

Preliminary Ecological Appraisal

Plot 400 – Dunsbury Park, Havant



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Executive Summary

Overview

Eight Versa was appointed in July 2025 by Portsmouth City Council to conduct a Preliminary Ecological Appraisal (PEA), including a desktop study and ‘extended’ UK Habitat Survey, to inform the proposed development of an area of land known as Plot 400, Dunsbury Park, Portsmouth, Hampshire, PO9 4EE, hereafter referred to as ‘the site’. A table summarising the key findings of this report can be found in Table 1.

The site comprises Open Mosaic Habitat on Previously Developed Land (OMHPDL), characterised by disturbed ground with spoil heaps, variable vegetation cover, artificial unvegetated/unsealed surfaces, ruderal species, temporary pools, and areas of bare ground. The northern and eastern boundaries are defined by artificial unsealed surfaces and bracken, while the eastern boundary also supports willow scrub and a strip of lowland mixed deciduous woodland. A public footpath runs off-site along the eastern boundary.

Both the OMHPDL and the lowland mixed deciduous woodland along the boundary of the site are recognised as Habitats of Principal Importance (HoPI) and are considered to be of county-level importance.

The site has the potential to support protected and notable fauna including bats (roosting, foraging and commuting), breeding birds, reptiles, hazel dormouse, terrestrial invertebrates and hedgehog. In response to these ecological constraints, an overarching mitigation strategy¹ has been prepared for the wider Dunsbury Park development to guide the protection, mitigation and enhancement measures associated with future works. The strategy has been informed by previous and ongoing ecological survey work across the wider site and adopts a precautionary approach to habitat clearance, lighting design, habitat retention and species protection measures. In particular, the retention and buffering of boundary habitats, maintenance of dark corridors, implementation of precautionary habitat clearance measures, and use of species-specific mitigation will reduce potential impacts to protected fauna.

Where required, species-specific mitigation licensing, updated pre-commencement checks and/or targeted survey work will be undertaken at the appropriate stage to support the implementation of the mitigation strategy and ensure compliance with relevant wildlife legislation. This includes, where necessary, measures relating to bats, hazel dormouse and reptiles.

Recommendations have been made to mitigate against the loss of ecological features, and to enhance the site in line with Havant Borough Council’s biodiversity policies, with the aim to provide a net gain for biodiversity on the site.

Table 1 Summary of results provided within this report.

Designated sites with the potential to be impacted	Seven internationally designated sites are present within a 10km radius of the site. There are no nationally designated sites present within a 2km radius of the site. Additionally, there are forty five non-statutory designated sites within a 2km radius of the site, such as Local Wildlife Sites (LWS).
Habitats	Open Mosaic Habitat on Previously Developed Land (OMHPDL) which consists of disturbed land with spoil heaps and varying cover levels of vegetation, artificial unvegetated; unsealed surface, ruderals, temporary pool and bare ground. Other habitats present include lowland mixed deciduous woodland, bracken and willow scrub. The OMHPDL and lowland mixed deciduous woodland are Habitats of Principal Importance (HoPI) and considered to be of county-level ecological importance. Additionally, the willow scrub habitat is considered to be of up to local ecological importance.
Protected Species and Ecological Constraints	<p>The following ecological constraints and species considerations have been identified in relation to the proposed development. An overarching mitigation strategy has been prepared for the wider Dunsbury Park development and is intended to provide the primary framework for avoiding and reducing impacts to protected and notable species through habitat retention, precautionary working methods and sensitive design measures. Depending on the final agreed mitigation approach, detailed design evolution and consultation with the Local Planning Authority and/or Natural England, targeted surveys, pre-commencement checks and/or licensing may still be required for certain species to support the implementation of the works and ensure compliance with relevant wildlife legislation:</p> <ul style="list-style-type: none">• Nesting birds - The woodland and scrub have potential to support common species of nesting birds. Where these features are to be affected with suitability for nesting birds, they should be removed outside of the nesting bird season or cleared following a nesting bird check by a suitably qualified ecologist up to 48 hours prior to work commencing.• Bats - Due to dense vegetation and limited accessibility, a number of trees present along the site boundary require further assessment to establish if potential roosting features (PRFs) are present in these trees. Where these features are to be affected, any trees with PRF-M suitability must be subject to a detailed aerial/close inspection by a suitably experienced bat licenced ecologist (level 2 or above, prior to the

¹ Eight Versa (2025) Overall Mitigation Strategy: Dunsbury Park, Havant. Report reference: 11539 – Dunsbury Park – Overall Mitigation Strategy – 2510-17ks

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	<p>commencement of works. Following the result of the survey, it may be necessary to carry out further surveys to determine the presence/likely absence of roosting bats.</p> <p>Where trees with PRF-I suitability are likely to be impacted, a precautionary 'soft-fell' approach will be implemented, whereby a suitably qualified tree surgeon will lower cut limbs to the ground, under the supervision of a suitably experienced bat licenced ecologist (level 2 or above), to be left overnight to allow bats to make their way out, if present. It is recommended that the trees are removed outside the hibernation season when bats are most vulnerable, which runs between mid-November to mid-March (inclusive).</p> <p>The woodland and scrub habitats on site have the potential to be utilised by foraging and commuting bat species. Therefore, night-time activity surveys will be required to ascertain important foraging and commuting routes.</p> <p>In the unlikely event that evidence of roosting bats is found, a licence from Natural England will be submitted and granted before work proceeds. Foraging and commuting bats can continue to use the site post-development.</p> <ul style="list-style-type: none"> • Badger – During the survey, no field signs or evidence of badger were identified. However, as suitable habitats to support badger are present on site, to comply with legislation, it is recommended that suitable habitats are subject to check for badger prior to the start of works within the woodland and scrub. • Hazel Dormouse – Historic surveys (2010–2017) confirm presence in western/northern boundary features; suitable habitat and connectivity remain on site. Clearance of affected scrub/woodland will require an EPSM licence, with updated surveys recommended to inform licensing. • Common Amphibians – The OMHPDL, woodland and scrub habitats on site provide potential for common amphibians such as common toad <i>Bufo bufo</i>. Further surveys or mitigation licensing are not required. Precautionary habitat clearance measures will be implemented to minimise residual risk. • Reptiles – The woodland, OMHPDL and scrub on site offer suitable sheltering and foraging opportunities for reptiles. Further surveys will be required to confirm presence/likely absence of widespread reptiles on site and provide an estimate of the population sizes of these species, if present.
Other Constraints	<ul style="list-style-type: none"> • Protection of any woodland and OMHPDL during construction.

	<ul style="list-style-type: none"> • To reduce impacts to retained habitats during construction, a detailed Construction Environmental Management Plan (CEMP) will be prepared and implemented. • Biodiversity Net Gain – Delivery of a 10% net gain through on site compensation.
Mitigation and Enhancements	<ul style="list-style-type: none"> • Application of the mitigation hierarchy to retain and protect habitats of highest ecological importance. • Provision of soft landscaping including tree planting, amenity and wildflower grassland, herbaceous and shrub planting, and ornamental planting. These in turn will provide opportunities for invertebrates, reptiles, bats and birds. • Provide a 10% net gain in line with Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). • Construction Environmental Management Plan (CEMP). • Inclusion of species-specific bat boxes, bird boxes, insect houses and hedgehog highways. • External lighting should be sensitive carefully designed in line with the Bat Conservation Trust (BCT) and Institute of Lighting Guideline.

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Introduction

Eight Versa was commissioned in July 2025 by Portsmouth City Council to conduct a Preliminary Ecological Appraisal (PEA), including a desktop study and 'extended' UK Habitat Survey to inform the proposed development located at Plot 400, Dunsbury Park, Portsmouth, Hampshire, PO9 4EE hereafter referred to as 'the site'. The site is centred on OS grid reference SU 70030 09368.

A hybrid outline planning permission for the phased development of Dunsbury Hill Farm into a business park named Dunsbury Park1 (hereafter referred to as the Wider Site) was granted by Havant Borough Council in 2014 (Reference APP/12/00338). Plot 400 forms part of the Wider Site application boundary. To inform the hybrid outline planning permission for the Wider Site and subsequent applications for the individual plots, numerous ecological surveys and reporting were undertaken. These reports include the following which have been used to inform this report where applicable:

- Environmental Statement (Atkins (2012) Dunsbury Hill Environmental Statement Volume 1)
- 2017 Dormouse Survey Results (Atkins (2018) 2017 Dormouse Survey Results. Dunsbury Park.
- Bat Survey and Report (Sylvatica Ecology (2017) Bat Survey and Report. Dunsbury Park Phased Development Projects)
- Ecological Impact Assessment (Atkins (2018) Ecological Impact Assessment. Reserved Matters Application Plot 3B Development. Reference: 5127287)
- Preliminary Ecological Appraisal – Plots 600 – 601 (Greengage (2023) Preliminary Ecological Appraisal. Dunsbury Park Plot 600 – 601. Reference: 551772dpJul23FV01_PEA_600 – 601)
- Reptile Survey Report – Plots 500 – 502 (Greengage (2021) Reptile Survey Report. Dunsbury Park Plot 500 – 502. Reference: 551772dpDec21FV01_Reptiles)
- Reptile Survey Report – Plots 600 – 601 (Greengage (2023) Reptile Survey Report. Dunsbury Park Plot 600 – 601. Reference: 551772dp13Oct23FV01_Reptiles_600 – 601)
- Dormouse Mitigation Strategy – Plots 500 – 502 (Greengage (2022) Dormouse Mitigation Strategy. Dunsbury Park 500 – 502)
- Bat Surveys Report – Plots 500 – 502 (Greengage (2021) Bat Survey Report. Dunsbury Park 500 – 502. Reference: 551772dpDec21FV01_Bat_Activity)

Alongside the ecological reports, arboricultural reports were also undertaken to inform the plot planning applications².

Enhancement measures will be implemented to achieve a net gain in biodiversity in accordance with national and local planning policies; however, this report does not represent a formal Biodiversity Net Gain assessment. The formal assessment and metric calculations are provided in a separate report³.

Site Description

The site is approximately 3.2 ha in size and is shown on Figure 1 below. The site is situated in the northern central area of the Wider Site. Plots to the south and west (Plots 500 – 502) have already been constructed and plot 600 is located to the north east of the site. A public footpath runs along the eastern boundary of the site. The A3 (M) lies approximately 0.18 km west of the site, beyond which is the town of Waterlooville.



Figure 1: Site boundary (basemap from Google, 2025)

Site Proposals

The proposed development comprises the construction of a new unit of similar construction to the adjacent units with associated service yard and parking with access in the south east of the site.

² Barrell Tree Consultancy (2025) Arboricultural constraints assessment: Dunsbury Park, Fitzwygram Crescent, Havant PO9 4EE. Report reference: 5098-Constraints-PB

³ Eight Versa (2025) Biodiversity Net Gain Assessment: Plot 400 – Dunsbury Park. Report reference: 11539 – Plot 400 – Dunsbury Park – PEA – 25XX-XX [Date TBC]

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This site layout and its associated landscape features will be considered in detail as part of this PEA to assess ecological constraints and opportunities, inform mitigation requirements, and inform the delivery of Biodiversity Net Gain. Drawings are provided in Appendix B.

Preliminary Ecological Appraisal (PEA)

A PEA is a rapid assessment of the ecological features present, or potentially present, within a site and its surrounding area (the Zone of Influence (Zoi)⁴). A PEA normally comprises two parts: a desk study and an 'extended' UK Habitat Survey.

The purpose of this report is to:

- To identify ecological features present within the Zoi;
- To identify potential ecological constraints and opportunities associated with the proposed development;
- To make recommendations for mitigation and enhancement, to ensure conformity with relevant policy and legislation; and
- To identify any additional surveys or work required to inform a planning application.

National and Local Biodiversity Policy

The following EU, international, national and local legislation, policies and strategic plans are considered to be relevant to this site (see Appendices C, D and E for more detailed information):

- The Conservation of Habitats and Species Regulations, EU exit, 2017 (as amended) – provides European protection for a variety of habitats and protected species including: bats, great crested newt *Triturus cristatus* and hazel dormouse *Muscardinus avellanarius*;
- The Wildlife and Countryside Act (WCA)1981 (as amended) – provides UK legal protection for a variety of habitats and protected species including bats, birds, reptiles, great crested newt, invertebrates, hazel dormouse and hedgehog;
- Protection of Badgers Act 1992 – specific legislative protection for badger *Meles meles*;
- The National Planning Policy Framework (NPPF) 2025⁵ – requires local authorities to avoid and minimise impacts on biodiversity and, where possible, to provide net gains in biodiversity when taking planning decisions;
- Environment Act 2021⁶ – Sets out to make provision about targets, plans and policies for improving the natural environment. Introduced a requirement for 10% Biodiversity Net Gain across;
- The Countryside and Rights of Way Act 2000 – Strengthens species enforcement provisions of the WCA 1981 (as amended);

- The Hedgerows Regulations 1997 – These regulations make provision for the protection of important hedgerows in England and Wales;
- Havant Borough Council Core Strategy 2011 (adopted March 2011)⁷ – Sets out local policies relating to nature conservation and biodiversity for the site. It advocates for the creation, protection and enhancement of green assets, including parks, gardens, green roofs, native hedgerows and trees; and
- Havant Biodiversity Strategy 2025 – Outlines the biodiversity Strategy to provide a framework for action towards nature recovery⁸.

⁴ The 'zone of influence' for a project is the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities. This is likely to extend beyond the project site, for example where there are ecological or hydrological links beyond the site boundaries." - CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland – Terrestrial, Freshwater, Coastal and Marine. Version 1.1

⁵ Ministry of Housing, Communities and Local Government (2025) National Planning Policy Framework.

⁶ Environment Act, 2021 – Schedule 14.

⁷ Havant Borough Council. Available [here](#).

⁸ Havant Borough Council. Available [here](#).

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Methodology

Zone of Influence (Zoi)

The desk study was informed by the Zoi² for the development was established in accordance with CIEEM guidelines⁹. The Zoi is based on the characteristics of the project, as well as the present ecological features (including habitats, species and ecosystems) and their sensitivity to environmental change.

Desk Study

The desk study was undertaken in July 2025. Due to the location and nature of the proposals, biological records were purchased from the local records centre (Hampshire Biodiversity Information Centre (HBIC)¹⁰). The following resources were also contacted/consulted:

- Multi-Agency Geographic Information for the Countryside (MAGIC) website¹¹ – for details of statutory designated sites, notable habitats, European Protected Species (EPS) licences;
- Havant Borough Council website¹² – for local planning policy and biodiversity action plans;
- Joint Nature Conservation Committee (JNCC) website¹³ – for designation reasons for statutory designated sites;
- Natural England (NE) Designated Sites¹⁴ – for locations on designated sites; and
- Ordnance Survey mapping and Google Maps – to view aerial habitats and to identify waterbodies within 500 m of the site.

The following search areas around the site boundary were applied:

- 2 km for protected/priority species;
- 2 km for non-statutory sites;
- 2 km for nationally designated site; and
- 10 km for internationally designated sites.

Habitat Survey

A habitat survey to assess the ecology of the site was carried out on 21st July 2025. The survey was conducted by Kalia Symeonidou, Senior Ecology and Biodiversity Net Gain Consultant and member of Chartered Institute of Ecology and Environmental Management (CIEEM) and Sara Curtis, Ecology Advisor and full member of CIEEM. Habitats were surveyed using the standardised UK Habitat Classification (UK Habs, Version 2)¹⁵. An inventory of habitats present onsite was recorded and

mapped and dominant plant species were identified and recorded within each habitat type. Where possible, adjacent habitats were also considered and mapped to provide contextual information for the site. The weather conditions during the survey were dry, with 50% cloud cover, with a light breeze, and a temperature of 19°C.

An assessment of the site's potential to support protected/priority species was conducted alongside the UK Hab survey, based on the results of the desk study, observations made during the site survey, an assessment of the suitability of onsite and adjoining habitat, and information on the distribution of these species. Species generally considered when carrying out this kind of assessment include bats, birds, badger, common species of reptile, great crested newt, hazel dormouse, water vole, otter and invertebrates.

Daytime Bat Walkover (DBW)

A Daytime Bat Walkover (DBW) including a Ground Level Tree Assessment (GLTA) was also conducted to assess the onsite potential to support roosting bats. The survey was carried out on 21st July 2025 by Kalia Symeonidou, an experienced ecologist with 6 years' commercial bat survey experience and Sara Curtis, an experienced ecologist and Level 1 bat licence holder. Both have extensive experience in completing Preliminary Roost Assessments (PRAs), GLTAs, dusk bat emergence surveys, and night-time bat walkover surveys, and Kalia has supported a number of projects as an Accredited Agent (AA) under Natural England bat mitigation licences. The GLTA was based on guidance set out in 'Bat Surveys for Professional Ecologists'¹⁶.

The purpose of a GLTA is to determine the suitability of trees within the site boundary to have the potential to support roosting bats. This type of survey can be carried out at any time of year and is used to inform a decision on whether further surveys with respect to bats are required. Each tree onsite was assessed for its potential suitability to support roosting bats using the suitability described in Table 2. Trees were inspected for the presence of the following features:

Pruning cuts;

- Woodpecker holes;
- Cankers;
- Knot holes;
- Wounds;
- Butt rots;
- Lightning strikes;

⁹ CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition.

¹⁰ Hampshire Biodiversity Information Centre (2025). Available at: <https://www.hants.gov.uk/landplanningandenvironment/environment/biodiversity/informationcentre>

¹¹ Multi-Agency Geographic Information for the Countryside (MAGIC). This is available at: <https://magic.defra.gov.uk/MagicMap.aspx>

¹² Havant Borough Council. Available at: <https://www.havant.gov.uk/>

¹³ JNCC (2024) Available at: <https://jncc.gov.uk/>

¹⁴ Natural England Designated Sites, 2022. Available at: <https://designatedsites.naturalengland.org.uk/>

¹⁵ UKHab Ltd (2023). UK Habitat Classification Version 2.0 (at <https://www.ukhab.org>)

¹⁶ Bat Conservation Trust, BCT (2023) Bat Surveys for Professional Ecologists, Good Practice Guidelines 4th Edition.

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- Ivy;
- Cracks; and
- Lifting bark;

Table 2 Categories for assessing the suitability of trees for bats ([BCT Good Practice Guidelines](#), pages 45 and 62)

Categorisation	Description
None	Either no PRFs (potential roosting features) in the tree or highly unlikely to be any.
FAR	Further assessment required to establish if PRFs are present in the tree.
PRF-I	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats.
PRF-M	PRF is suitable for multiple bats and may therefore be used by a maternity colony.

Limitations

It is important to consider that the biological records employed during a desk study come from a wide variety of sources, and as a result, these findings might not always provide an accurate or comprehensive description of the site's ecology on their own. However, when used alongside a UKHabs habitat survey to provide a better understanding of the wider region, the findings of a desk study contribute to the production of a robust ecological assessment of the site.

Some trees could not be fully inspected due to dense vegetation and parts of the trees falling outside the site boundary within adjoining private properties. As a result, there is a risk that Potential Roost Features (PRFs) may have been under-recorded. To mitigate this limitation, a precautionary approach was adopted, ensuring that it did not significantly affect the overall assessment. This limitation is therefore not considered significant. Similarly, dense vegetation with no access, particularly the scrub could not be fully assessed for the presence of badger setts. As such, a precautionary approach was adopted, ensuring that it did not significantly affect the overall assessment and this limitation is therefore not considered significant.

Ecological surveys are limited by any factors which could affect the presence/likely absence of plants and animals. These include the time of year, weather conditions, migration patterns, and behaviour. At the time of the survey, there had been a prolonged period of dry weather. Accordingly, any ecology assessment must be considered as a 'snapshot' of the site conditions at the time of the survey as ecological constraints will change over time. Furthermore, many species are mobile in nature and might leave the site frequently. The evidence (or absence of evidence) of a species should therefore not be taken as conclusive proof that this species is or is not present, or that it will or will not be present in the future.

Survey Validity

According to CIEEM guidance¹⁷, the findings of this report are considered to be valid for a period of 12 to 18 months from the date in which the survey was undertaken, after which the survey should be repeated to ensure the baseline conditions have not changed.

Quality Assurance

All ecologists at Eight Versa are members of CIEEM and abide by the Institutes Code of Professional Conduct.

¹⁷ CIEEM (2019) Advice Note on the Lifespan of Ecological Reports and Surveys. This is available at <https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf>

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Ecological Features

Statutory Designated Sites

The site is not located within or immediately adjacent to any international or national statutory designated sites for biodiversity. There are seven internationally designated sites within a 10 km radius and no nationally designated sites within a 2km radius of the site (see Table 3 below).

The site does fall within a Site of Special Scientific (SSSI) Interest Risk Zone (IRZ) of where the Local Planning Authority should consult with Natural England if the proposed development is likely to affect a SSSI. The proposals may fall into the at risk category 'Discharge: Any discharge of water or liquid waste of more than 20m³/day that is discharged to ground (i.e. to seep away) or to surface water, such as a beck or stream', depending on the details of the proposals. As such, Natural England may need to be consulted on the application.

Table 3 Statutory Designated Sites

Site Name	Approximate Distance from Site (At Closest Point)	Qualifying Features	Ecological Importance
Solent Maritime Special Conservation Area (SAC)	3.8 km south	<p>Annex I habitats that is the primary reason for selection of this site:</p> <ul style="list-style-type: none"> 1130 Estuaries 1320 Spartina swards (<i>Spartinion maritimae</i>) 1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:</p> <ul style="list-style-type: none"> 1110 Sandbanks which are slightly covered by sea water all the time 1140 Mudflats and sandflats not covered by seawater at low tide 1150 Coastal lagoons* Priority feature 1210 Annual vegetation of drift lines 1220 Perennial vegetation of stony banks 1310 Salicornia and other annuals colonizing mud and sand. 2120 "Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes")" <p>Annex II species present as a qualifying feature, but not a primary reason for site selection:</p> <ul style="list-style-type: none"> 1016 Desmoulin's whorl snail <i>Vertigo moulinsiana</i> 	International
Chichester and Langstone Harbour Ramsar	3.8 km south	Two large estuarine basins linked by the channel which divides Hayling Island from the main Hampshire coastline. The site includes extensive intertidal mudflats, saltmarsh, sand and shingle spits and sand dunes. The mudflats support beds of <i>Zostera</i> and <i>Enteromorpha</i> , whilst the lower saltmarsh is dominated by <i>Spartina anglica</i> , with a more varied community at higher levels. Although many areas bordering the site have been developed, some grassland and brackish/freshwater marshes with reedbeds remain. Peak counts of wintering water birds regularly exceed 20,000 individuals, including internationally important numbers* of <i>Branta bernicla bernicla</i> (Chichester 10,133; Langstone 7,333), <i>Charadrius hiaticula</i> (1,041; 459), <i>Pluvialis</i>	International

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Site Name	Approximate Distance from Site (At Closest Point)	Qualifying Features	Ecological Importance
		<i>squatarola</i> (2,803; 1,373), <i>Calidris alpina</i> (19,847; 32,896), and <i>Limosa limosa</i> (694; 668). Several other species occur in nationally important numbers, notably <i>Tadorna tadorna</i> (Chichester 2,373) and <i>Tringa totanus</i> (Chichester 1,460). Breeding <i>Sterna albifrons</i> (154 pairs in 1990) and <i>S. hirundo</i> (143 pairs in 1990) are also of national importance. Parts of the site are managed as nature reserves by the Royal Society for the Protection of Birds, the Hampshire and Isle of Wight Naturalists' Trust, Chichester Harbour Conservancy and Hampshire County Council. (1a,2c,3a,3b,3c)	
Chichester and Langstone Harbour Special Protection Area (SPA)	3.8 km south	Qualifying Features: <ul style="list-style-type: none"> • A046a <i>Branta bernicla bernicla</i>; Dark-bellied brent goose (Non-breeding) • A048 <i>Tadorna tadorna</i>; Common shelduck (Non-breeding) • A050 <i>Anas penelope</i>; Eurasian wigeon (Non-breeding) • A052 <i>Anas crecca</i>; Eurasian teal (Non-breeding) • A054 <i>Anas acuta</i>; Northern pintail (Non-breeding) • A056 <i>Anas clypeata</i>; Northern shoveler (Non-breeding) • A069 <i>Mergus serrator</i>; Red-breasted merganser (Non-breeding) • A137 <i>Charadrius hiaticula</i>; Ringed plover (Non-breeding) • A141 <i>Pluvialis squatarola</i>; Grey plover (Non-breeding) • A144 <i>Calidris alba</i>; Sanderling (Non-breeding) • A149 <i>Calidris alpina alpina</i>; Dunlin (Non-breeding) • A157 <i>Limosa lapponica</i>; Bar-tailed godwit (Non-breeding) • A160 <i>Numenius arquata</i>; Eurasian curlew (Non-breeding) • A162 <i>Tringa totanus</i>; Common redshank (Non-breeding) • A169 <i>Arenaria interpres</i>; Ruddy turnstone (Non-breeding) • A191 <i>Sterna sandvicensis</i>; Sandwich tern (Breeding) • A193 <i>Sterna hirundo</i>; Common tern (Breeding) • A195 <i>Sterna albifrons</i>; Little tern (Breeding) • Waterbird assemblage 	International
Solent and Isle of Wight Lagoons SAC	4.0 km south	Annex I habitats that is the primary reason for selection of this site: <ul style="list-style-type: none"> • 1150 Coastal lagoons * Priority feature 	International
Portsmouth Harbour SPA	6.8 km south west	Qualifying Features: <ul style="list-style-type: none"> • A046a <i>Branta bernicla bernicla</i>; Dark-bellied brent goose (Non-breeding) • A069 <i>Mergus serrator</i>; Red-breasted merganser (Non-breeding) • A149 <i>Calidris alpina alpina</i>; Dunlin (Non-breeding) • A156 <i>Limosa limosa islandica</i>; Black-tailed godwit (Non-breeding) 	International
Portsmouth Harbour Ramsar	6.8 km south west	Portsmouth Harbour is a large, industrialised estuary and includes one of the four largest expanses of mudflats and tidal creeks on the south coast of Britain. The Wallington River flows into the northwest estuary and gives rise to Fareham Creek, the most notable channel. Together with the adjacent Langstone and Chichester Harbours Ramsar site, Portsmouth Harbour forms an unusual intertidal ecosystem receiving comparatively little freshwater and possessing a characteristic hydrology arising from only narrow connections to the sea via the Solent. This is a very productive ecosystem with an invertebrate flora similar to Langstone and Chichester Harbours and a high density of benthic species including the mud snail <i>Hydrobia ulvae</i> . The	International

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Site Name	Approximate Distance from Site (At Closest Point)	Qualifying Features	Ecological Importance
		mudflats support large beds of eelgrass <i>Zostera angustifolia</i> and <i>Z. noltii</i> and large numbers of phytoplankton. The saltmarshes contain <i>Spartina</i> with a sea couch <i>Elymus pycnanthus</i> zone above the high water mark. The channel is a nursery for sea bass <i>Dicentrarchus labrax</i> . The estuary regularly supports an internationally important wintering population of <i>Branta bernicla bernicla</i> . In the five winter period 1986/87-1990/91, an average peak count of over 2,290 birds was recorded. The area also supports nationally important numbers of the following species (figures given are average peak counts for the five year winter period between 1986/87 - 1990/91): <i>Calidris alpina</i> (8,010), <i>Limosa limosa</i> (70) and <i>Mergus serrator</i> (100). (Criteria 2b,3c).	
Butser Hill SAC	8.76 km north	<p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) 91J0 <i>Taxus baccata</i> woods of the British Isles* Priority feature 	International

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Non-statutory Designated Sites

The data search returned forty-five non-statutory designated sites, also known as Sites of Importance for Nature Conservation (SINCs) within 2 km of the site. The closest SINCs are detailed in Table 4 below.

Table 4 Non-Statutory Designated Sites

Site Name	Approximate Distance from Site (At Closest Point)	Qualifying Features	Ecological Importance
Neville's Park Areas 2 & 3 SINC (HV0039)	0.13 km south	Grassland - Agriculturally unimproved grasslands which are not of recent origin.	Local
Beech Wood East SINC (HV0041)	0.15 km west	Ancient semi-natural woodlands and other woodlands where there is a significant element of ancient semi-natural woodland surviving or supporting some characteristics of ancient woodland.	Local
Cherry Tree Row SINC (HV0040)	0.17 km south	Ancient semi-natural woodlands	Local
The Warren, Havant SINC (HV0049)	0.25 km south east	Other woodland where there is a significant element of ancient semi-natural woodland surviving or supporting some characteristics of ancient woodland and wet woodlands such as alder <i>Alnus glutinosa</i> or willow <i>Salix</i> spp. woods and birch <i>Betula</i> sp. bog woods which support a good diversity of woodland and/or marsh/swamp/mire species.	Local
Dunsbury Hill Wood SINC (HV0050)	0.27 km east	Other woodland where there is a significant element of ancient semi-natural woodland surviving or supporting some characteristics of ancient woodland.	Local
Outhurst/Inhurst/Beech Woods SINC (HV0036)	0.27 km east	Ancient semi-natural woodlands.	Local
Meadow by Bells Copse SINC (HV0048)	0.28 km north east	Grassland - Agriculturally unimproved grasslands which are not of recent origin and semi-improved or impoverished grasslands which retain a significant element of unimproved grassland.	Local
Dunsbury Hill - Areas 5 and 6 SINC (HV0045)	0.46 km south	Grassland - Agriculturally unimproved grasslands which are not of recent origin.	Local

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Priority Habitats

There are a number of priority habitats within a 1 km radius of the site. UK Priority Habitats and Species are those subject to conservation action under Section 40 and 41 of the Natural Environment and Rural Communities (NERC) Act 2006 and referred to as Species of Principal Importance (SoPI) or Habitat of Principal Importance (HoPI). Priority habitats include deciduous woodland, ancient and semi-natural woodland, and good quality semi-improved grassland. The majority of these are also designated as SINC's (see Table 4 above) with the closest designated as wet woodland Beech Wood East SINC and deciduous woodland located 0.17 km south of the site.

The majority of the site comprises Open Mosaic Habitat on Previously Developed Land (OMHPDL) which is a Priority Habitat under Section 41 of the NERC Act 2006. As such, they should be afforded appropriate consideration in line with national planning policy.

HBIC identified part of the woodland adjacent to the site as being located within a Network Opportunity area which are 'An ecological network is a group of habitat patches that species can move easily between maintaining ecological function and conserving biodiversity'.

Habitats

The site comprises disturbed land with spoil heaps, areas of bare ground, temporary pools, ruderal vegetation, scattered scrub and artificial unvegetated/unsealed surfaces (forming part of the OMHPDL habitat). Other habitats present on site include willow scrub, artificial unvegetated; unsealed surface, bracken and lowland mixed deciduous woodland. Off-site, the boundaries are defined by hedgerows to the west, north and east, and by developed land (sealed surfaces including buildings and hardstanding) associated with the adjacent plots to the south. A public footpath also runs just outside the eastern boundary.

From available aerial images (Google Earth, 2025), the site was cleared between 2016 and 2019. Vegetation on the site was beginning to establish in 2019 however appears to have been cleared again with disturbance in 2020. A spoil heap in the south appeared on the site prior to 2022, and the site was relatively clear of vegetation in April 2022. In March 2024, more spoil heaps are visible on aerial images with vegetation present. This represents the current site conditions. A full species list is provided in Appendix F, and the habitat descriptions below should be read in conjunction with the Baseline Habitats Features Plan (Appendix A).

Artificial Unvegetated; Unsealed Surface – u1c

Scattered areas of artificial unvegetated; unsealed surface comprising gravel hardcore are located on the slopes in the north east of the site and in the south east. Although scattered vegetation is present, this is under 5% of the total area. This habitat has negligible ecological importance.



Figure 2: Area of artificial unvegetated; unsealed surface, view looking north east.

Bracken – g1c

Scattered areas of bracken are located along the eastern and northern boundaries of the site, adjacent to the offsite public footpath and hedgerows. The bracken is beginning to encroach into the central area of the site in places. Scattered gorse shrubs are present within the bracken. Areas of bracken are considered to be of negligible ecological importance.



Figure 3: Area of bracken present north of the site, view looking north east.

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Lowland Mixed Deciduous Woodland – w1f

A small area of lowland mixed deciduous woodland is located along the eastern boundary of the site comprising a very large mature oak with an understorey of hawthorn, oak saplings, grey willow, hazel, bracken and ivy. Some levels of disturbance were noted from the adjacent footpath. The woodland is unmanaged and shaded by the very large oak. This habitat is considered to be of County ecological importance.



Figure 4: Area of woodland present east of the site, view looking east.

Open Mosaic Habitat on Previously Developed Land (OMHPDL) – u, 80

The majority of the site comprises OMHPDL which is a Priority Habitat under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. The Priority Habitat criteria for OMHPDL is provided in Table 5 and each criterion must be met to classify it as OMHPDL. These criteria are also similar to the UK Habitat Classification criteria for this habitat type.

Table 5: OMHPDL Criteria¹⁸

Criteria	Description and Details
1. The area of open mosaic habitat is at least 0.25 ha in size	The site total area is 3.22 ha, with 2.88 ha onsite classified as OMHPDL.
2. Known history of disturbance at the site or evidence that soil has been removed or severely modified by previous use(s) of the site. Extraneous	Numerous spoil heaps present onsite and evident from available aerial images with

Criteria	Description and Details
materials/substates such as industrial spoil may have been added.	the spoil being added between 2020 and 2024.
3. The site contains some vegetation. This will comprise early successional communities consisting mainly of stress-tolerant species (e.g. indicative of low nutrient status or drought). Early successional communities are composed of (a) annuals, or (b) mosses/ liverworts, or (c) lichens, or (d) ruderals, or (e) inundation species, or (f) open grassland, or (g) flower-rich grassland, or (h) heathland.	Areas of OMHPDL contain varying percentage cover of vegetation including bare ground, ruderals, annuals, grassland and inundation species. Full species lists are provided in Appendix F however species dominating across the site include narrow leaved bird foot trefoil and fleabane.
4. The site contains unvegetated, loose bare substrate and pools may be present.	Areas of the site are compact and lack in vegetation with spoil edges comprising loose and bare substrate. A number of pools are present in the central area of the site including one pool which was holding less than 1 cm of water, however contained bull rush and common reed indicating it usually holds more water. At the time of the survey, there had been a prolonged period of dry weather and heat waves.
5. The site shows spatial variation, forming a mosaic of one or more of the early successional communities (a)-(h) above (criterion 3) plus bare substrate, within 0.25ha	A variety of habitat types are present across the site showing spatial variation with a mosaic of ruderals, annual, grassland and bare ground.

The site has evidence of previous management with the arising left onsite and within compost heaps along the eastern boundary of the site. There are no recent signs of any spoil being added to the site beyond those added between 2020 and 2024.

Areas of OMHPDL are a Priority Habitat and are of County ecological importance.

¹⁸ UK Biodiversity Action Plan Priority Habitat Description (2010) Open Mosaic Habitats on Previously Developed Land

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Figure 5: Area of OMHPDL (temporary pool).



Figure 6: Area of OMHPDL.



Figure 7: Area of OMHPDL.



Figure 8: Area of OMHPDL (spoil heap/mound).

Willow Scrub – h3j

Scattered willow is located along the eastern boundary of the site and is dominated by grey willow with rare gorse and bracken. The scrub appears to be unmanaged and was likely previously managed as a hedgerow which is now outgrown.

This habitat is considered to be of up to local ecological importance.

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Figure 9: Area of willow scrub east of the site, view looking north east.

Protected/Priority Species

The site supports habitats that are suitable for a number of protected and priority species, including roosting, foraging and commuting bats, nesting birds, badger *Meles meles*, great crested newt *Triturus cristatus*, hazel dormouse *Muscardinus avellanarius*, reptiles and western European hedgehog *Erinaceus europaeus*, and terrestrial invertebrates.

The potential for the site to support protected and/or notable species, as set out in Table 6 below, has been assessed according to best practice survey guidance and is based on the results of the desk study and observations made during the survey of habitats recorded at the site.

Table 6: Protected/notable species assessment

Species/Group	Desk Study Results	Onsite Potential	Potential Ecological Importance
Amphibians	<p>HBIC returned no records of great crested newt within 2 km of the site and no European Protected Species licences for the species were returned within 2 km of the site.</p> <p>However, the data search did return records of common toad <i>Bufo bufo</i> within 2 km of the site, the closest located over 1.25 km south east.</p> <p>No established waterbodies were identified within 500 m of the Wider Site. A number of watercourses were identified within 500 m of the Wider Site, however, were scoped out of previous assessments.</p>	<p>There are no established waterbodies onsite, however temporary pools are present within the spoil heaps. At the time of the survey, the majority of these pools had dried up and were considered unsuitable for breeding amphibians, including great crested newt. These pools appear to have been relatively recently created and were not identified during the previous surveys of the Wider Site. Due to the lack of waterbodies within 500 m of the Wider Site, the site is relatively isolated. It is therefore anticipated that great crested newt would not have colonised these onsite pools.</p> <p>Potential terrestrial habitat was present across the site within grassland, ruderal, scrub and woodland base habitats. These habitats provide some mosaic foraging and refuge.</p> <p>Due to the lack of suitable waterbodies within 500m of the site and the lack of connectivity to further afield waterbodies, great crested newt is considered likely absent from the site. More mobile amphibians, such as common toad, could be present on site however would not be reliant on the site alone due to the lack of permanent onsite aquatic habitats.</p>	Negligible

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Table 6: Protected/notable species assessment

Species/Group	Desk Study Results	Onsite Potential	Potential Ecological Importance
Badger	<p>The data search returned two records for badger within 2 km of the site.</p> <p>Evidence of badger was recorded within the Wider Site.</p>	<p>The site contained habitats suitable for badger, including scrub, grassland and woodland. No evidence of the presence of badger, such as setts, latrines or dung pits were recorded within the site during the 'extended' UKHabs survey with the exception of a few mammal runs noted along the northern boundary of the site and extending offsite. Additionally, some sections of the scrub around the periphery of the site were not fully accessible at the time of the survey due to dense vegetation and may have obscured evidence.</p> <p>Woodland within the surrounding area has the potential to be used by foraging and sheltering badger and provides extensive opportunities for sett building. Due to the surrounding habitats, the dynamic nature of badger and the connectivity between the site and offsite suitable habitats, badger may colonise the site or use it infrequently as part of the wider foraging resource.</p>	Negligible
Bats (Roosting - Trees)	<p>HBIC returned numerous records for fourteen species of bats within 2 km of the site. The closest records within the site for common pipistrelle <i>Pipistrellus pipistrellus</i>. Within 0.2 km of the site, numerous other records were returned including soprano pipistrelle <i>Pipistrellus pygmaeus</i>, noctule <i>Nyctalus noctula</i>, Bechstein's bat <i>Myotis bechsteinii</i> and Myotis species.</p> <p>Further afield, HBIC also returned records of barbastelle <i>Barbastella barbastellus</i>, brown long-eared bat <i>Plecotus auritus</i>, serotine <i>Eptesicus serotinus</i>, Daubenton's <i>Myotis daubentonii</i> and Natterer's bat <i>Myotis nattereri</i> within 2 km of the site.</p> <p>According to MAGIC, one historic mitigation licence was identified within 2 km of the site for the destruction of a resting place for common pipistrelle and brown long-eared located 1.4 km west of the site (licence number EPSM2013-5591).</p> <p>Bat surveys have been undertaken across the Wider Site between 2010 and 2023. Bat activity was generally low across</p>	<p>Mature trees are present along the site boundaries, particularly to the east and north. At the time of survey, dense vegetation and Heras fencing restricted access, preventing close inspection.</p> <p>The majority of the habitats on site which are suitable for foraging and commuting bats are present along the western, northern and eastern boundaries. The woodland and scrub, as well as the offsite adjacent hedgerows also provide connectivity to the surrounding landscape including woodland and grassland which are considered to provide foraging, commuting and roosting opportunities for bats, including rarer species such as Barbastelle and Bechstein's.</p> <p>The central area of the site is recently formed and although may provide opportunities for invertebrates, has only been relatively recently created. The southern portion of the site is subject to lighting from the adjacent units.</p>	Local
Bats (Foraging & Commuting)			Local

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Table 6: Protected/notable species assessment

Species/Group	Desk Study Results	Onsite Potential	Potential Ecological Importance
	the Wider Site with the majority of activity along the woodland margins and dark corridors formed by public footpaths. The majority of the bats observed/recorded were common pipistrelle and soprano pipistrelle, with serotine and Myotis species recorded less frequently and occasional recordings of Nathusius, noctule and brown long-eared bat. A barbastelle was recorded during the 2017 surveys.		
Hazel Dormouse	<p>The data search returned sixteen records of hazel dormouse within 2km of the site.</p> <p>According to MAGIC, three historic mitigation licences were identified within 2 km of the site. The closest is located 0.25 km south for the damage and destruction of breeding and resting places for dormouse (licence number 2014-456-EPS-MIT).</p> <p>An updated dormouse survey was undertaken in 2017 by Atkins of the Wider Site. This included suitable hazel dormouse habitat such as hedgerows and broad-leaved woodland. Prior to this, dormouse presence/likely absence surveys were undertaken between 2010 - 2011 to inform the Environmental Statement. The previous surveys have confirmed that dormouse is present on the Wider Site.</p>	<p>The 2017 surveys confirmed hazel dormouse presence within western and northern hedgerow located adjacent to the site. Dormouse surveys were also undertaken on the eastern hedgerow adjacent to the site, however no dormouse were recorded during the 2017 surveys.</p> <p>The offsite hedgerows, as well as the scrub and woodland habitat along the site boundaries continue to provide opportunities for dormouse including a number of mature and semi-mature trees, particularly along the eastern boundary which provides continuous arboreal connectivity to offsite woodland parcels.</p>	County
Nesting Birds & Schedule 1 Birds (e.g. Barn Owl)	<p>The desk study returned a large number of bird records, including Species of Principal Importance, Priority Species and red listed species including skylark <i>Alauda arvensis</i>, nightingale <i>Luscinia megarhynchos</i>, barn owl <i>Tyto alba</i>, and mistle thrush <i>Turdus viscivorus</i>. Records of swift <i>Apus apus</i> were also returned within 2 km of the site.</p> <p>HBIC also returned 'positive' visits to Solent Wader and Brent Goose Strategy sites, all of which are located 2 km south of the site.</p> <p>The woodland and scrub within the Wider Site offer suitable nesting and foraging habitat for common bird species.</p>	<p>The woodland, scrub and adjacent offsite hedgerows have potential to support a range of common species of breeding birds including <i>Fringilla montifringilla</i>, greenfinch <i>Chloris chloris</i> and song thrush <i>Turdus philomelos</i>.</p> <p>While the site provides suitable foraging opportunities for priority or Schedule 1 bird species, the site has a history of disturbance and has only been relatively recently created. As such, the site is unlikely to support a significant assemblage of priority or Schedule 1 bird species. Due to the habitats present onsite, the site is unlikely to support an assemblage of birds associated with the Chichester and Langstone Harbour SPA or Portsmouth Harbour SPA.</p>	Local

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Table 6: Protected/notable species assessment

Species/Group	Desk Study Results	Onsite Potential	Potential Ecological Importance
Reptiles	<p>The data search returned numerous records of for grass snake <i>Natrix helvetica</i>, adder <i>Vipera berus</i>, common lizard <i>Zootoca vivipara</i> and slow worm <i>Anguis fragilis</i> within 2 km of the site. The closest records are located on the Wider Site for common lizard.</p> <p>Reptile surveys were undertaken to inform the Environmental Statement between 2011 and 2021. Updated surveys have been undertaken to inform each subsequent plot. Reptile surveys on plot 500 - 502 were undertaken between September and October 2021. The surveys identified a low population of common lizard, slow worm and adder. Reptile surveys were undertaken between May and July 2023 on plot 600 - 601 identified an 'exceptional population of slow worm, 'good' population of common lizard and 'low' populations of adder and grass snake.</p>	<p>The site supports areas of suitable sheltering and foraging habitat for common reptile species, including woodland, scrub and offsite, adjacent hedgerow bases as well as a mosaic of habitats onsite including grassland and ruderal vegetation.</p> <p>The northern and eastern boundaries provide connectivity to habitats within the wider landscape including SINCs which may also support a population of reptiles.</p>	Local
Terrestrial Invertebrates	<p>The desk study returned records of terrestrial invertebrates including notable species such as stag beetle <i>Lucanus cervus</i>, small heath <i>Coenonympha pamphilus</i> and purple emperor <i>Apatura iris</i> within 2 km of the site.</p>	<p>The OMHPDL provides opportunities for a diverse range of invertebrates, including notable species and provides a range of food sources and opportunities onsite.</p>	Local
Western European Hedgehog	<p>The data search returned records of hedgehog within 2km of the site. The nearest recent record is from 2020, located approximately 0.9 km from the site.</p>	<p>There is suitable habitat on site for hedgehog, including the areas of grassland, scrub and woodland.</p>	Up to local

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Ecological Constraints and Opportunities

Site Proposals

The proposed development comprises the construction of a new unit of similar construction to the adjacent units with associated service yard and parking with access in the southeast of the site. Drawings are provided in Appendix B.

Impact on Statutory and Non-statutory Designated Sites

The site falls within a Site of Special Scientific (SSSI) Interest Risk Zone (IRZ) and further consultation, and clarification will be required to determine whether the site falls within the at-risk categories for discharge of water. If the site does fall within the at-risk category, the local planning authority would need to consult with Natural England on the proposals.

The proposals for the site are for industrial units and do not include an increase in overnight accommodation and are not anticipated to result in a high volume of water use. The current site habitats are not directly connected to or have similar habitats to the statutory designated sites within the zone of influence. Therefore, a likely significant effect on the Solent's European Sites is not anticipated as a result of the proposed development.

Habitats

Area of artificial unvegetated; unsealed surface and bracken are considered to be of negligible ecological importance which does not require specific mitigation for its loss.

The majority of the development proposals are located within the central portion of the site, with boundary lowland mixed deciduous woodland of local ecological importance and willow scrub of up to local ecological importance retained and protected as part of the proposals, where possible. The woodland and scrub have intrinsic value and contribute towards ecosystem services including carbon storage and reducing air pollution as well as providing aesthetic value. These habitats also provide value to wildlife by providing connectivity to the wider landscape as well as foraging opportunities for birds, hazel dormouse, bats and other fauna.

All retained habitats should be protected during construction works. The trees will be protected in accordance with BS 5837:2012: Trees in relation to design, demolition and construction including appropriate fencing and signage to prevent accidental damage or compaction of the roots. Standard pollution prevention measures will also be implemented during construction through a Construction Environmental Management Plan (CEMP).

The central portion of the site comprises open mosaic habitat on previously developed land (OMHPDL) which will be lost as part of the proposals. OMHPDL is a priority habitat under the NERC Act 2006 and is considered to be of County ecological importance. Due to this area being lost as part of the proposals and the importance of this habitat type, consultation with Natural England through their Discretionary Advice Service (DAS) and the Local Planning Authority Ecologist is required to agree an approach to inform the proposed development.

Habitat Creation

Areas of soft landscaping are yet to be finalised but will likely include tree planting, biodiverse green roofs, amenity and wildflower grassland, herbaceous and shrub planting and ornamental planting.

Planting of Wildlife Value

Areas of soft landscaping and tree planting should include native species and/or species of recognised wildlife value¹⁹. The use of nectar-rich and berry producing plants will attract a wider range of insects, birds, and mammals. Scrub can be an ideal planting style to create air pollution, visual or noise buffers, dense security planting or site boundaries. Where possible, larger shrubs/trees should be under-planted to create greater structure and cover for wildlife. Careful selection of suitable tree species can offer a range of ecosystem services, including improving air quality, carbon sequestration, reducing urban heat island effects whilst also supporting biodiversity.

Tree Planting

Careful selection of suitable tree species^{20,21} can offer a range of ecosystem services, including improving air quality, carbon sequestration, reducing urban heat island effects whilst also supporting biodiversity. Tree proposals should seek to prolong the value to pollinators and wildlife by choosing a variety of species that flower and fruit through the year. Species to consider include bird cherry *Prunus padus*, crab apple *Malus sylvestris*, common hawthorn, rowan *Sorbus aucuparia* and common hazel. Where possible, trees should be under-planted to create greater structure and cover for wildlife. These can include perennials and bulbous species of recognised wildlife value such as, red campion *Silene dioica*, primrose *Primula vulgaris*, tufted hair grass *Deschampsia cespitosa*, wood melic *Melica uniflora* f. *albida*, dog's tooth violet *Erythronium dens-canis* and bluebell *Hyacinthoides non-scripta*.

Peripheral Habitat Retention and Enhancement

It is recommended that the woodland and scrub around the boundaries of the site are retained and, where possible, enhanced to avoid the loss of suitable habitat for a range of protected and notable species. These features provide valuable structural connectivity and foraging, sheltering, and nesting opportunities for species such as birds, bats, and invertebrates. To improve the ecological condition and functionality of these habitats, enhancements could include gapping-up with a diverse mix of

¹⁹ For example: The Royal Horticultural Society (RHS) Perfect for Pollinators Scheme <https://www.rhs.org.uk/science/conservation-biodiversity/wildlife/encourage-wildlife-to-your-garden/plants-for-pollinators> & the joint RHS/Wildlife Trust's Gardening With Wildlife In Mind Database <http://www.joyofplants.com/wildlife/home.php>

²⁰ https://www.tdag.org.uk/uploads/4/2/8/0/4280686/tdag_tihl.pdf

²¹ <http://www.righttrees4cc.org.uk/members/search.aspx>

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native woody species (e.g. hazel, blackthorn *Prunus spinosa*, field maple *Acer campestre*, and holly), particularly where gaps or thinning are present. A buffer zone should also be incorporated into the development design to protect these habitats from indirect impacts such as disturbance or shading. In the longer term, the implementation of a sensitive management regime (e.g. rotational cutting or laying on a multi-year cycle) would help maintain their ecological value and structural diversity.

Wildflower Grassland

Areas of amenity and wildflower grassland should be incorporated in the development. Wildflower grassland would enable the site to support a higher diversity of invertebrates, which in turn supports wildlife such as bats, and birds. A wildflower and grass mix of 80:20 is recommended and should not include vigorous grasses as these will compete with wildflowers for resources. An appropriate mix for these could be Emorsgate EM3 Special General Purpose Meadow Mixture²², Landlife Wildflowers LWXM Dual Purpose Wildflower Seeds²³ (or similar). The grassland should be managed with a relaxed mowing scheme to allow the growth of flowering plant species and provide cover for invertebrates.

Any areas of amenity grassland should use a flowering lawn mixture such as Low Growing Wildflower Seeds LW12M 80/20²⁴, Emorsgate EL1 Flowering Lawn Mixture²⁵ (or similar). These contain slow growing grasses with a selection of wildflowers that respond well to regular short mowing. The grassland should be managed with a relaxed mowing scheme to allow the growth of flowering plant species to provide a source of nectar for invertebrates.

Biodiverse Green Roof

Areas of biodiverse green roof are recommended to be incorporated into the design where possible. The inclusion of green roofs will provide habitat for wildlife as well as enhancing the visual appearance of the roof. The proposed green roofs should use the Bauder Flora 3 seed mix (or similar) that contains a total of 49 species including wildflowers, sedge, grasses and sedum, with 35 species listed on RHS Plants for Pollinators. The green roof should follow UK standards²⁶ and include additional habitat features such as deadwood and varying substrate depths²⁷. This will provide good habitat for a range of insects and birds.

Protected and Priority Fauna

The requirement for further surveys, as outlined in Table 7 below, has been determined in line with current best practice guidance and professional judgement, taking into account the results of the desk study, field survey observations, and the suitability of habitats present within the site to support protected and/or notable species.

In parallel, an overarching mitigation strategy¹ has been prepared for the wider Dunsbury Park development to provide a coordinated approach to habitat retention, impact avoidance, precautionary working methods, sensitive lighting design and species protection measures across the wider site. The strategy has been informed by previous and ongoing ecological survey work undertaken across Dunsbury Park and is intended to minimise impacts to protected and notable fauna, where possible, through embedded mitigation and sensitive design measures.

As such, the survey recommendations set out below should be read alongside the wider mitigation strategy and may be refined further through detailed design, consultation and any subsequent licensing requirements, where applicable.

²² <https://wildseed.co.uk/product/mixtures/complete-mixtures/general-purpose-meadow-mixtures/special-general-purpose-meadow-mixture/>

²³ <https://www.wildflower.co.uk/products/wildflower-seed-mixtures/80-20-wildflower-meadows-seed-mixtures/lwxm-dual-purpose-70-30.html>

²⁴ <https://www.wildflower.co.uk/products/wildflower-seed-mixtures/80-20-wildflower-meadows-seed-mixtures/lw12-low-growing-80-20.html>

²⁵ <https://wildseed.co.uk/product/mixtures/complete-mixtures/special-habitat-mixtures/flowering-lawn-mixture/>

²⁶ GRO (2023). The GRO Green Roof Code: Green Roof Code of Best Practice for the UK 2023. Groundwork Sheffield, Sheffield.

²⁷ <https://livingroofs.org/introduction-types-green-roof/>

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Table 7: Further survey, mitigation and enhancements

Species/Group	Further Survey Requirement and Mitigation	Enhancements
Badger	<p>Under the Protection of Badgers Act 1992, it is an offence to wilfully kill, injure or take a badger; or intentionally or recklessly damage, destroy or obstruct access to a badger sett or disturb a badger in its sett.</p> <p>No evidence of badger activity (such as setts, latrines or foraging signs) was recorded during the field survey; however, access was restricted in parts of the site due to dense vegetation. The woodland and scrub, particularly around the site boundaries, offer some potential for occasional foraging use by badger. The spoil heaps onsite were generally compact, limiting sett building opportunities onsite. The site boundaries also retain connectivity to the wider landscape to the north and east, where additional suitable habitat is present. As such, while current use by badger is considered unlikely, a precautionary approach is advised.</p> <p>Prior to the commencement of any works affecting woodland, these areas should be checked by a suitably qualified ecologist for signs of badger activity or active setts. During construction, the following precautionary measures should be adopted to avoid harm to any badgers that may move through the site:</p> <ul style="list-style-type: none"> • No open trenches or pits should be left uncovered overnight. Where unavoidable, they should include escape ramps (e.g. roughened planks). • No fires should be lit on site. • No food waste should be left accessible overnight. • Vehicle movement should be restricted to existing tracks and areas of hardstanding or habitat clearly unsuitable for badgers, unless checked in advance by an ecologist. <p>Should any evidence of badger activity be identified during works, all activity must cease, and advice sought from a suitably qualified and experienced ecologist.</p>	<p>To enhance the site for badger the following measures could be incorporated on site:</p> <ul style="list-style-type: none"> • Retain and enhance boundary vegetation, such as woodland and scrub, to provide natural shelter and foraging opportunities. • Create areas of semi-natural grassland or wildflower-rich lawns with varied sward height to encourage invertebrates and increase food availability. • Avoid the use of chemical pesticides and herbicides, particularly near boundary habitats, to maintain a healthy ground invertebrate population. <p>These enhancements would contribute to wider ecological connectivity within the urban fringe and support the long-term resilience of local badger populations.</p>
Bats (Roosting - Trees)	<p>All bats and their roosts are protected under the Conservation of Habitats and Species Regulations 2017 (as amended) and the WCA 1981 (as amended).</p> <p>The site supports a number of mature and semi-mature trees, primarily associated with woodland boundary features. No obvious potential roosting features were identified on trees around the boundaries of the site, however due to dense tree canopies in some of the trees on site, visibility was restricted on some of these trees during the Ground-Level</p>	<p>To enhance the site's biodiversity, it is recommended that post-development soft landscaping plans include plants known to benefit insects, thereby attracting foraging bats. It is recommended that input from a suitably experienced ecologist is sought at an early stage when developing the landscaping plans to ensure the most appropriate species mix is used to maximise benefits for biodiversity. The Bat Conservation Trust's 'Landscape and Urban Design for Bats and Biodiversity'²⁸ and the Royal Horticultural Society's 'Plants for Bats List'²⁹ offer valuable guidance. Species to consider include hawthorn, catchflies <i>Silene</i> species, evening primrose</p>

²⁸ Gunnell, K., Grant, G. and Williams, C. 2012. Landscape and urban design for bats and biodiversity. Bat Conservation Trust

²⁹ <https://www.rhs.org.uk/advice/pdfs/plants-for-bats.pdf>

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Table 7: Further survey, mitigation and enhancements

Species/Group	Further Survey Requirement and Mitigation	Enhancements
	<p>Tree Assessment (GLTA). As a result, some Potential Roost Features (PRFs) may have been obscured and not recorded.</p> <p>Where possible, trees should be retained and protected as part of the proposals. However, where this is not possible, a full assessment of all trees to be lost or impacted as part of the proposals will be required prior to work commencing.</p> <p>If any works on or near trees with PRF-I suitability are required, in line with the Bat Conservation Trust's <i>Good Practice Guidelines</i>¹⁶, it is recommended that a precautionary 'soft-fell' approach is adopted. This involves a suitably qualified tree surgeon lowering cut limbs to the ground under the supervision of a suitably experienced, bat-licensed ecologist (Level 2 or above), with felled limbs left overnight to allow any bats present to disperse. Tree removal should ideally be scheduled outside of the bat hibernation season (mid-November to mid-March inclusive), when bats are most vulnerable.</p> <p>For trees with PRF-M suitability that are to be impacted or removed as part of the development, close inspection or aerial assessment is recommended to provide a more detailed evaluation of the roosting potential. Where PRFs on PRF-M trees are inaccessible for inspection, further survey effort in the form of dusk emergence surveys during the active bat season will be required.</p> <p>In the unlikely event that bats are found roosting within the trees on site, all works must stop immediately and a suitably qualified and bat licenced ecologist should be consulted. If the loss or damage of the roost sites and/or disturbance of bats is unavoidable, an appropriate licence from Natural England must be obtained before works commence, but only once planning permission has been granted. Depending on the species identified, as well as the size, number, and conservation status of any roosts found, a full European Protected Species (EPS) mitigation licence may be required. Alternatively, where no more than three low conservation status roosts are present and are used by low numbers of bats of no more than three of the (qualifying) species that mitigation licences are most commonly applied for, it may be possible to register the site under the Bat Mitigation Class Licence (BMCL) scheme.</p>	<p><i>Oenothera biennis</i>, honeysuckle <i>Lonicera species</i>, and common ivy <i>Hedera helix</i> and night-scented stock <i>Matthiola longipetala</i>. These will encourage night-flying insects and provide a foraging resource benefit for bats.</p> <p>To support local bat populations, at least 5 bat boxes should be installed on site. Bat boxes made from cement or 'woodcrete' (a mixture of wood shavings and cement) should be used, such as Vivara Pro Build-in WoodStone Bat Box³⁰ and 2F Schwegler Bat Box³¹, Habibat Bat Box 001³² (or similar) as they are likely to be of interest to a wide range of species and typically have longer lifespans than wooden boxes. The boxes can be integrated into new buildings and/or installed on suitable retained semi-mature and mature trees. The boxes should be located as high as possible, at a minimum of 4m to avoid predation. Bats use dark tree lines or hedgerows for navigation and boxes should therefore be located away from external lighting. Once installed, the bat boxes should be left undisturbed.</p>
Bats (Foraging and Commuting)	<p>The woodland and scrub habitats on site provide commuting corridors and foraging resources for bats. These features are connected to the wider landscape, including off site woodland blocks, hedgerows and grassland, offering continuity for species reliant on linear features for navigation.</p>	<p>Any future lighting scheme should be designed so as not to illuminate any areas of woodland and scrub, which should be retained where possible. This is to maintain the value of the site for bats and biodiversity in general. All proposed lighting should</p>

³⁰ <https://www.nhbs.com/vivara-pro-build-in-woodstone-bat-box>

³¹ <https://www.nhbs.com/2f-schwegler-bat-box-general-purpose>

³² <https://www.nhbs.com/habibat-bat-box-staffordshire-smooth-red-brick>

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Table 7: Further survey, mitigation and enhancements

Species/Group	Further Survey Requirement and Mitigation	Enhancements
	<p>To establish the extent of use by foraging and commuting bats, bat activity surveys in the form of night-time bat walkover (NBW) surveys are recommended, in accordance with best practice guidance. These surveys will help identify the species assemblage, periods of peak activity, and any key commuting routes or foraging hotspots that may be affected by the proposed development. The findings will inform the mitigation strategy, including habitat retention and lighting design.</p> <p>As the site has been assessed as having moderate potential for foraging and commuting bats, one NBW survey should be undertaken per season (spring – April/May, summer – June/July/August, autumn – September/October), between April and October (inclusive), in suitable weather conditions.</p> <p>In addition, automated/static bat detectors should be deployed at a minimum of one location per transect route, with data collected for a minimum of five consecutive nights per month during the survey period (April to October inclusive). Additional surveys may be required if the results from NBWs or static detectors indicate notable activity that warrants further investigation.</p>	<p>follow guidance set out by the BCT and Institute of Lighting Professionals guidance note on Bat and Artificial Lighting in the UK³³.</p>
Hazel Dormouse	<p>Previous survey effort (2010-2017) confirmed dormouse presence within boundary hedgerows of the wider Dunsbury Park site, including the western and northern boundary features (previously hedgerows but now outgrown). Although no dormouse was recorded within the eastern boundary woodland strip in 2017, habitats remain suitable and provide connectivity to adjacent woodland.</p> <p>Therefore, a European Protected Species Mitigation (EPSM) licence will be required to permit habitat clearance or woodland/scrub removal associated with the development. Greengage confirmed in their PEA for adjacent Plot 600 that dormouse presence is a key ecological constraint³⁴. Given the proximity and ecological connectivity between Plots 400 and 600, a single EPSM licence application covering both plots will be required.</p> <p>The most recent surveys were undertaken in 2017; therefore, to inform the EPSM licence application, updated dormouse surveys may be required to establish the current status of the population. This should be coordinated as a joint exercise with Plot 600 to ensure a consistent evidence base and to support a single, comprehensive application.</p>	<p>Enhancement opportunities include strengthening and extending existing boundary features with native species of known value to dormouse such as hazel <i>Corylus avellana</i>, honeysuckle <i>Lonicera periclymenum</i>, bramble <i>Rubus fruticosus</i>, oak <i>Quercus robur</i> and field maple <i>Acer campestre</i>. New planting should aim to create continuous arboreal links between retained habitats and off-site woodland. The installation of dormouse nest boxes within retained and newly created habitat should also be considered to increase nesting opportunities. Long-term management (e.g. sympathetic hedgerow cutting and rotational coppicing) should be adopted to ensure the development maintains and enhances habitat quality for dormouse.</p>

³³ Institution of Lighting Professionals Bats and BCT (2023) Bats and artificial lighting in the UK – Bats and the Built Environment series (Guidance Note 08/23).

³⁴ Greengage (2025) Preliminary Ecological Appraisal: Dunsbury Park Plot 600-601. Report reference: 553134ImAug25FV01_PEA.

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Table 7: Further survey, mitigation and enhancements

Species/Group	Further Survey Requirement and Mitigation	Enhancements
	Mitigation under the licence is likely to include phased vegetation clearance under ecological supervision during the active dormouse season (April-November), retention of habitat corridors where possible, and compensatory planting of structurally diverse native hedgerows and woodland edge habitats. Works must follow a precautionary approach in line with the <i>Dormouse Conservation Handbook</i> ³⁵ to avoid killing or injuring dormouse during site clearance.	
Nesting Birds	<p>All British birds, their nests, eggs and young are legally protected under the WCA 1981 (as amended) from disturbance while actively nesting (generally acknowledged to occur between March and August inclusive, although this is not defined in law and birds can nest outside of this time).</p> <p>The woodland and scrub have potential to support small numbers of common and widespread species of nesting birds. Where the proposed works require the removal of these habitats, this must be carried out between September to February inclusive, to avoid any potential offences relating to nesting birds during the main breeding bird season.</p> <p>If works during the breeding season is unavoidable, then a nesting bird check will be completed by a suitably experienced ecologist prior to the commencement of work. If nesting birds are found to be present, a buffer zone will be established, with no works to be undertaken within the buffer zone until the chicks have fledged or the nest abandoned as confirmed by the suitably experienced ecologist.</p>	<p>The inclusion of soft landscaping areas will provide suitable areas for invertebrates, which in turn will provide foraging opportunities for birds.</p> <p>To enhance the site further for nesting birds, bird boxes suitable for declining species such as swift <i>Apus apus</i> and house sparrow <i>Passer domesticus</i> (both Species of Principal Importance (SoPI)) should be installed on a north to north-easterly aspect of the proposed buildings and/or on retained semi-mature and mature trees. These boxes should be made of woodcrete (or similar) and installed as per the manufacturer's instructions. Boxes should be located as high as possible and preferably below an overhang or ledge and offset from windows and doors on the proposed buildings.</p> <p>Recent studies have shown that swift bricks are being used by red-listed species such as house sparrow, black redstart <i>Phoenicurus ochruros</i>, starling <i>Sturnus vulgaris</i> and swift as well as other small bird species and could be described as a 'universal brick'³⁶. This not only increases the chance of them being used but also, provides a cost-effective ecological enhancement for a variety of bird species³⁷. Where possible, at least 5 swift bricks should be installed within the fabric of the buildings. Alternatively, at least 5 suitable bird boxes should be installed on retained trees such as, the Vivara Pro Seville WoodStone Nest Box with 32mm Oval Hole³⁸, 1B Schwegler Nest Box³⁹ and Vivara Pro WoodStone Starling Nest Box⁴⁰ (other similar specifications would also be acceptable).</p>
Reptiles	All species of reptile are protected from killing or injuring under the WCA 1981 (as amended).	The proposals should include the installation of log piles to provide refuges, basking areas, and foraging opportunities for reptiles. Log piles should be constructed using a variety of untreated timber and brash of different sizes, ideally placed partially in sun and partially shaded to create a range of thermal conditions. Where possible,

³⁵ Bullion, S., Wolton, R., & White, I. (2025). Hazel Dormouse Conservation Handbook (3rd ed.). The Mammal Society

³⁶ Swift Bricks: The 'Universal' Nest Brick - by Dick Newell | CIEEM

³⁷ https://www.swift-conservation.org/universal_swift_nest_brick02.pdf

³⁸ <https://www.nhbs.com/vivara-pro-seville-32mm-oval-woodstone-nest-box>

³⁹ <https://www.nhbs.com/1b-schwegler-nest-box?bkfno=174761>

⁴⁰ <https://www.nhbs.com/vivara-pro-woodstone-starling-nest-box>

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Table 7: Further survey, mitigation and enhancements

Species/Group	Further Survey Requirement and Mitigation	Enhancements
	<p>Suitable habitats for reptiles in the form of OMHPDL, scrub and woodland bases are present on site. These habitats provide opportunities for sheltering and foraging for common and widespread reptiles such as slow worm.</p> <p>Given the habitat features present, further presence/likely absence surveys are required to determine if reptiles are present on site. The surveys involve placing artificial refugia within suitable habitats for reptiles across the site, followed by a minimum of seven inspections by a suitably experienced ecologist, in suitable weather conditions (dry with temperatures between 9 and 18°C, with a light wind). Surveys can be undertaken during the active reptile season (March to October inclusive) however, the most profitable months for surveys are April, May and September.</p> <p>During construction, a precautionary approach to vegetation and habitat clearance is recommended to minimise the risk of harm to reptiles, and other fauna during construction. All clearance of potentially suitable habitat (e.g. scrub, tussocky grassland) should be undertaken during the reptile active season (March to October inclusive), and when daytime temperatures consistently exceed 10°C. Vegetation should first be reduced using hand tools to a height of no less than 10 cm, preceded by a finger-tip search by an ecologist. The area should then be left undisturbed for at least 24 hours and rechecked by an ecologist before the remaining vegetation is reduced to ground level. A destructive search of the footprint should then be completed under ecological supervision.</p>	<p>logs should be placed directly on the ground or partially buried to retain moisture and promote decay, enhancing their value as sheltering and overwintering sites. The piles should be left undisturbed and incorporated into a long-term site management plan to ensure their continued suitability for wildlife use.</p>
Western European Hedgehog	<p>The OMHPDL, woodland and scrub bases habitats on the site have potential to support hedgehog. Hedgehog may be disturbed, injured or killed during the construction works of the proposed development. Therefore, any ground level vegetation clearance within suitable habitats on site should be undertaken outside of the hibernation period (November – March inclusive) and during the hedgehog active season. This will ensure any animals present are not hibernating and therefore reduce the risk of death or injury if disturbed. All construction materials should be kept off the ground on pallets or stored away to prevent them from becoming suitable for use by sheltering or hibernating hedgehog. If any are found, they will be moved to suitable nearby habitat.</p>	<p>Hedgehog highways could be incorporated into any existing or newly created boundary fences to allow hedgehog movement around the site. Fences should have 130 x 130mm hedgehog apertures at the base. These will allow for increased movement and foraging opportunities for hedgehog within the site. Guidance on how to create hedgehog highways can be found on the Hedgehog Street website⁴¹.</p>
Common Amphibians	<p>The OMHPDL, woodland and scrub bases habitats on the site have potential to support common toad. Common toad may be disturbed, injured or killed during the construction works of the proposed development. Therefore, any ground level vegetation clearance within suitable habitats on site should be undertaken outside of the hibernation period (November – March inclusive) in suitable weather conditions and</p>	<p>Enhancement measures for common amphibians should focus on providing additional shelter, foraging opportunities and refuges within the site. The creation of log and brash piles, similar to those proposed for reptiles, would provide damp, shaded microhabitats suitable for common toad and other amphibians for sheltering and overwintering. These should be constructed using untreated timber, brash and</p>

⁴¹ <https://www.hedgehogstreet.org/help-hedgehogs/link-your-garden/>

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Table 7: Further survey, mitigation and enhancements

Species/Group	Further Survey Requirement and Mitigation	Enhancements
	<p>during the common toad active season. This will ensure any animals present are not hibernating and therefore reduce the risk of death or injury if disturbed. All construction materials should be kept off the ground on pallets or stored away to prevent them from becoming suitable for use by sheltering or hibernating common toad. If any are found, they will be moved to suitable nearby habitat.</p>	<p>leaf litter, placed in partially shaded locations to retain moisture, and left undisturbed. Where appropriate, piles can be partially buried to increase humidity and promote invertebrate prey availability.</p> <p>In addition, the incorporation of shallow depressions or wetland features within green infrastructure (such as swales or seasonally wet areas) would provide additional foraging habitat and potential breeding opportunities. Planting of native ground flora around these features will further improve suitability by enhancing structural diversity and invertebrate prey resources.</p>
Terrestrial Invertebrates	<p>The OMHPDL habitat on site provides opportunities for a diverse range of invertebrates, including notable species such as stag beetle <i>Lucanus cervus</i>, small heath <i>Coenonympha pamphilus</i> and purple emperor <i>Apatura iris</i>, all of which have been recorded within 2 km of the site. These habitats offer a variety of food sources, shelter, and breeding opportunities.</p> <p>While current plans for the site remain under development, it is anticipated that most of the OMHPDL will likely be lost or disturbed during construction. As these features are valuable to invertebrates, their retention and protection should be prioritised where possible. Where impacts are unavoidable, the following measures are recommended:</p> <ul style="list-style-type: none"> • Relocation of deadwood and other organic debris to retained areas of suitable habitat margins on site; • Incorporation of deadwood features (e.g. log piles, standing deadwood where safe) within the landscaping scheme to maintain invertebrate diversity; • Wildlife-friendly planting, with a focus on nectar- and pollen-rich native species, to support pollinators and other invertebrates; • Avoidance of heavy ground compaction and excessive lighting near woodland edges and open scrub to protect invertebrate microhabitats. 	<p>It is recommended that invertebrate boxes are incorporated into the landscape scheme in secluded areas close to nectar-rich planting, providing nesting and shelter opportunities for a wide range of species (e.g. solitary bees, lacewings, ladybirds). Examples include Schwegler Insect Nesting Aid, Reed⁴² and Bug Hotel⁴³ (or similar). Planting to enhance structural diversity and extend the flowering season should be incorporated to maximise value. These measures will support invertebrate assemblages on site post-development, contribute to biodiversity net gain, and in turn provide additional food resources for birds and bats.</p> <p>Where feasible, the incorporation of a biodiverse green roof would provide additional habitat for invertebrates and other taxa. While such roofs cannot replicate the full ecological value of Open Mosaic Habitat on Previously Developed Land (OMHPDL), they can provide structurally diverse, flower-rich habitat that supports many of the same invertebrate guilds. Research by UCL⁴⁴ has highlighted the potential of biodiverse roofs designed using <i>ecomimicry</i> principles to mimic key characteristics of brownfield sites, such as varied substrates, topographical variation, and diverse microhabitats. This approach has been shown to support assemblages of invertebrates associated with OMHPDL, including some species of conservation concern.</p> <p>Design considerations should include:</p> <ul style="list-style-type: none"> • Use of a varied substrate depth and composition (e.g. recycled aggregates, sand, and gravels) to create microtopography; • Incorporation of local/native wildflower seed mixes to extend the nectar season;

⁴² <https://www.nhbs.com/schwegler-insect-nesting-aid-reed>

⁴³ <https://www.nhbs.com/bug-mansion>

⁴⁴ <https://cieem.net/wp-content/uploads/2019/03/5-Caroline-Nash.pdf>

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Table 7: Further survey, mitigation and enhancements

Species/Group	Further Survey Requirement and Mitigation	Enhancements
		<ul style="list-style-type: none"> Placement of habitat features such as dead wood, rubble piles, or bare ground patches to provide additional niches. <p>Guidance from the GRO and Buglife⁴⁵ further supports the role of biodiverse green roofs in urban landscapes as stepping stones for invertebrates, enhancing ecological connectivity and compensating for the loss of early successional habitats. Together, these measures would help to offset the loss of OMHPDL by providing a complementary suite of habitats that sustain invertebrate diversity and associated ecosystem functions within the development footprint.</p>
Other Protected/Notable Species	<p>General advice concerning mammals (including hedgehogs) during construction should be followed as below:</p> <ol style="list-style-type: none"> Any man-made excavations, trenches, pits or pipework relating to the development are either securely fenced off or covered up overnight to avoid entrapment mammals or, if left open, an egress point (e.g. mammal ladders or a roughened plank) will be placed within the excavation to form a ramp to allow any mammals to escape. Any excavations should be inspected each morning to ensure no mammals have become trapped overnight. If a mammal is found within any excavations, an ecologist should be contacted immediately for appropriate advice. 	None.

⁴⁵ Buglife – The Invertebrate Conservation Trust. (2012). *Creating green roofs for invertebrates: A best practice guide*. Available [here](#).

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Conclusion

The site comprises a range of habitats including Open Mosaic Habitat on Previously Developed Land (OMHPDL) which consists of disturbed land with spoil heaps and varying cover levels of vegetation, artificial unvegetated; unsealed surface, ruderals, temporary pool and bare ground. The OMHPDL and lowland mixed deciduous woodland are both Habitats of Principal Importance (HoPI) and are considered to be of county-level importance. Additionally, the willow scrub habitat is considered to be of up to **local ecological importance**, while the remaining habitats are considered to be of **negligible ecological importance**.

The site falls within a Site of Special Scientific (SSSI) Interest Risk Zone (IRZ) and therefore, further consultation and clarification will be required to determine whether the site falls within the at-risk categories for discharge of water. If the site does fall within the at-risk category, the local planning authority would need to consult with Natural England on the proposals.

The proposals for the site are for industrial units and do not include an increase in overnight accommodation and are not anticipated to result in a high volume of water use. The current site habitats are not directly connected to or have similar habitats to the statutory designated sites within the zone of influence. Therefore, a likely significant effect on the Solent's European Sites is not anticipated as a result of the proposed development.

An overarching mitigation strategy¹ has been prepared for the wider Dunsbury Park development to provide a coordinated approach to ecological mitigation, habitat retention, precautionary working methods and enhancement across the wider site. The strategy has been informed by previous and ongoing ecological survey work undertaken across Dunsbury Park and includes measures relating to habitat retention and buffering, maintenance of dark corridors for bats, sensitive lighting design and species-specific mitigation measures.

The following ecological constraints and recommendations should therefore be read alongside the wider mitigation strategy, with any necessary targeted surveys, pre-commencement checks and/or licensing requirements to be undertaken where applicable to support the implementation of the works and ensure compliance with relevant wildlife legislation:

- **Nesting Birds:** The woodland and scrub provide suitable habitat for nesting birds. Vegetation clearance should avoid the bird nesting season (March to August inclusive), or else be preceded by a check from a suitably qualified ecologist.
- **Bats:** Re-inspection of trees along the site boundary is recommended during more suitable conditions. Where necessary, a 'soft-fell' precautionary approach will be undertaken for PRF-I suitability trees and aerial inspections and/or emergence surveys during the active bat season (May to September, inclusive) will be undertaken of PRF-M suitability trees. The woodland and scrub habitats provide connectivity and foraging habitat for bats. Therefore, activity surveys are recommended to determine levels of bat activity and inform mitigation.

- **Badger:** No signs of badger were identified during the survey, but the dense vegetation and suitable habitats on site mean occasional foraging cannot be ruled out. A pre-commencement check for badger is recommended. Construction best practices, such as covering trenches overnight and avoiding open pits, should be followed.
- **Common Amphibians:** The OMHPDL, woodland and scrub habitats on site provide potential for common amphibians such as common toad *Bufo bufo*. Vegetation clearance within suitable habitats should be undertaken outside of the hibernation period (November-March inclusive) and during the active season in suitable weather conditions. Construction materials should be stored off the ground to prevent their use as refuges. If any individuals are encountered during works, they should be carefully relocated to nearby suitable habitat.
- **Reptiles:** OMHPDL, scrub and woodland bases present on site provide suitable habitat for common and widespread reptile species. Therefore, presence/likely absence surveys may be required if these habitats will be impacted by the works. Habitat clearance in these areas should follow a two-stage cut with ecological supervision, conducted during the active season (March-October inclusive) in suitable weather conditions.
- **Hedgehog:** The OMHPDL, woodland and scrub bases present on site provide suitable shelter and foraging habitat for hedgehog. Vegetation clearance should avoid the hibernation season (November-March) and be conducted using a sensitive approach during active periods.
- **Terrestrial Invertebrates:** The site contains suitable habitat for terrestrial invertebrates in the form of OMHPDL. As these features are valuable to invertebrates, their retention and protection should be prioritised where possible.

There are opportunities to deliver ecological enhancements on the site. These include:

- All planting incorporated into the scheme should be native species or species with a known wildlife benefit;
- Incorporation of bird boxes on retained trees or proposed buildings. This will provide opportunities for nesting birds;
- Incorporation of bat boxes on retained trees or proposed buildings. This will provide opportunities for roosting bats;
- Incorporation of insect boxes and log piles within the proposed soft landscaping areas. This will provide opportunities for invertebrates;
- Provision of hedgehog highways through boundaries; and
- External lighting should be carefully designed in line with the BCT and Institute of Lighting Guidelines. This is to prevent harsh lighting making habitats unfavourable for protected/notable species.

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Validation

Report produced by Sara Curtis:

Ecologist's Qualifications:	MSc – Environmental Consultancy BSc – Environmental Science (Biodiversity and Conservation)
Evidence of practicing Ecologist	Eight Versa – Principal Ecologist and Sustainability Consultant specialising in Ecology (2022 to present date), Senior Ecologist (2018 – 2021), Ecologist (2013 – 2018)
Professional Membership	Full member of the Chartered Institute of Ecological and Environmental Management (CIEEM)

Report Validated by Kalia Symeonidou:

Ecologist's Qualifications:	MSc – Ecology and Evolutionary Biology BSc – Biological Sciences
Evidence of practicing Ecologist	Eight Versa – Senior Ecology and Biodiversity Net Gain Consultant (April 2024 - present), Senior Ecologist (Temple, 2022 – 2024), Ecologist (Temple, 2020 – 2022), Assistant Ecologist (Temple, 2019 – 2020 & Thomson Environmental Consultants, 2018 – 2019)
Professional Membership	Associate of the Chartered Institute of Ecological and Environmental Management (CIEEM)

Validation

I confirm the information provided in this document is truthful and accurate at the time of completion.

Suitably Qualified Ecologist	Sara Curtis
Signature of Ecologist	SNC
Date	27/08/2025

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Appendix A – Habitat Features



Preliminary Ecological Appraisal

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Appendix B – Indicative Post-development Site Layout Plan⁴⁶



⁴⁶ UMC Architects (2025) Plot 400, Dunsbury Park. Document reference: DP - UMC - 0400 - SI - DR - A - 0601. Date created: 29/10/2025

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Appendix C – Relevant Legislation

Bats

All species of bat are fully protected under the Conservation of Habitats and Species Regulations 2017 (as amended). It is illegal to injure, kill, capture or disturb a bat. It is also illegal to damage, destroy or obstruct trees, buildings or other places used for roosting, even if bats are not present.

Most development and maintenance work affecting bats and / or roosts e.g. bridge / tree maintenance works, demolition, barn conversions etc., therefore require a Habitats Regulations License for work to take place legally.

All bat species are also protected under the Wildlife and Countryside Act 1981 (as amended). This means they are additionally protected from intentional or reckless disturbance, intentional or reckless obstruction of access to any place of shelter or protection; and/or, selling, offering or exposing for sale, possession or transporting for purpose of sale.

Wild Birds

The Wildlife and Countryside Act 1981 (as amended) is domestic legislation for Great Britain. The Act includes the UK's domestic implementation of the species protection of the European Directive on the Conservation of Wild Birds (79/409).

- Under the Wildlife and Countryside Act 1981 all birds, their nests and eggs are protected by law, and it is thus an offence, with certain exceptions to intentionally:
- Kill, injure or take any wild bird.
- Take, damage or destroy the nest of any wild bird while it is in use or being built.
- Take or destroy the egg of any wild bird.
- Have in one's possession or control any wild bird (dead or alive) or any part of a wild bird that has been taken in contravention of the Act or the Protection of Birds Act 1954.
- Have in one's possession or control any egg or part of an egg that has been taken in contravention to the Act. This includes items taken or killed before the passing of the Act.
- Have in one's possession or control any live bird of prey of any species in the world (with the exception of vultures and condors) unless it is registered and ringed in accordance with the Secretary of State's regulations.
- Have in one's possession or control any bird of a species occurring on Schedule 4 of the Act unless registered (and in some cases ringed) in accordance with the Secretary of State's regulations.
- Disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

Hazel Dormouse

Hazel dormouse is fully protected under the Conservation of Habitats and Species Regulations 2017 (as amended). It is illegal to injure, kill, capture or disturb a dormouse. It is also illegal to damage, destroy or obstruct access to their resting, breeding or sheltering places.

Most development and maintenance work affecting great crested newt and / or their habitat therefore require a Habitats Regulations License for work to take place legally.

Hazel dormouse is also protected under the Wildlife and Countryside Act 1981 (as amended). This means they are additionally protected from intentional or reckless disturbance, intentional or reckless obstruction of access to any place of shelter or protection; and/or, selling, offering or exposing for sale, possession or transporting for purpose of sale.

Reptiles

Slow worm, common lizard, adder and grass snake are protected under the Wildlife and Countryside Act 1981). It is an offence to:

- Intentionally kill or injure a reptile (Section 9(1));
- Intentionally trade or transport reptiles for sale (Section 9(5)).

Although the habitats of reptile species are not protected, disturbing or destroying reptile habitat during the course of development activities while reptiles are present is likely to lead to an offence.

Sand lizards *Lacerta agilis* and smooth snakes *Coronella austriaca* are European protected species and are afforded full protection under Section 9 of the Wildlife and Countryside Act 1981 and Regulation 39 of the Habitats Regulations 1994. However, these species are rare and highly localised and will not occur at this site.

All reptiles are additionally classed as Species of Principal Importance for under S41 of the Natural Environment and Rural Communities (NERC) Act 2006.

Western European Hedgehog

The Western European Hedgehog is listed on schedule 6 of the Wildlife and Countryside Act (1981) which makes it illegal to kill or capture wild hedgehogs, with certain methods listed. They are also listed under the Wild Mammals Protection Act (1996), prohibiting cruel treatment of hedgehogs.

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Plot 400 – Dunsbury Park, Havant

Appendix D – National Biodiversity Policy

National Planning Policy Framework, 2025

Section 15 - Conserving and enhancing the natural environment

187. Planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs;
- e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

188. Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework⁴⁷; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

⁴⁷ Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality

⁴⁸ English National Parks and the Broads: UK Government Vision and Circular 2010 provides further guidance and information about their statutory purposes, management and other matters

⁴⁹ For the purposes of paragraphs 190 and 191, whether a proposal is 'major development' is a matter for the decision maker, taking into account its nature, scale and setting, and whether it could have a significant adverse impact on the purposes for which the area has been designated or defined

189. Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and National Landscapes which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas and should be given great weight in National Parks and the Broads⁴⁸. The scale and extent of development within all these designated areas should be limited, while development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas.

190. When considering applications for development within National Parks, the Broads and National Landscapes, permission should be refused for major development⁴⁹ other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of:

- a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;
- b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and
- c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

191. Within areas defined as Heritage Coast (and that do not already fall within one of the designated areas mentioned in paragraph 189), planning policies and decisions should be consistent with the special character of the area and the importance of its conservation. Major development within a Heritage Coast is unlikely to be appropriate, unless it is compatible with its special character.

Habitats and Biodiversity

192. To protect and enhance biodiversity and geodiversity, plans should:

- a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity⁵⁰; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation⁵¹; and
- b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

⁵⁰ Circular 06/2005 provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system

⁵¹ Where areas that are part of the Nature Recovery Network are identified in plans, it may be appropriate to specify the types of development that may be suitable within them

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

1. 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;
2. 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;
3. 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 reasons⁵² and a suitable compensation strategy exists; and
4. development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

194. The following should be given the same protection as habitats sites:

- a) potential Special Protection Areas and possible Special Areas of Conservation;
- b) listed or proposed Ramsar sites⁵³; and
- c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

195. The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

Environment Act 2021

This is an Act which was set out to make provision about targets, plans and policies for improving the natural environment; for statements and reports about environmental protection; for the Office for Environmental Protection; about waste and resource efficiency; about air quality; for the recall of products that fail to meet environmental standards; about water; about nature and biodiversity; for conservation covenants; about the regulation of chemicals; and for connected purposes.

Relevant to ecology, The Environment Act has introduced a requirement for Biodiversity Net Gain (BNG) as a condition of planning permission in England (Schedule 14). It is expected that the biodiversity value attributable to a given development will need to exceed the pre-development biodiversity value of the onsite habitat by at least 10%. The BNG condition is subject to a number of exemptions as set out within the Act.

Countryside and Rights of Way Act 2000

An Act to make new provision for public access to the countryside; to amend the law relating to public rights of way; to enable traffic regulation orders to be made for the purpose of conserving an area's natural beauty; to make provision with respect to the driving of mechanically propelled vehicles elsewhere than on roads; to amend the law relating to nature conservation and the protection of wildlife; to make further provision with respect to areas of outstanding natural beauty; and for connected purposes.

⁵² For example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat

⁵³ Potential Special Protection Areas, possible Special Areas of Conservation and proposed Ramsar sites are sites on which Government has initiated public consultation on the scientific case for designation as a Special Protection Area, candidate Special Area of Conservation or Ramsar site

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Appendix E – Local Planning Policy

Havant Borough Council, Havant Borough Core Strategy March 2011 (Adopted 1 March 2011)

Relevant policies relating to nature conservation from Havant Borough Council are included below.

Policy CS13 Green Infrastructure

Development will be permitted that:

1. Maintains and manages the network of green infrastructure identified at the sub regional and local levels.
2. Incorporates, where appropriate, improvements to existing green infrastructure through the restoration, enhancement or creation of additional resources.
3. Does not undermine the functional integrity of the green infrastructure.
4. Creates, where appropriate, new green infrastructure (including access management measures) either through on site provision or financial contributions.

Development proposals that adversely affect green infrastructure will not be permitted unless superior alternative provision can be provided or where it is part of a service provider's plans to provide improved local services in equally accessible locations.

Green infrastructure sites will be allocated in the Development Delivery (Allocations) Plan.

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Appendix F – Plant Species List

Plant Species List for Plot 400, Dunsbury Park compiled from UK Habitat Classification Survey carried out on 21st July 2025.

Species	Scientific Name
Bracken	<i>Pteridium aquilinum</i>
Gorse	<i>Ulex europaeus</i>
Narrow leaved bird foot trefoil	<i>Lotus tenuis</i>
Geranium sp.	<i>Geranium sp.</i>
Creeping thistle	<i>Cirsium arvense</i>
Field horsetail	<i>Equisetum arvense</i>
Fleabane	<i>Pulicaria dysenterica</i>
Bristly oxetongue	<i>Helminthotheca echioides</i>
Prickly sowthistle	<i>Sonchus asper</i>
Bramble	<i>Rubus fruticosus agg.</i>
Perennial rye grass	<i>Lolium perenne</i>
Willowherb	<i>Epilobium spp.</i>
Black medick	<i>Medicago lupulina</i>
White clover	<i>Trifolium repens</i>
Yorkshire fog	<i>Holcus lanatus</i>
Purple vetch	<i>Vicia cracca</i>
Creeping bent	<i>Agrostis stolonifera</i>
Ragwort	<i>Jacobaea vulgaris</i>
Yarrow	<i>Achillea millefolium</i>
Ribwort plantain	<i>Plantago lanceolata</i>
Red clover	<i>Trifolium pratense</i>
Rapeseed	<i>Brassica napus</i>
Cinquefoil	<i>Potentilla sp.</i>
Hard rush	<i>Juncus inflexus</i>
Common nettle	<i>Urtica dioica</i>
Ivy	<i>Hedera helix</i>
Bullrush	<i>Typha latifolia</i>
Common reed	<i>Phragmites australis</i>
False oat grass	<i>Arrhenatherum elatius</i>
Field speedwell	<i>Veronica persica</i>
Coltsfoot	<i>Tussilago farfara</i>
Great hairy willowherb	<i>Epilobium hirsutum</i>
Teasel	<i>Dipsacus fullonum</i>
Scarlet pimpernel	<i>Anagallis arvensis</i>

Species	Scientific Name
Groundsel	<i>Senecio vulgaris</i>
Butterbur	<i>Petasites hybridus</i>
Euphorbia	<i>Euphorbia sp.</i>
Annual meadow grass	<i>Poa annua</i>
Pendunculate sedge	<i>Carex pendula</i>
Oxeye daisy	<i>Leucanthemum vulgare</i>
Coltsfoot	<i>Tussilago farfara</i>
Broad-leaved dock	<i>Rumex obtusifolius</i>
Shrubs/Trees	
Oak	<i>Quercus robur</i>
Ash	<i>Fraxinus excelsior</i>
Hawthorn	<i>Crataegus monogyna</i>
Grey willow	<i>Salix cinerea</i>
Silver birch	<i>Betula pendula</i>
Hazel	<i>Corylus avellana</i>
Dog rose	<i>Rosa canina</i>
Blackthorn	<i>Prunus spinosa</i>