Appendix 6856/1:

Legislation Summary

LEGISLATION SUMMARY

1. In England and Wales primary legislation is made by the UK Parliament, and in Scotland by the Scottish Parliament, in the form of Acts. The main piece of legislation relating to nature conservation in the UK is the Wildlife and Countryside Act 1981 (as amended).
2. Acts of Parliament confer powers on Ministers to make more detailed orders, rules or regulations by means of secondary legislation in the form of statutory instruments. Statutory instruments are used to provide the necessary detail that would be too complex to include in an Act itself¹. The provisions of an Act of Parliament can also be enforced, amended or updated by secondary legislation.
3. In summary, the key pieces of legislation relating to nature conservation in the UK are:
 - Wildlife and Countryside Act 1981 (as amended)
 - Protection of Badgers Act 1992
 - Hedgerows Regulations 1997
 - Countryside and Rights of Way (CROW) Act for England and Wales 2000
 - Natural Environment and Rural Communities Act 2006
 - Conservation of Habitats and Species Regulations 2017
4. A brief summary of the relevant legislation is provided below. The original Acts and instruments should be referred to for the full and most up to date text of the legislation.
5. **Wildlife and Countryside Act 1981 (as amended)**. The WCA Act provides for the notification and confirmation of Sites of Special Scientific Interest (SSSIs) identified for their flora, fauna, geological or physiographical features. The Act contains strict measures for the protection and management of SSSIs.
6. The Act also refers to the treatment of UK wildlife including protected species listed under Schedules 1 (birds), 5 (mammals, herpetofauna, fish, invertebrates) and 8 (plants).
7. Under Section 1(1) of the Act, all wild birds are protected such that it is an offence to intentionally:
 - Kill, injure or take any wild bird;
 - Take, damage or destroy the nest of any wild bird whilst in use* or being built;
 - Take or destroy an egg of any wild bird.

* The nests of birds that re-use their nests as listed under Schedule ZA1, e.g. Golden Eagle, are protected against taking, damage or destruction irrespective of whether they are in use or not.
8. Offences in respect of Schedule 1 birds are subject to special, i.e. higher, penalties. Schedule 1 birds also receive greater protection such that it is an offence to intentionally or recklessly:
 - Disturb any wild bird included in Schedule 1 while it is building a nest or while it is in, on or near a nest containing eggs or young;
 - Disturb dependent young of such a bird.

¹ <http://www.parliament.uk/business/bills-and-legislation/secondary-legislation/statutory-instruments/>

9. Under Section 9(1) of the Act, it is an offence to:
 - Intentionally kill, injure or take any wild animal included in Schedule 5.
10. In addition, under Section 9(4) it is an offence to intentionally or recklessly:
 - Obstruct access to, any structure or place which any wild animal included in Schedule 5 uses for shelter or protection; or
 - Disturb any wild animal included in Schedule 5 while occupying a structure or place which it uses for that purpose.
11. Under Section 13(1) it is an offence:
 - To intentionally pick, uproot or destroy any wild plant listed in Schedule 8; or
 - Unless the authorised person, to intentionally uproot any wild plant not included in Schedule 8.
12. The Act also contains measures (S.14) for preventing the establishment of non-native species that may be detrimental to native wildlife, prohibiting the introduction into the wild of animals (releases or allows to escape) and plants (plants or causes to grow) listed under Schedule 9.
13. **Protection of Badgers Act 1992.** The Act aims to protect the species from persecution, rather than being a response to an unfavourable conservation status, as the species is in fact common over most of Britain. It should be noted that the legislation is not intended to prevent properly authorised development. Under the Act it is an offence to:
 - Wilfully kill, injure, take, possess or cruelly ill-treat* a Badger, or attempt to do so;
 - To intentionally or recklessly interfere with a sett# (this includes disturbing Badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it).

* the intentional elimination of sufficient foraging area to support a known social group of Badgers may, in certain circumstances, be construed as an offence

A sett is defined as “any structure or place which displays signs indicating current use by a Badger”. Natural England advice (June 2009) is that a sett is protected so long as such signs remain present, which in practice could potentially be for some time after the last actual occupation by Badger. Interference with a sett includes blocking tunnels or damaging the sett in any way
14. Licences can be obtained from the Statutory Nature Conservation Organisation (SNCO) for development activities that would otherwise be unlawful under the legislation, provided there is suitable justification. The SNCO for England is Natural England.
15. **Hedgerows Regulations 1997.** ‘Important’ hedgerows (as defined by the Regulations) are protected from removal (up-rooting or otherwise destroying). Various criteria specified in the Regulations are employed to identify ‘important’ hedgerows for wildlife, landscape or historical reasons.
16. **Countryside and Rights of Way (CROW) Act for England and Wales 2000.** The CROW Act provides increased measures for the management and protection of SSSIs and strengthens wildlife enforcement legislation. Schedule 12 of the Act amends the species provisions of the WCA 1981, strengthening the legal protection for threatened species. The Act also introduced a duty on Government to have regard to the conservation of biodiversity and maintain lists of species and habitats for which conservation steps should be taken or promoted, in accordance with the Convention on Biological Diversity.

17. **Natural Environment and Rural Communities Act 2006.** Section 41 of the NERC Act requires the Secretary of State to publish a list of habitats and species that are of principal importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as local planning authorities, in implementing their duty under Section 40 of the Act, to have regard to the conservation of biodiversity in England, when exercising their normal functions. 56 habitats and 943 species of principal importance are included on the S41 list. These are all the habitats and species in England that were identified as requiring action in the UK Biodiversity Action Plan (BAP).
18. **Conservation of Habitats and Species Regulations 2017 (as amended).** The Regulations enact the European Union's Habitats Directive (92/43/EEC) in the UK. The Habitats Directive was designed to contribute to the maintenance of biodiversity within member states through the conservation of sites, known in the UK as Special Areas of Conservation (SACs), containing habitats and species selected as being of EC importance (as listed in Annexes I and II of the Habitats Directive respectively). Member states are required to take measures to maintain or restore these natural and semi-natural habitats and wild species at a favourable conservation status.
19. The Regulations also require the compilation and maintenance of a register of European sites, to include SACs and Special Protection Areas (SPAs)² classified under Council Directive 79/409/EEC on the Conservation of Wild Birds (the Birds Directive). These sites constitute the Natura 2000 network. The Regulations impose restrictions on planning decisions likely to significantly affect SPAs or SACs.
20. The Regulations also provide protection to European Protected Species of animals that largely overlaps with the WCA 1981, albeit the provisions are generally stricter. Under Regulation 43 it is an offence, *inter alia*, to:
 - Deliberately capture, injure or kill any wild animal of a European Protected Species;
 - Deliberately disturb any wild animals of any such species, including in particular any disturbance likely to impair their ability to survive, to breed or reproduce, to rear or nurture their young, to hibernate or migrate, or which is likely to affect significantly their local distribution or abundance;
 - Deliberately take or destroy the eggs of such an animal;
 - Damage or destroy a breeding site or resting place of such an animal.
21. Similar protection is afforded to European Protected Species of plants, as detailed under Regulation 47.
22. The Regulations do provide a licensing system that permits otherwise illegal activities in relation to European Protected Species, subject to certain tests being fulfilled.

² Special Protection Areas (SPAs) are protected sites classified in accordance with Article 4 of the EC Directive on the Conservation of Wild Birds (79/409/EEC) (aka the Birds Directive), which came into force in April 1979. SPAs are classified for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species.

Appendix 6856/2:

Work Schedule

WORK SCHEDULE – YEARS 1-5

(Schedule to be reviewed every five years between the client and the management firm to review management scheme)

Habitat	Management Objective	Operation	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Existing Trees	To promote healthy future growth and keep all footpaths clear from obstructions	Check all trees. Removal of dead, dying or diseased trees & pruning as required.												
	To maintain tree specimens with regard to nesting season.	Tree pruning where required outside of bird nesting season.												
Proposed Tree Planting	To ensure success of scheme and to promote healthy future growth and keep all footpaths and routes clear from obstructions.	Check all trees. Removal of dead, dying or diseased trees & pruning as required. Replacement with same or an approved substitution if unavailable.												
	To provide planting with the greatest opportunity for success.	Repair/replace/reinstate all stakes, guards and ties as required.												
Proposed Mixed scrub	To ensure success of scheme and to promote healthy future growth.	Check all plants. Removal of dead, dying or diseased plants & pruning as required. Replacement with same or an approved substitution if unavailable.												
	To provide planting with the greatest opportunity for success.	Repair/replace/reinstate all stakes, guards and ties as required.												
Proposed Woodland	To provide planting with the greatest opportunity for success and to promote healthy future growth.	Check all trees. Removal of dead, dying or diseased trees & pruning as required. Replacement planting if required should be with same or an approved substitution if unavailable.												
	To provide planting with the greatest opportunity for success.	Repair/replace/reinstate all stakes, guards and ties as required.												
	To minimise competition from surrounding weed/grass growth.	Pulling of ruderal vegetation around the base of each tree/shrub. Addition of mulch or mulch mats at base of trees and shrubs in spring to help manage weed growth.												

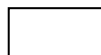
Habitat	Management Objective	Operation	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	To promote a diverse ground flora	Annual cut of ground vegetation in August to a height of between 40cm – 75cm. Cuttings to be removed 1-7 days following cut.												
Other neutral grassland	To maintain enhance / maintain floristic diversity. Hedgerow margins areas shall be left unmown.	In 1 st year, grass cutting/strimming to height of between 40- 60mm, twice a month during growing season. Cuttings to be removed directly following cut. Further cuts in October and March if necessary to maintain a height of c.50 mm between August and March. 2m strip of grassland adjacent to hedgerows and woodland to be left unmown for an extended period of time and subject to an annual cut in in late autumn.												

Habitat	Management Objective	Operation	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Modified grassland	To ensure all grassed areas are not overgrown and are suitable for use at all times whilst maintaining some value to wildlife.	Throughout the first year grass cutting is to be conducted every 7–10 days to a height of between 40-60 mm and arisings removed. After the first year to permit flowering, mowing can be relaxed from late June with cutting conducted every 4-8 weeks as required.												

Key:



Management required



Management not required

LANDSCAPE MANAGEMENT SCHEDULE – YEARS 6-10

(Schedule to be reviewed every five years between the client and the management firm to review management scheme)

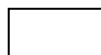
Habitat	Management Objective	Operation	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Expected Variation
All Trees including woodland	To ensure success of scheme and to promote healthy future growth and keep all footpaths and routes clear from obstructions	Check all trees. Removal of dead, dying or diseased trees & pruning as required. Replacement trees reviewed with the client, if required to maintain landscape structure should be replaced with same or an approved substitution if unavailable.													Plant losses should be minimal.
	To maintain tree specimens with regard to bird nesting season.	Tree pruning outside of bird nesting season.													
Mixed scrub	To ensure success of scheme and to promote healthy future growth.	Check all shrubs. Removal of dead, dying or diseased shrubs & pruning as required. Replacement shrubs reviewed with the client, if required to maintain landscape structure should be replaced with same or an approved substitution if unavailable.													Once scheme matures, plant losses should be minimal.
Woodland	To ensure success of scheme and to promote healthy future growth and keep all footpaths and routes clear from obstructions.	Check all trees. Removal of dead, dying or diseased trees/shrubs & pruning as required. Replacement with same or an approved substitution if unavailable.													Once scheme matures, plant losses should be minimal.
	To provide planting with the greatest opportunity for success.	Repair/replace/reinstate all stakes, guards and ties as required.													
	To minimise competition from surrounding weed/grass growth.	Pulling of ruderal vegetation around the base of each tree/shrub.													No reduction
	To ensure success of scheme, promote healthy future growth and create a structurally diverse woodland.	Management of 25% of woodland planting on rotation every 7 – 10 years.													
Hedgerow	To promote ongoing healthy future growth and maintain shape and height of existing hedgerows.	Pruning as required to maintain height of hedgerows at 1m, outside of bird nesting season.													Plant losses should be minimal.
	To maintain native hedges with regard to bird nesting season.	Hedge pruning every other year in January/February.													

Habitat	Management Objective	Operation	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Expected Variation
Other neutral grassland	To maintain high standard of appearance and ensure all wildflower grassed areas offer floral and structural diversity and do not become encroached by scrub.	Annual grass cutting/strimming to height of between 40 - 60 mm in late July or August. If necessary, further cuts between October and March to maintain height of ~50mm. Grassland edges, banks, scrub margins and grass around obstructions to be strimmed on an ad-hoc basis (every 1-2 years) to encourage a tall sward height and structural heterogeneity amongst the sward. Cuttings to be removed 1-7 days following cut. Removal of colonising scrub by lopping or digging up by hand as required.													No reduction
Modified grassland	To ensure all grassed areas are not overgrown and are suitable for use at all times whilst maintaining some value to wildlife.	Grass cutting is to be conducted to a height of between 40-60 mm as required in Spring and early Summer, and arisings removed. Mowing can be relaxed from late June with cutting conducted every 4-8 weeks as required.													No reduction

Key:



Management required



Management not required

LANDSCAPE MANAGEMENT SCHEDULE – YEARS 10 – 30+

(Schedule to be reviewed ten years between the client and the management firm to review management scheme)

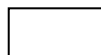
Habitat	Management Objective	Operation	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Expected Variation
All Trees including woodland	To ensure success of scheme and to promote healthy future growth and keep all footpaths and routes clear from obstructions	Check all trees. Removal of dead, dying or diseased trees & pruning as required. Replacement trees reviewed with the client, if required to maintain landscape structure should be replaced with same or an approved substitution if unavailable.													No reduction
	To maintain tree specimens with regard to bird nesting season.	Tree pruning outside of bird nesting season.													
Mixed scrub	To ensure success of scheme and to promote healthy future growth.	Check all shrubs. Removal of dead, dying or diseased shrubs & pruning as required. Replacement shrubs reviewed with the client, if required to maintain landscape structure should be replaced with same or an approved substitution if unavailable.													Once scheme matures, plant losses should be minimal.
Woodland	To ensure success of scheme and to promote healthy future growth and keep all footpaths and routes clear from obstructions.	Check all trees. Removal of dead, dying or diseased trees/shrubs & pruning as required. Replacement with same or an approved substitution if unavailable.													Once scheme matures, plant losses should be minimal.
	To provide planting with the greatest opportunity for success.	Repair/replace/reinstate all stakes, guards and ties as required.													
	To minimise competition from surrounding weed/grass growth.	Pulling of ruderal vegetation around the base of each tree/shrub.													
	To ensure success of scheme, promote healthy future growth and create a structurally diverse woodland.	Management of 25% of woodland planting on rotation every 7 – 10 years.													No reduction
Hedgerows	To ensure success of scheme and to promote healthy future growth and robust hedgerow is created.	Check all hedges. Removal of dead, dying or diseased hedges & pruning as required.													No reduction

Habitat	Management Objective	Operation	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Expected Variation
Other neutral grassland	To maintain high standard of appearance and ensure all wildflower grassed areas offer floral and structural diversity and do not become encroached by scrub.	Annual grass cutting/strimming to height of between 40 - 60mm in late July or August. If necessary, further cuts from October to March to maintain sward height at ~50mm. Grassland edges, banks, scrub margins and grass around obstructions to be strimmed on an <i>ad hoc</i> basis (every 1-2 years) to encourage a tall sward height and structural heterogeneity amongst the sward. Cuttings to be removed 1-7 days following cut. Removal of colonising scrub by lopping or digging up by hand as required.													No reduction
Modified grassland	To ensure all grassed areas are not overgrown and are suitable for use at all times whilst maintaining some value to wildlife.	Grass cutting is to be conducted to a height of between 40-60 mm as required in Spring and early Summer, and arisings removed. Mowing can be relaxed from late June with cutting conducted every 4-8 weeks as required.													No reduction

Key:



Management required



Management not required

ecology • landscape planning • arboriculture



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