



Preliminary Ecological Appraisal
Land to the rear of 6 & 8 Sedgwick
Road

For

Sherfield Homes Ltd

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1. Summary

- 1.1.1** Sherfield Homes Ltd are submitting a planning proposal for an area of land to the rear of Number 6 and 8 Sedgwick Road, Bishopstoke, Eastleigh to construct two new bungalows within the former garden footprint.
- 1.1.2** The new proposals include the removal of an outbuildings and two sheds and the construction of two new bungalows each with gardens and two parking spaces (plans shown in Appendix 5). The proposed development is set on a 0.064 hectare site. The site location is shown on Figure 1.
- 1.1.3** The pre-baseline biodiversity calculations have been calculated based on the survey completed 4th October 2024 using the statutory biodiversity metric for small sites (issued July, 2024). The Site comprised introduced shrub and modified grassland, with a small patch of bramble scrub, one outbuilding and two sheds. A small lean-to extension which is currently used as a porch for number 6 will need to be removed for access, but the two semi-detached properties will remain untouched and are outside the redline boundary.
- 1.1.4** Nature's Cousins were commissioned to undertake a Preliminary Ecological Appraisal (PEA) of the site, including an ecological desk study, habitat survey and assessment of the site's baseline biodiversity value. This appraisal informs the assessment of potential effects of the project on biodiversity and ecological features including protected species, species of conservation concern, designated sites and priority habitats for nature conservation.
- 1.1.5** Records for statutory designated sites and priority habitats were collated for a 2km study area from online data sets, and desk study records for non-statutory designated sites, protected species and species of conservation concern were requested from the local environmental records centre within 1km.
- 1.1.6** The desk study found were that the site is within 2km of one statutory designated sites; the River Itchen which is designated as a Special Area of Conservation (SAC) and also a Site of Special Scientific Interest (SSSI). Eight Sites of Importance for Nature Conservation (SINCs) were also return within the search radius. The designated sites will not be impacted by the proposals, as the river is at least 300m away and separated via roads and other residential units.
- 1.1.7** The desk study found records of seven priority habitats for nature conservation within the 1km study area. The closest habitat was deciduous woodland, associated with Stoke Park Woods SINC. No priority habitat was recorded within the study area.
- 1.1.8** Records of protected and notable species were found within the 1km study area. These included multiple records for birds, seven species of bat, slow worm, grass snake, great crested newt, and hedgehog, badger and six invertebrate records including some rarer freshwater species, including southern damselfly and Bullhead associated with the River Itchen SSSI.

- 1.1.9** A habitat survey using the UK Habitat Classification (UKHab) methodology was undertaken during a site visit carried out by Grace Cousins MCIEEM of Nature's Cousins on 4th October, 2024. Habitats on site were described, mapped and assessed for their conservation importance and potential to support protected species or species of conservation concern. Ecological features of note were target noted. Habitat conditions were also recorded where possible.
- 1.1.10** During the habitat survey the main habitats found were developed land (hardstanding (u1b) and buildings (u1b5) and mixed bramble scrub (h3h) and introduced scrub (u1 847), non-native hedgerow (h2b). The habitat survey results are shown in Figure 3.
- 1.1.11** The current habitat baseline calculations under the statutory metric are 0.145 habitat units and 0.01 hedgerow units. A total of 0.159 habitat units are required in order to meet 10% biodiversity net gain targets, and 0.011 hedgerow units are required. These can be achieved offsite by purchasing offsite mitigation credits.

2. Introduction

2.1.1 During the ecological desk study, designated sites and priority habitats¹ for nature conservation are identified within a defined study area of the proposed works and the potential of the project to affect those sites and habitats is discussed. Records for protected species and species of conservation concern² are collated to identify potential effects of the project and inform requirements for further surveys if necessary. During the habitat survey undertaken by a suitably qualified ecologist, the habitats present on the site are identified and mapped to determine the baseline biodiversity metric value for the site, and the suitability of the site to support protected species and species of conservation concern is assessed.

2.2 Project Description

2.2.1 The project includes sectioning off an area of land to the rear of two existing semi-detached properties; 6 and 8 Sedgwick Road which currently both used as back gardens. The gardens include primarily modified grassland with an introduced scrub border, bramble scrub, hardstanding, dilapidated outbuildings and sheds in poor condition. There is one large English Oak tree with a TPO which lies on the boundary of the property for No 6 Sedgwick Road and the neighbouring property (no 10 Sedgwick Court). No 6 includes two sheds and a large outbuilding also to be removed within the plans, and a laurel hedgerow which will be removed for access. (see proposed drawing, Appendix 5). Two bungalows and associated gardens and parking will be constructed within the original garden footprint (see plans in Appendix 5). The lean too entrance to the property of No 6 will be partially removed in order to allow access to the rear garden (driveway for the new properties).

2.2.2 The proposals are hereafter referred to collectively as “the proposed works”.

2.3 Site Description

2.3.1 The site was previously used as a garden for the two existing properties, both are still currently used as gardens and are well-kept and maintained. Both boundaries for each property have introduced shrub borders, including garden species such as Laurel, buddleia, privet, cotoneaster and a couple of native species including a young ash tree and a young hazel tree. There is one large mature English oak tree *Quercus robur* on the boundary of No 6 which overhangs into the Site. The site location is shown on Figure 1.

¹ Priority habitats are habitats listed on the Section 41 list of the Natural Environment and Rural Communities Act 2006 (the NERC Act) as Habitats of Principal Importance in England or listed in local Biodiversity Action Plans.

² Species of conservation concern are species identified on published lists as being rare, vulnerable or declining, This includes priority species which are species which are listed on the Section 41 list of the NERC Act as Species of Principal Importance in England or species which are listed in local biodiversity action plans. Protected species are species protected under legislation.

Figure 1: Site Location



2.4 The Brief and Objectives

2.4.1 Nature's Cousins was commissioned on 23rd September 2024 to undertake a PEA for the project, including:

- An ecological desk study;
- A habitat survey;
- Condition assessments to inform baseline biodiversity metric calculation; and
- A report detailing results.

2.4.2 The objective of the appraisal was to identify constraints and opportunities related to ecology and biodiversity with respect to development of the site.

2.5 Limitations

2.5.1 The species data collated during the desk study is mainly derived from records submitted by members of the public and *ad hoc* surveys undertaken by volunteers. Therefore, it should not be taken as a definitive list of the protected species and other species of conservation concern that occur in the local area.

2.5.2 This report is based on the development boundary and layout provided by Sheffield Homes Ltd on the 23rd September 2024. Subsequent changes may result in a requirement to reassess the potential impacts of the development and the requirements for avoidance, mitigation and enhancement.

3. Planning Policy and Legislation

3.1.1 National legislation and planning policy relating to ecology and biodiversity, relevant to the proposed works, is summarised below. Local policies relevant to the project are also described below.

3.1.2 This report refers to “ecological features” which include:

- Statutory designated sites for nature conservation;
- Non-statutory designated sites for nature conservation;
- Priority habitats for nature conservation, including ancient woodland;
- Protected species;
- Species of conservation concern; and
- Invasive non-native species.

Designated Sites

3.1.3 Designated sites for nature conservation are protected under UK legislation. Sites can be classified according to their levels of conservation importance. Sites may be considered of international, national or local conservation importance. Internationally important sites receive the highest level of protection.

3.1.4 Paragraph 180 of the National Planning Policy Framework, 2023 (NPPF) states that: “Planning policies and decisions should contribute to and enhance the natural and local environment by: a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan)”. In this guidance, which sets out the government’s planning policies for England and how they should be applied, “sites of biodiversity” are taken to include designated sites for conservation.

3.1.5 Paragraph 187 of the NPPF states that “The following should be given the same protection as habitats sites³:

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

3.1.6 Statutory designated sites of national importance include Sites of Special Scientific Interest (SSSIs) which are protected under the Wildlife and Countryside Act 1984 (WCA), Countryside

³ Any site which would be included within the definition at regulation 8 of the Conservation of Habitats and Species Regulations 2017 for the purpose of those regulations, including candidate Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation, Special Protection Areas and any relevant Marine Sites.

and Rights of Way Act 2000 (CRoW Act) and Natural Environment and Rural Communities Act 2006 (NERC Act). National Nature Reserves (NNRs) are a selection of the very best parts of England's SSSIs, protected under the WCA and CRoW Act.

- 3.1.7** Natural England's Impact Risk Zones (IRZ) for SSSIs (Natural England, 2021) is a GIS tool developed by Natural England to make a rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts. The IRZs also cover the interest features and sensitivities of European sites, which are underpinned by the SSSI designation and "Compensation Sites", which have been secured as compensation for impacts on European and Ramsar sites.
- 3.1.8** Development proposals situated within IRZs may require consultation between the Local Planning Authority and Natural England to discuss the potential impacts of a proposal upon the designated site.
- 3.1.9** Local Nature Reserves (LNRs) are statutory designated sites of local importance that receive protection under the National Parks and Access to the Countryside Act 1949. Local Planning Authorities are required to consult Natural England about all new proposals. An LNR can be given protection against damaging operations. It also has protection against development on and around it. This protection is usually given via the Local Plan⁴ (produced by the planning authority), and often supplemented by local bylaws. Unlike national designations, the level and type of protection afforded an LNR is decided locally and varies from site to site.
- 3.1.10** Non-statutory designated sites, such as Sites of Nature Conservation Interest (SNCI), Sites of Interest to Nature Conservation (SINC) and Local Wildlife Sites (LWSs) are of local importance. These sites are not protected under legislation. However, local authorities take account of local sites when formulating local plans and when considering planning applications.

Priority Habitats

- 3.1.11** In this report priority habitats for nature conservation include:
- Habitats of Principal Importance listed under Section 41 of the NERC Act;
 - Habitats listed under Local Biodiversity Action Plans (LBAPs); and
 - Ancient woodland.
- 3.1.12** Habitats of Principal Importance are listed under the NERC Act. Under Section 41 of the NERC Act, the Secretary of State must, as respects England, publish a list of the types of habitat which in the Secretary of State's opinion are of principal importance for the purpose of conserving biodiversity.
- 3.1.13** Section 40 of the Act places a duty on all public bodies, including planning authorities, to have regard for biodiversity in exercising their functions. Planning authorities should have particular regard to the Habitats of Principal Importance (priority habitats) listed under Section 41 of the Act which should be treated as a material consideration in the planning process.

⁴ A plan for the future development of a local area, drawn up by the local planning authority in consultation with the community. In law this is described as the development plan documents adopted under the Planning and Compulsory Purchase Act 2004. A local plan can consist of either strategic or non-strategic policies, or a combination of the two.

- 3.1.14** Paragraph 185 of the NPPF states that to protect and enhance biodiversity and geodiversity, plans should “promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.” The NPPF defines “priority habitats and species” as “Species and Habitats of Principal Importance included in the England Biodiversity List published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006”.
- 3.1.15** Some habitats are described as ‘irreplaceable habitat’. The NPPF describes these as habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen.
- 3.1.16** Ancient woodland is any area that’s been wooded continuously since at least 1600AD⁵. Ancient woodland, as well as ancient and veteran trees, are regarded as an irreplaceable habitat⁶. Paragraph 186(c) of the NPPF states that “When determining planning applications, local planning authorities should apply the following principles: c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists ...”

Protected Species

- 3.1.17** Rare and declining plant and animal species in the UK are generally protected under national legislation. Such protection and species can be found in Appendix 2.
- 3.1.18** Species protected under the Habitat Regulations⁷ receive the highest level of protection in the UK. These species are considered to be of international importance because they are rare or declining in Europe as well as in the UK. These species are not only protected from killing and injury, but their breeding sites and resting places are also protected. These species include:
- Great-crested newt (*Triturus cristatus*),
 - All bat species;
 - Hazel dormouse (*Muscardinus avellanarius*) and otter (*Lutra lutra*);
- 3.1.19** For the species listed above, the Habitats Regulations makes it an offence to:
- Deliberately kill, injure, disturb or capture them;
 - Deliberately take or destroy their eggs;

⁵ Ancient woodland includes ‘ancient semi-natural woodland’ (ASNW) and plantations on ancient woodland sites (PAWS).

⁶ <https://www.gov.uk/guidance/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions>

⁷ These species are often referred to as European Protected Species (EPS) because the requirement to protect them under national legislation originally derives from the fact that these species are listed under the European Habitats Directive

- Damage or destroy their breeding sites and resting places⁸; and
- Possess, control or transport them (alive or dead).

3.1.20 The WCA also offers protections. In addition to the species listed above, which also receive some protection under the WCA (Section 9 (1)), protection under this legislation is given to prevent intentional (or reckless in Scotland) killing and injury⁹ of:

- Common lizard (*Zootoca vivipara*), slow worm (*Anguis fragilis*), adder (*Vipera berus*) and grass snake (*Natrix helvetica*);
- All wild birds; and
- Water vole (*Arvicola amphibius*).

3.1.21 The WCA also provides additional protection for some species also protected under the Habitats Regulations. These species include great-crested newt, sand lizard, smooth snake, bats, dormouse, otter, large blue butterfly, Fisher's estuarine moths, and little ramshorn whirlpool snails, whereby it is also an offence under the WCA to intentionally or recklessly:

- Disturb while they occupy a structure or place used for shelter or protection; and
- Obstruct access to a place of shelter or protection.

Species of Conservation Concern

3.1.22 Other rare or declining species may not receive strict legal protection but may be recognised on published lists as species of conservation concern that should be protected as a matter of best practice.

3.1.23 Under Section 41 of the NERC Act, the Secretary of State must, publish a list of the living organisms which in the Secretary of State's opinion are species of principal importance for the purpose of conserving biodiversity. Planning authorities are required to have particular regard to these species and treat them as a material consideration in the planning process. Consideration of species of conservation concern during development projects is a requirement of the NERC Act which states that any "public authority must, in exercising its functions, have regard ... to the purpose of conserving biodiversity" and "conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat."

3.1.24 Further information can be found in Appendix 2.

Invasive Non-Native Plant Species

3.1.25 Invasive non-native plants are those listed as species of special concern because they cause severe problems for native UK plants and the environment.

3.1.26 The relevant legislation on invasive plant species is:

- Schedule 9 of the WCA; and
- Schedule 2 of the Invasive Alien Species (Enforcement and Permitting) Order 2019, which gives effect to EU regulations on the prevention and management of the spread of invasive alien species.

⁸ This applies even if the species is not present at the time when the damage or destruction occurs.

⁹ The WCA also protects many species from activities related to their sale, including: Selling, offering for sale, possessing or transporting for the purpose of the sale or publishing advertisements to buy or sell a protected species (WCA Section 9 (5)).

- 3.1.27 Both make it an offence to “plant or otherwise cause to grow in the wild” any plant species listed.

Local Planning Policy

- 3.1.28 The NPPF is enacted locally through local borough plans, In Eastleigh Borough a new Local Plan for Biodiversity is currently being drafted. In the meantime, the previously adopted **Biodiversity Action Plan (2012- 2022)** still remains relevant, and the BAP includes eight species of bats which are national priority species in Eastleigh borough.

- 3.1.29 **Eastleigh Biodiversity Supplementary Planning Document** states: “ **Planning Policy Statement 1:** ‘*Delivering Sustainable Development*’ requires development plan policies to take account of environmental issues including the conservation and enhancement of wildlife species and habitats and the promotion of biodiversity (para. 20). The PPS1 supplement on climate change identifies the conservation and enhancement of biodiversity as a key objective (para. 9), indicating that in selecting sites for development, account should be taken of effects on biodiversity, and opportunities for biodiversity enhancement through the provision of open space and other green infrastructure (para. 24).

- 3.1.30 **Eastleigh Biodiversity Supplementary Planning Document:**

Priority Habitats and Species

“Where there is potential for a development to cause harm to priority habitats or species the applicant must submit adequate biodiversity surveys, impact assessment and mitigation proposals to enable the Council to determine a planning application. Further guidance on this is provided in Chapter 4.

Where development is proposed, the Council will consider applying planning conditions or legal obligations to secure the protection, conservation and enhancement of priority habitats or species to minimise any harmful impacts arising from the development.

Where damage cannot be avoided the Council will require compensatory measures to be provided as part of the development.

The Council will welcome proposals which will help conserve habitats and species of principal biodiversity importance listed under Section 41 of the Natural Environment and Rural Communities Act 2006 and the UK and Eastleigh Biodiversity Action Plans”.

4. Desk Study

4.1 Methodology

- 4.1.1** A study area was defined to cover the site and all land within a 2km buffer area. Records for designated sites, ancient woodland and priority habitats were sought for the full 2km study area. Records for protected species, species of conservation concern and invasive non-native species were sought for a 1km study area. The site location and study areas are shown on Figure 1.
- 4.1.2** The search areas for biological records were deemed to be suitable based on the zone of influence for the works. The zone of influence for a project is defined as the area over which ecological features may be subject to significant effects as a result of the proposed project and associated activities (CIEEM, 2017). The development is small scale and the construction works will be short-term.
- 4.1.3** Publicly available data sets were referenced to identify the location of statutory designated sites and priority habitats, including ancient woodland. Biological records were requested from the Local Environmental Records Centre (LERC) for records relating to species and non-statutory designated sites. The Natural England MAGIC website (<https://magic.defra.gov.uk>) was also consulted for biological records.
- 4.1.4** In addition to the records request, OS mapping was used to identify the presence of running (rivers and streams) and standing (lakes, ponds and ditches) water bodies within the 500m study area.
- 4.1.5** Sources of information were as follows:

Table 4.1: Sources of desk study data

Source	Summary of information provided
Hampshire Biodiversity Information Centre (HBIC)	Desk study data of species and designated sites.
MAGIC	Priority habitats and waterbodies.

- 4.1.6** Requests for information were sent to the Local Environmental Record Centre, listed above, on 25th September 2024, with results received from the HBIC on 30th September 2024.
- 4.1.7** Results were filtered to include only those relevant to the study area within 1km, and only those recorded in the last ten years. Results are presented in the following section.
- 4.1.8** Potential ecological constraints identified as a result of the desk study are presented in Section 7.

5. Habitat Survey

5.1 Methods

- 5.1.1** A survey area was defined as an area that encompassed the site. The survey area is shown on Figure 2.
- 5.1.2** A survey using the UK Habitat Classification system (UKHab) (Butcher *et al.*, 2023) was conducted throughout the survey area. This is a nationally recognised habitat classification system that is compatible with the DEFRA Biodiversity Metric for calculating biodiversity net gain values (DEFRA, 2023).
- 5.1.3** The UKHab has five hierarchical levels and includes the identification of priority habitats (Habitats of Principal Importance listed under the Natural Environment and Rural Communities Act 2006) and Annex I habitats as listed under the European Habitats Directive. The five levels are:
- Level 1 – Biomes/major ecosystems (terrestrial, freshwater and coastal);
 - Level 2 – Ecosystem types (i.e. woodland, grassland, heathland and scrub);
 - Level 3 – Broad Habitats, based on those of the UK Biodiversity Action Plan (UKBAP);
 - Level 4 – Habitats, including priority habitats; and
 - Level 5 – Habitats, including Annex I habitats.
- 5.1.4** During the field survey, the habitats in the survey area were mapped to the highest level possible.
- 5.1.5** Table 5.1 below shows the meta-data used for this survey.

Table 5.1: Habitat survey meta-data

Scope and purpose of the survey	Preliminary Ecological Appraisal (PEA)
Area surveyed	Site boundary
Edition of UKHab used	UKHab-Professional (V2)
Minimum Mapping Unit (MMU)	25m ² for areas, 5m for linear features
Level of UKHab Primary Hierarchy used	Level 5, where possible
List of Secondary Code groups recorded	All secondary codes
Additional attributes recorded	Habitat condition assessment
Map projection and units	Figure 3
Date of survey	4 th October 2024
Organisation and individual undertaking the survey	Nature's Cousins Grace Cousins MSc BSc MCIEEM, Principal Ecological Consultant
References for any existing datasets that have been used	Hampshire Biodiversity Information Centre (HBIC) MAGIC Maps

5.1.6 The dominant and readily identified species of higher plant species from each habitat type within the survey area were recorded and their abundance was assessed on the DAFOR scale:

- D Dominant;
- A Abundant;
- F Frequent;
- O Occasional; and
- R Rare.

5.1.7 These scores represent the abundance within the defined area only and do not reflect national or regional abundances. Plant species nomenclature follows Stace (2019).

5.1.8 Target notes were made for any features which were too small to map but were of particular ecological interest.

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- 5.1.9** Incidental records of fauna were also made during the survey and the habitats identified were evaluated for their potential to support protected species and other species of conservation concern, including priority species. However, no specific faunal surveys were undertaken.

6. Desk Study Results

6.1.1 The results of the desk study are summarised below and shown on Figure 2.

Designated Sites

6.1.2 There was one statutory designated site located within a 2km study area; this is the River Itchen which is both a Special Protection Area (SPA) and a Site of Special Scientific Interest (SSSI); this site and reasons for their designations are described in Table 6.1 below.

6.1.3 There were no Local Nature Reserves within the 2km study area and an additional eight non statutory designated sites; Sites of Importance for Nature Conservation (SINCs) were located within a 1km search radius, these are detailed in Table 6.2 below, the closest is Stoke Park Woods, located 460m east at its closest point.

Table 6.1: Designated sites within the study area

Statutory Site	Central Grid Reference	Distance from Site	Description
The River Itchen Special Protection Area (SPA) & Site of Special Scientific Interest (SSSI)	SU467191	300m west at closest point	The Itchen is a classic example of a sub-type 1 chalk river. The river is dominated throughout by aquatic <i>Ranunculus</i> spp. The headwaters contain pond water-crowfoot <i>Ranunculus peltatus</i>, while two <i>Ranunculus</i> species occur further downstream: stream water-crowfoot <i>R. penicillatus</i> ssp. <i>pseudofluitans</i>, a species especially characteristic of calcium-rich rivers, and river water-crowfoot <i>R. fluitans</i>. Annex II species that are a primary reason for selection of this site - Southern damselfly <i>Coenagrion mercuriale</i> Strong populations of southern damselfly <i>Coenagrion mercuriale</i> occur here, estimated to be in the hundreds of individuals. The site in central southern England represents one of the major population centres in the UK. It also represents a population in a managed chalk-river flood plain, an unusual habitat for this species in the UK, rather than on heathland. - Bullhead <i>Cottus gobio</i> The Itchen is a classic chalk river that supports high densities of bullhead <i>Cottus gobio</i> throughout much of its length. The river provides good water quality, extensive beds of submerged plants that act as a refuge for the species, and coarse sediments that are vital for spawning and juvenile development. Annex II species present as a qualifying feature, but not a primary reason for site selection

			• White-clawed (or Atlantic stream) crayfish <i>Austropotamobius pallipes</i> • Brook lamprey <i>Lampetra planeri</i> • Atlantic salmon <i>Salmo salar</i> • Otter <i>Lutra lutra</i>
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Figure 2 : Designated sites within a 2km radius of the site

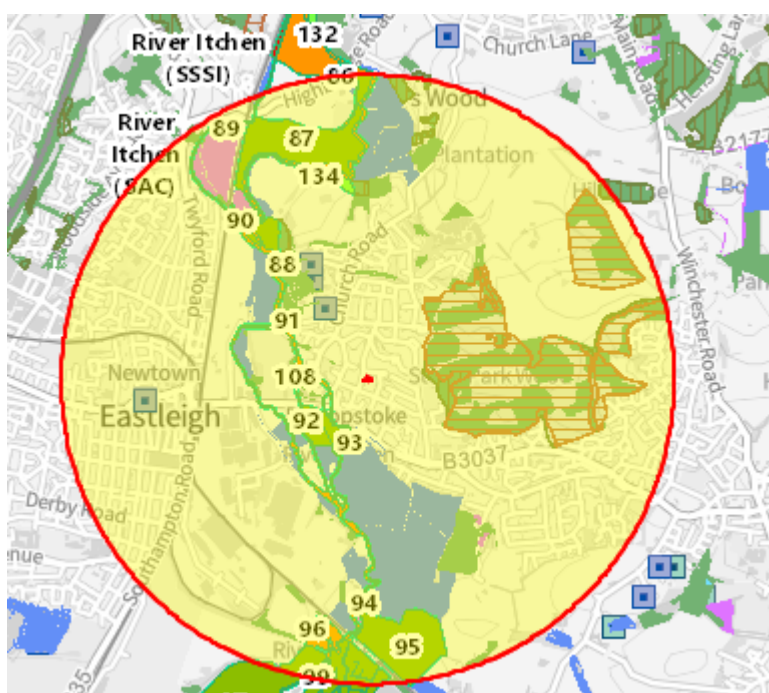


Table 6.2: Local Non Statutory Sites - SINCs

Statutory Site	Central Grid Reference	Distance from Site
Stoke Park Wood	SU48001940	460m E
Breach & Gully Copses	SU46402000	600m NW
Astrim Nurseries	SU46401900	660m SW
Judges Gully Copse	SU47302010	730m NE
Judges Gully Meadow	SU47202030	850m NE
Swamp west of recreation grounds	SU46001950	860m W
Marshy grassland, Bishopstoke	SU46601870	860m S
Poplar Plantation (Stoke Park Wood)	SU47602020	980m NE

Ancient Woodland

- 6.1.4** There are 20 parcels of ancient woodland and ancient replanted woodland recorded within the 2km study area. The closest parcels were associated with Stoke Park Woods in Bishopstoke, located 460m east at the closest point.

Other Priority Habitats

- 6.1.5** There were seven different types of priority habitat were identified within the study area; this included coastal floodplain grazing marsh, lowland meadows, lowland fens, purple moor grass & rush pasture, good quality semi-improved grassland, reedbeds and deciduous woodland. The closest of which was deciduous woodland associated with Stoke Park Woods.

Protected Species and Species of Conservation Concern

- 6.1.6** A total of 18 protected species and species of conservation concern records were identified within the study area, which are listed in Table 6.3 below. An additional 70 bird species records were also returned. The records shown are those that have been submitted within the last ten years and occur within 1km. Grid references are provided for a maximum 100m resolution or reduced to this resolution when a higher accuracy grid was included.

Table 6.3: Species records derived from the desk study

Common name	Scientific name	CHSR ¹⁰ Schedule 2 or 5	WCA ¹¹ Schedule 1, 5 or 8	National Priority Species ¹²	Red Data Book/ BoCC ¹³	Year of most recent record	Grid Ref.	Distance from Site (km)	Source
Herptiles									
Slow Worm	<i>Anguis fragilis</i>		Schedule 5			2022	SU47111956	300m	HBIC
Grass snake	<i>Natrix helvetica</i>		Schedule 5				SU47591909	725m	HBIC
Common toad	<i>Bufo bufo</i>			✓		2019	SU4671419452	170m	HBIC
Great crested newt	<i>Triturus cristatus</i>	✓	Schedule 5	✓		2017	SU465191	280m	HBIC
Mammals									
European Hedgehog	<i>Erinaceus europaeus</i>			✓	VU	2018	SU47001967	340m	HBIC
European Badger	<i>Meles meles</i>	PoB Act 1992				2020	SU474197	600m	HBIC
European Otter	<i>Lutra lutra</i>	✓	Schedule 5	✓		2015	SU467191	140m	HBIC

¹⁰ Conservation of Habitats and Species Regulations 2017, as amended

¹¹ Wildlife and Countryside Act 1981, as amended

¹² Species of Principal Importance within the relevant country of the United Kingdom

¹³ Birds of Conservation Concern 5: the status of all regularly occurring birds in the United Kingdom, Channel Islands and the Isle of Man (Stanbury *et al.*, 2021)

Preliminary Ecological Appraisal

Land to the rear of 6-8 Sedgwick Road



Common name	Scientific name	CHSR ¹⁰ Schedule 2 or 5	WCA ¹¹ Schedule 1, 5 or 8	National Priority Species ¹²	Red Data Book/ BoCC ¹³	Year of most recent record	Grid Ref.	Distance from Site (km)	Source
Water vole	<i>Arvicola amphibius</i>	✓	Schedule 5	✓		2015	SU46711911	450m	HBIC
Brown long-eared bat	<i>Plecotus auritus</i>	✓	Schedule 5	✓		2016	SU478193	890m	HBIC
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	✓	Schedule 5			2016	SU471189	370m	HBIC
Soprano pipistrelle	<i>Pipistrellus pymeaus</i>	✓	Schedule 5	✓		2016	SU478194	900m	HBIC
Brandt's bat	<i>Myotis brandtii</i>	✓	Schedule 5	✓	DD	2016	SU478193	890m	HBIC
Natterer's bat	<i>Myotis nattereri</i>	✓	Schedule 5	✓		2016	SU478193	890m	HBIC
Noctule bat	<i>Nyctalus noctula</i>	✓	Schedule 5	✓		2016	SU478193	890m	HBIC
Daubenton's bat	<i>Myotis daubentonii</i>	✓	Schedule 5	✓		2015	SU463195	490m	HBIC
Invertebrates									
Alder leaf beetle	<i>Agelastica alni</i>				DD	2017	SU468200	400m	HBIC
Stag Beetle	<i>Lucanus cervus</i>	✓		✓	NS	2016	SU467194	83m	HBIC

Common name	Scientific name	CHSR ¹⁰ Schedule 2 or 5	WCA ¹¹ Schedule 1, 5 or 8	National Priority Species ¹²	Red Data Book/ BoCC ¹³	Year of most recent record	Grid Ref.	Distance from Site (km)	Source
Southern damselfly	<i>Coenagrion mercuriale</i>	✓	Schedule 5	✓	EN	2016	SU46261979	730m	HBIC
Bullhead	<i>Cottus gobio</i>	✓		✓		2015	SU4665019040	350m	HBIC

6.1.7 An additional 70 bird records were returned from HBIC records centre, including four Schedule 1 birds. An additional 5 protected fish species and eel records and a single white-clawed crayfish record were also returned, all located within the river Itchen SAC and SSSI, either the main river or tributaries off the main watercourse. However, none of them are likely to be impacted by the proposals at land to the rear of 6-8 Sedgwick Road therefore they have not all been listed in the Table above.

Invasive Non-Native Species

- 6.1.8** There are four notable records for invasive non-native species (INNS) recorded within 1km of the survey area, taken from the HBIC desk study search. Other records were returned which were associated with garden escapes and other ornamental plant records. These records are summarised in Table 6.4 below.

Table 6.4: Invasive non-native species

Common name	Scientific name	WCA Schedule 9 or Invasive Alien Species Order 2019	Year recorded	Grid Reference
Japanese knotweed	<i>Fallopia japonica</i>	WCA9_Mod	2016	SU461186
Himalayan balsam	<i>Impatiens glandulifera</i>	WCA9_Mod & INNS	2021	SU47151852
Himalayan Cotoneaster	<i>Cotoneaster simonsii</i>	WCA9_Mod	2016	SU478189
Waterer's Cotoneaster	<i>Cotoneaster frigidus</i> x <i>salicifolius</i>	WCA9_Mod & INNS	2016	SU478189

7. Habitat Survey Results

Habitats and Flora

7.1.1 The following UKHab habitat types were identified:

- u1b5 – Buildings (Appendix 1, Photographs 1 & 2 & 5) – x1 outbuilding and x3 sheds
- u1b – Developed land, sealed surface (Appendix 1; Photograph 3)
- u1 847 Introduced shrub (Appendix 1, Photographs 3 & 4)
- G4 – Modified Grassland (Appendix 1, Photographs 4, 5, 6 & 8)
- h3d - Mixed Bramble Scrub (Appendix 1, Photograph 7)
- 203 - Urban trees (Appendix 1, Photograph 3);
- h2b – Non native ornamental hedgerow (Appendix 1, Photograph 1)

7.1.2 The Site comprised largely of modified grassland G4 garden, with a small section of hardstanding (u1b sealed surface), a border of introduced shrub, and a small patch of bramble scrub; hd3 (dominated by bramble (*Rubus fruticosus*). Several urban trees were recorded including one large English oak, one mature butterfly bush (*Buddleia davidii*), an ash tree *Fraxinus excelsior* and a hazel tree *Corylus avellana*.

7.1.3 There is one non native ornamental hedgerow on site, around the access area on the driveway of No 6. A wooden 6ft fence divides the two gardens and perimeter of the Site. There were no watercourses recorded on site.

7.1.4 These habitats are described below and their distribution is shown on Figure 3.

Figure 3 : Habitat Survey Results



Key:

- Grey = Hardstanding – artificial sealed surface (U1b)
- Black = Built structures - buildings (U1b5)
- Green = Modified grassland (G4)
- Pink = Introduced shrub (u1 847)
- Red = Bramble scrub (H3d)

Target Notes

7.1.5 There are two target notes as shown on Figure 3.

- TN1 – Mature Oak tree
- TN2 – Non native ornamental hedgerow H2b (cherry laurel)

u1b - Developed land, sealed surface

- 7.1.6** There is an area (approximately 148m² of developed land sealed surface (hardstanding) (u1b on Figure 3) in the entrance to the site and a footpath stretching all the way down the garden of No 6, and a small square area of paving within the rear garden of No 8. This habitat type scores 0 Biodiversity credits and cannot be given a condition score under the metric.

u1b5 - Buildings

- 7.1.7** A large outbuilding stretching the whole width of the garden at No 6 was in a poor dilapidated condition (Photograph 5). The building was exposed to the elements and not well insulated, the building was constructed with wood and a bitumen felt and asbestos roofing panels noted. The building was not accessed due to health and safety concerns, but upon a detailed external inspection the building has negligible suitability for roosting bats. Two additional wooden sheds in varying stages of repair will also be removed as a result of the development proposals. The total area of the buildings on site was 50m². This habitat type scores 0 Biodiversity credits and cannot be given a condition score under the metric.

Hd3 – Mixed bramble scrub

- 7.1.8** There is small patch of bramble scrub (approximately 22m²) within the garden of No 8 (Photograph 4) which also extends along the boundary between 6 and 8, totalling 31m² overall. Dominant species recorded was bramble (*Rubus fruticosus agg*) with occasional nettles (*Urtica dioica*) and herb Robert (*Geranium robertium*). Condition of these parcels was Poor due to the young nature of the scrub and lack of species diversity.

U1 847- Introduced scrub

- 7.1.9** There is a large patch of introduced scrub comprising multiple ornamental species of cotoneaster, buddleia bush, laurel species and privet bushes forming the eastern boundary of No 6. All these species are garden plants which have been planted and well maintained. A couple of smaller native shrubs were included within the ornamental planting (see category below for urban trees).

203 Urban trees

- 7.1.10** Within the introduced planting above, there were a couple of native specimens, including a semi-mature ash tree and a hazel tree. A large mature English Oak tree with a Tree Preservation Order (TPO) was also present on the eastern boundary (TN1), of which the main canopy overhangs into the site, but the most part of the trunk falls outside of the perimeter boundary.

H2b Non-native ornamental Hedgerow

- 7.1.11** There was a 10m stretch of non-native cherry laurel bush forming the perimeter of the driveway of No 6 which will require removal to facilitate access to the Site. Cherry laurel was the only species recorded present (Photograph 1), Figure 3, Target note 2.

G4 Modified Grassland

- 7.1.12** There are two main parcels of modified grassland (Photograph 4 & 8) associated with the rear gardens. The parcel had white clover (*Trifolium repens*), ribwort plantain (*Plantago lanceolata*), cock's-foot (*Dactylis glomerata*), perennial ryegrass (*Lolium perenne*), daisy (*Bellis perennis*), broadleaf dock (*Rumex obtusifolius*), Yorkshire fog (*Holcus lanatus*). Condition assessment of this grassland was good.

7.2 Potential of the Site to Support any Protected Species

- 7.2.1** The site has the potential to provide the following:

- Foraging, basking and commuting opportunities for common reptiles such as slow worm;
- Foraging and commuting opportunities and shelter for hedgehog and other small mammals; and
- Foraging and nesting opportunities for common nesting birds within trees, shrubs, sheds and outbuildings.

Birds

- 7.2.2** There are opportunities for common nesting birds within the eastern boundary garden of property No 6. Care should be taken when removing the scrub and any vegetation and sheds and outbuildings from site to avoid disturbance to nesting birds which could reside within them.

Bats

- 7.2.3** The outbuildings and sheds do not provide any suitability for roosting bats, they are dilapidated in nature and open to the elements, without any suitable roosting opportunities noted.
- 7.2.4** It is recommended that these buildings, sheds and introduced shrub border are removed over the winter period in order to reduce the risk of disturbing any nesting birds which may be present.

Common reptiles & Amphibians

- 7.2.5** There is a very low risk of common reptiles such as slow worm which could be present along the boundaries of each property, care should be taken when removing any vegetation, compost piles and outbuildings to avoid any harm and injury to slow worm. A small stand alone home-made pond within No6 should also be carefully relocated to avoid any disturbance to any common amphibians. Due to the very small area of suitable habitat, it is not thought common reptiles will be present in enough number to warrant a full mitigation strategy.

Trees

- 7.2.6** Further arboricultural survey from a specialist contractor is recommended in order to assess the impact to the TPO oak tree (Photograph 3), and identify a suitable root protection zone and identify suitable protection measures, such as Heras fencing. All the other trees along the boundaries are of low ecological value. One dead tree stump remaining noted in No 6 had a single bird box on which can either be retained or relocated during the winter months if the tree requires removal for access.

8. Constraints, Opportunities and Recommendations

8.1 Designated Sites

- 8.1.1** It is very unlikely that the proposed works will have a direct effect on any of the designated sites identified during the desk study. This is because of their distance from the site and the absence of direct connectivity via habitat corridors or potential pollution pathways.

8.2 Priority Habitats

- 8.2.1** It is unlikely that the proposed works will have an effect on any of the priority habitats identified during the desk study. This is because of their distance from the site and the absence of direct connectivity via habitat corridors or potential pollution pathways.
- 8.2.2** Nonetheless, pollution from the construction phase of the development should be avoided, as dust and potential chemical spill from plant could enter the environment, so precautionary measures such as dampening down and spill kits should be used to minimise risk of environmental pollution during the construction phase.

8.3 Protected Species and Species of Conservation Concern

Great crested newt

- 8.3.1** The desk study returned a single record for great crested newt within 280m of the site, located in the ditches to the south of Bishopstoke Road. Although the desk study identified the presence of waterbodies within the 500m search area that could provide suitable breeding sites for amphibians. There were no waterbodies present on site, (apart from a small home-made mobile- pond) therefore no suitable breeding opportunities for great crested newt, it is therefore unlikely they will be present or site or impacted by the proposed works.
- 8.3.2** Great crested newts are protected under the Habitats Regulations as described in Section 3 and Appendix 1, which means it would be an offence to kill or injure individual newts or to damage or destroy breeding sites or resting sites. Other common amphibians such as common frog or toad may be present.

Badger

- 8.3.3** The desk study returned five records for badger within the 1km study area, however there is no suitable habitat on site for badger foraging or sett building and no badger foraging signs were recorded during the habitat survey, therefore they have not been considered further.

Hazel Dormouse

- 8.3.4** The desk study returned no records for hazel dormouse within the 1km study area, and there is also no suitable habitat on site for them. The site is isolated from connected suitable habitat (such as woodland or hedgerows) for dormice therefore they have not been considered further.

Reptiles

- 8.3.5** The desk study returned 19 records of slow worm within the 1km study area, the closest of which was located approximately 300m from the site. Suitable habitat (in the form of bramble scrub, introduced shrub, grassland and hardstanding for basking) for reptiles was recorded to be present on the site. The legal protection afforded to reptiles is summarised in Section 3 and Appendix 1.
- 8.3.6** Removal of habitat suitable for supporting reptiles could result in the killing or injury of reptiles which would be an offence in the absence of appropriate mitigation, therefore further recommendations for this species group have been made.

Birds

- 8.3.7** Many records for notable and protected bird species were returned in the desk study, these have not been mapped and most are associated with the River Itchen SAC and SSSI site nearby and Stoke Park Woods SINC. The current habitat on site is very limited for nesting birds. There is potential for common bird garden species, such as blue tit or blackbird or woodpigeon to nest within the outbuilding, sheds and introduced shrub, therefore a pre-check is recommended prior to demolition and any vegetation removal. As summarised in Section 3 and Appendix 2 all bird species are protected, including active nests.

Bats

- 8.3.8** Six different bat species records were found within the 1km study area, these included records for common *Pipistrellus pipistrellus* and soprano pipistrelle *Pipistrellus pygmaeus*, the rare barbastelle bat (*Barbastella barbastellus*). There was one large mature oak tree recorded on the site with the potential to support roosting bats, however it is on the perimeter of the site boundary and will be retained within the development proposals. So long as no additional lighting is proposed associated with the new bungalows, then the tree (if hosting a bat roost) will not be directly impacted. From a ground level inspection, no immediate Potential Roosting Features (PRFs) were identified on the tree, and it appeared in good condition, however due to its size and age there are likely roosting features further up in the canopy, as the tree was still in full leaf at the time of survey it was difficult to inspect fully.
- 8.3.9** The legal protection afforded to bats is summarised in Section 3. Killing or injury of bats would be an offence, as well as damage or destruction of a roosting site.

Hedgehog

- 8.3.10** There were multiple records of hedgehog (*Erinaceus europaeus*) returned within the desk study within a 1km radius. Although hedgehog is not a protected species it is a species of conservation concern, suitable habitat for hedgehog was recorded on the site in the form of bramble scrub and introduced shrub (on Figure 3 & Photograph 4) which may be suitable nesting and foraging sites for hedgehog, therefore appropriate recommendations will be made with regard to hedgehog to carefully check the scrub prior to removal in case of any hedgehogs present. Within the new perimeter fencing, a small hole (13cm by 13cm) should be installed within the boundary fences to allow free roaming access for hedgehogs to neighbouring properties on both sides.

Invertebrates & Fish

- 8.3.11** The desk study records were noted nearby for lots of aquatic invertebrate species and fish, due to suitable habitat nearby associated with the River Itchen, notable records include the Bullhead fish and the southern damselfly. However, the site itself has no waterbodies and will not support these species. Therefore, no further recommendations have been made with regards to this species group.

Invasive Plant Species

- 8.3.12** The desk study found records for the presence of INNS within 1km of the survey area. These included x20 Japanese Knotweed *Reynoutria japonica* records, all within the Bishopstoke and Eastleigh area. No evidence of Japanese Knotweed was recorded on site at the time of the survey. Three species of INNS was recorded on site during the habitat survey, these were Buddleia bush (*Buddleja davidii*) (Photograph 3) and multiple species of introduced planted Cotoneaster (*Cotoneaster sp*) and a cherry laurel (*Prunus laurus*) hedgerow. Measures should be put in place to avoid further spread of these plants, and careful removal of their vegetative waste should be considered to avoid contamination of further ground.

9. Summary of Recommendations & Enhancements

9.1 Recommendations

- 9.1.1** The Site has the potential to support common reptile species, such as slow worm. The site currently has poor habitat to support this species, but it is likely that individuals colonise from the neighbouring gardens which do support good suitable habitat. Prior to the works taking place, it is recommended that the site is kept clear of all vegetation and unsuitable for reptiles to avoid risk of disturbance and potential injury. Enhancement measure for reptiles (such as slow worm) has been provided below.
- 9.1.2** No further recommendations have been made in regards to GCN, however if any great crested newts are discovered during the clearance phase, works should stop and an ecologist be contacted for further advice.
- 9.1.3** No further bat surveys have been recommended as all the outbuildings have negligible suitability for roosting bats. However, if the Oak tree is to be impacted in any way then further surveys are recommended on the tree to reduce any indirect impacts on any bat roosts.
- 9.1.4** Minimise future artificial lighting to avoid disturbance to foraging and commuting bats and minimise lighting during the demolition and construction phase. Keep any lighting directed away from the oak tree and eastern boundary.
- 9.1.5** The invasive garden species along the garden boundaries are recommended to be removed via a specialist contractor. Specific care should be taken when removing cotoneaster, rhododendron and buddleia bush in order to reduce further spread of these species.

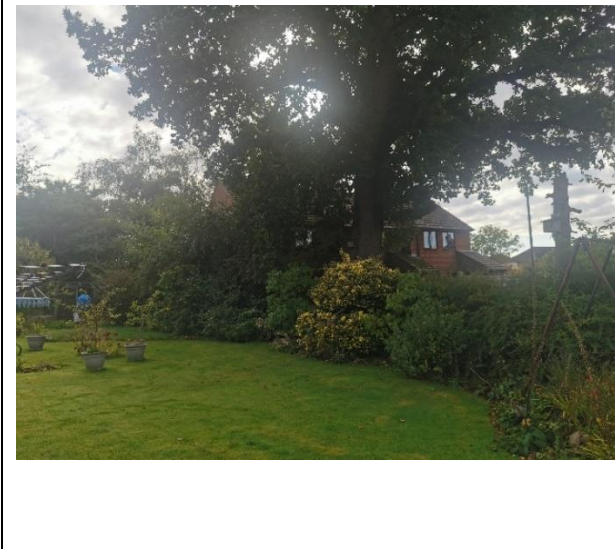
9.2 Enhancements

- 9.2.1** Enhancement measures include the following;
- the installation of bat boxes post development on the new bungalows to provide additional roosting opportunities;
 - the installation of hedgehog access holes, (can be buried into the new garden fences);
 - A small hibernacula pile is also recommended to support the population of slow worm on site, to be incorporated into the landscape plans;
 - Plant as many local native species as possible within the new bungalow gardens and include these within a detailed landscape plan. Hedgerow species are recommended around the boundary perimeter of the site and smaller standard trees within the gardens.
 - A diverse grassland mix could be used for the gardens to further enhance biodiversity and opportunities for wildlife.
 - 0.145 habitat units are required to meet the net gain requirement under the current metric (Appendix 4). As the site landuse will be bungalows, associated parking and rear gardens it is likely that the 30-year commitment to BNG cannot be met, and it is advised that the 10% net gain required is mitigated for off-site.

10. References

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Appendix 1: Site Photographs

	
Photograph 1: Site entrance from roadside (side entrance past No 6.) Current driveway and shed, laurel hedgerow forming boundary (TN2).	Photograph 2: Site entrance from No 6 Sedgwick Road, Small lean too to be removed and garden shed where access entrance will be.
	

Photograph 3: Mature TPO Oak tree positioned on boundary of No 6, tree canopy overhangs Site (TN1).



Photograph 4: Modified Grassland - garden with introduced shrub border (No 6).



Photograph 5: Shed / outbuildings and buddleia to be removed from No 6.



Photograph 6: Modified Grassland G4 in No 8.



Photograph 7: Small patch of bramble scrub, eastern boundary No 8.

Photograph 8: Site photo taken from No 8. Showing full extent of oak tree in background, and modified grassland in foreground & shed to be removed.

Appendix 2: Plant Species and Abundance

H2b – Non native ornamental hedgerow – Condition score - Poor

Common Name	Scientific Name	Abundance
Cherry laurel	<i>Prunus laurus</i>	D

H3h – Bramble Scrub – Condition score – Poor / Low

Common Name	Scientific Name	Abundance
Common Bramble	<i>Rubus fruticosus (agg)</i>	D
Butterfly bush	<i>Buddleja davidii</i>	A
Herb Robert	<i>Geranium robertianum</i>	R
Common nettle	<i>Urtica dioica</i>	R

Introduced Shrub - Condition score Poor / Low

Common Name	Scientific Name	Abundance
Buddleia	<i>Buddleja davidii.</i>	R
Cotoneaster sp.	<i>Cotoneaster sp.</i>	A
Cotoneaster sp.	<i>Cotoneaster sp.</i>	A
Privet	<i>Lingustrum ovalifolium</i>	F
Rhododendron sp.	<i>Rhododendron sp.</i>	F
Laurel sp.	<i>Prunus laurus</i>	F
Dogwood	<i>Cornus sp.</i>	O
Field bindweed	<i>Convolvulus arvensis</i>	A

Urban trees – recorded on site.

Common Name	Scientific Name	Abundance	Condition Score
English Oak	<i>Quercus robur</i>	R (x1 tree)	Good
Ornamental Acer	<i>Acer sp.</i>	R (x1 tree)	Poor
Californian lilac	<i>Ceanothus sp.</i>	R (x1 tree)	Poor
Hazel	<i>Corylus avellana</i>	R (x1 tree)	Good
Ash	<i>Fraxinus excelsior</i>	R (x1 tree)	Good

Modified grassland – Condition score Good.

Common Name	Scientific Name	Abundance
White clover	<i>Trifolium repens</i>	O
Ribwort plantain	<i>Plantago lanceolata</i>	O
Cock's-foot	<i>Dactylis glomerata</i>	O
Perennial rye grass	<i>Lolium perene</i>	D

Daisy	<i>Bellis perennis</i>	A
Broadleaf dock	<i>Rumex obtusifolius</i>	O
Yorkshire fog	<i>Holcus lanatus</i>	F
Common ragwort	<i>Jacobaea vulgaris</i>	O
Creeping thistle	<i>Cirsium arvense</i>	R
Dandelion	<i>Taraxacum sp</i>	F

Appendix 3: Protected Species Legislation

Protected Species

Rare and declining plant and animal species in the UK are generally protected under national legislation

Species protected under the Habitat Regulations¹⁴ receive the highest level of protection in the UK. These species can be considered to be of international importance because they are rare or declining in Europe as well as in the UK. These species are not only protected from killing and injury, but their breeding sites and resting places are also protected. These species include:

- **great crested newt** (*Triturus cristatus*), **natterjack toad** (*Epidalea calamita*) and **pool frog** (*Pelophylax lessonae*);
- **sand lizard** (*Lacerta agilis*) and **smooth snake** (*Coronella austriaca*);
- all **bat species**;
- **hazel dormouse** (*Muscardinus avellanarius*) and **otter** (*Lutra lutra*);
- **large blue butterfly** (eggs, caterpillars, chrysalises and adults)
- **Fisher's estuarine moth** (eggs, caterpillars, chrysalises and adults)
- **little ramshorn whirlpool snail**

For the species listed above the Habitats Regulations, makes it an offence to:

- deliberately kill, injure, disturb or capture them;
- deliberately take or destroy their eggs;
- damage or destroy their breeding sites and resting places¹⁵; and
- possess, control or transport them (alive or dead).

The WCA also offers protections. In addition to the species listed above, which also receive some protection under the WCA (Section 9 (1)), protection under this legislation is given to prevent intentional (or reckless in Scotland) killing and injury¹⁶ of:

- **common lizard** (*Zootoca vivipara*), **slow worm** (*Anguis fragilis*), **adder** (*Vipera berus*) and **grass snake** (*Natrix helvetica*);
- all wild **birds**; and
- **water vole** (*Arvicola amphibius*).

¹⁴ These species are often referred to as European Protected Species (EPS) because the requirement to protect them under national legislation originally derives from the fact that these species are listed under the European Habitats Directive

¹⁵ This applies even if the species is not present at the time when the damage or destruction occurs.

¹⁶ The WCA also protects many species from activities related to their sale, including: Selling, offering for sale, possessing or transporting for the purpose of the sale or publishing advertisements to buy or sell a protected species (WCA Section 9 (5)).

The WCA also provides additional protection for some species also protected under the Habitats Regulations. These species include **GCN, sand lizard, smooth snake, bats, dormouse, otter, large blue butterfly, Fisher's estuarine moths, little ramshorn whirlpool snails** whereby it is also an offence under the WCA to intentionally or recklessly:

- disturb while they occupy a structure or place used for shelter or protection; and
- obstruct access to a place of shelter or protection.

In the case of **birds**, as well as birds being protected from killing or injury, it is also an offence to take, damage or destroy a nest that's in use or being built, and to take or destroy eggs. Additional protection applies to specific birds listed in Schedule 1 of the WCA, meaning it is also an offence to intentionally or recklessly disturb these species when: on, or near a nest containing eggs or young; when it's building a nest; or when the nest is active with dependent young.

Badger (*Meles meles*) receive protection under the **Protection of Badgers Act 1992**. Whereby it would be an offence to: take, injure or kill a badger - or attempt these actions; treat a badger cruelly; interfere with a badger sett; possess or control a live badger; mark or ring a badger.

Other mammal species including **rabbit (*Oryctolagus cuniculus*), fox (*Vulpes vulpes*) and hedgehog (*Erinaceus europaeus*)** are protected under the **Wild Mammals (Protection) Act 1996**, which makes it an offence to inflict any unnecessary suffering, including crushing or asphyxiation of a wild mammal..

Some plants are listed on schedule 5 of the Habitat Regulations. For these species it is an offence to: deliberately pick, collect, cut, uproot or destroy them; or possess, control or transport them (alive or dead).

Species of conservation concern

Other rare or declining species may not receive strict legal protection but may be recognised on published lists as species of conservation concern that should be protected as a matter of best practice.

Under Section 41 of the NERC Act, the Secretary of State must, publish a list of the living organisms which in the Secretary of State's opinion are **species of principal importance** for the purpose of conserving biodiversity. Planning authorities are required to have particular regard to these species and treat them as a material consideration in the planning process. Consideration of species of conservation concern during development projects is a requirement of the NERC Act which states that any "public authority must, in exercising its functions, have regard ... to the purpose of conserving biodiversity" and "conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat."

Most protected species are also listed as species of principal importance.

Species of principal importance or species listed on Local Biodiversity Action Plans (LBAPs) are often referred to as 'priority species'.

Species of amphibian not protected from killing and injury under the WCA but listed as species of principal importance include: **common toad (*Bufo bufo*)**.

All native **reptile species** in England are species of principal importance.

Otter, water vole, hazel dormouse, several species of bats are listed as species of principle importance under Section 41 of the NERC Act.

Rare or declining **bird species** are listed as red or amber in **Birds of Conservation Concern (BOCC) (Stanbury et al., 2021)** a list that is periodically updated. Some wild birds are listed as species of principal importance under Section 41 of the NERC Act and species may also be listed in Local Biodiversity Action Plans.

Invasive Non-Native Plant Species

Invasive non-native plants are those listed as species of special concern because they cause severe problems for native UK plants and the environment.

The relevant legislation on invasive plant species is:

- Schedule 9 of the WCA; and
- Schedule 2 of the Invasive Alien Species (Enforcement and Permitting) Order 2019, which gives effect to EU regulations on the prevention and management of the spread of invasive alien species.

Both make it an offence to “plant or otherwise cause to grow in the wild” any plant species listed.

Appendix 4: The Statutory Biodiversity Metric & Net Gain Pre Calculations

An estimated pre-calculation has been made in order to establish the site's baseline biodiversity value. This has been done using the following methodology:

Methods

The Statutory Biodiversity Metric quantifies losses and gains in biodiversity in terms of biodiversity units.

The metric calculates the biodiversity value by multiplying the area or length (hectares or kilometre), distinctiveness (habitat type), condition (quality) and strategic significance (local significance for biodiversity) of each habitat parcel. To calculate the biodiversity units which may be achieved post-development, risk multipliers are also introduced to account for difficulty of habitat creation (delivery/risk factor) and time for created habitats to reach target condition (time to target factor). The calculations were carried out using the statutory biodiversity metric calculation tool 4.0 for calculating biodiversity net gain values for small sites (Defra, 2023).

The baseline biodiversity unit calculation in this report represents the biodiversity value of the site as it currently stands. The anticipated future biodiversity units for the site, following habitat creation and enhancement, have also been determined. The net change in biodiversity units was then calculated by subtracting the number of baseline biodiversity units from the future number of post-development biodiversity units to get the number of biodiversity units that will be created or lost by the proposed works. If this number is positive, the development has achieved biodiversity net gain. If the number is negative, there is a loss.

Area based habitats, hedgerow habitats and river habitats are considered separately in the tool to account for the differences in their ecological values and functions.

Baseline Formula

The baseline biodiversity value calculation represents the pre-development biodiversity value of the site as it was at the time that the baseline habitat survey was undertaken.

To calculate the baseline biodiversity value, habitat distinctiveness and condition are given numerical 'scores' which are multiplied with hectares or kilometres of habitat. The formula for calculating baseline biodiversity units is as follows:

Where:

- A = Area (ha) or Length (km)
- D = Distinctiveness
- Q = Condition
- S = Strategic Significance
- AHBU = Area or Length-based Habitat Biodiversity Units

Distinctiveness

Each habitat parcel is assigned a multiplier based on habitat distinctiveness. This includes '*consideration of species richness and rarity; the extent to which the habitat is protected by designations; and the degree to which a habitat supports species rarely found in other habitats*' (Defra, 2023b).

Habitats such as hard standing and buildings are assumed to have very low distinctiveness and are not included.

Condition

10.1.12 To enable the calculation of BNG units, an assessment of the condition of each habitat was made in the field in accordance with the statutory biodiversity metric condition assessments (Defra, 2023c). These sheets provide a series of condition assessment criteria, specific to each habitat type. Once all applicable criteria have been assessed, a condition score of good, moderate or poor is applied, based on the scoring instructions provided within the condition sheets.

10.1.13 The condition of habitats such as hard standing and buildings is not assessed

Strategic Significance

10.1.14 The location of habitat parcels is factored into the calculation based on whether it has been identified as significant for nature conservation within local plans and strategies.

10.1.15 Following the field survey, the data was used to carry out a biodiversity metric calculation using the statutory biodiversity metric calculation tool for calculating biodiversity net gain values published by DEFRA: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

1.2 Results

A summary of the baseline Biodiversity Metric Tool is shown on Table 10.1.

Table 10.1 On-site baseline biodiversity units (Statutory Metric for small sites, 4.0 DEFRA, 2024)

Existing Area Habitats			Distinctiveness	Condition	Strategic significance	Required Action to Meet Trading Rules	Ecological Baseline			
Parcel	Habitat Type	Irreplaceable Habitat	Area (m2)	Distinctiveness	Condition			Strategic Significance		Total Habitat Units
U1	Introduced scrub	No	151.70	2	2	Area/compensation not in local strategy/ no local strategy	Same broad habitat or higher required	Low	1	0.03
G4	Modified Grassland	No	256.00	2	2	Area/compensation not in local strategy/ no local strategy	Same broad habitat or higher required	Low	1	0.10
U1	Sealed surface / hardstanding	No	148.00	0	0	N/A	Habitat type can't be assessed under the metric	Low	1	0
U1b5	Buildings	No	50.00	0	0	N/A	Habitat type can't be assessed under the metric	Low	1	0
H3d	Bramble scrub	No	31.00	4	1	N/A	Same broad habitat or higher distinctiveness required	Low	1	0.01

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Land to the rear of 6-8 Sedgwick Road

Existing Area Habitats			Distinctiveness	Condition	Strategic significance	Required Action to Meet Trading Rules	Ecological Baseline			
Parcel	Habitat Type	Irreplaceable Habitat	Area (m2)	Distinctiveness	Condition			Strategic Significance		Total Habitat Units
	TOTAL UNITS									0.14

Therefore the total biodiversity units of the site (pre development) are:

The on-site baseline biodiversity unit value is currently 0.14 habitat units, therefore 0.15 habitat units will be required in order to achieve the minimum 10% net gain.

Further BNG Recommendations:

Based on the current proposed plans (October, 2024) and the space available on site, it is unlikely that the 10% net gain can be achieved on site, as the new retained habitat areas will be gardens for the new bungalows (Appendix 5).

In order to achieve the 10% net gain score, it is recommended that the existing boundary fence is replaced and planted with native hedgerow species and the gardens of proposed new properties are seeded with a species rich grassland seed mix of local provenance to the area. Additional standard trees are also recommended to be planted such as English oak and hazel trees which will benefit local wildlife. Bat boxes have also been recommended to be installed on the two new proposed bungalows. Off-site credits can be purchased in order to conform with the 10% biodiversity net gain.

Appendix 5: Site Proposals - Plan

