



Preliminary Ecological Appraisal

Land Known as Interbridges,
Emsworth

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Report	Preliminary Ecological Appraisal
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Executive Summary

Ecosupport Ltd was instructed by PNH Properties Ltd to undertake a Preliminary Ecological Appraisal (PEA) of the 'Land Known as Interbridges, Emsworth'. This was required in order to identify any potentially important ecological features that may be affected by the proposed development. As part of this assessment, the following surveys were undertaken:

- Data request submitted to Hampshire Biodiversity Information Centre (HBIC) (March 2024)
- Walkover survey with UK Habs habitat assessment (March, 2024)
- Preliminary Roost Assessment (March, 2024)

The following important ecological features were identified on site following the conclusion of the above survey work and may be subject to adverse impacts in the absence of suitable mitigation / compensation:

- Moderate potential for foraging/ commuting bats,
- Moderate potential for foraging/ commuting Badgers,
- Low potential for breeding/ nesting birds.

In the absence of any mitigation measures, the proposed development is anticipated to result in **adverse impacts** although measures are outlined within section 6.0 of this document to provide mitigation where impacts have been identified as well as provide targeted ecological enhancements.

1.0 INTRODUCTION

1.1 Brief

Ecosupport Ltd was instructed by PNH Properties Ltd to undertake a Preliminary Ecological Appraisal (PEA) of the 'Land Known as Interbridges, Emsworth', PO10 7PH (here after referred to as 'the site'). The site has previously been granted full planning permission (ref: APP/10/00912 and variant of condition APP/16/00295) for the development of a Veterinary practice, 4No. business units, parking and open storage yards, with ecological mitigation work undertaken in line with the conditions of the granted permission. The purpose of this survey was to assess any ecological impacts that may arise as a result of the newly proposed planning application and development. The objectives of the survey were as follows:

- Identify and classify any priority habitats;
- Assess the ecological value of the site;
- Identify any signs of protected species and potential features that may support them;
- Make recommendations for further survey work as necessary;
- Make recommendations for any necessary ecological avoidance and mitigation where possible at PEA stage.

NB: If the works do not take place within 18 months of this report¹ then the findings of this survey will no longer be considered valid and may require updating.

1.2 Summary of Previous Surveys

In support of the previous planning application, an Ecological Assessment was undertaken by Aluco Ecology Ltd in 2014. As part of the assessment reptile surveys were undertaken in 2008 and updated in 2014 with records of slow worm (*Anguis fragilis*), common lizard (*Zootoca vivipara*) and grass snake (*Natrix Natrix*) identified.

1.3 Site Description & Location

The site is located adjacent to the A27 known as land associated with Interbridges, Emsworth PO10 7PH centered on OS grid reference SU749063 (**Fig 1**). The site covers approximately 0.65ha and comprises predominantly of grassland, woodland and scrub. The site is bound by the A27 to the north, the railway to the south and further scrub/trees to the east and west of the site.

¹ <https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf>

Figure 1. Aerial image of the site with approximate redline boundary provided (Google Earth, 2024)

1.4 Proposed Development

The proposed development will involve the creation of an employment development, with associated access, parking, yards, landscaping and substation (**Fig 2**).

Figure 2. Proposed site layout, drawing NoPNH-9173-HYP-00-DR-A-000010 (Hyphen, 2024)

2.0 RELEVANT LEGISLATION AND POLICY

2.1 Legislation

2.1.1 *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*

The Conservation of Habitats and Species Regulations 2017 transposes the EU Habitats Directive (Council Directive 92/43/EEC) into UK domestic law. It provides protection for sites and species deemed to be of conservation importance across Europe. It is an offence to deliberately capture, kill or injure species listed in Schedule 2 or to damage or destroy their breeding sites or shelter. It is also illegal to deliberately disturb these species in such a way that is likely to significantly impact on the local distribution or abundance or affect their ability to survive, breed and rear or nurture their young.

The Conservation of Habitats and Species Regulations 2019 (EU Exit) makes changes to the three existing instruments which transpose the Habitats and Wild Birds Directives so that they continue to work (are operable) upon the UK's exit from the European Union (EU). These include The Conservation of Habitats and Species Regulations 2017 and The Conservation of Offshore Marine Habitats and Species Regulations 2017. This instrument also amends section 27 of the Wildlife and Countryside Act 1981 to ensure existing protections continue. The intention is to ensure habitat and species protection and standards as set out under the Nature Directives are implemented in the same way or an equivalent way when the UK exits the EU.

In order for activities that would be likely to result in a breach of species protection under the regulations to legally take place, a European Protected Species (EPS) licence must first be obtained from Natural England.

2.1.2 *The Wildlife and Countryside Act (1981) (as amended)*

This is the primary piece of legislation by which biodiversity is protected within the UK. Protected fauna and flora are listed under Schedules 1, 5 and 8 of the Act. They include all species of bats, making it an offence to intentionally or recklessly disturb any bat whilst it is occupying a roost or to intentionally or recklessly obstruct access to a bat roost. Similarly, this Act makes it an offence to kill or injure any species of British reptiles and also makes it an offence to intentionally kill, injure or take any wild bird or to take, damage or destroy their eggs and nests (whilst in use or being built).

The Wildlife & Countryside Act (1981) states that it is an offence to 'plant or otherwise cause to grow in the wild' any plant listed in Schedule 9 part II of the Act. This list over 30 plants including Japanese Knotweed (*Fallopia japonica*), Giant Hogweed (*Heracleum mantegazzianum*) and Parrot's Feather (*Myriophyllum aquaticum*).

2.1.3 *The Countryside and Rights of Way Act (2000)*

This Act strengthens the Wildlife & Countryside Act by the addition of "reckless" offences in certain circumstances, such as where there is the likelihood of protected species being present. The Act places a duty on Government Ministers and Departments to conserve biological diversity and provides police with stronger powers relating to wildlife crimes.

2.1.4 Natural Environment and Rural Communities Act (2006)

The Natural Environment and Rural Communities (NERC) Act 2006 requires that public bodies have due regard to the conservation of biodiversity. This means that Planning authorities must consider biodiversity when planning or undertaking activities. Section 41 of the Act lists species found in England which were identified as requiring action under the UK Biodiversity Action Plan and which continue to be regarded as conservation priorities under the *UK Post – 2010 Biodiversity Framework*.

2.1.5 Protection of Badgers Act

The Protection of Badgers Act (1992) relates to the welfare of Badgers (*Meles meles*) as opposed to nature conservation considerations. The Act prevents:

- The wilful killing, injury, ill treatment or taking of Badgers and / or
- Interference with a Badger sett
- Damaging or destroying all or part of a sett
- Causing a dog to enter a set and
- Disturbing a Badger while it is occupying a sett

Provisions are included within the Act to allow for the lawful licensing of certain activities that would otherwise constitute an offence under the Act.

2.1.6 The Environment Act (2021)

The Environment Act 2021 is the UK's new legislation for environmental protection in the UK, which includes protection of water quality, clean air, and biodiversity among other key protections. This Act provides the government power to set targets to reach long-term aims relating to the environment, which will be periodically reviewed and updated. This legislation also establishes a new environmental watchdog organisation, the Office for Environmental Protection (OEP), which will hold the government accountable on environmental issues.

Part 6 of The Environment Act relates to nature and biodiversity. This section makes provision for biodiversity net gain to be a condition of planning permission in England and a requirement for nationally significant infrastructure projects. Biodiversity net gain will require maintenance for a period of at least 30 years after the completion of enhancement works to be achieved.

The legislation also includes updates to existing environmental legislation, such as the NERC Act 2006, to strengthen biodiversity enhancement rather than just conservation and includes a requirement for local, or relevant, authorities to publish biodiversity reports. Further, The Environment Act places a requirement on responsible authorities to prepare local nature recovery strategies, which will outline nature conservation sites and priorities and opportunities for recovering or enhancing biodiversity within the local area. Within England, the legislation also provides Natural England with the power to publish 'species conservation strategies' and 'protected site strategies' to identify activities that may affect a species or site's status and outline their opinions on measures that would be appropriate to avoid, mitigate or compensate any adverse impacts.

2.2 Policy

2.2.1 National

The National Planning Policy Framework (NPPF) (2023) sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally-prepared plans for housing and other development can be produced.

Chapter 15 'Conserving and enhancing the natural environment' states that planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing sites of biodiversity, the wider benefits from natural capital and ecosystem services, minimising impacts on and providing net gains for biodiversity.

The NPPF states that plans should distinguish between the hierarchy of international, national and locally designated sites and that 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.

To protect and enhance biodiversity plans should:

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 biodiversity, wildlife corridors and stepping stones that connect them and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation;

and 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.

The NPPF states determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- b) development on land within or outside a SSSI, 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 SSSI;
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists;
- d) 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.

2.2.2 Local – Havant Borough Core Strategy 2011

Part of the 'Building a Better Future Plan' of the emerging Local Plan is to protect and enhance biodiversity. Similarly, policy 'CS11: Protecting and Enhancing the Special Environment and Heritage of Havant Borough' states that planning permission will only be granted when development protects and where possible enhances the borough's statutory and non-statutory designated habitats and features of biological interest. and features of biological interest and prevents the fragmentation of existing habitats.

The strategy states that protection and enhancement will be achieved by appropriate adaptation and mitigation measures. It also has particular regard for nature conservation designations with international designations given the highest regard and supports an ongoing programme of surveys of habitats and species and designations of SINC.

The above Local Plan will remain in place until the Havant Borough Local Plan is adopted (the new local plan was withdrawn in 2021), with the following relevant policies detailed below:

Policy CS11 : Protecting and Enhancing the Special Environment and Heritage of Havant Borough

'Planning permission will be granted for development that:

- 1. Ensures the key landscape and built form principles set out in the Havant Borough Townscape, Landscape and Seascape Character Assessment are protected and where possible enhanced by partnership working with developers, groups and the wider community.*
- 2. Protects and where possible enhances the borough's statutory and non-statutory designated landscape, habitats and features of biological, hydrological or geological interest. Protection and enhancement will be achieved by appropriate adaptation and mitigation measures including wardening, education and information and the creation of new habitats, water bodies/courses planting of new trees and woodland.*
- 3. Has particular regard to the following hierarchy of nature conservation designations within the borough (as identified on the Proposals Map): (i) Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar [International]. (ii) Sites of Special Scientific Interest (SSSI) and National Nature Reserves [National]. (iii) Sites of Importance for Nature Conservation (SINC), Local Nature Reserves (LNR), other Ancient Woodland not identified in (ii) above [Local].*
- 4. Protects and where appropriate enhances the borough's statutory and non-statutory heritage designations by appropriately managing development in or adjacent to conservation areas, listed buildings, scheduled ancient monuments, historic parks and gardens, archaeological sites, buildings of local historic or architectural interest. 5. Supports an ongoing*

programme of survey of habitats and species and designation of Sites of Importance for Nature Conservation.

6. Incorporates partnership working with conservation organisations to improve public understanding of biodiversity and to manage public access to designated sites, particularly on the coast, to reduce harm to nature conservation interests.

7. Incorporates partnership working with landowners and developers to ensure land management practices restore, enhance and where appropriate create new valued landscapes, habitats and their soil structure, particularly the ancient woodland remnants of the Forest of Bere and coastal salt marsh.

8. Protects wildlife habitats and wildlife corridors to prevent the fragmentation of existing habitats and to allow species, for example Brent Geese, to respond to the impacts of climate change by making provision for habitat adaptation e.g. coastal managed realignment and species migration.

9. Maintains undeveloped gaps between the settlements of Emsworth/Havant; Havant/Waterlooville; Havant/Portsmouth; Emsworth/Westbourne and Leigh Park/Rowlands Castle as shown on the Proposals Map.

10. Protects the best and most versatile agricultural land that has the greatest potential for local food security.

11. Responds to the emerging evidence from the Solent Disturbance and Mitigation Project, the published recommendations, and future related research.'

2.3 Biodiversity Action Plans & UK Post-2010 Biodiversity Framework

The UK Post-2010 Biodiversity Framework (JNCC & DEFRA, 2010) supersedes the UK Biodiversity Action Plan 1992-2012 (UKBAP), setting out goals relating to nature conservation at a UK scale, for example the reduction and reversal in the decline of threatened species and improving the status of biodiversity. The specific habitats and species contained within the UKBAP continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework and are required to be a material consideration in the planning process under the 2021 NPPF.

3.0 METHODOLOGY

3.1 Data Request

A data request was submitted to the Hampshire Biodiversity Information Centre (HBIC) to ascertain any records held of nature conservation designations and protected species within 1 km of the boundary of the site.

The data search covered:

- Statutory designated sites
- Non-statutory designations such as SINCs
- Records of protected and notable species.

3.1.1 Waterbodies

A search was made for any ponds located within 500m of the proposed development were searched for using Ordnance Survey maps and available aerial images.

3.2 Field Survey

3.2.1 Personnel

The field survey work which forms the basis of the findings of this report was carried out by Gareth Ainscough MSc ACIEEM, Project Ecologist with Ecosupport (5 years post MSc graduation experience) on the 27th March 2024 (Accredited agent under class 2 bat license 2015-13366-CLS-CLS).

3.2.2 Habitats

Habitats on site pre-development were identified in accordance with the categories specified for a UK Habitats survey, using Habitat Definitions Version 2.0 (UKHab Ltd., 2023). This was chosen as an appropriate habitat categorisation system as it fits within the Statutory Biodiversity Metric calculation.

UKHab represents a method for classifying habitats which has been produced to provide an up-to-date replacement for the current industry standard phase 1 survey method. One of the main benefits of UKHab is that it supports the evaluation of habitats for EclA and no net loss/net gain analysis, providing a more detailed interpretation of habitat types, which is important for assessing the distinctiveness and condition of habitats against which biodiversity net gain is measured.

The standard survey methodology has been 'extended' in this report to include the following:

- Floral species lists for each identified habitat;
- Descriptions of habitat structure, the evidence of management and a broad assessment of habitat condition;
- Mapping of additional habitat types (e.g. hardstanding);
- Identification of Priority Habitats under Section 41 of the NERC Act;
- Evidence of, or potential for, the presence of certain species/groups

3.2.3 Badger

The site was thoroughly searched for evidence of use by Badgers (*Meles meles*), with the specific aim of identifying the presence and location of any setts. In accordance with the *Badgers and Development: A Guide to Best Practice and Licensing* (Natural England, 2011) guidance, the survey accounted for a 30m from the site's boundary (observed where possible i.e. does not conflict with private dwellings). Evidence of Badgers could include latrines, dung pits, feeding remains and foraging evidence, trails and setts.

3.2.4 Bats

A preliminary roost assessment for trees on site was conducted, following edition 4 of the BCT guidelines (Collins, 2023) (**Table 1**). Features of trees were assessed for their suitability to support roosting bats using a high-powered torch and binoculars and combining these observations with data collated during the desk study were classified as either negligible, PRF-Is (Potential Roost Features - Individual) or PRF-M's (Potential Roost Features – Maternity). The same assessment was conducted for habitats on site, as to their suitability for flight-paths and foraging habitats, which also used field observations and desk study information on habitats and nearby records and roosts (**Table 2**).

Table 1. Guidelines for assessing the potential suitability of sites for bats (Trees) (adapted from Collins, 2023).

Suitability	Description
	Roosting Habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.
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.

Table 2. Guidelines for assessing the potential suitability of sites commuting and foraging potential for bats (adapted from Collins, 2023).

Suitability	Description
	Commuting and Foraging Habitats
Negligible	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	Habitat that could be used by small numbers of commuting bats such as gappy hedgerow or unvegetated streams, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree or a patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.

High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined water courses and grazed parkland. Site is close to and connected to known roosts.
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3.2.5 Birds

The Site was assessed for its potential to support general nesting and breeding birds (which are all protected during the breeding season) and for its suitability to support birds protected under Schedule 1 of the Wildlife and Countryside Act (1981) (as amended). The suitability of the Site for supporting foraging activity was also assessed. These assessments followed guidelines provided by the Bird Survey and Assessment Steering Group (2022), and included factors including field signs (the birds themselves, nests, droppings) and habitats present and their characteristics.

3.2.6 Invasive non-native Plant Species

Whilst the survey should not be considered a full site assessment for invasive non-native plant species (including plant species listed on Schedule 9 of the Wildlife and Countryside Act (1981) (as amended)), signs of these species were noted if identified. This involved a visual inspection for any in leaf or dormant features (e.g. Cotoneaster with leaves in winter, dead stems and dormant crowns of Japanese Knotweed (*Reynoutria japonica*)).

3.3 Assessment Methodology

3.3.1 Introduction

The methodology for the assessment of the likely ecological effects of the proposed development is based on CIEEM's *Guidelines for Ecological Assessment in the UK* (CIEEM 2018). Although this assessment does not constitute a formal Ecological/ Environmental Impact Assessment, the CIEEM guidelines provide a useful framework for assessing ecological impacts at any level.

3.3.2 Valuation

Features of ecological interest are valued on a geographic scale. Value is assigned on the basis of legal protection, national and local biodiversity policy and cultural and/or social significance.

3.4 Limitations

There were no specific survey limitations with the site fully accessible. Where appropriate, previous botanical survey data from the survey undertaken by Ecosupport in June 2023 prior to the undertaking of vegetation clearance works as part of the previous application (ref: APP/10/00912 and variant of condition APP/16/00295) was utilized.

This survey does not constitute a full site assessment for Schedule 9 invasive plant species such as Japanese knotweed but these were noted if found.

4.0 BASELINE DATA

4.1 Designated Sites

4.1.1 Statutory Designated Sites

Fig 3 displays the map provided from HBIC (2024) showing the statutory designated sites from within 1 km of the site, with **Table 3** providing a greater level of detail.

Table 3. Statutory designated sites within 1 km (HBIC, 2024)

Site Name	Designation	Distance and Direction	Description of Interest
Brook Meadow (Emsworth)	LNR	0.14km South	Brook Meadow LNR comprise of a 3.9ha site supporting grassland which is surrounded by woodland and flanked by two streams.
Chichester and Langstone Harbour	SPA & Ramsar	0.9km South	Chichester and Langstone Harbours SPA is located on the south coast of England in Hampshire and West Sussex, and features large sheltered estuarine basins that comprise of extensive mudflats that are exposed at low tide. The site is noted to support internationally important overwintering bird assemblages, with notable species including ringed plover (<i>Charadrius hiaticula</i>), black-tailed godwit (<i>Limosa limosa islandica</i>), dark-bellied brent goose (<i>Branta bernicla bernicla</i>), dunlin (<i>Calidris alpina alpina</i>), grey plover (<i>Pluvialis squatarola</i>), redshank (<i>Tringa tetanus</i>) and ringed plover (<i>Charadrius hiaticula</i>).
Chichester Harbour	SSSI	0.9km South	Chichester Harbor SSSI comprises of a large estuarine basin supporting extensive mud flats and sandflats, with the site of particular significance for wintering wildfowl and waders, in addition to important plant communities.

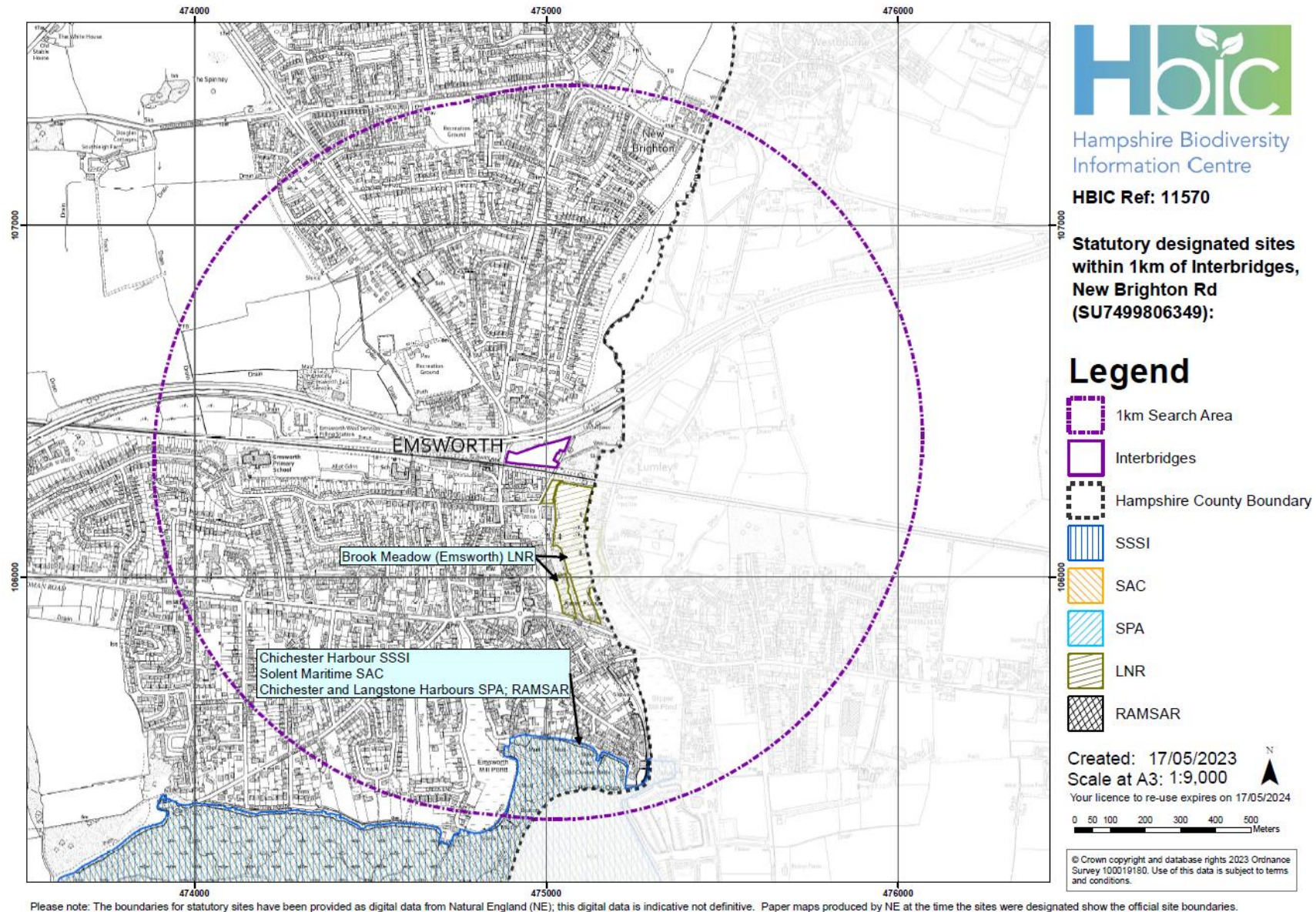
Solent Maritime	SAC	0.9km South	The Solent Maritime SAC is designated as a result of supporting Estuaries, Spartina swards and Atlantic salt meadows annex 1 habitats, with the Solent encompassing four coastal plain estuaries and four bar-built estuaries, which form a unique hydrographic regime.
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SPA: Special Protection Area

RAMSAR: Wetland of international importance under the Ramsar Convention

SSSI: Site of Special Scientific Interest

LNR: Local Nature Reserve

Figure 3. Map showing statutory designated sites located within 1 km of the site (HBIC, 2024).

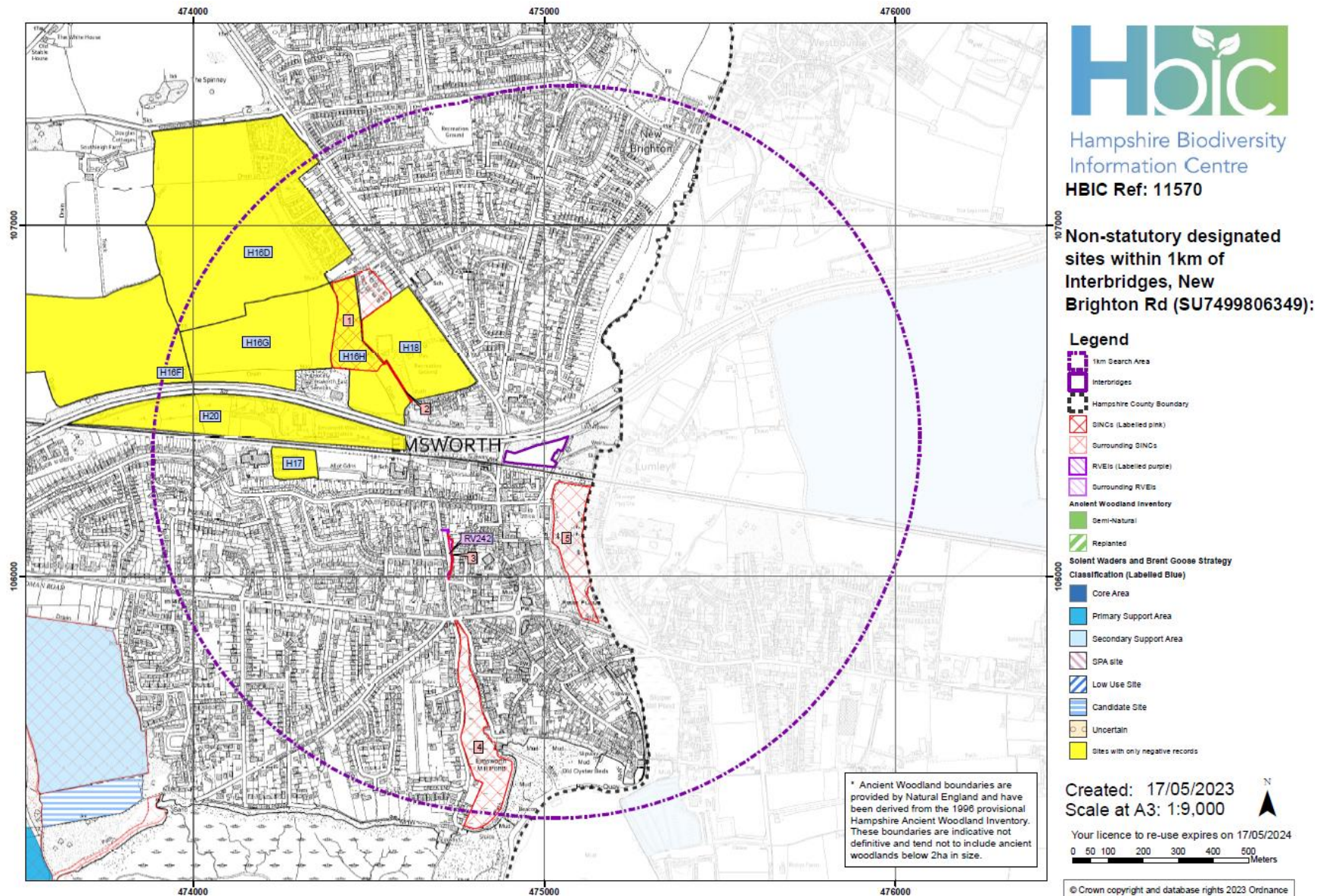
4.1.2 Non-Statutory Designated Sites

Fig 4 displays the map provided from HBIC (2024) showing the non-statutory designated sites from within 1 km of the site, with **Table 4** providing a greater level of detail.

Table 4. Non-Statutory designated sites within 1 km (HBIC, 2024)

Site Name	Map Label	SINC Criteria	Designation	Distance and Direction
Lumley Meadow	5	2A/6A	SINC	0.05km South-East
Stream West of Emsworth Recreation Ground	2	6A	SINC	0.29km West
Westbrook Stream, Bridge Road	3	6A/7A	SINC	0.27km South-West
Land West of Emsworth Recreation Ground	1	2B/5B	SINC	0.42km North-West
Emsworth Millpond	4	4A	SINC	0.48km South

SINC: Site of Importance for Nature Conservation

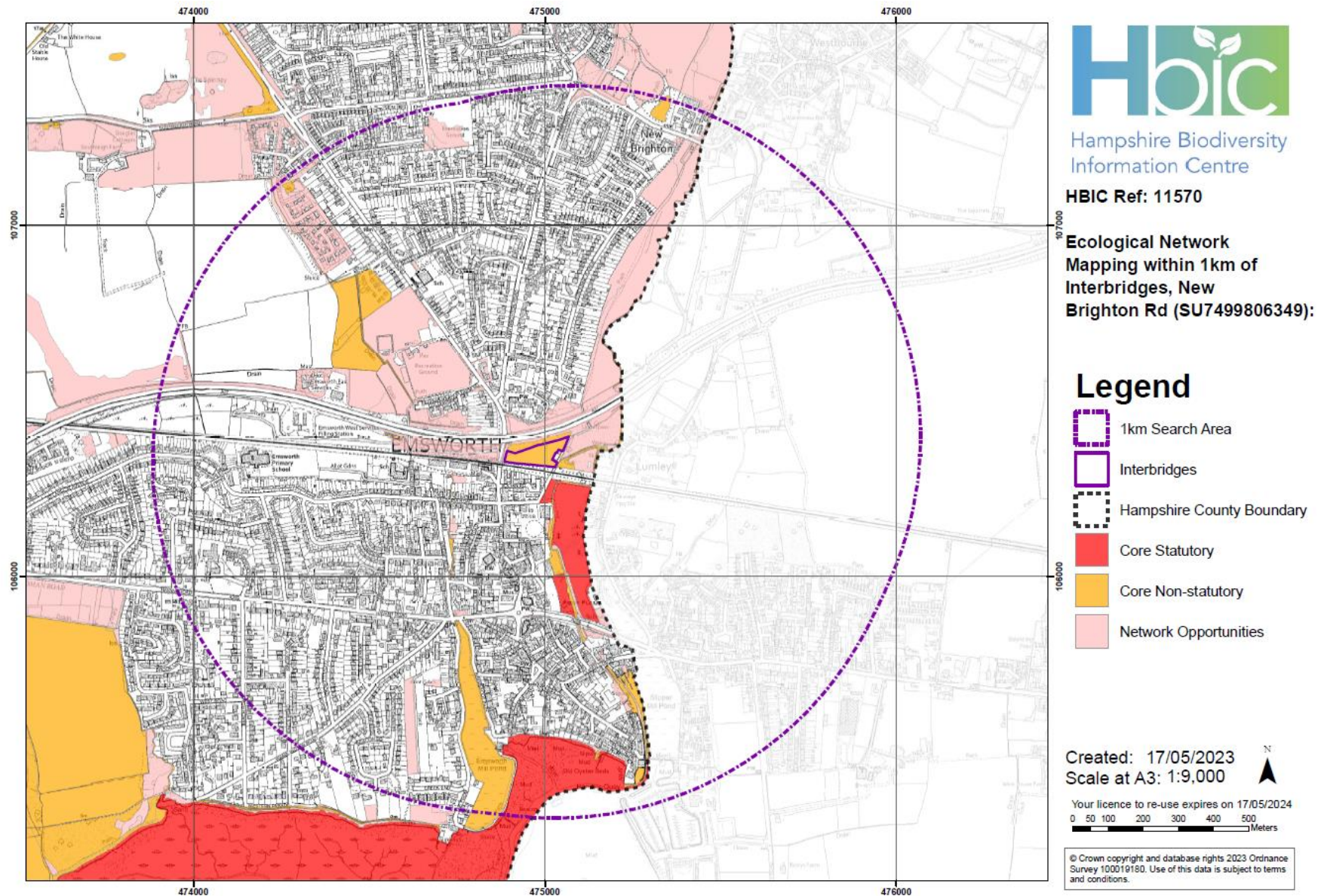
Figure 4. Map showing non-statutory designated sites located within 1 km of the site (HBIC, 2024).

3.1.3 Ecological Network

The data received from HBIC also includes the provision of information about the local Ecological Network designations, the aim of which is to:

- Improve the quality of current wildlife sites by better habitat management
- Increase the size of existing wildlife sites
- Enhance connections between sites, either through physical corridors or through 'stepping stones'
- Create new sites; and
- Reduce pressure on wildlife by improving the wider environment (Court & Ritter 2016)

As shown in **Fig 5** below, the site represents an area noted as a 'core non-statutory' zone of the local ecological network.

Figure 5. Ecological networks located within 1km (HBIC, 2024)

4.2 Habitats

The vegetation within the site has been described below using classification terminology as described within Habitat Definitions Version 2.0 (UKHab Ltd, 2023). The below species should not be considered an exhaustive list and instead refer to dominant, characteristic and other noteworthy species associated with each community within the survey area. A UKHabs map showing the locations of the habitats present within the site has been included within Appendix A. The habitat types identified within the site comprise of:

- g3c – Other neutral grassland (32 – scattered trees, 517 – recent management)
- h3d – Bramble scrub (517 – recent management)
- w1h – Other woodland; mixed

4.2.1 g3c – Other Neutral Grassland (32,517)

The grassland on-site forms a strip which runs through the centre of the site which loosely follows the footprint of this habitat type that was identified on site prior to vegetation clearance works (**Fig 6**). Similar to the previous survey, the forb diversity in the sward was consistently > 9 species / m². Grasses noted within the sward included Perennial Rye Grass (*Lolium perenne*), Red Fescue (*Festuca rubra*), Meadow Fescue (*F. pratensis*), Meadow Foxtail (*Alopecurus pratensis*), Timothy (*Phleum pratense*), Creeping Bent (*Agrostis stolonifera*), Meadow Grasses (*Poa* sp). Crested Dogstail (*Cynosurus cristatus*) and False Oat Grass (*Arrhenatherum elatius*). The grassland was also noted to support a high herb content with Common Knapweed (*Centaurea nigra*), Ribwort Plantain (*Plantago lanceolata*), Yarrow (*Achillea millefolium*), Common Vetch (*Vicia sativa*), Creeping Cinquefoil (*Potentilla reptans*), Lesser Celandine (*Ficaria verna*), Cut-leaved Crane's-bill (*Geranium dissectum*), White dead-nettle (*Lamium album*), Winter Heliotrope (*Petasites fragrans*), Common Daisy (*Bellis perennis*), Comfrey (*Symphytum* sp.) and Oxeye Daisy (*Leucanthemum vulgare*).

Figure 6. View of the g3c grassland habitat. Taken from the sites western boundary facing east (March, 2024)



4.2.2 h3d – Bramble Scrub (517)

Bramble (*Rubus fruticosus*) dominated scrub was throughout the site with this habitat type forming the dominant habitat type recorded on site (**Fig 7**). Similar to the other habitats within the site, the scrub was managed last year as part of the previous planning application, with the habitat now growing in the interim period. In addition to Bramble, other species noted included Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*), and Dog rose (*Rosa canina*), with high coverage of species including Common Hogweed (*Heracleum sphondylium*), Common Nettle (*Urtica dioica*), Field Horsetail (*Equisetum arvense*), Cleavers (*Galium aparine*) and Ivy (*Hedera helix*) noted following the removal of dense scrub habitat.

Figure 7. View of a section of h3d Bramble scrub situated along the site's northern boundary (March, 2024)



4.2.3 w1h – Other Woodland; Mixed

A small section of mixed woodland habitat was noted to encroach the site from beyond the railway boundary situated along the southern boundary of the site (**Fig 8**). Trees noted within this area comprised of a mixture of Field Maple (*Acer campestre*), Sycamore (*Acer pseudoplatanus*), Ash (*Fraxinus excelsior*), Horse Chestnut (*Aesculus hippocastanum*), Lime (*Tilia x europaeus*) and Maritime Pine (*Pinus pinaster*). The understory was largely dominated by Ivy, species including Lords & Ladies (*Arum maculatum*) and Cleavers also noted.

Figure 8. View of a section of the small area of w1h woodland habitat situated along the sites southern boundary (March, 2024)



4.3 Bats

4.3.1 Pre-existing Information

The data request from HBIC returned the following records within 1 km of the site (**Table 5**).

Table 5. List of Bat records within 1 km of the site (HBIC, 2024)

Taxon Name	Species Name	Number of Records	Distance to nearest record
<i>Plecotus auritus</i>	Brown Long-eared Bat	11	0.21km
<i>Pipistrellus pipistrellus</i>	Common Pipistrelle	59	0.17km
<i>Nyctalus noctula</i>	Noctule Bat	16	0.16km
<i>Pipistrellus</i> spp.	Pipistrelle Bat species	18	0.22km
<i>Eptesicus serotinus</i>	Serotine	18	0.15km
<i>Pipistrellus pygmaeus</i>	Soprano Pipistrelle	54	0.19km
<i>Barbastella barbastellus</i>	Western Barbastelle	2	0.58km
<i>Myotis</i> spp.	Myotis Bat Species	29	0.46km
<i>Myotis daubentonii</i>	Daubenton's Bat	8	0.33km
<i>Myotis nattereri</i>	Natterer's Bat	1	0.93km
<i>Pipistrellus nathusii</i>	Nathusius's Pipistrelle	11	0.22km
<i>Nyctalus noctula</i>	Lesser Noctule	4	0.57km

4.3.2 Preliminary Roost Assessment (Trees)

A preliminary roost assessment of the trees on site was undertaken during the site walkover. No trees on site were identified to support roosting features and such are considered to hold **Negligible potential** to support roosting bats.

4.3.3 Foraging and Commuting Bats

The site is situated between the A27 to the north and the railway estate to the south, with the linear woodland habitats within these areas representing favorable habitat to support foraging and commuting bats. Furthermore, the site is located in close proximity to Brook Meadow LNR and the River Ems which offer further foraging opportunities. Whilst the habitats within the site have been subject to clearance works, the grassland and scrub habitat have the potential support invertebrate assemblages which would increase the suitability of the site as a foraging resource. As such, the site is considered to hold **Moderate** potential to support foraging and commuting bats.

4.4 Reptiles

4.4.1 Pre-existing Information

HBIC returned recorded 4 records of Slow Worms (*Anguis fragilis*) from within the 1km search radius.

4.4.2 Site Assessment

As part of the works associated the granted full planning permission (ref: APP/10/00912 and variant of condition APP/16/00295) for this site, the reptile population within the site was subject to a translocation operation, with the on-site habitats managed to facilitate these works. Following the translocation of the reptile population to an off-site receptor (With a total of 13 Slow Worms relocated to Patrica Way, Nutborne, PO18 8FX) the site was subject to a sensitive destructive search. As such, due to the exclusion of reptiles and subsequent maintenance of reptile exclusion fencing around the perimeter of the site (thus preventing recolonization of the site), the site is considered to hold **Negligible** potential to support common UK reptiles.

4.5 Badgers

4.5.1 Pre-existing Information

HBIC returned no records of Badger (*Meles meles*) from within 1km of the site boundary.

4.5.2 Site Assessment

No Badger setts or evidence of associated badger activity (e.g. deceased animals, snuffle holes, latrines, spoil heaps) were detected within the proposed site. Notwithstanding this, the presence of earth mounds situated within the site offer suitable locations for sett creation, with the grassland habitat offering suitable habitat to support foraging activity. As such, the site is considered to hold **Moderate** potential to support foraging and commuting Badgers.

4.6 Great Crested Newts

4.6.1 Pre-existing Information

No records of Great Crested Newts (*Triturus cristatus*) were returned within 1km of the site boundary.

4.6.2 Waterbodies

No suitable waterbodies to support GCN were identified with 500m of the site boundary.

4.6.3 Site Assessment

Based on the absence of suitable waterbodies within dispersal range of the site, the site is considered to hold **Negligible** potential to support GCN. As noted in section 4.4 above, the site has also been subject to a prior translocation exercise in line with the previous planning application with a sensitive destructive search undertaken and reptile exclusion fencing maintained around the perimeter, therefore preventing both reptiles and amphibians from dispersing within the site.

4.7 Breeding Birds & Nesting Birds

4.7.1 Pre-existing Information

HBIC returned a high volume of records for bird species within 1km of site boundary, with the records predominantly originating from the statutory/ non-statutory designated wetland/ coastal sites that are situated within 1km of the site boundary (Chichester and Langstone Harbor SPA & Ramsar). As such, based on the habitats present on site, it is considered that the majority of bird species records provided are not relevant (with no suitability to support Schedule 1 listed birds) and therefore a full species list has not been provided in this section.

4.7.2 Site Assessment

There is limited suitable habitat within the redline boundary for breeding and nesting birds. The boundary woodland habitats within the highways and railway estates offer potential to support nesting and foraging activity, although as this is limited to the boundaries, the site is considered to hold **Low** potential to support breeding and nesting birds.

5.0 LIKELY ECOLOGICAL IMPACTS IN ABSENCE OF MITIGATION

5.1 Introduction

The CIEEM guidelines (CIEEM 2018) require that the potential impacts of the proposals should be considered in absence of mitigation. In order for a significant adverse effect to occur, the feature being affected must be at least of local value. However, in some cases, features of less than local value may be protected by legislation and/or policy and these are also considered within the assessment. Although significant effects may be identified at this stage of the assessment, it is often possible to provide appropriate mitigation.

5.2 Site Preparation and Construction

5.2.1 Impacts to Habitats

The scrub and grassland habitats within the site are considered to hold value at the Site level with the woodland considered to hold value at the Local level of significance. In addition to the loss of scrub and grassland habitats within the site, the thinning/removal of five trees within the woodland area has been recommended within the associated arboricultural report (Johnston Tree Consultancy, 2024) due to health and safety concerns. As such, it is considered that the works will have an **adverse impact** on habitats of **Site-Local** value.

5.2.2 Impacts to Wildlife

The site has been identified as holding potential to supporting foraging and commuting bats. The works will result in a loss of scrub and grassland habitat present within the site and any disruption to commuting routes (from external lighting) would likely have an **adverse impact** at the **Local - Regional** level (level dependent on species of bat and activity).

The mixed woodland and scrub habitat adjacent to the site offers favourable nesting opportunities, and if the works are undertaken during bird nesting season (March – September) this could result in the disturbance of bird's nests. As such, it is considered that the noise disturbance generated from the construction activities a resulting in a **temporary potential adverse impact**. Whilst there is limited available habitat to support nesting birds in the form of trees present along the southern boundary of the site, removal of this habitat could lead to the disturbance, harm or even death of any nesting birds, if present. Therefore, in the absence of mitigation, an **adverse impact is possible** at the **Site** level.

5.2.3 Impacts to Designated Sites

The site is located within approximately 0.05km of Lumley Meadow SINC and 0.9km of Chichester & Langstone Harbor SPA/Ramsar, Chichester Harbor SSSI and Solent Maritime SAC which represent sites of **Local** and **International** value respectively. In the absence of mitigation, impacts such as air pollution (i.e. dust) and water pollution could result in adverse effects on these sites. Notwithstanding this, the site is buffered by the railway estate that is situated along the southern boundary of the site which will provide a barrier to potential pollution events. As such, it is considered that the works will have a **potential minor adverse impact** on the nearby designated sites.

5.3 Site Operation

The development may result in an increase in lighting within the general area from external lighting on the proposed commercial business park. This can affect the behaviour, particularly foraging, of nocturnal wildlife. Therefore, an ***adverse impact is possible*** at the ***Local - Regional*** level (level dependent on species of bat and activity).

6.0 RECOMMENDATIONS

6.1 Introduction

The below sections outline a number of recommendations for further survey work required to fully assess the potential ecological impacts of the development and ensure and proposed mitigation and compensation appropriate and proportionate. In addition to this, measures are outlined to protect the existing features of value and provide enhancements post development.

6.2 Bats

6.2.1 Foraging and Commuting Bats

Based on the moderate assessment for foraging and commuting bats, latest BCT guidelines suggest that (Collins, 2023) (as shown in Table 8.3 from the guidelines – **Table 6**) one nighttime bat walk survey is undertaken per season, with automated/ static bat detector surveys carried out for a minimum of five nights per month between April to October.

Following the completion of the recommended surveys, the results will be detailed in a dedicated report, with appropriate avoidance, mitigation and compensation measures outlined.

Table 6. Minimum recommended number of repeats for activity surveys (adapted from table 8.3, Collins, 2023).

Survey Type	Low suitability habitat for bats	Moderate suitability habitat for bats	High suitability habitat for bats
NBW	<i>One survey visit per season (spring – April/May, summer – June/July, autumn – September/October). Further surveys may be required if these visits, or the results of the static detector surveys, reveal activity of interest that requires more observation on site.</i>		
Automated/ static bat detector surveys	Data to be collected for a minimum of five consecutive nights per season (spring – April/May, summer – June/July, autumn – September/October) in appropriate (or best available) weather conditions for bats.	<i>Data to be collected for a minimum of five consecutive nights per month (April – October) in appropriate (or best available) weather conditions for bats.</i>	

6.2.2 Sensitive Lighting for Foraging and Commuting Bats

A sensitive lighting strategy will be provided upon the completion of the bat activity work when an understanding of the assemblages present and areas of importance is understood.

6.3 Badgers

During construction, any excavations on site should be covered nightly and/or include a suitable escape ramp for the protection of wildlife e.g. Badgers and Hedgehogs (a suitable

escape ramp can be created using wooden planks placed at a 45-degree angle or provision of a sloping end wall). Any temporarily exposed open pipe systems should be covered.

6.4 Avoidance of Impacts to Breeding and Nesting Birds

In order to avoid disturbance of breeding and nesting birds or damage to their nests, tree removal / maintenance works on site should be undertaken outside of the bird nesting season (typically March – August, dependent on weather). If this is not possible, areas proposed for clearance should be thoroughly checked by an ecologist immediately prior to clearance. If any active nests are found, they will need to be left undisturbed with a suitable buffer of undisturbed vegetation (ca. 5m) until nestlings have fledged and departed from the immediate area.

6.5 Reptiles

Following the previous exclusion operations of reptiles within the site, reptile exclusion fencing is present around the perimeter of the site. In order to prevent recolonization of the site from the adjacent highways/ railway boundary habitats, the exclusion fencing must be checked regular intervals and appropriately repaired/maintained.

6.6 Enhancements

6.6.1 Bats

The erection of six bat boxes around the boundaries of the site will provide enhancements for this species. It is recommended that No.5 Schwegler 2FN boxes (**Fig 9**) and No.1 Schwegler 2F boxes (with double front panel) are utilized, however it is anticipated that the final design selection will be based on the results of the bat activity surveys. Notwithstanding this, both of these bat boxes represent 'general purpose' boxes with the 2FN box providing a larger void space to enable utilization by groups of large bats and has been successful at supporting Noctule and Bechstein's bats. These boxes will be erected on suitable trees situated around the site boundaries. The locations will be agreed with an ecologist prior to their erection on site.

Figure 9. Recommended bat box design – Schwegler 2FN (NHBS.com)



6.6.2 Birds

As a general enhancement, a total of six Schwegler 1B hole nest boxes will be incorporated into the new development. These nest boxes are supplied with either 26mm or 32mm front panels (a mixture should be utilized within the site) which provide access for birds such as Blue Tits or Great Tits, Marsh Tits and Coat Tits with the larger 32mm access hole (**Fig 10**). These will be installed in suitable locations around the site boundaries. The locations will be agreed with an ecologist prior to their erection on site.

Figure 10. Recommended bird box design – Schwegler 1B (NHBS.com)



6.7 Biodiversity Net Gain

A BNG assessment will be carried out for the proposed development and presented in a dedicated report ensuring that a 10% gain in biodiversity units is achieved

7.0 REFERENCES

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APPENDIX

Appendix A – UKHabs Map



Legend

-  Site boundary
-  Other Neutral Grassland
-  Bramble Scrub
-  Other Woodland; Mixed
-  Individual Tree



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Map	Baseline Habitats
Site	Land Known As Interbridges
Client	PNH Properties
Date	28/11/2024

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