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PRELIMINARY ECOLOGICAL APPRAISAL

Land at Netley Central Club, Netley,
Southampton

Report Reference: BG19.291

September 2019



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Report	Name	Signature	Date
Prepared by	Tom Hough		12/09/2019
1 st Check by	Lucinda Sweet MCIEEM		13/09/2019
2 nd Check by	Paul Sheridan GradCIEEM		26/09/2019
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Project Details

Project carried out by:

Brindle and Green

Unit 3, Silverhill Court

Radbourne

Derby.

DE6 4LY

Head Office: 0800 222 9105

Email: info@brindlegreen.co.uk

Website: www.brindlegreen.co.uk

Project carried out for:

Whitman Builders Ltd.

11 Tenterton Avenue

Southampton

SO19 9HT

Project site:

Land at Netley Central Club

24 Station Road,

Netley,

Southampton

SO31 5AE

Grid Ref. SU 45753 08393

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1 Summary

- 1.1 Brindle & Green Ltd were commissioned by Whitman Builders Ltd to undertake a Preliminary Ecological Appraisal incorporating a Phase 1 Habitat Survey and Protected Species Assessment on an area of land at the Netley Central Club, Netley, Southampton. This report summarises the potential ecological constraints to the full planning application for development of eight residential dwellings facilitated by site clearance. Design plans are provided within Appendix 6 of this report. The survey was carried out on the 6th September 2019.
- 1.2 The red line boundary is approximately 0.4 hectares in extent and comprises two adjoining sections. The first consists of scattered fruit trees and native trees forming an orchard with unmanaged amenity grassland and scrub. The second comprises sections of the hardstanding car park associated with Netley Central Club. The application site was evaluated to support habitats of a low biological quality offering site value on a local scale.
- 1.3 The habitats described within this report have the potential to support protected and/or notable species. As such, this report outlines important measures to protect species during site clearance, and recommendations to improve the biodiversity status of the site post development. A full description of the recommendations can be found within Chapter 7, the table below is a summary of the ecological issues recommended for further consideration as a result of our initial investigations:

Ecological Consideration	Recommendations (e.g. further survey, mitigation)	Timing
Breeding birds	Reasonable avoidance measures and enhancements. See Chapter 7.	Before and during development.
Bats	Reasonable avoidance measures and enhancements. See Chapter 7.	During and post development.
Badgers	Reasonable avoidance measures. See Chapter 7.	During development
Reptiles	Reasonable avoidance measures. See Chapter 7.	During development.

2 Introduction

- 2.1 The purpose of this assessment was to provide a Preliminary Ecological Appraisal of the site incorporating a Phase 1 Habitat Survey and Protected Species Assessment to establish the likelihood of the site supporting protected species. The survey provides detail on the need for any additional, more detailed protected species surveys, likely mitigation and any opportunities for enhancement.
- 2.2 The red line boundary is approximately 0.4 hectares in extent and comprises an area of land adjoining the Netley Central Club, situated within the centre of Netley, a small town 5km to the south-east of the centre of Southampton. The site is surrounded by residential and commercial development. Woodland and parkland are located 0.3km to the south east within the Royal Victoria Country Park as well as to the 0.6km north-west at Netley Abbey. Further woodland and grazing pasture are located to the north-east beyond areas of residential development. The site is the subject of a full planning application for development of eight residential dwellings facilitated by site clearance. Design plans are provided within Appendix 6 of this report
- 2.3 The legislation relevant to protected species within the United Kingdom is summarised within Appendix 4.
- 2.4 Results and recommendations contained within this report have been prepared by an experienced ecologist and are therefore the view of Brindle & Green Limited. The survey is based on information provided by our client, the development proposals, results of the desk study, and our survey of the site. This report pertains to this information only.

3 Methodology

3.1 Desk Study

Table 1 below lists organisations and/or resources used as part of the desk study process. Data regarding any known statutory or non-statutory sites, in addition to any records for protected species, were requested from the following sources:

Table 1. Ecological Data Resources

Consultant	Requested Data	Search Radius	Date Requested
Local Ecological Records Centre <i>Hampshire Biodiversity Information Centre</i>	Protected and notable species records Local, National and International Site Designations	2km	09/09/2019
MAGIC Maps	National and International Site Designations Granted EPS Development Licences	2km	09/09/2019

3.2 Surveyors

Survey carried out by Tom Hough MSc, Assistant Ecologist

The survey was supervised by Lucinda Sweet PhD, MCIEEM, Natural England Bat Licence (2019-39122-CLS-CLS), Great Crested Newt licence (2016-22852-CLS-CLS), Principal Ecologist

3.3 Survey Conditions

The survey was undertaken at 10:30am on 6th September 2019

The outside temperature was recorded as 17°C, with dry, overcast conditions, and 6/8 cloud cover.

3.4 Extended Phase 1 Habitat Survey

- 3.4.1 A Phase 1 habitat survey was undertaken following survey guidance (JNCC 2007) to establish the presence and distribution of habitat types within the site and potential ecological constraints to development. A Phase 1 Habitat Map was produced (Appendix 1) and where additional details were required Target Notes have been provided (Appendix 2). A plant species list (Appendix 2) summarising all plants identified on site was produced during the survey and all scientific nomenclature was produced according to Stace (2010).
- 3.4.2 This survey was extended to note the potential for habitats on site to support protected and/or notable species and for evidence of any such species. The habitats on site were assessed for their suitability to support protected species in relation to the habitat types found at the site. Any incidental sightings or field signs were noted at the time of survey. Where evidence of, or the confirmed presence of a protected species was identified, further species specific surveys may be recommended to ensure that the presence or otherwise of a legally protected species is fully considered prior to the determination of any planning approval or to guide an EPS development licence.
- 3.4.3 Hedgerows on site were assessed following the Hedgerow Survey Handbook (DEFRA 2007) and defined as species-rich if the structural species making up a surveyed 30m section of hedgerow included at least four native woody species. Results were compiled and assessed against qualifying criteria within the Hedgerow Regulations (1997) and also the UK Biodiversity Action Plan / NERC Act 2006.
- 3.4.4 Legislation, guidance and methodology for species relevant to this site are presented in full within Appendices 4 and 5 of this report.
- 3.4.5 **Site Evaluation**
- Following the ecological appraisal the site was classified into one of six groups (Table 2), to indicate whether the site is considered to hold ecological value on a local, national or international scale. This evaluation is intended as a guide and only targeted survey work can establish the significance of protected species populations onsite.

Table 2. Definitions of each of the six evaluation brackets, indicating the importance of each habitat type and an example of their possible habitat status. (Table constructed following The CIEEM EcIA Guidelines, Terrestrial, Freshwater and Coastal (2016) pages 16-17).

Evaluation Value	Comparable example
International	An internationally designated site or candidate site, including habitat or species included within Special Protection Areas (SPA) / Special Areas of Conservation (SAC), Ramsar Sites, listed under Annex 1 of the Habitats Directive.
National	Sites designated at UK level, e.g. Sites of Special Scientific Interest (SSSI), supporting species considered nationally threatened or rare. A regularly occurring regionally or county significant population/number of any nationally important species A feature identified as of critical importance within Section 41 of the NERC Act (2006).
Regional	Key Habitat type included within the National Biodiversity Action Plan (BAP) /NERC Habitat of Principle Importance (HPI). A regularly occurring, locally significant number of a regionally important species.
County	Designated sites, such as Sites of Biological Importance (SBIs) or viable habitat / species populations of value at a county level (LBAP).
District	District level designated sites, such as Local Wildlife Sites (LWS) or habitats / species populations of value at a district (Which have features qualifying for LWS status). Sites/features that are scarce within the district or which appreciably enrich the district habitat resource.
Local / Site	Habitats or species populations of value in a local (i.e. within ~ 5km of the site) context. Habitats of poor to moderate biological diversity e.g. established conifer plantations, species poor hedgerows and un-intensively managed grassland which supports species which are common to the local area and whose loss can be easily mitigated.

3.5 Limitations

3.5.1 It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment. The protected and notable species assessment provides a preliminary view of the likelihood of these species occurring on site, based upon the suitability of the habitats, known distribution of the species in the local area and any direct evidence on site. It should not be taken as providing a full and definitive survey of any protected species group.

3.6 Report Lifespan

Given the transient nature of the subject we would consider the survey results contained to be accurate for 2 years.

4 Site Context

4.1 Site Description

The application site can be found at SU 45753 08393 and comprises an area of unmanaged land at the Netley Central Club, situated within the centre of Netley, a small town 5km to the south-east of the centre of Southampton. The site is surrounded by residential and commercial development isolating it from the wider environment, however a limited number of scattered trees and hedgerows provide some connectivity from the site to the wider environment. Higher quality habitats are present to the south-east and north-west, including Royal Victoria Country Park approximately 0.3km to the south-east which supports extensive areas of woodland and parkland and Netley Abbey 0.6km to the north-west which supports further areas of woodland and parkland. Additional areas of woodland and grazing pasture are located to the north-east, 0.7km from the site, beyond extensive residential development. The coast of the Southampton Water is located 0.25km to the south-west.

4.2 Zone of Influence

The zone of influence describes the geographic extent of potential impacts of a proposed development. The small scale of the proposed development reduces the likelihood of impact to the surrounding area, however suitable connective vegetation could influence the presence of protected species within the application boundary. The zone of influence was considered to be 500 metres from the application boundary for amphibians and reptiles, 30 metres for terrestrial mammals such as badgers, and within the application boundary for breeding birds.



Figure 1. OS map of the project site and surrounding area.

Red line boundary depicts application site. Buildings are depicted in black.

5 Results

5.1 Desk Study

5.1.1 Designated Sites

The site was subjected to a search for designated sites within a 2km radius of the site using data supplied by the Local Records Centre (*Hampshire Biodiversity Information Centre (HBIC)*) and the online desk-based resource MAGIC.

5.1.2 The data supplied by HBIC was received on the 13/09/2019 and is summarised within Table 3. The search revealed 3 statutory and 14 non-statutory sites within a 2km radius of the site.

5.1.3 A search of the online resource Magic Maps found no additional sites with statutory designation within the 2km radius search.

Table 3. Summary of Designated Sites within a 2km radius of the application site

Site Name	Grid Ref	Status	Reason for Designation	Distance from site
Statutory				
Solent and Southampton Water	SU 45549 08239	Ramsar	Estuarine habitats	0.3km SW
Lee-on-The Solent to Itchen Estuary	SU 45549 08239	SSSI	Estuarine habitats. Saltmarsh, reedbeds and marsh grasslands.	0.3km SW
Westwood Woodland Park	SU 454 095	LNR	Ancient woodland and grassland.	1.2km NW
Non-statutory				
Netley Lodge	SU46100820	SINC	Not provided	0.3km S
Spear Pond Gully	SU46600850	SINC	Not provided	1km E
St. Marys Road Wood	SU46600860	SINC	Not provided	1km E

5.1.4 Protected Species Assessment

Data supplied by HBIC also included records of protected species. A summary of the closest or most relevant records can be seen in Table 4 below. Magic maps did not highlight any EPS licences within the area.

Table 4. Summary of relevant protected and priority species records

Species	Grid ref.	Date	Description
Common pipistrelle (<i>Pipistrellus pipistrellus</i>)	SU455084; SU456090	2004 - 2018	8 records within the surrounding area. The nearest, for a single bat located 0.2km to the west. Larger record for 5 individuals located 1.2km north
Soprano pipistrelle (<i>Pipistrellus pygmaeus</i>)	SU462081;	2005 - 2018	Seven records within the surrounding area, the nearest of these for a location approx. 0.4km to the south east, for an individual bat.
<i>Pipistrellus</i> sp.	SU459081; SU467072	1988 - 2018	23 records within the surrounding area. The nearest record located 0.3km to the south-east for a single individual. Record for 100 individuals 1.5km south-east.
Noctule (<i>Nyctalus noctula</i>)	SU462081; SU470075	2002 - 2018	6 records within the surrounding area. The nearest, for 2 individuals, at a location 0.3km to the south-west. Record for 48 individuals 1.5km south-east.
Natterers (<i>Myotis nattereri</i>)	SU462081; SU453089	2003 - 2018	6 records within the surrounding area. The nearest, for 2 individuals, at a location 0.3km to the south-west. Record for 18 individuals located 1.5km to the north-west
Whiskered/brandts (<i>Myotis mystacinus/brandtii</i>)	SU469092	2004 - 2016	2 records within the area, nearest for 2 individuals located 1.5km to the north-west.
Daubentons (<i>Myotis daubentonii</i>)	SU462081	2001 - 2016	3 records, nearest 1.5km to the south-east.
Brown long-eared (<i>Plecotus auritus</i>)	SU455084	1986 - 2017	11 records within the area, the nearest for 3 individuals located 0.5km north-west.
Serotine (<i>Eptesicus serotinus</i>)	SU453089	2002 - 2004	2 records, nearest 1.5km north-west.
Common lizard (<i>Zootoca vivipara</i>)	SU46110902	2004 - 2010	6 records, the nearest for 2 individuals 1.1km to the north. The remaining records all for locations 2km to the south-east.
Adder (<i>Vipera berus</i>)	SU471071	2005	Single record for a location 2km to the south-east.
Slow worm (<i>Anguis fragilis</i>)	SU46110902	2004 - 2017	6 records, with the nearest for 8 individuals 1.1km to the north.
Song thrush (<i>Turdus philomelos</i>)	SU4410	2009 - 2016	10 records within the area all approximately 2km to the north-east of the site.
Black Redstart (<i>Phoenicurus ochrurus</i>)	SU4509	2006 - 2017	16 records within the area all approximately 2km to the north-east of the site.

5.2 Habitats

5.2.1 The habitat types recorded on site are summarised below, and the frequency and distribution of habitat types is displayed within a Phase 1 Habitat Survey Map (Appendix 1 and 2).

5.2.2 Table 5 provides a list of habitat types present on site along with their inclusion (or otherwise) as a National and / or Local Habitat of Principle Importance (HPI) (Previously referred to as Biodiversity Action Plan (BAP)) (*It should be noted that additional information is included within the text where a classification under Phase 1 survey methodology does not mirror habitat types considered to be conservation priorities*).

Table 5. JNCC Habitat Types found on site and inclusion within UK BAP habitats.

Habitat Type	N HPI	L HPI	N/A
Poor semi-improved grassland			✓
Amenity grassland			✓
Orchard			✓
Scattered trees			✓
Scrub			✓
Species-poor hedgerow (non-native)			✓
Tall ruderal herbs			✓
Hardstanding			✓
Buildings			✓

5.2.3 Poor semi-improved grassland

Poor semi-improved grassland formed the understory of the orchard and adjacent open grassland (Figure 2). This area was species poor and dominated by grass species such as false oat-grass (*Arrhenatherum elatius*) and cocks' foot (*Dactylis glomerata*) with a sward length varying between 30cm up to 100cm in more tussocky areas. Within the sward occasional ribwort plantain (*Plantago lanceolata*), dock (*Rumex* sp.) and hawkweed (*Hieracium* sp.) were present, as well as rarely occurring herb Robert (*Geranium robertianum*) were present.

5.2.4 Amenity grassland

A portion of the rear garden of 26 Station Road was also included within the red-line boundary. While this area was not directly accessible, a visual assessment suggested it comprised a section of managed amenity grassland dominated by perennial rye-grass (*Lolium perennae*).



Figure 2. Unmanaged amenity grassland abundant within the eastern half of the site.

5.2.5 Orchard

The eastern half of the site comprised an orchard with scattered fruit trees consisting of abundant semi-mature apple (*Malus* sp.), as well as occasional immature cherry (*Prunus* sp.). These were unevenly spaced with some evidence of natural regeneration in the form of immature trees. The majority of these trees were covered with dense field bindweed (*Convolvulus arvensis*). The grassland associated with this orchard was of a low biological quality with no identifiable flowering plants found on site (section 5.2.3).

5.2.6 Scattered Trees

Scattered trees found on site included semi-mature sycamore (*Acer pseudoplatanus*) and holly (*Ilex aquifolium*) (Figures 2, 3) found within the orchard and also with a dense covering of field bindweed. In addition to these, individual hawthorn (*Crataegus monogyna*) and sweet chestnut (*Castanea sativa*) were present to the centre of the site.



Figure 3. Scattered fruit trees within the eastern half of the site.



Figure 4. Dense scrub along the boundaries of the orchard. A small section of tall ruderal herbs also present at the north-eastern corner (the centre of this image).

5.2.7 Scrub

Dense scrub dominated by bramble (*Rubus fruticosus* agg.) was present along the boundaries of the orchard (Figure 4), as well as the north-eastern boundary of the western portion of the site. In addition to this occasional *buddleja* sp. could be found within the orchard.

5.2.8 Species-poor hedgerow (non-native)

A managed non-native species-poor hedgerow was present along the south-eastern boundary (Figure 5). The hedgerow was dominated by garden privet (*Ligustrum ovalifolium*), with occasional ivy (*Hedera helix*) and field bindweed. The hedgerow reached a height of 1.8 metres and a width of 1 metre.

5.2.9 Tall ruderal herbs

A small section of tall ruderal herbs was also present within the north-eastern corner of the site (Figure 4), comprised entirely of common nettle (*Urtica dioica*). Scattered common nettle and cleavers (*Galium aparine*) were also present throughout the orchard.

5.2.10 Hardstanding

The western half of the site consisted of non-permeable concrete hardstanding forming a portion the car park of the Netley Central Club (Figure 5). Occasional dock and common nettle could be found exploiting cracks and gaps.



Figure 5. Hardstanding within the western end of the site, with a species-poor hedgerow along the boundary.

5.2.11 Buildings

Two buildings, including a timber garage and shed, were present within the red-line boundary. Buildings 1 and 2 were present, at the western end of the orchard, within the central area of the site. Detailed building descriptions can be found within Table 6, with associated images within Appendix 10.

5.2.12 Invasive Weeds Assessment

An assessment of the site was made to establish the presence of invasive weeds included on schedule 9 of the Wildlife and Countryside Act 1981 (as amended). No invasive weed species were found within, or adjacent to the application area.

5.3 Fauna

5.3.1 Breeding Birds

5.3.1.1 The assessment was undertaken towards the end of the active nesting period (March -September) and no current evidence of breeding birds was recorded at the time of the survey. However, scattered trees and scrub on site provide suitable nesting habitat for common bird species. The data search revealed a wider diversity of bird species within the surrounding area, largely associated with the Ramsar site located within the area. Nevertheless, bird species such as song thrush (*Turdus philomelos*) and black redstart (*Phoenicurus ochruros*) are located within the area.

5.3.1.2 Buildings 1 and 2 and were considered suitable to support species such as swallow (*Hirundo rustica*). However, there was no evidence to suggest that breeding birds had previously occupied either building during the internal inspection.

5.3.1.3 Based on a review of the habitat types occurring within the application boundary, the site is considered to suitable support an assemblage of bird species including some species considered to be of high conservation concern that are either legally protected or UK BAP species, such as song thrush (*Turdus philomelos*) and house sparrow (*Passer domesticus*).

5.3.2 Bats

5.3.2.1 Roosting Bats

Scattered trees were present throughout the site. Visible trees were assessed and categorised based upon Bat Conservation Trust guidance (Appendix 5), with all scattered trees within the site boundary assessed to have negligible suitability to support roosting bats. Despite the trees being mature in nature, they did not support suitable cracks, fissures or holes to support roosting bats. The majority were also covered with dense bindweed which offers limited suitability.

5.3.2.2 Buildings 1 and 2 were assessed to offer negligible suitability to support roosting bats. No roosting features were present on either building and their dilapidated nature and surrounding vegetation further reduced suitability. The main structural features of the building, and their suitability for supporting

roosting bats are summarised below (Table 6), and associated figures can be found with Appendix 10.

5.3.2.3 One building with loose tiling suitable for roosting bats was located along the north-western boundary, but outside of the red-line boundary (Target Note 2, Appendix 1, 2).

Table 6. Summary of Bat Roost potential and evidence found within each of the buildings/structures on site (Supporting Figures within Appendix 10).

High Moderate Low Negligible None				
Building Number	Description	Bat evidence / Potential Roosting Features (PRFs)		Roost Suitability
B1	Open-fronted garage constructed of a single layer of timber and corrugated metal. The roof, southern and western elevation were covered with dense surrounding vegetation. The building was in a state of disrepair although still in use. The interior roof was constructed of timber and tarpaulin, although sections were missing with the roof partially collapsed due to the extent of the vegetation above.	No roosting features present. No evidence of previous bat activity was recorded during the assessment.		Negligible
B2	Open-fronted shed constructed of timber. The western portion of the building was dilapidated and inaccessible. Dense vegetation covered the eastern, western and southern elevations, with ivy covering the roof. Timber fascia boarding was present on the northern elevation however this was still well-sealed.	No roosting features present. No evidence of previous bat activity was recorded during the assessment.		Negligible

5.3.2.4 Foraging and Commuting Bats

The data search revealed 68 records of 8 species of bat within the surrounding area, the majority within the areas of woodland surrounding Netley. The site held vegetative features considered suitable to support commuting and foraging bats. The hedgerows and scattered trees along the boundaries and within the site provide suitable connectivity across the application site and offer commuting pathways to the wider environment. In addition, the areas of grassland and scrub offer intermittent foraging opportunities. Based upon BCT guidelines the site is considered to provide a low suitability habitat for foraging and commuting bats.

5.3.3 Badgers (*Meles meles*)

5.3.3.1 Records relating to certain protected species including badger sett locations are sensitive in nature, and due to the risk of public interference are kept confidential. Details of results relating to badger have not been included in this report due to their sensitive nature but will be submitted within a confidential appendix to support the planning submission (Appendix 11).

5.3.3.2 No evidence of badger setts, or activity such as mammal runs, snuffle holes and latrines were found during the ecological appraisal of the site. The site was not considered suitable to support permanent populations of this species; however, the site supported some suitable habitat features such as hedgerows, grassland and scrub which were considered conducive to supporting individual foraging badgers. The extent of the site, and the location within a built-up landscape suggest the species is not dependant on habitats within the application boundary, however the possibility of individual badgers entering the site for foraging purposes cannot be ruled out.

5.3.4 **Great Crested Newts** (*Triturus cristatus*)

The data search did not reveal any records of this species within the surrounding area. The site supported a mixture of scrub and tussock grassland which is considered suitable to support the terrestrial phase of this species lifecycle. However, a pond search only identified a single water body, located 300 metres to the south-west of the site and beyond an area of residential development (Figures 6, 7). This water body was assessed and assigned a GCN Habitat Suitability Index (HSI) score (Oldham et al, 2000) displayed within Table 7 below. Although surrounded by optimal habitats for this species, this pond was considered to be unsuitable for supporting newts.

Table 7. Pond Locations and Suitability for Great crested newts (Images can be found within Figure 7 below).

Pond No.	Grid Ref.	Habitat Suitability Index Score (See Appendix 9)	Distance from Site
1	SU 45898 08091	0.42 – 'Poor'	300m SW

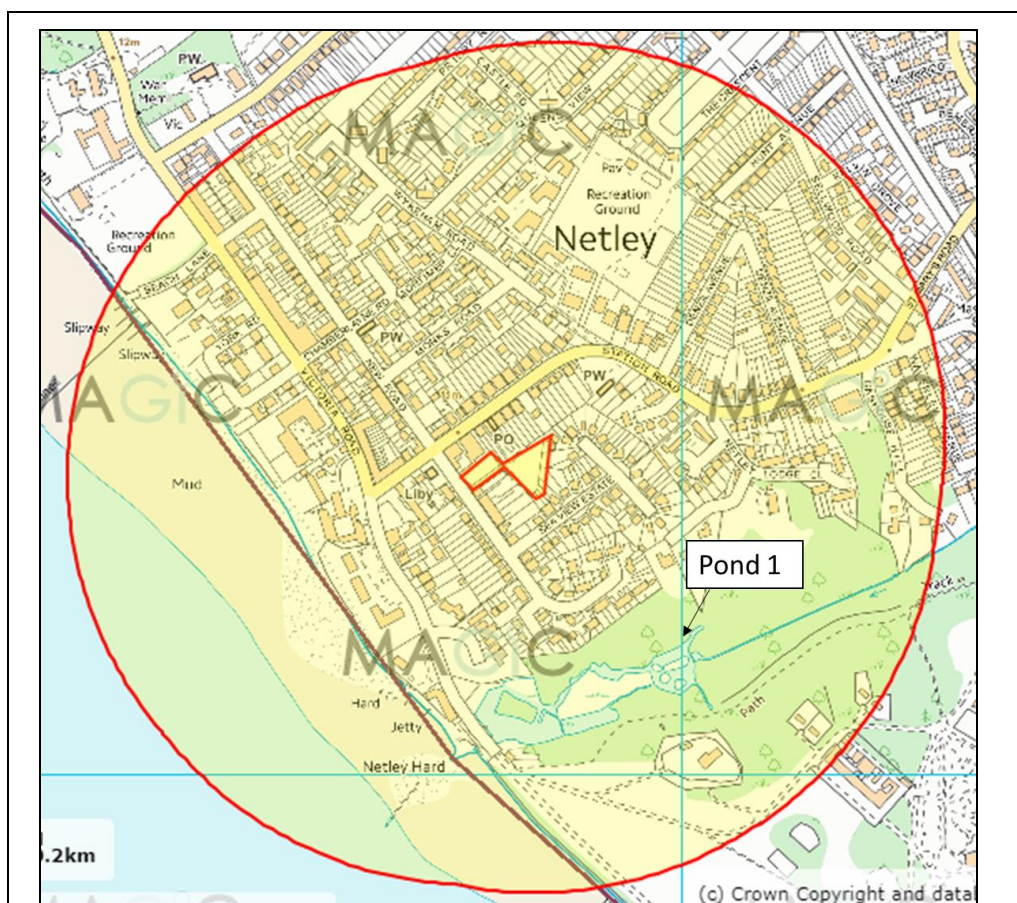


Figure 6. OS Map showing pond locations within a 500-metre radius of the site, Grid references and further detail on their suitability for GCN are evaluated in Table 7.

Figure 7: Images and pond descriptions

Pond 1

Lake located within the Royal Victoria Country Park with an approximate size of 1.6-hectares. Fish and fowl present. Surrounding habitat of broadleaved woodland with marshland also present.



5.3.5 Reptiles

The data search revealed three species of reptile within the surrounding area, although all records were at least 1km from the site. No evidence of reptiles was recorded during the survey, however, the site held some suitable habitats capable of supporting reptiles such as grass snake (*Natrix helvetica*). The extensive grassland on site provided a variable sward structure with suitable refugia found within rougher tussocks, as well in areas of scrub. A pile of waste plant material on site (Target Note 1; Appendix 1, 2) also provides some refuge for this species group. Suitable basking areas could also be found within shorter areas of grassland. However, due to the location of the site within a built-up area, the habitats on site were rather fragmented and isolated with limited connectivity to the wider environment. Consequently, the presence of reptiles is considered unlikely.

6 Evaluation

6.1 Development Proposals

The site is the subject of a full planning application for the development of eight residential dwellings facilitated by site clearance. Design proposals for the site are presented in Appendix 6 of this report.

6.2 Desk Study Impacts

Direct impacts on nearby designated sites as a result of the proposed development are considered unlikely. It is understood that the proposed development is to be contained within the red-line boundary, and although the nearest statutory sites are located only 0.3km to the south-west, these comprise estuarine habitats with limited connectivity to the site. The initial proposals set out for the site (Appendix 6) show that the extent of the development proposals are contained within the site boundary, and impacts on locally designated sites are considered unlikely.

6.3 Habitats

The habitats on site have been evaluated as holding low biological value and offer 'Site Value' in a local context. The site was dominated by an area of amenity grassland, scattered trees and hardstanding, with small areas of scrub and tall ruderal herbs. The grassland sward did not contain any species of local importance or significance. A species-poor hedgerow was located along one boundary, however, was non-native and therefore not considered a constraint to the development. Traditional orchards are considered a HPI, however due to the uneven spacing of the fruit trees found on site, the lack of any notable flowering species within the grassland sward and the lack of management associated with traditional orchards, the orchard located on site is not considered to be a traditional orchards and therefore is not considered a constraint to this development. Habitats on site do not require further survey, however, Chapter 7 provides enhancement prescriptions to increase the biological value of the site post-development.

6.4 Breeding Birds

- 6.4.1 All wild birds, their eggs and nests are protected under the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally kill, injure, or take any wild bird whilst nesting, or take, damage or destroy the

nest of any such bird while in use or being built. In addition, species listed on Schedule 1 of the Wildlife and Countryside Act 1981 or their dependant young are afforded additional protection from disturbance whilst they are at their nests.

- 6.4.2 The vegetation on site was considered to provide suitable nesting habitat for common bird species and has the potential to support populations of birds of local and national interest such song thrush, and house sparrow. In addition, the two buildings on site have the potential to provide nesting opportunities for species such as swallow. Any clearance works proposed on site should be well researched in order to prevent direct or indirect impacts on individual birds, their young, eggs and habitats. Chapter 7 sets out important guidance on measures to avoid impacts on such species.

6.5 **Bats**

All bats in the United Kingdom and their habitats are fully protected under the Wildlife and Countryside Act 1981 (as amended), and the Conservation of Habitats and Species Regulations 2017. It is an offence to damage or destroy any bat roost, intentionally or recklessly obstruct a bat roost, deliberately, intentionally or recklessly disturb a bat or intentionally kill, injure or take any bat.

6.5.1 *Roosting bats*

Scattered trees on site were not considered suitable to support roosting bats due to immaturity and dense bindweed. The buildings on site were considered to offer negligible suitability to support roosting bats due to the lack of features and surrounding vegetation. The recommendations section of this report sets out important guidance on measures to avoid indirect impacts on any bats roosting within this building and measures to support its conservation status through ecological enhancement.

6.5.2 *Foraging and Commuting Bats*

Scattered trees and scrub on site provide suitable foraging and commuting habitat for bats both across the site and within the wider landscape. Consequently, the area within the application boundary is considered to offer a low suitability following BCT assessment guidelines. According to current plans these habitats are proposed for removal as part of the development,

however this is not considered detrimental for foraging and commuting bats, overall, as scattered trees are abundant within the surrounding area and more optimal habitats are to be found further to the south-east and north-west. Landscaping within residential gardens, post-development, will also provide habitats for foraging and commuting. However, the mitigation of indirect impacts on foraging and commuting bats would be desirable for the continued success of any bats in the surrounding area

6.6 Badgers

Under the Protection of Badgers Act 1992, in England and Wales it is an offence to wilfully kill, injure, disturb or take any badger, or intentionally or recklessly damage, destroy, or obstruct access to any part of a badger sett. There was no evidence of badger activity within zone of influence, however the possibility that individual badgers could forage and commute through the red line boundary on an intermittent basis cannot be ruled out. Chapter 7 sets out important guidance on measures to avoid impacts on this species and measures to support its conservation status.

6.7 Great Crested Newts

Great crested newts and their eggs, breeding sites and resting places are fully protected under the Wildlife and Countryside Act 1981 (as amended), and the Conservation of Habitats and Species Regulations 2017. Ponds within the zone of influence provide suitable breeding habitat for local GCN populations. The single pond within a 500-metre radius was considered unsuitable to support the species. Although some suitable habitats are found on site, it is considered unlikely that GCN would present a constraint to the planning application. GCN are not thought to be present within the redline boundary and as such are not considered further within this report. If any evidence of GCN presence is uncovered during development works, then works should cease and the advice of an ecologist sought.

6.8 Reptiles

Reptiles are protected under the Wildlife and Countryside Act 1981 (as amended) making it illegal to intentionally kill or injure reptiles. No evidence of reptiles was recorded during the survey; however, the site supported a suitable habitat matrix consisting of a variable sward structure, suitable refugia within areas of scrub and suitable basking areas within shorter

grassland. Although large populations of reptiles on site are unlikely, the presence of this species group cannot be ruled out and therefore it is possible that harm or injury could be sustained to this group of species during the pre-construction clearing of the site. Chapter 7 sets out important guidance on measures to avoid impacts on this species and measures to support its conservation status.

7 Recommendations

The site should be the subject of further ecological survey works and/or consideration to produce an Ecological Impact Assessment, where the following indices should be assessed and evaluated further to establish the extent of impact to the ecological value of the application site.

This survey can be used to guide the Master Plan to ensure that mitigation is employed to retain and enhance local biodiversity. As with all development sites; efforts should be made to support National and Local Biodiversity Action Plans and seek opportunities to incorporate ecological enhancement schemes within the proposed development. Such site enhancements are viewed positively in light of the NPPF (2019) which seeks biodiversity enhancements and net gain through the planning process.

7.1 Habitats

Habitats / Botanical	Timing
Enhancement Prescriptions	
The boundaries of new residential plots should support native hedgerows of species such as elder (<i>Sambucus nigra</i>) and blackthorn (<i>Prunus spinosa</i>).	During development.

7.2 Breeding Birds

Breeding Birds	Timing
Recommendations	
Vegetation in the form of scattered trees and hedgerows provide suitable nesting habitat on site for breeding birds, with suitability also within Buildings 1 and 2. Given their protection, development must be sympathetic to the value of these habitats / features and potential impacts on breeding birds, their eggs, nests and young. The breeding bird season is generally accepted as being between March and September. Developers should consider and implement the options appropriate to their scheme; a) Undertake development works between the months of October and February where possible. b) In the event of development works between the months of March and September, scattered trees and buildings with suitable access points should be subjected to a search for active birds' nests 24 hours prior to commencement of works.	Before and during development.
Enhancement Prescriptions	
1SP Schwegler Sparrow terraces should be incorporated into the eastern elevation of at least 50% of new residential dwellings, positioned at least 2 metres from the ground. Three 1B Schwegler bird boxes (or similar) in the following sizes: 26mm Hole, 32mm Hole, Oval Hole should be positioned on suitable scattered boundary trees, retained following the development and located within the application boundary. Entrance holes directed towards the north and east to avoid strong sunlight and driving rain. The Bird boxes should be positioned at a height of between 2 and 4 metres during the Autumn.	

7.3 Bats

Foraging & Commuting Bats	Timing
Recommendations	
Scattered trees and hedgerows along site boundaries are considered suitable for use by foraging bats, and it is understood they will be retained as part of the development. However, the extent of disturbance to foraging and commuting bats within the area should be reduced where possible by employing a sensitive lighting scheme during construction works, and artificial security lighting should not be installed post construction in a way which directs lighting at these boundary features. Artificial lighting should also be avoided on the neighbouring building on the north-western boundary with roosting potential. If lighting is required, a scheme should be devised and positioned to have minimal disturbance following the guidance of an ecologist. Any lighting used during the development should be directed away from the woodland habitat with overspill less than 1lux (ideally 0) onto suitable habitats.	During and post development.
Enhancement Prescriptions	
Integrated bat boxes such as 1FR Schwegler Bat Tubes, or similar, should be incorporated into 50% of the proposed residential dwellings to provide roosting suitability on site post-development.	

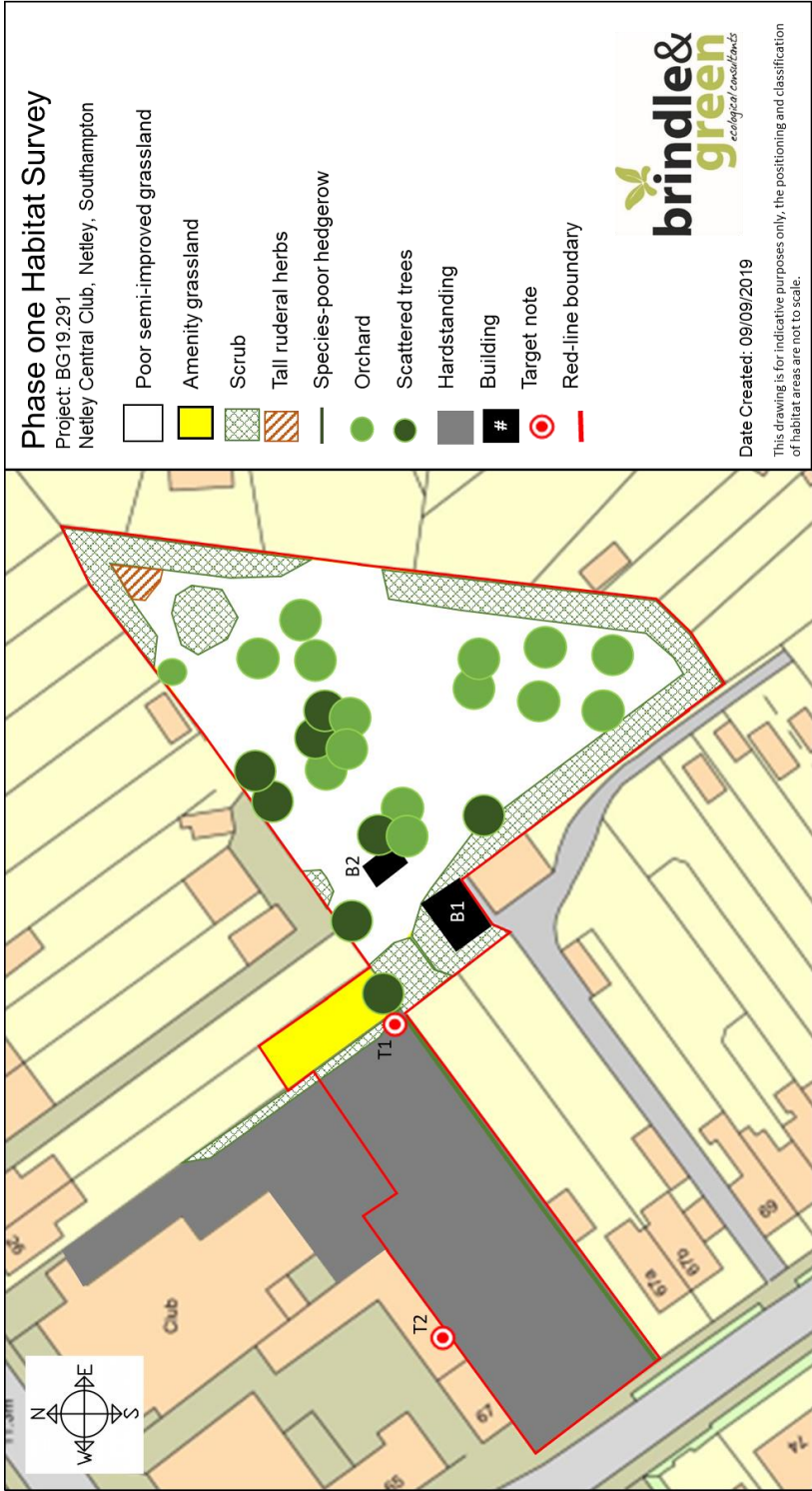
7.4 Badgers

Badgers	Timing
Recommendations	
It is possible that badgers may utilise the site for foraging or commuting purposes and as such, the following precautionary measures should be taken: Any excavations left overnight are to be covered at the end of each working day, or include a means of escape, such as wood planks. In addition, any temporarily exposed open pipe systems are to be capped in such a way as to prevent badgers gaining access. A pre-works check to ensure badgers have not moved into the site should be undertaken, if works do not begin within 12 months of the initial report.	During development

7.5 Reptiles

Reptiles	Timing
Recommendations	
There is a low possibility that if present reptiles may be injured during ground clearance within the application boundary. As a precaution, sensitive working methods should be adopted, in order to reduce the risk of injury or death of reptiles during clearance down to negligible levels. An ecological 'toolbox talk' should be provided to all site personnel prior to development works commencing. The 'toolbox talk' should include information pertaining to the ecology and protection of reptiles, a brief description of field signs and who to contact should reptiles be encountered during development works. Clearance of the grassland habitat should be supervised by a suitably experienced ecologist, including pre-clearance checks of the area to be affected. In addition, any vegetation cuttings and brash piles etc. to be removed from site should first be dismantled by hand. Should reptiles be found, individuals should be moved to comparable habitat, outside of the area to be directly affected.	During development

Appendix 1. Phase 1 Habitat Plan



Appendix 2. Phase 1 Target Notes

Target Note Number	Description
T1	Pile of waste plant material.
T2	Loose roof tiling on neighbouring building outside of the red-line boundary.

Plant Species List with DAFOR Scale

Scientific nomenclature follows Stace (2010) for vascular plant species and common names follow BSBI List of British & Irish Vascular Plants and Stoneworts.

Please note that this plant species list was generated as part of a Phase 1 Habitat survey, and does not constitute a full botanical survey.

Abundance was estimated using the DAFOR scale as follows: D = dominant, A = abundant, F = frequent, O = occasional, R = rare, LF = locally frequent

Common Name	Scientific Name	Estimated Abundance (DAFOR)
Apple	<i>Malus</i> sp.	A
Bramble	<i>Rubus fruticosus</i>	F
Buddleja	<i>Buddleja</i> sp.	O
Cherry	<i>Prunus</i> sp.	O
Cleavers	<i>Galium aparine</i>	R
Cock's-foot	<i>Dactylis glomerata</i>	F
Common nettle	<i>Urtica dioica</i>	F
Dock	<i>Rumex</i> sp.	O
Garden privet	<i>Ligustrum ovalifolium</i>	O
Hawkweed	<i>Hieracium</i> sp.	R
Hawthorn	<i>Crataegus monogyna</i>	O
Herb robert	<i>Geranium robertanum</i>	R
Holly	<i>Ilex aquifolium</i>	O
False oat grass	<i>Arrhenatherum elatius</i>	F
Field bindweed	<i>Convolvulus arvensis</i>	A
Ivy	<i>Hedera helix</i>	F
Leyland cypress	<i>Cupressus</i> × <i>leylandii</i>	R
Ribwort plantain	<i>Plantago lanceolata</i>	O
Perennial rye-grass	<i>Lolium perenne</i>	O
Sweet chestnut	<i>Castanea sativa</i>	R
Sycamore	<i>Acer pseudoplatanus</i>	O

Appendix 3. General References

Bat Conservation Trust's 'Good Practice Survey Guidelines' (Rev 2012).

Bell, S. McGillivray, D. (2006) *Environmental Law*. 6th ed. Oxford University Press.

Byron, H (2000) *Biodiversity and Environmental Impact Assessment: A Good Practice Guide for Road Schemes*. The RSPB, WWF-UK, English Nature and the Wildlife Trusts, Sandy.

Collins, J (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines*, (3rd edition), Bat Conservation Trust, London.

Defra (2007) *Hedgerow Survey Handbook*; A standard procedure for local surveys in the UK. Defra, London.

Gilbert G, Gibbons DW, Evans J. (1998) *Bird Monitoring Methods: Breeding Bird Survey* (pages 389-393). RSPB.

Harris S, Cresswell P and Jefferies D (1989). *Surveying Badgers*.

Joint Nature Conservation Committee (JNCC) *Handbook for Phase 1 habitat survey* (2003). JNCC.

Langton T, Beckett C and Foster J (2001) *Great Crested Newt Conservation Handbook*. Froglife, Halesworth.

Mitchell-Jones A.J. McLeish, A.P. (2004) *Bat Workers Manual* (3rd Edition). Joint Nature Conservation Committee.

Mitchell-Jones A.J. *Bat Mitigation Guidelines* 2004. English Nature.

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

Rodwell, J.S. Joint Nature Conservation Committee (JNCC). *National Vegetation Classification: Users' handbook* (2006). JNCC.

Rose, F. (2006). *The Wild Flower Key* (Revised edition). Penguin books Ltd, London

Stace, C. (2010). *Field Flora of the British Isles*. Cambridge University Press

Sutherland, W.J. (1996) *Ecological Census Techniques*. Cambridge University Press.

Treweek, J. (1999) *Ecological Impact Assessment*. Blackwell Science.

Williams, C. (2010) *Biodiversity for Low and Zero Carbon Buildings, A Technical Guide for New Build*. Riba Publishing.

Appendix 4. Legislation, Policy and Guidance

Articles of British wildlife and countryside legislation, policy guidance and both Local and National Biodiversity Action Plans (BAPs) are referred to. The articles of legislation are:

- The Wildlife and Countryside Act 1981 (as amended)
- The Conservation of Habitats and Species Regulations 2017
- Department for Communities and Local Government. National Planning Policy Framework. (2019)
- EC Council Directive on the Conservation of Wild Birds 79/409/EEC
- The Protection of Badgers Act 1992
- The Natural Environment and Rural Communities Act 2006 (Including National and Local Biodiversity Action Plan (LBAP / HPI))
- Hedgerow Regulations 1997

Appendix 5. Legislation, Guidance and Methodology for Preliminary Ecological Appraisals.

Legislation, Guidance and Methodology

Breeding Birds

All nesting birds are protected under the Wildlife and Countryside Act 1981, which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition, for species listed on Schedule 1 of the Wildlife and Countryside Act 1981 it is an offence to intentionally or recklessly cause disturbance at, on or near an 'active' nest.

The bird breeding season is typically accepted to start in February/March and continue through until September/October, however breeding birds can be found all year round depending on the given species and climatic conditions.

A site's habitat composition, locality, association to designated sites as well as current usage and management are all considered in the decision as to whether further bird-related surveys are required. In addition, surveys may be recommended based on incidental bird records collected during a Preliminary Ecological Appraisal, species identified within an ecological data search or target species listed within a local biodiversity action plan.

Bird surveys are carried out in accordance with:

Gilbert G, Gibbons DW, Evans J. (1998) *Bird Monitoring Methods*. RSPB.

Bats

Roosting Bats

All bats in the United Kingdom and their habitats are fully protected under the Wildlife and Countryside Act 1981 (as amended), and the Conservation of Habitats and Species Regulations 2017 (as amended). It is an offence to damage or destroy any bat roost, intentionally or recklessly obstruct a bat roost, deliberately, intentionally or recklessly disturb a bat or intentionally kill, injure or take any bat.

Areas of concern; can be encountered in many types of structure and care should therefore be taken when undertaking maintenance or demolition of suitable structures and trees.

Site assessments of buildings, commuting and foraging habitat and trees are undertaken in accordance with: Collins, J (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines*, (3rd edition), Bat Conservation Trust, London. (Table 1 & 2 Below).

Preliminary Ecological Surveys look for evidence of bat presence such as feeding remains, bat droppings, roosting individuals and staining around potential access points. The suitability of site features are also assessed because absence of bat evidence, is not confirmation of a negative result.

Within trees, features searched for include; natural holes, woodpecker holes, cracks/splits in major limbs, loose bark, hollows, and dense cover of ivy over the tree. If evidence is found, or a building supports features conducive to supporting roosting bats then further presence / absence bat surveys and/or roost characterisation surveys will be recommended.

Foraging and Commuting bats

Habitat features on site are assessed for their suitability to support foraging and commuting bat populations. This assessment is independent from the suitability of the site to support roosting bats, and provides information on the likelihood of bat foraging activity within the local environment, and the dependence of individuals on these features for commuting to alternative roosting sites, foraging and migration.

Table 1: Guideline for assessing the suitability of a structure to support roosting habitat (Buildings and Trees), amended from Collins, J (2016)

Category	Description of roosting habitat	Number of additional presence / absence surveys required
Negligible Suitability	Suitable cavities may exist, but these are less than ideal.	None
Low Suitability	A structure with one or more potential roost sites that could be used by individual bats opportunistically. The feature and surrounding habitat do not provide enough shelter, conditions* space for larger roost types such as a maternity or hibernation roost. A tree of sufficient size and age to support roosting bats, but with no features observed from the ground, or the features only have a limited potential to support roosting bats.	One survey between May and August Trees – No further surveys required
Moderate Suitability	A structure or tree considered to have one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions* and surrounding habitat but are unlikely to support a roost of high conservation status (With regard to roost type only – assessments are made irrespective of species conservation status, which is established after presence is confirmed).	Two surveys between May and September (with at least one survey undertaken between May and August) One Dusk emergence and One Dawn re-entry survey to ideally be undertaken at least two weeks apart.
High Suitability	A structure or tree 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* and surrounding habitat.	Three surveys between May and September (with at least two surveys undertaken between May and August) One Dusk emergence and One Dawn re-entry survey to be undertaken. The third survey can be either Dusk or Dawn, undertaken at least two weeks apart.
Confirmed	This category is where positive evidence of bats has been recorded. For example, bats are found; bat droppings may be present at a suitable location for roosting bats; existing bat records may be associated with the structure.	

(* in this context conditions refers to the level of disturbance, light, height above ground, temperature, and humidity etc)

Table 2: Potential suitability of foraging and commuting habitat within an application boundary. Features should be assessed following this guide and professional judgement. Adapted from Collins J (2016)

Category	Description of commuting and foraging habitat	Survey effort to establish the value of commuting and foraging habitat**
Negligible Suitability	Negligible habitat features on site likely to be used by commuting or foraging bats.	None
Low Suitability	Habitat which could be used by low numbers of commuting bats such as an isolated gappy hedgerow, or an unvegetated stream unconnected to suitable habitat in the wider environment.	Transect /spot count/ timed search survey: One survey visit per active season AND Static automated surveys: One location per transect, over a five-

	Suitable, yet isolated habitat that could be used by foraging bats such as individual trees, or a patch of scrub.	night period, per season.
Moderate Suitability	Continuous habitat connected to the wider landscape that could be used by commuting bats, notably tree lines, hedgerows or linked back gardens. Habitat that is connected to the wider landscape which could be used by bats for foraging such as trees, open water, scrub or grassland.	Transect /spot count/ timed search survey One survey visit per month At least one survey should comprise dusk and pre-dawn (or dusk to dawn) within one 24-hour period. AND Static automated surveys: Two locations per transect, over a five-night period, per month (April to October)
High Suitability	Continuous, High-quality habitat that is well connected to the wider landscape which is considered to be highly conducive to commuting bats including river valleys, stream, hedgerows, and woodland edge High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree lined watercourses, and grazed parkland. Site is close to and connected to known roosts.	Transect /spot count/ timed search survey Up to two survey visit per month (April to October) At least one survey should comprise dusk and pre-dawn (or dusk to dawn) within one 24-hour period. AND Static automated surveys: Three locations per transect, over a five-night period, per month (April to October)

(** This is only a guide for survey effort required, the complexity of the site and the proposed disturbance / loss of features will determine the extent of works required on a site by site basis).

Badgers (*Meles meles*)

Badgers are protected under the Protection of Badgers Act 1992. It is illegal to wilfully kill, injure, disturb or take any badger, or attempt to do so and it is an offence to intentionally or recklessly damage, destroy, or obstruct access to any part of a badger sett.

Site assessments are undertaken in accordance with:
Harris S, Cresswell P and Jefferies D (1989). *Surveying Badgers*.

During the PEA, the site and the 30 metre zone of Influence considered for this species are searched for evidence of badger activity. The surveyor will identify evidence of activity, or habitat suitability for this protected species. Even if no evidence of badger activity is found, if local conditions suggest that the habitat may be suitable for badger, further surveys will be recommended.

Amphibians

The great crested newt and natterjack toad are fully protected under Schedule 5 of the wildlife and countryside Act 1981. The legislation protects these amphibians and their place of shelter or protection which may extend 500m from the breeding pond.

Great Crested Newt (*Triturus cristatus*)

The great crested newt, is fully protected under the Habitat regulations 2017, making it an offence to intentionally or recklessly kill, injure, disturb or take great crested newts, intentionally or recklessly damage destroy or obstruct access to any place used by the animal for shelter or protection.

The legislation protects these amphibians and their place of shelter or protection which may extend 500m from the breeding pond. Sites should be considered suitable to support great crested newts if distribution and historical records suggest newts may be present, there is a pond within 500m of the development or the development site includes suitable terrestrial habitat refuges.

Great crested newt site assessments are undertaken in accordance with:

English Nature. (2001) *Great Crested Newt Mitigation Guidelines*. English Nature, Peterborough. and Langton T, Beckett C and Foster J (2001) *Great Crested Newt Conservation Handbook*. Froglife, Halesworth.

Prior to a site visit, a desk study pond search is undertaken. When searching for ponds, Brindle & Green apply a total of 4 sources to establish their location. The following online sources are used:

OS MAPPING VIA PRO MAP, GOOGLE EARTH PRO, GOOGLE MAPS and MAGIC MAPS

Each identified pond (Access permitting) is subjected to a Habitat Suitability Index (HSI) assessment providing a score for each pond. This survey should be undertaken during the summer period to be fully accurate, however assumptions can be made out of season to guide survey recommendations.

Reptiles

Two species of reptile, the sand lizard and smooth snake, and their habitats are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981. All other native British reptiles are protected against intentional killing and injury.

British reptiles are found in exposed, undisturbed areas, such as areas without cultivation with differing areas of grassland sward length. Suitable areas include abandoned sand quarries, fallow farmland land, heathland, post-industrial land, railway corridors etc. If these types of suitable features are found then further reptile surveys are recommended.

Edgar P, Foster J and Baker J (2010) *Reptile Habitat Management Handbook*. Amphibian and Reptile Conservation, Bournemouth.

Gent T and Gibson S (2003) *Herpetofauna Workers Manual*. JNCC, Peterborough.

Invasive non-native weeds

Plant species such as Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*) and giant hogweed (*Heracleum mantegazzianum*) are examples of invasive non-native weeds classified under Part II of Schedule 9 of the Wildlife and Countryside act 1981. Any person who causes these species to grow or spread in the wild by dumping or other means is guilty of an offence. The plant and the soil these species are found growing in are classified as waste material and should be treated as such.

A simple walk over survey of the site to determine if these species are present was carried out during the PEA. A full list of Schedule 9 species can be found at Plantlife.org

Botanical Value

There are 60 plant species listed under Schedule 8 of the Wildlife and Countryside Act 1981 where it is an offence to intentionally pick or uproot or destroy any of these plant species.

During the PEA, a phase one habitat survey was undertaken following JNCC guidance. Further assessments are made to determine whether habitats comprise those identified as Habitats of principle Importance under S42 of NERC Act 2006.

Surveys can be undertaken year-round, however, if species or site conditions suggest higher botanical interest a full botanical survey will be recommended.

Invertebrates

The following invertebrates are European protected species and it is considered an offence if you capture, kill, disturb or injure, on purpose or by not taking enough care. It is also against the law to damage or destroy a breeding or resting place, obstruct access to their resting or sheltering places, possess, sell, control or transport live or dead protected invertebrates, or parts of them.

Large blue butterflies (eggs, caterpillars, chrysalises and adults)
Fisher's estuarine moths (eggs, caterpillars, chrysalises and adults)
Little ramshorn whirlpool snails

Approximately 400 additional species form the invertebrate species of Principal Importance in England and are included within Schedule 5 of the Wildlife and Countryside Act 1981 and S4I of NERC Act 2006.

If suitable habitat for invertebrates is identified during the PEA further surveys will be recommended.

Ecological Enhancement

In March 2012 the Department for Communities and Local Government published the National Planning Policy Framework. This sets out planning policies on protection of biodiversity through the planning system. The document states - *opportunities to incorporate biodiversity in and around developments should be encouraged.*

For new buildings guidance such as in the following will be used:
Williams, C. (2010) *Biodiversity for Low and Zero Carbon Buildings, A Technical Guide for New Build.* Riba Publishing.

Designated Sites

Designated areas are Sites of Special Scientific Interest (SSSI) while others have been designated as having European protection status. Local authorities can also designate areas for nature conservation and in doing so may impose local authority byelaws to support local nature conservation objectives. European designated status includes Special Protection Areas (SPAs) that preserve areas for birds and Special Areas of Conservation (SACs) which provides protection for habitats and the species which these habitats supports.

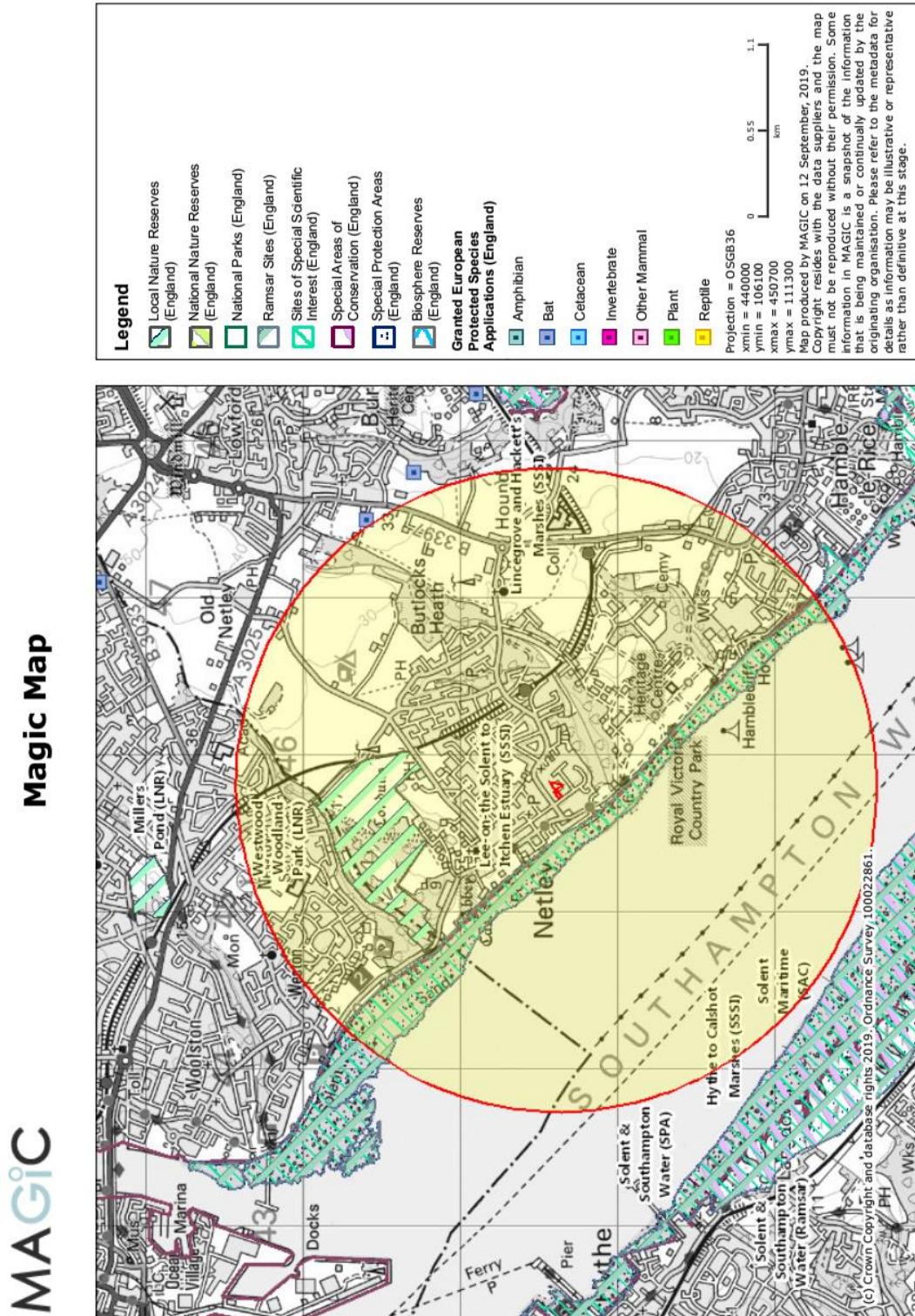
Information of Designated Protected Areas is received through Ecological Data Searches and Magic Map searches.

Appendix 6. Proposed Plans



Appendix 7. Magic Data

Two kilometre radius search of the project site.



09/09/2019

Site Check Report generated on Mon Sep 09 2019

You selected the location: Centroid Grid Ref: SU45770839

The following features have been found in your search area:

Local Nature Reserves (England) - points

Reference	1460442
Name	WESTWOOD WOODLAND PARK
Hectares	49.47
Hyperlink	https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L.1460442

Local Nature Reserves (England)

Reference	1460442
Name	WESTWOOD WOODLAND PARK
Hectares	49.47
Hyperlink	https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L.1460442

Ramsar Sites (England)

Name	SOLENT & SOUTHAMPTON WATER
Reference	UK11063
Hectares	5304.7

Sites of Special Scientific Interest (England)

Name	Lee-on-The Solent to Itchen Estuary SSSI
Reference	1000802
Natural England Contact	KENNETH JOHNSTONE
Natural England Phone Number	0845 600 3078
Hectares	585.9
Citation	1005846
Hyperlink	http://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s1005846

Special Protection Areas (England)

Name	SOLENT & SOUTHAMPTON WATER
Reference	UK9011061
Hectares	5399.67

Granted European Protected Species Applications (England)

No Features found

Areas of Outstanding Natural Beauty (England)

No Features found

Limestone Pavement Orders (England)

No Features found

National Nature Reserves (England) - points

No Features found

National Nature Reserves (England)

No Features found

National Nature Reserves (Wales) - points

No Features found

National Nature Reserves (Wales)

No Features found

National Parks (England)

No Features found

Ramsar Sites (England) - points

No Features found

Sites of Special Scientific Interest (England) - points

No Features found

Special Areas of Conservation (England) - points

No Features found

Special Areas of Conservation (England)

No Features found

Special Protection Areas (England) - points

1/2

09/09/2019

No Features found

Biosphere Reserves (England) - points

No Features found

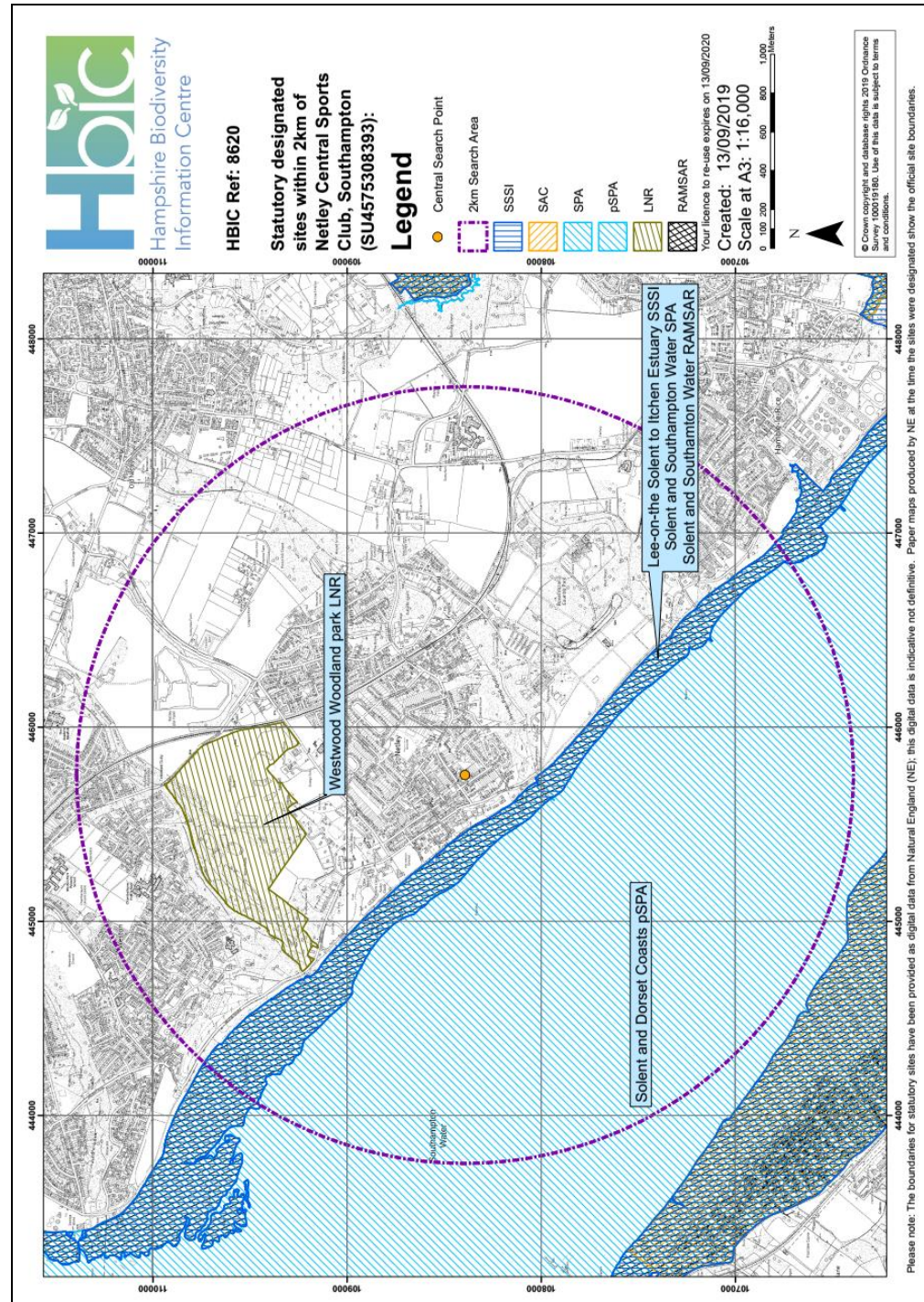
Biosphere Reserves (England)

No Features found

2/2

Appendix 8. Ecological Data Search Information

The project site can be found at SU 45753 08393





Hampshire Biodiversity
Information Centre

HBIC Ref: 8620

Non-statutory designated
sites within 2km of
Netley Central Sports
Club, Southampton
(SU4575308393):

Legend

- Central Search Point
- 2km Search Area
- SHCs (L-adjacent sites)
- Surrounding SHCs
- Ancient Woodland Inventory
- Semi-Natural
- Registered
- Brent Goose Sites 2002 without recording again
- Classification
 - Core Area
 - Primary Support Area
 - Secondary Support Area
 - SPH site
 - Low use
 - Candidate
 - Uncertain

Your licence to re-use expires on 13/09/2020

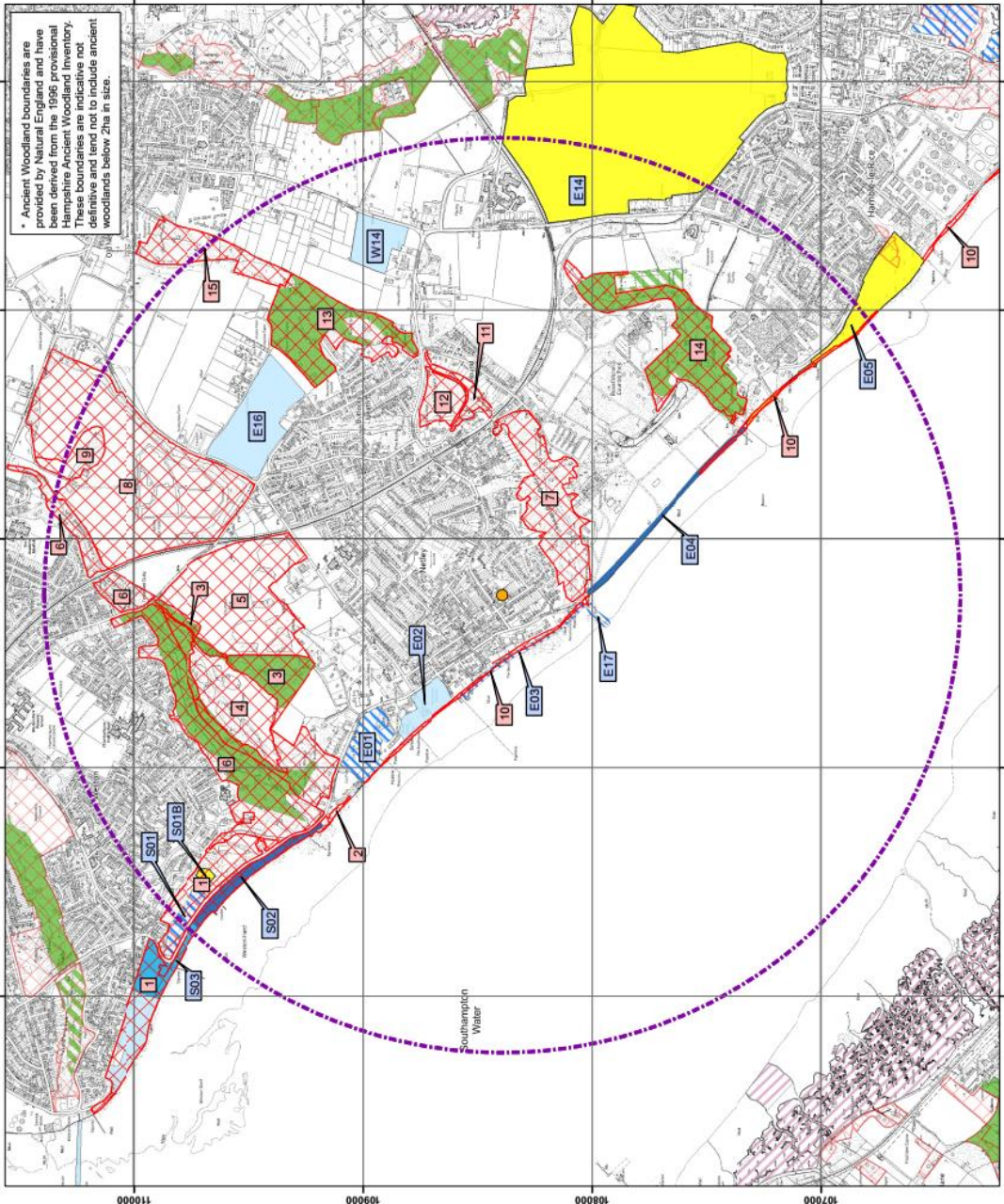
Created: 13/09/2019

Scale at A3: 1:16,000

0 100 200 400 600 800 1,000
Meters



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Appendix 9. Habitat Suitability Index – GCN

Water Bodies	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	T
W1	1	0.1	0.9	1	0.2	0.67	0.33	0.1	1	0.4	0.42

$$\text{Total HSI Score} = (S1 \times S2 \times S3 \times S4 \times S5 \times S6 \times S7 \times S8 \times S9 \times S10)^{1/10}$$

Key:

W = Waterbody

S1 = Location

S2 = Pond Area

S3 = Pond Permanence

S4 = Water Quality

S5 = Shade

S6 = Water Fowl

S7 = Fish

S8 = Pond Numbers

S9 = Terrestrial Habitat Quality

S10 = Macrophyte Coverage

T = Total HSI Score

Appendix 10. Building Photographs

Building 1 – Northern elevation

Open fronted garage constructed of timber panelling and corrugated metal. Roof and southern and eastern elevations covered with dense vegetation.



Building 2 – Northern elevation

Open fronted timber shed. Western side dilapidated with a collapsed roof. Western, eastern and southern elevations obscured by vegetation.



Appendix 11. Confidential Badger Records

11.1 Results

The results from the local data centre provided two records for this species from 2008, situated within an area of woodland 1.2km to the north-east of the site. A max count of 6 individuals were recorded for each of these locations, however the nature of these records were not provided. Connectivity to the site from this location is limited due to a large area of built up residential development situated between.