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Habitat Management and Monitoring Plan

171 Evendons Lane,
Wokingham

Prepared For:

Propco (Wokingham) Ltd

Date: 14/10/2025

PEG602-15C

171 Evendons Lane, Wokingham



Document Control

Revision	Issue Status	Notes	Prepared By / Date	Reviewed By / Date	Approved By / Date
A	Draft	First Draft	Eilidh Brown/ 22.09.2025	Steph Robertson / 03.10.2025	-
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C	Issue	Issue	Eilidh Brown/ 14.10.2025	-	-

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APPENDICES

- Appendix A: ECO-5904 – Evendons Lane, Wokingham
– Ecological Appraisal.
- Appendix B: PEG602-08C – 171 Evendons Lane,
Wokingham BNG Report

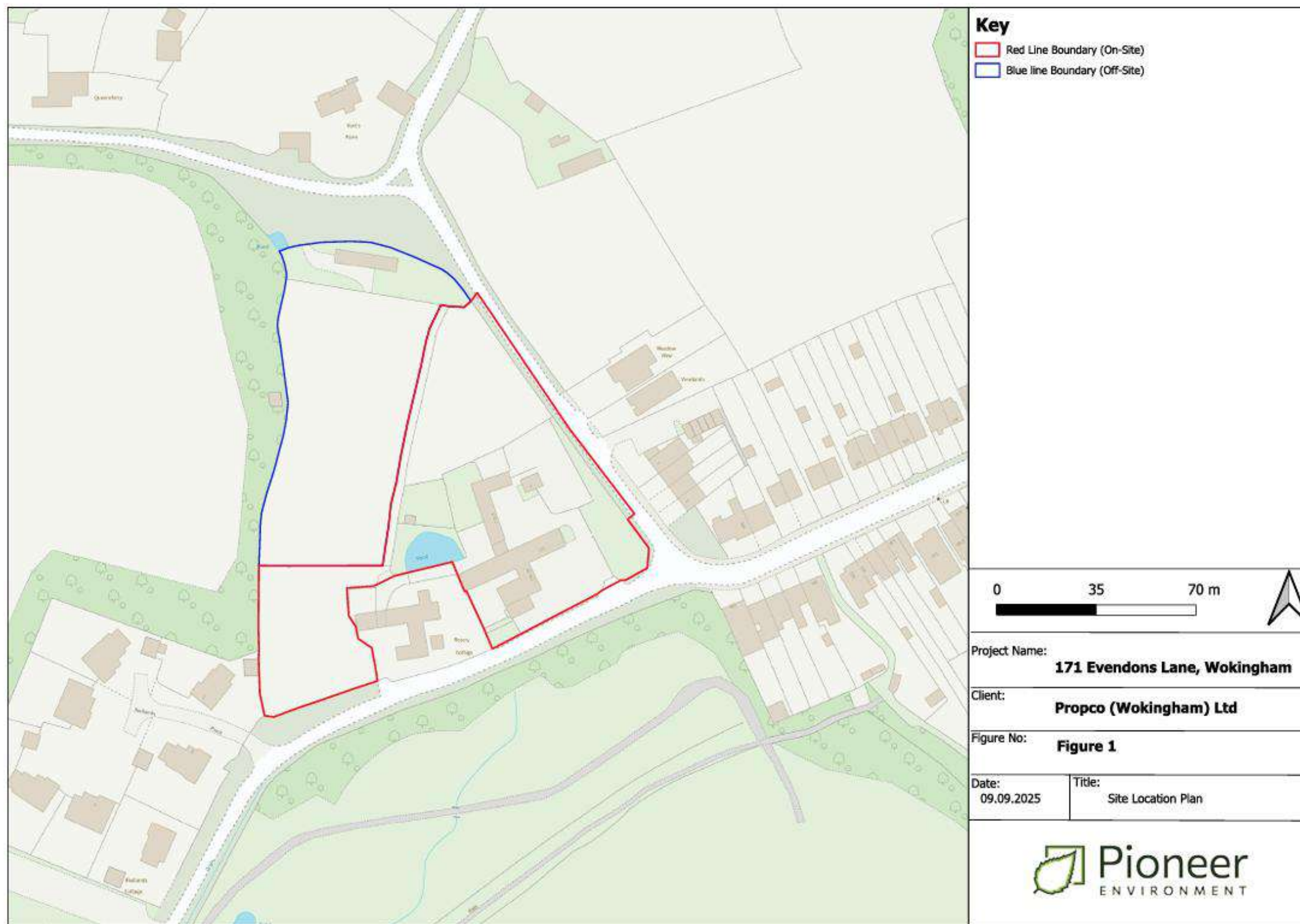
1. Project Background

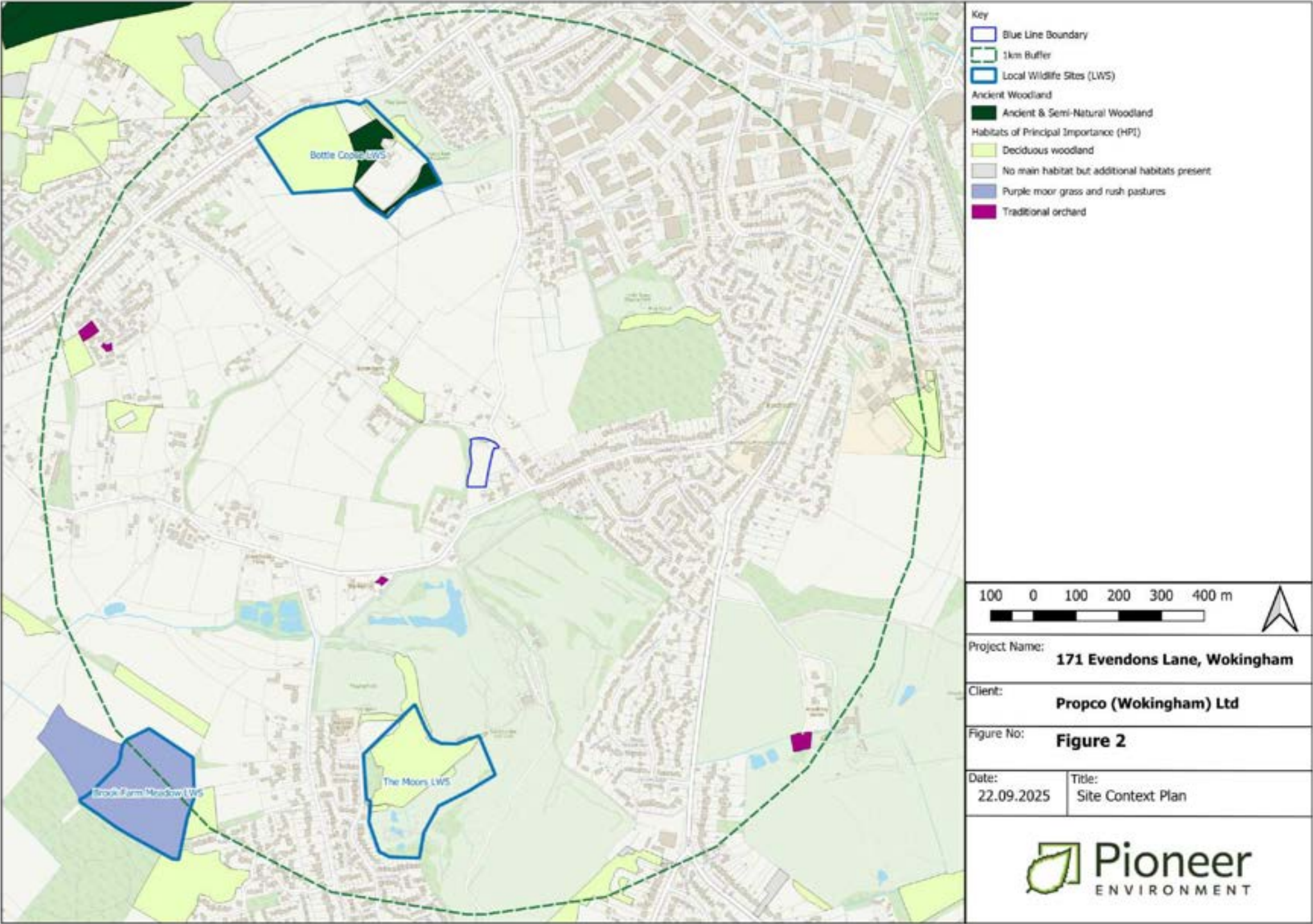
Site Overview	
Project type	Off-Site delivery
Development Name and Address	171 Evendons Lane, Wokingham, RG41 4EH
BNG Project Name and Address	171 Evendons Lane, Wokingham, RG41 4EH
Author Organisation	Pioneer Environment Group Ltd.
Landowner	Propco (Wokingham) Ltd
Land Manager	Propco (Wokingham) Ltd
Responsible person/organisation for creating or enhancing the habitat	Propco (Wokingham) Ltd
Period covered by this management plan	December 2025 – December 2055
Planning authority	Wokingham Borough Council
Planning reference (if applicable)	231351
BNG register reference (if applicable)	N/A
Central OS grid reference	SU 79868 66970
Metric revision/title	‘PEG602-08A– Appendix C –Biodiversity Net Gain Metric’ from September 2025
Are any Irreplaceable Habitats present onsite	Yes: ☐ No: ☒

HMMP Summary

Habitats to be Retained, Enhanced and Created
The following Habitat Management and Monitoring Plan (HMMP) covers an area of land, located outside of the proposed development area for the outline planning application (planning reference: 231351), that will be used to deliver biodiversity net gains, hereafter referred to as ‘Off-Site’. Management of the habitats within the development footprint are detailed within the separate Landscape and Ecological Management Plan (LEMP) for the ‘On-Site’ areas. Habitat Enhancement Habitats to be enhanced within the Off-Site area include other neutral grassland and bramble scrub. Areas of other neutral grassland will be enhanced in condition from Poor to Moderate; a small area within the centre of the field will be enhanced to traditional orchards in Moderate condition, and areas of bramble scrub will be enhanced to mixed scrub in Moderate condition. Habitat Creation A total of 0.17 ha of baseline habitats will be lost to facilitate the proposed landscape plan, including areas of other neutral grassland, bramble scrub, ruderal/ephemeral, tall forbs, and developed land; sealed surface. Created habitats include: modified grassland and artificial unvegetated, unsealed surface access paths; additional areas of other neutral grassland; extension of areas of mixed scrub with additional planting; small areas of developed land; sealed surface; and the planting of 40 rural trees.
Timescales for Actions
The legal obligation for the landowner, stated within the Section 106, is to manage the habitat for a 30-year period and the implementation of the approved HMMP must commence no later than one year from the commencement of development. The anticipated start date of proposed works is to be confirmed. Habitat enhancement and creation of the Off-Site area will begin once the scheme is consented. By Year 5, establishment management of the site will have been completed for most habitats, and post-establishment management and monitoring will then be undertaken. Between Years 10-15, the site is expected to have largely achieved the targeted habitat condition scores. Long-term management will commence after initial establishment, continuing for a total of 30 years.
Monitoring Requirements
Monitoring will be undertaken annually for 1-5 years, thereafter in years 10, 15, 20, 25 and 30. The key aim of monitoring will be to track the success of targets for habitat enhancement and to trigger any remedial measures, where necessary. This is an adaptive management plan; over time, it may be necessary to adjust management measures according to the success of the outcomes. This will be a process of monitoring, evaluating, and modifying

the plan, as required, to reach the same desired outcomes. The responsible authority will be consulted if any significant changes are required. Any other qualitative or supporting information will be collected, as required.
Required Consents and Licences
Consent has been provided by the landowner to make the necessary changes and legal agreements associated with this project. No licenses are necessary.
Funding
The responsibility of funding the habitat creation, monitoring and management will fall with the land manager (Propco (Wokingham) Ltd).
Legal Agreement
A Section 106 agreement is in place for the proposed development of land at 171 Evendons Lane (Wokingham Borough Council, 2024) which secures the Off-Site area and makes this HMMP legally binding, for at least 30 years, to secure the delivery of habitat remedial work required to ensure the target habitat types and conditions are met.





Site Summary

Summary of the Site

The Off-Site area is approximately 0.54 hectares (ha) in size, located on the south-west edge of the town of Wokingham, Berkshire. The Off-Site area comprises a large field, which was formerly used for horse grazing, and the associated horse stable and access is situated to the north of this area. Areas of bramble scrub and tall forb vegetation dominated by nettles (*Urtica dioica*) are scattered around the boundary of the Off-Site area. Areas of short ephemeral/ruderal vegetation has grown on the areas of gravel/bare ground around the old stable block.

Three Local Wildlife Sites (LWS) are situated within 1km of the Off-Site area; the closest is Bottle Copse LWS, located 0.56 km to the north and is designated for its wet woodland. The wider landscape consists of open greenspace, farmland, and residential houses, with the built-up environs of Wokingham situated to the north-east of the Off-Site location. Wokingham town centre is situated approximately 2.08 km to the north-east.

The adjacent area (referred to as ‘On-Site’) has had an outline planning application submitted in June 2023 (planning reference: 231351) for the following:

“Outline application with all matters reserved except for access, for the proposed erection of a 64 bed care home (Use Class C2) with site access, parking, hard and soft landscaping and other associated works following demolition of existing commercial buildings.”

This Off-Site area is proposed to be enhanced to off-set the loss of habitat within the On-Site area, with the enhancement of the grassland to a more species-rich other neutral grassland (wildflower/ meadow), an area will be enhanced to a tradition orchard, and areas of mixed scrub and individual rural trees will be created.

Post-development plans will provide new rural tree, mixed scrub, other neutral grassland and traditional orchard, along with the creation of modified grassland and artificial unvegetated, unsealed surfaces footpaths to allow access to residents from the adjacent care home.

Site Context Photos



Phasing Strategy

Will the proposed work measures be delivered in phases?	Yes: ☐ No: ☒
This management plan is structured as a single, continuous scheme rather than being divided into phases. Its primary objective is to achieve and sustain BNG targets over a 30-year period.	

Roles and Responsibilities

Ecologist or Other Professional Responsible for HMMP	
Name or Initials	E. Brown MSc, Ecologist
Organisation	Pioneer Environment Group Ltd.
Responsibility	
Pioneer Environment Group Ltd. (PEG) will be responsible for overseeing the preparation of this Habitat Management and Monitoring Plan (HMMP) and for providing ecological advice on the implementation of habitat establishment and management measures. PEG will also ensure that the landowner or management organisation is informed of any potential constraints related to the presence of protected and/or notable species on the site.	
Statement of Competency	
PEG brings extensive experience in the ecological consultancy sector, collaborating with a diverse range of clients, including landowners, local authorities, government agencies, and private developers. Our expertise lies in identifying ecological constraints and implementing land management strategies that enhance biodiversity. Additionally, PEG specialise in habitat creation initiatives, particularly for river restoration projects and Biodiversity Net Gain (BNG) schemes, ensuring that our work not only meets regulatory requirements but also contributes to long-term environmental sustainability. This Habitat Management and Monitoring Plan (HMMP) has been developed by Ecologist Eilidh Brown, who has over five years of experience in the field, and has been quality assured by Director Martin Woolley, a Chartered Member of the Chartered Institute of Ecology and Environmental Management (MCIEEM). Our team's combined knowledge ensures that the plan is both scientifically robust and aligned with best practices in ecological management.	

Landowner or Land Manager	
Name or Initials	Propco (Wokingham) Ltd
Organisation	N/A

Responsibility	Start Date:	December 2025	End Date:	December 2055
The responsibility of creating, enhancing and retaining proposed habitats remains with the landowner for 30 years, unless the land changes ownership, in which case the new owner will become responsible for retaining the area of habitat designated for BNG.				
Statement of Competency				
The landowner has been made aware of how to implement the habitat enhancement and creation measures, and monitoring will inform the landowner on how to implement the necessary changes in order to meet the desired conditions.				
Management Organisation(s) Responsible for Implementing the HMMP				
Name or Initials		N/A		
Organisation		N/A		
Responsibility	Start Date:	N/A	End Date:	N/A
N/A				
Statement of Competency				
N/A				
LPA or Responsible Body for Reviewing HMMP				
Name or Initials		Wokingham Borough Council		
Organisation		Wokingham Borough Council		
Responsibility	Start Date:	December 2025	End Date:	December 2055
Responsibilities of the LPA include the reviewing of this HMMP and subsequent monitoring reports. Their long-term involvement will ensure that all parties involved are fulfilling their responsibilities to uphold this HMMP and address any changes that need to be made.				

Overview of Baseline Site Use

The Off-Site area is approximately 0.54 hectares (ha) in size, located on the south-west edge of the town of Wokingham, Berkshire.

The Off-Site area comprises a large field, which was formerly used for horse grazing, with the associated horse stable block and access situated to the north of this area. Areas of bramble scrub and tall forb vegetation dominated by nettles are scattered around the boundary of the Off-Site. Areas of short ephemeral/ruderal vegetation has grown on the areas of gravel/bare ground around the old stable block. Full details are provided within the separate Ecological Assessment (Aspect Ecology, 2023) and Biodiversity Net Gain Assessment report (Pioneer Environment, 2025).

The predominant habitat is grassland (0.4406 ha) which was recorded as ‘other neutral grassland’ in accordance with UK Habitat classification (UKHab), though the sward was relatively species-poor with a high proportion of grass cover and species indicative of suboptimal condition were present. The field has previously been divided into two smaller field parcels and grazed by horses until around 2022, from a review of aerial imagery it appears to have been managed as a horse pasture for over 20 years.

Due to the lack of management, areas of ‘bramble scrub’ (0.047 ha) and ‘tall forbs’ (0.0271 ha) dominated by nettles have established along the periphery of the field and along boundary features. The old stable block and associated areas of hardstanding have been classified as ‘developed land; sealed surface’ (0.0124 ha) and areas of gravel have been colonised by ‘ruderal/ephemeral’ vegetation (0.0159 ha).

Overview of Proposed Site Use

This Off-Site area is proposed to be enhanced to off-set the loss of habitat within the On-Site area from the proposed development. Proposed habitat works include the enhancement of the grassland to a more species-rich other neutral grassland (wildflower/ meadow grassland), enhancement of an area of other neutral grassland to a traditional orchard, and areas of mixed scrub and individual rural trees will be created.

Post-development plans will provide new rural tree, mixed scrub, enhanced other neutral grassland, and an area of traditional orchard, along with the creation of modified grassland and artificial unvegetated, unsealed surfaces footpaths to allow access for residents from the adjacent care home to utilise this area.

Site Baseline, Environmental Information and Associated Impacts Checklist

Baseline and Environmental Information	Prompts for when these may be relevant.	Check box if included	Document Reference or Reason if not included
Statutory / Non-statutory Designated Sites	Will your proposals lead to direct or indirect effects on designated sites?	☐	The proposals are highly unlikely to have any impact on designated sites, with no international or national statutory designated sites within 5km or 2km, respectively. Three non-statutory designated sites, specifically Local Wildlife Sites (LWS), are located within 1km of the Off-Site. Proposals will cause negligible impact on the surrounding environment, and they are unlikely to cause any significant increase to chemical, noise or light pollution.
Protected and Notable Species	Does the presence or proximity of specific species on or near your site present any constraints or opportunities to project design or management?	☒	As part of the surveys conducted for the Ecological Appraisal by Aspect Ecology (2023), a single great crested newt (<i>Triturus cristatus</i>) was recorded within the pond located On-Site and the proposed development has been entered into the NatureSpace Partnership District Licensing scheme. Refer to Appendix A - ECO-5904 – Evendons Lane, Wokingham – Ecological Appraisal. The former office building on the Site was identified as a confirmed common pipistrelle (<i>Pipistrellus pipistrellus</i>) roost in 2020, but surveys conducted in 2025 recorded the species as absent. Brown long-eared (<i>Plecotus auritus</i>) droppings were detected by eDNA analysis in 2020, and a live individual was confirmed roosting in 2025. These roosts will be covered under a ‘low impact’ licence prior to demolition. There will only be benefits to protected or notable species as a result of the habitat enhancement works which will provide additional foraging, hibernating and nesting habitat for a range of species.
Invasive Non-Native Species (INNS)	Are any INNS present onsite that could affect the proposals?	☐	No INNS identified within the Off-Site area.
Biological Records Plan - Sites and Species	Does the presence of designated sites or specific species on or near the site present any constraints or opportunities to proposals?	☒	Three LWS are located within 1km of the Off-Site area; due to the nature of proposed works, there are no expected constraints or opportunities to proposals due to designated sites. As stated above in the Protected and Notable Species section, great crested newts are present within the area, and the proposed development has been entered into the NatureSpace District Licensing scheme. There will only be benefits to protected or notable species, of all groups, as a result of the habitat enhancement this will provide additional foraging, hibernating and nesting habitat for a range of species
Baseline Habitats Survey	Is this current and important HMMP information located in a separate document? If so, provide details on where it is located.	☒	The baseline habitat survey was compiled as part of the Ecological Appraisal Report (Aspect Ecology, 2023) and the updated BNGA Report (Appendix B – PEG602-08C – 171 Evendons Lane, Wokingham BNG Report).
Public Access	Has public access, or proposals to allow public access, influenced your management prescriptions? If so, how?	☐	The Off-Site area is on private land with no public access.
Climate	Are local climate conditions and, or, climate change likely to impact the target habitat retention, creation or enhancement?	☐	Climate is unlikely to have a significant effect on the proposed habitats within the next 30 years.
Geology and Topography	Any geological or topographical constraints or opportunities?	☐	The Off-Site area sits on ‘Bagshot formation – sand’ bedrock geology. The proposed habitat works within the Off-Site are unlikely to have any geological or topographical constraints or opportunities.
Agricultural Land Status	Does the site support any land favourable for agricultural management? Could this affect the proposals?	☐	The Off-Site area has not been historically used for agricultural purposes (e.g. arable crops); given the size, there are limited opportunities for the Off-Site area to be utilised for agricultural purposes.
Soils and Substrates	Do soils and substrates present any constraints or opportunities?	☐	Soils and substrates do not present any constraints or opportunities to the habitat creation works. Other neutral grassland is already present within the Off-Site area, adjacent to where more of this habitat will be created. It is therefore likely that soil/substrate will be similar.
Contaminated Land	If there is any contaminated land, will this present any constraints?	☐	There is no known contaminated land Off-Site and works are unlikely to create any contaminated land.

Hydrology and Drainage	Will the site hydrology present any constraints or opportunities?	☐	Hydrology is not likely to present any constraints or opportunities to the development.
Flood Risk Zones	Is the site within a flood risk zone? Will that present any site management risks?	☐	The Off-Site area falls within an area with ‘Very low’ yearly chance of flooding from surface water, rivers and sea, groundwater or reservoirs according to Gov.uk (https://check-long-term-flood-risk.service.gov.uk/postcode) and flooding is therefore not considered an constraint.
Landscape Character and Designations	Does the landscape character of the site present any constraints or opportunities?	☐	The landscape character of the Off-Site area does not present any constraints or opportunities.
Historic Land Use	Does the historic land use present any constraints or opportunities?	☐	Historic land use does not present any constraints or opportunities.
Historic Environment and Earth Heritage	Are there any historic environment designations? What are the implications for your plan?	☐	There are no historic environment designations.
Other – please specify	Any other details - for example underground services or overhead powerlines, which may impact habitat management.	☐	N/A.

Biological Records

Protected and Notable Species (BI-T02)

Provide a concise summary of the notable species records within the zone of influence of the project and any potential impacts from the project.

Species	Dates	Conservation Status	Distance of Closest Record	Potential Impact from Project
Great crested newt	June 2021	Protected in the UK under the Wildlife and Countryside Act, 1981. Priority Species under the UK Post-2010 Biodiversity Framework. Listed as a European Protected Species under Annex IV of the European Habitats Directive.	8m to the south-east	Positive
Brown long-eared	July 2025	Protected in the UK under the Wildlife and Countryside Act, 1981. Priority Species under the UK Post-2010 Biodiversity Framework. European Protected Species under Annex IV of the European Habitats Directive.	A single BLE was observed roosting in the building within the On-Site area, c. 36m to the south-east.	Positive
Common pipistrelle	July 2020	Protected in the UK under the Wildlife and Countryside Act, 1981. Priority Species under the UK Post-2010 Biodiversity Framework. European Protected Species under Annex IV of the European Habitats Directive.	A single common pipistrelle was observed emerging from the building within the On-Site area, c. 36m to the south-east.	Positive

Summary of Protected and Notable Species (BI-B03)

The mature oak in H3 was confirmed as a transient roost in 2012; however, surveys undertaken in 2020 recorded no roosting activity (Aspect Ecology, 2023). This tree will be retained and suitably buffered during the proposed development.

The former office building on the Site was identified as a confirmed common pipistrelle (*Pipistrellus pipistrellus*) roost in 2020, but surveys conducted in 2025 recorded the species as absent. Brown long-eared (*Plecotus auritus*) droppings were detected by eDNA analysis in 2020, and a live individual was confirmed roosting in 2025. These roosts will be covered under a ‘low impact’ licence prior to demolition.

Great crested newt population estimate surveys were undertaken during April to June 2021. These recorded only a single female GCN, during the torching survey on 21st June 2021. No other amphibians were recorded during the surveys. The development site has been entered into the NatureSpace Partnership District Licensing scheme and temporary amphibian fencing with pitfall trapping has been conducted, with no GCN or other amphibian recorded during the checks.

The aforementioned species will be relevant to this HMMP due to their proximity and the opportunity for the proposed habitat enhancement/ creation works within the Off-Site area to create better quality habitat that will benefit these species and other notable species (e.g. hedgehogs).

Constraints and Opportunities for Project (BI-B04)

The proposed habitat enhancements/ creation works will offer a wider range of feeding habitat, providing additional foraging, commuting, hibernating and nesting habitat for a range of species.

Works in relating to the HMMP should proceed under species best practice measures as outline in the Ecological Appraisal report (Appendix A) and NatureSpace Partnership Best Practice Principles for GCN. Proposed habitat works will be largely habitat enhancement and will not require the clearance of extensive areas of vegetation. Should any extensive vegetation clearance be required, advice should be sought from an ecologist and supervision from an Ecological Clerk of Works (ECoW) will likely be required.

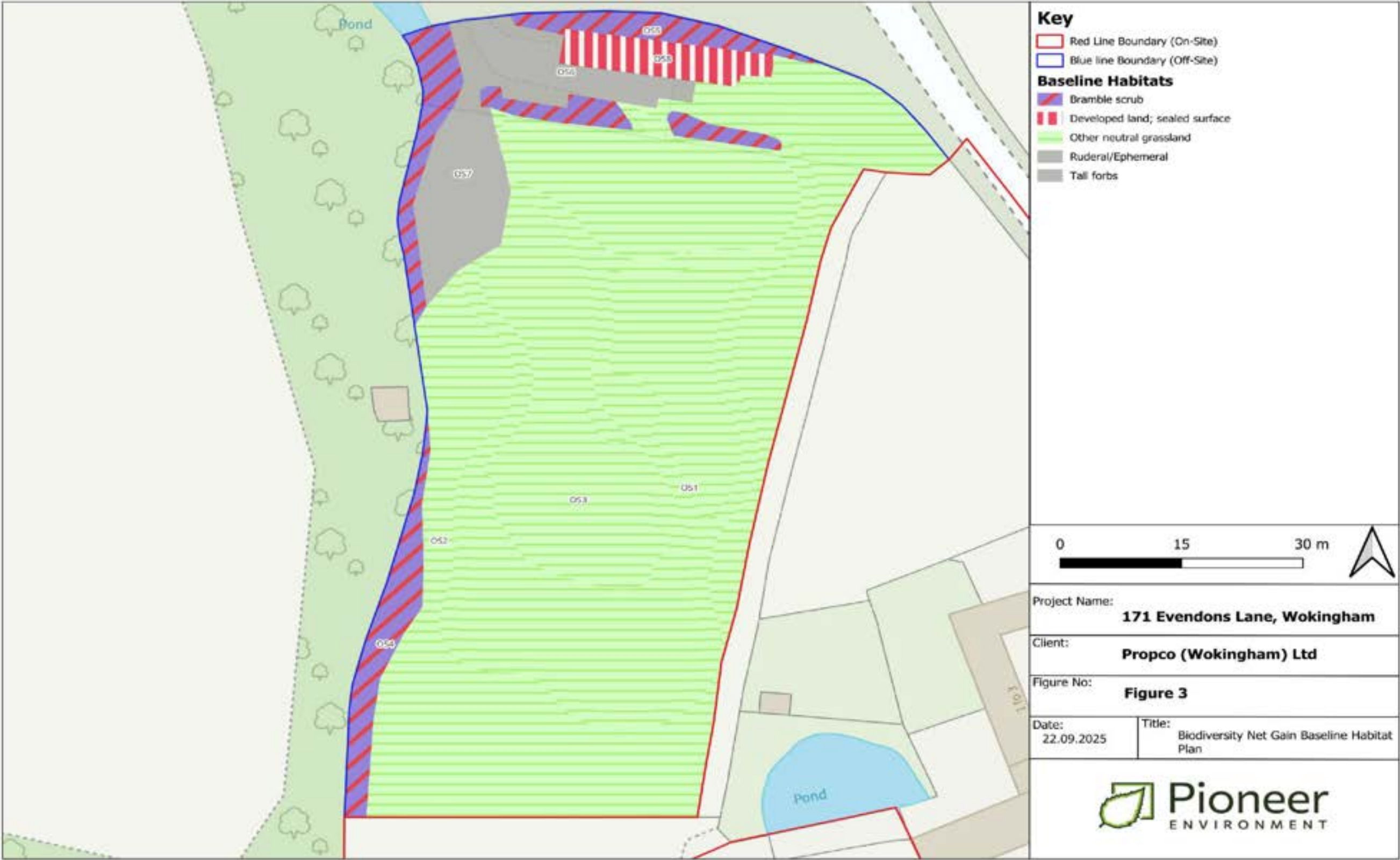
Baseline Habitat Descriptions and Condition

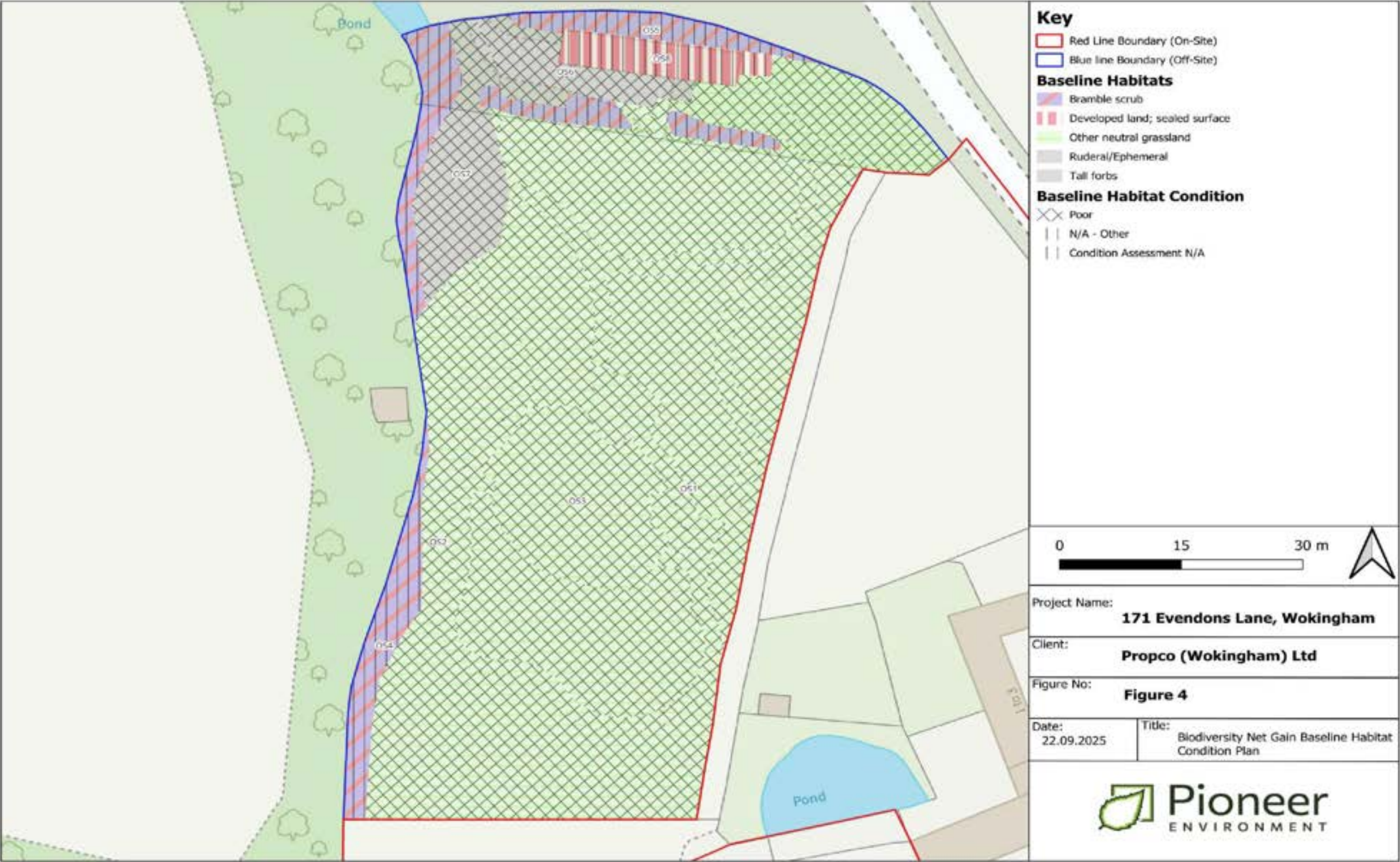
Use the following tables to provide details of the relevant baseline habitats information. Provide a concise overview of the justification for the condition chosen for each parcel(s) in the appropriate column.

Habitats (BI-T04)

Parcel Refs	Habitat Type and Code	Irreplaceable	Priority	Description and Condition Justification	Condition	Area (ha)
OS1	Other neutral grassland	No	No	Field of other neutral grassland within the Off-Site area, OS1 is the area to be lost. Criteria A – Fail – high proportion of species indicative of suboptimal condition and sward is dominated by grass species. Criteria B – Fail – tall, unmanaged sward of approximately 20-30cm. Criteria C – Pass – bare ground is 5%. Criteria D – Pass – scrub cover is under 5% and there is no bracken present. Criteria E – Fail – species indicative of suboptimal condition are over 5%. Criteria F – Fail – less than 10 plant species per m ² (approximately 8-9 per m ² including species indicative of suboptimal condition.	Poor	0.0816
OS2	Other neutral grassland	No	No	Field of other neutral grassland within the Off-Site area, OS2 is the area to be enhanced from ‘Poor’ to ‘Moderate’ condition. Condition assessment same as OS1, see above.	Poor	0.3174
OS3	Other neutral grassland	No	No	Field of other neutral grassland within the Off-Site area, OS3 is the area to be enhanced to traditional orchard in ‘Moderate’ condition. Condition assessment same as OS1, see above.	Poor	0.0416
OS4	Bramble scrub	No	No	Areas of bramble scrub across the Off-Site area to be lost. Condition Assessment N/A at baseline.	Condition Assessment N/A	0.0371
OS5	Bramble scrub	No	No	Area of bramble scrub situated towards the north of Off-Site area to be enhanced to mixed scrub in ‘Moderate’ condition. Condition Assessment N/A at baseline.	Condition Assessment N/A	0.0099
OS6	Ruderal/Ephemeral	No	No	Areas of short ephemeral/ruderal vegetation situate towards the north of Off-Site area, which is to be lost. Criteria A – Fail – uniform in structure. Criteria B – Fail – dominated by short lived plant species that flower in the summer. Lacks a diverse mix of species. Criteria C – Pass – no invasive non-native species (INNS) present.	Poor	0.0159
OS7	Tall forbs	No	No	Areas of ruderal vegetation situated towards the west of the Off-Site area, which is to be lost.	Poor	0.0271

				Criteria A – Fail – uniform in structure, tall swards of nettles (<i>Urtica dioica</i>). Criteria B – Fail – dominated by nettles and lacks a diverse mix of species. Criteria C – Pass – no INNS present.		
OS8	Developed land; sealed surface	No	No	Old stable and associated hardstanding to be lost. Condition Assessment N/A - Other at baseline.	N/A - Other	0.0124





2. Planned Management Activities

Management Plan Aims and Objectives

The management objectives outline the overall ecological goals and anticipated outcomes of the proposed habitat works. These objectives will be accomplished by adhering to the detailed management prescriptions set forth in this plan. The management prescriptions should be adaptable throughout the life of this HMMP and amended, where necessary, to achieve the objectives. The management objectives represent the tangible outcomes that will be monitored in accordance with the monitoring plan.

Overall Management Plan Aims

The proposals for the Off-Site area involve the enhancement of existing habitats, and the creation of new habitat, on an area of land that is situated outside the red line boundary of the proposed development (On-Site) to help deliver a 10% net gain in biodiversity.

The long-term management aims for the Off-Site area involve a mix of habitat enhancement and creation measures. The existing other neutral grassland (OS2) will be enhanced by improving the botanical and structural diversity across the Off-Site area to ultimately benefit biodiversity and target a ‘moderate’ condition. A small area of other neutral grassland (OS3) in the centre of the Off-Site area will be enhanced to a tradition orchard, through planting a variety of fruit trees and managing the grassland to improve the biodiversity value. Along the northern boundary of the Off-Site area, the bramble scrub (OS5) will be enhanced to mixed scrub in ‘Moderate’ condition. Areas of other neutral grassland (OS1), bramble scrub (OS4), ruderal/ephemeral (OS6), tall forbs (OS7) and developed land (OS8) will be lost for the proposed habitat enhancement work. The creation of additional areas of other neutral grassland (OS10), and areas of modified grassland (OS9), mixed scrub (OS11), and scattered rural trees (OS14) will provide further habitat resources and strengthen the connectivity across the On-Site/Off-Site areas and the wider landscape.

Management Objectives

Other Neutral Grassland Enhancement (Parcel: OS2)

The enhancement of ‘other neutral grassland’ in ‘poor’ condition (0.3174 ha) to an ‘other neutral grassland’ in ‘moderate’ condition. The ongoing management of these communities will focus on enhancing species-richness and delivering a structurally diverse sward, by implementing a late-summer hay cut on rotation, creating a varied sward height, and leaving some tall, tussocky areas uncut to provide overwintering habitat. Management will also focus on prevention of encroachment by bramble and bracken, in addition to provide more areas of bare ground to encourage colonisation of less rigorous plant species (ensuring this does not exceed 5% of the area).

Other Neutral Grassland Enhancement to Traditional Orchard (Parcel: OS3)

The enhancement of ‘other neutral grassland’ in ‘poor’ condition (0.0416 ha) to a ‘traditional orchards’ in ‘moderate’ condition. The area will be planted with a minimum of five or more fruit (or nut) trees with crown edges less than 20 m apart and will be managed in a low-intensity way. It is expected that it will take 20 years for the traditional orchard to reach the target condition of ‘moderate.’

Bramble Scrub Enhancement to Mixed Scrub (Parcel: OS5)

The enhancement of ‘bramble scrub’ in ‘poor’ condition (0.0099 ha) to a ‘mixed scrub’ in ‘moderate’ condition. The existing area of scrub will be enhanced by increasing the species diversity through natural regeneration and planting of additional scrub species. Enhanced and new areas of scrub will be managed for wildlife by creating well-developed edges adjacent to form a buffer where tall, tussocky grassland can grow. It is expected that it will take five years for the scrub to reach the target condition of ‘moderate.’

Modified Grassland Creation (Parcel: OS9)

Linear footpaths of ‘modified grassland’ (0.0607 ha) are expected to be created in the Off-Site area to allow access for residents from the adjacent care home. The grassland will be created through the regularly mowing and tramping of the existing grassland which will degrade the grassland to modified grassland. The area of grassland will be managed as a short sward lawn and will aim to achieve ‘poor’ condition. It is estimated to take one year for this habitat to reach the target condition of ‘poor’.

Other Neutral Grassland Creation (Parcel: OS10)

Additional areas of ‘other neutral grassland’ (0.0659 ha) will be created within the northern part of the Off-Site area from lost areas of ruderal/ephemeral, tall forbs or bramble scrub. This will focus on creating a more species-rich sward that will follow the same management as the adjacent, enhanced other neutral grassland. It is estimated to take five years for this habitat to reach the target condition of ‘moderate’.

Mixed Scrub Creation (Parcel: OS11)

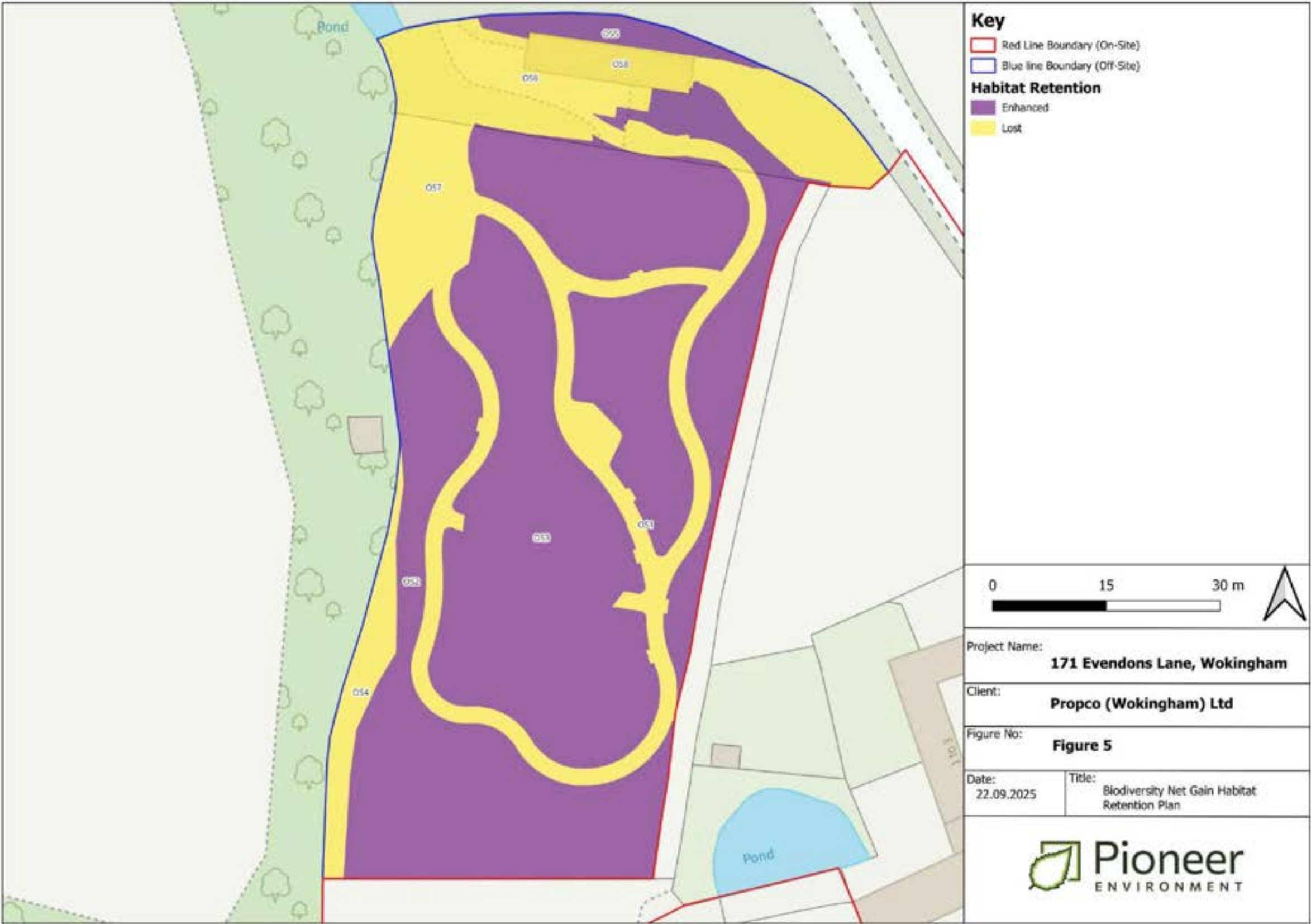
The creation of ‘mixed scrub’ (0.0327 ha) in ‘moderate’ condition is proposed to the north of the Off-Site area and will extend the existing area of scrub (Parcel: OS5) whilst also creating a transitional habitat between the habitats outside the boundary and the grassland within the Off-Site area. This will be created by planting a range of woody, native scrub species in an organic, naturalistic shape with a scalloped edge. It is estimated to take five years for this habitat to reach the target condition of ‘moderate.’

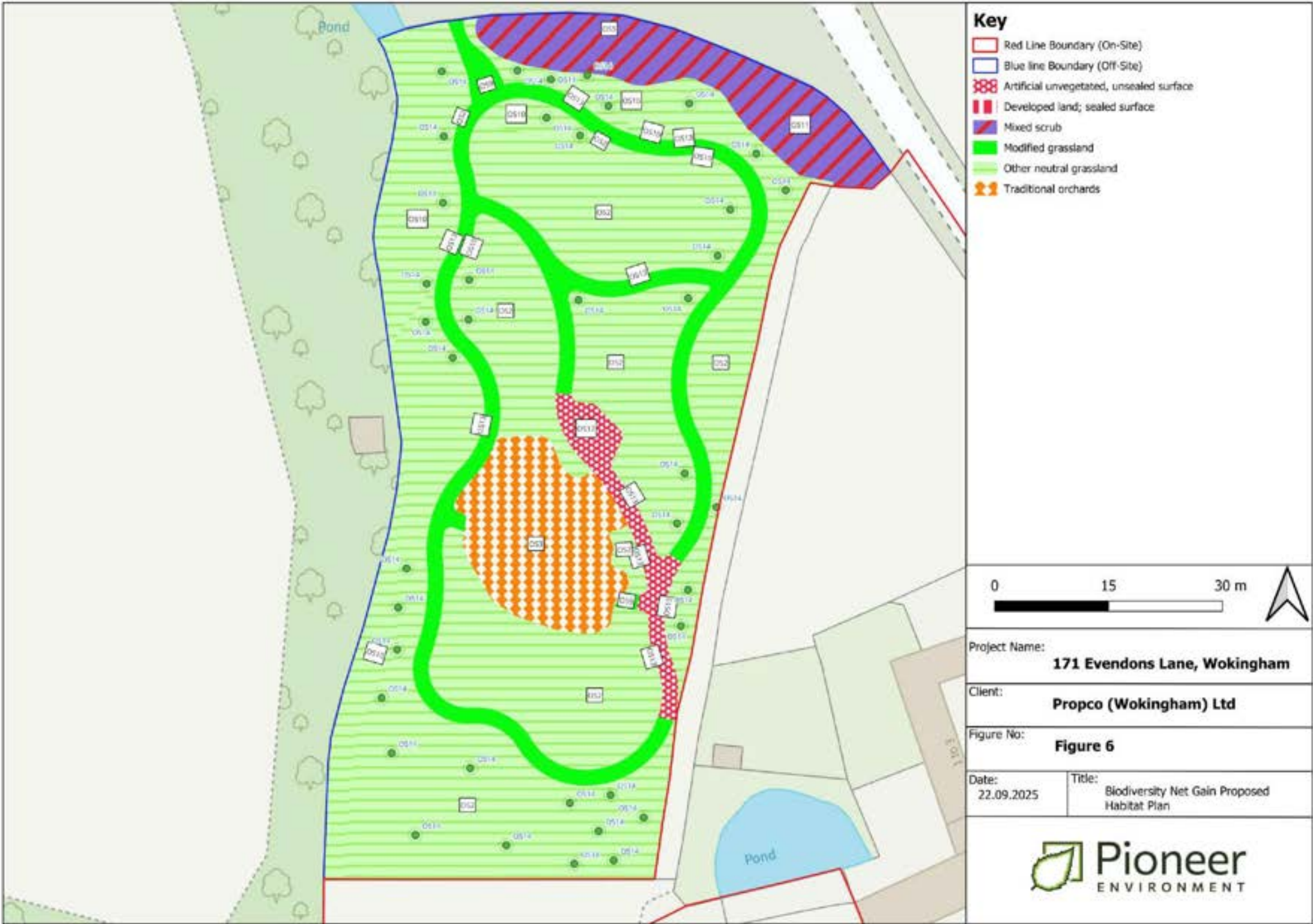
Rural Trees Creation (Parcel: OS14)

The planting of 40 small, native trees (0.1629 ha) to off-set the loss of existing trees within the On-Site area, and to provide additional habitat types within the Off-Site area. The trees will be managed as individual trees and species planted will be native and of local provenance, such field maple (*Acer campestre*), alder (*Alnus glutinosa*), and silver birch (*Betula pendula*) which will provide a variety of food offerings to wildlife. It is expected that it will take 27 years for the trees to reach their target conditions of ‘moderate.’

Principles Informed by Design Stage

Design Principles Informed by Baseline Information
A minimal amount of existing habitat is proposed to be lost to become ‘developed land; sealed surface’ and ‘artificial unvegetated, unsealed surface’, these areas will be lost to allow access paths and hardstanding for benches, to allow the residents of the adjacent care home to enjoy the habitat enhancement within the Off-Site area. Walk routes are necessary to avoid excessive poaching to these habitats from care home residents. Habitat creation decisions for BNG were based on the provision of habitat relevant to those lost (i.e. other neutral grassland replacement with other neutral grassland in a higher condition). Areas of lower distinctiveness habitat (i.e. ruderal/ephemeral and tall forbs) were identified through the initial condition assessment to be targeted to be lost and replaced with a higher distinctiveness habitat (e.g. other neutral grassland and mixed scrub in ‘moderate’ condition). Enhanced habitats include a significant proportion of the existing other neutral grassland and bramble scrub. Removal of these habitats is not necessary for the proposals, and these habitats will be enhanced to a better condition. Habitat management work will be informed by the BNG monitoring processes which will trigger any remedial actions. They will be carried out in ecologically sensitive manners using best practice methods and following the relevant guidance. Proposed habitats should improve the connectivity of the On-Site/Off-Site areas with the wider environment and provide a range of foraging, commuting, nesting and resting/sheltering opportunities for a range of species.





Habitat and Condition Targets

This table presents a record of what has been proposed to be delivered based on the biodiversity metric. These habitat condition targets form the basis of what the management plan and the targets that it will set out to achieve. It includes the area types to be implemented by the plan and managed throughout the 30-year period and beyond, where relevant.

Baseline Habitat Type	Target Habitat Type	Parcel / Feature Refs	Baseline Condition	Targeted Condition	Years to Targeted Condition	Condition Assessment Targets	Comments
Other neutral grassland (Enhancement)	Other neutral grassland (Enhancement)	OS2	Poor	Moderate	10	All criterion A – G to be targeted with emphasis on meeting criterion A, B and D as a standard. In order to maintain the classification of ‘other neutral grassland’, the Off-Site grassland will be managed to support >8 species per m² (including forbs, grasses, sedges and rushes) and have >20% cover of broadleaved herb and sedge species present. The presence of perennial ryegrass and white clover will be monitored to ensure <30% of ground cover is these species. The habitat will be managed to ensure a varied sward height (at least 20% of sward <7cm and at least 20% of sward >7cm). Bracken cover will be <20% and scrub less than 5% of total habitat.	Moderate condition will be achieved when at least three criteria are passed; Criterion A must also be achieved.
Other neutral grassland (Enhancement)	Traditional orchard (Enhancement)	OS3	Poor	Moderate	20	Moderate condition will be targeted by achieving criterion C, F, G and H. The management will be low intensity, avoiding the use of pesticides and fertilisers wherever possible, and the underlying grassland will be managed the same as adjacent areas of ‘other neutral grassland’. The habitat will be managed to ensure there is an absence of invasive non-native species, and the cover of species indicative of suboptimal condition (i.e. creeping thistle (<i>Cirsium arvense</i>), common nettle (<i>Urtica dioica</i>)) is less than 10%, and that less than 10% of the grassland under the tree canopy is not poached.	Moderate condition will be achieved when four or five criteria are passed.
Bramble scrub (Enhancement)	Mixed scrub (Enhancement)	OS5	Condition Assessment N/A	Moderate	5	Moderate condition will be targeted by achieving criterion A, C and D. At least three species of native scrub plants will be present within each scrub block, with no single species comprising more than 75%. Monitoring will ensure that invasive species do not establish and that those indicative of sub-optimal condition do not become prevalent.	Moderate condition will be achieved when three or four criteria are passed.
Other neutral grassland (OS1), Bramble scrub (OS4), Ruderal/ Ephemeral (OS6) and Tall forbs (OS7)	Modified Grassland (Creation)	OS9	Poor (OS1), Condition Assessment N/A (OS4), Poor (OS6 and (OS7)	Poor	1	Poor condition will be targeted by achieving criterion C, F and G. Scrub and bracken cover will be <20% of total habitat and there will be an absence of invasive non-native plant species.	Poor condition will be achieved when three or fewer criteria are passed.
Bramble scrub (OS4), Ruderal/ Ephemeral (OS6), Tall forbs (OS7), and Developed land; sealed surface (OS8)	Other neutral grassland (Creation)	OS10	Condition Assessment N/A (OS4), Poor (OS6 and (OS7),	Moderate	5	Moderate condition will be targeted by achieving criterion C, F, G and H. The management will be low intensity, avoiding the use of pesticides and fertilisers wherever possible, and the underlying grassland will be managed the same as adjacent areas of ‘other neutral grassland’. The habitat will be managed to ensure there is an absence of invasive non-native species, and the cover of species indicative of suboptimal condition (i.e. creeping thistle,	Moderate condition will be achieved when four or five criteria are passed.

			N/A – Other (OS8)			common nettle) is less than 10%, and that less than 10% of the grassland under the tree canopy is not poached.	
Other neutral grassland (OS1), Ruderal/ Ephemeral (OS6), and Developed land; sealed surface (OS8)	Mixed Scrub (Creation)	OS11	Poor (OS1 and OS6), and N/A – Other (OS8)	Moderate	5	Moderate condition will be targeted by achieving criterion A, C and D. At least three species of native scrub plants will be present within each scrub block, with no single species comprising more than 75%. Monitoring will ensure that invasive species do not establish and that those indicative of sub-optimal condition do not become prevalent.	Moderate condition will be achieved when three or four criteria are passed.
Other neutral grassland (OS1)	Artificial unvegetated, unsealed surface (Creation)	OS12	Poor (OS1)	N/A - Other	0	N/A - Habitat type does not have a condition assessment.	N/A - Habitat type does not have a condition assessment.
Other neutral grassland (OS1)	Developed Land; Sealed Surface (Creation)	OS13	Poor (OS1)	N/A - Other	0	N/A - Habitat type does not have a condition assessment.	N/A - Habitat type does not have a condition assessment.
N/A	Rural Tree (Creation)	N/A	N/A	Moderate	27	Moderate condition will be targeted by achieving criterion A, B, and F. Only native tree species will be planted, and will be managed as individual trees with more than 20% of the tree canopy oversailing vegetation beneath.	Moderate condition will be achieved when three or four criteria are passed.

3. Creation, Enhancement and Management Targets and Prescriptions

Grassland (Low Distinctiveness)

Creation and Management Summary (GL-T01)

Provide details of the approach to delivering each of the targeted condition criteria and habitat. Conditions from Statutory Biodiversity Metric habitat condition assessment sheets – Sheet 5. Grassland Low

Target Habitat:		Modified Grassland – Poor condition (Creation)			
Condition Assessment Criteria		Targeted	Relevant Parcels	Creation Approach	Management Approach
A	There are 6-8 vascular plant species per m² present, including at least 2 forbs. Note - this criterion is essential for achieving Moderate or Good condition. Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m², please review the full UKHab description to assess whether the grassland should be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high or very high distinctiveness, please use the relevant condition sheet.	No	OS9	N/A	N/A - Species diversity within the sward is assumed to be low due to its proposed function as a footpath and requirement for frequent management.
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	No	OS9	N/A	N/A - This area of modified grassland will be regularly mown to a short sward.
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). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Yes	OS9	N/A – No scrub is currently present.	The regular mowing regime will remove scrub as necessary; hand-pulling of any larger plants should be undertaken.

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.	No	OS9	N/A	N/A - This area of modified grassland will be managed as a lawn footpath and will be subjected to regular disturbance from the residents of the adjacent care home.
E	Cover of bare ground between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens.)	No	OS9	N/A	N/A
F	Cover of bracken <i>Pteridium aquilinum</i> less than 20%.	Yes	OS9	N/A – No bracken is currently present.	The aforementioned mowing regime will remove bracken as necessary; mechanical cutting of any larger stands should be undertaken if required.
G	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA).	Yes	OS9	N/A – No INNS are currently present.	Any imported topsoil must be checked and imported from a reputable company/ location to ensure no INNS are present. Continual monitoring of the Off-Site area will ensure any identified plants are removed before establishment can occur.

Creation, Enhancement and Management Detailed Methods
(GL-T02)

Provide detailed prescriptions for the creation and management of the habitat.

Action	Relevant Parcels	Timing	Prescriptions
Modified grassland establishment	OS9	Mow regularly the existing grassland in the growing season (March to September). The regular maintenance will degrade the grassland to modified grassland.	Mow regularly as a lawn but not too short (>25mm) during the growing season. Cut when the sward gets untidy (after 4-8 weeks). Heavy quantities of cuttings should be collected and removed from the Off-Site area to reduce soil fertility.
Long term management	OS9	As required, aim to avoid wet conditions that could damage the lawn.	Mow lawn regularly as required throughout the growing season (generally March-October) and it will likely be kept to a short sward (≤10cm). Grassland areas will not be fertilised to conserve the sward diversity, and arisings should be removed if dense to reduce nutrient levels. Flattening of the grass from the residents utilising the lawn path may reduce the need for mowing. Where treatment of weeds/species (e.g. docks, thistles, nettles, ragwort) is required, this will be controlled by hand pulling, or repeated mowing.
Overseeding (if required)	OS9	If additional overseeding is required (e.g. large areas of bare ground are present), seed mix is best sown in the autumn (September-November) or spring	Remove any stones or debris, and weeds (e.g. dock (<i>Rumex spp.</i>), thistles (<i>Cirsium spp.</i>) etc.). Prepare soil using a rake/harrow/rotavator to create a medium tilth of approximately 150mm deep. Roll or tread to create a firm (but not heavily compacted) surface. If importing

		(March-April) but can be sown at other times of the year if there is sufficient warmth (between 10°C and 20°C) and moisture (moist soil).	topsoil, ensure suitable sources are obtained to reduce the risk of introducing unwanted or invasive species. Avoid heavy machinery during this time to avoid compaction. The seed must be surface sown and can be applied by machine or broadcast by hand. To get an even distribution and avoid running out, divide the seed into two or more parts and sow in overlapping sections. Rake soil lightly over the seed, then firm in with a roll, or by treading, to give good soil/seed contact. If particularly dry conditions occur during the establishment, water lightly regularly. Leave the seeds to germinate for 10-14 days. Once the sward reaches a height of 7-10cm, cut the lawn for the first time. Cut with the mower set on a high setting (>50mm), aiming to trim the sown grass back by about one-third of its height and cut back any weeds. In the first year, mow the newly sown flowering lawns regularly as required throughout the first year of establishment. Cut to a height of 40-60 mm, removing arisings if dense. Dig out any residual perennial weeds such as docks.
Removal of scrub/bracken	OS9	As required, annually check will trigger remedial action.	Scrub and bracken should not be allowed to establish and should be removed as soon as it appears to prevent this. An annual check for any scrub and bracken will be conducted and will trigger any remedial action to control the spread (i.e. mechanical cutting by hand or with mower).

Grassland (Low Distinctiveness) Species Lists (GL-T03)

Emorsgate Seeds EG22 Strong Lawn Grass Mixture (100% Grass Mix) (if required), or similar approved species list.

Common Name	Scientific Name	Abundance / %	Comments
Common bent	<i>Agrostis capillaris</i>	5.00	Perennial
Red fescue	<i>Festuca rubra</i>	50.00	Perennial
Perennial rye-grass	<i>Lolium perenne</i>	25.00	Perennial
Smooth-stalked meadow-grass	<i>Poa pratensis</i>	20.00	Perennial

Grassland (Medium, High, and Very High Distinctiveness)

Creation and Enhancement and Management Summary

This table provides details of the approach to delivering each of the targeted condition criteria and habitat. Conditions from Statutory Biodiversity Metric habitat condition assessment sheets – Sheet 6. Grassland Med High and V. High.

Target UKHab Community		Other Neutral Grassland – Moderate Condition (Creation and Enhancement)			
Condition Assessment Criteria		Targeted	Relevant Parcels	Creation/Enhancement Approach	Management Approach
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. Note – this criterion is essential for achieving ‘Moderate’ or ‘Good’ condition for non-acid grassland types only.	Yes	OS2 and OS10	If the existing seed bank lacks diversity, the existing grassland will be cut (with cuttings removed) to a short sward. Areas of bare ground will be created using machinery, or scarified by hand (e.g. raking, strimming or garden scarifier), to create 50% bare ground. Areas of other neutral grassland (wildflower grassland) to be created or enhanced through overseeding will be seeded with the recommended Emorsgate Standard General Purpose Meadow Mixture (EM2) or a similar seed mix. The EM2 seed mix is suitable for a variety of soil and nutrient conditions and where precise soil and site characteristics have not been established before sowing. Green hay of local provenance can also be used. Seed is best sown in early autumn or spring but can be sown at other times of the year if there is sufficient warmth and moisture. The seed mix must be surface sown and can be applied by machine or broadcast by hand. To get an even distribution and avoid running out, divide the seed into two or more parts and sow in overlapping sections. Do not incorporate or cover the seed but firm in with a roll, or by treading, to give good soil/seed contact.	Ongoing management will be achieved through rotational cutting. Variability will be introduced through a flexible cutting date of the grassland, which allows for different species to set seed from year to year. The cutting height will also be varied across the grassland to avoid leaving large areas at a uniform height; ideally a third should be left uncut each year. The areas left each year should be rotated annually, so no area is left uncut for more than two years. The annual hay cut will be undertaken flexibly from mid-July through to September (with the exact cutting date determined by weather conditions and conditions of the sward). The sward will be kept short (i.e. to 50 mm) by mowing the aftermath through to late autumn/winter and again in spring if needed in the first year. Once established, the grassland should be cut on a bi-annual basis (twice a year): • Main hay cut once to c. 50 mm between August and September - This cut will give time for plants to flower and the ‘hay’ should be left to dry and shed seeds for 1-7 days before the arisings are removed; and, • Spring cut, once between 50 and 80 mm in February or March - This will reset any potential winter re-growth and help to control any vigorous coarse grass growth prior to the start of the annual, optimal botanical period. Cutting can be done with brush-cutters or suitable mowers and raking off the arisings. Any arisings from any grass cuts will be removed. If the sward is becoming grass dominated in years 3-4, add yellow rattle (if not already established) to the developing grassland to help reduce the viability of the dominant grasses and create structure. This management will help maintain a diverse sward, characteristic of good quality neutral grasslands. It will increase the variety of indicator species present within the sward, as well as their abundance, with at least two frequent and two occasional to frequent indicator species present and less than 30% cover of perennial rye-grass.
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more	Yes	OS2 and OS10	Management will be conducted via appropriate cutting once the grassland has been established.	Management through a rotational hay cut will help to establish a varied sward height. Monitoring will track the sward diversity and may influence the frequency

	than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.				where necessary to promote structural diversity in the sward or the requirement to leave a proportion of the sward unmown on rotation from year to year.
C	Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	No	N/A	N/A	N/A
D	Cover of bracken <i>Pteridium aquilinum</i> less than 20% and cover of scrub (including bramble) less than 5%.	Yes	OS2 and OS10	N/A – existing grassland does not contain any bracken and has <5% cover of bramble.	The regular mowing regime will prevent bracken and scrub from establishing. Regular monitoring will track any scrub or bracken encroachment and trigger remedial action where necessary.
E	Combined cover of species indicative of suboptimal condition and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging activities) accounts for less than 5% of total area. If any invasive non-native species (as listed on Schedule 9 of WCA) are present, this criterion is automatically failed.	Yes	OS2 and OS10	During enhancement works, care will be taken to ensure no physical damage occurs from machinery use or storage.	Regular monitoring will track the presence of invasive non-native species, or those species indicative of sub-optimal condition, and will trigger remedial action to remove or reduce their presence, where necessary. Species indicative of sub-optimal condition are to be removed by hand pulling or selectively scythed. Topping of thistles will be undertaken by hand with a strimmer or by machine set to the required height and may be required to be conducted twice during the growing season. If large numbers of annual species of suboptimal condition are present, a spring cut will be conducted to top the suboptimal species. Management of the sward using light machinery and prior to the wetter months will ensure that minimal damage occurs to the grassland.
F	There are 10 or more vascular plant species per m ² present, including forbs that are characteristic of the habitat type. Note – this criterion is essential for achieving ‘Good’ condition for non-acid grassland types only.	No	N/A	N/A	N/A

Creation, Enhancement and Management Detailed Methods (GH-T02)

Provide detailed prescriptions for the creation and management of the habitat.

Action	Relevant Parcels	Timing	Prescriptions
Ground preparation	OS10 (Creation)	All activities to take place in autumn or spring, frost free conditions, ground must not be waterlogged. Not to be undertaken during or after a period of hot weather. Ground preparation should be conducted within 24 hours of sowing to prevent soil hardening/ drying.	To ensure they are at a satisfactory level to allow the wildflower meadow to establish (pH 5.5 – 8), nutrient levels can be reduced by repeated cultivation or soil stripping/soil inversion if necessary. Remove all planted materials and weeds. Prepare soil using a rake/harrow/rotavator to create a medium tilth of approximately 150mm deep. Roll or tread to create a firm (but not heavily compacted) surface. If importing topsoil, ensure suitable sources are obtained to reduce the risk of introducing unwanted or invasive spp. Avoid heavy machinery during this time to avoid compaction.
Spreading of wildflower seed mix and/or green hay.	OS10 (Creation)	EM2 seed mix is best sown at a rate of 4g/m² in the autumn or spring but can be sown at other times of the year if there is sufficient warmth and moisture.	Sowing should utilise a suitable seed mix with native grass and wildflower species (e.g. Emorsgate EM2); the use of green hay can also be implemented. The seed mix must be surface sown and can be applied by machine or broadcast by hand. To get an even distribution and avoid running out, divide the seed into two or more parts and sow in overlapping sections. Do not incorporate or cover the seed but firm in with a roll, or by treading, to give good soil/seed contact. If using green hay, the area of meadow from which green hay is being taken should be left uncut and ungrazed three months prior to the harvest. Once cut, there should be no more than two hours between this and the spreading within the designated area. Hay should be spread thinly, with sward visible underneath, and left between one and three weeks (if weather is dry the hay does not need to be left for as long compared to if it is wet).
Grassland species diversity enhancement	OS2 (Enhancement)	Natural regeneration can be used in conjunction with overseeding to accelerate habitat enhancement. EM3 seed is best sown at a rate of 4g/m² in the autumn or spring.	Natural colonisation from the existing seed bank may take time therefore natural regeneration can be used in conjunction with seeding to accelerate habitat enhancement. Seed mixes can increase the diversity of species and can be targeted to create a particular species mix. Leaving 50% bare ground and sowing the remainder typically provides the best results. If the existing seed bank lacks diversity, the existing grassland will be cut (with cuttings removed) to a short sward. Areas of bare ground will be created using machinery or scarified by hand (e.g. raking, strimming or garden scarifier) to create 50% bare ground. EM2 or similar seed mix has been proposed for this habitat which contains a very wide range of species.
Short Term Management (First Year)	OS2 and OS10	Cut in mid to late summer and remove arisings. Keep short by mowing over the winter until the end of March the following year.	Most species within the seed mix are perennials and can be slow to establish and are unlikely to flower in their first year of establishment. Annual weeds are likely to colonise newly sown areas, offering shelter to the sown seedlings and will not be cut until mid to late summer. In mid-July to early August, the grassland will be cut with all the arisings removed to reduce nutrient levels. These arisings will either be taken away from the Off-Site area or composted in designated grass heaps. The sward will be kept short (i.e. to 50 mm) by mowing the aftermath over the winter through to the end of March of the following year.
Long Term Management (Once Established)	OS2 and OS10	Cut in mid to late summer and spring cut, removing all arisings. Annual checks for cover of species indicative of	Once established, the grassland should be cut on a bi-annual basis (twice a year):

		suboptimal condition, scrub and bramble and any remedial management.	• Main hay cut once to c. 50 mm between August and September - This cut will give time for plants to flower and the ‘hay’ should be left to dry and shed seeds for 1-7 days before the arisings being removed; and, • Spring cut, once between 50 and 80 mm in February or March - This will reset any potential winter re-growth and help to control any vigorous coarse grass growth prior to the start of the annual, optimal botanical period. The cutting height will also be varied across the grassland to avoid leaving large areas at a uniform height, ideally a third should be left uncut each year. The areas left each year should be rotated annually, so no area is left uncut for more than two years. Where species indicative of suboptimal conditions, establish a targeted cutting and/or hand pulling regime prior to the species flowering or setting seed. This could be conducted through hand pulling before they set seed, or through repeated cutting to top the species (i.e. thistles, dock). The regular mowing regime will prevent bracken and scrub from establishing. Regular monitoring will track any scrub or bracken encroachment and trigger remedial action where necessary (i.e. cutting).
Sowing of yellow rattle	OS2 and OS10	September-November – Year 3, and subsequent years should it struggle to establish.	If grasses are too dominant in the sward, yellow rattle seeds should be hand cast in autumn between September and November to allow the seeds to freeze and germinate the following spring. Scarify the area to remove any thatch in the base of the existing sward to ensure seed to soil contact prior to broadcasting the seed.

Grassland (Medium, High, and Very High Distinctiveness) Species Lists

Emorsgate Seeds EM2 General Purpose Meadow Mixture (85/15% Grass & Wildflower Meadow Mix), or similar approved species list.

Common Name	Scientific Name	Abundance / %	Comments
Wildflower (15%)			
Betony	<i>Betonica officinalis</i>	3.33	Perennial
Common knapweed	<i>Centurea nigra</i>	10.00	Perennial
Wild carrot	<i>Daucus carota</i>	6.67	Biennial
Hedge bedstraw	<i>Galium album</i>	2.00	Perennial
Meadow crane’s-bill	<i>Geranium pratense</i>	2.00	Perennial
Oxeye daisy	<i>Leucanthemum vulgare</i>	6.67	Perennial
Ribwort plantain	<i>Plantago lanceolata</i>	6.67	Perennial
Salad burnet	<i>Poterium sanguisorba spp. sanguisorba</i>	5.33	Perennial
Cowslip	<i>Primula veris</i>	4.67	Perennial
Selfheal	<i>Prunella vulgaris</i>	5.33	Perennial

Meadow buttercup	<i>Ranunculus acris</i>	5.33	Perennial
Bulbous buttercup	<i>Ranunculus bulbosus</i>	1.33	Perennial
Yellow rattle	<i>Rhinanthus minor</i>	1.33	Perennial
Red campion	<i>Silene dioica</i>	2.67	Perennial
Bladder campion	<i>Silene vulgaris</i>	3.33	Perennial
Grasses (85%)			
Common bent	<i>Agrostis capillaris</i>	8.50	Perennial
Crested dog’s-tail	<i>Cynosurus cristatus</i>	29.75	Perennial
Red fescue	<i>Festuca rubra</i>	25.50	Perennial
Smaller cat’s-tail	<i>Phleum bertolonii</i>	4.25	Perennial
Smooth-stalked meadow-grass	<i>Poa pratensis</i>	17.00	Perennial

Creation and Management Summary (SC-T01)

Provide details of the approach to delivering each of the targeted condition criteria and habitat. Conditions from Statutory Biodiversity Metric habitat condition assessment sheets – Sheet 19. Scrub.

Target Habitat:		Mixed Scrub – Moderate Condition			
Condition Assessment Criteria		Targeted	Relevant Parcels	Creation and Enhancement Approach	Management Approach
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 comprising more than 75% of the cover (except hazel (<i>Corylus avellana</i>), common juniper (<i>Juniperus communis</i>), sea buckthorn (<i>Hippophae rhamnoides</i>) or box (<i>Buxus sempervirens</i>), which can be up to 100% cover).	Yes	OS5 and OS11	Planting of at least three native woody species in the areas of scrub such as hawthorn (<i>Crataegus monogyna</i>), blackthorn (<i>Prunus spinosa</i>) and hazel (<i>Corylus avellana</i>). Plant an even amount of each species to provide a balanced variation within the scrub and to avoid any one species dominating the scrub. Enhancement by increasing species diversity can be achieved through natural regeneration and/or planting. Diversity should be maintained through regular management.	Removal of any non-native or ornamental species, should they appear. Should any species fail to establish, replacement of these species will occur to ensure that there are no less than three native woody species, and certain species are not dominating more than they should.
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran) shrubs are all present.	No	N/A	N/A	N/A
C	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA) and species indicative of suboptimal condition make up less than 5% of ground cover.	Yes	OS5 and OS11	Do not plant any invasive non-native (e.g. rhododendron (<i>Rhododendron ponticum</i>)) or species indicative of suboptimal condition species (e.g. cherry laurel (e.g. <i>Prunus laurocerasus</i>)).	Remove any non-native species from the scrub, or ground flora, should they appear. Ensure that excess nutrient enrichment does not cause species of sub-optimal condition to occupy ground cover. Avoid use of fertilisers and pesticides and ensure good maintenance of other neutral grassland habitat surrounding scrub.
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	Yes	OS5 and OS11	Planting and maintenance of other neutral grassland around scrub.	Periodic cutting of scrub edges to create and maintain a graded margin. Annual mowing/cut of grassland/herb ground flora to maintain adjacent areas free of scrub growth.
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	No	N/A	N/A	N/A

Creation, Enhancement and Management Detailed Methods (sc-T02)

Provide detailed prescriptions for the creation and management of the habitat.

Action	Relevant parcels	Timing	Prescriptions
Scrub establishment	OS11	November to March, avoiding periods of heavy rainfall and/or frost.	The ground should be prepared for planting through scarification via a rake prior to scrub planting to reduce competition from grasses and tall herbs during establishment. Planting is recommended between November and March to increase likelihood of the new planting becoming established; however, periods of heavy waterlogging/flooding will be avoided. Whips should be planted with biodegradable spiral guards/tubes to protect the young scrub. Bare rooted whips 60-90cm, sourced locally wherever possible, at varying 1-3m centres in same-species groups of 3-5 plants. Placement of whips should be planned to create a habitat natural in appearance, by mixing species randomly to create a diverse mix and by planting in clumps to create natural looking clearings. Irregular spacing with wide gaps can help to create a more natural appearance, whilst also encouraging natural infill of species. Planting should aim to create scalloped edges, rides and open glades, which will increase the area of valuable edge habitat.
Scrub diversity enhancement	OS5 (Enhancement)	Natural regeneration can be used in conjunction with additional planting to accelerate habitat enhancement. Any additional planting will be undertaken November to March.	Natural colonisation from natural regeneration may take time therefore it can be used in conjunction with planting to accelerate habitat enhancement. Planting can increase the diversity of species within the block of scrub and can be targeted to create a particular mix of scrub (e.g. over three native woody species). Within the areas of bramble scrub to be enhanced to mixed scrub, no more than over one third of the total area of scrub should be cleared to allow space for additional planting. Follow the above prescriptions for scrub establishment for any additional scrub planting.
Short term management	OS5 and OS11	Year 1 – 5, as required.	Mulch will be applied after planting at a depth of 50mm to eliminate competition from grasses. Annual rotational cutting of grassland between mulched areas within 0.5m of the scrub. Hand pulling of species indicative of suboptimal condition/weeds will be undertaken during the first 3 years of establishment. These works will be undertaken to avoid removing natural encroaching woody species, including bramble, as the presence of these species will accelerate habitat establishment. Regular watering of planted scrub will be necessary, particularly during hot, dry spells of weather during the first five years of establishment. Where watering takes place, care will be taken to ensure water reaches deep below the surface to reach the roots of the scrub, through prolonged and/or targeted watering near the base. Scrub should be protected by utilising biodegradable spiral guards/tubes during the first five years. Should these become damaged and not provide the support necessary for the scrub, they should be replaced. Despite this, tree guards should be removed after five years if it appears that the guards are suppressing plant growth.
Long term management	OS5 and OS11	Year 6-30, as required. Any scrub clearance should be conducted outside the bird breeding season (March-August).	Once the scrub is well established, areas will be cut in rotation to create a diverse height range of plants. Cut and thin out approximately one third of the scrub once established and repeat this process with a different third every 5 years, such that the cutting cycle for each third is 15 years. The edge of the scrub will be maintained through rotational cutting and mowing to create a well-developed and diverse edge habitat. Cut scrub in January or February to avoid the breeding bird season and maintain foraging resource (berries/seeds etc.). Arisings produced from scrub management will be piled up in designated areas to act as deadwood habitat and shelter.

Scrub replacement	OS5 and OS11	November to March, avoiding periods of heavy rainfall and/or frost.	If any scrub species fail to establish, for any reason, they should be replaced and planted as previously recommended.
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Scrub Species Lists (SC-T03)

Example species list for the habitat to be created.

Common Name	Scientific Name	Abundance / %
Hawthorn	<i>Crataegus monogyna</i>	50
Hazel	<i>Corylus avellana</i>	30
Blackthorn	<i>Prunus spinosa</i>	20

Individual Trees

Creation, Enhancement and Management Summary (UT-T01)

Provide details of the approach to delivering each of the targeted condition criteria and habitat. Conditions from Statutory Biodiversity Metric habitat condition assessment sheets – Sheet 9. Individual Trees

Target Habitat:			Individual Trees – Moderate Condition		
Condition Assessment Criteria		Targeted	Relevant Features	Creation Approach	Management Approach
A	The tree is a native species (or more than 70% within the block are native species).	Yes	N/A	Provision of native species, ideally of local provenance, to increase specialisation to the area and provide a range of food offerings to wildlife. Species chosen to match surrounding species and produce trees suitable for the proposed habitat, not shading out the grassland habitat. Species list given below. Standards should be planted in suitable weather conditions (frost and flood free) between October and March, with biodegradable tree guards used to protect the young trees.	Should any species fail to establish, replacement of these species will occur to ensure that the target of five trees is met.
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	No	N/A	N/A	N/A
C	The tree is mature (or more than 50% within the block are mature).	No	N/A	N/A	N/A
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.	No	N/A	N/A	N/A
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	No	N/A	N/A	N/A
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Yes	N/A	The positioning of whips will be such that they are integrated into the surrounding grassland habitat and allowed to establish. Planting of whips will be spaced out to prevent mature tree canopies over-shading the habitats and inhibiting their establishment.	Pruning back of canopies, where necessary, to prevent over-shadowing of habitats beneath.

Creation, Enhancement and Management Detailed Methods (UT-T02)

Provide detailed prescriptions for the creation and management of the habitat.

Action	Relevant Features	Timing	Prescriptions
Planting of individual trees	N/A	November to March, avoiding periods of heavy rainfall and/or frost.	The ground should be prepared for planting through scarification via a rake prior to scrub planting to reduce competition from grasses and tall herbs during establishment. Planting is recommended between November and March to increase likelihood of the new planting becoming established; however, periods of heavy waterlogging/flooding will be avoided. Use locally sources native tree stock to plant, with appropriate spacings (size depending). The planting pit dug will be a shallow square hole, larger than the root ball of the whip. Place tree into centre of hole, spread roots and fill hole with soil mixture, compacting once full to secure tree and support with biodegradable spiral guards to protect the young trees. An option to help with watering is to incorporate flexible PVC perforated pipes, which shall be wrapped around the root ball of each tree prior to backfilling of the tree pits during planting, and the ends of the watering pipes shall be set to c. 50mm above the finished soil/mulch level and sealed with end caps.
Early management	N/A	When necessary – usually throughout spring and summer.	Maintain a weed free area of 1m² around the base of the tree using mulch at c. 50mm, to prevent any competition from weeds and grasses. The mulch will help to retain water and improve soil structure. Regular watering of planted scrub will be necessary, particularly during hot, dry spells of weather during the first five years of establishment. Where watering takes place, care will be taken to ensure water reaches deep below the surface to reach the roots of the scrub, through prolonged and/or targeted watering near the base. Maintenance will consist of yearly protection checks and adjustments for the first five years. Any planting failures will be identified with marker paint in the growing season and replaced in the next available planting season for the first five years. Trees should be protected by utilising biodegradable tree guards during the first five years. Should these become damaged and not provide the support necessary for development, they should be replaced. Despite this, tree guards should be removed after five years if it appears that the guards are suppressing plant growth.
Pruning	N/A	Outside of nesting bird season (September – March)	Pruning to be kept to a minimum and only permitted if needed to reduce impact on grassland habitat beneath. This should be <10% of the total canopy.
Ongoing Management	N/A	When necessary, after 20 years	If natural features have not occurred from storm events or other natural methods, veteranisation can be considered, if needed. This could involve the crenelation of removed limbs, ring barking suitable limbs, and creation of cavities. Deadwood to be retained in all trees, unless it poses a risk to persons using the site. Any dead wood removed to be retained on site as habitat piles. If ivy growth occurs, this will be retained.

Individual Trees Species Lists (UT-T03)

Provide a detailed species list for the habitat to be created.

Common Name	Scientific Name	Abundance (Number of Individual Trees)
Field maple	<i>Acer campestre</i>	6
Alder	<i>Alnus glutinosa</i>	2
Silver birch	<i>Betula pendula</i>	5
Downy birch	<i>Betula pubescens</i>	3
Hornbeam	<i>Carpinus betulus</i>	1
Hawthorn	<i>Crataegus monogyna</i>	6
Crab apple	<i>Malus sylvestris</i>	5
Blackthorn	<i>Prunus spinosa</i>	6
English Oak	<i>Quercus robur</i>	6
Whitebeam	<i>Sorbus aria</i>	1
Rowan	<i>Sorbus aucuparia</i>	2

Orchard

Creation, Enhancement and Management Summary (OR-T01)

Provide details of the approach to delivering each of the targeted condition criteria and habitat. Conditions from Statutory Biodiversity Metric habitat condition assessment sheets – Sheet 17. Orchard

Target Habitat:			Traditional Orchard – Moderate Condition		
Condition Assessment Criteria		Targeted	Relevant Parcels	Enhancement Approach	Management Approach
A	Presence of ancient and or veteran trees. Note – this criterion is essential for achieving Good condition.	No	N/A	N/A	N/A
B	Presence of deadwood in or on trees, or on the ground: at least 20% of mature trees have deadwood associated with them. Some examples of deadwood are: standing, attached and fallen trees or limbs; dead stems; branches and branch stubs greater than 10 cm diameter; and internal cavities. The types and distribution of deadwood provide a range of habitats suitable to support a wide assemblage of saproxylic invertebrates. Note – this criterion is essential for achieving Good condition.	No	N/A	N/A	N/A
C	Less than 5% of fruit trees are smothered by scrub. Small patches of dense scrub and or scattered scrub growing between trees can be beneficial to biodiversity, however these occupy less than 10% of ground cover.	Yes	OS3	N/A	Regular monitoring will track the cover of scrub species and will trigger remedial action where necessary to remove or reduce their presence, respectively.
D	There is evidence of formative and or restorative pruning to maintain longevity of trees.	No	N/A	N/A	N/A
E	At least 95% of the trees are free from damage caused by humans or animals, for example browsing, bark stripping or rubbing on non-adjusted ties.	No	N/A	N/A	N/A
F	Grassland is not overgrazed, poaching is not evident around the trees, with no more than 10% of trees poached under the canopy.	Yes	OS3	During surrounding grassland enhancement, care will be taken to prevent the physical damage from machinery or storage.	Management of the sward using light machinery and any management should avoid wet/waterlogged conditions or extreme dry condition to ensure that minimal damage occurs to the grassland

					Areas that are displaying high levels of poaching should be fenced to prevent any further encroachment until recovered. Fencing must be open to ensure wildlife can pass through freely.
G	Species richness of the grassland is equivalent to a medium, high, or very high distinctiveness grassland.	Yes	OS3	The grassland surrounding the orchard trees will be managed as other neutral grassland, see Grassland (Medium, High, and Very High Distinctiveness) creation and enhancement section above for further details.	The grassland surrounding the orchard trees will be managed as other neutral grassland, see Grassland (Medium, High, and Very High Distinctiveness) creation and enhancement section above for further details.
H	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA) and species indicative of suboptimal condition make up less than 10% of ground cover.	Yes	OS3	No fertiliser will be used during planting of the scrub to prevent eutrophication of the soil.	Regular monitoring will track the presence of invasive non-native species, or those species indicative of sub-optimal condition, and will trigger remedial action to remove or reduce their presence, where necessary. Species indicative of sub-optimal condition are to be removed by hand pulling or selectively scythed. Topping of thistles by hand with trimmer or by machine set to the required height and may be required to be conducted twice during the growing season. If large number of annual species of suboptimal condition are present a spring cut will be conducted to top the suboptimal species.

Creation, Enhancement and Management Detailed Methods (OR-T02)

Provide detailed prescriptions for the creation and management of the habitat.

Action	Relevant Parcels	Timing	Prescriptions
Planting of orchard tree	N/A	November to March, avoiding periods of heavy rainfall and/or frost.	The ground should be prepared for planting through scarification via a rake prior to tree planting to reduce competition from grasses and tall herbs during establishment. Planting is recommended between November and March to increase likelihood of the new planting becoming established; however, periods of heavy waterlogging/flooding will be avoided. Use locally sources native tree stock to plant, with appropriate spacings at 5 to 7m centres. The planting pit dug will be a shallow square hole, larger than the root ball of the whip. Place tree into centre of hole, spread roots and fill hole with soil mixture, compacting once full to secure tree and spread a layer of mulch around the newly planted tree. Each tree will be staked and supported with biodegradable spiral guards to protect the young trees.
Early management	N/A	When necessary – usually throughout spring and summer.	Maintain a weed free area of 1m² around the base of the tree using mulch at c. 50mm, to prevent any competition from weeds and grasses. The mulch will help to retain water and improve soil structure. Regular watering of planted scrub will be necessary, particularly during hot, dry spells of weather during the first five years of establishment. Where watering takes place, care will be taken to ensure water reaches deep below the surface to reach the roots of the scrub, through prolonged and/or targeted watering near the base.

			Maintenance will consist of yearly protection checks and adjustments for the first five years. With any planting failures identified in the growing season and will be replaced in the next available planting season for the first five years. Trees should be protected by utilising biodegradable tree guards during the first five years. Should these become damaged and not provide the support necessary for development, they should be replaced. Despite this, tree guards should be removed after five years if it appears that the guards are suppressing plant growth.
Ongoing management		Year 5 - 30, annual checks and any remedial management as required.	An annual check will be undertaken to assess encroachment of scrub, and cover of non-native species and species indicative of suboptimal condition, and will trigger remedial action (e.g. strimming of scrub, hand pulling of suboptimal species). Harvest and collect fallen fruit to avoid enrichment of grassland. Formative pruning where required, to remove unwanted growth and/or deadwood that is affecting the health of the tree. Specialist pruning advice should be sought from an arborist. Tree canopy thinning/tree removal (only if required, as determined by the annual walkover), should primarily focus on canopy thinning or the removal of trees which are showing signs of poor physical health (i.e. disease, dead/partially dead, and excessive lean, to ensure that damage to healthy trees is mitigated as much as possible. Any deadwood should be maintained where possible, as deadwood provides niche habitats for an expansive range of both plant and animal species. The deadwood (if fallen) may remain in situ or collected and piled in discrete locations, if preferred. Here, the deadwood will form a vital habitat for invertebrates.
Grassland management		Annual hay cut as detailed within the Grassland (Medium, High, and Very High Distinctiveness) section.	Details for the management of the grassland beneath and surrounding the trees will be the same as given in the Grassland (Medium, High, and Very High Distinctiveness) creation and enhancement section above.

Orchard Species Lists (OR-TO3)

Example species list or similar mix for the orchard trees

Common Name	Scientific Name	Abundance / %	Comments
Apple	<i>Malus x domestica</i>	40	Example composition. Other apple subspecies/varieties could be considered.
Pear	<i>Pyrus communis</i>	30	Example composition. Other pear subspecies/varieties could be considered.
Plum	<i>Prunus domestica</i>	30	Example composition. Other plum subspecies/varieties could be considered.

Habitat Creation and Management – Risk Register and Remedial Measures

Habitat Type	Risk Factor	Trigger for Action	Remedial Measure
All habitats	Establishment of non-native invasive species.	Annual monitoring to identify the presence of invasive non-native species.	Implement a programme to eradicate invasive non-native species. Specialist advice should be obtained to ensure appropriate eradication measures are implemented for the identified species.
All habitats	Evidence of physical damage in the form of poaching from footfall and/or presence of litter.	Any evidence of litter and/or poaching from footfall.	Erection of signage and/or fencing to deter people entering the habitat. Organisation of regular litter picks.
Individual Trees/Mixed Scrub/Orchard Trees	Newly planted tree and scrub species failing to establish.	Newly planted trees and scrub species will be monitored and condition assessed. Trigger will be evidence of decline, such as signs of drought stress.	Initial planting phase will include a mulch layer to help retain water and then watering as needed through drier seasons during years 1-5 as they establish. If there is a failure to establish, the tree or scrub species will be replaced on a like-for-like basis.
Individual Trees/Mixed Scrub/Orchard Trees	Disease/pests	Dead bark/dieback/de-foliation/fungal growth/discolouration of leaves or fruit.	Prune any infected branches or areas of dieback to prevent spread. Any dead trees or scrub species should be replaced.
Individual Trees/Mixed Scrub/Orchard Trees	Growth of new trees and/scrub suppressed by grasses/weeds	Suppressed growth, excessive weeds at the base of trees.	Removal of weeds in and around habitats, with the addition of mulch (including grass cuttings) to suppress grass and weed growth during the initial stages of development.
Other Neutral Grassland/Modified Grassland	Failure of seeds to germinate.	Over 10% of the ground cover does not germinate during year 1-2.	Apply additional seed mix or plug plants in areas of failed establishment, during next suitable season.
Other Neutral Grassland	Poor sward height diversity.	If <20% of the sward is <7cm and <20% of the sward is >7cm in height.	Leave 20% of the sward un-mown during second cut; rotate unmown areas each year.
Other Neutral Grassland	Vigorous grass growth limiting species diversity.	Productive grasses are dominating the sward (>50% cover).	If further monitoring shows continued vigorous grass growth, introduce yellow rattle seed: 1) After the second cut of the year hay cut chain harrow the grassland three times in immediate succession and in a different direction each time. 2) Broadcast yellow rattle seed at a rate of 2.5kg/ha, then roll immediately with a flat roller. 3) If there is sufficient grass growth following sowing, take another cut before the end of year removing arisings.
Other Neutral Grassland/Modified Grassland	Scrub or bracken and species indicative of suboptimal condition encroachment.	Scrub or bracken cover is >5%, or 20%, respectively. Species indicative of sub-optimal condition comprises >5% of the sward.	Initiate programme of scrub and/or bracken removal as required. This can either be through mechanical removal or spot spraying with herbicide. Initiate a programme of hand pulling, mowing or spot spraying species of suboptimal condition.

4. Monitoring Schedule

To deliver BNG, a robust strategy is critical to monitor successes and challenges. Routine monitoring informs progress and facilitates the required management plan updates at set intervals.

Monitoring Strategy

Provide details of the monitoring strategy to encourage successful implementation of the management plan
The habitat management of the Off-Site area will undergo varying levels of monitoring from its establishment and throughout its long-term management. In the first 1-5 years, ecologists will conduct annual reviews to assess the progress of the proposed habitats’ development. During this time, key observations will determine if the habitats are successfully establishing and if any replacement planting or reseeding is required. During years 5-10, management of the Off-Site habitats will shift to post-establishment management for the grassland, hedgerow and scrub habitats. Monitoring will occur at the start and end of this five-year period, with an additional review of establishment in year 8. By the end of this period, the grassland, and scrub habitats should have reached their target conditions, and the review in year 10 will evaluate the success of habitat management efforts, recommending any necessary remedial actions if the targets have not been met. During years 11-30, monitoring will take place every five years, starting in year 15. The focus will be on assessing whether long-term management practices are maintaining the habitat at the target condition scores. During this period, adaptive management strategies will be reviewed to explore opportunities for further habitat enhancements.

Monitoring Methods

Habitat Type	Monitoring Methods	Monitoring Interval and Timing
Other Neutral Grassland	Undertake quadrat sampling to identify the habitat type that is establishing, and the number of species present per m ² . Estimate percentage of bare ground, bramble and scrub cover, and sward height above and below 7cm. Collate a botanical species list across the grassland to check against target species list.	Annually from years 1-5, then every 5 years. Surveys to be completed in the optimal season, between May and August.
Modified Grassland	Undertake quadrat sampling to identify the habitat type that is establishing and then number of species per m ² . Estimate percentage of bramble and bracken cover. Record variation in sward height and/or evidence of any invasive non-native species.	Annually from years 1-5, then every 5 years. Surveys to be completed within the optimal botanical season between May – August (inclusive).
Mixed Scrub	Record the number of woody species present and estimate percentage cover for each. Estimate percentage of any non-native shrubs and record whether there is presence of any Schedule 9 invasive non-native species. Estimate percentage cover of species of sub-optimal condition in the ground flora. Assess whether the scrub edge is well-developed.	Annually from years 1-5, then every 5 years. Surveys to be completed between May and August.
Individual Trees	All individual trees to be checked by a suitable surveyor for signs of stress, decline or other health issues.	Annually from years 1-5, then every 5 years. Surveys to be completed between May and August.

Habitat Type	Monitoring Methods	Monitoring Interval and Timing
	This will be done through a visual inspection of canopy, giving a percentage score of healthy leaf cover as well as an inspection of the bark and main body of the trees. Visual inspection for features of natural ecological niches.	Natural ecological niches to be inspected for from Year 20.
Traditional Orchard	All individual trees to be checked by a suitable surveyor for signs of stress, decline or other health issues. Any pruning requirements to benefit the fruits trees will be reviewed during the management checks. Estimate percentage of scrub growing between trees, level of grassland poaching, and the presence of invasive non-native plant species and species indicative of suboptimal condition. Survey the grassland below the fruit trees as part of the monitoring check for the other neutral grassland (as stated above). This is to determine that it is meeting the definition of other neutral grassland and has developed a diverse structure and abundance of positive indicator species.	Annually from years 1-5, then every 5 years. Surveys to be completed between May and August.

Monitoring Reports

Monitoring Report Schedule

Organisation Responsible for Submitting the Monitoring Reports	Organisation Receiving and Responsible for Reviewing Reports
Propco (Wokingham) Ltd	Wokingham Borough Council

Monitoring will be undertaken as per the following table.

Project Year	Month Report to be Submitted	Month Management Plan to be reviewed	Comments
Y1	September	September or October	Report on results of initial grassland, scrub, orchard and tree creation measures.
Y2	September	September or October	Report on the establishment period of grassland, scrub, orchard, and tree habitats and any actions that must be undertaken within the next year.
Y3	September	September or October	Report on the establishment period of grassland, scrub, orchard, and tree habitats and any actions that must be undertaken within the next year.
Y4	September	September or October	Report on the establishment period of grassland, scrub, orchard, and tree habitats and any actions that must be undertaken within the next year.
Y5	September	September or October	Report on the establishment period of grassland, scrub, orchard, and tree habitats and any actions that must be undertaken within the next year.
Y8	September	September or October	Review and report on the success of the establishment period of

			grassland, scrub, orchard, and tree habitats. Establish if any further habitat creation actions are required.
Y10	September	September or October	Report on the condition of habitats and highlight any actions that must be undertaken within the next five years, to better achieve the target conditions.
Y15	September	September or October	Report on the condition of habitats and highlight any actions that must be undertaken within the next five years, to better achieve the target conditions.
Y20	September	September or October	Report on the condition of habitats and highlight any actions that must be undertaken within the next five years, to better achieve the target conditions.
Y25	September	September or October	Report on the condition of habitats and highlight any actions that must be undertaken within the next five years, to better achieve the target conditions.
Y30	September	September or October	Report on the final condition of grassland, scrub, orchard, and tree habitats.

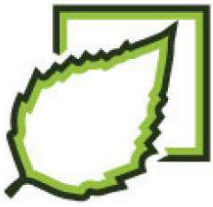
Summary of Adaptive Management Approaches

Adaptive management is a systematic approach to natural resource management that involves monitoring and evaluating the effectiveness of management actions, then adjusting as necessary to improve outcomes over time. It is an iterative process in which management actions are followed by targeted monitoring outcomes. These, in turn, inform the ongoing management.

Monitoring results inform necessary management changes to promote achieving BNG targets, as stated in the Statutory Biodiversity Metric and HMMP. Continual monitoring can pick up any unexpected, external influences. This can include, but is not limited to, dealing with a new plant disease, an invasive species that is thriving due to climate change, or changes to site access due to changes in hydrological features of the land.

Observations and notes from day-to-day management are important for delivering adaptive management. Consider how this information will be captured and fed into changes in management prescriptions, then filtered into subsequent monitoring reports.

Regular robust monitoring, and reporting to the responsible authority, should identify issues early on. Then you can make conscious decisions to implement effective actions. If the BNG objectives are affected by external factors, it is important to agree decisions on changes to the management prescriptions and targets with the responsible authority. Following the review, record any changes in this management plan and schedule.



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Appendix A: ECO-5904 – Evendons Lane, Wokingham – Ecological Appraisal.

Evendons Lane, Wokingham

Ecological Appraisal

May 2023

Quality Management	
Client:	Bewley Homes Ltd
Project:	Evendons Lane, Wokingham
Report Title:	Ecological Appraisal
Project Number:	ECO-5904
File Reference:	5904 EcoAp dv6/MC/DM
Date:	30/05/2023

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Plan 5904/ECO3	Habitats and Ecological Features
Plan 5904/ECO4	Faunal Results
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Appendices:

Appendix 5904/1	Land Use Parameter Plan
Appendix 5904/2	Desktop Study Data
Appendix 5904/3	Evaluation Methodology
Appendix 5904/4	Legislation Summary

Executive Summary

- i) **Introduction.** Aspect Ecology has been commissioned by Bewley Homes Ltd to undertake an Ecological Appraisal in respect of proposed redevelopment of land at Evendons Lane, Wokingham.
- ii) **Proposals.** The proposals are for redevelopment of the site to provide a care home along with access, parking and landscaping.
- iii) **Survey.** The site was originally surveyed in April 2020 based on standard extended Phase 1 methodology. In addition, a general appraisal of faunal species was undertaken to record the potential presence of any protected, rare or notable species, with specific surveys conducted in respect of bats, Badger, Dormouse, Great Crested Newt and reptiles. An update Phase 1 survey and building inspection has subsequently been undertaken in May 2023.
- iv) **Ecological Designations.** The site itself is not subject to any statutory or non-statutory ecological designations. The nearest statutory designation is Longmoor Bog Site of Special Scientific Interest (SSSI) located approximately 2.1km south-west of the site, which is also subject to designation as a Local Nature Reserve (LNR). The nearest non-statutory designation is The Moors Local Wildlife Site (LWS) located approximately 0.5km south of the site. All of the ecological designations in the surrounding area are physically well separated from the site and are therefore unlikely to be adversely affected by the proposals.
- v) **Habitats.** The south of the site is dominated by buildings and hardstanding, with the north dominated by grassland. Other habitats include an ornamental pond, hedgerows, coniferous woodland and ruderal vegetation and scrub at the south-west. The ornamental pond, along with sections of hedgerow will be removed under the proposals. This will be compensated by new, native planting. The remaining habitats within the site are not considered to form important ecological features.
- vi) **Protected Species.** Small numbers of roosting bats have been recorded using the buildings at the site, whilst foraging and commuting bats were also recorded to be present. Great Crested Newt were confirmed to make use of the ornamental pond, likely as part of the meta-population centred on ponds at the golf course to the south. Dormouse was found to be absent from the site. Accordingly consideration will need to be given to licensing and mitigation in relation to roosting bats and Great Crested Newt. Appropriate mitigation measures, centred on the careful timing of works, will be implemented to safeguard protected species during relevant site clearance works.
- vii) **Enhancements.** New native planting will be provided along with new wetland and wooded habitats, and new roosting features for bats and nesting features for birds.
- viii) **Summary.** In summary, the proposals have sought to minimise impacts on biodiversity and subject to the implementation of appropriate avoidance, mitigation and compensation measures, it is considered unlikely that the proposals will result in significant harm.

1 Introduction

1.1 Background and Proposals

- 1.1.1 Aspect Ecology has been commissioned by Bewley Homes Ltd to undertake an Ecological Appraisal in respect of proposed development of land at Evendons Lane, Wokingham, centred at grid reference SU 79869 66966 (see Plan 5904/ECO1), hereafter referred to as 'the site'. Additionally, the fields adjacent to the west of the site and the property to the south have been subject to ecological surveys. Together, the site and this additional area are referred to as the 'survey area' as indicated on Plan 5904/ECO3.
- 1.1.2 The proposals are for redevelopment of the site to provide a new care home along with access, parking and landscaping. The proposed land use parameter plan can be seen at Appendix 5904/1.

1.2 Site Overview

- 1.2.1 The site is located at the south west of Wokingham within an urban-edge context. The site is bound to the north by trees and grassland beyond which is Doles Lane, to the south by Evendons Lane, to the east by Blagrove Lane and to the west by several residential dwellings, horse grazed pasture and the grassland of Redlands Farm Park.
- 1.2.2 The south of the site is dominated by buildings and hardstanding, with the north dominated by grassland. Other habitats include an ornamental pond, hedgerows, coniferous woodland and tall ruderal vegetation.

1.3 Purpose of the Report

- 1.3.1 This report documents the methods and findings of the baseline ecology surveys and desktop study carried out in order to establish the existing ecological interest of the site, and subsequently provides an appraisal of the likely ecological effects of the proposals. The importance of the habitats and species present is evaluated. Where necessary, avoidance, mitigation and compensation measures are proposed so as to safeguard any significant existing ecological interest within the site and where appropriate, opportunities for ecological enhancement are identified with reference to national conservation priorities and local Biodiversity Action Plans (BAPs).

2 Methodology

2.1 Previous Survey Work

- 2.1.1 Aspect Ecology is aware that previous ecological scoping and survey work has been undertaken at the site by CSA Environmental Planning in 2006 and by Diversity Environmental Consultants in 2010 and 2013. This work comprised a habitats survey along with a number of Phase 2 surveys. These reports have been reviewed and where relevant, are referenced within this report.
- 2.1.2 Similarly, Aspect Ecology is aware of existing survey information from 2019 (undertaken by Derek Finnie Associates) and 2020 (undertaken by Hankinson Duckett Associates) relating to Sand Martins Golf Club, located to the south of the site, in relation to Great Crested Newt. These reports have been reviewed and where relevant, are referenced within this report.

2.2 Desktop Study

- 2.2.1 In order to compile background information on the site and its immediate surroundings the Thames Valley Environmental Records Centre (TVERC) was contacted during September 2020, with data requested on the basis of a search radius of 2km.
- 2.2.2 Where information has been received from the above organisation this is reproduced on Plan 5904/ECO2, where appropriate.
- 2.2.3 Information on statutory designations was obtained from the online Multi-Agency Geographic Information for the Countryside (MAGIC) database, which utilises data provided by Natural England, with an extended search radius (25km). In addition, the MAGIC database was searched to identify the known presence of any Priority Habitats within or adjacent the site. Relevant information is reproduced at Appendix 5904/2 and on Plan 5904/ECO2, where appropriate.
- 2.2.4 In addition, the Woodland Trust database was searched for any records of ancient, veteran or notable trees within or adjacent to the site.

2.3 Habitat Survey

- 2.3.1 The survey area was initially surveyed in April 2020 in order to ascertain the general ecological value of the land contained within the boundaries of the site and to identify the main habitats and ecological features present. An update survey was subsequently undertaken in May 2023.
- 2.3.2 The survey area was surveyed based on standard Phase 1 Habitat Survey methodology¹, whereby the habitat types present are identified and mapped, together with an assessment of the species composition of each habitat. This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential which require further survey. Any such areas identified can then be examined in more detail through Phase 2 surveys. This method was extended, in line with the Guidelines for Preliminary

¹ Joint Nature Conservation Committee (2010, as amended) 'Handbook for Phase 1 habitat survey: A technique for environmental audit.'

Ecological Appraisal² to record details on the actual or potential presence of any notable or protected species or habitats.

- 2.3.3 Using the above method, the site was classified into areas of similar botanical community types, with a representative species list compiled for each habitat identified. The nomenclature used for plant species is based on the Botanical Society for the British Isles (BSBI) Checklist.

2.4 Faunal Surveys

- 2.4.1 General faunal activity, such as mammals or birds observed visually or by call during the course of the surveys was recorded. Particular attention was also paid to the potential presence of any protected, rare or notable species, and specific consideration was given to bats, Badger *Meles meles*, Dormouse *Muscardinus avellanarius* and Great Crested Newt *Triturus cristatus*, as described below.

Bats³

Visual Inspection Surveys

- 2.4.2 **Buildings.** Buildings within the survey area were subject to specific internal and external inspection during 2020. However, building conditions may have altered due to time lapsed since the previous survey work. Therefore, the buildings within the site (B1 and B2) were subject to an update internal and external inspection during May 2023.
- 2.4.3 During the external inspections, particular attention was given to any potential roost features or access points, such as broken or lifted roof tiles, lifted lead flashing, soffit boxes, weatherboarding, hanging tiles, etc. and for any external signs of use by bats such as accumulations of bat droppings or staining. Binoculars were used to inspect any inaccessible areas more closely where appropriate.
- 2.4.4 Buildings B1 (sections a and b) and B3 were subject to internal inspections during 2020, with an update inspection of B1 (sections a and b) in May 2023. No access was available to roof voids within building B2 or sections c and d within B1. During the internal inspections, evidence for the presence of bats was searched for with particular attention paid to any loft voids and relevant potential roost features and locations, such as ridge boards, rafters, purlins, gable walls, and mortise joints. Specific searches were made for bat droppings that can indicate present or past use and extent of use, whilst other signs that can indicate the possible presence of bats were also searched for, e.g. presence of stained areas, feeding remains, corpses, etc. Any droppings collected during the course of the surveys were visually assessed and attributed to a species where possible on the basis of size/shape/texture⁴. Where appropriate, samples of similar droppings were collected with gloved hands and put into labelled eppendorfs, and sent off for DNA analysis where appropriate.

² Chartered Institute for Ecology and Environmental Management (CIEEM) (2013) 'Guidelines for Preliminary Ecological Appraisal.'

³ Surveys based on: English Nature (2004) 'Bat Mitigation Guidelines' and Collins, J. (ed.) (2016) 'Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn).' Bat Conservation Trust

⁴ Stebbings, RE, Yalden DW and Herman, JS (2007). 'Which bat is it? A guide to bat identification in Great Britain and Ireland.' The Mammal Society

2.4.5 **Trees.** Trees were assessed for their suitability to support roosting bats based on the presence of features such as holes, cracks, splits or loose bark. Suitability for roosting bats was rated based on relevant guidance⁵ as:

- Negligible;
- Low;
- Moderate; or
- High.

2.4.6 Any potential roost features identified were also inspected for any signs indicating possible use by bats, e.g. staining, scratch marks, bat droppings, etc.

Dusk Emergence/Dawn Re-entry Surveys

2.4.7 A dusk emergence survey was carried out on 29th July 2020, with a dusk emergence and dawn re-entry survey being carried out on 20th/21st August 2020 to identify any bats roosting in the trees and buildings within the survey area highlighted to have potential to support roosting bats.

2.4.8 Surveyors employed either Anabat Scout detectors or Echometer EM3 or EM Touch handheld bat detectors alongside BatBox Duet detectors to aid identification of any bats observed. An infrared (IR) camera set-up, comprising a 1080p IR sensitive camera and two Evolve T38 IR lights, was deployed at one location during the dusk emergence and dawn re-entry surveys on 20th/21st August 2020 in the location shown on plan 5904/ECO5. The IR camera was utilised to aid an assessment of potential roosting. At dusk, surveyors were in position 15-30 minutes prior to sunset, remaining in place for approximately 2 hours. At dawn, surveyors were in place approximately 2 hours before sunrise and remained in place until 15 minutes after sunrise. This survey method aims to identify any roosting bats emerging from or returning to potential roost sites.

2.4.9 This survey work was carried out during suitable weather conditions, as set out in Tables 2.1 and 2.2 below.

Table 2.1. Dusk survey details.

Date	Start & end times & time of sunset	Structure reference / location	Equipment used	Weather
29/07/2020	Start time: 20.40 End time: 22.55 Sunset: 20.55	B1, B3 and T1	Bat Box Duet, Echo Meter EM3, Echo Meter EM Touch and Anabat Scout.	Dry, 80% cloud, BF2, 20°C
Comments: The survey was undertaken by 9 surveyors.				
20/08/2020	Start time: 19.59 End time: 22.14 Sunset: 20.14	B3	Bat Box Duet, Echo Meter EM3, Echo Meter EM Touch and Anabat Scout.	Dry, 5% cloud, BF1, 20°C
Comments: The survey was undertaken by 2 surveyors.				

BF0 = calm, BF12 = hurricane force.

⁵ Collins, J. (ed.) (2016) 'Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn).' Bat Conservation Trust

Table 2.2. Dawn survey details.

Date	Start & end times & time of sunrise	Structure reference / location	Equipment used	Weather
21/08/2020	Start time: 04.00 End time: 06.15 Sunrise: 06.00	B1, B3 and T1	Bat Box Duet, Echo Meter EM3 and Echo Meter EM Touch and Anabat Scout.	Dry, 95% cloud, BF5-6, 18°C
Comments: The survey was undertaken by 8 surveyors.				

BF0 = calm, BF12 = hurricane force.

Activity Surveys

2.4.10 Walked transect surveys were undertaken in July and August 2020, immediately following the July dusk emergence survey and before the August dawn re-entry survey, to ascertain the level of usage of the site by foraging or commuting bats within the survey area. This survey method involves walking planned transect routes with key listening points, specifically covering habitats/features with particular potential for commuting or foraging bats. Echometer EM3, EM Touch and/or Anabat Scout handheld bat detectors were employed alongside BatBox Duet detectors to aid identification of any bats observed. For the activity survey following the dusk emergence survey in July the transect was walked after the completion of the emergence survey approximately 2 hours after sunset, for at least 30 minutes, with a minimum 5 minute stop at each listening point. This methodology was repeated before the start of the August dawn survey, thereby commencing approximately 3 hours before sunrise.

2.4.11 This survey work was carried out during suitable weather conditions, as set out in Tables 2.3 and 2.4 below.

Table 2.3. Dusk walked transect survey details.

Date	Start & end times & time of sunset	Transect / location	Equipment used	Weather
29/07/2020	Start time: 23.07 End time: 23.37 Sunset: 20.55	Transect A	Anabat Scout.	Dry, 45% cloud, BF0, 20°C
Comments: The survey was undertaken by 2 surveyors.				

BF0 = calm, BF12 = hurricane force

Table 2.4. Dawn walked transect survey details.

Date	Start & end times & time of sunrise	Transect / location	Equipment used	Weather
21/09/2020	Start time: 03.05 End time: 03.38 Sunrise: 06.00	Transect A	Anabat Scout.	Dry, 95% cloud, BF6, 18°C
Comments: The survey was undertaken by 2 surveyors.				

BF0 = calm, BF12 = hurricane force

Analysis of Bat Survey Recordings

2.4.12 All bat calls were analysed using Anabat Insight v1.9.1 to verify the species recorded during the survey work. Where recordings could not be reliably attributed to species (such as for *Myotis* species) or where overlaps between otherwise distinguishable species occur (such as in Pipistrelle bat calls around 40kHz or 50kHz) calls were identified to genus level; in the case of calls which could not be distinguished between *Nyctalus* sp. and Serotine, these have been labelled as 'unidentified big bat' species.

Badger⁶

2.4.13 A Badger survey was carried out during the initial Phase 1 survey in April 2020, with an update in May 2023. The survey comprised two main elements. The first element involved searching for evidence of Badger setts. For any setts that were encountered, each sett entrance was noted and mapped. The following information was recorded:

- Number and location of well used/active entrances; these are clear from any debris or vegetation and are obviously in regular use and may, or may not, have been excavated recently;
- Number and location of inactive entrances; these are not in regular use and have debris such as leaves and twigs in the entrance or have plants growing in or around the edge of the entrance; and
- Number of disused entrances; these have not been in use for some time, are partly or completely blocked and cannot be used without considerable clearance. If the entrance has been disused for some time all that may be visible is a depression in the ground where the hole used to be and the remains of the spoil heap.

2.4.14 The second element involved searching for signs of Badger activity such as well-worn paths and push-throughs, snagged hair, footprints, latrines and foraging signs, so as to build up a picture of any use of the site by Badger.

Dormouse⁷

2.4.15 Surveys were undertaken to establish the presence/absence of Dormouse within the survey area between June and December 2020. Survey work followed the methodology set out within best practice guidance⁷, whereby nesting tubes are attached to branches of trees and shrubs and checked on a regular basis for signs of use by Dormouse.

2.4.16 The guidance employs an indexation system to define survey effort, based on the number of tubes deployed and months over which these are in place and are checked for signs of use. Months in which use of nest tubes by Dormouse is more likely afford a higher number of points than months when there is a lower likelihood of use. The guidance recommends that determination of absence of Dormouse from a site should be based on a survey effort score of at least 20 points.

2.4.17 Accordingly, a total of 75 Dormouse nest tubes were deployed within the suitable wooded habitat within and bounding site (see Plan 5904/ECO4). Nest tubes were checked monthly between June and December 2020, giving a total survey effort score of 30 points across the survey area.

Great Crested Newt

Habitat Suitability Index (HSI)

2.4.18 As a first step in identifying the potential presence of Great Crested Newt within the survey area, a Habitat Suitability Index (HSI) study was undertaken of the onsite pond and the pond

⁶ Based on: Mammal Society (1989) 'Occasional Publication No. 9 – Surveying Badgers'

⁷ Based on: English Nature (2003) 'Surveying dormice using nest tubes: Results and experiences from the South West Dormouse Project', English Nature (2006) 'The Dormouse Conservation Handbook', 2nd Edition, English Nature Research Report No. 524; and Natural England (2011) 'Interim Natural England Advice Note – Dormouse surveys for mitigation licensing – best practice and common misconceptions', WML-537 (12/11)

adjacent to the north, whilst access was not granted to ponds to the south associated with Sand Martins Golf Course. No other ponds were identified within 250m of the site⁸ boundary (based on a review of Ordnance Survey mapping and satellite imagery). Guidance set out within Natural England's Method Statement template, to be used when applying for a Great Crested Newt development licence, states that surveys of ponds within 500m of the site boundary are only required when '(a) data indicates that the pond(s) has potential to support a large Great Crested Newt population, (b) the footprint contains particularly favourable habitat, (c) the development would have a substantial negative effect on that habitat and (d) there is an absence of dispersal barriers.' Given that in this instance, none of the four points listed above are applicable to the site, it is considered that survey of ponds within 500m of the site boundary is not required, and that survey of ponds within 250m, where access is granted, represents adequate survey effort.

2.4.19 An HSI study is used to assess the potential of water bodies to support Great Crested Newt. It is undertaken by attributing a score to a number of factors that can affect the presence or absence of this species. Ten factors are utilised in an HSI assessment, as described below:

- *SI1 Location*. The location of the water body within Great Britain;
- *SI2 Pond area*. The size of the water body;
- *SI3 Permanence*. How often the water body dries out;
- *SI4 Water Quality*. The water quality, based primarily on invertebrate diversity;
- *SI5 Shade*. The percentage of the perimeter of the water body that is shaded;
- *SI6 Fowl*. The presence or absence of water fowl;
- *SI7 Fish*. The presence or absence of fish;
- *SI8 Pond Count*. The number of water bodies within 1km of the surveyed water body (not counting those on the far side of major barriers such as roads);
- *SI9 Terrestrial*. The quality of terrestrial habitat surrounding the water body; and
- *SI10 Macrophytes*. The percentage cover of the surface area of the water body covered by macrophytes (aquatic plants).

2.4.20 The overall suitability of the water body is then determined by entering these figures into an equation devised by Oldham *et al.* (2000)⁹. The suitability of water bodies is classed into one of five categories, either 'poor', 'below average', 'average', 'good' or 'excellent'.

2.4.21 This HSI study was undertaken in line with the guidelines developed by Oldham *et al.* and subsequently adapted by ARG UK (2010)¹⁰. A suitably experienced ecologist undertook the assessment in line with these guidelines, with the study also supplemented by desktop research where appropriate.

Environmental DNA (eDNA)

2.4.22 An eDNA survey was carried out to determine the presence/absence of Great Crested Newt within one on-site pond, P1, whilst the pond adjacent to the north of the site was dry. While there were other off-site ponds recorded during initial background research for the site,

⁸ 250m is the typical maximum migratory range of this species, see English Nature (2004) 'An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt *Triturus cristatus*'. English Nature Research Report 576

⁹ Oldham RS, Keeble J, Swan MJS & Jeffcote M (2000) 'Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*)'. Herpetological Journal 10 (4), 143-155

¹⁰ Amphibian & Reptile Groups of the UK (2010) 'ARG UK Advice Note 5: Great Crested Newt Habitat Suitability Index'

access to these was not possible. Water samples were collected on the 29/06/2020 following the procedure outlined in the methods manual prepared for DEFRA by Biggs *et al.* (2014)¹¹. The survey fell within the acceptable seasonal window set out by Natural England (15th April to 30th June)¹². Samples were collected by suitably licensed Aspect Ecology staff. The water samples were sent for laboratory analysis which was conducted by 'Fera' and also followed the procedure set out by Biggs *et al.* (2014)¹⁴.

Population estimate survey

- 2.4.23 Given the confirmed presence of Great Crested Newt based on the eDNA survey of the on-site pond P1, a population estimate survey of this pond was undertaken during April to June 2021.
- 2.4.24 Surveys were undertaken in suitable weather conditions, using torching and bottle trapping methods in accordance with the 'Great Crested Newt Mitigation Guidelines'¹³ to determine the presence or absence of Great Crested Newt. Suitable weather conditions are those nights when the night-time air temperature is 5°C or warmer. All surveys were conducted during such conditions as set out in Table 2.5 below.

Table 2.5. Great Crested Newt survey dates and weather conditions.

Survey Date	Weather Conditions		
	Wind (BF)	Temp(°C)	Precipitation
26/04/2021	1	5-9	Dry
29/04/2021	2	4-8	Dry
13/05/2021	1-2	9-11	Dry, raining earlier in day
20/05/2021	3-4	11	Mostly dry with some light rain
15/06/2021	1-2	17-21	Dry
21/06/2021	1-4	11-12	Mostly dry with some light rain

BF0 = calm, BF12 = hurricane force

- 2.4.25 Torch surveys involved the use of high-powered torches (min. 50,000 candlepower) to count the number of each amphibian species present. As recommended by the guidance, the entire margin of the waterbody was walked once, slowly searching for Great Crested Newt.
- 2.4.26 Bottle-trapping involved setting traps made from 2-litre plastic bottles around the pond margins, and leaving the traps in place overnight before checking them the following morning. 25 bottle traps were deployed, equating to a density of at least one trap for every two metres of shoreline, as recommended by the guidance.

2.5 Survey Constraints and Limitations

- 2.5.1 All of the species that occur in each habitat would not necessarily be detectable during survey work carried out at any given time of the year, since different species are apparent during different seasons. Both the original and update Phase 1 habitat survey were

¹¹ Biggs J., Ewald N., Valentini A., Gaboriaud C., Griffiths R.A., Foster J., Wilkinson J., Arnett A., Williams P. and Dunn F. (2014). 'Analytical and methodological development for improved surveillance of the Great Crested Newt. Appendix 5. Technical advice note for field and laboratory sampling of great crested newt (*Triturus cristatus*) environmental DNA'. Freshwater Habitats Trust, Oxford.

¹² Natural England (2015) 'Great crested newts: surveys and mitigation for development projects. Standing advice for local planning authorities who need to assess the impacts of development on great crested newts'. Last updated at www.gov.uk on 24/12/2015.

¹³ Surveys based on: English Nature (2001) 'Great Crested Newt Mitigation Guidelines'

undertaken within the optimal season therefore allowing a robust assessment of habitats and botanical interest across the site.

- 2.5.2 Attention was paid to the presence of any invasive species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). However, the detectability of such species varies due to a number of factors, e.g. time of year, site management, etc., and hence the absence of invasive species should not be assumed even if no such species were detected during the Phase 1 survey.
- 2.5.3 A recognised limitation of the bat activity surveys is that bat detectors can only provide an index of activity rather than absolute numbers of bats. Therefore, the results of the bat activity surveys should only be considered indicative of the amount of use bats make of an area rather than the abundance of bats. In addition, some bat species, e.g. Brown Long-eared Bat, are difficult to detect due to their quiet echolocation calls.
- 2.5.4 Densely vegetated habitats within the site have the potential to reduce the detectability of field signs for faunal species such as Badger. A detailed survey was able to be completed and, whilst dense scrub vegetation is present within the site, it is considered that the survey results do provide an accurate baseline to assess the potential for impacts on Badger under the development proposals.
- 2.5.5 It is acknowledged that the original survey data is now 3 years old (2 years old in the case of Great Crested Newt). However, the update survey has allowed site conditions to be reviewed and has found these to have been largely static, with little recent change. Accordingly, no significant changes to habitats likely to affect status of faunal species has occurred, and existing information is considered to be sufficiently robust for a planning application. Any requirements for update survey work to inform licensing are set out at Chapter 6 below.

2.6 Ecological Evaluation Methodology

- 2.6.1 The evaluation of ecological features and resources is based on professional judgement whilst also drawing on the latest available industry guidance and research. The approach taken in this report is based on that described by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018)¹⁴, which involves identifying 'important ecological features' within a defined geographical context (i.e. international, national, regional, county, district, local or site importance). For full details refer to Appendix 5904/3.

2.7 National Policy Approach to Biodiversity in the Planning System

- 2.7.1 The National Planning Policy Framework (NPPF)¹⁵ describes the Government's national policies on 'conserving and enhancing the natural environment' (Chapter 15). NPPF is accompanied by Planning Practice Guidance on 'Biodiversity, ecosystems and green infrastructure' and ODPM Circular 06/2005¹⁶.

¹⁴ CIEEM (2018) 'Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine', ver. 1.1, Chartered Institute of Ecology and Environmental Management, Winchester

¹⁵ Ministry of Housing, Communities & Local Government (2019) 'National Planning Policy Framework'

¹⁶ ODPM (2006) 'Circular 06/2005: Planning for Biodiversity and Geological Conservation – A Guide to Good Practice'

- 2.7.2 NPPF takes forward the Government's strategic objective to halt overall biodiversity loss¹⁷, as set out at Paragraph 170, which states that planning policies and decisions should contribute to and enhance the natural and local environment by:

'minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures'

- 2.7.3 The approach to dealing with biodiversity in the context of planning applications is set out at Paragraph 175:

'When determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.*

- 2.7.4 The above approach encapsulates the 'mitigation hierarchy' described in British Standard BS 42020:2019¹⁸, which involves the following step-wise process:

- **Avoidance** – avoiding adverse effects through good design;
- **Mitigation** – where it is unavoidable, mitigation measures should be employed to minimise adverse effects;
- **Compensation** – where residual effects remain after mitigation it may be necessary to provide compensation to offset any harm; and
- **Enhancement** – planning decisions often present the opportunity to deliver benefits for biodiversity, which can also be explored alongside the above measures to resolve potential adverse effects.

¹⁷ DEFRA (2011) 'Biodiversity 2020: A strategy for England's wildlife and ecosystem services'

¹⁸ British Standards Institution (2013) 'Biodiversity – Code of practice for planning and development', BS 42020:2019

- 2.7.5 The measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development (BS 42020:2019, section 5.5).

2.8 Local Policy

- 2.8.1 The two planning policy documents that contain planning policies relevant to the area are the Core Strategy for Wokingham Borough Local Development framework (Adopted January 2010), hereafter referred to as the Core Strategy (2010), and the Managing Development Delivery (MDD) Local Plan (adopted 2014).
- 2.8.2 Core Strategy Policy 1 (CP1) relates to sustainable development and highlights the importance of demonstrating a maintenance or enhancement of the high quality of the environment in development proposals. CP7 of the Core Strategy (2010) relates to biodiversity and states that developments which impact habitats or species of principal importance or veteran trees or wildlife corridors will only be permitted if impacts are mitigated to prevent damaging impacts and appropriate compensation measures are provided to offset losses.
- 2.8.3 In February 2013 the South East Plan was formally abolished except for Policy NRM6 which relates to new residential development close to the Thames Basin Heath Special Protection Area (SPA). This policy remains in place as part of the Wokingham Borough development plan. It informs policy CP8 (Thames Basin Heaths Special Protection Area) and is referenced in Policy TB23 of the MDD.
- 2.8.4 Policy CC03 of the MDD relates to green infrastructure, trees and landscaping and states that green infrastructure networks should be promoted, with fragmentation avoided.
- 2.8.5 Policy TB23 of the MDD states that planning permissions will only be granted where proposals comply with Core Strategy Policy CP7. Further, the policy explicates the requirement for development proposals to demonstrate a number of factors with regards to biodiversity including:
- Buffering between development and features of elevated importance for nature conservation;
 - Providing opportunities to incorporate new biodiversity and enhance existing biodiversity (delivering an overall gain for biodiversity); and
 - Ensuring new developments are ecologically permeable through the protection and provision of well-linked wildlife corridors.

3 Ecological Designations

3.1 Statutory Designations

Description

- 3.1.1 The statutory designations of ecological importance that occur within the local area are shown on Plan 5904/ECO2. The nearest statutory designation is Longmoor Bog Site of Special Scientific Interest (SSSI) and Local Nature Reserve (LNR) located approximately 2.1km to the south-west of the site. Longmoor Bog SSSI is designated on the basis of supporting base-poor valley mire and Alder carr. This area is also subject to designation as Longmoor Bog Local Nature Reserve (LNR). The next nearest statutory designation is Holt Copse and Joel Park LNR located approximately 2.1km to the north of the site. Holt Copse & Joel Park LNR supports ancient woodland and a large Noctule *Nyctalus noctula* bat roost.
- 3.1.2 Natural England has developed Impact Risk Zones (IRZs) as an initial tool to help assess the risk of developments adversely affecting SSSIs, taking into account the type and scale of developments. The site sits within an IRZ in relation to Longmoor Bog SSSI and Heath Lake SSSI, although this does not flag any risks with residential development at the scale of the proposals.
- 3.1.3 The nearest international designation to the site is Thames Basin Heaths Special Protection Area (SPA), located approximately 5.2km to the south east of the site. This SPA is designated on the basis of supporting breeding populations of Nightjar *Caprimulgus europaeus*, Woodlark *Lullula arborea* and Dartford Warbler *Sylvia undata*.

Evaluation

- 3.1.4 The site itself is not subject to any statutory ecological designations. All statutory ecological designations in the surrounding area are well separated from the site by existing development and given the nature and scale of the proposals, these designations are unlikely to be affected.
- 3.1.5 The site is located approximately 5.2km from Thames Basin Heaths SPA, and accordingly lies beyond the 5km zone of influence in relation to recreational effects. A wider 5-7km zone is identified in relation to large scale developments, although given the nature and scale of the proposed care home development, this would not apply. Accordingly, in line with the Thames Basin Heaths SPA Delivery Framework, no mitigation is required in relation to recreational pressure at this designation.

3.2 Non-statutory Designations

Description

- 3.2.1 The non-statutory designations of nature conservation interest that occur within the local area are shown on Plan 5904/ECO2. The nearest non-statutory designation is The Moors Local Wildlife Site (LWS), located approximately 0.5km to the south of the site. The Moors LWS is designated on the basis of being an area of wet woodland, marsh and marshy meadow which supports a variety of wetland species. The next nearest non-statutory designation is Bottle Copse located approximately 0.6km to the north of the site.

Evaluation

- 3.2.2 The site itself is not subject to any non-statutory nature conservation designations. All non-statutory designations in the surrounding area are well separated from the site by existing development and given the nature and scale of the proposals, these designations are unlikely to be affected.

3.3 Priority Habitats, Ancient Woodland and Notable Trees

Description

- 3.3.1 There are no records of any ancient woodland or other priority habitat within or adjacent to the site. The nearest area of ancient woodland to the site is located approximately 0.6km to the north of the site. Three veteran and notable trees are however identified by the Woodland Trust database located in the immediate area around the site, namely a notable Oak tree adjacent to the north of the survey area, and a veteran Ash and a veteran Holly to the west of the survey area within the offsite wooded strip.

Evaluation

- 3.3.2 Subject to the implementation of appropriate mitigation measures (as discussed below in Chapter 6) it is unlikely that any Priority Habitats or any notable or veteran trees will be significantly affected by the proposals.

3.4 Summary

- 3.4.1 In summary, the site itself is not subject to any statutory or non-statutory ecological designations and, subject to the implementation of appropriate mitigation measures (as described above), it is unlikely that any such designations in the surrounding area will be significantly affected by the proposals.

4 Habitats and Ecological Features

4.1 Background Records

- 4.1.1 Background records of plant species were returned from TVERC, none of which relate to priority species.

4.2 Overview

- 4.2.1 The habitats and ecological features present within the survey area are described below and evaluated in terms of whether they constitute an important ecological feature and their level of importance, taking into account the status of habitat types and the presence of rare plant communities or individual plant species of elevated interest. The likely effects of the proposals on the habitats and ecological features are then assessed. The value of habitats for the fauna they may support is considered separately in Chapter 5 below.

- 4.2.2 The following habitats/ecological features were identified within/adjacent to the survey area:

- Other Neutral Grassland;
- Modified Grassland;
- Woodland;
- Scrub and Tall Ruderal Vegetation;
- Hedgerows and Trees;
- Pond;
- Ornamental Planting; and
- Buildings and Hardstanding.

- 4.2.3 The locations of these habitat types and features are illustrated on Plan 5904/ECO3 and described in detail below.

4.3 Priority Habitats

- 4.3.1 Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 places duties on public bodies to have regard to the conservation of biodiversity in the exercise of their normal functions. In particular, Section 41 of the NERC Act requires the Secretary of State to publish a list of habitats which are of principal importance for conservation in England. This list is largely derived from the 'Priority Habitats' listed under the former UK Biodiversity Action Plan (BAP), which continue to be regarded as priority habitats under the subsequent country-level biodiversity strategies.

- 4.3.2 Of the habitats within the site, hedgerows and the onsite pond are considered to qualify as Priority Habitats and therefore constitute important ecological features. This is discussed further in the relevant habitat sections below.

4.4 Other Neutral Grassland

Description

- 4.4.1 The grassland within the survey area is dominated by other neutral grassland, divided into four main areas, described below in further detail and shown on Plan 5904/ECO3.
- 4.4.2 Field G1 is located within the north of the site. This was recorded to support a very short, horse-grazed sward in 2020, although was recorded to support a largely uniform sward height of approximately 10-25cm during the May 2023 survey. The field lacks substantial thatch or tussocks indicating occasional cutting, although presence of last year's seed heads during the May 2023 survey indicated this grassland has not recently been managed. Grassland G1 contained approximately 40% herb cover and contained a moderate diversity of species. The sward was dominated by Rough Meadow Grass while other grass species present include Annual Meadow Grass, Perennial Rye Grass, Meadow Foxtail, Soft Brome, Sweet Vernal Grass and Yorkshire Fog and herbs present include Black Knapweed, Broad-leaved Dock, Common Mouse-ear, Creeping Buttercup, Creeping Thistle, Greater Plantain, Meadow Buttercup, Red Clover, Ribwort Plantain, Rough Hawkbit, Self-heal and White Clover.
- 4.4.3 Field G3 is located at the south-west of the site. This was recorded to be mown to a low sward height during the 2020 survey, although now appears to be unmanaged supporting a sward height of 30-40cm and is rank in nature. Additionally, there is evidence of physical damage such as rutting from vehicles and areas of rubbish. This grassland contained grass species including Cock's Foot, False Oak-grass, Meadow Foxtail, Perennial Rye-grass, Rough Meadow Grass, Sweet Vernal Grass and Yorkshire Fog, with several herb and ruderal species including Black Knapweed, Common Mouse-ear, Common Nettle, Common Sorrel, Creeping Buttercup, Creeping Thistle, Cuckooflower, Curled Dock, Germander Speedwell, Meadow Buttercup, Ribwort Plantain, Self-heal, Cleavers, Red Dead-nettle, Great Willow-herb, Hogweed, Ground Ivy, Greater Stitchwort, Bittercress, Rough Chervil, Flag Iris, Field Bindweed, Horsetail and Cranesbill.
- 4.4.4 The remaining other neutral grassland within the site is grassland G4. This grassland has been split into a southern section (G4a) and a northern section (G4b) as shown on Plan 5904/ECO3. Grassland G4a is located adjacent to the ornamental pond P1 and is overgrown in nature while grassland G4b is in use for keeping of livestock/poultry, resulting in a short sward with evidence of disturbance/bare ground. This grassland contains species including Yorkshire Fog, Rough Meadow Grass, Wood Aven, White Dead-nettle, Creeping Buttercup, Curled Docks, Cow Parsley, Creeping Thistle and Common Nettle. Parcel G4b contains a higher proportion of ruderal species.
- 4.4.5 Grassland G2 is located outside of the site itself within the wider survey area, to the north-west of the site. The field appears to be used for horse grazing (albeit horses were absent during the May 2023 survey), containing evidence of poaching/disturbance and being dominated by a short sward height of 2-7cm. Small areas located at the margins support a higher sward height of 20-30cm. Grass species within the sward include Annual Meadow Grass, Cock's-foot, Creeping Bent, Meadow Foxtail, Perennial Rye-grass, Red Fescue, Rough Meadow Grass, Sweet Vernal Grass and Yorkshire Fog, with herb species including Ribwort Plantain, Seal-heal, Thyme-leaved Speedwell, White Clover and Procumbent Pearlwort.

Evaluation

- 4.4.6 Overall, the other neutral grassland within the survey area supports a moderate diversity of largely common and widespread species with some species indicating elevated quality, especially within grasslands G1 and G2. However, the grasslands were not recorded to be species rich (recorded to support between 11 and 13.6 species per m² on average) and lacked indicators of priority habitat grassland types such as lowland meadow. Accordingly, this habitat is not uncommon in the local area. Furthermore, grasslands G3, G4 and G2 contain evidence of undesirable conditions such as excessive horse poaching, nutrient enrichment (a large proportion of undesirable species at locations), rubbish tipping and areas being encroached by scrub and tall ruderal vegetation. As such, the grassland is not considered to form a habitat of ecological importance.

4.5 Modified Grassland

Description

- 4.5.1 The site contains a small area of modified grassland (G5) which is located adjacent to the buildings and parking area. This area is likely subject to regular management in the form of mowing/strimming. This small area of grassland is grass dominated and contains species including Yorkshire Fog, Lords-and-Ladies, Ground Ivy, Cats-ear, Broad-leaved Dock and Creeping Buttercup.

Evaluation

- 4.5.2 The parcel of modified grassland is small and isolated within the site and is dominated by common and widespread species. As such it does not form a habitat of ecological importance.

4.6 Woodland

Description

- 4.6.1 Located within the south-east corner of the site is a small area of coniferous woodland (W1) as shown on Plan 5904/ECO3. This woodland is dominated by Pine, with trees likely 30-40 years in age, forming a tall, drawn-up canopy. Approximately 25-50% of the trees are showing signs of die back. Additionally, there is a small amount of Oak and Ash located at the southern boundary. This woodland contains a loose scrub layer including species such as Holly, Snowberry and Bramble. Woodland W1 is currently being used to house/graze small number of domestic pigs. As such, the ground is heavily disturbed and contains little ground flora vegetation, however there are some areas of Common Nettle.
- 4.6.2 Additional areas of woodland are located at the northern and western boundaries of the survey area, comprising broadleaved woodland strips.

Evaluation

- 4.6.3 The coniferous woodland W1 is small in size and is currently being used for housing pigs, resulting in substantial disturbance to the ground layer. Due to the largely monoculture planting of Pine, significant percentage of dieback present and the high level of grazing pressure this woodland forms a poor example of this habitat type. Therefore, this woodland does not form an ecologically important habitat.

4.7 Scrub and Tall Ruderal Vegetation

Description

- 4.7.1 Areas of scrub and tall ruderal vegetation are located in the south-western part of the site, adjacent to grassland G3. Tall ruderal vegetation is largely dominated by Common Nettle, whilst scrub vegetation comprises stands dominated by Bramble, together with Blackthorn thickets encroaching from the adjacent wooded strip.

Evaluation

- 4.7.2 The scrub and tall ruderal vegetation are common and widespread habitat types and do not form important ecological features.

4.8 Hedgerows and Trees

Description

- 4.8.1 Three hedgerows are present within and bounding the site located along the southern boundary, eastern boundary, western boundary, labelled respectively as H1, H2 and H3 on Plan 5904/ECO3. Additionally, hedgerow H4 bounds the survey area at the west which is also shown on Plan 5904/ECO3. The hedgerows within the survey area are described in more detail in Table 4.1 below.

Table 4.1. Hedgerow descriptions.

No.	H	W	Woody species	Ground flora & climbers	Associated features	Comments (including structure / management)
H1	8m	3m	Hawthorn, Elm, Lime, Holly, Horse Chestnut, Snowberry, Cherry, Laurel, Field Maple, Hazel	Bramble, Cleavers, Garlic Mustard, Common Nettle, Lords & Ladies, Cow Parsley, Willowherb	Located adjacent to Evendons Lane and forming part of a residential curtilage, including a number of ornamental plants.	The hedgerow contains a number of trees and appears to be subject to minimal management, largely relating to cutting back the lower branches from encroaching into the road. A substation section is managed on an ornamental basis as part of the garden.
H2	6-8m	3-4m	Oak, Ash, Hawthorn, Blackthorn, Privet, Elm, Field Maple, Hazel	Lesser Stitchwort, Cleavers, Grasses	Wider and taller at southern end. Generally dense, some gaps. Connects to the Pine <i>Pinus</i> sp. trees to the south.	Largely unmanaged, although subject to some cutting back from field.
H3	5-8m	3-5m	Hazel, Oak, Field Maple, Blackthorn, Elder, Ash, Hawthorn, Dog-rose	Ground Ivy, Cleavers, Lords & Ladies, Hedge Woundwort, Horsetail, Bluebell, Bramble, Grasses	Dry ditch at east. Contains a mature Oak tree.	This hedgerow contains a number of trees and is subject to low intensity management of the hedge with some historic evidence of cutting back from the field.
H4	6-10m	4-5m	Plum, Oak, Lime sp, Elder, Hawthorn, Dogrose, Blackthorn, Hazel, Holly, Ash	Cleaver, Common Nettle, Grasses, Ground Ivy		Bushy and outgrown in nature with no recent evidence of management.

- 4.8.2 A number of trees were recorded within the site, largely associated with the hedgerows. Standard trees within the hedgerows were noted to range from young/semi-mature to mature in age, with a single mature Oak tree situated within hedgerow H3.

Evaluation

- 4.8.3 The hedgerows at the site are relatively substantial in nature and contain a number of standard trees. All of the within the site are likely to qualify as a Priority Habitat based on the standard definition¹⁹, which includes all hedgerows (>20m long and <5m wide) consisting predominantly (>80%) of at least one native woody species. It has been estimated that approximately 84% of countryside hedgerows in Great Britain qualify as a Priority Habitat under this definition²⁰. Hedgerows are also listed as a Priority Habitat in Wokingham. From a preliminary appraisal, the hedgerows are considered unlikely to qualify as important under the Hedgerows Regulations 1997.
- 4.8.4 The hedgerows within the site are considered to form an important ecological feature of importance at the local level. The value of these habitat types in relation to faunal species, such as bats, Badger and Dormouse, is outlined within Chapter 5 below.
- 4.8.5 Some hedgerow losses are required for access under the proposals associated with hedgerow H2. Additionally, some impacts from the development footprint, parking and landscaping may affect hedgerow H3. These losses/damage will be compensated for by new planting throughout the site, maintaining connectivity around the site to the wider landscape. Furthermore, the new planting of native tree and shrub species within the site will form an enhancement to the network of wooded habitat at the site and wider area.

4.9 Pond

Description

- 4.9.1 One pond is located within the site (P1), along with an ephemeral pond located adjacent to the northern survey area boundary (P1a).
- 4.9.2 Pond P1 located within the site forms an ornamental, artificial waterbody, located within a fenced enclosure also containing a number of Chickens and Geese, resulting in an apparent very poor water quality, with the water clearly very turbid. The banks are formed by bare earth in places, whilst elsewhere they are artificial wood and concrete banks. Flag Iris was recorded at the pond, along with abundant ruderal species such as White Dead Nettle and Common Nettle along the banks.
- 4.9.3 The ephemeral pond P1a adjacent to the north-west of the survey area was recorded to be nearly dry during the April 2020 Phase 1 survey, and had completely dried up by June 2021. This pond was surrounded by trees and scrub forming a very shaded character with abundant leaf litter collecting in the pond.

¹⁹ Based on: Biodiversity Reporting and Information Group (2011) 'UK Biodiversity Action Plan (BAP) Priority Habitat Descriptions', ed. Ant Maddock

²⁰ Based on: Biodiversity Reporting and Information Group (2011) 'UK Biodiversity Action Plan (BAP) Priority Habitat Descriptions', ed. Ant Maddock

Evaluation

- 4.9.4 The ponds recorded within and adjacent to the site and survey area are considered to be poor quality examples of this habitat type given the dry character of the adjacent pond and the poor water quality within the onsite pond. However, given the recorded presence of Great Crested Newt within pond P1, this is considered to qualify under the relevant priority habitat description. As such, pond P1 forms an important ecological feature, of value at the site level. Pond P1 is to be lost under the proposals, although given its poor quality this is not considered to be of significance. Replacement wetland habitat will be provided as part of the SuDS strategy in the south-western part of the site (see Chapter 6).
- 4.9.5 Potential for the ponds to support faunal species such as amphibians is discussed below in Chapter 5.

4.10 Ornamental Planting

Description

- 4.10.1 To the north and east of building B3 is a small garden area, which comprises amenity grassland, paving, ornamental shrubs and a small number of Apple trees. These areas are dominated by ornamental species, and are managed on an ornamental basis, whilst they are also subject to regular use by the domestic Chickens and Geese.

Evaluation

- 4.10.2 Areas of ornamental planting were small in extent and managed on an ornamental basis, as part of the residential garden area. As such, these areas support minimal ecological value and are not considered to form an important ecological feature. In any event, ample new garden areas will be provided under the proposals.

4.11 Buildings and Hardstanding

Description

- 4.11.1 A number of buildings and other structures are present within the site and survey area, identified on Plan 5904/ECO3. The buildings include a single storey building forming a complex of offices, with a pitched roof of corrugated metal (B1), a further small building with a pitched corrugated roof (B2), a single storey cottage with a pitched, thatched roof (B3), along with a small number of caravans, sheds, stables and other temporary structures.
- 4.11.2 The buildings are generally associated with small areas of hardstanding, including a driveway and parking areas, which are largely devoid of vegetation aside from a small amount of colonising weeds, associated with the edges of the ornamental planting and disturbed ground.

Evaluation

- 4.11.3 The buildings and hardstanding are largely devoid of vegetation, although a small amount of common and widespread weed species were recorded at the margins. As such these habitats are inherently of negligible ecological value. Potential for the buildings to support faunal species such as roosting bats is discussed below in section 5.

4.12 Habitat Evaluation Summary

- 4.12.1 On the basis of the above, the following habitats within and adjacent to the site are considered to form important ecological features:

Table 4.2. Evaluation summary of habitats forming important ecological features.

Habitat	Level of Importance
Hedgerows and Trees	Local
Pond P1	Site

- 4.12.2 Other habitats present within the site include other neutral grassland, modified grassland, other ponds, ornamental planting and buildings. However, these habitats do not form important ecological features.

5 Faunal Use of the Site

5.1 Overview

- 5.1.1 During the survey work, general observations were made of any faunal use of the site with particular attention paid to the potential presence of protected or notable species. Specific survey work was undertaken in respect of bats, Badger, Dormouse and Great Crested Newt, with the results described below.

5.2 Priority Species

- 5.2.1 Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 places duties on public bodies to have regard to the conservation of biodiversity in the exercise of their normal functions. In particular, Section 41 of the NERC Act requires the Secretary of State to publish a list of species which are of principal importance for conservation in England. This list is largely derived from the 'Priority Species' listed under the former UK Biodiversity Action Plan (BAP), which continue to be regarded as priority species under the subsequent country-level biodiversity strategies.
- 5.2.2 During the survey work undertaken, the Priority Species Soprano Pipistrelle, Brown Long-eared bat, Great Crested Newt and House Sparrow were recorded within the site. This is discussed further below.

5.3 Bats

- 5.3.1 **Legislation.** 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 (see Appendix 5904/4 for detailed provisions). If proposed development work is likely to result in an offence a licence may need to be obtained from Natural England which would be subject to appropriate measures to safeguard bats. Given all bats are protected species, they are considered to represent important ecological features. A number of bat species are also considered S41 Priority Species.
- 5.3.2 **Background Records.** No specific records of bats from within or adjacent to the site were returned from the desktop study. Information received from the LRC returned records of Common Pipistrelle bat *Pipistrellus pipistrellus*, Daubenton's Bat, Soprano Pipistrelle bat *Pipistrellus pygmaeus*, Noctule, Leisler's Bat, Serotine, Nathusius' Pipistrelle bat, Natterer's, Brown Long-eared bat *Plecotus auritus*, other Long-eared bat sp. and other Pipistrelle bat species *Pipistrelle* sp. within 3km of the site. The closest record is for a Common Pipistrelle, recorded in 2012, located approximately 50m to the east of the site.
- 5.3.3 **Previous Survey Results.** Previous survey work undertaken by the third party consultancy identified a potential emergence and re-entry of a Common Pipistrelle bat to the mature Oak tree located within hedgerow H3, and assessed this to be a transient roost. In addition, a small number of droppings considered likely to be from a single male Brown Long-eared bat were recorded within the loft void of building B3.

5.3.4 Survey Results

Visual Inspection Surveys

Trees

- 5.3.5 A number of semi-mature and mature trees are present on site. The results of the tree assessment work undertaken at the site are illustrated on Plan 5904/ECO4 and summarised in Table 5.1 below:

Table 5.1. Tree inspection results.

Tree No.	Species	Age	Potential Roost Features	Suitability
T50	Oak	Mature	2 split limbs facing east towards field F1, Small covering of Ivy. Previously recorded bat roost in 2012.	Previously confirmed as a transient roost, in 2012

Buildings

- 5.3.6 A detailed visual inspection was undertaken of all the buildings within the site during 2020 with an update completed on building B1 and B2 during 2023, the results of which are detailed in Table 5.2, below. A number of other built structures are present at the site, largely forming temporary cabins and sheds used by the domestic Geese and Chickens. These features were all subject to regular use and lack enclosed voids or external features of value to bats and as such are not considered further.

Table 5.2: Building Description and Assessment of Bat Roosting Potential.

Building	Photo	Description	Assessment of bat roosting potential
B1		A one storey office building supporting a pitched roof of corrugated metal. A main void (B1-a) throughout the building has a large access point formed by a missing ceiling panel, located under an exposed underpass, allowing free access into this void at any time. The void measures approximately 3m in height and is open and uncluttered. Wood beams and rafters are present, whilst felt lines much of the roof, with numerous rips noted. Breathable roof membrane was also present associated with the southern void (B1-b) of the building. Two lower sections of buildings are also present (B1-c and B1-d) where internal access was not possible.	During 2020 a scattering of 30-50 Brown Long-eared bat droppings (confirmed by DNA analysis) were found in the central void (B1-a) located near the access hatch, which seems likely to be the access point for the bat(s). During the update survey of B1 a similar number of bat droppings (likely Brown Long-eared Bat given the shape, size and their previously confirmed presence) were recorded. No bat droppings were recorded within the southern loft void (B1-b). It appears likely that bats accessed the roost from the exposed access panel at the underpass, however other access points are available associated with the eaves and ripped lining. Likely transitional roost

Building	Photo	Description	Assessment of bat roosting potential
B2		A 1 storey building supporting a pitched corrugated roof which is understood to not contain a loft void.	The building is in active use, does not support a loft void, and does not support suitable external features considered to be of value to roosting bats. Negligible bat roosting potential
B3		A single storey cottage supporting a pitched thatched roof. Clay hanging tiles are present at the eaves in number of locations, whilst three chimneys are also present. Internally, the loft void forms one connected space. The thatch was located directly on top of wood beams with no lining, whilst the loft space itself was relatively open with little clutter.	No evidence for the presence of bats was recorded during the internal survey in 2020, whilst the void was very cobwebbed which further indicates a lack of bat activity in the recent past. Numerous features of value to bats are located externally on the building including hanging tiles and cracks and crevices associated with chimneys. Moderate bat roosting potential (previously recorded to support a Brown Long-eared roost of a likely lone male)
B4		A single storey stables structure with no void and subject to active use to keep horses.	The building is open and exposed not offering any enclosed, sheltered features for bats to use, whilst is also subject to active use as a stables. Negligible bat roosting potential

Dusk and Dawn Surveys

Emergence / re-entry surveys

- 5.3.7 Building B1 was found to support evidence of roosting Brown Long-eared bat, whilst building B3 was recorded to offer external opportunities for roosting bats, although no evidence for use of the loft void was found. As such building B3 was considered to support moderate bat roosting potential. All other buildings at the site are considered to offer negligible roosting potential. Tree T50 was recorded to support features of value to roosting bats, whilst a single Common Pipistrelle was recorded to use this tree as a roost in 2012.
- 5.3.8 As such, buildings B1 and B3, and tree T50 were subject to further survey work in the form of dusk emergence and dawn re-entry surveys during 2020. The results of the dusk emergence and dawn re-entry surveys are summarised in Table 5.3 below.

Table 5.3. Emergence / re-entry survey results.

Building/ Tree	Date	Sunset/sunrise and Survey start/end	Emergence/ re-entry	Summary of other activity
Building B1	29 th July 2020 (dusk)	Sunset: 20:55 Survey start: 20:40 Survey end: 22:55	1 Common Pipistrelle emergence associated with north-west corner of courtyard, recorded at 21:13	Frequent Common Pipistrelle foraging around B1. Soprano Pipistrelle, <i>Myotis</i> sp. and <i>Nyctalus/Eptesicus</i> also noted in smaller numbers.
	21 August 2020 (dawn)	Sunrise: 06:00 Survey start: 04:00 Survey end: 06:15	None	Occasional to frequent passes by Common Pipistrelle flying along and over B1. Very occasional passes by <i>Nyctalus/Eptesicus</i> , <i>Myotis</i> sp. and Soprano Pipistrelle.
Building B3	29 th July 2020 (dusk)	Sunset: 20:55 Survey start: 20:40 Survey end: 22:55	2 Common Pipistrelle bats recorded to emerge from the eastern chimney area at 21:11, at the south eastern extent of the building.	Very regular passes by Common Pipistrelle, with lower numbers of Soprano Pipistrelle noted foraging and flying around B3. <i>Myotis</i> sp., Brown Long- eared bat and <i>Nyctalus/Eptesicus</i> sp. noted on occasion, again either foraging or commuting along or around B3, including in field to west of B3.
	20 August 2020 (dusk)	Sunset: 20:14 Survey start: 19:59 Survey end: 22:14	None	Occasional to frequent passes by Common Pipistrelle flying along and over B3. Very occasional passes by <i>Nyctalus/Eptesicus</i> sp., <i>Myotis</i> sp. and Soprano Pipistrelle.
	21 August 2020 (dawn)	Sunrise: 06:00 Survey start: 04:00 Survey end: 06:15	1 Common Pipistrelle re-entry associated with northern side of gable end on the south eastern corner of building, likely under hanging tiles, recorded at 05:31	Occasional to frequent passes by Common Pipistrelle flying along and over B1, along with a re-entry of a single bat. Very occasional passes by <i>Nyctalus/Eptesicus</i> sp., <i>Myotis</i> sp. and Soprano Pipistrelle.
Tree T50	29 th July 2020 (dusk)	Sunset: 20:55 Survey start: 20:40 Survey end: 22:55	None	Frequent Common Pipistrelle foraging activity associated with T50. Soprano Pipistrelle noted foraging similarly.
	21 August 2020 (dawn)	Sunrise: 06:00 Survey start: 04:00 Survey end: 06:15	None	Occasional passes by Common Pipistrelle. Very occasional passes by Soprano Pipistrelle, and one pass by <i>Nyctalus/Eptesicus</i> sp.

Activity surveys (foraging /commuting)

5.3.9 The hedgerows, trees and scrub within the site and surveys area, in addition to the pond, offer potential opportunities for foraging bats as they are likely to support a reasonable biomass of invertebrate prey. In addition, the hedgerow, trees and treelines form linear corridors that could act as navigational aids for commuting bats and provide connectivity to similar offsite habitats in the surrounding area. As such, bat activity was assessed across the majority of the south of the site during the emergence and re-entry surveys, whilst short bat activity transects were undertaken at the survey area in July and August 2012, following completion of the emergence and re-entry surveys.

- 5.3.10 **Manual walked transect surveys.** The activity survey results illustrated on Plan 5904/ECO6, with summary tables provided below.

Table 5.4. Results of the dusk walked transect on 29th July 2020.

Species	Number of Passes Recorded	Approximate % of Total Passes Recorded
Common Pipistrelle	32	88.9
Soprano Pipistrelle	2	5.6
<i>Myotis</i> sp.	2	5.6
Total	36	100

Table 5.5. Results of the dusk walked transect on 21st August 2020.

Species	Number of Passes Recorded	Approximate % of Total Passes Recorded
Common Pipistrelle	6	85.7
<i>Nyctalus/Eptesicus</i> sp.	1	14.3
Total	7	100

- 5.3.11 As shown by the above results, during the dusk walked transect survey in July 2020, Common Pipistrelle was the most commonly recorded species, accounting for 88.9% of all registrations. Soprano Pipistrelle and *Myotis* sp. were recorded to a lesser extent, both accounting for 5.6% of total registrations each. In the August dawn walked transect survey, the most commonly recorded species was again Common Pipistrelle, accounting for 85.7% of registrations on the dawn survey. A single *Nyctalus/Eptesicus* registration was also recorded during this survey.
- 5.3.12 During the walked transects, the highest levels of bat activity were recorded in the south west corner of the survey area (see Plan 5904/ECO4), adjacent to the tree line, and comparatively slightly lower levels of bat activity were recorded throughout the rest of the site, however foraging and commuting passes were recorded throughout the site. Higher numbers of registrations recorded during the July survey with 36 registrations, with lower levels of activity recorded during the August survey with a total of 7 registrations.

5.3.13 Evaluation and Assessment of Likely Effects

Roosting

Trees

- 5.3.14 It is understood that tree T50 will be retained under the proposals, such that roosting features will remain intact. As such, subject to the implementation of the recommendation outlined at Chapter 6 below in relation lighting and protective measures, it is considered that this roost will be fully safeguarded under the proposals, should it remain in use.

Buildings

- 5.3.15 Buildings B1 and B3 were recorded to support bat roosts, whilst the remaining buildings and built structures at the site were considered to provide negligible suitability for roosting bats. Small numbers of Common Pipistrelle were recorded roosting in buildings B1 and B3 during the emergence and re-entry survey work, whilst bat droppings collected during 2020 (from a total scattering of approximately 50 droppings, both old and recent, located under the central ridge beam) from the loft void of building B1 were confirmed through DNA analysis to be Brown Long-eared bat droppings. During the update internal inspection completed within May 2023 the building B1 was in a similar state of repair and suitability for roosting

bats as recorded during the 2020 internal and emergence re-entry surveys. The update internal survey confirmed continued presence of roosting bats within building B1 (void B1-a) in the form of scattered droppings. Additionally, a similar amount of droppings were recorded indicating the number of bats and the associated roost type is likely to have remained the same since the 2020 emergence/re-entry surveys as described below.

- 5.3.16 Given the presence of individual Common Pipistrelle bats and a small number of Brown Long-eared droppings (which are likely from a single bat, or at most a small number of bats on an infrequent basis), the roosts in buildings B1 and B3 likely represent small numbers of male or non-breeding female bat and are therefore likely to be relatively temporal and opportunistic in nature. As such, in accordance with guidance set out within Natural England's 'Bat Mitigation Guidelines' (2004), these roosts are considered to be of low conservation significance, and of importance at the site level only.
- 5.3.17 Building B3 now lies outside of the site boundary and will be fully retained. Building B1 is to be lost under the proposals. Given the low status of the recorded roosts, the loss of building B1 is unlikely to be of significance to the local bat populations. However, given the legal protection that bats are afforded, it will be necessary to give consideration to licencing and implementation of safeguarding measures during building demolition, whilst new bat roosting habitat should be provided as part of the proposed development. Accordingly, recommended mitigation measures and a consideration of licencing requirements are set out in Chapter 6 below.

Foraging / Commuting

- 5.3.18 As noted above, the hedgerows, trees and scrub within the survey area offer foraging/commuting habitat for bats and indeed foraging and commuting bats were recorded during the activity surveys, including frequent passes from two common species (Common and Soprano Pipistrelle) and occasional passes from rarer species (*Nyctalus/Eptesicus* sp. and *Myotis* sp.). This combination of habitat types occurs relatively frequently in the surrounding area and taking this into the account, together with the levels of activity and species recorded during the survey work, the site is considered to be of at least local or district level value to bats.
- 5.3.19 The majority of the wooded habitat within and bounding the site will be retained under the proposals, whilst new tree, hedgerow and shrub planting will provide new foraging habitat within the site.
- 5.3.20 Accordingly, subject to the implementation of the recommendations outlined at Chapter 6 below, along with other ecological enhancements, it is considered that the conservation status of local bat populations will be fully safeguarded under the scheme.

5.4 Badger

- 5.4.1 **Legislation.** Badger receive legislative protection under the Protection of Badgers Act 1992 (see Appendix 5904/4 for detailed provisions), and as such should be assessed as an important ecological feature. The legislation 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 is the duty of planning authorities to consider the conservation and welfare impacts of development upon Badger and issue permissions accordingly.

- 5.4.2 Licences can be obtained from Natural England for development activities that would otherwise be unlawful under the legislation. Guidance on the types of activity that should be licensed is laid out in the relevant best practice guidance.^{21, 22}
- 5.4.3 **Background Records:** The nearest record of badger returned from the desktop study was located approximately 500m to the south east of the site and dated 2013.
- 5.4.4 **Previous Survey Results.** No signs of activity associated with Badger were previously recorded at the site.
- 5.4.5 **Survey Results and Evaluation.** No evidence of Badger or Badger setts were recorded during the survey work. However, as Badgers are a highly mobile species it is recommended that consideration for this species is continued throughout the proposals.

5.5 Dormouse

- 5.5.1 **Legislation:** Dormouse is fully protected under the Wildlife and Countryside Act 1981 (as amended) and is a European Protected Species under the Conservation of Habitats and Species Regulations 2017 (as amended). Such legislation affords protection to individuals of the species and their breeding sites and places of rest (see Appendix 5904/4 for detailed provisions). Dormouse is also a S41 Priority Species. On this basis, Dormouse is considered to form an important ecological feature.
- 5.5.2 **Background Records:** No specific records of Dormouse were returned from the desktop study from within 2km of the study area.
- 5.5.3 **Previous Survey Results.** Dormouse was not considered within the previous reports at the site.
- 5.5.4 **Survey Results and Evaluation:** The study area provides some opportunities for Dormouse, associated with the adjacent western wooded strip and the hedgerows, which are noted to connect to larger blocks of suitable woodland in the surrounds of the site. The majority of the study area however is dominated by open grassland fields which are unsuitable for Dormouse.
- 5.5.5 Given the presence of potential Dormouse habitat within the site, specific Dormouse survey work was undertaken in 2020. A total of 75 Dormouse tubes were put out at the site, within suitable habitat (see Plan 5904/ECO4) in June 2020, and checked in July, October and December 2020.
- 5.5.6 No evidence for the presence of Dormouse was identified during these surveys and as such, it is considered that Dormouse is likely absent from the site and therefore does not form a constraint to the proposals.

5.6 Other Mammals

- 5.6.1 **Legislation.** A number of other UK mammal species do not receive direct legislative protection relevant to development activities but may receive protection against acts of cruelty (e.g. under the Wild Mammals (Protection) Act 1996). In addition, a number of these

²¹ English Nature (2002) 'Badgers and Development'

²² Natural England (2011) 'Badgers and Development: A Guide to Best Practice and Licensing', Interim Guidance Document

mammal species are S41 Priority Species and should be assessed as important ecological features.

- 5.6.2 **Background Records.** No specific records of other mammals from within or adjacent to the site were returned from the desktop study. The desktop study returned records of Hedgehog and American Mink, of which the closest relates to Hedgehog and was located approximately 200m to the south east of the site and dated 2014.
- 5.6.3 **Previous Survey Results.** Evidence for Mammals and Rabbit was recorded during the previous survey work dated 2006. No other mammals were recorded at the site.
- 5.6.4 **Survey Results and Evaluation.** No evidence of any other protected, rare or notable mammal species was recorded within the site. Evidence of Wood Mouse *Apodemus sylvaticus* was recorded during the Dormouse surveys, with two Wood Mouse nests being noted in the December Dormouse nest-tube survey. Other mammal species likely to utilise the site, such as Fox *Vulpes vulpes*, remain common in both a local and national context, and as mentioned above do not receive specific legislative protection in a development context. As such, these species are not a material planning consideration and the loss of potential opportunities for these species to the proposals is of negligible significance.
- 5.6.5 The desktop study returned background records of Hedgehog within the surrounding area. Hedgehog is a Priority Species, albeit this species remains common and widespread in England. The site offers potential opportunities for this species, particularly in the form of areas of denser scrub, rank grassland tall herbs and Bramble in the west of the site, although habitats are unlikely to be of importance in a local context, and Hedgehog is considered to be of importance at a site level only. In any event, abundant similar opportunities are present within the local area and there is no evidence to suggest the proposals will significantly affect local populations of this species. However, it is recommended that precautionary safeguards are put in place to minimise the risk of harm to Hedgehog in the event this species is present, as detailed in Chapter 6 below.

5.7 Amphibians

- 5.7.1 **Legislation.** All British amphibian species receive a degree of protection under the Wildlife and Countryside Act 1981 (as amended). Great Crested Newt is protected under the Act and is also classed as a European Protected Species under the Conservation of Habitats and Species Regulations 2017 (as amended). As such, both Great Crested Newt and habitats utilised by this species are afforded protection (see Appendix 5904/4 for detailed provisions). Great Crested Newt is also a S41 Priority Species, as are Common Toad *Bufo bufo*, Natterjack Toad *Epidalea calamita*, and Pool Frog *Pelophylax lessonae*. As such, these species should be assessed as important ecological features.
- 5.7.2 **Previous Survey Results.** No evidence for the present of Great Crested Newt was recorded in 2010 or 2013, with the absence considered likely a result of poor water quality, predation by the domestic Geese and Chickens, and a lack of suitable vegetation for egg laying. It was however noted that Great Crested Newts are known to be present approximately 200m to the south of the site, associated with Sand Martins Golf Course. Common Frog and Smooth Newt were recorded.
- 5.7.3 Previous information has also been reviewed in relation to planning applications to the south of the site, associated with Sand Martins Golf Club. It is noted that in 2019, Great Crested Newt were found to be absent within the ponds surveyed located within 250m of

Land at Evendons Lane, whilst peak counts of 7 and 4 Great Crested Newt were recorded within two ponds located beyond 250m from the site. Update eDNA surveys in 2020 also found Great Crested Newt presence within two ponds within 250m of Land at Evendons Lane, indicating they had been colonised in the intervening year.

5.7.4 Background Records. No specific records of Great Crested Newt from within or adjacent to the site were returned from the desktop study. A number of records of Great Crested Newt, Smooth Newt, Common Toad and Common Frog were returned from the search area surrounding the site, with the closest record of Great Crested Newt located approximately 60 metres to the south east of the site.

5.7.5 Survey Results and Evaluation. As discussed at section 2 previously, a single pond (P1) is present within the site, whilst one further pond (P1a) is located adjacent to the northern boundary of the survey area. Five further ponds are located within 250m to the south, and are associated with Sand Martins Golf Course, although access was not granted to survey these ponds. An initial appraisal of accessible ponds was made using the HSI system to identify potential suitability to support Great Crested Newt, see Table 5.6, below.

Table 5.6. HSI survey results.

Pond	Suitability Indices										HSI Score	Suitability
	SI 1 Location	SI 2 Pond Area	SI 3 Pond Drying	SI 4 Water Quality	SI 5 Shade	SI 6 Water Fowl	SI 7 Fish	SI 8 Ponds	SI 9 Terrestrial Habitat	SI 10 Macrophytes		
Onsite Ponds												
P1	1	0.3	0.9	0.33	1	0.01	0.67	1	0.67	0.35	0.41	Poor
Offsite Ponds												
P1a	1	0.05	0.1	0.67	0.2	1	1	1	0.67	0.3	0.41	Poor

5.7.6 In summary, both the onsite pond and the pond adjacent to the north of the survey area were found to be of 'poor' suitability to support Great Crested Newts. This is largely a result of pond P1 being subject to significant disturbance and nutrient input from associated domestic Geese and Chickens, which are kept in an enclosure which includes this pond, whilst pond P1a is overshadowed and appears likely to dry up on a yearly basis.

5.7.7 Nevertheless, on the basis of the known presence of a population of this species to the south, further survey work was undertaken at the site, as detailed below.

5.7.8 A Great Crested Newt eDNA survey was conducted at the site in relation to the onsite pond P1 in 2020 (whilst the offsite pond was dry at time of survey). This returned a positive result, meaning this species was present within the pond.

5.7.9 Further population estimate surveys were undertaken during April to June 2021. These recorded only a single female Great Crested Newt, during the torching survey on 21 June 2021. No other amphibians were recorded during the surveys.

5.7.10 Accordingly, whilst the presence of Great Crested Newt has been confirmed at the site, it is considered that this likely represents a small number of outlier individual newts which have

dispersed from the core habitat located to the south associated with the Golf Course. The pond at the site is largely unsuitable for this species given the evident impacts from the domestic Geese and Chickens (indeed, no Great Crested Newt were recorded in previous surveys at the site in 2010 and 2013), whilst no other suitable waterbodies are located north of Evendons Lane which could act as a sink for dispersing newts to move towards (aside from pond P1a, which dries annually and as such is also unsuitable). In addition, very little suitable egg laying surfaces are present at the pond, and are largely limited to leaf litter and similar brash which falls into the pond, given the lack of aquatic plants present, save for Iris, which does not form a suitable surface for egg laying given the robust, erect form of the leaves. Furthermore, the low numbers of this species recorded in 2019 in the core habitat to the south, with no presence recorded within ponds 250m from the site (albeit presence was confirmed via eDNA survey in 2020 associated with two of these ponds), indicates that low numbers of this species are likely to make use of this core habitat.

- 5.7.11 Nevertheless, given the loss of the onsite pond to the proposals, along with the loss of suitable terrestrial habitat (namely the longer sward grassland and scrub within the survey area, based on Natural England guidance²³) it will be necessary to secure a licence for the proposed development and undertake appropriate mitigation. Further detail is set out at Chapter 6 below.

5.8 Reptiles

- 5.8.1 **Legislation.** All six species of British reptile are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), which protects individuals against intentional killing or injury. Sand Lizard *Lacerta agilis* and Smooth Snake *Coronella austriaca* receive additional protection under the Conservation of Habitats and Species Regulations 2017 (as amended); refer to Appendix 5904/4 for detailed provisions. All six reptile species are also S41 Priority Species. As such, all reptile species should be assessed as important ecological features.
- 5.8.2 **Background Records.** Background records were returned in relation to Slow Worm, Grass Snake and Common Lizard. The nearest record relates to Slow Worm, located approximately 400m to the south east of the site and dated 2010.
- 5.8.3 **Previous Survey Results.** No evidence for the presence of reptiles was included within the previous reports. The 2006 report recommends reptile surveys, albeit through reviewing historical aerial photography, the habitats look to have been more suitable for this species group at this point in time.
- 5.8.4 **Survey Results and Evaluation.** The site was previously recorded to be dominated by short sward grazed grassland or buildings and hardstanding, forming largely unsuitable habitat for reptile species. Small areas of longer sward grassland were recorded at field margins and in the south-west of the site, offering some potential opportunities for this species group, however given the very small area present, it was considered unlikely that this habitat is of particular value to reptiles, whilst only low numbers would be expected. Grassland G1 was recorded to support a longer sward during the May 2023 update survey, although it lacked a varied sward or established tussocks offering particular reptile habitat. Accordingly, it is considered that reptiles (if present) can be appropriately safeguarded through the implementation of a habitat manipulation exercise, as set out at Section 6.

²³ Natural England GCN Licence Method Statement (WML-A14-2), 'Licence risk asmt(2)'

5.9 Birds

- 5.9.1 Legislation.** 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, and their nests, whilst being built or in use, cannot be taken, damaged or destroyed. Species included on Schedule 1 of the Act receive greater protection and are subject to special penalties (see Appendix 5904/4 for detailed provisions).
- 5.9.2 Conservation Status.** The conservation importance of British bird species is categorised based on a number of criteria including the level of threat to a species' population status²⁴. Species are listed as Green, Amber or Red. Red Listed species are considered to be of the highest conservation concern being either globally threatened and or experiencing a high/rapid level of population decline (>50% over the past 25 years). A number of birds are also S41 Priority Species. Red and Amber listed species and priority species should be assessed as important ecological features.
- 5.9.3 Background Records.** Information from the data search included records for several bird species in the vicinity of the site, including the priority species Bullfinch, Cuckoo, Dunnock, Herring Gull, Lapwing, Lesser Redpoll, Lesser Spotted Woodpecker, Linnet, Nightjar, Skylark *Alauda arvensis*, Song Thrush *Turdus philomelos*, Starling and Yellow Wagtail. None of the records originate from within the site itself. The nearest of these records relates to Song Thrush located approximately 190m to the east of the site, and dated 2001.
- 5.9.4 Previous Survey Results.** The 2006 report stated that a number of common bird species likely use the site.
- 5.9.5 Survey Results and Evaluation.** Several species of bird were observed within the site during the Phase 1 survey including: Wood Pigeon *Columba palumbus*, Blackbird *Turdus merula*, House Sparrow *Passer domesticus*, Robin *Erithacus rubecula*, Pied Wagtail *Motacilla alba*, Magpie *Pica pica* and Jay *Garrulus glandarius*.
- 5.9.6** Most of the birds recorded at the site are not listed as having any special conservation status, although House Sparrow is included on the Red list as a result of declines in UK breeding populations and is also a Priority Species. However, the habitats present are common in the surrounding area and there is no evidence to suggest the site is of elevated value at a local level for this species, which in any case, is common in Great Britain²⁵. The proposals will result in the loss of sections of hedgerow to facilitate site access and this could potentially affect any nesting birds that may be present at the time of works. Accordingly, a number of safeguards in respect of nesting birds are proposed, as detailed in Chapter 6 below. In the long-term, new nesting opportunities will be available for birds as described in Chapter 6 below.

5.10 Invertebrates

- 5.10.1 Legislation.** A number of invertebrate species are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). In addition, Large Blue Butterfly *Maculinea arion*, Fisher's Estuarine Moth *Gortyna borellii lunata* and Lesser Whirlpool Ram's-horn Snail *Anisus vorticulus* receive protection under the Conservation of Habitats and Species Regulations

²⁴ Eaton MA, Aebischer NJ, Brown AF, Hearn RD, Lock L, Musgrove AJ, Noble DG, Stroud DA and Gregory RD (2015) 'Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man' British Birds 108, pp.708-746

²⁵ Population estimates of birds in Great Britain and the United Kingdom. Musgrove *et al.*, British Birds, 2013

2017 (as amended); refer to Appendix 5904/4 for detailed provisions. A number of invertebrates are also S41 Priority Species. Where such species are present, they should be assessed as important ecological features.

- 5.10.2 Background Records.** No specific records of invertebrates were returned from within or adjacent to the site. A record of a Small heath butterfly potentially being on-site were returned from the records centre, with the record being from 1991, this being within the 1km x 1km OS grid square containing part of the site, albeit more specific information was not available. A number of records of Stag Beetle (Priority Species) were returned within information received from TVERC, with the closest three of these records being located approximately 230 metres south-east of the site recorded in 2006.
- 5.10.3 Previous Survey Results.** No evidence for any protected or notable invertebrates was included within the previous reports associated with the site.
- 5.10.4 Survey Results and Evaluation.** No evidence for the presence of any protected, rare or notable invertebrate species was recorded within the site. The site is dominated by buildings, hardstanding and short grazed grassland, which are likely to support only a limited diversity of invertebrates. The site has several areas of bare ground and occasional patches of scrub but otherwise contains relatively few micro-habitats that would typically indicate elevated potential for invertebrates²⁶, such as a variable topography with areas of vertical exposed soil, areas of species-rich semi-natural vegetation; variable vegetation structure with frequent patches of tussocks combined with short turf; free-draining light soils; walls with friable mortar or fibrous dung. Accordingly, given the habitat composition of the site and lack of adjacent sites designated for significant invertebrate interest, it is considered unlikely that the proposals will result in significant harm to any protected, rare or notable invertebrate populations, and the site is not considered to support an important invertebrate assemblage.

5.11 Summary

- 5.11.1** On the basis of the above, a summary of the evaluation of fauna is provided below:

Table 5.6. Evaluation summary of fauna forming important ecological features.

Species / Group	Supported by or associated with the site	Level of Importance
Bats – Roosting	Confirmed presence on site	Site
Bats – Foraging / Commuting	Confirmed presence on site	Local
Hedgehog	Suitable habitat present	Site
Great Crested Newt	Confirmed presence within on site pond P1	Local
Birds	Confirmed presence on site	Site

- 5.11.2** Other fauna supported by the site include non-priority species of mammals, amphibians and invertebrates. However, these species do not form important ecological features.

²⁶ Natural England (2010) 'Higher Level Stewardship – Farm Environment Plan (FEP) Manual', 3rd Edition

6 Mitigation Measures and Biodiversity Net Gains

6.1 Mitigation

- 6.1.1 Based on the habitats, ecological features and associated fauna identified within / adjacent to the site, it is proposed that the following mitigation measures (**MM1-MM13**) are implemented under the proposals. Further, detailed mitigation strategies or method statements can be secured via suitably-worded planning conditions, as recommended by relevant best practice guidance (BS 42020:2019).

Hedgerows and Trees

- 6.1.2 **MM1 – Hedgerow and Tree Protection.** All hedgerows and trees to be retained within and adjacent to the proposed development shall be protected during construction in line with standard arboriculturalist best practice (BS5837:2012) or as otherwise directed by a suitably competent arboriculturalist. This will involve the use of protective fencing or other methods appropriate to safeguard the root protection areas of retained trees / hedgerows. This will include the offsite notable trees located to the north and west.

Pond

- 6.1.3 **MM2 – New Pond Creation.** To compensate for loss of the existing pond P1 within the site, a new wetland feature will be created as part of the SuDS strategy within the south-western part of the site. This will be designed to support a permanently wet area, forming suitable breeding habitat for amphibians and other aquatic wildlife, within a wider drainage basin supporting wet grassland vegetation. The pond will be designed in accordance with ecological principles, with a varied, sinuous margin and shallow sloping sides, planted with a range of marginal and aquatic vegetation.

Bats

- 6.1.4 **MM3 – Update Survey.** The existing bat roosting survey data is considered to provide sufficient information to determine mitigation and licensing requirements for the planning application. However, it is likely that update surveys of building B1 will be required at an appropriate stage to inform a licence application. Such surveys could be conditioned, in accordance with the exceptional circumstances set out under 9.2.4 of BS42020:2013: “*c) where adequate information is already available and further surveys would not make any material difference to the information provided to the decision-maker to determine the planning permission, but where further survey is required to satisfy other consent regimes, e.g. an EPS licence*”.
- 6.1.5 **MM4 – Licensing.** To avoid an offence under the relevant legislation, it will be necessary for the demolition of building B1 (resulting in the loss of bat roosts) to be carried out under a European Protected Species (EPS) development licence, obtained from Natural England. When determining whether to grant a licence, Natural England will need to give consideration to the three derogation tests under Article 16 of the Habitats Directive (1992), namely whether the development is for imperative reasons of overriding interest, no satisfactory alternative, and maintenance of favourable conservation condition.
- 6.1.6 The need for development is set out by the planning documents associated with the application. In summary, the redevelopment of the site will provide a valuable care home for the local population. Retention of the existing buildings would not be a satisfactory

alternative, as it would not provide a suitable building to deliver the requirements of a care home.

6.1.7 In terms of maintenance of favourable conservation status, this would be achieved through the implementation of safeguarding measures and provision of new roosting opportunities within the proposals, as set out below.

6.1.8 On this basis, it is therefore considered that, subject to full planning permission being granted and confirmation of the detailed mitigation measures in line with those set out below, there is no reason to suggest that any associated licence would not be granted by Natural England.

6.1.9 **MM5 – Safeguarding Measures during Demolition.** To minimise the risk to bats during demolition works, a number of safeguarding measures will need to be implemented. Evidence of bats have previously been recorded from roof void B1-a only in the form of scattered droppings and a single emergence during a survey in 2020. As such, measures will likely comprise building/void B1-a to be subject to a supervised soft strip involving the staged removal of building materials to render the building unsuitable for bats, under the supervision of a suitability qualified ecologist. The remainder of building B1 will then be demolished under a watching brief, and should any further bats be found works in that areas will cease and Aspect Ecology will be contact immediately. Works should also avoid periods of cold weather to ensure that bats are active and can respond to disturbance. These measures will be detailed in the method statement accompanying the EPS licence application.

6.1.10 **MM6 – Replacement Roosting Provision.** To compensate for losses of roosting habitat under the proposals, and to provide an increased roosting resource following development, a number of bat boxes should be provided on retained trees and within new buildings. The exact number and specification will be determined at the licensing stage.

6.1.11 **MM7 – Sensitive Lighting.** Light-spill onto retained and newly created habitat, in particular the offsite woodland and retained hedgerows, will be minimised in accordance with good practice guidance²⁷ to reduce potential impacts on light-sensitive bats (and other nocturnal fauna). This may be achieved through the implementation of a sensitively designed lighting strategy, with consideration given to the following key factors:

- **Light exclusion zones** – ideally no lighting should be used in areas likely to be used by bats. Light exclusion zones or ‘dark buffers’ may be used to provide interconnected areas free of artificial illumination to allow bats to move around the site;
- **Appropriate luminaire specifications** – consideration should be given to the type of luminaires used, in particular luminaries should lack UV elements and metal halide and fluorescent sources should be avoided in preference for LED luminaries. A warm white spectrum (ideally <2,700K) should be adopted to reduce the blue light component;
- **Light barriers / screening** – new planting (e.g. hedgerows and trees) or fences, walls and buildings can be strategically positioned to reduce light spill;

²⁷ Bat Conservation Trust and Institute of Lighting Professionals (2018) ‘Guidance Note 08/18: Bats and artificial lighting in the UK’; Stone, E.L. (2013) ‘Bats and lighting: Overview of current evidence and mitigation guidance.’; ILP (2011) ‘Guidance notes for the reduction of obtrusive light’ Institution of Lighting Professionals, GN01:2011.

- **Spacing and height of lighting units** – increasing spacing between lighting units will minimise the area illuminated and allow bats to fly in the dark refuges between lights. Reducing the height of lighting will also help decrease the volume of illuminated space and give bats a chance to fly over lighting units (providing the light does not spill above the vertical plane). Low level lighting options should be considered for any parking areas and pedestrian / cycle routes, e.g. bollard lighting, handrail lighting or LED footpath lighting;
- **Light intensity** – light intensity (i.e. lux levels) should be kept as low as possible to reduce the overall amount and spread of illumination;
- **Directionality** – to avoid light spill lighting should be directed only to where it is needed. Particular attention should be paid to avoid the upward spread of light so as to minimise trespass and sky glow;
- **Dimming and part-night lighting** – lighting control management systems can be used, which involves switching off/dimming lights for periods during the night, for example when human activity is generally low (e.g. 12.30 – 5.30am). The use of such control systems may be particularly beneficial during the active bat season (April to October). Motion sensors can also be used to limit the time lighting is operational.

Badger

6.1.12 **MM8 – Badger Construction Safeguards.** In order to safeguard Badger should they enter the site during construction works, the following measures will be implemented:

- Any trenches or excavations within the site that are to be left open overnight will be provided with a means of escape should a Badger enter. This could simply be in the form of a gently graded ramp or roughened plank of wood placed in the trench as a ramp to the surface. This is particularly important if the trench fills with water;
- Any temporarily exposed open pipes (>150mm outside diameter) should be blanked off at the end of each working day so as to prevent Badgers gaining access as may happen when contractors are off-site;
- Any trenches/pits will be inspected each morning to ensure no Badgers have become trapped overnight. Should a Badger become trapped in a trench it will likely attempt to dig itself into the side of the trench, forming a temporary sett. Should a trapped Badger be encountered a suitably qualified ecologist will be contacted immediately for further advice;
- The storage of topsoil or other 'soft' building materials in the site will be given careful consideration. Badgers will readily adopt such mounds as setts. So as to avoid the adoption of any mounds, these will be kept to a minimum and any essential mounds subject to daily inspections with consideration given to temporarily fencing any such mounds to exclude Badgers;
- The storage of any chemicals at the site will be contained in such a way that they cannot be accessed or knocked over by any roaming Badgers;
- Fires will only be lit in secure compounds away from areas of Badger activity and not allowed to remain lit during the night; and
- Unsecured food and litter will not be left within the working area overnight.

- 6.1.13 **MM9 – Badger Update Survey.** Given that no evidence of Badgers has been recorded within or adjacent to the site it is considered that Badgers do not currently pose a constraint to development. Nonetheless, Badgers are dynamic animals and levels of Badger activity can rapidly change at a site, with new setts being created at any time. It is therefore recommended that an update survey is carried out prior to commencement of site works in order to confirm the current status of Badgers at the site.

Hedgehogs

- 6.1.14 **MM10 – Hedgehog Safeguards.** In order to safeguard Hedgehogs and other small mammals should they enter the site during construction works, the following measures will be implemented:

- A watching brief should be maintained for Hedgehog and other small mammals throughout any clearance works;
- Any piles of material already present on site, particularly vegetation/leaves, etc. and any areas of dense scrub or hedgerows, shall be dismantled/removed by hand and checked for Hedgehog prior to the use of any machinery/disposal;
- Any material to be disposed of by burning, particularly waste from vegetation clearance and tree works, should not be left piled on site for more than 24 hours in order to minimise the risk of Hedgehogs occupying the pile. If this cannot be avoided, material should be stored within a container such as a skip to prevent animals from gaining access. Any material which has been stored on the ground overnight should be moved prior to burning to allow a thorough check for any animals which may have been occupying the pile;
- In the event that an injured Hedgehog is found, the animal should be wrapped carefully in a towel, the British Hedgehog Preservation Society (BHPS) phoned (01584 890 801) and the Hedgehog taken to a local vet immediately; and
- To maintain connectivity throughout the site for Hedgehog and to allow access to suitable foraging habitat contained within residential gardens, small holes (13cmx13cm) should be created within garden fences or under gates.

Great Crested Newt

- 6.1.15 **MM11 – Great Crested Newt Licensing.** Great Crested Newt was recorded to be present within the onsite pond P1, which will be lost to the proposals, along with associated terrestrial habitats. As such, in the absence of mitigation it is likely that the proposals would likely result in an offence under the Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended). Accordingly, consideration will need to be given to mitigation and licensing requirements for this species.
- 6.1.16 A district licensing scheme is in place for Berkshire, led by the NatureSpace Partnership, and as such, this provides an option to ensure that mitigation and licensing requirements for the Proposed Development are fully addressed. District licensing is intended to focus conservation effort where it will create maximum benefit for the species, with management of Great Crested Newt populations at a landscape scale rather than a site-specific mitigation approach. Accordingly, an application can be made to join the district licensing scheme, with a Conservation Payment to be made towards offsite habitat creation to secure a licence and allow works to proceed once consent is granted. Through this mechanism, the long-term

favourable conservation status of the local Great Crested Newt population will be maintained.

- 6.1.17 Alternatively, consideration can be given to applying for a site-specific development licence at the appropriate stage. This would likely involve replacement of the existing pond with a new pond feature as part of the SuDS strategy in the south-western part of the site, together with a programme of trapping and translocation to remove any newts from the development area.

Reptiles

- 6.1.18 **MM12 – Clearance of Grassland/Ruderal Vegetation.** As a precautionary measure to minimise the risk of harm to these species, in the unlikely event that any are present at the site, safeguards will be implemented during clearance of suitable habitat within the site. This will involve an initial search of the areas by a suitably qualified ecologist, followed by cutting the vegetation at the field margins to a short height (~15cm) so as to encourage any animals to disperse to suitable areas of nearby habitat, whilst also allowing for a further fingertip search of the area. This exercise should be carried out under the supervision of a competent ecologist during the active reptile season where practicable (generally March/April to September/October, depending on prevailing weather). Any potential refuge features, e.g. piles of rubble, heavy logs, brash piles, will be fingertip-searched by an ecologist prior to being carefully disassembled. Any animals encountered during the destructive search will be carefully rescued by the supervising ecologist and relocated to suitable nearby habitat.

Nesting Birds

- 6.1.19 **MM13 – Timing of Works.** To avoid a potential offence under the relevant legislation, no clearance of suitable vegetation should be undertaken during the bird-nesting season (1st March to 31st August inclusive). If this is not practicable, any potential nesting habitat to be removed should first be checked by a competent ecologist in order to determine the location of any active nests. Any active nests identified would then need to be cordoned off (minimum 5m buffer) and protected until the end of the nesting season or until the birds have fledged. These checking surveys would need to be carried out no more than three days in advance of vegetation clearance.

6.2 Biodiversity Net Gains

- 6.2.1 The National Planning Policy Framework (NPPF) encourages new developments to maximise the opportunities for biodiversity through incorporation of enhancement measures. The proposals present the opportunity to deliver ecological enhancements at the site for the benefit of local biodiversity, thereby making a positive contribution towards the broad objectives of national conservation priorities and the local Biodiversity Action Plan (BAP). The recommendations and enhancements summarised below are considered appropriate given the context of the site and the scale and nature of the proposals. Through implementation of the following ecological enhancements (**EE1 – EE7**), the opportunity exists for the proposals to deliver a number of biodiversity net gains at the site.

Habitat Creation

- 6.2.2 **EE1 – New Planting.** It is recommended that where practicable, new planting within the site be comprised of native species of local provenance, including trees and shrubs appropriate to the local area. Suitable species for inclusion within the planting could include native trees

such as Oak, Ash, Birch *Betula pendula* and Field Maple, whilst native shrub species of particular benefit would likely include fruit and nut bearing species which would provide additional food for wildlife, such as Blackthorn, Hawthorn, Crab Apple *Malus sylvestris*, Hazel *Corylus avellana* and Elder. Where non-native species are proposed, these should include species of value to wildlife, such as varieties listed on the RHS' 'Plants for Pollinators' database, providing a nectar source for bees and other pollinating insects.

6.2.3 EE2 – Grassland Enhancement. The proposed development provides the opportunity to secure ongoing management of the grassland field within the wider survey area to enhance its biodiversity value. This would likely include reduced grazing pressure to avoid trampling and poaching of the grassland and spreading of green hay to increase botanical diversity, together with an ecologically sensitive grazing or mowing regime. This would make a positive contribution towards the local BAP, which lists 'lowland meadows' as a priority. Consideration should be given to the creation of wildflower grassland within the site itself, which could include laying of wildflower turfs, comprising locally appropriate native species, to establish wildflower grassland. This would ensure rapid establishment of these habitats, and reduce the timeframe for delivering the range of ecological benefits that are proposed.

6.2.4 EE3 – Wetland Features. The opportunity exists under the proposals to create new wetland habitats that will provide a range of opportunities for wildlife. It is recommended that the potential to create ponds or other wetland habitats such as Sustainable Drainage Systems (SuDS) under the proposals be given due consideration. Creation of such habitats would provide opportunities for a range of wildlife while also helping to attenuate surface water run-off.

Bats

6.2.5 EE4 - Bat Boxes. A number of bat boxes will be incorporated within the proposed development. The provision of bat boxes will provide new roosting opportunities for bats in the area, such as Common Pipistrelle and Brown Long-eared Bat – a national Priority Species. So as to maximise their potential use, the bat boxes should ideally be situated on suitable retained trees, erected as high up as possible and sited in sheltered wind-free areas that are exposed to the sun for part of the day, facing a south-east, south or south-westerly direction. In addition, where architectural design allows, a number of integrated bat boxes / roost features will be incorporated into a proportion of the new build.

Birds

6.2.6 EE5 - Bird Boxes. A number of bird nesting boxes are to be incorporated within the proposed development, thereby increasing nesting opportunities for birds at the site. Ideally, the bird boxes will have greater potential for use if sited on suitable, retained trees, situated as high up as possible.

Invertebrates

6.2.7 EE6 – Habitat Piles. A proportion of any deadwood arising from vegetation clearance works should be retained within the site in a number of wood piles located within areas of new planting, new wetland habitats or areas of wildflower grassland in order to provide potential habitat opportunities for invertebrate species, which in turn could provide a prey source for a range of other wildlife. In addition, the provision and management of new native landscape planting will likely provide additional opportunities for invertebrates at the site in the long term.

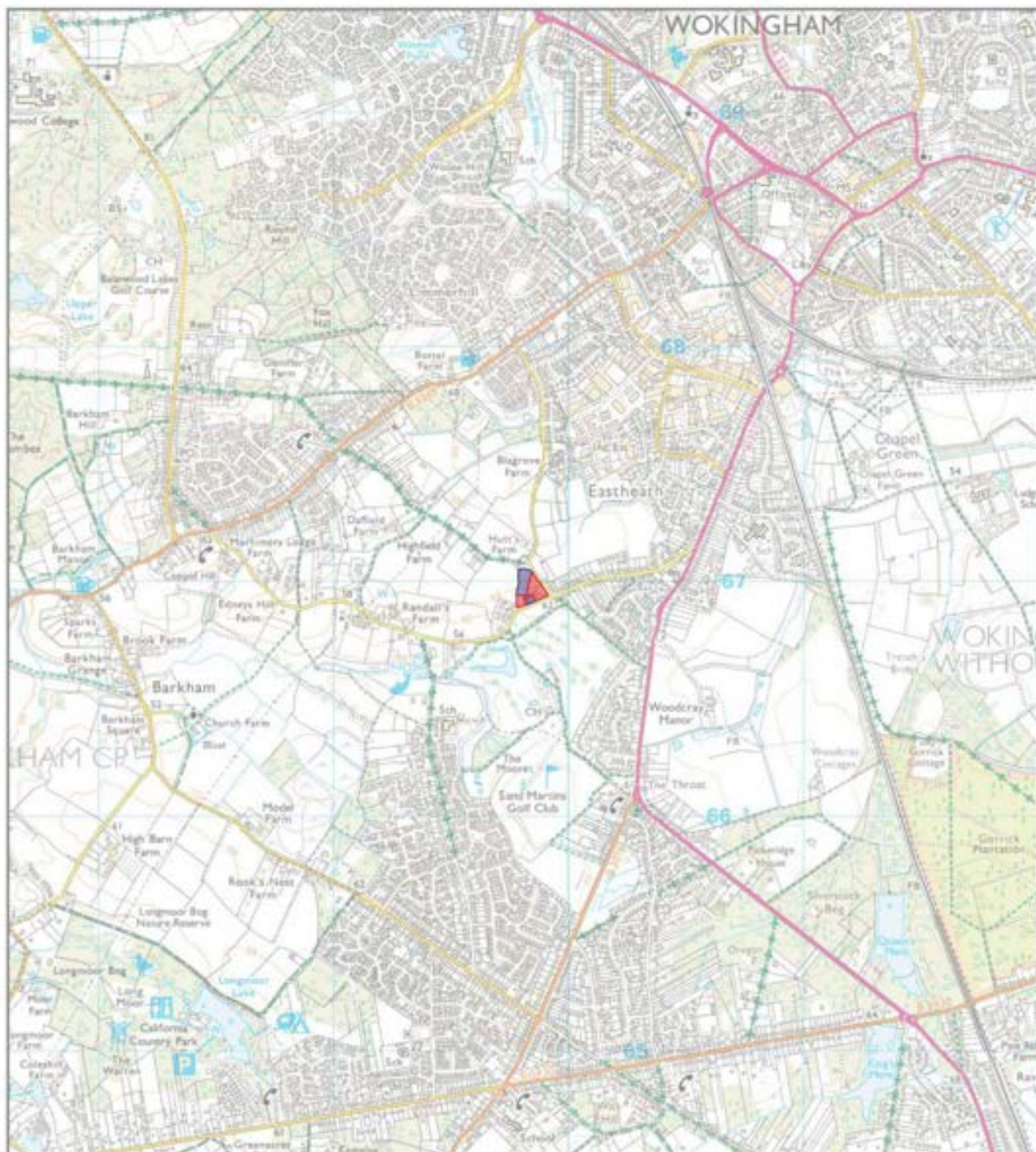
- 6.2.8 **EE7 – Bee Bricks.** It is recommended that a number of bee bricks be incorporated within the proposed development thereby increasing nesting opportunities for declining populations of non-swarming solitary bee populations. Ideally, bee bricks should be located within suitable south-facing walls (where architectural design allows), located at least 1m off the ground. The bricks should be unobstructed by vegetation, though within close vicinity of nectar and pollen sources.

7 Conclusions

- 7.1.1 Aspect Ecology has carried out an Ecological Appraisal of the proposed development of land at Evendons Lane, Wokingham, centred at grid reference SU 79843 66971, based on the results of a desktop study, Phase 1 habitat survey and a number of detailed protected species surveys.
- 7.1.2 The available information confirms that no statutory or non-statutory nature conservation designations are present within or adjacent to the site, and none of the designations within the surrounding area are likely to be adversely affected by the proposals.
- 7.1.3 The Phase 1 habitat survey has established that the site is dominated by habitats not considered to be of ecological importance, whilst the proposals have sought to retain those features identified to be of value. Where it has not been practicable to avoid loss of habitats, new habitat creation has been proposed to offset losses, in conjunction with the landscape proposals.
- 7.1.4 The habitats within the site support several protected species, including species protected under both national and European legislation. Accordingly, a number of mitigation measures have been proposed to minimise the risk of harm to protected species, with compensatory measures proposed, where appropriate, in order to maintain the conservation status of local populations.
- 7.1.5 In conclusion, the proposals have sought to minimise impacts and subject to the implementation of appropriate avoidance, mitigation and compensation measures, it is considered unlikely that the proposals will result in significant harm to biodiversity. On the contrary, the opportunity exists to provide a number of biodiversity net gains as part of the proposals.

Plan 5904/ECO1:

Site Location



Key:

- Site Location
- Survey Area

aspect ecology

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 West Way - Burying - Oxfordshire - OX3 2AF
 01295 299215 - info@aspect-ecology.com - www.aspect-ecology.com

**Land at Evendons Lane,
 Wokingham**

Site Location

5904/ECO1

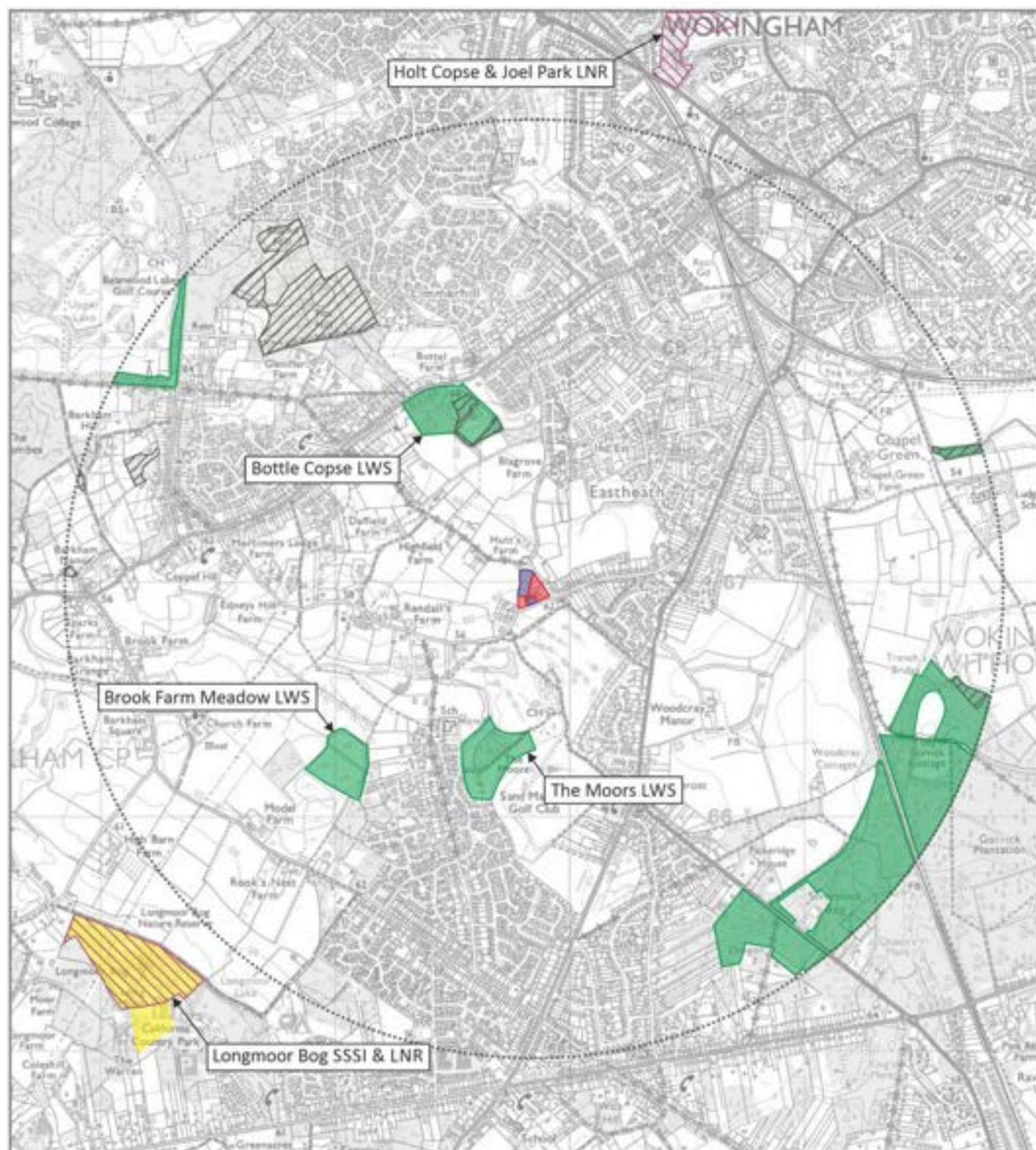
B/BG

May 2023



Plan 5904/ECO2:

Ecological Designations



Key:

- Site Location
- Survey Area
- Site of Special Scientific Interest (SSSI)
- Local Nature Reserve (LNR)
- Local Wildlife Site (LWS)
- Ancient & Semi-Natural Woodland (ASW)
- Local Records Centre 2km Search Area

Only non-statutory designations occurring within 2km of the site centre are shown

aspect ecology

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 Local Way - Banbury - Oxfordshire - OX3 2AF
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**Land at Evendons Lane,
 Wokingham**

Ecological Designations

5904/ECO2

B/BG

May 2023



Plan 5904/ECO3:

Habitats and Ecological Features



Key:

- Site Boundary
- Survey Area
- Other Neutral Grassland
- Modified Grassland
- Coniferous Woodland
- Broadleaved Woodland
- Pond
- Mixed Scrub
- Bramble Scrub
- Tall Ruderal Vegetation
- Ornamental Planting/Garden
- Building
- Hardstanding/Bare Ground
- Built Structure
- Fence
- Hedgerow
- Tree
- 3 Photograph Number & Location

aspect ecology

Aspect Ecology Limited - West Court - Hardwick Business Park
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Land at Evendons Lane, Wokingham

Habitats and Ecological Features

5904/ECO3

E

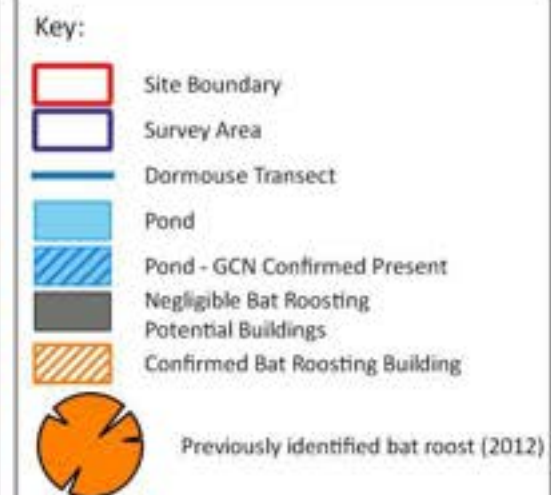
May 2023

PROJECT
TITLE
DRAWING NO.
REV.
DATE



Plan 5904/ECO4:

Faunal Results



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Land at Evendons Lane,
Wokingham
Faunal Results

S904/ECO4

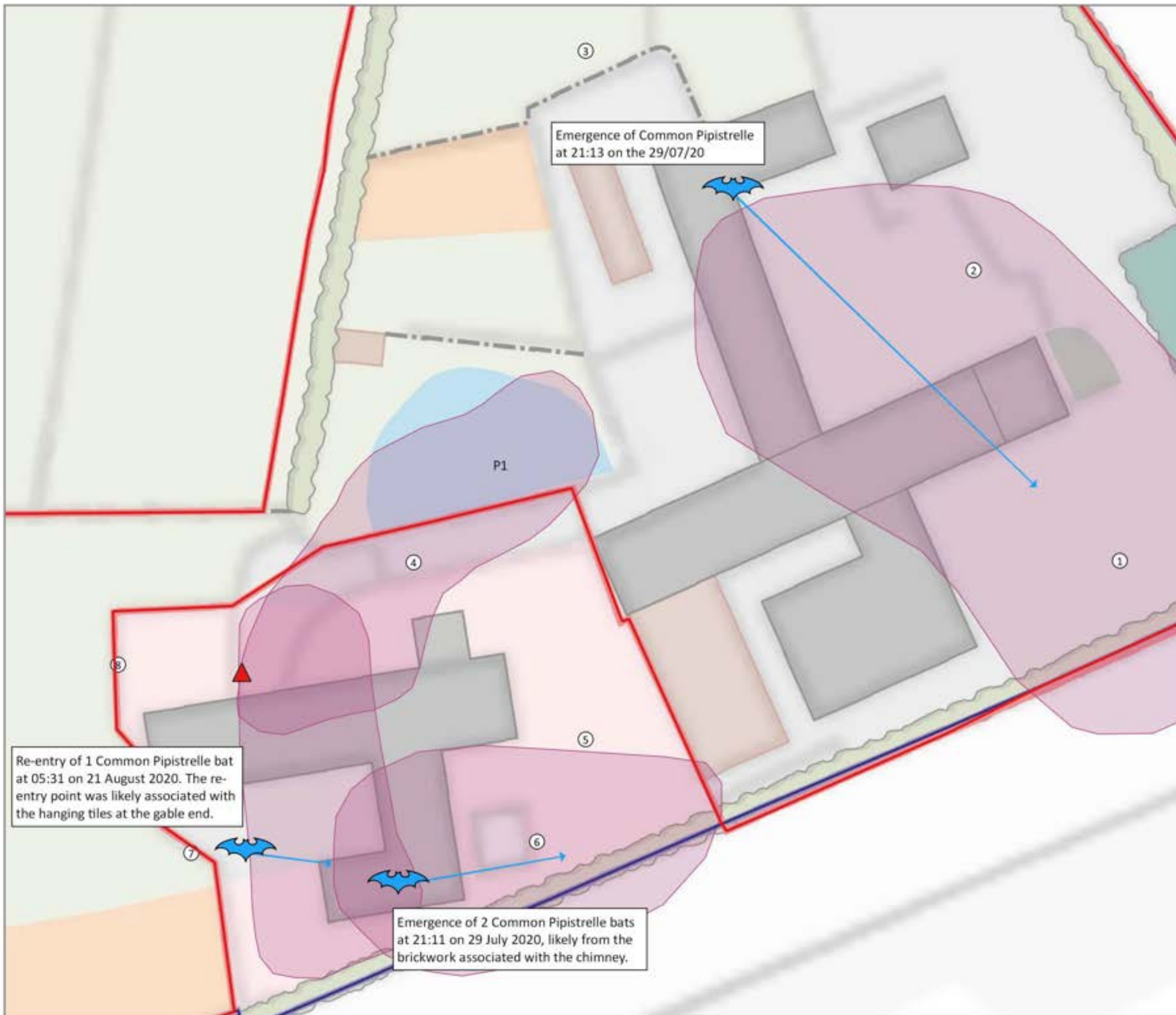
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May 2023

PROJECT
TITLE
DRAWING NO.
REV.
DATE

Plan 5904/ECO5:

Bat Emergence / Re-entry



- Key:
- Site Boundary
 - Survey Area
 - Surveyor Location
 - ▲ Infra-red camera location at dusk on 20 August 2020
 - Areas of Frequent Foraging Activity
 - 🦇 Common Pipistrelle Emergence or Re-entry Location
 - Common Pipistrelle Emergence or Re-entry Flight Path

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Land at Evendons Lane,
Wokingham
Bat Emergence/Re-entry

S904/EC05

B/BG

May 2023



Plan 5904/ECO6:

Bat Activity Results



Key:

- Site Boundary
- Survey Area
- Bat Activity Transect
- Listening Point
- Common Pipistrelle commuting pass

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Land at Evendons Lane,
Wokingham
Bat Activity Results

S904/ECO6

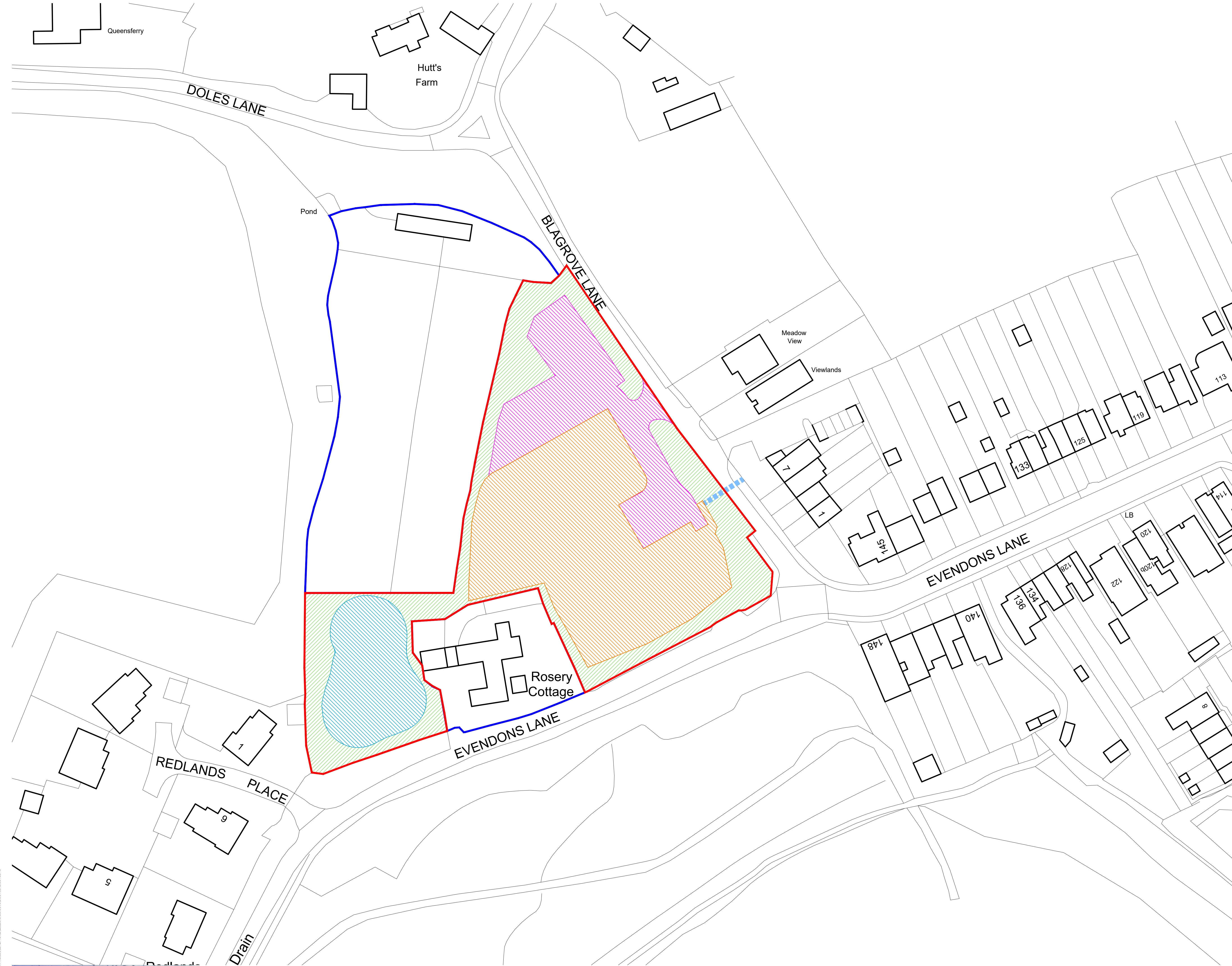
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May 2023



Appendix 5904/1:

Land Use Parameter Plan



N

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Rev	Date	Drawn	Checked
-	23/05/23	HS	
FIRST ISSUE			
A	23/05/23	HS	
REVISIONS FOLLOWING COMMENTS.			
B	25/05/23	HS	
RED AND BLUE LINE AMENDED. BASIN UPDATED.			

- Legend
- Application Boundary

Development area - including class C2 residential uses, gardens, paths, open space, landscaping, refuse storage

Proposed vehicular access, roads, and parking

Sustainable Urban Drainage System

Green infrastructure - including existing trees and planting, open space and landscaping

Proposed pedestrian crossing and footway

Project:
EVENDONS LANE
WOKINGHAM
RG414DX

Drawing Title:
PARAMETER PLAN
LAND USE

BEWLEY
HOMES

carlton

design partnership

Sewyn House, 35a Castle Way, Southampton, SO14 2AW
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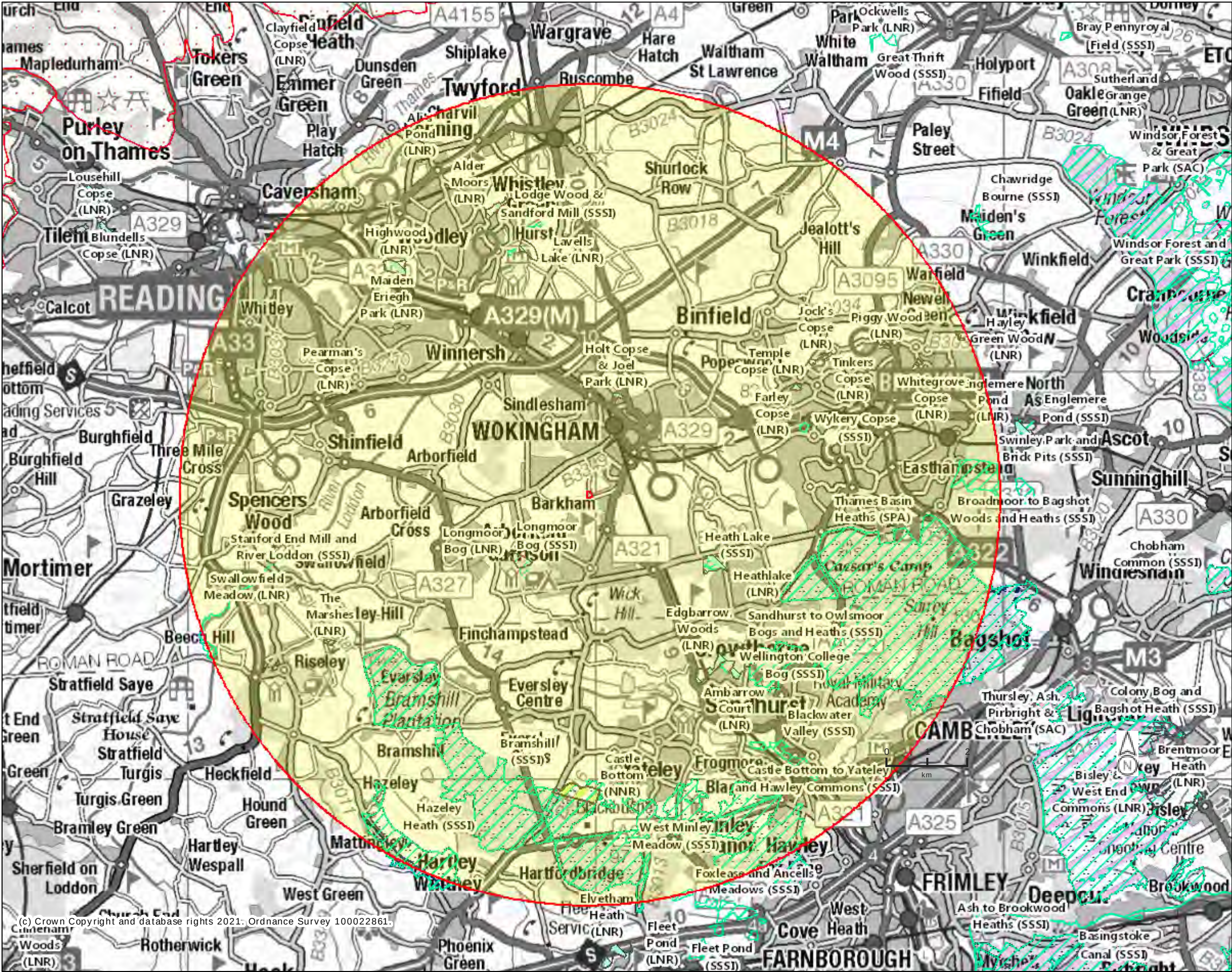
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Drg No: 230323/SL03

Rev: 8

Appendix 5904/2:

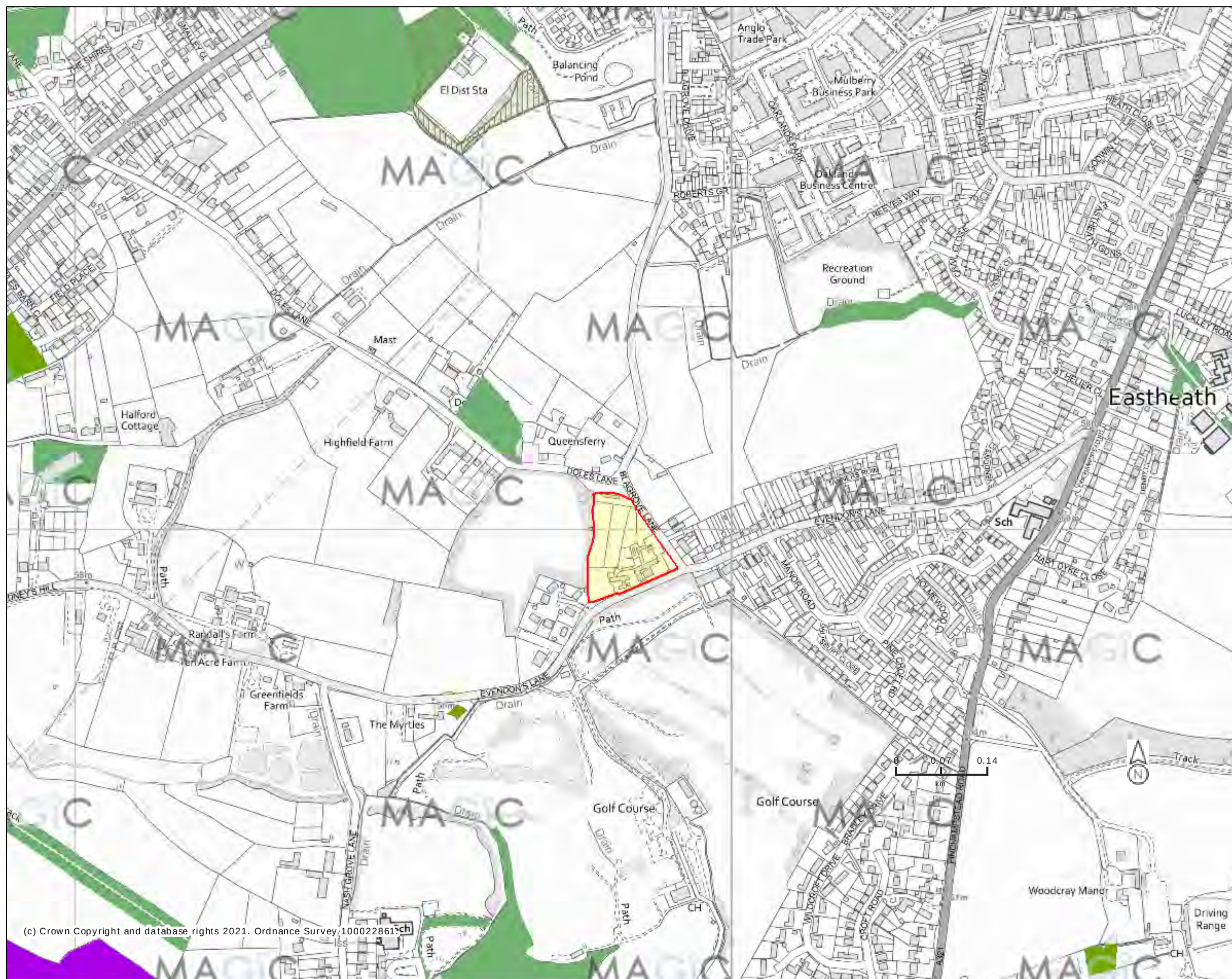
Desktop Study Data



Legend

- Areas of Outstanding Natural Beauty (England)
- Local Nature Reserves (England)
- National Nature Reserves (England)
- Ramsar Sites (England)
- Proposed Ramsar Sites (England)
- Sites of Special Scientific Interest (England)
- Special Areas of Conservation (England)
- Possible Special Areas of Conservation (England)
- Special Protection Areas (England)
- Potential Special Protection Areas (England)
- Biosphere Reserves (England)

Projection = OSGB36
xmin = 456700
ymin = 155700
xmax = 504400
ymax = 178600
Map produced by MAGIC on 15 March, 2021.
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Legend

Priority Habitat Inventory - Purple
Moor Grass and Rush Pasture (England)

Ancient Woodland (England)

Ancient and Semi-Natural Woodland

Ancient Replanted Woodland

Priority Habitat Inventory - Deciduous Woodland (England)

Priority Habitat Inventory - Traditional Orchards (England)

Woodpasture and Parkland BAP Priority Habitat (England)

Projection = OSGB36

xmin = 478300

ymin = 166300

xmax = 481300

ymax = 167800

Map produced by MAGIC on 15 March, 2021.

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Appendix 5904/3:

Evaluation Methodology

Principles of Ecological Evaluation

1. The evaluation of ecological features and resources is based on professional judgement whilst also drawing on the latest available industry guidance and research. The approach taken in this report is based on that described by the Chartered Institute of Ecology and Environmental Management (CIEEM) 'Guidelines for Ecological Impact Assessment in the UK and Ireland' (2016)¹.

Importance of Ecological Features

2. Various characteristics contribute to the importance of ecological features, including:
 - Naturalness;
 - Animal or plant species, sub-species or varieties that are rare or uncommon, either internationally, nationally or more locally, including those that may be seasonally transient;
 - Ecosystems and their component parts, which provide the habitats required by important species, populations and/or assemblages;
 - Endemic species or locally distinct sub-populations of a species;
 - Habitat diversity;
 - Habitat connectivity and/or synergistic associations;
 - Habitats and species in decline;
 - Rich assemblages of plants and animals;
 - Large populations of species or concentrations of species considered uncommon or threatened in a wider context;
 - Plant communities (and their associated animals) that are considered to be typical of valued natural/semi-natural vegetation types, including examples of naturally species-poor communities; and
 - Species on the edge of their range, particularly where their distribution is changing as a result of global trends and climate change.
3. As an objective starting point for identifying important ecological features, European, national and local governments have identified sites, habitats and species which form a key focus for biodiversity conservation in the UK, supported by policy and legislation. These are summarised by CIEEM guidance as follows:

Designated Sites

- Statutory sites designated or classified under international conventions or European legislation, for example World Heritage Sites, Biosphere Reserves, Wetlands of International Importance (Ramsar sites), Special Areas of Conservation (SAC), Special Protection Areas (SPA);
- Statutory sites designated under national legislation, for example Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR) and Local Nature Reserves (LNR);
- Locally designated wildlife sites, e.g. Local Wildlife Sites (LWS).

¹ Chartered Institute of Ecology and Environmental Management (CIEEM) (2016) 'Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal'

Biodiversity Lists

- Habitats and species of principal importance for the conservation of biodiversity in England and Wales (largely drawn from UK BAP priority habitats and priority species), often referred to simply as Priority Habitats / Species;
- Local BAP priority species and habitats.

Red Listed, Rare, Legally Protected Species

- Species of conservation concern, Red Data Book (RDB) species;
- Birds of Conservation Concern;
- Nationally rare and nationally scarce species;
- Legally protected species.

4. In addition to this list, other features may be considered to be of importance on the basis of local rarity, where they enable effective conservation of other important features, or play a key functional role in the landscape.

Assigning Level of Importance

5. The importance of an ecological feature should then be considered within a defined geographical context. Based on CIEEM guidance, the following frame of reference is used:
 - International (European);
 - National;
 - Regional;
 - County;
 - District;
 - Local (e.g. Parish or Neighbourhood);
 - Site (not of importance beyond the immediate context of the site).
6. Features of 'local' importance are those considered to be below a district level of importance, but are considered to appreciably enrich the nature conservation resource or are of elevated importance beyond the context of the site.
7. Where features are identified as 'important' based on the list of key sites, habitats and species set out above, but are very limited in extent or quality (in terms of habitat resource or species population) and do not appreciably contribute to the biodiversity interest beyond the context of the site, they are considered to be of site importance.
8. In terms of assigning the level of importance, the following considerations are relevant:

Designated Sites

9. For designated sites, importance should reflect the geographical context of the designation (e.g. SAC/SPA/Ramsar sites are designated at the international level whereas SSSIs are designated at the national level). Consideration should be given to multiple designations as appropriate (where an area is subject to differing levels of nature conservation designations).

Habitats

10. In certain cases, the value of a habitat can be measured against known selection criteria, e.g. SAC selection criteria, 'Guidelines for the selection of biological SSSIs' and the Hedgerows Regulations 1997. However, for the majority of commonly encountered sites, the most relevant habitat evaluation will be at a more localised level and based on relevant factors such as antiquity, size, species-diversity, potential, naturalness, rarity, fragility and typicalness (Ratcliffe, 1977). The ability to restore or re-create the habitat is also an important consideration, for example in the case of ancient woodland.
11. Whether habitats are listed as priorities for conservation at a national level in accordance with Sections 41 and 42 of the Natural Environment and Rural Communities Act (NERC) 2006, so called 'Habitats of Principal Importance' or 'Priority Habitats', or within regional or local Biodiversity Action Plans (BAPs) is also relevant, albeit the listing of a particular habitat under a BAP does not in itself imply any specific level of importance.
12. Habitat inventories (such as habitat mapping on the MAGIC database) or information relating to the status of particular habitats within a district, county or region can also assist in determining the appropriate scale at which a habitat is of importance.

Species

13. Deciding the importance of species populations should make use of existing criteria where available. For example, there are established criteria for defining nationally and internationally important populations of waterfowl. The scale within which importance is determined could also relate to a particular population, e.g. the breeding population of common toads within a suite of ponds or an otter population within a catchment.
14. When determining the importance of a species population, contextual information about distribution and abundance is fundamental, including trends based on historical records. For example, a species could be considered particularly important if it is rare and its population is in decline. With respect to rarity, this can apply across the geographic frame of reference and particular regard is given to populations where the UK holds a large or significant proportion of the international population of a species.
15. Whether species are listed as priorities for conservation at a national level in accordance with Sections 41 and 42 of the Natural Environment and Rural Communities Act (NERC) 2006, so called 'Species of Principal Importance' or 'Priority Species', or within regional or local Biodiversity Action Plans (BAPs) is also relevant, albeit the listing of a particular species under a BAP does not in itself imply any specific level of importance.
16. Species populations should also be considered in terms of the potential zone of influence of the proposals, i.e. if the entire species population within the site and surrounding area were to be affected by the proposed development, would this be of significance at a local, district, county or wider scale? This should also consider the foraging and territory ranges of individual species (e.g. bats roosting some distance from site may forage within site whereas other species such as invertebrates may be more sedentary).

Appendix 5904/4:

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.

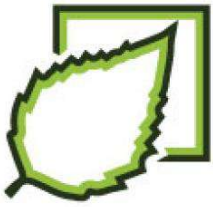
² Special Protection Areas (SPAs) are protected sites classified in accordance with Article 4 of the EC Directive on the Conservation of Wild Birds (79/409/EEC) (aka the Birds Directive), which came into force in April 1979. SPAs are classified for rare and vulnerable birds (as listed on Annex I of the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

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Appendix B: PEG602-08C – 171 Evendons Lane, Wokingham BNG Report



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Biodiversity Net Gain Assessment Report

171 Evendons Lane,
Wokingham

Report For:

Propco (Wokingham) Ltd

Date: 06/10/2025

PEG602-08C

171 Evendons Lane, Wokingham



Document Control

Revision	Issue Status	Notes	Prepared By / Date	Reviewed By / Date	Approved By / Date
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1.0 Executive Summary

- 1.1 Pioneer Environment Group Ltd was commissioned by Propco (Wokingham) Ltd to produce an Biodiversity Net Gain Assessment in relation to the reserved matters application for land at 171 Evendons Lane, Wokingham, RG31 4EH (centred on National Grid Reference: SU 79868 66970).
- 1.2 The area proposed for development is illustrated in Figure 1 by the 'Red Line Boundary' (hereafter referred to as the 'On-Site') and the wider landowner ownership is represented by the 'Blue Line Boundary' (hereafter referred to as the 'Off-Site').
- 1.3 This report should be read in conjunction with the Ecological Appraisal report (Aspect Ecology, 2023). A previous BNG report was produced by Aspect Ecology in 2023, this report details the results of an updated survey and metric calculations for the proposed development.
- 1.4 This report details the methods, results and recommendations of the Biodiversity Net Gain assessment, the scope of which is:
 - Summarise the results of the baseline survey undertaken and to present the results of the habitat condition assessment surveys conducted in accordance with the Department for Environment, Food & Rural Affairs (DEFRA) Statutory Biodiversity Metric User Guide (DEFRA, 2025) and British Standard 'BS8683: Process for Designing and Implementing Biodiversity Net Gain' (The British Standards Institution, 2021).
 - Establish the theoretical value of biodiversity within the On-Site and Off-Site areas pre- and post-development based on the current development proposals using the DEFRA Statutory Biodiversity Metric (DEFRA, 2025).
 - Assess whether the proposed development can deliver BNG based on the current plans.
 - Propose design and management suggestions, including use of any measures to avoid, minimise and compensate biodiversity loss, with the aim of maximising BNG.
- 1.5 An outline planning application was submitted in June 2023 (planning reference: 231351) for the following:

"Outline application with all matters reserved except for access, for the proposed erection of a 64 bed care home (Use Class C2) with site access, parking, hard and soft landscaping and other associated works following demolition of existing commercial buildings."
- 1.6 The outline application was subsequently granted planning permission in November 2024 by Wokingham Borough Council (WBC).
- 1.7 The current proposals for the On-Site area were taken from the ijLA Landscape Architects '171 Evendons Lane, Wokingham – Landscape Masterplan' (Drawing Number: M464 – IJLA – VV – 00 – DR – L – 0100) and RM Design Group 'Wokingham – Proposed Site Plan' (Drawing Number: B01-11-10-J). It is understood that the proposals will result in the loss of areas of the following habitat types: other neutral grassland, modified grassland, blackthorn scrub, mixed scrub, bramble scrub, other woodland; broadleaved, other Scot's pine woodland, ponds, tall forbs, ruderal/ephemeral, ground level planters and urban trees.
- 1.8 No irreplaceable habitat or statutory designated sites will be impacted by the proposed development.

- 1.9 Under current landscape plans, the proposed scheme will result in a net gain of +0.53 Habitat Units (HU) (+10.82%), and a net gain of +1.13 Hedgerow Units (HeU) (+43.98%).
- 1.10 To supplement this report, the metric calculations have been supplied for the discretion of the Local Planning Authority.
- 1.11 A Biodiversity Gain Plan (BGP) and a Habitat Management and Monitoring Plan (HMMP) will be required as part of discharging the planning conditions in relation to BNG. This will demonstrate how the development will achieve the biodiversity net gain required and will ensure the Site habitats deliver the habitat scores listed within this BNGA (or further iterations of this), to be agreed with the LPA.

2.0 Introduction

Background

- 2.1 Pioneer Environment Group Ltd was commissioned by Propco (Wokingham) Ltd to produce Biodiversity Net Gain (BNG) Assessment in relation to the reserved matters application for land at 171 Evendons Lane, Wokingham, RG31 4EH (centred on National Grid Reference: SU 79868 66970).
- 2.2 The area proposed for development is illustrated in Figure 1 by the 'Red Line Boundary' (hereafter referred to as 'On-Site') and the Off-Site area in the wider landowner ownership is represented by the 'Blue Line Boundary' (hereafter referred to as 'Off-Site').
- 2.3 This report should be read in conjunction with the Ecological Appraisal report (Aspect Ecology, 2023). A previous BNG report was produced by Aspect Ecology in 2023, this report details the results of an updated survey and metric calculations for the proposed development.

Scope of this Report

- 2.4 The aim of the BNG report is to assess the baseline habitats On-Site/Off-Site and evaluate the proposed development plans to conclude whether a net gain in biodiversity can be achieved. The objectives were as follows:
 - Summarise the results of the baseline survey undertaken and to present the results of the habitat condition assessment surveys conducted in accordance with the Department for Environment, Food & Rural Affairs (DEFRA) Statutory Biodiversity Metric User Guide (DEFRA, 2025) and British Standard 'BS8683: Process for Designing and Implementing Biodiversity Net Gain' (The British Standards Institution, 2021).
 - Establish the theoretical value of biodiversity within the On-Site and Off-Site areas pre- and post-development based on the current development proposals using the DEFRA Statutory Biodiversity Metric (DEFRA, 2025).
 - Assess whether the proposed development can deliver BNG based on the current plans.
 - Propose design and management suggestions, including use of any measures to avoid, minimise and compensate biodiversity loss, with the aim of maximising BNG.

Site Description

- 2.5 The On-Site area comprises 0.83 hectares (ha) of land off Evendons Lane, Wokingham (excluding the area of individual trees). The On-Site area is bound to the north by trees and grassland, beyond which is Doles Lane, to the south by Evendons Lane, to the east by Blagrove Lane and to the west by several residential dwellings, a wooded strip and the grassland of Redlands Farm Park.
- 2.6 The On-Site area comprises former office buildings with associated areas of hardstanding, gravel car park and access road, with the north of the On-Site area dominated by pasture grassland. Other habitats included a pond, hedgerows, and longer sward grassland with ruderal vegetation and scrub at the south-west. Habitats within the Off-Site area included a pasture field, with areas of tall ruderal and bramble scrub, an old stable with associated areas of ephemeral/ruderal vegetation over gravel.

Development Proposals

- 2.7 An outline planning application was submitted in June 2023 (planning reference: 231351) for the following:
- “Outline application with all matters reserved except for access, for the proposed erection of a 64 bed care home (Use Class C2) with site access, parking, hard and soft landscaping and other associated works following demolition of existing commercial buildings.”*
- 2.8 The outline application was subsequently granted planning permission in November 2024 by Wokingham Borough Council (WBC).
- 2.9 The current proposals for the On-Site area were taken from the ijLA Landscape Architects ‘171 Evendons Lane, Wokingham – Landscape Masterplan’ (Drawing Number: M464 – IJLA – VV – 00 – DR – L – 0100) and RM Design Group ‘Wokingham – Proposed Site Plan’ (Drawing Number: B01-11-10-J).

Relevant Legislation and Policy

- 2.10 This BNG Assessment (BNGA) has been compiled with reference to the following relevant nature conservation legislation, planning policy and the UK Biodiversity Framework from which the protection of sites, habitats and species is derived in England including:
- UK Government’s 25 Year Environment Plan (DEFRA, 2018).
 - Biodiversity 2020: A Strategy for England’s Wildlife and Ecosystem Services (DEFRA, 2011).
 - National Planning Policy Framework (NPPF) (MHCLG, 2024).
 - The Natural Environment and Rural Communities (NERC) Act (HMSO, 2006).
 - The Environment Act 2021 (Commencement No. 8 and Transitional Provisions) Regulations 2024.
 - Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021).
- 2.11 Full details of BNG related legislation and policy are available at www.legislation.gov.uk.

3.0 Methodology

Biodiversity Net Gain

- 3.1 This BNG assessment uses the government mandated methodology within the '*Statutory Biodiversity Metric User Guide*', distributed by the Department of Environment, Food & Rural Affairs (DEFRA, 2024).
- 3.2 This assessment was carried out using BSI British Standard BS8683 and CIEEM's Good Practice Principles of BNG (Chartered Institute for Ecology and Environmental Management, 2016) and calculates the change in ecological value at a site by comparing the number of 'biodiversity units' within the Site pre- and post-development for both area-based habitats and linear habitats.

Desk Study

- 3.3 A desk study was undertaken to provide information of habitat type, condition and strategic significance both on Site and within the wider area. The following sources were reviewed:
- Multi-Agency Geographical Information for the Countryside (MAGIC) website for mapped statutory designated sites, Habitats of Principal Importance (HPI in accordance with Natural Environment and Rural Communities ('NERC') Act 2006 Section 41), and irreplaceable habitats (e.g. ancient woodland).
 - Wokingham Borough Development Plan – Adopted Managing Development Delivery Local Plan (Wokingham Borough, 2014).
 - Wokingham Borough Local Development Framework – Core Strategy Development Plan Document (Wokingham Borough Council, 2010).
 - Wokingham Borough Council – Biodiversity Action Plan 2012-2024 (Wokingham Borough Council, 2014).

Habitat Assessment

- 3.4 An updated Site visit was conducted by Eilidh Brown, on behalf of Pioneer Environment Group Ltd., in May 2025 to review the mapped habitats and conditions detailed within the BNG report produced by Aspect Ecology (2023). This allowed the creation of an accurate baseline habitat plan (Figure 2) to inform calculations for the proposed habitat plan (Figure 3).
- 3.5 Alongside the UK Habitat Classification (UKHab) survey that was undertaken (UKHab Ltd., 2023), the habitats present within the Site were identified and classified according to the habitat classification system set out in the '*Statutory Biodiversity Metric, User Guide*' (DEFRA, 2025) and/or '*The Statutory Biodiversity metric – Technical Annex 1: Condition Assessment and Sheets Methodology*' (DEFRA, 2025). Baseline habitat measurements for area/length have been taken using the Coreo app and digital mapping software QGIS (QGIS Geographic Information System version 3.44.0).
- 3.6 Where applicable, habitats were subject to a condition assessment in accordance with the criteria set out by the '*Statutory Biodiversity Metric - Technical Annex 1 condition assessments and methodology*' to determine their relative condition (DEFRA, 2025).

- 3.7 Maps of the Site were created for pre- and post-development in QGIS. Post-development plans were made by accessing CAD files and overlaying these onto the habitat maps to accurately assess the level of habitat loss resulting from the development.

Statutory Biodiversity Metric

- 3.8 The Statutory Biodiversity Metric (SBM) uses habitat features as a proxy measure for capturing the value and importance of nature. The following information on each habitat type are the required metric inputs:
- Type
 - Area (ha)/Length (km)
 - Condition
 - Strategic Significance
 - Riparian and Watercourse encroachment (for watercourse habitats only).
- 3.9 The 'Distinctiveness' of each habitat type is automatically calculated within the SBM, based upon national records of the occurrence and rarity of each habitat. For post-development habitat creation or enhancement, a 'Temporal Multiplier' and 'Difficulty Multiplier' are automatically applied by the SBM to account for the time to target condition and difficulty of restoration/creation.
- 3.10 The SBM provides a numerical score for the value of existing habitats on the Site and their likely value post-development in Habitat Units (HU), Hedgerow Units (HeU) and Watercourse Units (WU), in order for the impact of the proposed development to be quantitatively assessed. To achieve biodiversity net gain, the three different '*biodiversity units*' (HU, HeU and WU) are treated separately, the individual gains cannot be combined to form an overall gain for the Site.
- 3.11 This report is based on CIEEM's Biodiversity Net Gain Report and Audit Template (2021).

Assumptions and Limitations

- 3.12 It should be noted that whilst every effort has been made to describe the features on Site as accurately as possible, this report reflects the habitat conditions noted at the time the ecology survey was undertaken.
- 3.13 The survey was completed in May, within the optimal habitat survey period (April to September inclusive). It is considered that all habitats have been correctly classified according to the SBM habitat classification system.
- 3.14 The accuracy of habitat area measurements is limited to baseline data collection and quality of available mapping resources. In addition, post-development calculations were obtained by using illustrative designs and in the absence of detailed planting plans, reasonable assumptions have been made with regards to the type/condition of habitats.
- 3.15 The presence of a single great crested newt (*Triturus cristatus*) was confirmed within the pond On-Site during surveys conducted by Aspect Ecology (2023), therefore the pond has been classified as '*Lakes - Pond (priority habitat)*' due to supporting a species of high conservation importance which is protected under the Wildlife and Countryside Act, 1981. As part of the

detention basin, a pond will be created that holds permanent water and will be managed to benefit biodiversity; it is assumed that the pond post-development will also be '*Lakes - Pond (priority habitat)*' due to the wildlife friendly design of the pond and that great crested newt are present in the area and will likely utilise the newly created pond, once established.

- 3.16 Within the BNGA, strategic significance has been considered as '*Area/compensation not in local strategy/ no local strategy*' (low significance) for the majority of the area-based habitats within the Site (i.e. Other neutral grassland, Modified grassland, Bramble scrub, Mixed scrub, Ruderal/Ephemeral, Tall forbs, Urban trees, Artificial unvegetated, unsealed surface, and Developed land; sealed surface). Although woodland and grassland are identified as Habitat Action Plans (HAPs) within the '*Wokingham Borough Council – Biodiversity Action Plan 2012-2024*' (Wokingham Borough Council, 2014), the habitat types located within the Site are not identified as any of the priority habitats listed within this document and are therefore have been considered as '*Area/compensation not in local strategy/ no local strategy*' (low significance).
- 3.17 Native hedgerows and pond habitats are described in the Wokingham BAP (Wokingham Borough Council, 2014) under the Grassland and Hedgerow HAP and the Wetland HAP, however they are not shown on any strategic maps and therefore have been considered as '*Location ecologically desirable but not in local strategy*' (medium significance).
- 3.18 Please note that the sum of the values shown in columns within the biodiversity metric tables may vary from the total units stated in the Statutory Metric. This is due to rounding values and is not considered significant. The totals stated reflect those calculated within the metric (DEFRA, 2025).
- 3.19 The condition of post-development habitats has been estimated based on the criteria within the '*The Statutory Biodiversity Metric -Technical Annex 1*' (DEFRA, 2025) and is based on reasonable assumptions for the habitat types taking into account feasibility, locality, and their extent within the Site.
- 3.20 Drawing '*M464 – IJLA – VV – 00 – DR – L – 0100*' (ijLA, 2025) and '*B01-11-10-J*' (RM Design, 2025) was used to inform the calculations. Should plans change, the calculations of Biodiversity Net Gain will no longer be accurate, and this report will require amendments.
- 3.21 Any proposed individual trees which did not form part of a habitat type (i.e. scrub or woodland habitat) were noted and entered into the '*Tree Helper*' section of the metric to determine the area of Rural trees. This area was then added to the metric as an area-based habitat (i.e. Individual Trees – Rural Tree or Urban Tree). In accordance with the '*The Statutory Biodiversity Metric - User guide*', all proposed new trees planting post-development have been entered as the 'small' tree size class (DEFRA, 2025).
- 3.22 The information contained within this report is considered valid for a period of 18 months from the date of the May 2025 updated survey visit (CIEEM, 2019). If the development has not commenced by November 2026, it is recommended that the Site is fully re-surveyed to determine if there have been any significant changes to baseline habitats and their associated conditions within the elapsed timeframe.

4.0 Baseline Habitats

Baseline Habitat Overview

- 4.1 The habitats within the On-Site area comprised other neutral grassland, modified grassland, blackthorn scrub, mixed scrub, bramble scrub, ruderal/ephemeral, tall forbs, artificial unvegetated, unsealed surface, developed land; sealed surface, ground level planters, other Scots pine woodland, other woodland; broadleaved, and urban tree.
- 4.2 Off-Site habitats comprised other neutral grassland, bramble scrub, ruderal/ephemeral, tall forbs and developed land; sealed surface.
- 4.3 Full habitat descriptions are detailed within the Ecological Appraisal report (Aspect Ecology, 2023). The baseline habitats are illustrated in Figure 2, with further information on the habitats provided in Appendix A, and the condition assessment forms are provided in Appendix B.

On-Site Habitat Baseline

- 4.4 The total area of the On-Site area has been calculated at 0.83 ha (excluding area of individual trees). The habitat type, condition, area and HU of the area-based habitats are provided within Table 1. Area-based habitats generate a baseline value of 4.91 HU.

Table 1: Summary of On-Site Baseline Area-based Habitats, Conditions and Habitat Units

Ref.	Broad Habitat	Habitat Type	Area (ha)	Distinctiveness	Condition	Strategic Significance	Total Habitat Units
G1 and G1.1	Grassland	Other neutral grassland	0.1921	Medium	Moderate	Area/ compensation not in local strategy/ no local strategy	1.54
G2, G3-G6, G3.1 and G4.1	Grassland	Other neutral grassland	0.1214	Medium	Poor	Area/ compensation not in local strategy/ no local strategy	0.49
G7	Grassland	Modified grassland	0.0019	Low	Poor	Area/ compensation not in local strategy/ no local strategy	0.00
S1	Heathland and shrub	Blackthorn scrub	0.0575	Medium	Moderate	Area/ compensation not in local strategy/ no local strategy	0.46

Ref.	Broad Habitat	Habitat Type	Area (ha)	Distinctiveness	Condition	Strategic Significance	Total Habitat Units
S2-S3	Heathland and shrub	Mixed scrub	0.0209	Medium	Poor	Area/ compensation not in local strategy/ no local strategy	0.08
BS1-BS3	Heathland and shrub	Bramble scrub	0.0516	Medium	Condition Assessment N/A	Area/ compensation not in local strategy/ no local strategy	0.21
P1	Lakes	Ponds (priority habitat)	0.0125	High	Moderate	Location ecologically desirable but not in local strategy	0.17
RE1	Sparsely vegetated land	Ruderal/ Ephemeral	0.0018	Low	Poor	Area/ compensation not in local strategy/ no local strategy	0.00
TF1-TF4	Sparsely vegetated land	Tall forbs	0.0495	Low	Poor	Area/ compensation not in local strategy/ no local strategy	0.10
U1-U2	Urban	Developed land; sealed surface	0.1114	Very low	N/A - Other	Area/ compensation not in local strategy/ no local strategy	0.00
U3	Urban	Artificial unvegetated, unsealed surface	0.1371	Very low	N/A - Other	Area/ compensation not in local strategy/ no local strategy	0.00
UP1	Urban	Ground level planters	0.0088	Low	Condition Assessment N/A	Area/ compensation not in local	0.02

Ref.	Broad Habitat	Habitat Type	Area (ha)	Distinctiveness	Condition	Strategic Significance	Total Habitat Units
						strategy/ no local strategy	
W1	Woodland and forest	Other Scot's pine woodland	0.0436	Medium	Poor	Area/ compensation not in local strategy/ no local strategy	0.17
W2	Woodland and forest	Other woodland; broadleaved	0.0153	Medium	Poor	Area/ compensation not in local strategy/ no local strategy	0.06
T12	Individual trees	Urban tree (One large tree)	0.0366	Medium	Good	Area/ compensation not in local strategy/ no local strategy	0.44
T1	Individual trees	Urban tree (One large tree)	0.0366	Medium	Moderate	Area/ compensation not in local strategy/ no local strategy	0.29
T2-T3	Individual trees	Urban tree (Two medium trees)	0.0326	Medium	Good	Area/ compensation not in local strategy/ no local strategy	0.39
T5 and T13	Individual trees	Urban tree (Two medium trees)	0.0326	Medium	Moderate	Area/ compensation not in local strategy/ no local strategy	0.26
T4, T6-T11	Individual trees	Urban tree (Seven small trees)	0.0285	Medium	Moderate	Area/ compensation not in local strategy/ no local strategy	0.23

Ref.	Broad Habitat	Habitat Type	Area (ha)	Distinctiveness	Condition	Strategic Significance	Total Habitat Units
Total On-Site Habitat Units							4.91

- 4.5 The total length of hedgerows within the On-Site area has been calculated at 0.19 km. The habitat type, condition, area and HeU of the linear-based hedgerow habitats are provided within Table 2. Hedgerow habitats generate a baseline value of 2.56 HeU.

Table 2: Summary of On-Site Baseline Linear-based Habitats, Conditions and Hedgerow Units

Ref.	Habitat Type	Length (km)	Distinctiveness	Condition	Strategic Significance	Total Hedgerow Units
H1	Native hedgerow with trees	0.0419	Medium	Good	Location ecologically desirable but not in local strategy	0.55
H2	Native hedgerow with trees	0.0569	Medium	Good	Location ecologically desirable but not in local strategy	0.75
H3	Native hedgerow with trees	0.0954	Medium	Good	Location ecologically desirable but not in local strategy	1.26
Total On-Site Hedgerow Units						2.56

Off-Site Habitat Baseline

- 4.6 The total area of the Off-Site area has been calculated at 0.54 ha. The habitat type, condition, area and HU of the area-based habitats are provided within Table 3. Area-based habitats generate a baseline value of 2.04 HU.

Table 3: Summary of Off-Site Baseline Area-based Habitats, Conditions and Habitat Units

Ref.	Broad Habitat	Habitat Type	Area (ha)	Distinctiveness	Condition	Strategic Significance	Total Habitat Units
OS1-OS3	Grassland	Other neutral grassland	0.4406	Medium	Poor	Area/compensation not in local strategy/ no local strategy	1.76

Ref.	Broad Habitat	Habitat Type	Area (ha)	Distinctiveness	Condition	Strategic Significance	Total Habitat Units
OS4-OS5	Heathland and shrub	Bramble scrub	0.047	Medium	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	0.19
OS6	Sparsely vegetated land	Ruderal/Ephemeral	0.0159	Low	Poor	Area/compensation not in local strategy/ no local strategy	0.03
OS7	Sparsely vegetated land	Tall forbs	0.0271	Low	Poor	Area/compensation not in local strategy/ no local strategy	0.05
OS8	Urban	Developed land; sealed surface	0.0124	Very low	N/A - Other	Area/compensation not in local strategy/ no local strategy	0.00
Total Off-Site Habitat Units							2.04

5.0 Post-Development Habitats

Proposed Development

- 5.1 The current proposals for the On-Site area include the construction of a 64-bed care home with site access, parking, hard and soft landscaping. The current proposals for the On-Site area were taken from the ijLA Landscape Architects '171 Evendons Lane, Wokingham – Landscape Masterplan' (Drawing Number: M464 – IJLA – VV – 00 – DR – L – 0100) and RM Design Group 'Wokingham – Proposed Site Plan' (Drawing Number: B01-11-10-J). It is understood that the proposals will result in the loss of areas of grassland, scrub, sparsely vegetated land, woodland and urban habitats currently present within the On-Site area.
- 5.2 The post-development habitats are illustrated in Figure 3 and proposed target conditions for each habitat in Figure 4.

Post-Development On-Site Habitats

Retained Habitats

- 5.3 Post-development, a total of 0.63 HU will be retained as detailed within Table 4 below.

Table 4: Summary of On-Site Area-based Habitat Retention

Habitat Type	Rationale	Area (ha)	Distinctiveness	Condition	Habitat Units (HU)
Retention					
Other neutral grassland	Retention of areas G1.1 along retained hedgerows to the north-east (H2) and north-west (H3) of the On-Site area.	0.0202	Medium	Moderate	0.16
Other neutral grassland	Retention of G6 along retained hedgerow to the south (H1) of the On-Site area.	0.0082	Medium	Poor	0.03
Urban tree	Retention of one large oak (<i>Quercus robur</i>) tree (T12) to the east of the On-Site area.	0.0366	Medium	Good	0.44
On-Site Baseline Habitat Units Retained					0.63

- 5.4 Post-development, hedgerow H1 along the southern boundary will be retained in full and both H2 and H3 will be partially retained. A total of 2.15 HeU will be retained as detailed within Table 5 below.

Table 5: Summary of On-Site Linear-based Hedgerow Retention

Habitat Type	Rationale	Length (km)	Distinctiveness	Condition	Hedgerow Units (HeU)
Retention					
Native hedgerow with trees	H1 retained in full along the southern boundary.	0.0419	Medium	Good	0.55
Native hedgerow with trees	Small section of H2 to be lost for new access entrance, the rest of the hedgerow will be retained.	0.0275	Medium	Good	0.36
Native hedgerow with trees	Small section of H3 to be lost for footpath to Off-Site area, the rest of the hedgerow will be retained.	0.0935	Medium	Good	1.23
On-Site Baseline Hedgerow Units Retained					2.15

Enhanced Habitats

- 5.5 Areas of other neutral grassland will be enhanced from Poor to Moderate condition; blackthorn, bramble, and mixed scrub will be enhanced to mixed scrub in Good condition. The area of other Scot's pine woodland is to be enhanced to other woodland; mixed in Moderate condition. Table 6 provides an overview of the habitat enhancement measures that are proposed post-development. The proposed habitat enhancement will deliver 1.30 HU.

Table 6: Summary of On-Site Area-based Habitat Enhancement

Habitat Type	Rationale	Area (ha)	Distinctiveness	Condition	Habitat Units (HU)
Enhancement					
Other neutral grassland	Enhancement of small areas of other neutral grassland to west and south-west of the On-Site area (G2, G3.1-G4.1) with appropriate grassland management.	0.0369	Medium	Poor to Moderate	0.25

Habitat Type	Rationale	Area (ha)	Distinctiveness	Condition	Habitat Units (HU)
Blackthorn scrub to Mixed scrub	Enhancement of the blackthorn scrub (S1) to mixed scrub with appropriate scrub management.	0.0337	Medium	Moderate to Good	0.39
Bramble scrub to Mixed scrub	Enhancement of the bramble scrub (BS1) to mixed scrub with appropriate scrub management.	0.0236	Medium	Condition Assessment N/A to Good	0.23
Mixed scrub	Enhancement of the mixed scrub (S2) with appropriate scrub management.	0.0181	Medium	Poor to Good	0.17
Other Scot's pine woodland to Other woodland; mixed	Enhancement of retained areas of W1 with appropriate woodland management.	0.0374	Medium	Poor to Moderate	0.25
Total Habitat Units Delivered from Habitat Enhancement					1.30

Habitat Creation Opportunities

- 5.6 A total of 0.78 ha of baseline habitats will be lost as part of the proposals, including areas of other neutral grassland (G1, G3-G5), modified grassland (G7), blackthorn scrub (S1), bramble scrub (BS1-BS3), mixed scrub (S3); the pond (priority habitat), ruderal/ephemeral (RE1), tall forbs (TF1-TF4), artificial unvegetated, unsealed surface (U3), developed land; sealed surface (U1-U2), ground level planters (UP1), other Scot's pine woodland (W1), other woodland; broadleaved (W2), and urban trees (T1-T6, T11 and T13).
- 5.7 Table 7 provides an overview of the On-Site area-based habitat creation measures that are proposed post-development. The proposed area-based habitat creation will deliver 1.76 HU.

Table 7: Summary of On-Site Area-based Habitat Creation

Habitat Type	Rationale	Area (ha)	Distinctiveness	Condition	Habitat Units (HU)
Creation					
Modified grassland	Areas of proposed lawn to be seeded with an appropriate seed mix (e.g. Emorsgate EL1 flowering lawn mix) to achieve 6-8 vascular plant species per m ² , including two forb species. Management techniques will involve the control of scrub, bracken and invasive species within the sward to achieve Moderate condition.	0.027	Low	Moderate	0.09
Modified grassland	Areas of private lawn to be planted with an appropriate lawn mix, management will involve control of bracken, scrub and invasive species to achieve Poor condition.	0.0644	Low	Poor	0.12
Other neutral grassland	Proposed wildflower/ meadow and wetland meadow grass to be seeded with an appropriate seed mix (e.g. Emorsgate EM10 Tussock Meadow Mixture and EM8 Meadow Mixture for Wetlands). Grassland to be managed to support a high proportion of indicator species for UKHab type and to include a varied sward height; it is likely to achieve Moderate condition.	0.1318	Medium	Moderate	0.88
Other neutral grassland	Area of other neutral grassland to be seeded with an appropriate neutral grassland seed mix along the southern boundary. Grassland to be managed to support some indicator species for UKHab type and to include a varied sward	0.0014	Medium	Poor	0.01

Habitat Type	Rationale	Area (ha)	Distinctiveness	Condition	Habitat Units (HU)
	height, it is likely to achieve Poor condition.				
Mixed scrub	Small area of native mixed scrub to be planted to extend the area of enhanced mixed scrub to the south-west of the On-Site area. A mix of native species are proposed and species of sub-optimal condition will be managed; it is likely that the scrub will achieve Moderate condition.	0.0005	Medium	Moderate	0.00
Ornamental lake or pond	Small water feature proposed in garden area to the west of the care home.	0.0003	Low	Poor	0.00
Ponds (priority habitat)	Proposed pond within detention basin to the south-west of the On-Site area. The pond will hold permanent water, and will be managed to benefit wildlife (e.g. planted with a mix of emergent, submerged or floating plants and scrub management).	0.0213	High	Moderate	0.17
Artificial unvegetated, unsealed surface	Proposed access paths across the On-Site area.	0.0267	Very low	N/A - Other	0.00
Developed land; sealed surface	Proposed new building and associated areas of hardstanding (i.e. access and car park).	0.3409	Very low	N/A - Other	0.00
Bare ground	Bare ground at the base of proposed ornamental hedges, likely to be overshadowed by dense hedge species and will lack diversity in structure, it is likely that the bare ground will achieve Poor condition.	0.0094	Low	Poor	0.02

Habitat Type	Rationale	Area (ha)	Distinctiveness	Condition	Habitat Units (HU)
Introduced shrub	Areas of proposed shrub planting to be created around the care home.	0.0223	Low	Condition Assessment N/A	0.04
Ground based green wall	Proposed trellis for climbing plants along sections of the care home building (to approximately 2m in height).	0.0053	Low	Poor	0.01
Other woodland; mixed	Area of enhanced woodland (W1) to be slightly increased in size through the planting of new trees and native shrub planting. To be managed the same as enhanced woodland and will likely achieve Moderate condition.	0.0011	Medium	Moderate	0.00
Urban tree	Provision of 10 small-sized native trees in areas of other neutral grassland. It is assumed the trees will be managed as individual native trees, will be predominately oversailing vegetation and will reach Moderate condition.	0.0407	Medium	Moderate	0.12
Urban tree	Provision of 14 small-sized non-native tree species in areas of modified grassland and in/along boundary of garden area. It is assumed the trees will be managed as individual trees and will be predominately oversailing vegetation and will reach Poor condition.	0.057	Medium	Poor	0.16
Urban tree	One medium sized tree (T3) will be retained to the west of the care home, however the condition will be reduced due to future management regime and location.	0.0163	Medium	Moderate	0.13
Total Units Delivered from On-Site Habitat Creation					1.76

- 5.8 A total of 0.03 km of hedgerow habitats are proposed to be lost as part of the proposals, including a small section of H2 and H3. Table 8 provides an overview of the On-Site linear-based hedgerow creation measures that are proposed post-development. The proposed hedgerow creation will deliver 1.54 HeU.

Table 8: Summary of On-Site Hedgerow Creation

Habitat Type	Rationale/ Description	Length (km)	Distinctiveness	Condition	Hedgerow Units (HeU)
Creation					
Native hedgerow with trees	Native hedgerow with trees (NH1) situated towards the centre of the On-Site area, to the north of the care home building. To be planted with a mix of field maple (<i>Acer campestre</i>), hornbeam (<i>Carpinus betulus</i>), and beech (<i>Fagus sylvatica</i>), with scattered <i>Prunus</i> spp. trees.	0.0612	Medium	Moderate	0.38
Native hedgerow	Proposed native hedge planting to west (NH2) and south (NH3) of the proposed garden area, and along the southern boundary of the On-Site area (NH8) adjacent to the retained H1. To be planted with a mix of field maple, hornbeam, and beech.	0.101	Low	Moderate	0.37
Species-rich native hedgerow	Sections of proposed native hedge planting along the south-eastern (NH7) and eastern boundary (NH4) of the On-Site area. To be planted with a species-rich mix including field maple, hornbeam, penduculate oak (<i>Quercus robur</i>), dogwood (<i>Cornus sanguinea</i>), hazel (<i>Corylus avellana</i>), spindle (<i>Euonymus europaeus</i>), wild privet (<i>Ligustrum vulgare</i>), elder (<i>Sambucus nigra</i>), and	0.071	Medium	Moderate	0.52

Habitat Type	Rationale/ Description	Length (km)	Distinctiveness	Condition	Hedgerow Units (HeU)
	guelder-rose (<i>Viburnum opulus</i>).				
Species-rich native hedgerow with trees	Proposed native hedge planting with trees along the eastern boundary (NH5), north of the new access. A species-rich hedge mix is proposed with scattered field maple trees.	0.0145	High	Moderate	0.13
Non-native and ornamental hedgerow	Proposed ornamental hedge planting (NH6) throughout the On-Site area around the care home and garden area. Ornamental species such as silverberry (<i>Elaeagnus × ebbingei</i>), white escallonia (<i>Escallonia 'Iveyi'</i>) and <i>Euonymus 'Green Spire'</i> to be planted.	0.1396	V.Low	Poor	0.13
Total Units Delivered from On-Site Hedgerow Creation					1.54

Post-Development Off-Site Habitats

Retained and Enhanced Habitats

- 5.9 Post-development, areas of other neutral grassland and bramble scrub will be enhanced. A total of 2.51 HU will be delivered through the proposed habitat enhancement as detailed within Table 9 below.

Table 9: Summary of Off-Site Area-based Habitat Enhancement

Habitat Type	Rationale	Area (ha)	Distinctiveness	Condition	Habitat Units (HU)
Enhancement					
Other neutral grassland	Enhancement of existing paddock area (OS2) to a wildflower meadow with appropriate grassland management.	0.3174	Medium	Poor to Moderate	2.16

Habitat Type	Rationale	Area (ha)	Distinctiveness	Condition	Habitat Units (HU)
Other neutral grassland to Traditional orchard	Enhancement of existing paddock area (OS3) to a traditional orchard. The area will be planted with open-grown, fruit-producing trees within neutral grassland.	0.0416	Medium to High	Poor to Moderate	0.28
Bramble scrub to Mixed scrub	Enhancement of the bramble scrub (OS5) to mixed scrub with appropriate scrub management.	0.0099	Medium	Condition Assessment N/A to Moderate	0.07
Total Habitat Units Delivered from Habitat Enhancement					2.51

Habitat Creation Opportunities

- 5.10 A total of 0.1741 ha of baseline Off-Site habitats will be lost as part of the proposals, including areas of other neutral grassland (OS1), bramble scrub (OS4), ruderal/ephemeral (OS6), tall forbs (OS7), and developed land; sealed surface (OS8). Table 10 provides an overview of the Off-Site area-based habitat creation measures that are proposed post-development. The proposed area-based habitat creation will deliver 1.28 HU.

Table 10: Summary of Off-Site Habitat Creation

Habitat Type	Rationale	Area (ha)	Distinctiveness	Condition	Habitat Units (HU)
Creation					
Modified grassland	Creation of managed lawn footpaths.	0.0607	Low	Poor	0.12
Other neutral grassland	Creation of additional areas of wildflower grassland to the north of the Off-Site area.	0.0659	Medium	Moderate	0.44
Mixed scrub	Creation of additional areas of mixed scrub adjacent to enhanced area of scrub to the north of the Off-Site area.	0.0327	Medium	Moderate	0.22

Habitat Type	Rationale	Area (ha)	Distinctiveness	Condition	Habitat Units (HU)
Artificial unvegetated, unsealed surface	Proposed access path with self binding gravel to the east of the Off-Site area.	0.0141	V.Low	N/A - Other	0.00
Developed land; sealed surface	Proposed bench seating on paving slab surface scattered throughout the Off-Site area.	0.0008	V.Low	N/A - Other	0.00
Rural tree	Planting of 40 rural individual trees. Native species will be planted and will be managed as individual trees.	0.1629	Medium	Moderate	0.50
Total Habitat Units Delivered from Off-Site Habitat Creation					1.28

Summary of Habitat Changes

- 5.11 A summary of the combined On-Site and Off-Site area-based broad habitat changes are presented in Table 11 and On-Site hedgerow changes are presented in Table 12. Overall, the proposed scheme will result in a net gain of +0.53 HU, which equates to a 10.82% net gain in habitat units, and a net gain of +1.13 HeU, which equates to +43.98% net gain in hedgerow units.

Table 11: Combined On-Site and Off-Site Change by Broad Habitat Type

Habitat group	Baseline		On-Site and Off-Site Post-development		Combined Change	
	Combined existing area (ha)	Combined existing value	Combined proposed area (ha)	Combined proposed value	Combined area change (ha)	Combined unit change
Grassland	0.76	3.79	0.78	4.54	0.02	0.76
Heathland and shrub	0.18	0.94	0.12	1.09	-0.06	0.15
Lakes	0.01	0.17	0.02	0.17	0.01	0.00
Sparsely vegetated land	0.09	0.19	0.00	0.00	-0.09	-0.19
Urban	0.27	0.02	0.42	0.07	0.15	0.05
Woodland and forest	0.06	0.24	0.04	0.26	-0.02	0.02
Individual trees	0.17	1.61	0.31	1.35	0.15	-0.26

Table 12: On-Site Change by Hedgerow Type

Habitat group	Baseline		Post-development On-Site		On-Site Change	
	On-Site existing length (km)	On-Site existing value	On-Site proposed length (km)	On-Site proposed value	On-Site length change (km)	On-Site unit change
Species-rich native hedgerow with trees	0.00	0.00	0.01	0.13	0.01	0.13
Species-rich native hedgerow	0.00	0.00	0.07	0.52	0.07	0.52
Native hedgerow with trees	0.19	2.56	0.22	2.53	0.03	-0.04
Native hedgerow	0.00	0.00	0.10	0.37	0.10	0.37
Non-native and ornamental hedgerow	0.00	0.00	0.14	0.13	0.14	0.13

6.0 Conclusion

- 6.1 Under current landscape plans the proposed development On-Site and habitat enhancement Off-Site is predicted to result in a net gain of +0.53 HU (+10.82%), and a net gain of +1.13 HeU (+43.98%) (Table 13).
- 6.2 No irreplaceable habitat will be impacted by the proposed development.

Table 13. Headline Results

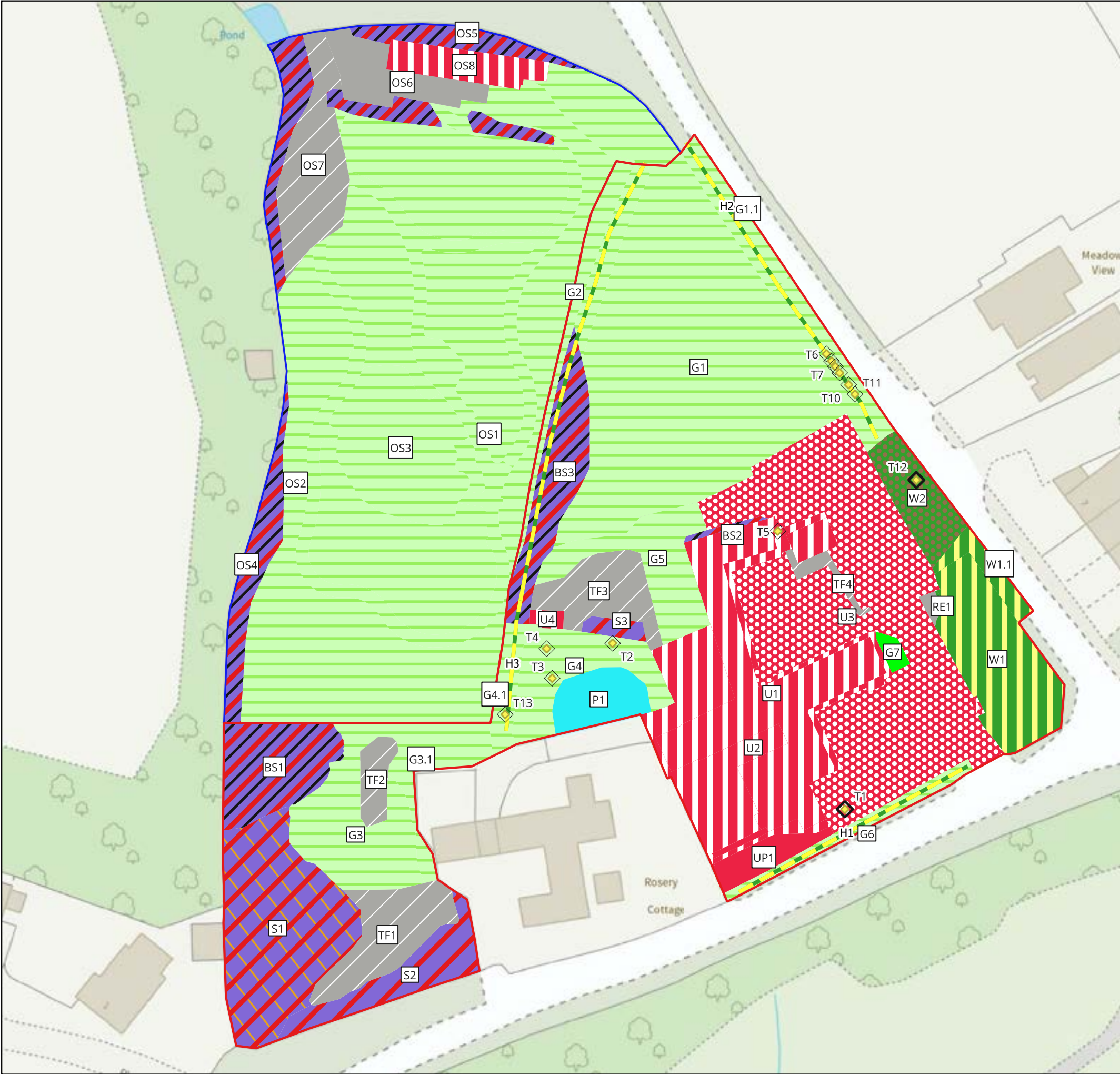
FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Area habitat units</i>	0.53
	<i>Hedgerow units</i>	1.13
	<i>Watercourse units</i>	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Area habitat units</i>	10.82%
	<i>Hedgerow units</i>	43.98%
	<i>Watercourse units</i>	0.00%
Trading rules satisfied?	Yes ✓	

Habitat Management and Monitoring Plan (HMMP)

- 6.3 A Biodiversity Gain Plan (BGP) and a Habitat Management and Monitoring Plan (HMMP) will be required as part of discharging the planning conditions in relation to BNG. This will demonstrate how the development will achieve the biodiversity net gain required and will ensure the Site habitats deliver the habitat scores listed within this BNG assessment report (or further iterations of this), to be agreed with the LPA.
- 6.4 This plan should assign the suggested management prescriptions to ensure that the post-development Site habitats outlined are created, enhanced and/or retained where required. This management of post-development habitats will be to the condition required in order to deliver the BNG score specified in accordance with the condition assessment methodology.

7.0 References

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- UKHab Ltd (2023). UK Habitat Classification Version 2.0. Available at www.UKHab.org



Key

- Red Line Boundary (On-Site)
- Blue line Boundary (Off-Site)

Baseline Habitats

- Existing Large Urban Tree
- Existing Medium Urban Tree
- Existing Small Urban Tree
- Native hedgerow with trees
- Artificial unvegetated, unsealed surface
- Blackthorn scrub
- Bramble scrub
- Developed land; sealed surface
- Ground level planters
- Mixed scrub
- Modified grassland
- Other neutral grassland
- Other Scot's pine woodland
- Other woodland; broadleaved
- Ponds (priority habitat)
- Ruderal/Ephemeral
- Tall forbs

0 20 40 m

Project Name:
171 Evendons Lane, Wokingham

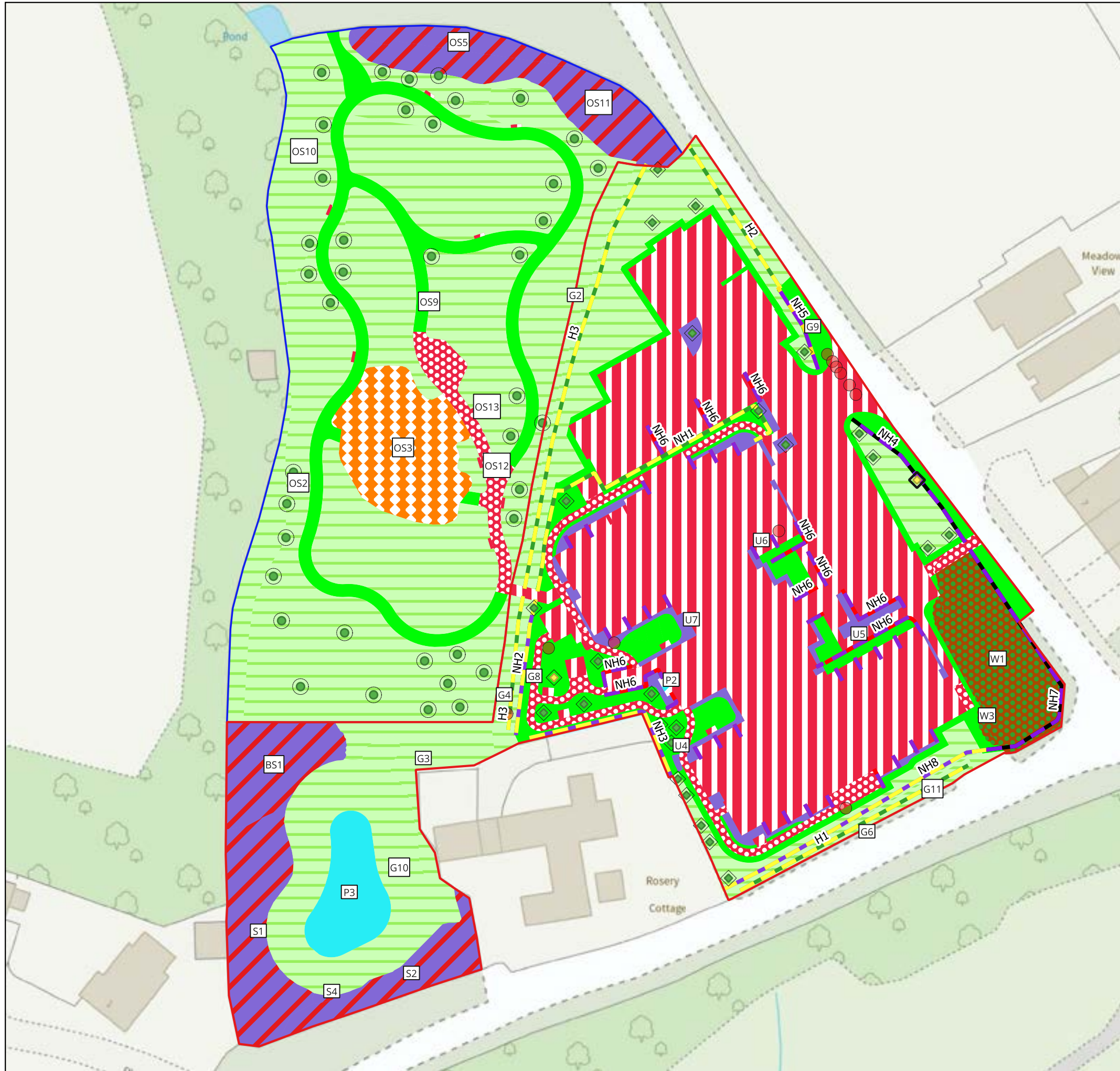
Client:
Propco (Wokingham) Ltd

Figure No:
Figure 2

Date:
09.09.2025

Title:
Biodiversity Net Gain Baseline Habitat Plan





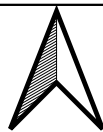
Key

- Red Line Boundary (On-Site)
- Blue line Boundary (Off-Site)

Proposed Habitats

- Proposed Small Urban Tree
- Proposed Small Rural Tree
- Retained Large Urban Tree
- Retained Medium Urban Tree
- Lost Tree
- Non-native and ornamental hedgerow
- Native hedgerow
- Native hedgerow with trees
- Species-rich native hedgerow
- Species-rich native hedgerow with trees
- Artificial unvegetated, unsealed surface
- Developed land; sealed surface
- Introduced shrub
- Mixed scrub
- Modified grassland
- Ornamental lake or pond
- Other neutral grassland
- Other woodland; mixed
- Ponds (priority habitat)
- Traditional orchards
- Bare ground

0 20 40 m



Project Name:
171 Evendons Lane, Wokingham

Client:
Propco (Wokingham) Ltd

Figure No:
Figure 3

Date: 09.09.2025	Title: Biodiversity Net Gain Proposed Habitat Plan
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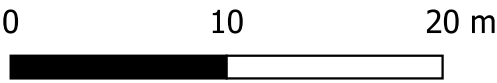


Key

- Red Line Boundary (On-Site)
- Blue line Boundary (Off-Site)

Proposed Habitats

- Proposed Small Urban Tree
- Proposed Small Rural Tree
- Retained Large Urban Tree
- Retained Medium Urban Tree
- Lost Tree
- Non-native and ornamental hedgerow
- Native hedgerow
- Native hedgerow with trees
- Species-rich native hedgerow
- Species-rich native hedgerow with trees
- Artificial unvegetated, unsealed surface
- Developed land; sealed surface
- Introduced shrub
- Modified grassland
- Ornamental lake or pond
- Other neutral grassland
- Other woodland; mixed
- Bare ground



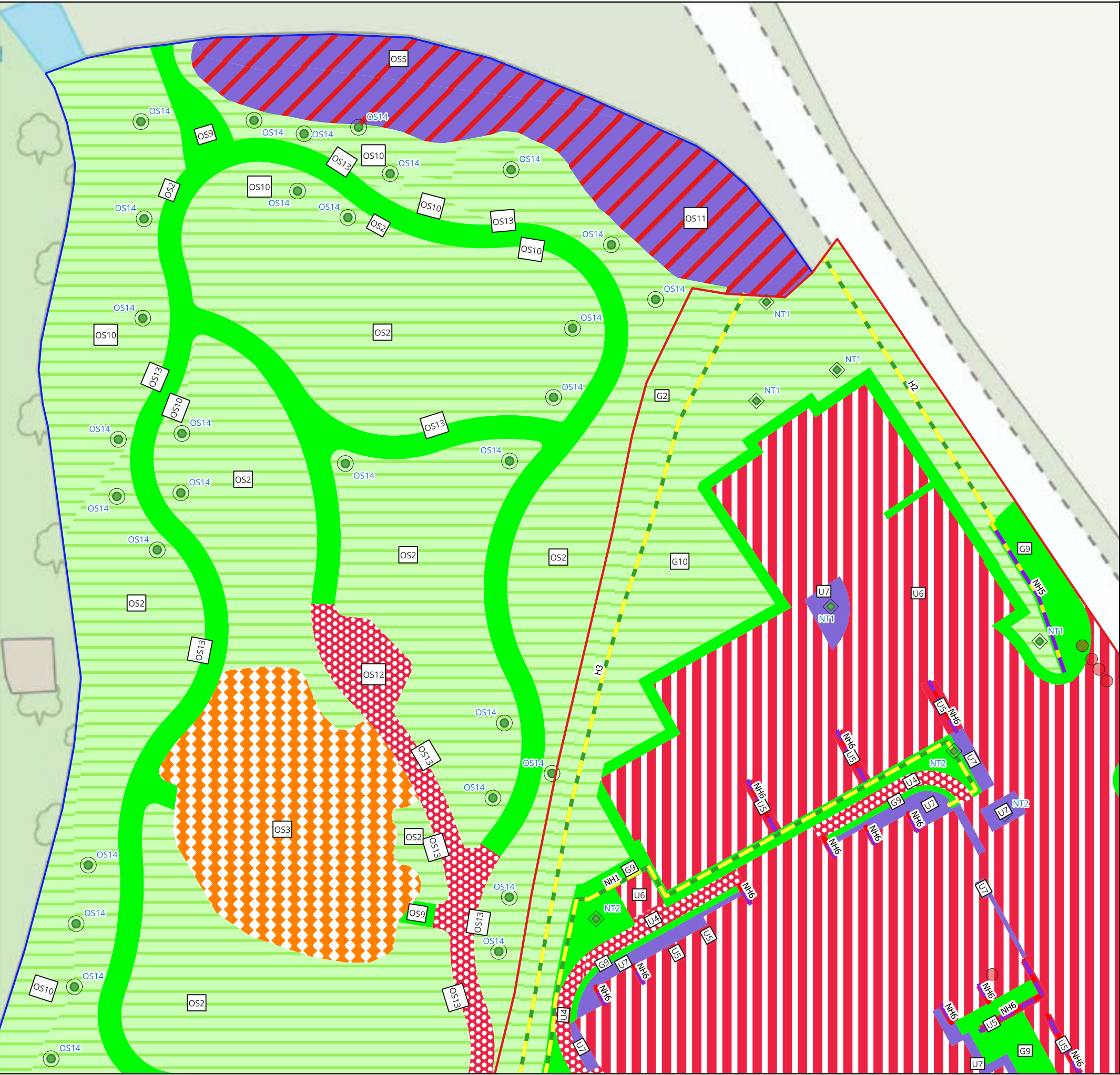
Project Name: **171 Evendons Lane, Wokingham**

Client: **Propco (Wokingham) Ltd**

Figure No: **Figure 3**

Date: 09.09.2025	Title: Biodiversity Net Gain Proposed Habitat Plan
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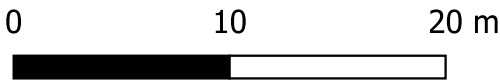


Key

- Red Line Boundary (On-Site)
- Blue line Boundary (Off-Site)

Proposed Habitats

- Proposed Small Urban Tree
- Proposed Small Rural Tree
- Lost Tree
- Non-native and ornamental hedgerow
- Native hedgerow
- Native hedgerow with trees
- Species-rich native hedgerow with trees
- Artificial unvegetated, unsealed surface
- Developed land; sealed surface
- Introduced shrub
- Mixed scrub
- Modified grassland
- Other neutral grassland
- Traditional orchards
- Bare ground



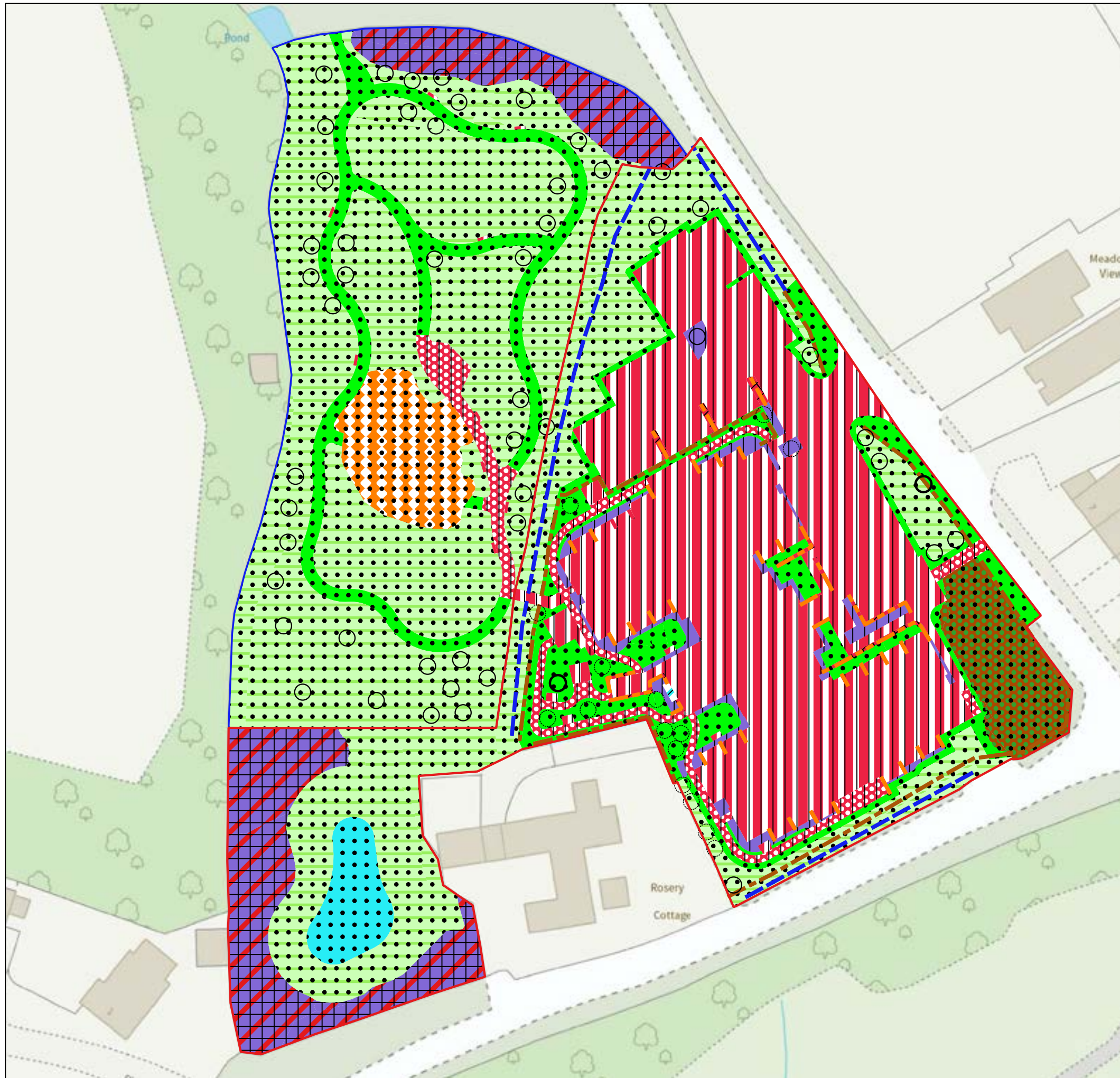
Project Name: **171 Evendons Lane, Wokingham**

Client: **Propco (Wokingham) Ltd**

Figure No: **Figure 3**

Date: 09.09.2025	Title: Biodiversity Net Gain Proposed Habitat Plan
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Key

Red Line Boundary (On-Site)

Blue line Boundary (Off-Site)

Proposed Individual Tree Condition

Good

Moderate

Poor

Proposed Hedgerow Condition

Good

Moderate

Poor

Proposed Habitat Condition

Good

Moderate

Poor

N/A - Other

Condition Assessment N/A

02040 m

Project Name:

171 Evendons Lane, Wokingham

Client:

Propco (Wokingham) Ltd

Figure No:

Figure 4

Date:

09.09.2025

Title:

Biodiversity Net Gain Proposed Habitat Condition Plan

Pioneer

ENVIRONMENT



Pioneer
ENVIRONMENT

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Appendix A: Supplementary Material – Site Information

Habitat	Ref.	Photograph	Species List	Condition Assessment
On-Site				
Other neutral grassland	G1		Former horse grazed field to the north of the On-Site area. This area supported a uniform tall sward (c. 15-25cm), with a variety of herb cover within the sward (40%). Grass species included rough meadow-grass (<i>Poa trivialis</i>) (D), meadow foxtail (<i>Alopecurus pratensis</i>) (D), Yorkshire fog (<i>Holcus lanatus</i>) (A), cock's-foot (<i>Dactylis glomerata</i>) (F), barren brome (<i>Bromus sterilis</i>) (O), sweet vernal grass (<i>Anthoxanthum odoratum</i>) (O), soft brome (<i>Bromus hordeaceus</i>) (O), and perennial rye-grass (<i>Lolium perenne</i>) (O). Herb species included black knapweed (<i>Centaurea nigra</i>) (A), common nettle (<i>Urtica dioica</i>) (LA), creeping buttercup (<i>Ranunculus repens</i>) (A), meadow buttercup (<i>Ranunculus acris</i>) (F), ribwort plantain (<i>Plantago lanceolata</i>) (F), common mouse-ear (<i>Cerastium fontanum</i>) (O), perforate St John's-wort (<i>Hypericum perforatum</i>) (R), cut-leaved crane's-bill (<i>Geranium dissectum</i>) (R), rough hawkbit (<i>Leontodon hispidus</i>) (R), cleavers (<i>Galium aparine</i>) (R), selfheal (<i>Prunella vulgaris</i>) (R), lesser stitchwort (<i>Stellaria graminea</i>) (R), and broadleaved dock (<i>Rumex obtusifolius</i>) (R).	Moderate

Habitat	Ref.	Photograph	Species List	Condition Assessment
Other neutral grassland	G2 - G6		Areas of unmanaged, rank grassland were present throughout the On-Site area. These areas supported grassland with a tall sward height, dominated by grassland species, and with evidence of rubbish and past disturbance (G2-G6). Grass species included a mix of rough meadow-grass (A), meadow foxtail (A), Yorkshire fog (F), cock's-foot (F), false oat grass (<i>Arrhenatherum elatius</i>) (O), red fescue (<i>Festuca rubra</i>) (O), creeping bent (<i>Agrostis stolonifera</i>), sweet vernal grass (R), soft brome (R), perennial rye-grass (R), and pendulous sedge (<i>Carex pendula</i>) (R). Herb and ruderal species included common nettle (F), meadow buttercup (O), black knapweed (O), creeping thistle (<i>Cirsium arvense</i>) (O), ribwort plantain (O), red clover (<i>Trifolium pratense</i>) (O), field horsetail (<i>Equisetum arvense</i>) (O), common hogweed (<i>Heracleum sphondylium</i>) (O), curled dock (<i>Rumex crispus</i>) (O), common sorrel (<i>Rumex acetosa</i>) (O), greater stitchwort (<i>Stellaria holostea</i>) (R), yarrow (<i>Achillea millefolium</i>) (R), ground ivy (<i>Glechoma hederacea</i>) (R), meadow vetchling (<i>Lathyrus pratensis</i>) (R), germander speedwell (<i>Veronica chamaedrys</i>) (R), thyme-leaved speedwell (<i>Veronica serpyllifolia</i>) (R), common bird's-foot-trefoil (<i>Lotus corniculatus</i>) (R), garlic mustard (<i>Alliaria petiolata</i>) (R), wood avens (<i>Geum urbanum</i>) (R), daisy (<i>Bellis perennis</i>) (R), and white dead-nettle (<i>Lamium album</i>) (R). Patchy and unmanaged grassland was present around the former pond (G4). Other species recorded around the former pond included yellow iris (<i>Iris pseudacorus</i>) (LA), hemlock water-dropwort (<i>Oenanthe crocata</i>) (F), pendulous sedge (O), and great willowherb (<i>Epilobium hirsutum</i>) (O).	Poor

Habitat	Ref.	Photograph	Species List	Condition Assessment
Modified grassland	G7		Small area of modified grassland which was located adjacent to the building and parking area. Currently unmanaged with a tall sward height. Species included Yorkshire fog (D), dandelion (<i>Taraxacum officinale</i> agg.) (O), cock's-foot (O), rough meadow grass (O), white deadnettle (R), cat's-ear (<i>Hypochaeris radicata</i>) (R), and creeping buttercup (R).	Poor
Other Scot's pine woodland	W1		The canopy is dominated by Scot's pine (<i>Pinus sylvestris</i>), with other species including pedunculate oak (<i>Quercus robur</i>) (R), ash (<i>Fraxinus excelsior</i>) (R). The shrub layer consisted of bramble (<i>Rubus fruticosus</i> agg.) (O) and holly (<i>Ilex aquifolium</i>) (R). The ground layer is dominated by common nettles.	Poor

Habitat	Ref.	Photograph	Species List	Condition Assessment
Other woodland; broadleaved	W2		The canopy is dominated by ash, with a single oak tree. Ground and shrub layer species included curled dock (O), bramble (O), rough meadow grass (O), Yorkshire fog (O), wood avens (F), herb Robert (<i>Geranium robertianum</i>) (R), honeysuckle (<i>Lonicera periclymenum</i>) (R), tufted vetch (R), elm (<i>Ulmus</i> sp.) (R), hawthorn (<i>Crataegus monogyna</i>) (R) and oak saplings (R).	Poor
Ponds (priority habitat)	P1		The pond was drained prior to the updated visit. Habitat description is based on what is stated in the Ecological Appraisal (Aspect Ecology, 2023): <i>'The banks are formed by bare earth in places, whilst elsewhere they are artificial wood and concrete banks. Flag Iris was recorded at the pond, along with abundant ruderal species such as white dead nettle and common nettle along the banks.'</i>	Moderate

Habitat	Ref.	Photograph	Species List	Condition Assessment
Tall forbs	TF1-TF4		Areas of tall forb vegetation, dominated by ruderal species including common nettles (D), green alkanet (<i>Pentaglottis sempervirens</i>) (LA), cock's-foot (F), bramble (F), rosebay willowherb (O), broad-leaved dock (O), rough meadow grass (O), common fleabane (<i>Pulicaria dysenterica</i>) (O), cleavers (R), red fescue (R), and hogweed (R).	Poor
Ruderal/ephemeral	RE1		Small areas of short ruderal/ephemeral vegetation adjacent to woodland with a mix of species including barren brome (F), annual meadow grass (<i>Poa annua</i>) (O), white clover (O), herb Robert (O), germander speedwell (R), ragwort (<i>Jacobaea vulgaris</i>) (R), lesser trefoil (<i>Trifolium dubium</i>) (R), common vetch (<i>Vicia sativa</i>) (R), cut-leaved crane's-bill (R) and daisy (<i>Bellis perennis</i>) (R).	Poor

Habitat	Ref.	Photograph	Species List	Condition Assessment
Bramble scrub	BS		Areas of dense bramble scrub.	Condition Assessment N/A
Blackthorn scrub	S1		Area of thick blackthorn (<i>Prunus spinosa</i>) scrub.	Poor

Habitat	Ref.	Photograph	Species List	Condition Assessment
Mixed scrub	S2-S3		Areas of scrub with a mix of bramble (O), elder (<i>Sambucus nigra</i>) (O), dogwood (<i>Cornus sanguinea</i>) (O), willow (<i>Salix</i> sp.) (O), rose (<i>Rosa</i> sp.) (R), field maple (<i>Acer campestre</i>) (R), and guelder rose (<i>Viburnum opulus</i>) (R). The mixed scrub to the south-west of the Site (S2) included a few ornamental varieties of shrubs such as sumac species (<i>Rhus</i> sp.) and cherry laurel (<i>Prunus laurocerasus</i>).	Poor
Hedgerows	H1-H3		H1: mix of species including hawthorn, elm, holly, field maple, hazel (<i>Corylus avellana</i>), and scattered beech (<i>Fagus sylvatica</i>) trees. H2: mix of species including hawthorn, blackthorn, elm, field maple, hazel, with scattered oak, ash, and field maple trees. H3: mix of species including hazel, field maple, blackthorn, elder, hawthorn, dog-rose (<i>Rosa canina</i>), with scattered oak and field maple trees (Hedgerow Photograph).	Good

Habitat	Ref.	Photograph	Species List	Condition Assessment
Developed land; sealed surface	U1		A number of buildings are present within the On-Site area and were associated with small areas of hardstanding, including pathways.	N/A - Other
Artificial unvegetated, unsealed surface	U2		An area of gravel formed the existing car park and access roads within the On-Site area.	N/A - Other

Habitat	Ref.	Photograph	Species List	Condition Assessment
Ground level planter			Overgrown former garden area for the commercial properties, with brick and wood ground level planters, dominated with nettles and occasional pendulous sedge and common ivy (<i>Hedera helix</i>). Evidence of compost heap, old wheelbarrow and garden equipment.	
Urban trees	T1-T13		Several scattered urban trees were present throughout the On-Site area including the following species: ash, horse chestnut (<i>Aesculus hippocastanum</i>), field maple, goat willow (<i>Salix caprea</i>), oak and Medlar tree (<i>Mespilus germanica</i>).	T2-T3, T12 – Good T1, T4-T11, and T13 - Moderate
Off-Site				

Habitat	Ref.	Photograph	Species List	Condition Assessment
Other neutral grassland	OS1-OS3		Former horse grazed field that has been left unmanaged, sward height is tall, and grass species dominated the sward. Grass species included a mix of rough meadow-grass (A), meadow foxtail (A), Yorkshire fog (F), cock's-foot (F), false oat grass (O), creeping bent (O), sweet vernal grass (R), soft brome (R), and perennial rye-grass (R). Herb and ruderal species included meadow buttercup (O), black knapweed (O), creeping common nettle (O), thistle (O), creeping buttercup (O), ribwort plantain (O), red clover (O), meadow vetchling (R), ground ivy (R), and common vetch (R).	Poor
Bramble scrub	OS4-OS5		Areas of dense bramble scrub.	Condition Assessment N/A

Habitat	Ref.	Photograph	Species List	Condition Assessment
Ruderal/Ephemeral	OS6		Area of short and patchy ruderal/ephemeral vegetation. Species included barren brome (A), false oat-grass (F), Yorkshire fog (F), black knapweed (O), bramble (O), cock's-foot (R), dandelion (R), soft brome (R), herb Robert (R), oxeye daisy (<i>Leucanthemum vulgare</i>) (R), and common ivy (R).	Poor
Tall forbs	OS7		Areas of tall forb vegetation is dominated by ruderal species including common nettles (D), cock's-foot (F), bramble (F), broad-leaved dock (O), rough meadow grass (O), cleavers (R), and hogweed (R).	Poor

Habitat	Ref.	Photograph	Species List	Condition Assessment
Developed land; sealed surface	OS8		Disused stables with associated areas of hardstanding to the north of the Off-Site Area.	N/A - Other



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Appendix B: Supplementary Material – Statutory Biodiversity Metric Condition Assessments

Survey Cover Sheet			
Survey date/s	06/03/2025 and 14/05/2025	Site name or location	171 Evendons Lane, Wokingham
Weather conditions	Sunny, dry, mild	Project or development name	171 Evendons lane, Wokingham
Surveyor name	Martin Woolley and Eilidh Brown	On-site or off-site	On-site and Off-site
Survey reference		Reason for assessment (if not baseline condition survey)	
Notes			

[illegible]

G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	Yes - no INNS											
Essential criterion achieved (Yes or No)		No											
Number of criteria passed		4											
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved *//											
Passes 6 or 7 criteria including passing essential criterion A	Good (3)												
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)												
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)	X											
Suggested enhancement interventions to improve condition score													
Footnotes													
Footnote 1 – 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> .													
Footnote 2 – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.													
Footnote 3 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement.													
Footnote 4 – Wildlife and Countryside Act 1981 (as amended).													

Condition Sheet: GRASSLAND Habitat Type (medium, high and very high distinctiveness)													
UK Habitat Classification (UKHab) Habitat Types													
Grassland - Lowland calcareous grassland Grassland - Lowland dry acid grassland Grassland - Lowland meadows Grassland - Other lowland acid grassland Grassland - Other neutral grassland Grassland - Tall herb communities (H6430) [Not to be confused with the Tall forbs secondary code – see UKHab guidance for details.] Grassland - Upland acid grassland Grassland - Upland calcareous grassland Grassland - Upland hay meadows Sparsely vegetated land - Calaminarian grassland													
Habitat Description													
ukhab – UK Habitat Classification													
On-site or off-site, site name and location		Survey date and Surveyor name											
		Survey reference (if relating to a wider survey)											
Limitations (if applicable)		Habitat parcel reference											
		G1	OS1-3	G2	G3	G4	G5	G6					
Condition Assessment Criteria		Grid reference											
		SU 79854 67007	SU 79816 67006	SU 79829 66976	SU 79800 66921	SU 79838 66952	SU 79850 66971	SU 79882 66924					
		Criterion passed (Yes or No)										Notes (such as justification)	
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 (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description). ¹ Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	Yes - meets three criteria in the UKHab definition (>8 species per m2, >1 grass species that is not generally sown for intensive agricultural production and cover of rye-grass and	No - higher proportion of species indicative of sub-optimal condition and dominated by grass species.	No - higher proportion of species indicative of sub-optimal condition and dominated by grass species.	No - higher proportion of species indicative of sub-optimal condition and dominated by grass species.	No - higher proportion of species indicative of sub-optimal condition and dominated by grass species.	No - higher proportion of species indicative of sub-optimal condition and dominated by grass species.	No - higher proportion of species indicative of sub-optimal condition and dominated by grass species.					
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 insects, birds and small mammals to live and breed.	No - tall sward, unmanaged, c.20-30cm	No - tall sward, unmanaged, c.20-30cm	No - tall sward, unmanaged, c.20-30cm	No - tall sward, unmanaged, c.20-30cm	Yes - some areas of shorter sward and tall sward	No - tall sward, unmanaged, c.20-30cm	No - tall sward, unmanaged, c.20-30cm					
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens ² .	Yes - 5%	Yes - 5%	Yes - 5%	Yes - 5%	No - bare ground c. 50%	Yes - 5%	No - bare ground c. 10%					

D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	Yes - scrub less than 5% and no bracken	Yes - scrub less than 5% and no bracken	Yes - scrub less than 5% and no bracken	No - bramble scrub present c. 20%	Yes - scrub less than 5% and no bracken	No - bramble scrub present c. 20%	No - scrub 10%				
E	Combined cover of species indicative of suboptimal condition ³ and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species ⁴ (as listed on Schedule 9 of WCA ⁵) are present, this criterion is automatically failed.	No - suboptimal species are present over 5% of total	No - suboptimal species are present over 5% of total area	No - suboptimal species are present over 5% of total area	No - suboptimal species are present over 5% of total area	No - suboptimal species are present over 5% of total	No - suboptimal species are present over 5% of total area	No - suboptimal species are present over 5% of total area				
Additional Criterion - must be assessed for all non-acid grassland types												
F	There are 10 or more vascular plant species per m ² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). Note - this criterion is essential for achieving Good condition for non-acid grassland types only.	No - less than 10 plant species per m2	No - less than 10 plant species per m2	No - less than 10 plant species per m2	No - less than 10 plant species per m2	No - less than 10 plant species per m2	No - less than 10 plant species per m2	No - less than 10 plant species per m2				
Essential criterion for Good condition achieved (for non-acid grassland) (Yes or No)		No	No	No	No	No	No	No				
Number of criteria passed		3	2	2	1	2	1	0				
Condition Assessment Result	Condition Assessment Score	Score Achieved x/√										
Acid grassland types (Result out of 5 criteria)												
Passes 5 criteria	Good (3)											
Passes 3 or 4 criteria	Moderate (2)											
Passes 2 or fewer criteria	Poor (1)											
Non-acid grassland types (Result out of 6 criteria)												
Passes 5 or 6 criteria, including essential criterion A and additional criterion F.	Good (3)											
Passes 3 - 5 criteria, including essential criterion A.	Moderate (2)	X										
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.	Poor (1)		X	X	X	X	X	X				
Suggested enhancement interventions to improve condition score												
Notes												
Footnote 1 - Professional judgement should be used alongside the UKHab description. Footnote 2 – For example, this could include small, scattered areas of bare ground allowing for plant colonisation, or localised patches not exceeding 5% cover. Footnote 3 - 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. Footnote 4 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, by applying professional judgement. Footnote 5 – Wildlife and Countryside Act 1981 (as amended).												

Condition sheet: HEDGEROW Habitat Types														
Habitat Type														
Native hedgerow Native hedgerow - associated with bank or ditch Native hedgerow with trees Native hedgerow with trees - associated with bank or ditch Species-rich native hedgerow Species-rich native hedgerow - associated with bank or ditch Species-rich native hedgerow with trees Species-rich native hedgerow with trees - associated with bank or ditch														
Habitat Description														
Three hedgerows with trees along the boundaries of this Site. All assessed to be in Good condition.														
ukhab – UK Habitat Classification														
On-site or off-site, site name and location	On-site			Survey date and Surveyor name	Martin Woolley, 06/03/2025									
Limitations (if applicable)				Survey reference (if relating to a wider survey)										
Condition Assessment Details														
A series of ten attributes, representing key physical characteristics are used for this assessment. Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria. This assessment is based on the Hedgerow Survey Handbook ¹ and Favourable Conservation Status document ² . For further clarification please refer to the Hedgerow Survey Handbook. Best practice would be to record the species, age, spacing and other key information about all trees present along a hedgerow within the 'Habitat Description' box, as well as other key features of the hedgerow.														
Hedgerow favourable condition attributes														
Attributes and functional groupings (A, B, C, D and E)		Criteria - the minimum requirements for 'favourable condition'	Criteria description	Habitat parcel reference										
				H1	H2	H3								
				Grid reference										
				SU 79883	SU 79874	SU 79837								
Core groups - applicable to all hedgerow types				Criterion passed (Yes or No)										Notes (such as justification)
A1.	Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).	Y	Y	Y								
A2.	Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	Y	Y	Y								

E2.	Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.	Y	Y	Y										
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The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the Statutory Biodiversity Metric. The scores for each are set out in the tables below.

Condition categories for hedgerows without trees		
Category	Category Requirements	Metric Score
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3
Moderate	No more than 4 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and C2 = Moderate condition).	2
Poor	Fails a total of more than 4 attributes; OR <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1
Score achieved:		
Condition categories for hedgerows with trees		
Category	Category Requirements	Metric score
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3
Moderate	No more than 5 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2
Poor	Fails a total of more than 5 attributes; OR <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1
Score achieved:		GOOD

Suggested enhancement interventions to improve condition score

All in good condition.

Condition Sheet: POND Habitat Type			
Habitat Type			
Lakes - Ponds (priority habitat)			
Lakes - Ponds (non-priority habitat)			
Lakes - Temporary lakes ponds and pools (H3170) [Use this condition sheet for Temporary ponds and pools, use Lake condition sheet for Temporary lakes]			
Lakes - Ornamental lake or pond [Use this condition sheet for Ornamental ponds, use Lake condition sheet for Ornamental lakes]			
Habitat Description			
ukhab – UK Habitat Classification			
On-site or off-site, site name and location	On-Site	Survey date and Surveyor name	
Limitations (if applicable)		Survey reference (if relating to a wider survey)	Refer to BNGA (Aspect Ecology, 2023)
Grid reference	SU 79839 66947	Habitat parcel reference	P1
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
Core Criteria - applicable to all ponds (woodland¹ and non-woodland):			
A	The pond is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution. Turbidity is acceptable if the pond is grazed by livestock.	No	Refer to BNGA (Aspect Ecology, 2023)
B	There is semi-natural habitat (moderate distinctiveness or above) completely surrounding the pond, for at least 10 m from the pond edge for its entire perimeter.	No	
C	Less than 10% of the water surface is covered with duckweed <i>Lemna</i> spp. or filamentous algae.	Yes	
D	The pond is not artificially connected to other waterbodies, such as agricultural ditches or artificial pipework.	Yes	
E	Pond water levels can fluctuate naturally throughout the year. No obvious artificial dams ² , pumps or pipework.	Yes	
F	There is an absence of listed non-native plant and animal species ³ .	Yes	

G	The pond is not artificially stocked with fish. If the pond naturally contains fish, it is a native fish assemblage at low densities.	Yes	
Additional Criteria - must be assessed for all non-woodland ponds:			
H	Emergent, submerged or floating plants (excluding duckweed) ⁴ cover at least 50% of the pond area which is less than 3 m deep.	No	
I	The pond surface is no more than 50% shaded by adjacent trees and scrub.	Yes	
Number of criteria passed		6	
Condition Assessment Result		Condition Assessment Score	Score Achieved ×/✓
Results for woodland ponds which require assessment of 7 core criteria			
Passes 7 criteria		Good (3)	
Passes 5 or 6 criteria		Moderate (2)	
Passes 4 or fewer criteria		Poor (1)	
Results for non-woodland ponds which require assessment of 9 criteria			
Passes 9 criteria		Good (3)	
Passes 6 to 8 criteria		Moderate (2)	X
Passes 5 or fewer criteria		Poor (1)	
Suggested enhancement interventions to improve condition score			
.			
Footnote 1 - A woodland pond will be surrounded on all sides by woodland habitat. Footnote 2 – This excludes natural dams such as those created by Eurasian beaver <i>Castor fiber</i> . Footnote 3 - Any species included on the Water Framework Directive (WFD) UKTAG GB High Impact Species List should be absent: WFD UKTAG (2021) <i>Classification of aquatic alien species according to their level of impact</i> [online]. Available from:			

Condition Sheet: INDIVIDUAL TREES Habitat Type												
Habitat Types												
Individual trees – Urban trees												
Individual trees – Rural trees												
Complete a condition sheet for each tree or block of trees.												
Please see the separate Line of trees condition sheet for a line of rural trees. You should only use the Line of trees condition assessment and record that habitat type in rural locations.												
Habitat Description												
Five individual trees identified across the Site.												
Individual trees (description applied to the urban or rural environment):												
Young trees over 7.5 cm in diameter at breast height whose canopies are not touching.												
Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only):												
Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies should predominantly overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.												
On-site or off-site, site name and location	On-site	Survey date and Surveyor name		Martin Woolley / 06.03.2025								
		Survey reference (if relating to a wider survey)										
Limitations (if applicable)		Habitat parcel reference										
		T1	T2	T3	T4	T5						
		Grid reference										
Condition Assessment Criteria		SU 79879	SU 79846	SU 79835	SU 79837	SU 79875						
		Criterion passed (Yes or No)										Notes (such as justification)
A	The tree is a native species (or at least 70% within the block are native species).	Y	Y	Y	N	Y						T1 = Horse chestnut. T2 = Willow sp. T3 = Goat willow T4 = Medlar tree Mespilus germanica T5 = ash.
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y	Y	Y	Y	Y						
C	The tree is mature (or more than 50% within the block are mature) ¹ .	Y	Y	Y	N	Y						
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.	Y	Y	Y	Y	Y						
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N	N	N	N	N						
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	N	Y	Y	Y	N						
Number of criteria passed		4	5	5	3	4						

Condition Assessment Result (out of 6 criteria)	Condition Assessment Score	Score Achieved */✓									
Passes 5 or 6 criteria	Good (3)		X	X							
Passes 3 or 4 criteria	Moderate (2)	X			X	X					
Passes 2 or fewer criteria	Poor (1)										
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.											
Suggested enhancement interventions to improve condition score ²											

Condition Sheet: INDIVIDUAL TREES Habitat Type												
Habitat Types												
Individual trees – Urban trees												
Individual trees – Rural trees												
Complete a condition sheet for each tree or block of trees.												
Please see the separate <i>Line of trees condition sheet</i> for a line of <u>rural</u> trees. You should only use the <i>Line of trees condition assessment</i> and record that habitat type in <u>rural</u> locations.												
Habitat Description												
These are the trees assessed within hedgerow (H2) as it is likely some will have to be removed for the proposed site entrance. All small sized (DBH 7.5cm to 30cm), except T13 which medium (DBH 35cm) and T14 which large (DBH 70cm)												
Individual trees (description applied to the urban or rural environment):												
Young trees over 7.5 cm in diameter at breast height whose canopies are not touching.												
Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only):												
Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies should predominantly overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.												
On-site or off-site, site name and location	On-site	Survey date and Surveyor name		Martin Woolley / 06.03.2025								
		Survey reference (if relating to a wider survey)										
Limitations (if applicable)		Habitat parcel reference										
		T6	T7	T8	T9	T10	T11	T12	T13			
		Grid reference										
Condition Assessment Criteria		SU 79878	SU 79879	SU 79880	SU 79880	SU 79882	SU 79883	SU 79893	SU 79825			Notes (such as justification)
		Criterion passed (Yes or No)										
A	The tree is a native species (or at least 70% within the block are native species).	Y	Y	Y	Y	Y	Y	Y	Y			T6 - T9 = Field maple, T10 = Ash, T11, T12 = Oak T13=Ash
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y	Y	Y	Y	Y	Y	Y	Y			
C	The tree is mature (or more than 50% within the block are mature) ¹ .	N	N	N	N	N	N	Y	Y			
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.	Y	Y	Y	Y	Y	Y	Y	N			
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N	N	N	N	N	N	Y	N			
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	Y	Y	Y	Y	Y	Y	Y			
Number of criteria passed		4	4	4	4	4	4	6	5			

Condition Assessment Result (out of 6 criteria)	Condition Assessment Score	Score Achieved ×/√									
Passes 5 or 6 criteria	Good (3)							X			
Passes 3 or 4 criteria	Moderate (2)	X	X	X	X	X	X		X		
Passes 2 or fewer criteria	Poor (1)										
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.											
Suggested enhancement interventions to improve condition score ²											

Passes 2 or fewer criteria	Poor (1)		X	X							
Suggested enhancement interventions to improve condition score											

[illegible]

Additional Criterion - must be assessed for Intensive green roofs only:													
F	The roof has a minimum of 50% native and non-native wildflowers. 70% of the roof area is soil and vegetation (including water features).												
Additional Criterion - must be assessed for Biodiverse green roofs only:													
G	The roof has a varied depth of 80 – 150 mm; at least 50% is at 150 mm and is planted and seeded with wildflowers and sedums or is pre-prepared with sedums and wildflowers. Note – to achieve Good condition, some additional habitat, such as sand piles, stones, logs etc. are present.												
Essential criteria relevant for habitat type achieved (Yes or No)													
Number of criteria passed		1	1	1	1								
Condition Assessment Result	Condition Assessment Score	Score Achieved x/√											
Results for habitats requiring assessment of 3 core criteria only (all listed urban habitats except Open mosaic habitat on previously developed land, Bioswale, SuDS and Green roofs):													
• Passes all 3 core criteria; AND • Meets the requirements for Good condition within criterion C.	Good (3)												
• Passes 2 of 3 core criteria; OR • Passes 3 of 3 core criteria but does not meet the requirements for Good condition within criterion C.	Moderate (2)												
• Passes 0 or 1 of 3 core criteria.	Poor (1)	X	X	X	X								
Results for Green roofs and Open mosaic habitat on previously developed land (requiring assessment of 4 criteria only - core criteria plus additional criterion specified for habitat type):													
• Passes all 3 core criteria; AND • Meets the requirements for Good condition within criterion C; AND • Passes additional criterion relevant to specific habitat type (D, F or G).	Good (3)												
• Passes 2 or 3 of 4 criteria; OR • Passes 4 of 4 criteria but does not meet the requirements for Good condition within criterion C.	Moderate (2)												
• Passes 0 or 1 of 4 criteria.	Poor (1)												
Results for Bioswale or SuDS (requiring assessment of 5 criteria - core criteria plus additional criteria specified for habitat type):													
• Passes all 3 core criteria; AND • Meets the requirements for Good condition within criterion C; AND • Passes all additional criteria relevant to specific habitat type (Group E)	Good (3)												
• Passes 3 or 4 of 5 criteria; OR • Passes 5 of 5 criteria but does not meet the requirements for Good condition within criterion C.	Moderate (2)												
• Passes 2 or fewer of 5 criteria.	Poor (1)												
Suggested enhancement interventions to improve condition score													
Footnotes													

[illegible]

[illegible]



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Appendix C: Supplementary Material – Statutory Biodiversity Metric Calculations (Read-only Excel Version)