



ecosupport



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Table of Contents

EXECUTIVE SUMMARY	4
1.0 INTRODUCTION	5
1.1 BRIEF	5
1.2 SITE DESCRIPTION & LOCATION.....	5
1.3 PROPOSED DEVELOPMENT	6
2.0 RELEVANT LEGISLATION AND POLICY	7
2.1 LEGISLATION	7
2.1.1 <i>The Conservation of Habitats and Species Regulations (2018)</i>	7
2.1.2 <i>The Wildlife and Countryside Act (1981) (as amended)</i>	7
2.1.3 <i>The Countryside and Rights of Way Act (2000)</i>	7
2.1.4 <i>NERC Act</i>	7
2.1.5 <i>Protection of Badgers Act</i>	7
2.2 POLICY	8
2.2.1 <i>National</i>	8
2.2.2 <i>Local – Draft Havant Borough Local Plan</i>	8
3.0 METHODOLOGY	12
3.1 DESK STUDY.....	12
3.1.1 <i>Data Request</i>	12
3.1.2 <i>Waterbodies</i>	12
3.2 FIELD SURVEY	12
3.2.1 <i>Habitats</i>	12
3.2.2 <i>Badger</i>	13
3.2.3 <i>Bats</i>	13
3.3 ASSESSMENT METHODOLOGY	14
3.3.1 <i>Introduction</i>	14
3.3.2 <i>Valuation</i>	14
3.4 LIMITATIONS	14
4.0 ECOLOGICAL BASELINE	15
4.1 DESIGNATED SITES	15
4.1.1 <i>Statutory</i>	15
4.1.2 <i>Non-Statutory</i>	17
4.2 VEGETATION SURVEY RESULTS	17
4.2.1 <i>Poor Semi - improved Grassland</i>	17
4.2.2 <i>Tall Herb</i>	18
4.2.3 <i>Scrub</i>	18
4.2.4 <i>Tree Lines / Hedgerow</i>	19
4.2.5 <i>Scattered Trees</i>	21
4.2.6 <i>Hard Standing</i>	21
4.2.7 <i>Amenity Grassland / Shrubs</i>	21
4.2.8 <i>Buildings</i>	21
4.3 BAT SURVEY RESULTS	22
4.3.1 <i>Pre-existing Data</i>	22

4.3.2 Preliminary Roost Assessment (buildings)	23
4.3.3 Foraging and Commuting Habitat	27
4.4 BADGERS	27
4.4.1 Pre-existing Information.....	27
4.4.2 Site Survey	27
4.5 REPTILES.....	27
4.5.1 Pre-existing Information.....	27
4.5.2 On Site Suitability	27
4.6 GREAT CRESTED NEWTS.....	27
4.6.1 Pre-existing Records	27
4.6.2 Waterbodies Within 500m	27
4.7 HAZEL DORMOUSE.....	29
4.8 NESTING AND BREEDING BIRDS	29
4.9 BRENT GEESE & WADERS.....	29
4.9.1 Pre-existing Records	29
5.0 LIKELY ECOLOGICAL IMPACTS IN ABSENCE OF MITIGATION	35
5.1 INTRODUCTION.....	35
5.2 SITE PREPARATION AND CONSTRUCTION.....	35
5.2.1 Impacts to Habitats	35
5.2.3 Impacts to Wildlife	35
5.3 SITE OPERATION	36
5.3.1 Impacts to Wildlife	36
5.3.2 Special Protection Areas.....	36
6.0 RECOMMENDATIONS	37
6.1 INTRODUCTION.....	37
6.2 BATS	37
6.2.1 Foraging and Commuting.....	37
6.3 REPTILES.....	37
6.4 MINIMISATION OF DISTURBANCE TO NOCTURNAL WILDLIFE	37
6.5 CHICHESTER AND LANGSTONE HARBOUR SPA 'ZONE OF INFLUENCE'	38
6.6 MITIGATING IMPACTS TO H46B CORE AREA	38
6.6.1 During Construction	38
6.7 ENHANCEMENTS	40
7.0 REFERENCES	41

Executive Summary

Ecosupport Ltd was instructed by Taylor Wimpey Southern Counties to undertake a Preliminary Ecological Appraisal (PEA) of a parcel of land located to the east of Fathom's Reach, Hayling Island, 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:

- Desktop survey submitted to the Hampshire Biodiversity Information Centre (HBIC) September 2020)
- Extended phase I habitat survey (September 2020)

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:

- Suitable habitat for foraging and commuting bats
- Suitable habitat for common reptile species
- Suitable habitat for breeding and nesting birds
- Site adjacent to 'core area' for SPA birds

In the absence of any mitigation measures, the proposed development is anticipated to result in, **certain adverse effects** (significance level to be determined following additional survey work).

Suitable mitigation measures will be outlined within reports that will accompany this document following the conclusion of the additional survey work recommended.

1.0 INTRODUCTION

1.1 Brief

Ecosupport Ltd was commissioned by Taylor Wimpey Southern Counties to conduct a Preliminary Ecological Appraisal (PEA) of a parcel of land to the east of Fathom's Reach, Hayling Island. 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:

- 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 appropriate.

NB If the development does not take place within 18 months¹ of this report 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 parcel of land supporting scattered trees, scrub and unmanaged grassland located to the east of Fathom's Reach, Hayling Island, PO11 0RR (centred on OS grid reference SZ 716 996) (**Fig 1**). The north of the site is bounded by a parcel of unmanaged grassland, the east by an arable field (listed as being a 'core area' habitat for Brent Goose and waders), the south by Southleigh Grove and the west by Fathom's Reach.

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

Figure 1. Redline location plan of the site.



1.3 Proposed Development

At this stage it is understood the proposals will entail the construction of 51 dwellings with associated access and infrastructure.

2.0 RELEVANT LEGISLATION AND POLICY

2.1 Legislation

2.1.1 *The Conservation of Habitats and Species Regulations (2018)*

This 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.

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).

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

This 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 *NERC Act*

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.

2.2 Policy

2.2.1 National

Section 15 of the National Planning Policy Framework (NPPF, 2021) 'Conserving and enhancing the natural environment' states that planning policies and decisions should contribute to and enhance the natural environment. They should do this by protecting and enhancing sites of biodiversity and minimising impacts on and providing net gains for biodiversity, including establishing coherent ecological networks.

The plan states to protect and enhance biodiversity plans should identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks. This includes the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them. Plans should identify the protection and recovery of priority species and opportunities for securing measurable net gains for biodiversity.

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

- if significant harm to biodiversity resulting from a development cannot be avoided, adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact;
- development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- 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 – Draft Havant Borough Local Plan

Policy E15- Ecological Conservation

“Development on any site in the Borough should conserve and enhance the natural environment wherever possible. Planning permission on any site in the Borough will be permitted where:

- a. The applicant has identified and assessed the level of ecological value of the site through appropriate assessment(s) and any matters arising have been addressed through the development proposal at the earliest stage possible;*
- b. The development results in a net gain in biodiversity wherever possible;*
- c. Development avoids the fragmentation and isolation of habitats and wildlife corridors within or close to the development site;*
- d. The development is informed and influenced by the presence of woodlands, trees and hedgerows on site, particularly those protected by a Tree Preservation Order (TPO) or within a conservation area. If the removal of any tree is unavoidable because it would be in best arboricultural practice a replacement tree of at least equal value to that lost should be planted on site unless it is shown to be impractical to do so; and*
- e. Any necessary mitigation plan includes provision for ongoing management and maintenance.*

In addition to the above, priority habitats in the Borough have been identified and afforded protection by a network of designated sites. Development proposals which could affect a designated site will need to consider the impact and respond appropriately:

*For **international nature conservation designations**, planning permission will be refused where:*

- f. There is likely to be a significant effect on the SPA, SAC or Ramsar designation and the proposal is not directly connected with or necessary to the management of that site; and*
- g. The development proposal is not in compliance with the relevant regulations and national policy regarding the assessment of implication for SPAs, SACs or Ramsar sites.*

*For national **nature conservation designations**, planning permission will only be permitted where:*

- h. Development does not have an adverse effect on a SSSI, either individually or in combination with other developments. For local nature conservation designations, planning permission will be permitted where either:*
- i. The value of the designation is retained or enhanced in line with its original criteria for designation through avoidance or mitigation measures; or*
- j. The benefit of the development can be shown to clearly outweigh the substantive nature conservation value of the site and the impact cannot be avoided or mitigated."*

Policy E16 Solent Special Protection Areas

"Planning permission will be granted for residential development resulting in a net increase in population that mitigates a likely significant effect on the Solent SPAs. This mitigation can be provided through either:

- a. A financial contribution; or*

- b. A developer provided package of measures associated with the proposed development designed to avoid or mitigate any likely significant effect on the SPAs; or*
- c. A combination of measures in (a) and (b) above.*

Where these measures cannot be provided development proposals will be refused, unless the applicant can show, subject to meeting the tests of the Habitats Regulations, that there would not be a likely significant effect on the Solent SPAs."

Policy E17 Brent Goose and Wader Feeding and Roosting Sites

"Development proposals on or in the vicinity of sites which are used by Brent Geese and/or waders will be assessed in line with the appropriate regulations. Such proposals will thus require a project level Habitats Regulations Assessment and the Council will consider the Solent Waders and Brent Goose Strategy and the latest survey data when making such an assessment.

For *Core Areas*:

- a. Core areas are considered essential to the continued function of the Solent Wader and Brent Goose network and are functionally linked to the Solent SPAs. They are either irreplaceable or extremely difficult to replace and so their loss would impact on the integrity of the SPA;*
- b. A deliverable mitigation package, which will be able to avoid or mitigate a significant impact on the Solent SPAs, is not considered possible to implement for development on Core Areas in all but exceptional cases. In all likelihood therefore, planning permission for development, other than that which would enhance the site for waders and/or Brent Geese, on Core Sites will be refused; and*
- c. In all but exceptional cases where development is able to demonstrate compliance with b. a deliverable mitigation package will have to meet the full criteria for the replacement of primary support areas, as well as the following requirements:*
 - i. A suitable site of greater size must be provided in close proximity to the Core Area affected*
 - ii. The site must be shown to have a management structure in place that will ensure it is managed in perpetuity for Waders and/or Brent Geese*
 - iii. The replacement site must be demonstrated to be used by the target species prior to the loss of the Core Area.*

For *Primary Support Areas*:

- d. Residential development is allocated on Land North of Sinah Lane (H31) and East of College Road (H41). Both of these sites are identified as Primary Support Areas. As such, development proposals for these sites must provide mitigation for the impact on the Solent SPAs through a refuge area either on-site or extremely close to the site. Planning permission will be granted where the refuge area:*

- i. Continues to provide the ecological function of the Brent Goose and wader network*
 - ii. Is suitable for at least the number of Brent Geese and waders recorded on the site in terms of habitat type and area, timing and availability of habitat and quality of habitat*
 - iii. Is as close to the area to be off-set as possible, taking into account likely impact on the replacement habitat or species likely to use it*
- e. Refuge habitat for Primary Support Areas must be provided upfront with evidence to show it works prior to development taking place. It must also be supported by an agreed costed Habitat Management Plan and fully secured for 80 years by a legal agreement.*

For *Secondary Support Areas*:

- f. Development proposals on Secondary Sites will be considered on a case-by-case basis and will only be permitted where either:*
- i. A replacement refuge is provided on a "like for like" basis on site or within the locality of the site; or*
 - ii. A replacement refuge is provided which is smaller than the area that is being lost to development, along with a suitably scaled financial contribution towards the management of permanent refuge sites for Brent Geese and waders.*
- g. In both options, refuge habitat for Secondary Sites must be provided upfront with evidence to show it works prior to development taking place. It must also be supported by an agreed costed Habitat Management Plan and fully secured for 80 years by a legal agreement.*

For *Low Use and Uncertain Sites*:

- h. If it can be shown that neither Brent Geese nor waders use Low Use and/or Uncertain Sites, then avoidance and mitigation measures may not be needed. This will need to be shown with three years of continuous survey effort, with the site kept in a condition suitable for use by waders and Brent Geese.*
- i. Where Brent Geese and/or waders are likely to be present on the site, planning permission will only be granted where either:*
- i. On site mitigation is provided which is based upon appropriate ecological assessments to the satisfaction of the Local Planning Authority and Natural England; or*
 - ii. A suitably scaled financial contribution is provided towards the management of permanent refuge sites for Brent Geese and waders.*

For *indirect effects*:

- j. Appropriate mitigation will be required where new development or change to access and management has the potential to adversely impact the function of the Brent Goose and wader network.*
- k. The amount and kind of mitigation will be determined by the importance of the Brent Goose and Wader site within the overall network and how the indirect effects could impact the function of the site.*
- l. Avoidance measures should be considered before moving on to mitigation. The package of avoidance and mitigation measures should be discussed with the Council and Natural England*

during the pre-application process and embedded into the development proposals at an early stage.”

3.0 METHODOLOGY

3.1 Desk Study

3.1.1 Data Request

A data request was submitted to the Hampshire Biodiversity Information Centre (HBIC) in order 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.
- Records for waders and Brent Geese

NB bat records were obtained using a 2 km search radius.

3.1.2 Waterbodies

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

3.2 Field Survey

3.2.1 Habitats

The field survey work which forms the basis of the findings of this report was carried out by Adam Jessop MSc ACIEEM, (8 years post MSc graduation experience) on the 14th September 2020. Weather conditions were good with a temperature of 23°C, sunny spells and a light breeze.

The Phase 1 Habitat survey (JNCC, 2010) methodology was adopted which is a method of classifying and mapping wildlife habitats in Great Britain. It was originally intended to provide “...relatively rapidly, a record of semi-natural vegetation and wildlife habitat over large areas of the countryside”. The standard Phase 1 Habitat 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

3.2.2 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.

3.2.3 Bats

An assessment was made of the suitability the buildings and trees on site to support roosting bats based on the presence of any Potential Roost Features (PRFs). This involved the use of 8 x 42 close focus binoculars and a high-powered torch (where required) for a more detailed inspection of any features along with an internal inspection of the accessible loft space. The survey conformed to current best practice guidance as described *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2016) and was undertaken by Dean Swensson (NE class level 2 bat licence holder) on the 9th October 2020.

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 IEEM's *Guidelines for Ecological Assessment in the UK* (CIEEM 2018). Although this assessment does not constitute a formal Ecological/ Environmental Impact Assessment, the IEEM 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

2 of the dwellings that are proposed to be demolished along Fathom's Reach (numbers 67 and 69) were not able to provide internal access during the Preliminary Roost Assessment and as such, only an external assessment of these building was possible. Given the identification of PRFs (and hence requirement for further survey work in 2021), it is not however considered at this stage this has posed a significant constraint on the results of this report (as ample time to arrange a survey is available prior to the follow up emergence surveys being complete).

4.0 ECOLOGICAL BASELINE

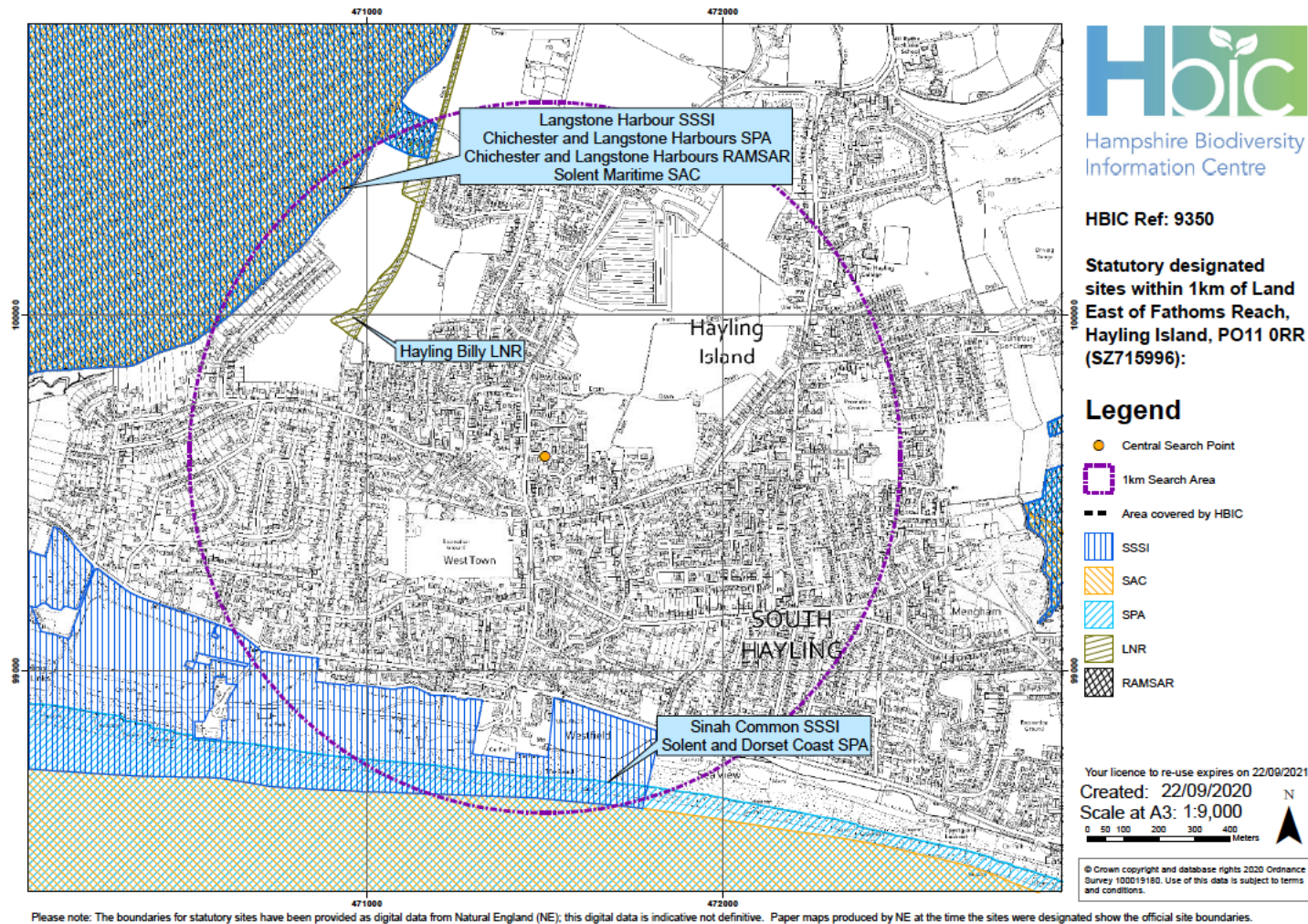
4.1 Designated Sites

4.1.1 Statutory

The HBIC data request has identified the following statutory designated sites located within 1 km of the site (shown in **Fig 2**):

- Langstone Harbour SSSI (0.9 km NW)
- Chichester and Langstone Harbour SPA (0.9 km NW)
- Chichester and Langstone Harbours Ramsar (0.9 km NW)
- Solent Maritime SAC (0.9 km NW)
- Hayling Billy LNR (0.6 km NW)
- Sinah Common SSSI and Dorset Coast SPA (0.8 km S)

Figure 2. Map provided by HBIC which indicates the proximity of the site to the nearby statutory designations.



4.1.2 Non-Statutory

Only 1 SINC was identified as falling within the 1 km search radius by HBIC with this Breachlands East located 0.9 km to the south of the site (shown in **Fig 11**). This is designated under criteria 4A and 6A (*Elytrigia juncea*, *Medicago polymorpha*, *Poa bulbosa*, *Trifolium suffocatum*, *Anthriscus caucalis*).

4.2 Vegetation Survey Results

The vegetation within the site has been described below using the broad Phase I habitat classification terminology as described with JNCC (2010). The below species noted 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 on site comprise (phase 1 habitat map appended):

- Poor semi improved grassland
- Tall herb
- Scrub
- Tree lines / hedgerow
- Scattered trees
- Hard standing
- Amenity grassland / ornamental shrub
- Buildings

4.2.1 Poor Semi - improved Grassland

The dominant habitat type on site is unmanaged poor semi-improved grassland which (from discussions with the owner) has been left unmanaged for a number of years with Any hills developing in places (**Figs 3**). The sward was dominated by grasses such as Perennial Rye Grass (*Lolium perenne*), *Poa* spp, Cocks Foot (*Dactylis glomerata*), *Agrotis* spp, Meadow Foxtail (*Alopecurus pratensis*) and Yorkshire Fog (*Holcus lanatus*). Although somewhat rare within the sward as a whole, a reasonable diversity of forbs was also noted including; Common Knapweed (*Centura nigra*), Common Mallow (*Malva neglecta*), Meadow Cranesbill (*Geranium pratense*), *Crisium* spp, Curled Dock (*Rumex crispus*), Ribwort Plantain (*Plantago lanceolata*), Greater Plantain (*Plantago major*), Yarrow (*Achillea millefolium*), Self-Heal (*Prunella vulgaris*), Creeping Buttercup (*Ranunculus repens*), Red Clover (*Traifolium pratense*), Meadow Vetchling (*Lathyrus pratensis*), Field Bindweed (*Convolvulus arvensis*) and (what appeared to be) Square Stemmed Willowherb (*Epilobium tetragonum*).

Figure 3. View of the unmanaged poor semi improved grassland on-site (taken Sept 2020).



4.2.2 Tall Herb

The south eastern part of the site (adjacent to the existing pathway into the site) supported areas of tall herb habitat as well as grassland. The tall herb was largely dominated by Nettle (*Urtica dioica*) with Common Hogweed (*Heracleum sphondylium*) and Bracken also noted in places.

4.2.3 Scrub

Through a lack of management, large blocks of scrub are developing on site with these particularly associated with the western part of the site (**Fig 4**). Scrub was dominated by Bramble (*Rubus fruticosus* agg) with large areas of Blackthorn (*Prunus spinosa*) dominated scrub also present along the eastern boundary of the site. Further areas of Bramble scrub were also associated with the northern boundary tree line and eastern boundary hedgerow.

Figure 4. Large bank of Bramble dominated scrub associated with the scattered trees located along the western part of the site (taken Sept 2020).



4.2.4 Tree Lines / Hedgerow

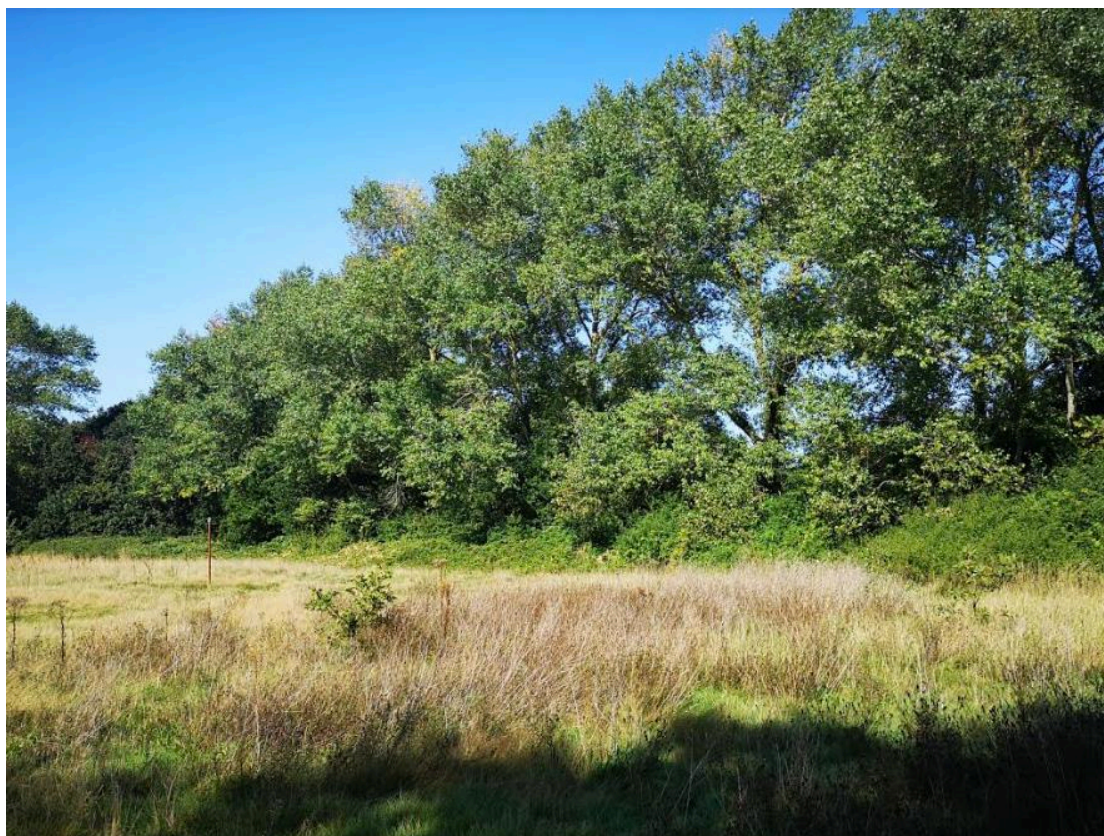
The eastern and northern boundaries of the site are formed by mature trees lines (with the eastern boundary feature more resembling a mature hedgerow) (**Fig 5**). Species present within the eastern boundary hedgerow included *Populus* spp, Elm (*Ulmus* spp), Oak (*Quercus* spp), Hawthorn (*Crataegus monogyna*), Field Maple (*Acer campastre*), Ash (*Fraxinus excelsior*), *Salix* spp, and Blackthorn. The understory supported Bramble, Ivy (*Hedera helix*), Bracken, Wood Sage (*Teucrium scorodonia*) and Stinking Iris (*Iris foetidissima*).

Figure 5. View of the hedgerow located along the site's eastern boundary adjacent to an existing used informal footpath (taken Sept 2020).



The tree line located along the northern boundary supported more mature specimens with these dominated by Oak and *Populus* spp (**Fig 6**).

Figure 6. The mature tree line located along the site's northern boundary (taken Sept 2020).



4.2.5 Scattered Trees

A collection of mature *Populus* spp trees was present along the western boundary of the site with some of these more mature specimens (seen in **Fig 4**). Other trees species noted in this area included Silver Birch (*Betula pendula*), Ash and *Salix* spp.

4.2.6 Hard Standing

Areas of tarmac and block paving hard standing were associated with front of the houses off Fathom's Reach. These areas were largely devoid of any significant vegetation.

4.2.7 Amenity Grassland / Shrubs

The gardens associated with the 5 properties included within the redline boundary of the site off Fathom's Reach supported areas of managed amenity grassland along with ornamental / amenity shrub planting.

4.2.8 Buildings

The final habitat type is buildings and these has been described in greater detail in section 4.3.2 below as part of the preliminary roost assessment.

4.3 Bat Survey Results

4.3.1 Pre-existing Data

HBIC have returned the following records from within 2 km of the site (**Table 1**).

Table 1. Bat records using a 2 km search radius as provided by HBIC.

Taxon Name	Common Name	No of Records	Max Abundance	Notes
<i>Eptesicus serotinus</i>	Serotine	18	2	All bat detector recordings
<i>Myotis</i>	Myotis bat	11	1	All bat detector recordings
<i>Myotis bechsteinii</i>	Bechstein's bat	1	1	Caught in a mist net with lure with low resolution grid reference indicating approx. 1 km to west of site.
<i>Myotis daubentonii</i>	Daubenton's Bat	4	3	All bat detector recordings
<i>Myotis mystacinus/brandtii</i>	Whiskered / Brandt's bats	1	1	Field recording
<i>Myotis nattereri</i>	Natterer's	1	1	Caught in a mist net with lure
<i>Nyctalus leisleri</i>	Lesser Noctule	1	1	Field recording
<i>Nyctalus noctula</i>	Noctule Bat	3	1	All bat detector recordings
<i>Pipistrellus</i>	Pipistrelle spp	27	127	19 roosts records with a number of maternity roosts also present.
<i>Pipistrellus nathusii</i>	Nathusius's Pipistrelle	1	1	Bat detector recording
<i>Pipistrellus pipistrellus</i>	Common Pipistrelle	83	387	At least 30 roost records with a number of large maternity roosts

				(100+ bats) present.
<i>Pipistrellus pygmaeus</i>	Soprano Pipstrelle (55 kHz)	70	45	1 roost present with the majority of calls from bat detectors
<i>Plecotus</i>	Long-eared sp.	5	1	1 roost present
<i>Plecotus auritus</i>	Brown Long-eared Bat	5	1	2 roost records

4.3.2 Preliminary Roost Assessment (buildings)

The results of the preliminary roost assessment undertaken covering the buildings on site is provided within **Table 2** below

Table 2. Findings of the preliminary roost assessment.

Building	Figure(s)	Description of Construction	PRFs / Evidence of Occupation	Assessed Roost Potential
61, 63, 65, 67 and 69 Fathom's Reach	Figure 7. View of the frontage No's 61 – 69 Fathom's Reach that will all be demolished under the current proposals. 	Row of houses with 4 staggered terraces and a link detached dwelling. All of rebrick wall construction with corrugated concrete roof tiles, wood style PVC windows and wooden soffits / fascia's. All buildings relatively modern in construction with roof tiles underlined with intact bitumen roofing felt (Fig 8).	All dwellings in a relatively good state of repair with gaps within roof tiles limited to small gaps in the mortar at the ridge tiles of No's 61 and 67. Gaps also noted into soffits and fascia's on gables ends although these were again limited in number. No evidence of bat occupation noted within the accessible loft spaces (<i>NB the loft spaces of No's 61 and 69 were not accessible during the PRA.</i>).	<i>All considered to be of Low roost potential</i>

Figure 8. View of the loft space of No 65 with intact roofing felt underlining the tiles.



4.3.3 Foraging and Commuting Habitat

The site supports a mosaic of habitats including unmanaged grassland, large scrub banks, scattered mature trees and hedgerows. These habitats can all be considered of value to foraging and commuting bats although when viewed in a wider context, the immediate surrounding habitat is of more limited value with arable fields and residential houses dominating. Taking this into account, along with the high number and diversity of records provided by HBIC (including Annex II Bechstein's) the site is considered to be of **Moderate potential** for foraging and commuting bats.

4.4 Badgers

4.4.1 Pre-existing Information

No records of Badger were provided by HBIC from within the 1 km search radius.

4.4.2 Site Survey

No evidence of resident Badger was noted whilst undertaking the walkover survey on site although the grassland can be considered to provide a potentially suitable foraging resource.

4.5 Reptiles

4.5.1 Pre-existing Information

HBIC did not return any records of reptile presence from within 1 km of the site.

4.5.2 On Site Suitability

The grassland areas on site have been left unmanaged for a number of years supporting a dense tussocky structure (with Anthills also present) along with areas of Bramble scrub which would create the 'ecotones' favoured by common reptile species (Edgar et al., 2010). Although no local records of reptile presence were provided by HBIC, anecdotal records of Slow Worm presence were given by local residents and given the maturity of the habitat on-site and the insolation opportunities, it is considered to be of High potential for common reptile species.

4.6 Great Crested Newts

4.6.1 Pre-existing Records

HBIC did not return any records of GCN presence from within the 1 km search radius.

4.6.2 Waterbodies Within 500m

Only a single pond was shown on available OS maps within a 500m radius from the site with this located 450 m to the north west of the site (seen in **Fig 9** below). Drainage ditches are also shown along the northern and eastern boundaries of the site although these were both completely dry during the walkover survey conducted in September (**Fig 10**). Taking the absence of records into account and the lack of nearby suitable waterbodies, the works would be considered to have a Negligible impact upon GCN.

Figure 9. OS map showing the only pond noted within 500m of the site located approximately 450 to the NW (central point within site indicated by the red circle).

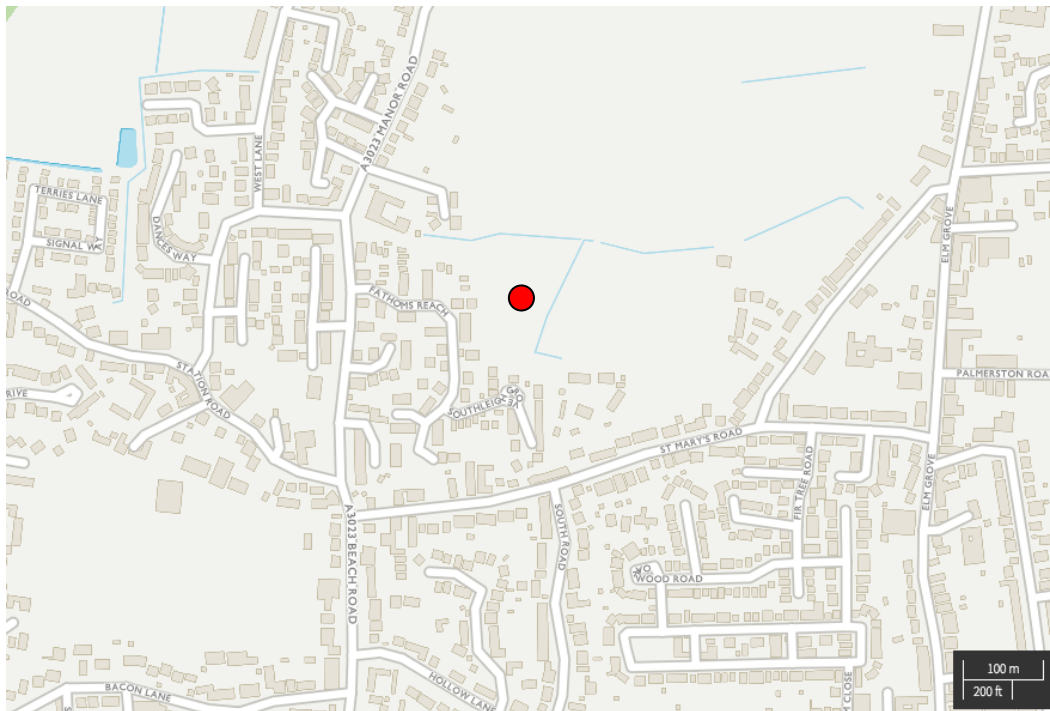
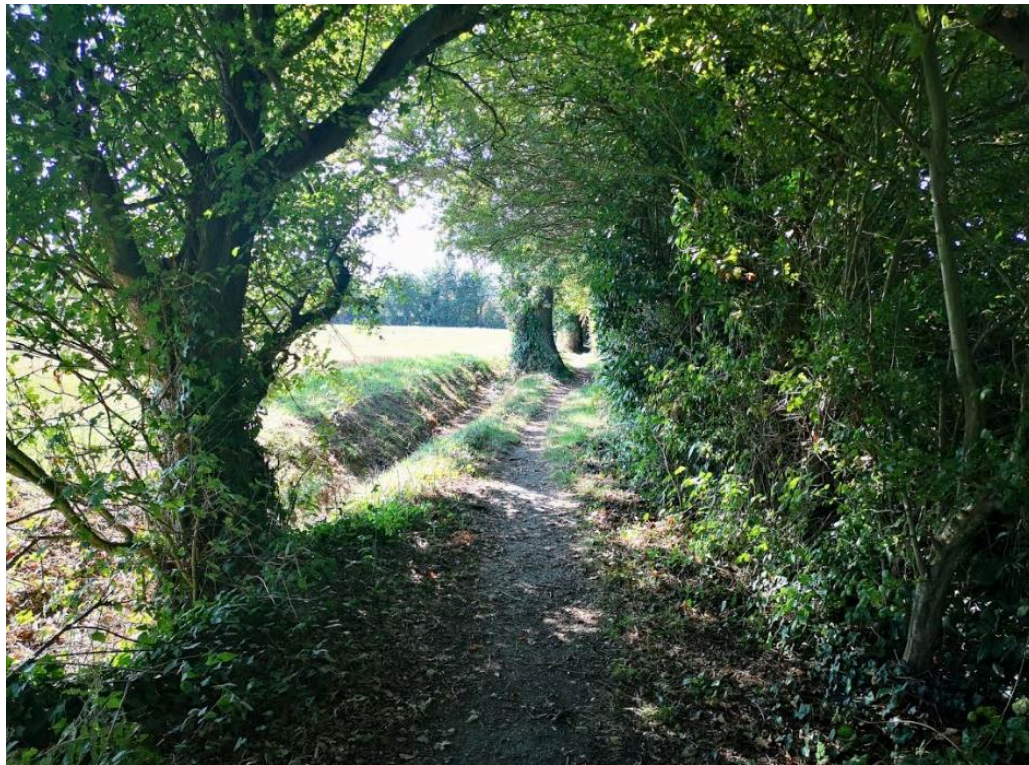


Figure 10. The drainage ditch just beyond the eastern boundary of the site which was completely dry during the walkover (taken Sept 2020).



4.7 Hazel Dormouse

HBIC did not return any records of Dormouse (*Muscardinus avellanarius*) presence from within the 1 km search radius and using freely available online resources, no records from within Hayling Island itself were noted. Although the habitats on site can be considered suitable with large areas of scrub and a variety of tree / hedgerow species of known benefit to the species (as per Bright et al., 2006), the habitats are somewhat isolated and do not connect into any areas of woodland in the wider landscape (with roads also acting as breakages in the connectivity to the wider hedgerow network). As such, the site is considered to be of **Negligible** potential for Dormice and no further survey work is considered necessary.

4.8 Nesting and Breeding Birds

HBIC have returned records for a variety of different bird species including a number of NERC S41 listed species and Birds of Conservation Concern (BoCC). The habitats on site can also be considered suitable for a variety of these species with mature hedgerows, scrub and tree lines. As such, the site is considered to be of **High** potential for breeding and nesting birds (although large areas of the suitable habitat will be retained).

4.9 Brent Geese & Waders

4.9.1 Pre-existing Records

The site itself is listed within the Solent Brent Goose and Wader strategy under parcel number H45 which is listed as having only negative records (as per **Fig 11**). The site is however adjacent to parcel H46B which is listed as being a 'core area' with records from within this parcel shown in **Table 3**.

Figure 11. The non-statutory designated sites within 1 km as provided by HBIC (including those listed within the SW&BGS). This indicates the site is listed as 'only having negative records' although is adjacent to a 'core area'.

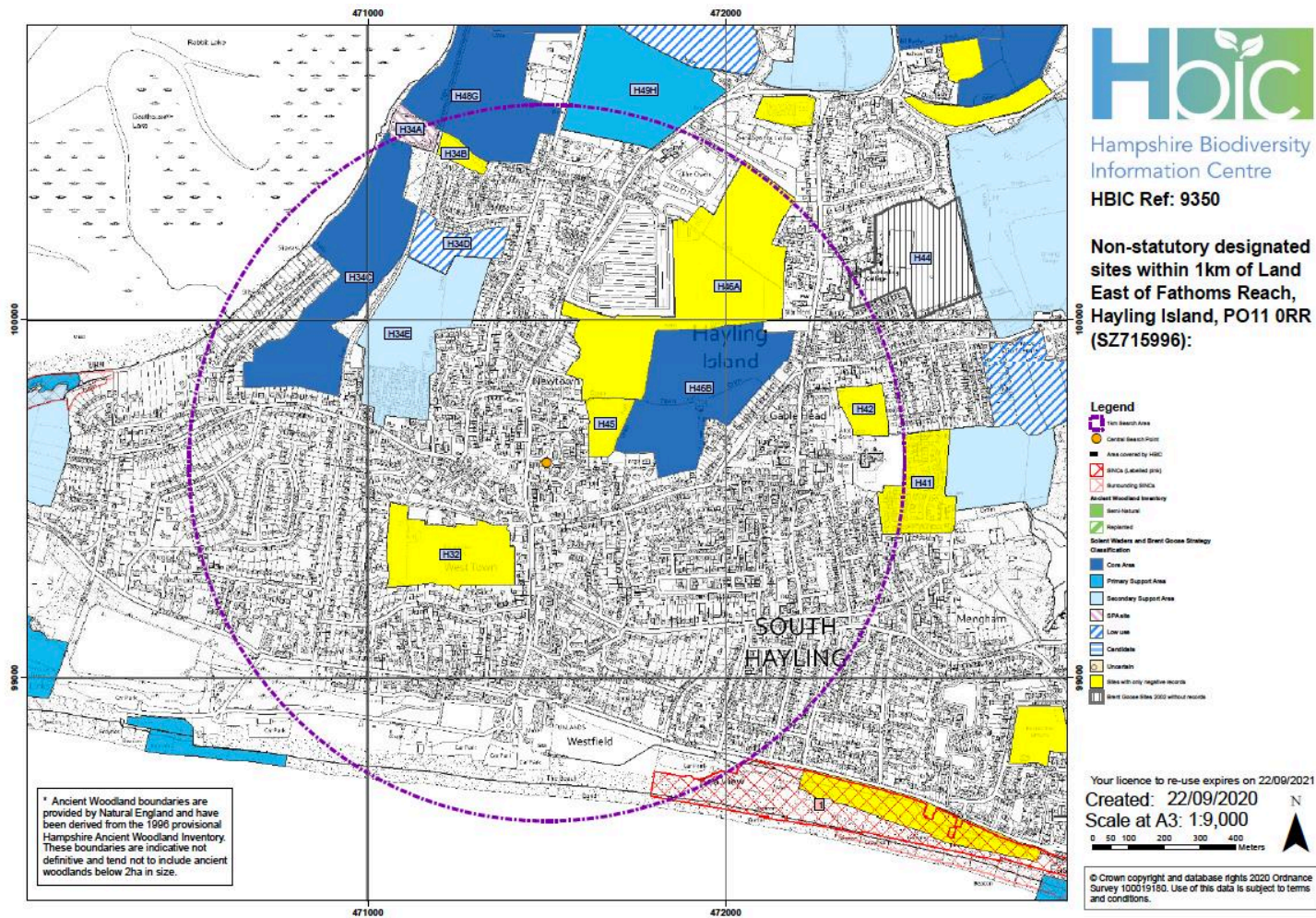


Table 3. Brent Goose and Wader records as provided by HBIC for the H46B parcel adjacent to the site's eastern boundary.

Date of Record	Species	Max Count	Use
07/01/2013	Brent Goose (dark-bellied)	200	Feeding
09/01/2013	Brent Goose (dark-bellied)	150	Feeding
24/01/2013	Brent Goose (dark-bellied)	2	
28/01/2013	Brent Goose (dark-bellied)	200	Feeding
17/02/2013	Brent Goose (dark-bellied)	200	Feeding
19/02/2013	Brent Goose (dark-bellied)	250	Feeding
27/02/2013	Brent Goose (dark-bellied)	250	Feeding
17/03/2013	Brent Goose (dark-bellied)	250	Feeding
20/03/2013	Brent Goose (dark-bellied)	250	Feeding
21/03/2013	Brent Goose (dark-bellied)	250	Feeding
22/03/2013	Brent Goose (dark-bellied)	300	Feeding
19/11/2014	Brent Goose (dark-bellied)	500	Feeding
21/11/2014	Brent Goose (dark-bellied)	250	Feeding
28/11/2014	Brent Goose (dark-bellied)	80	Feeding
29/11/2014	Brent Goose (dark-bellied)	200	Feeding
12/01/2015	Brent Goose (dark-bellied)	200	Feeding

16/01/2015	Brent Goose (dark-bellied)	200	Feeding
17/01/2015	Brent Goose (dark-bellied)	300	Feeding
20/01/2015	Brent Goose (dark-bellied)	50	Feeding
22/01/2015	Brent Goose (dark-bellied)	50	Feeding
31/01/2015	Brent Goose (dark-bellied)	70	Feeding
03/02/2015	Brent Goose (dark-bellied)	30	Feeding
04/02/2015	Brent Goose (dark-bellied)	35	Feeding
08/02/2015	Brent Goose (dark-bellied)	50	Feeding
09/02/2015	Brent Goose (dark-bellied)	50	Feeding
17/02/2015	Brent Goose (dark-bellied)	200	Feeding
19/02/2015	Brent Goose (dark-bellied)	50	Feeding
22/02/2015	Brent Goose (dark-bellied)	50	Feeding
06/09/2015	Brent Goose (dark-bellied)	150	Feeding
07/09/2015	Brent Goose (dark-bellied)	150	Feeding
08/09/2015	Brent Goose (dark-bellied)	250	Feeding
12/09/2015	Brent Goose (dark-bellied)	200	Feeding
13/09/2015	Brent Goose (dark-bellied)	200	Feeding
14/09/2015	Brent Goose (dark-bellied)	200	Feeding

02/12/2016	Brent Goose (dark-bellied)	107	Roosting
06/12/2016	Brent Goose (dark-bellied)	150	
07/12/2016	Brent Goose (dark-bellied)	250	
08/12/2016	Brent Goose (dark-bellied)	250	
12/12/2016	Brent Goose (dark-bellied)	200	
13/12/2016	Brent Goose (dark-bellied)	200	
14/12/2016	Brent Goose (dark-bellied)	200	
16/12/2016	Brent Goose (dark-bellied)	1	Roosting
17/12/2016	Brent Goose (dark-bellied)	300	Feeding
19/12/2016	Brent Goose (dark-bellied)	1000	Feeding
30/12/2016	Brent Goose (dark-bellied)	300	Feeding
01/01/2017	Brent Goose (dark-bellied)	50	Feeding
02/01/2017	Brent Goose (dark-bellied)	200	Feeding
05/01/2017	Brent Goose (dark-bellied)	1000	Feeding
11/01/2017	Brent Goose (dark-bellied)	150	
16/01/2017	Brent Goose (dark-bellied)	400	Feeding
17/01/2017	Brent Goose (dark-bellied)	1100	
18/01/2017	Brent Goose (dark-bellied)	400	Feeding

19/01/2017	Brent Goose (dark-bellied)	400	Feeding
20/01/2017	Brent Goose (dark-bellied)	400	Feeding
21/01/2017	Brent Goose (dark-bellied)	200	Feeding
01/02/2017	Curlew	3	
03/02/2017	Curlew	3	
08/02/2017	Curlew	4	
09/02/2017	Curlew	3	
10/03/2017	Brent Goose (dark-bellied)	2	
10/03/2017	Curlew	2	
20/03/2017	Brent Goose (dark-bellied)	1	

The result as shown in **Table 3** above indicate the importance of this land parcel for Brent Geese feeding with a maximum count of 100 Geese recorded during the surveys in 2017.

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 development will result in the loss of poor semi improved grassland, scrub and tall herb with the majority of this habitat considered to be of value at the **Site** level of significance. The development will however be taking place adjacent to mature hedgerows and tree lines which could be harmed through dust deposition and root zone compaction (with these features considered to be of **Local** value.) **Therefore, a potential minor – moderate adverse impact upon habitats of value at the local level is possible.**

5.2.3 Impacts to Wildlife

There were a range of suitable habitats present on site noted which could be used by breeding and nesting birds with a diverse range of local records also returned by HBIC for within a 1km radius of the site. Therefore, an **adverse impact is possible** if clearance works are undertaken without adequate mitigation.

There are areas of habitat that could be used by common reptile species on-site. As such, removal of suitable habitat without adequate mitigation would constitute an offence under the W&CA, 1891 and It is considered this would result in a **minor – moderate adverse impact to a species of local value** (scale to be determined following population surveys).

Suitable habitat for foraging and commuting bats was also identified. Consequently, construction works could result in the disturbance of foraging habitat and commuting routes. In the absence of mitigation, this is considered to have a likely **Moderate adverse impact** (scale of significance to be determined following additional recommended survey work).

The site also lies adjacent to the parcel of land listed as being a 'core area' for SPA birds and is of particular importance to Dark Bellied Brent Geese. Construction works associated with the development will include constructional traffic and mechanical and human working activities (such as piling). This will increase noise and movement activity to the western edge of the H46B 'Core Area' parcel that could indirectly have disturbance affects upon SPA birds including Brent geese. Different types of disturbance stimuli are characterised by different avifaunal reactions and the level of reaction is not uniform to certain types of activity. Generic guidelines at present are precautionary for consenting requirements whereby a 70dB noise threshold has been developed over a period of years, based on published data as well as findings from primary observations (e.g. Cutts et al; 2009). There are further potential means of indirect disturbance during construction through dust deposition into the adjacent fields.

5.3 Site Operation

5.3.1 Impacts to Wildlife

The development is taking place in an area within which night time lighting is minimal and therefore any additional lighting associated with the development could result in disturbance to bats along with any other nocturnal wildlife present). Therefore, any further **adverse impact is likely** on any bats present in the vicinity due to lighting.

5.3.2 Special Protection Areas

The development will take place well within the 5.6 km 'disturbance zone' and in line with Policy E16 of the Local Plan *"It is Natural England's advice that all net increases in residential development within the 5.6km 'Zone of Influence' are likely to have a significant effect on the SPA either alone or in-combination with other development"*. As such the increase in visitor numbers would have an **adverse impact** to features of **International Significance**.

Once the development is operational the residents associated with the new development will lead to a minor increase in the local population which may make use of the existing public bridleways which go around the N46B parcel. This increase in visitor numbers and (if they are walking a dog off lead for example) could lead to increased incidences of Brent Goose and Wader disturbance which would have a **minor – major** (depending on scale of impact) adverse impact to bird assemblages **International Significance**.

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.

6.2 Bats

6.2.1 Foraging and Commuting

Based on the **Moderate habitat** suitability assessment for foraging and commuting bats, in accordance with the latest BCT guidelines (Collins (ed) 2016) (as shown in Table 8.3 from the guidelines):

“One survey (i.e. activity transect) visit per month (April – Oct) in appropriate weather conditions for bats. At least one of these surveys should comprise dusk and pre-dawn (or dusk to dawn) within one 24 hr time period.”

In addition to this, automated surveys are also recommended with:

“Two locations per transect, data to be collected on five nights per month (April – October) in appropriate weather conditions for bats”

This information will be used to inform a sensitive lighting strategy and feed into the layout to ensure areas of greatest importance for bats are protected.

NB if any Myotis spp calls are recorded that resemble possible Bechstein's, more in depth survey work may be required (such as trapping surveys) to ascertain if this species is using the site.

6.3 Reptiles

Habitats within the site have been assessed as suitable to support reptiles. These include areas of unmanaged grassland, scrub and tall ruderal which provide suitable habitat for supporting common species of reptile. ***It is recommended that a suite of reptile presence/likely absence surveys be completed.*** This would involve the laying of artificial refugia within areas of suitable habitat and checking the refugia on seven occasions between March and mid-October (optimal survey season April, May and September with July and August typically not considered appropriate) in suitable weather conditions. Should reptiles be present it is recommended that suitable habitats are retained and protected during works, with exclusion fencing used if necessary to ensure reptiles cannot enter the construction area. Translocation of reptiles out of construction area may also be necessary.

6.4 Minimisation of Disturbance to Nocturnal Wildlife

A more detailed scheme of minimising the potential impact of lighting upon sensitive species will be included within the bat activity survey results and mitigation strategy.

6.5 Chichester and Langstone Harbour SPA 'Zone of Influence'

The site lies within the vicinity (approximately 0.9 km to the north) of the Chichester and Langstone Harbour SPA, Ramsar, SSSI and SAC. In order to mitigate for the likely increases in residential pressure upon this SPA, due to the high densities of 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.

In April 2020 a sliding scale of contribution, based upon the number of dwellings per residential unit, was introduced:

- £356 for 1 bedroom dwelling
- £514 for 2 bedroom dwelling
- £671 for 3 bedroom dwelling
- £789 for 4 bedroom dwelling
- £927 for 5 bedrooms or more

Therefore, a contribution will be made either prior to planning permission being granted, by completing the Agreement and sending the completed form along with mitigation contribution to the Planning Agreements Officer at the Local Planning Authority or by completing a Unilateral Undertaking before planning permission is granted with the per dwelling payment made before the development is implemented.

6.6 Mitigating Impacts to H46B Core Area

6.6.1 During Construction

One of the key issues with the close proximity of a 'Core Area' on this scheme relates to the potential for noise mediated disturbances to SPA birds. To avoid disturbing birds using the area, it is recommended to keep construction noise to below 70dbAmax (as measured at the sensitive receptor). Following the precautions in **Table 4** should result in a reduction in construction noise levels to below this threshold (***NB further information is provided within the Shadow HRA (Ecosupport 2021) which accompanies this application***).

Table 4. Practical measures and sensitive working practices to reduce noise during construction.

Issues(s) to Control	Measures to be Adopted
General noise control measures	• Avoid simultaneous operation of noisy equipment. • Shut down all plant and equipment in intermittent use between work periods or throttled down to minimum idling speed. • Erect as early as possible noise source screening structures such as stores to shield the noise sensitive receivers (NSR). • Perform excavation works to the south, which is furthest away from the 'primary support habitat', to allow earth materials to shield the area from noise sources. • Located plant known to emit noise strongly in more than one direction oriented to direct noise away from the 'primary support area'. • Locate noisy equipment and plant as far away from the 'primary support habitat' as practically possible. • Maintenance and servicing of equipment and vehicles in accordance to manufacturers recommendations especially for noise mitigation components e.g. retaining silencers and mufflers supplied with construction equipment. • Erect temporary noise barriers constructed from readily available building materials or commercially available sound absorbing panels along the eastern boundary of the site adjacent to the H46B Core Area (surface mass of barrier material must be greater than 7kg/m², with the length at least 5 times its height). This can achieve noise reduction of 5 - 10 dB(A).
Powered mechanical equipment from general construction works	Select quiet equipment whenever possible: • Silenced/super silenced compressors or electric compressor (when mains power available); • Hydraulic concrete cutters and crushers, and rock drills (up to 20 dB noise reduction). • Pneumatic breakers fitted with mufflers and damping collars (up to 21dB noise reduction)

Site staff shall also be competent to perform tasks that have the potential to cause a significant ecological impact. Competence is defined in terms of appropriate education, training and experience. Ecological awareness and training shall be achieved by:

- Site induction provided during which information on best practice guidance for reducing the impacts of noise, the purpose and importance of the sound barrier, air pollution and appropriate storage of hazardous substances.
- The locality of Designated Sites and the adjacent 'Core Area', the associated protection and importance will be highlighted.

Environmental posters and site notices will be erected around the site

6.7 Enhancements

Based on the evolving nature of layouts through the design process, it is considered most appropriate to provide measures that will enhance the site's biodiversity through a stand-alone Biodiversity Enhancement and Mitigation Plan (BEMP) which can be secured via a suitably worded condition of planning.

7.0 REFERENCES

ARG (2010) ARK UK Advice Note 5, Great Crested Newt Habitat Suitability Index, May 2010

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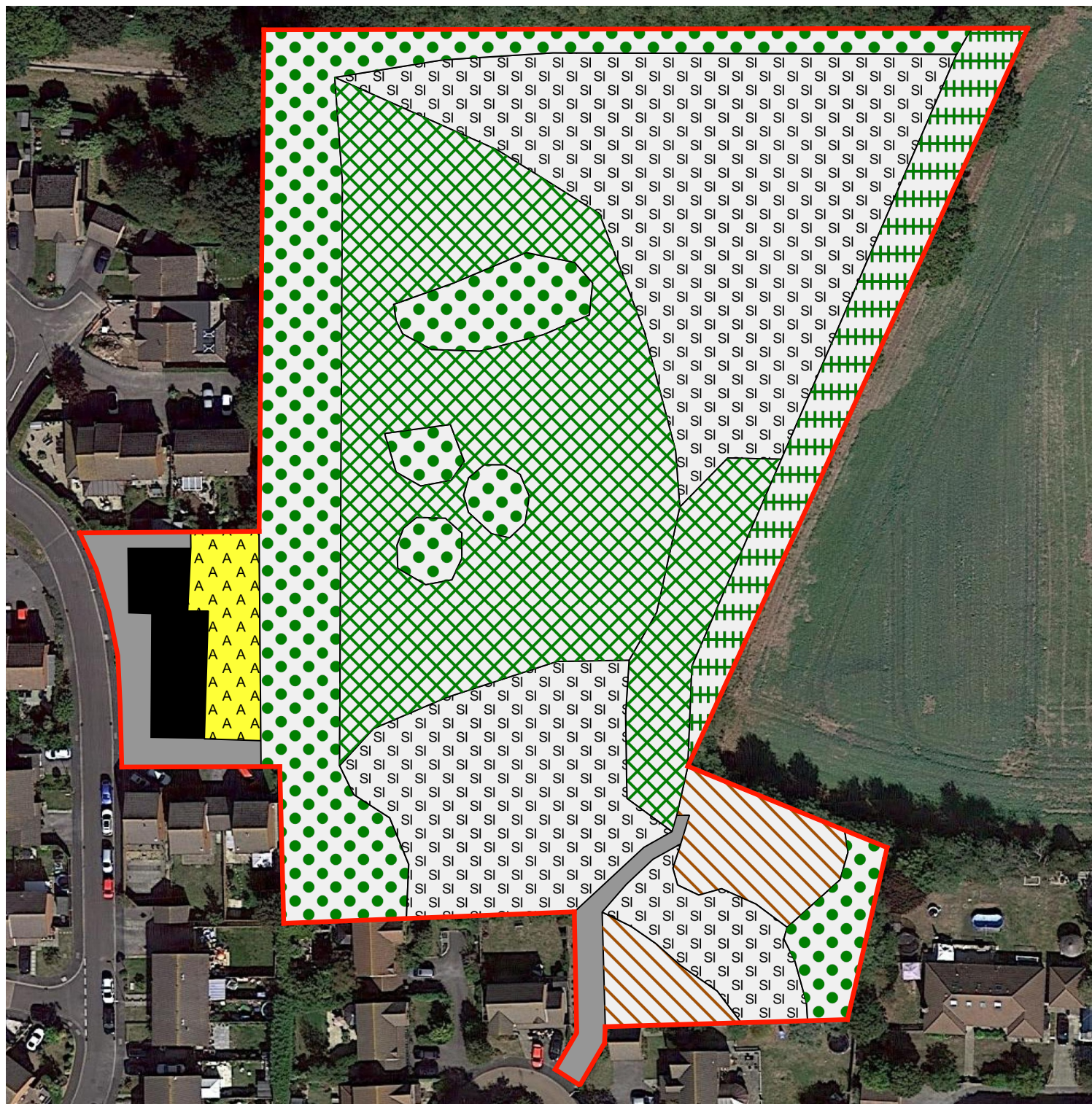
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Cutts, N.D., Phelps, A., & Burdon, D., (2009) Construction and Waterfowl: Defining Sensitivity, Response, Impacts and Guidance. Report to Humber INCA, Institute of Coastal Studies, University of Hull

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JNCC (2010) Handbook for Phase 1 Habitat Survey

Natural England, 2011 *Badgers and Development: A Guide to Best Practice and Licensing*



Legend

- Site boundary
-  Poor semi-improved grassland
-  Scrub
-  Scattered trees
-  Tall herb
-  Amenity grassland
-  Hedgerow with trees
-  Buildings
-  Hard Standing



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Map	Phase I Habitat Survey
Site	Land East of Fathom's Reach
Client	Taylor Wimpey Southern Counties
Date	19/10/2020

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