Preliminary Ecological Appraisal

Sparkes Marina, Hayling Island

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Report	Preliminary Ecological Appraisal
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Table of Contents

Executive Summary **5**

1.0 INTRODUCTION **6**

1.1 Brief **6**

1.2 Site Description & Location **6**

1.3 Proposed Development **7**

2.0 RELEVANT LEGISLATION AND POLICY **8**

2.1 Legislation **8**

2.1.1 The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 ..... *8*

2.1.2 The Wildlife and Countryside Act (1981) (as amended) *8*

2.1.3 The Countryside and Rights of Way Act (2000) *8*

2.1.4 Natural Environment and Rural Communities Act (2006) *9*

2.1.5 Protection of Badgers Act *9*

2.2 Policy **10**

2.2.1 National *10*

2.2.2 Local – Havant Borough Council *11*

3.0 METHODOLOGY **12**

3.1 Desk Study **12**

3.1.1 Waterbodies *12*

3.1.2 Designated Sites & Protected Species *12*

3.2 Field Survey **12**

3.2.1 Personnel *12*

3.2.2 Habitats *12*

3.2.3 Badger *12*

3.2.4 Bats *12*

3.2.4.1 Preliminary Roost Assessment 12

3.2.4.2 Ground Level Tree Assessment 13

3.3 Assessment Methodology **14**

3.3.1 Introduction *14*

3.3.2 Valuation *14*

3.4 Limitations **14**

3.4.1 Habitats *14*

3.4.2 Chichester and Langstone Harbour SPA & Chichester Harbour SSSI *14*

4.0 ECOLOGICAL BASELINE **15**

4.1 Desk Study **15**

4.1.1 Statutory Designated Sites *15*

4.1.2 Non-Statutory Designated Sites *16*

4.1.3 Priority Habitats *17*

4.1.4 Protected Species *18*

4.1.5 Waterbodies (Ponds) *18*

4.2 Vegetation Survey Results 18
4.2.1 Modified Grassland (g4) 19
4.2.2 Other Woodland Broadleaved (w1g) with secondary habitat code: Line of Trees (33) 19
4.2.3 Built-up Areas & Gardens (u1) with secondary habitat code: Vegetated Garden (828), Scattered Trees (32), & Introduced Shrub (847) 20
4.2.4 Developed Land; Sealed Surface (u1b) 21
4.2.5 Buildings (u1b5) 22
4.2.6 Intertidal Mudflats (t2d) with secondary habitat code: Marina (700) 22
4.2.7 Baseline Biodiversity Units 23
4.3 Bats 24
4.3.1 Preliminary Roost Assessment 24
4.3.2 Ground Level Tree Assessment 30
4.3.3 Commuting and Foraging Bats 30
4.4 Reptiles 30
4.5 Badgers and Other Mammals 30
4.6 Great Crested Newts 30
4.7 Birds of Conservation Concern (BoCC) 30
4.7.1 Breeding and Nesting Birds 30
4.7.2 Wintering Birds 31
4.8 Hazel Dormouse 32

5.0 LIKELY ECOLOGICAL IMPACTS IN ABSENCE OF MITIGATION 33
5.1 Introduction 33
5.2 Site Preparation and Construction 33
5.2.1 Impacts to Habitats 33
5.2.2 Impacts to Wildlife 33
5.2.2.1 Bats 33
5.2.2.2 Birds of Conservation Concern 33
5.2.3 Impacts to Designated sites 33
5.3 Site Operation 34
5.3.1 Impacts to Nocturnal Wildlife 34
5.3.2 Impacts to Designated Sites 34

6.0 MITIGATION, COMPENSATION & ENHANCEMENT 35
6.1 Introduction 35
6.2 Protection of Retained Habitats 35
6.3 Removal of Virginia Creeper 35
6.4 Bats 35
6.4.1 Internal Preliminary Roost Assessment 35
6.4.2 Phase II Bat Surveys 35
6.4.3 Sensitive Lighting for Nocturnal Species 36
6.4.3.1 During Construction 36
6.4.3.2 During Operation 36
6.5 Birds of Conservation Concern 38

Ecosupport Ltd K4 Keppel, Daedalus Park, Daedalus Drive, Lee-on-the-Solent, Hampshire, PO13 9FX
T: 01329 832841 info@ecosupport.co.uk www.ecosupport.co.uk

6.5.1 Avoidance of Impacts to Breeding and Nesting Birds 38
6.5.2 Wintering Birds 38
6.6 Designated Sites 38
6.6.1 Construction Environmental Management Plan (CEMP) 38
6.6.2 Financial Contribution 38
6.6.3 Shadow Habitat Regulations Assessment 39
6.7 Nutrient Neutrality 39
6.8 Biodiversity Net Gain 39
6.9 Enhancements 39
6.9.1 Bat Boxes 39
6.9.2 Bird Boxes 40
7.0 REFERENCES 42

Ecosupport Ltd K4 Keppel, Daedalus Park, Daedalus Drive, Lee-on-the-Solent, Hampshire, PO13 9FX
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Executive Summary

Ecosupport Ltd was instructed by MDL Marinas to undertake a Preliminary Ecological Appraisal (PEA) at 'Sparkes Marina, Hayling Island' (hereafter referred to as 'the site'). 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:

- Walkover survey with UK Habs habitat assessment (May, 2025)
- External Preliminary Roost Assessment (May, 2025)
- Ground Level Tree Assessment (May, 2025)

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:

- A small section of the site is designated as Chichester and Langstone Harbours SPA & Ramsar, Solent Maritime SAC, Chichester Harbour SSSI, and Mudflats Priority Habitat on site;
- Boatyard Patch SINC immediately south of the site;
- Low potential for commuting and foraging bats;
- Low potential for roosting bats within Building 1 and Building 3;
- Low potential for breeding and nesting birds;
- Potential for disturbance of wintering birds.

In the absence of any mitigation measures, the proposed development is anticipated to result in ***adverse impacts*** although measures, including recommendations for Phase II surveys where necessary, 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 MDL Marinas to undertake a Preliminary Ecological Appraisal (PEA) at 'Sparkes Marina, Hayling Island' (hereafter referred to as 'the site'). The purpose of this survey was to assess any ecological impacts that may arise as a result of the proposed 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 report[1] then the findings of this survey will no longer be considered valid and may require updating.

1.2 Site Description & Location

The site comprises a marina and associated buildings at Sparkes Marina, Wittering Road, Hayling Island, Hampshire, PO11 9SR (centred on OS grid reference SZ 74690 98966) (**Fig 1**). The site is encompassed by the Emsworth Channel (also designated as Chichester and Langstone Harbours SPA & Ramsar, Solent Maritime SAC, and Chichester Harbour SSSI) to the north, east, and west, with access off Wittering Road to the south, adjacent to Boatyard Patch SINC. The wider environ, to the south, is urban, with the site situated at the far east of Hayling Island.

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

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Figure 1. Aerial image of the site with approximate redline boundary provided (Google Earth, 2025).

1.3 Proposed Development

The proposals at this stage entail regeneration of the existing marina and erection of circa 9 No dwellings.

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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 if 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 art II of the Act. This list over 30 plants including Japanese Knotweed (*Fallopia japonica*), Giant Hogweed (*Heracleum mantegazzianum*) and Parrots 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

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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 sett 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

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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) (2024) 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 minimising impacts on and providing net gains for biodiversity including by incorporating features which support priority or threatened species such as swifts, bats and hedgehogs.

The NPPF states that plans should distinguish between the hierarchy of international, national and locally designated sites and land should be allocated with the least environmental or amenity value and take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure for the enhancement of natural capital at a catchment or landscape scale.

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 SSSIs;

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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.

Potential SPAs and possible SACs, listed or proposed Ramsar sites and sites required as compensatory measures for the previous should be given the same protection as habitats sites.

2.2.2 Local – Havant Borough Council

Under the Havant Borough Council adopted Local Plan: Core Strategy, part of the 'Vision for Havant Borough in 2026' is to protect and enhance biodiversity. 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 SINCs.

The proposed Local Plan 2036 was withdrawn during the Examination and therefore the above Local Plan will remain in place until a new Havant Borough Local Plan is adopted.

Furthermore, Policy 'DM24: Recreational Disturbance to Special Protected Areas (SPAs) from Residential Development' outlined within the Havant Borough Local Plan (Allocations) (2014), states that planning permission will be granted for residential developments that avoid or mitigate a likely significant effect on the SPAs, caused by recreational disturbance through the in-combination effect of net additional dwellings (via a financial contribution, and /or package of measures to avoid or mitigate adverse impacts upon the SPAs).

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3.0 METHODOLOGY

3.1 Desk Study

3.1.1 Waterbodies

Any ponds located within 500m of the proposed development were searched for using Ordnance Survey maps and available aerial images.

3.1.2 Designated Sites & Protected Species

A search for designated sites and records of protected species within 2km of the site was undertaken using freely available online resources.

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 Grace Roberts MSci (Hons), Assistant Ecologist with Ecosupport Ltd on the 28th May 2025.

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). Where appropriate primary habitat codes were used although for some habitat types, the use of secondary habitat codes was necessary as well.

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

3.2.4.1 Preliminary Roost Assessment

An external and internal (where possible) preliminary roost assessment of the buildings on site was undertaken by Grace Roberts of Ecosupport in May 2025. This followed BCT (Collins (ed) 2023) best practice survey guidelines searching for any PRFs / evidence of bat occupation and assigning a roost potential assessment as outlined in **Table 1** below.

Table 1. Guidelines for assessing the potential suitability of a built structure for roosting bats (reproduced from BCT (Collins (ed) 2023.

Suitability	Description of Roosting Habitats
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.

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Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions[2] and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e., unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats[3].
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions[2] and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions[2] and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g., maternity or classic cool/stable hibernation site.

2 For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.

3 Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten et al., 2016 and Jansen et al., 2022). Common pipistrelle swarming has been observed in the UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland (National Trust, 2018). This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in prominent buildings in the landscape, urban or otherwise.

3.2.4.2 Ground Level Tree Assessment

A non-exhaustive Ground Level Tree Assessment (GLTA) assessment of any notable trees on site was undertaken by Grace Roberts of Ecosupport in May 2025. This followed BCT (Collins (ed) 2023) best practice survey which includes aiming to identify the following Potential Roost Features (PRFs):

- PRFs formed by disease and decay: woodpecker holes, squirrel holes, knot holes, pruning cuts, tear outs, wounds, cankers, compression, forks, butt rots
- PRFs formed by damage: lighting strikes, hazard beams, subsidence cracks, shearing cracks, transverse snaps, welds, lifting bark, desiccation features, frost cracks; and
- PRFs formed by association: fluting Ivy.

The presence or absence of any of the features listed above are then fed into the classification of the tree which is as follows (**Table 2**).

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Table 2. Guidelines for assessing the suitability of trees on proposed development sites for bats, to be applied using professional judgement (Collins (ed) 2023).

Suitability	Description
None	Either no PRFs in the tree or highly unlikely to be any
FAR	Further Assessment Required (FAR) to establish if any PRFs are present in the tree
PRF	A tree with at least one PRF present.

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

3.4.1 Habitats

There is not considered to be any limitations of the survey work, with the walkover being conducted during the optimum time of year for vascular flowering plants. However, this survey does not constitute a full site assessment for invasive species, such as Japanese Knotweed (*Reynoutria japonica*).

3.4.2 Chichester and Langstone Harbour SPA & Chichester Harbour SSSI

Part of the site comprises Chichester and Langstone Harbour SPA & Ramsar, Solent Maritime SAC, and Chichester Harbour SSSI, all marine designated sites. The walkover and Preliminary Ecological Appraisal report contains the terrestrial ecology baseline, mitigation, and further recommendations, but not marine ecology. As such, this is considered to be a minor limitation of the survey effort and should be taken into consideration.

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4.0 ECOLOGICAL BASELINE

4.1 Desk Study

4.1.1 Statutory Designated Sites

Following a review of online resources, five statutory designated sites were identified within 2km of the site, 4 of which are present on site (**Figure 2** & **Figure 3**). The designated sites are outlined in **Table 3**, below.

Table 3. Statutory Designated sites identified within 2km of the site.

Designation	Name	Distance from site
Special Protected Areas (SPA)	Chichester and Langstone Harbours	On-site
Special Areas of Conservation (SAC)	Solent Maritime	On-site
Sites of Special Scientific Interest (England)	Chichester Harbour	On-site
Ramsar	Chichester and Langstone Harbours	On-site
Local Nature Reserve (LNR)	Sandy Point	c.394m south

Figure 2. Statutory Designated sites identified within 2km of the site, showing the approximate redline boundary.

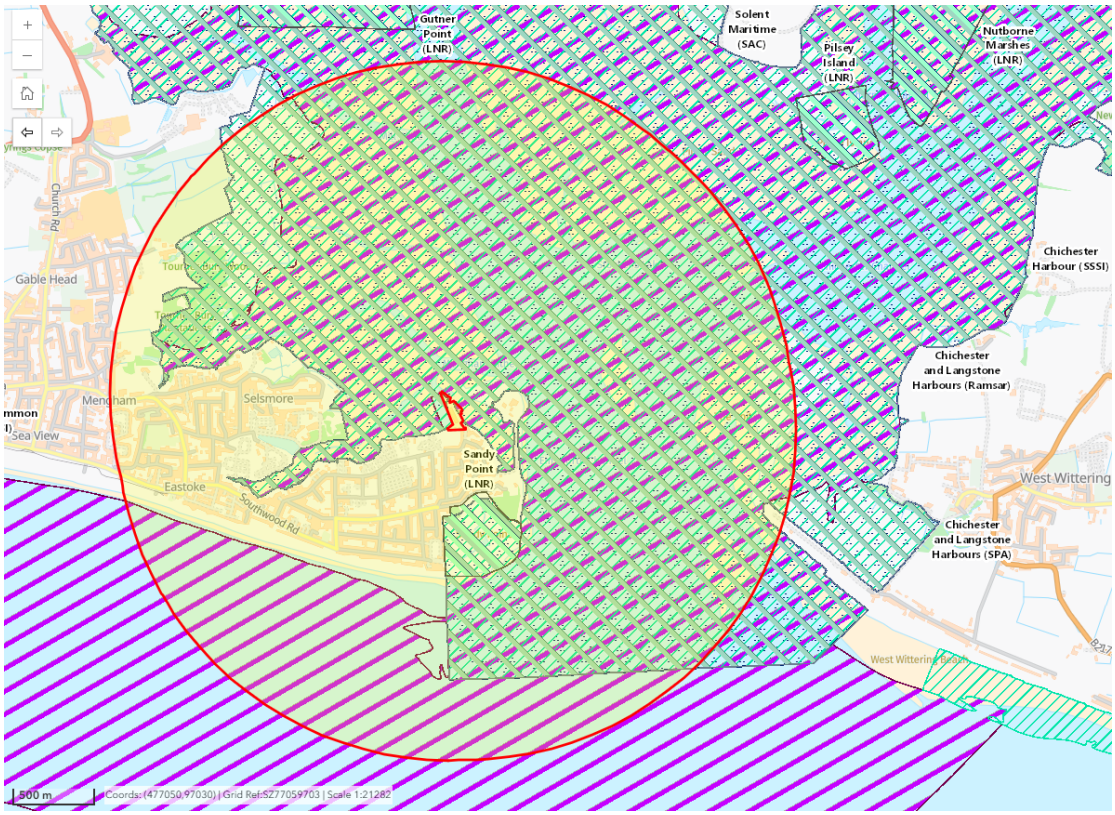

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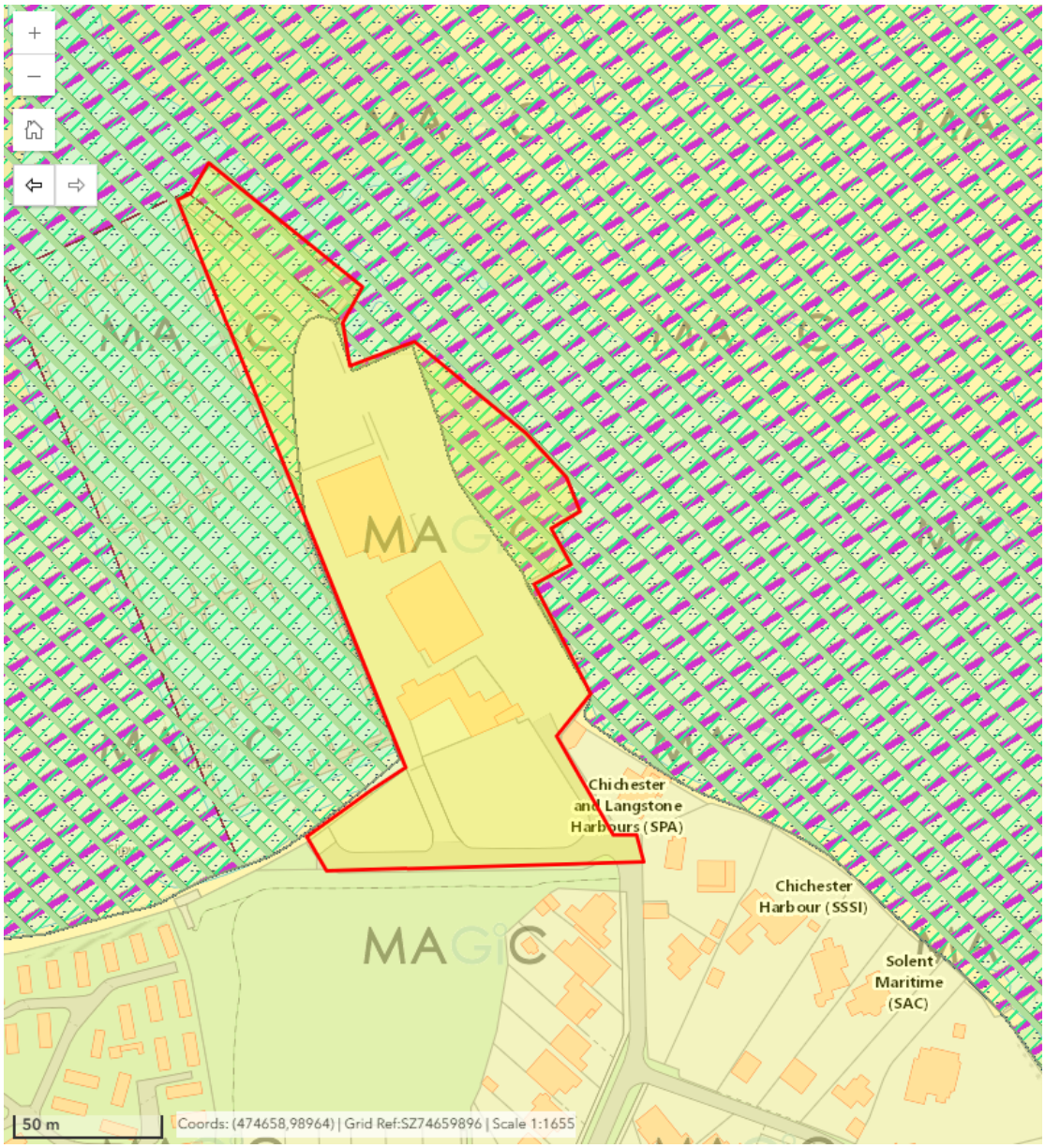
Figure 3. Statutory Designated sites identified on site, showing the approximate redline boundary.



4.1.2 Non-Statutory Designated Sites

Following a review of online resources, four Sites of Important Nature Conservation (SINCs) sites were identified within 500m of the site, one of which lies directly south of the site. The non-statutory designated sites are outlined in **Table 4** and displayed in **Figure 4**, below.

Table 4. Non-statutory designated sites identified within 2km of the site.

Designation	Ref / Name	Criteria	Distance from site
Site of Important Nature Conservation (SINC)	HV0129 - Boatyard Patch	4Aii/6A	0m south
	HV0131 - Lifeboat Station Saltmarsh	4A/6A	c.356m south-east

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	HV0132 – Land East of Sandy Point	4A/6A	c.460m south-east
	HV0130 – Lifeboat Station Heath	3A	c.475m south-east

Figure 4. SINCs identified within 500m of the site, showing the approximate red line boundary (Havant Borough Council Interactive Map, accessed June 2025).

4.1.3 Priority Habitats

Using freely available resources, a search was undertaken to identify any priority habitats on or immediately adjacent to the site. One priority habitat was identified on site, priority habitat mudflats (**Fig 5**). Furthermore, priority habitat good quality semi-improved grassland was identified approximately 6m south of the site, with priority habitat coastal saltmarsh identified approximately 30m east of the site.

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Figure 5. Priority habitat identified on and surrounding the site, showing the approximate red line boundary. Brown = Mudflats, Pink = Good quality semi-improved grassland, and Green = Coastal saltmarsh.

4.1.4 Protected Species

Following a review of freely available online resources, one granted European Protected Species Licence (EPSL) was identified within 2km of the site, approximately 1.40km west.

4.1.5 Waterbodies (Ponds)

Using freely available online resources, no waterbodies (ponds, lakes etc.) were identified within 500m of the site.

4.2 Vegetation Survey Results

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. The habitat types identified within the site comprise of:

- Modified Grassland (g4)
- Other Woodland Broadleaved (w1g) with secondary habitat code: Line of Trees (33)

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- Buit-up Areas & Gardens (u1) with secondary habitat code: Vegetated Garden (828), Scattered Trees (32), & Introduced Shrub (847)
- Developed Land; Sealed Surface (u1b)
- Buildings (u1b5)
- Intertidal Mudflats (t2d) with secondary habitat code: Marina (700)

NB. As per the UKHab Version 2.0 Habitat Definitions (2023) – line of trees must be classified under the 'w – woodland and forest' primary habitat code. Although it must be noted this habitat type does not fall under the definition of a 'woodland and forest' as is under the 25% land cover required.

4.2.1 Modified Grassland (g4)

A small area of modified grassland (g4) was identified on site, forming a road verge along the southern boundary (**Fig 6**). A low number of species was noted, comprising Yarrow *(Achillea millefolium)*, Ribwort Plantain *(Plantago lanceolata)*, Cow Parsley *(Anthriscus sylvestris)*, Bramble *(Rubus fruticosus)*, Rose (*Rosa* sp.), False Oat-grass *(Arrhenatherum elatius)*, Orchard Grass *(Dactylis glomerata)*, and Rough Meadow Grass *(Poa trivialis)*.

Figure 6. Modified grassland at the south of the site (taken May, 2025).

4.2.2 Other Woodland Broadleaved (w1g) with secondary habitat code: Line of Trees (33)

Within the grassland along the southern site boundary, a line of trees (secondary habitat code 33) was present (13 No individual trees), comprising of Poplar sp (*Populus* sp.) (**Fig 7**).

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Figure 7. Line of trees (33) located along the southern site boundary (taken May, 2025).

4.2.3 Built-up Areas & Gardens (u1) with secondary habitat code: Vegetated Garden (828), Scattered Trees (32), & Introduced Shrub (847)

A vegetated garden (secondary habitat code 828 under primary code u1) was present comprising of grassland, ornamental shrubs and several trees (**Fig 8**). Species noted included Yarrow *(Achillea millefolium)*, Creeping Thistle *(Cirsium arvense)*, Yorkshire Fog *(Holcus lanatus)*, Cock's-foot *(Dactylis glomerata)*, Buddleia *(Buddleja davidii)*, Willowherb *(Epilobium* sp.*)*, Common Fleabane *(Pulicaria dysenterica)*, Bittersweet *(Solanum dulcamara)*, Greater Plantain *(Plantago major)*, Crested Hairgrass *(Koeleria macrantha)*, non-native ornamental plants and Virginia Creeper *(Parthenocissus quinefolia)*.

Furthermore, several trees were present within the garden, comprising of 1 No medium-sized Cherry *(Prunus sp.)*, and 10 small-sized non-native trees.

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Figure 8. Vegetated garden (u1 - 828) on site (taken July, 2025).

4.2.4 Developed Land; Sealed Surface (u1b)

The majority of the site comprises of developed land; sealed surface (u1b) in the form of a hardstanding car park and vehicular access around the site (**Fig 9**).

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Figure 9. Areas of developed land; sealed surface (u1b) around the site (taken May, 2025).

4.2.5 Buildings (u1b5)

Several buildings (u1b5) are present throughout the site, with further information provided in **Section 4.3.1**.

4.2.6 Intertidal Mudflats (t2d) with secondary habitat code: Marina (700)

The site boundary encompasses an area of the Solent at the north-east, which is designated as a priority habitat mudflat, utilised as part of the Marina (secondary habitat code 700). As such, upon review of the UKHab Version 2.0 Habitat Definitions (2023), it is anticipated that this habitat falls under habitat intertidal mudflats (t2d) (**Fig 10**).

NB. It is recommended that this habitat is confirmed by a marine specialist.

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Figure 10. Area of suspected mudflat to the west of the site (taken May, 2025).

4.2.7 Baseline Biodiversity Units

Baseline Biodiversity Net Gain (BNG) units were calculated shown in **Table 5**. The total habitat units are 3.25, comprising predominantly of urban trees (1.91ha) and littoral mud (1.28). The remaining units comprise modified grassland and vegetated garden. Despite part of the developed land; sealed surface residing with an SPA / Ramsar / SAC/ SSSI, this habitat has very low distinctiveness and biodiversity value of 0.

The 'line of trees' on site (w1g - 33) have been classified as individual urban trees following the Statutory Biodiversity Metric: User Guide (2023) as the linear feature falls under an urban habitat (urban line of trees). The tree helper calculator within the Statutory Biodiversity Metric has been utilised to calculate the area.

Table 5. Baseline Biodiversity Net Gain habitat units.

Habitat Type	Area (ha)	Distinctiveness	Condition Assessment	Strategic Significance	Baseline units
Modified Grassland	0.007	Low	Poor	Area/compensation not in local strategy/ no local strategy	0.01
*Littoral Mud**	0.093	High	*Moderate**	Formally identified in local strategy	1.28
Vegetated Garden	0.023	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	0.05

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Developed Land; Sealed Surface	0.9	V.Low	N/A – Other	Area/compensation not in local strategy/ no local strategy	0.00
Developed Land; Sealed Surface	0.423	V.Low	N/A – Other	Formally identified in local strategy	0.00
Developed Land; Sealed Surface	0.176	V.Low	N/A – Other	Area/compensation not in local strategy/ no local strategy	0.00
Urban Tree	0.1832	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	1.47
Urban Tree	0.0366	Medium	Good	Area/compensation not in local strategy/ no local strategy	0.44
**To be confirmed by a Marine specialist.*					

4.3 Bats

4.3.1 Preliminary Roost Assessment

An assessment of the buildings on site was undertaken, with a location plan shown in **Figure 11**, and the results outlined below.

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Figure 11. Building location plan of the site (Google Satellite, 2025).

Building 1 is a two-storey dwelling, of brick construction with plastic cladding on the exterior, and a pitched tiled roof (**Fig 12**). At the time of the survey, an internal assessment of the structure was not possible. A single-storey attached cladded garage was present at the east with a flat bitumen felt roof. Furthermore, a lean to is present with a slightly pitched plastic roof. No external potential roosting features or evidence of bats was identified, with the soffits and cladding tightly sealed, and no gaps identified beneath the roof tiles (**Fig 12**). Notwithstanding this, as an internal assessment was not possible at the time of the survey, the building is considered to offer ***low potential*** for roosting bats.

Building 2 comprises two single-storey workshop building, also utilised for storage. The buildings are single-skinned with corrugated metal walls and corrugated metal pitched roofs (**Fig 13**). A single-storey extension is present with a cladded half pitched roof utilised as a wash area. Externally, minor gaps were present between and corrugated roof and wall on the gable ends, however upon close inspection with a high-powered torch, no bats or evidence of bats was identified beneath. Internally, the structures are not lined, with areas of plastic incorporated into the roof allowing for internal fluctuating light levels (**Fig 13**). No bats or evidence of bats was identified internally. Due to the location and construction (single-skinned) of the structure, it is subject to fluctuating temperatures and therefore does not provide the stable conditions for roosting bats. As such, Building 2 was considered to be of ***negligible potential*** for roosting bats.

Building 3 is a two-storey building utilised as the Marina office and member's lounge. The building is mostly single-storey, with the eastern aspect of the building comprises of rendered walls and a corrugated pitches roof, whereas the western aspect of the building comprises of plastic cladded walls with a partial flat roof and partial corrugated metal pitched roof. The two-storey aspect of the building comprises of plastic cladded walls with a flat corrugated roof (**Fig 14**). At the time of the survey, an internal assessment of the structure was not possible. Externally, no bats or evidence of bats was found, however minor PRFs were identified. Minor gaps beneath the roof overhang and walls of the southern and northern gable ends were identified (**Fig 14**). Upon closer inspection with a high-powered torch, no bats or evidence of bats was identified beneath. Similarly, gaps are present at the base of the roof beneath the corrugated metal. Due to the location of the building, it is anticipated that the building is subject to fluctuating non-stable weather conditions, such as wind. As an internal assessment was not possible at the time of the survey, the building is considered to offer ***low potential*** for roosting bats.

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Figure 12. Annotated north-eastern elevation of Building 1 (taken May, 2025).

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Figure 13. Annotated eastern elevation of Building 2 (taken May, 2025).

Internal view

Western elevation

Southern elevation

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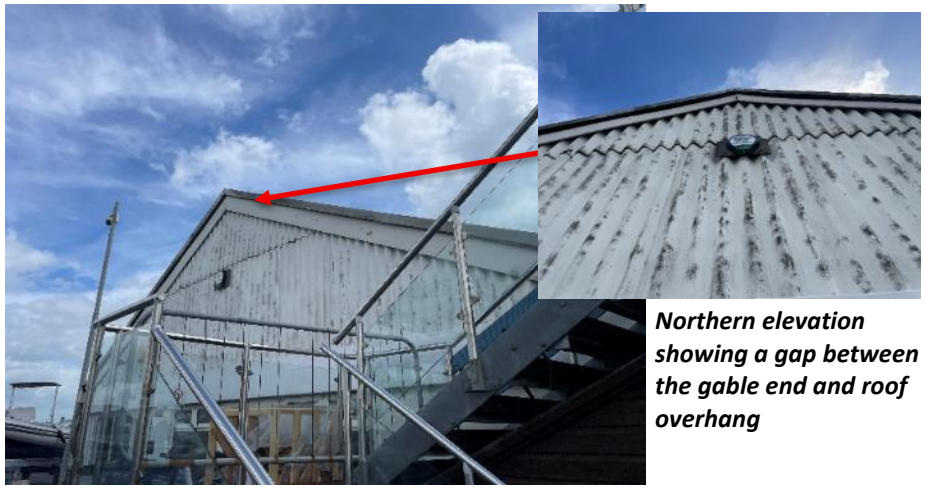
Figure 14. Annotated southern, eastern and northern elevations of Building 3 (taken May, 2025).

Southern elevation of the two-storey aspect

Southern elevation showing a gap between the gable end and roof overhang

Eastern elevation showing gaps at the base of the roof



Northern elevation showing a gap between the gable end and roof overhang

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4.3.2 Ground Level Tree Assessment

A Ground Level Tree Assessment (GLTA) was undertaken during the site walkover on all of the trees within the vegetated garden and along the southern boundary which have the potential to be impacted during the works. Although the trees range in diameter (small to large), no roosting features were identified on any trees. Therefore, all of the trees on site are considered to be of ***negligible potential*** for roosting bats.

4.3.3 Commuting and Foraging Bats

The majority of the site comprises of developed land; sealed surface and buildings. The site is located within an urban area, subject to frequent anthropogenic use, fluctuating light levels associated with the buildings and boats, and fluctuating weather conditions from the Solent (such as winds). Notwithstanding this, the line of trees along the southern site boundary lie adjacent to the Boatyard Patch SINC. This SINC comprises areas of scrub, individual trees, and semi-improved grassland (priority habitat) offering suitable habitat for commuting and foraging bats to the south of the site. As such, the site is considered to offer very ***low potential*** for commuting and foraging bats.

4.4 Reptiles

The habitat on site offers limited suitability for reptiles due to the limited area of suitable habitat on site. The grassland verge, connected to the southern SINC, offers suitable connectivity to the wider environment, and sub-optimal habitat in the form of long-sward grassland and heterogeneity favoured by reptiles. However, this habitat is to be retained as part of the proposals and as such, the area of impact is conserved to be of ***negligible potential*** for common reptiles.

4.5 Badgers and Other Mammals

During the walkover, no evidence of Badgers was noted on site. The habitats present on site comprise predominantly of hardstanding, with the road verge strip at the south of the site disconnected from the southern SINC via a fenceline. The site is situated within an urban area in frequent use, and as such, the site is considered to offer ***negligible potential*** to support commuting and foraging Badger.

4.6 Great Crested Newts

No suitable waterbodies were identified within 500m of the site and no records of Great Crested Newts (GCN) were identified within 2km of the site. Similar to reptiles, the habitat offers limited suitability for GCN. As such, the site is considered to offer ***negligible potential*** to support this species.

4.7 Birds of Conservation Concern (BoCC)

4.7.1 Breeding and Nesting Birds

The line of trees and building on site provide suitable opportunities for nesting birds. However, given the small extent of the suitable habitat to be impacted upon (buildings and potentially trees) and the abundance of more suitable habitat within the wider area, it is considered that the site is of ***low potential*** for nesting birds.

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4.7.2 Wintering Birds

It is worth noting that the site lies approximately 75m west of the nearest Solent Wader and Brent Goose Site: H97 (SPA Site) and approximately 115m west of Solent Wader and Brent Goose Site: H80 (SPA Site) (**Fig 15**). Several other sites are located within and around Hayling Island, comprising a mixture of Primary Support Areas, Secondary Support Areas, Low Use Sites, and Candidate Sites.

However, although the site is fairly close to H97 and H80, Brent Geese prefer large open sites favouring nutrient-rich grassland for grazing (Whitfield, D. 2020). Furthermore, disturbance also has a marked effect on Brent Geese. It is considered that the unsuitable habitat on site (developed land) with regular levels of anthropogenic disturbance, it would be unlikely that Solent Waders and Brent Geese would be present on site.

Most wader species feed at low tide and roost at high tide. Natural roosting sites include saltmarsh areas, shingle banks and coastal grasslands. Although roosting sites tend to be closer to the coast (around 100m from mean high water) they are usually situated away from sources of disturbance, such as housing and industry (Whitfield, D. 2020). As for Brent Geese, it is considered the current levels of disturbance are likely to discourage species from utilising the area of impact.

Notwithstanding this, it is possible for species associated with the nearby designated sites to pass over the site to other designated areas within the strategy networks, within Hayling Island.

Taking into consideration the above, the site is considered to offer ***negligible potential*** for resting Solent Waders and Brent Geese. Notwithstanding this, due to close proximity, disturbance may be possible during construction.

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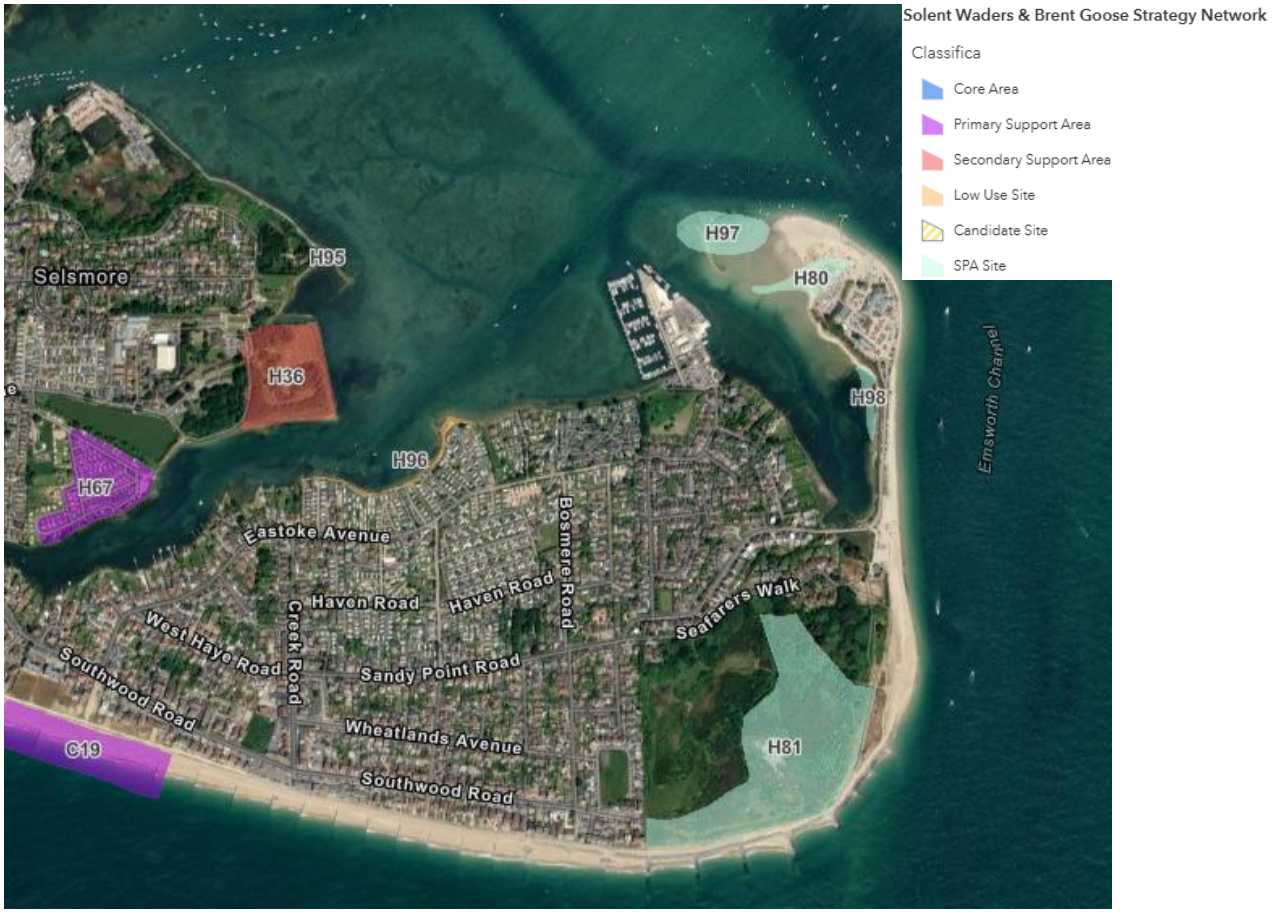
Figure 15. The location of Solent Wader and Brent Geese designated areas within proximity to the site, shown as the approximate red line booundary (SW&BG Strategy Interactive Map, accessed June 2025).



4.8 Hazel Dormouse

The line of trees on site do not offer suitability to support Hazel Dormouse as they are considered to be isolated from the wider environment, with a lack of understory habitat, and do not offer any foraging resources such as fruiting berries. Therefore, the site is considered to offer ***negligible potential*** to support Hazel Dormice.

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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 proposed development at this stage entails the regeneration of the existing marina and erection of circa 9 No dwellings. Plans have not been provided at this stage, however, it is anticipated that works will take place on the existing developed land; sealed surface, vegetated garden, and buildings (considered to be of *site value*), with potential impacts to the modified grassland (*site value*) and line of trees (*local value*). The intertidal mudflats / Solent are proposed to be retained (*international value*). Notwithstanding this, part of the developed land; sealed surface within the Marina falls under international designation (SPA, Ramsar, SAC), and as such, the loss of habitat and potential indirect effects could have a ***moderate adverse impact*** to habitats of up to ***international value.***

5.2.2 Impacts to Wildlife

5.2.2.1 Bats

Building 1 and Building 3 is considered to be of low potential for roosting bats, with Building 2 considered to be of negligible potential. Proposed plans for the buildings have not been finalised at this stage, however any works to the PRFs, roof, and roof void may lead to the damage and destruction of bat roosts, should they present. Therefore, in the absence of mitigation ***an adverse impact is possible*** (scale unable to be determined without species confirmation, if present).

5.2.2.2 Birds of Conservation Concern

Works may be required to the buildings and line of trees on site. In the absence of mitigation, this could lead to the disturbance of nesting birds and damage to their nests. Therefore, an ***adverse impact is possible*** at the ***site level*** if breeding and nesting birds are present.

The proposed works could result in the disturbance of wintering birds within the vicinity, should they be present. It should be noted however the site is subject to high levels of anthropogenic use and is already subject to relatively high noise disturbance. Therefore, a ***minor adverse impact is possible*** at the ***international level***.

5.2.3 Impacts to Designated sites

Part of the site comprises Chichester and Langstone Harbour SPA & Ramsar, Solent Maritime SAC, and Chichester Harbour SSSI, with mudflats priority habitat also present within the

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redline boundary. As such, there is potential for pollution created during the construction phase to impact on the designated sites. Therefore, there is a ***potential adverse impact*** on designated sites of ***international significance*** in the absence of mitigation.

5.3 Site Operation

5.3.1 Impacts to Nocturnal Wildlife

The development may result in an increase in lighting within the general area from external lighting associated with the residential development. This can affect the behaviour, particularly foraging, of nocturnal wildlife such as bats. Therefore, an ***adverse impact is possible*** at a likely ***local level.***

5.3.2 Impacts to Designated Sites

A small part of the site lies within the boundary of the Chichester and Langstone Harbours SPA & Ramsar and the Solent Maritime SAC and therefore within the recreational buffer zone of the Chichester & Langstone Harbours SPA and there is a risk of disturbance from an increase in visitor numbers and recreational disturbance to these designated sites as a result of the erection of residential units. Further, the site lies within a nutrient impact area and an increase in residents has been identified as having a potential impact on designated sites within the Harbours and Solent due to nutrients in wastewater. As such, in the absence of mitigation, the operational phase of the development would have a ***minor certain adverse effect*** on sites of ***International Value***.

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6.0 MITIGATION, COMPENSATION & ENHANCEMENT

6.1 Introduction

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

6.2 Protection of Retained Habitats

All existing habitats that will be retained (trees, intertidal mudflats) will be protected from damage during the works. All the site boundaries outside the area of impact will be fenced using Heras fencing or similar, with a tarpaulin screen to prevent the spread of dust and prevent access by machinery. Where large mature trees are present, they will be protected using standard arboricultural tree protection measures which include protection of the canopy and prevents root compaction. Access will not be permitted behind this fencing by construction personnel. This will protect the SPA, Ramsar, SAC, SSSI, and adjacent SINC from direct damage/disturbance and dust.

6.3 Removal of Virginia Creeper

Virginia Creeper is present within the vegetated garden and encroaching onto the main dwelling on site. As this is a Schedule 9 species listed under the Wildlife and Countryside Act 1981, it is recommended that specialist invasive species contractors are consulted to remove this species, to prevent accidental spread through construction activities.

Measures for removal and details of any herbicides and treatment will be included within the Construction Environmental Management Plan (CEMP) (**Section 6.6.1**).

6.4 Bats

6.4.1 Internal Preliminary Roost Assessment

Due to the limited access to the internal structure of Building 1 and Building 3, an updated walkover will be required to be undertaken by a suitably qualified ecologist to search for any internal evidence of bats and determine the roosting suitability of the building.

6.4.2 Phase II Bat Surveys

Following the internal Preliminary Roost Assessment, if Building 1 and Building 3 are still assessed as offering low potential for roosting bats, one dusk survey will be required (as per the survey effort requirements from BCT 2023 **Table 6**). This survey will need to be completed between May – August. This will include the use of NVA's (Night Vision Aid) to cover the entire building(s).

Table 6. Recommended minimum number of survey visits (from Table 7.1, BCT 2023).

Low Roost Suitability	**Moderate Roost Suitability**	**High Roost Suitability / Known Roost**

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One dusk emergence survey visit between May – August.	Two separate dusk emergence survey visits between May – September, with at least one between May – August. Surveys must be three weeks apart.	Three separate dusk emergence survey visits between May – September, with at least two between May – August. Surveys must be three weeks apart.

6.4.3 Sensitive Lighting for Nocturnal Species

The phase II activity surveys will be used to construct a detailed lighting strategy; however, it is expected that any new lighting on site will follow what is set out in **Section 6.4.3.1 & Section 6.4.3.2** below.

6.4.3.1 During Construction

In order to avoid any disturbance to bats (and other potential nocturnal wildlife) construction works should be limited to daylight hours and should not be undertaken 30 minutes prior to dusk through to dawn. All lighting should be sensitive to the use of the site by nocturnal wildlife, for example by including low-level downward-facing / hooded lights that are sensor-operated where possible.

6.4.3.2 During Operation

In addition, it is recommended that any lighting complies with the following the *Guidance Note 08/23 Bats and Artificial Lighting at night* (ILP / BCT, 2023) produced via a collaboration between the Institute of Lighting Professionals (ILP) and the Bat Conservation Trust (BCT), which outlines the latest recommendations to minimise the impacts of increased artificial lighting on bats. The key recommendations within this document have been outlined below and will be implemented as far as is practicable:

'Light sources, lamps, LEDs and their fittings come in a myriad of different specifications which a lighting professional can help to select. However, the following should be considered when choosing luminaires and their potential impact on Key Habitats and features:

- *All luminaires will lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used*
- *LED luminaires will be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability*
- *A warm white light source (2700Kelvin or lower) will be adopted to reduce blue light component*
- *Light sources will feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012)*
- *Internal luminaires can be recessed (as opposed to using a pendant fitting - See **Fig 16**) where installed in proximity to windows to reduce glare and light spill*
- *Waymarking inground markers (low output with cowls or similar to minimise upward light spill) to delineate path edges (see Case Study 1)*
- *Column heights will be carefully considered to minimise light spill and glare visibility. This should be balanced with the potential for increased numbers of columns and upward light reflectance as with bollards*

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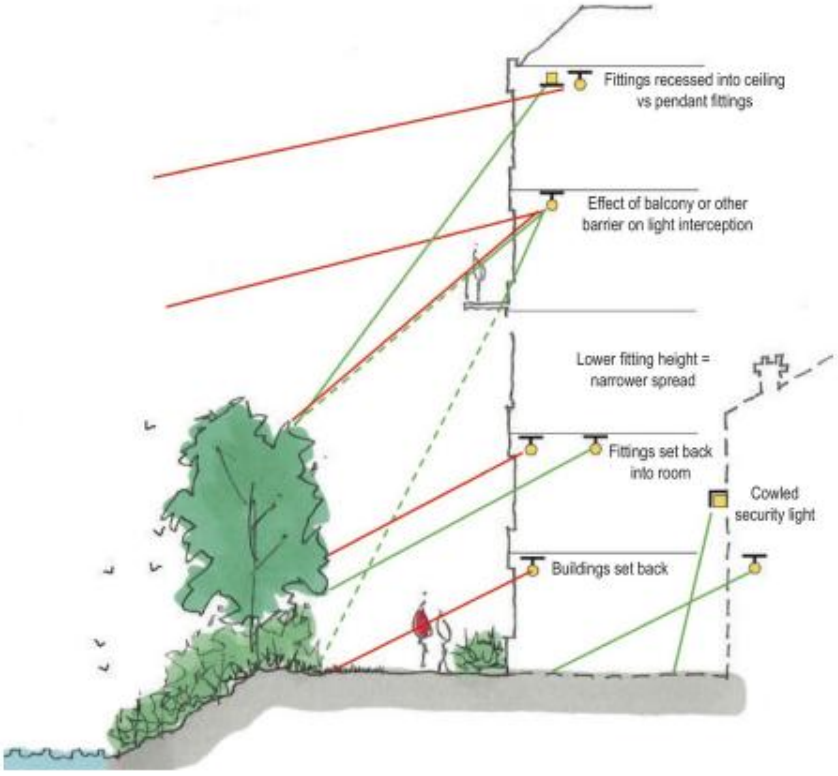
- *Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be considered - See ILP GN01*
- *Luminaires will always be mounted horizontally, with no light output above 90° and/or no upward tilt*
- *Where appropriate, external security lighting will be set on motion sensors and set to as short a possible a timer as the risk assessment will allow. For most general residential purposes, a 1 or 2 minute timer is likely to be appropriate*
- *Use of a Central Management System (CMS) with additional web-enabled devices to light on demand Use of motion sensors for local authority street lighting may not be feasible unless the authority has the potential for smart metering through a CMS*
- *The use of bollard or low-level downward-directional luminaires is strongly discouraged. This is due to a considerable range of issues, such as unacceptable glare, poor illumination efficiency, unacceptable upward light output, increased upward light scatter from surfaces and poor facial recognition which makes them unsuitable for most sites. Therefore, they should only be considered in specific cases where the lighting professional and project manager are able to resolve these issues. See Case Study 6*
- *Only if all other options have been explored, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed. However, due to the lensing and fine cut-off control of the beam inherent in modern LED luminaires, the effect of cowls and baffles is often far less than anticipated and so should not be relied upon solely'*

Figure 16. Internal lighting mitigation options (ILP 2023).



6.5 Birds of Conservation Concern

6.5.1 Avoidance of Impacts to Breeding and Nesting Birds

In order to avoid disturbance of breeding and nesting birds or damage to their nests, any proposed works to the trees or buildings should avoid bird nesting season (typically March – August, dependent on weather). If this is not possible, these habitats should be thoroughly checked by an ecologist immediately prior to works. If any active nests are found, they should be left undisturbed with a suitable buffer within which works cannot take place (ca. 5m) until nestlings have fledged.

6.5.2 Wintering Birds

To avoid potential disturbance impacts during the construction phase to wintering birds utilising the nearby Solent Wader & Brent Goose sites, the following precautionary approach will be assumed.

Activities which could result in sudden and percussive noise pollution should be avoided as far as possible (i.e. materials will be gently placed rather than dropped from height). Furthermore, noisy works (works exceeding 70db) should not take place during peak wintering periods for Dark- bellied Brent Goose and other Solent Waders (October to March, inclusive).

With these mitigation measures in place, it is anticipated noise disturbance during the construction phase will have a likely negligible impact upon any Solent Waders & Brent Geese within the local vicinity.

6.6 Designated Sites

Part of the Chichester and Langstone Harbour SPA & Ramsar, Solent Maritime SAC, Chichester Harbour SSSI, and Mudflats Priority Habitat falls within the redline site boundary. Furthermore, Boatyard Patch SINC lies immediately south of the site. As such, the following measures are proposed in order to mitigate against potential impacts, such as pollution and recreational impacts, during and post construction.

It is not considered that a significant buffer is required from the SINC to the proposed dwellings, due to the existing urban nature of the site.

6.6.1 Construction Environmental Management Plan (CEMP)

Due to the presence of designated sites on site / adjacent site, there is potential for impacts from pollution during construction. A Construction Environmental Management Plan (CEMP) will be produced to address these impacts and ensure all pollution will be managed to avoid any adverse impacts on the sensitive designated sites and their habitats.

6.6.2 Financial Contribution

The site lies within the vicinity of the recreational zone for the Solent SPAs. In order to mitigate for the likely increases in residential pressure upon these SPAs, due to the high densities of

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wildfowl and waders for which the area is predominantly protected, the Solent Recreation Mitigation Strategy (SRMS) has been introduced in collaboration with Natural England, comprising a partnership of all local councils. Mitigation towards the SPA must be provided for all new recreational developments within the 5.6km disturbance zone of the SPA.

The simplest method of providing a necessary suitable and appropriate level of mitigation towards the SPAs associated with the Solent is via financial contributions. These contributions are used to enable the continued use of the coastline in a way that reduces the risks to the bird species of international importance that use the area, for example funding a team of rangers and implementing initiatives to encourage responsible dog walking (Solent Recreation Mitigation Partnership, 2014). It is considered that the contribution, in compliance with the recommendations presented within the SDMP, provides a suitable level of mitigation for the potential adverse impacts associated with the proposed scheme upon the Solent SPA.

The contributions from 1st April 2025 are as follows:

- 1 bedroom property £482
- 2 bedroom property £696
- 3 bedroom property £907
- 4 bedroom property £1067
- 5 bedroom property £1251
- Flat rate £805

6.6.3 Shadow Habitat Regulations Assessment

A Shadow Habitat Regulations Assessment (HRA) will be required to fully inform the Local Planning Authority (LPA) of any potential impacts to the nearby international designated sites.

6.7 Nutrient Neutrality

The site lies within a nutrient impact area where Nitrogen has been identified as having an impact on the Solent designated sites. Therefore, a nutrient budget calculation (following Natural England methodology) will be required. Where this will result in an increase in nutrients, mitigation will be needed to offset this to ensure the site results in nutrient neutrality.

6.8 Biodiversity Net Gain

A biodiversity net gain 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.

6.9 Enhancements

6.9.1 Bat Boxes

Half of the newly built dwellings will have 1 No Ibstock bat brick each (**Fig 16**) integrated within the external brick work. These features are entirely self-contained and available in a variety of different colours to match different construction materials. They should ideally be placed on an elevation which will benefit from some degree of sunlight exposure and be located away from windows.

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Figure 17. Ibstock bat brick 'B' which will be integrated into the gable walls of the newly built dwellings.

If this is not feasible, the following woodcrete models will also be erected on suitable retained trees around the site's boundary:

- 1 No Vivara Pro Miramare Large WoodStone bat box
- 1 No Vivara Pro Large Multi Chamber WoodStone bat box

The woodstone bat boxes will be erected by or under the supervision of an ecologists to ensure they are placed in the most appropriate / effective locations.

6.9.2 Bird Boxes

To act as biodiversity enhancement, a ratio of 1:1 Swift bricks to dwellings will be incorporated on site. The Ibstock 'Eco Home for Swifts' bricks are recommended (**Fig 18**) as they are a discreet and attractive box ideal for new dwellings. The boxes should be installed under the eaves or in high walls in shaded areas out of direct sunlight and away from windows. The installation of such boxes has also been shown to be beneficial for House Sparrows (*Passer domesticus*) which are a nationally declining species. Each dwelling does not need to have a brick; rather as a colony species the preference is to cluster the bricks in groups.

Figure 18. Ibstock eco home for swifts that will be incorporated into the newly built dwellings

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Alternatively, if this is not feasible, the erection of 2 No nest boxes in trees within the retained tree line along the northern boundary will be sufficient. Where possible these nest boxes could be tailored to provide opportunities for red listed/BAP species known from the local area. Vivara Pro Seville 32mm, Seville 28mm or Barcelona Bird Box should be used. These will provide suitable nesting opportunities for a variety of bird species and will increase the nesting opportunities for birds on site.

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