

Project	Lindfield Close, Portslade, East Sussex	Date	November 2023
Note	Ecological Walkover Survey	Ref	UE0558
Author	Hayley Fuller BSc (Hons) MSc / Tim Lees BA (Hons) MSc MCIEEM	Page	1 of 24
Status	Revision 4		

1 Introduction

- 1.1 Urban Edge Environmental Consulting Ltd (UEEC) was commissioned to undertake an Ecological Walkover Survey (EWS) at Lindfield Close, Portslade, East Sussex. The purpose of the survey was to reassess the extent, character and condition of habitats, including buildings and trees for roosting bats, present within the survey area to establish any change from the 2019 Preliminary Ecological Appraisal (PEA; Appendix II). The survey area's potential to support protected species was also reassessed, with reference to any implications arising from the Proposed Development.
- 1.2 Two surveys were carried out on 30 November 2022 and 19 January 2023 by Hayley Fuller BSc (Hons) MSc, a Consultant Ecologist with six years' professional consultancy experience. On 30 November 2022 weather conditions were mild (9°C), with light breeze (Beaufort scale 2), 60% cloud cover and no precipitation. On 19 January 2023 weather conditions were cold (3°C), with a light breeze (Beaufort scale 2), 0% cloud cover and no precipitation.
- 1.3 A subsequent visit was carried out on 15 November 2023, focussing upon status of hedgerows within the survey area, by Tim Lees BA (Hons) MSc, an Associate Director with eleven years' professional consultancy experience. Weather conditions were mild (11°C), with light air (Beaufort scale 1), 15% cloud cover and no precipitation.

Survey Area Description

- 1.4 The survey area lies to the south of Portslade village in the city of Brighton and Hove, East Sussex (Grid reference: TQ 25514 06156). The survey area comprises c.0.63ha of developed land, currently dominated by a village hall with nearby garages, hardstanding, amenity grassland, scrub, hedgerows and scattered trees. The extent of the survey area is outlined in red on Figure 1.
- 1.5 The survey area is bounded to the north by sheltered housing and Portslade village green, and to the east, south and west by residential properties with associated gardens and amenity grassland. The survey area lies within an urban setting, with the wider area mainly characterised by residential property.

A number of parks and allotments are situated within the wider environment, along with some woodland and a railway line. No ponds lie within 500m of the survey area.

Proposed Development

- 1.6 Planning consent is being sought for the demolition of the existing buildings and construction of a residential development together with access, parking, landscaping and associated facilities. A Landscape Masterplan for the Proposed Development is shown at Figure 2.

Project Background

- 1.6 A range of recommendations for avoiding and mitigating ecological impacts were made in the 2019 PEA¹ together with recommendations for ecological enhancement. The findings from the 2019 assessments have contributed to an updated evaluation of constraints within section 4 of this note, and the recommendations at section 5. The survey area boundary was revised in January 2023 to include new areas which are assessed within this report.

2 Methodology

- 2.1 During the 2023 walkover survey, habitats and ecological features within the survey area were noted in accordance with the methodology for Phase 1 habitat survey². This basic methodology was extended to provide more detail in relation to habitats with potential to support rare or protected fauna, as described by the Chartered Institute of Ecology and Environmental Management's *Guidelines for Preliminary Ecological Appraisal*³. The assessment of habitat suitability for protected, rare or priority species is based on current good practice guidance such as that presented in the *Herpetofauna Workers' Manual*⁴ and *Bat Surveys for Professional Ecologists: Good Practice Guidelines*⁵.
- 2.2 The ecological walkover survey included a Preliminary Roost Assessment (PRA) which was carried out in accordance with the latest *Good Practice Guidelines* from the Bat Conservation Trust as well as Natural England Standing Advice on bats. Structures and trees within the survey area were subject to an external and internal inspection. All features observable from ground level which were potentially suitable for bats were noted and the overall suitability of the structure or tree for roosting bats was classified with reference to Table 1.

¹ UEEC, 2019: *Lindfield Close, Portslade, East Sussex - Preliminary Ecological Appraisal Report*.

² Joint Nature Conservation Committee (2010): *Handbook for Phase 1 Habitat Survey. A Technique for Environmental Audit*, Joint Nature Conservation Committee, Peterborough.

³ CIEEM (2017): *Guidelines for Preliminary Ecological Appraisal. 2nd Edition*, CIEEM, Winchester.

⁴ Gent, A.H. and Gibson, S.D., eds. (2003): *Herpetofauna Workers' Manual*. Joint Nature Conservation Committee, Peterborough.

⁵ Collins, J. (ed.) (2016): *Bat Surveys for Professional Ecologists: Good Practice Guidelines. 3rd Edition*, Bat Conservation Trust, London.

Lindfeld Close Portslade Brighton & Hove

 Site boundary

Figure 1: Survey area



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Ordnance Survey 0100031673

Scale (at A4): 1:5,000 Created by: MT

Date: Nov 2023 Reviewed by: NP

Drawing number:

UE0558ECO-LindfeldClose_SiteLocation_231124





Figure 2: Landscape Masterplan

Table 1: Potential suitability of structures / trees for roosting bats

Suitability	Roosting habitats
Negligible	Negligible habitat features within the survey area likely to be used by roosting bats
Low	A structure with one or more PRFs that could be used by individual bats opportunistically, but do not provide enough space, shelter, protection, appropriate conditions and / or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats A tree of sufficient size and age to contain PRFs but with none seen from the ground / using ladders or features seen with only very limited roosting potential
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (for roost type only)
High	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
Confirmed roost	Bats or unequivocal evidence of bats found, i.e. bat droppings

Limitations

- 2.3 There were no difficulties in gaining access to the majority of the survey area to assess the suitability of buildings and habitats to support protected species. One exception was the small water storage room on the roof of the building, as this could not be safely accessed due to the limited reach of the available ladder. The interiors of the private garages along the western and south-eastern survey area boundaries also could not be accessed. There was a very narrow gap to north and east of the garage block in the south-east of the survey area which could not be accessed.
- 2.4 Adjacent habitats were surveyed where appropriate in order to identify constraints falling outside of the Proposed Development and to place the survey area in its ecological context. However, the adjacent residential gardens could not be surveyed for signs of species such as badger *Meles meles* due to access restrictions.
- 2.5 Time of year when the survey was carried out and other variations, such as management, can influence the results of the survey. The 2023 surveys were undertaken in winter, outside the normal flowering period for many species and during a period of less intensive ground maintenance, however this is not considered to be a significant limitation to meeting the objectives of the survey.

3 Results

Habitats

- 3.1 The following Phase 1 habitats were identified within or adjacent to the survey area and are shown on the Phase 1 Habitat map at Appendix I:

- ▶ Hardstanding;
- ▶ Amenity grassland;
- ▶ Buildings;
- ▶ Dense and scattered scrub;
- ▶ Introduced shrub;
- ▶ Scattered trees;
- ▶ Species-poor hedgerow; and
- ▶ Tall ruderal.

3.2 The habitats recorded within survey area were broadly consistent with those identified in 2019, with minor variations in condition and extent. Since the 2019 survey the structure of some linear habitats had developed resulting in reclassification. Additionally, the revised survey area boundary introduced new areas and most of this contained similar habitats. One additional habitat was noted, introduced shrub in the form of a strip of garden in the western extent of the survey area. Updated photos for these habitats are provided below.

Hardstanding

3.3 Areas of hardstanding covered over 60% of the survey area. These included access pathways to the building, a recreational area in the centre of the survey area, access and parking areas to the north and access to west and south-east of the survey area with associated garages.



Central recreational area



Carpark / entranceway to garages in the west

Amenity grassland

3.4 Amenity grassland made up over 35% of the survey area. Species typically found within this habitat type included the abundant common grasses perennial rye grass *Lolium perenne*, cock's-foot *Dactylis glomerata* and Yorkshire Fog *Holcus lanatus*, together with common daisy *Bellis perennis*, dandelion *Taraxacum* agg., creeping buttercup *Ranunculus repens*, yarrow *Achillea millefolium*, dove's-foot cranesbill *Geranium molle*, bristly oxtongue *Helminthotheca echioides* and ribwort plantain *Plantago*

lanceolata. This habitat was present as lawn areas and banks surrounding the central recreation area, on a bank with a hedge along the eastern survey area boundary, a narrow strip along the northern survey area boundary and lawn in the south-west of the survey area.

- 3.5 At the time of survey, the sward was not uniform and varied between c.15-25cm in height. It did not appear to have been recently managed and therefore appeared longer and more tussocky when compared to the photos of grassland at this location taken in August 2019. In some areas, such as to the east of the main building, where ground management has been less intensive, scattered scrub was beginning to gain a foothold.
- 3.6 Brash has been left on the western bank of the amenity grassland (see Target Note (TN) TN5 on the updated Phase 1 habitat map in Appendix I).



Unmanaged amenity grassland with scattered scrub spreading between B1 and the eastern boundary hedge.

Buildings

Building B1

- 3.7 Building B1 is currently in use as a village centre, with numerous uses including office areas, a kitchen and halls for community events. This is essentially a single storey brick-built building with securely fitted uPVC windows and doors. The roof has a pitched section covered with corrugated sheets running broadly north to south above the main hall, and the rest of the roof is flat and covered with roofing felt.
- 3.8 The majority of the pitched section was open in the interior but there were two small roof void spaces towards the northern end of the building. In addition, there is a small water tank storage room located on the roof at the northern end of the building. The interior of this room on the roof was not accessed during this survey for health and safety reasons.
- 3.9 The soffits, fascia boards and guttering were found to be in reasonable condition and had not noticeably deteriorated since the 2019 survey when it was noted that there were very small gaps between the soffits and the brick wall at the northern end of the building which could serve as Potential Roosting Features (PRF's).

3.10 There is a small extension to the north of the building with a flat roof. Widely spaced apart planks present to the south of the entrance door could provide access by bats into the building.



B1 showing the pitched roof running north to south.



Vaulted roof in main hall.



Void structure, northern section of pitched roof.



Small water storage room on the roof of the building which was not accessed during this survey.



Northern extension with large gaps between planks allowing potential access by bats to the interior of this room.



The gutters, soffits and fascias of the building are in a reasonable condition.

Other Buildings

3.11 Three blocks of flat roofed garages lie along the western survey area boundary and another block of flat roofed garages lies along the south-eastern survey area boundary. These are constructed from concrete slabs and have metal up and over garage doors. Most of these garages are in a dilapidated condition with frequent holes in the concrete slabs from which they are constructed. These are private garages, and it was not possible to examine their interiors during this survey.



Garages along the western survey area boundary.



Garages along the south-eastern survey area boundary.

Dense and scattered scrub

3.12 The bramble *Rubus fruticosus* scrub along the fence line in the west of the survey area had developed south and joined up the scattered trees in this location, forming a new hedgerow (H3 – see 3.20). Additionally, the feature mapped as H3 in 2019 along the north-eastern boundary was reclassified as dense scrub, comprising of bramble, sycamore *Acer pseudoplatanus*, elder *Sambucus nigra* and evergreen oak *Quercus ilex*. New areas of scattered scrub had developed between B1 and the eastern survey area boundary due to reduced grass cutting (see above photo of amenity grassland). These areas are characterised by sycamore and elm *Ulmus* spp. saplings together with bramble.



Dense scrub along the north-eastern boundary – previously H3 in 2019.



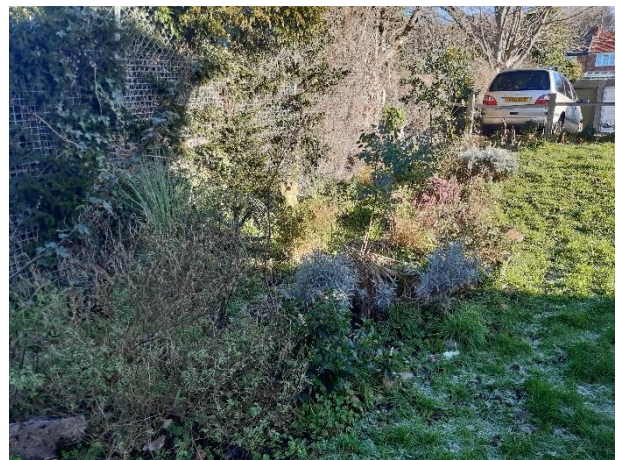
Scattered scrub which had developed in the east of the survey area.

Introduced shrub

- 3.13 A narrow strip of introduced shrub runs along the wall and existing fence line between the village hall and the residential flats of Kemps Court and continues along the western edge of the associated parking area. A broad mix of non-native shrubs and young trees were present which included lavender *Lavandula* spp., rosemary *Salvia rosmarinus*, Oregon grape *Mahonia* spp., magnolia *Magnolia* spp., eucalyptus *Eucalyptus* spp., and monkey puzzle tree *Araucaria araucana*.
- 3.14 This area widens at the corner between the fence and the wall (see TN7 on the updated Phase 1 habitat map in Appendix I) where it contains features more typical of a garden including a composting bin, paving stones, garden ornaments, brash and logs. It also widens at the eastern extent.



Introduced shrubs along the wall in the south-west of the survey area.



A strip of Introduced shrubs along the fence line between B1 and Kemps Court flats which widens at the eastern extent.



Introduced shrubs and trees adjacent to parking.



Introduced shrubs together with garden features.

Scattered trees

- 3.15 Several young to semi-mature scattered trees were noted within the survey area boundary which included species such as alder *Alnus glutinosa*, cherry *Prunus* sp., common lime *Tilia x europaea*, sycamore and rowan *Sorbus aucuparia*.

- 3.16 Only one tree, the alder noted at TN2, was mature enough to have potential roosting features (PRFs) for bats, such as cracked bark and possible natural holes.



Alder at TN2 with potential PRF's.



Lime tree in the south-western part of the survey area.

Species-poor hedgerows

- 3.17 Hedgerows H1 and H2 which were originally noted in the PEA survey are still present, but the length of H1 was found to be far greater than the feature mapped in 2019. The feature identified as H3 in 2019 has been reclassified as dense scrub, but a new H3 has been mapped in the western extent of the survey area. As a result of the survey area boundary revision, hedgerow H4 now falls within the survey area boundary. All current hedgerows are shown in the updated Phase 1 habitat map in Appendix I.
- 3.18 H1 is a hedgerow with trees located along a chain-link fence on the southern edge of the village hall site. The hedgerow measured c.68m in length, c.1.5-4m in width and c.4-6m in height. It comprised a mixture of native and non-native species with frequent elder, as well as bramble, evergreen oak, dog-rose *Rosa canina*, yew *Taxus baccata*, holly *Ilex aquifolium*, garden privet *Ligustrum ovalifolium* and bay *Laurus nobilis*. Common ivy *Hedera helix* and honeysuckle *Lonicera periclymenum* climbers were recorded, and standard trees included sycamore, wild cherry and ash *Fraxinus excelsior* specimens. The ground flora included a varied mix of horticultural species associated with the introduced shrub at Kemps Court.
- 3.19 H2 formed the eastern boundary of the survey area and surrounded sections of metal and timber panel fencing. The hedgerow measured c.46m in length, c.1-3m in width and c.3.5-6m in height. The hedgerow was dominated by garden privet, with bramble, sycamore, blackthorn, bay and elm sp. also recorded. The understorey comprised of the adjacent amenity grassland, but also contained bittersweet *Solanum dulcamara*, ivy and cow parsley *Anthriscus sylvestris*. Mammal tracks and holes were present in the vicinity of this hedge (see TN3 in Appendix 1). The mammal paths and holes noted did not reveal any evidence of badger use, such as footprints, latrines, scratching posts or hairs. It was considered that these features were most likely created by common fox *Vulpes vulpes*.
- 3.20 H3 had developed along the western edge of the amenity grassland, separating the village hall from the adjacent garages. It ran along a chain-link fence and had formed from bramble and individual shrubs connecting the existing trees. The hedgerow measured c.52m in length, c.3-4m in width and c.2-6m in

height. The hedgerow included abundant bramble, with intermittent occurrences of elder, wild cherry and dog-rose. Two sycamore standards were present. The ground flora consisted entirely of the adjacent amenity grassland.

3.21 H4 is a short section of hedge along the south-eastern boundary, c.12m length, c.2.5m in height and c.1m in width. The hedgerow was dominated by variegated garden privet and cherry laurel *Prunus laurocerasus*, with climbers such as common ivy, bramble and traveller's joy *Clematis vitalba*.



H1 on the southern edge of the village centre site.



H2 on the eastern survey area boundary.



H3 in the western extent of the survey area.



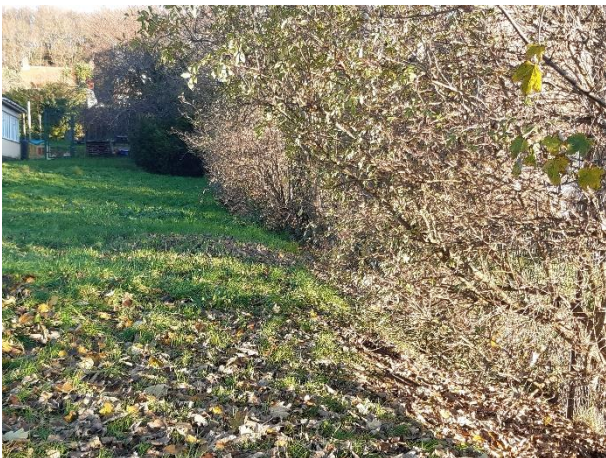
H4 on the south-eastern survey area boundary.

Tall ruderal

3.22 Tall ruderal was no longer present as a separate habitat type, but is likely to contribute to the ground flora at H1.

Target notes

- 3.23 Target notes recorded in the 2019 PEA⁶ included grassland banks at TN1 and an alder tree with low suitability to support roosting bats at TN2, these are still present and in the same condition.
- 3.24 In addition, this 2023 survey noted mammal paths and holes adjacent to H2 at TN3, piles of rubble / brash at TN4, TN5 and TN6, piles of logs / brash and a compost heap at TN7 and dense areas of ivy on the garage roofs at TN8. The mammal holes and runs did not have any associated signs for badger and are considered more likely to be created and used by foxes. The areas of rubble / brash, log piles and stone offer shelter for amphibians and reptiles. The areas of dense ivy offer suitable habitat for nesting birds. The additional target notes are shown on the updated Phase 1 habitat map in Appendix I.



TN1 Grassland banks beside fencelines.



TN3 Mammal holes are present to the east of B1.



TN3 Mammal access hole through fence between play area in south-east corner and grassland bank to east of B1.



TN4 Pile of vegetative material beside the eastern wall of B1.

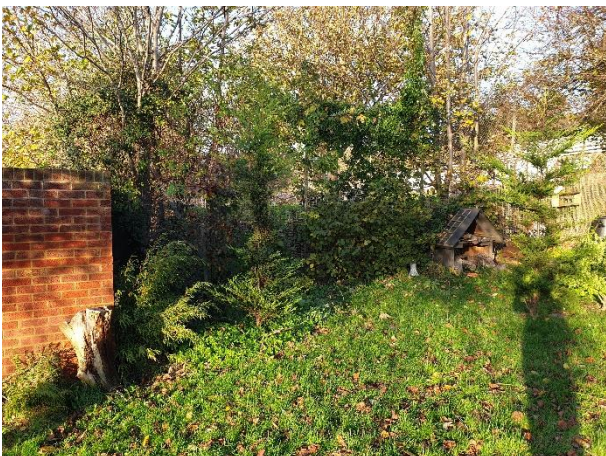
⁶ Ibid pg 4



TN5 Brush left on slopes adjacent to the western fence line between grassland and the garage area.



TN6 Piles of rubble and vegetative material on hardstanding in the south-western corner of the survey area.



TN7 Logs, brush, paving stones and a compost heap are present in this garden area.



TN8 Dense ivy on northernmost garage roof in the south-east of the survey area.

Preliminary Roost Assessment

Buildings

- 3.25 All buildings were subjected to an external and, where safe access was permitted, an internal inspection to look for signs of roosting bats. No bats, or evidence of bats, such as droppings, feeding remains or urine stains, were noted in any buildings within the survey area.
- 3.26 B1 was assessed as providing negligible suitability for roosting bats in the 2019 PEA⁷ due to the absence of any evidence for roosting bats and because it lacked suitable access points and conditions for roosting bats. Although it was not accessed during this survey, it is considered that the condition of the water storage room on the roof will not have significantly changed since 2019. The condition of B1 was assessed to be consistent with that recorded in 2019 and it remains of negligible suitability for roosting bats.

⁷ Ibid pg 4

3.27 The garages were not considered to offer suitable conditions for roosting bats in the 2019 PEA and they were classified as being of negligible suitability. The 2022 / 23 surveys confirms that the garages continued to be classified as of negligible suitability for roosting bats.

Trees

3.28 Only one tree within the survey area, the alder at TN2, was identified as providing low suitability for roosting bats in 2019. The 2022 / 23 assessment found that the condition of the alder tree at TN2 had not significantly altered, and it remained a low suitability feature for roosting bats.



Cracked bark on TN2.

4 Evaluation

4.1 Table 2 presents a summary of ecological constraints and opportunities identified within the survey area.

Table 2: Summary of ecological constraints and opportunities

Feature	Detail
Constraints:	
Designated sites	No statutory or non-statutory wildlife sites are likely to be affected by the proposed development. No international sites were recorded within 5km of the desk study search zone. One national site, South Downs National Park lies c. 910m north of the site, and three non-statutory sites lie within 1km of the survey area, the closest being Emmaus Garden & St. Nicholas Local Wildlife Site (LWS) at c. 145m north-east of the survey area.
Local designations	The entire site lies within land designated by Brighton & Hove City Council as a Nature Improvement Area associated with policy CP10 ⁸ . Where possible habitats of greater

⁸ Interview Adopted Policies Map available at:

<https://bhcc.maps.arcgis.com/apps/webappviewer/index.html?id=aa076c468ec74c0a806087a6b09ddeb0c>

Feature	Detail
	value will be retained and protected, and proposed landscaping will be designed to enhance the value of the survey area for nature.
Priority habitats	Hedgerow H1 was classified as priority habitat and is considered to be of high ecological value. Hedgerows H2, H3 and H4 all consisted of <80% cover of woody UK native species and therefore did not qualify as priority habitat. Hedgerow H1 will wherever possible be retained and protected during construction.
Other habitats	The proposed development would result in permanent losses of up to c.0.63ha of amenity grassland, introduced shrub, scrub, scattered trees and buildings across the survey area. These areas are of relatively low intrinsic ecological value and of negligible importance. However, losses to vegetated habitats within urban environments take on greater importance, in this case where they act as a 'stepping stone' and enhancement measures proposed at the survey area will look to mitigate these losses with the inclusion of ornamental planting of value to pollinators and native shrub planting where possible.
Birds (nesting)	Possible permanent loss of nesting habitats (trees, hedgerows, scrub, dense ivy, buildings).
Bats (roosting)	Possible permanent loss of one tree (TN2) with low suitability for roosting bats.
Bats (foraging / commuting)	The intensively managed grassland and buildings which dominate the survey area negligible suitability to commuting and foraging bats. The hedgerows, particularly H1, may serve as a navigation route or foraging feature for bats and are well connected with woodland to the east. It is anticipated that H2 and sections of H1 will be retained and protected during the works, maintaining a link with the wider area . Hedgerow / native shrub planting will provide further opportunities for foraging bats. Given the scale of the Proposed Development, impacts upon foraging / commuting bats are considered unlikely. Further bat activity surveys are not required, but recommendations in relation to lighting during the construction and operational phase of the development will be followed.
Reptiles	Possible permanent losses of suitable habitats (scrub, rubble / brash piles, compost heap and log piles).
<u>Opportunities:</u>	
Priority habitats	The hedgerow priority habitat within the survey area is of high intrinsic value and can provide a focus for ecological enhancement measures.
Habitat creation / enhancement	Habitat creation and enhancement opportunities include wildflower meadow planting, hedgerow creation / enhancement, habitat piles and bird / bat boxes.

5 Recommendations

5.1 Recommendations are made here for the protection of important ecological features, and / or to avoid or mitigate ecological impacts, and to enhance the ecology of the survey area post-construction. These are consistent with recommendations identified in 2019 but also include additional recommendations in relation to updated observations. It is intended that these recommendations are considered during

future changes to the design of development proposals so that protection of important ecological features is secured and opportunities for ecological enhancement are realised.

- 5.2 The following species / groups (Table 3) require specific precautionary measures to be adhered to, prior to and during construction to ensure that an offence under the relevant legislation is avoided.

Table 3: Recommended precautionary measures

#	Recommendations for precautionary measures
R1	Removal of nesting bird habitats (buildings, dense scrub, introduced shrub, dense ivy, hedgerows and scattered trees) will be undertaken outside of the bird nesting season, which runs from 1 March to 30 September. It will therefore be carried out between October and February. Any construction works undertaken within the bird breeding season where suitable bird breeding habitat exists will require a site check for nesting birds by a suitably qualified ecologist. This will take place no more than two days prior to works commencing. This is to ensure that no disturbance to active bird nests occurs. If a nest is found it must be cordoned off and works adjacent to the nest must be delayed until such time that the chicks have fledged from the nest. This will be supervised by a suitably qualified ecologist.
R2	If works to fell or lop the <u>low</u> suitability tree (TN2) are required, they will be undertaken during March-April or September-October to avoid critical maternity and hibernation periods, and in accordance with a Non-Licensed Method Statement to reduce the risk of killing / injury to roosting bats.
R3	Vegetation clearance works in the small areas of scrub, introduced shrub and hedgerows, found mainly towards the edges of the survey area, and works which may impact rubble / brash / log piles (TN4, TN5, TN6 and TN7) will be undertaken in accordance with a Precautionary Method Working Statement to reduce the risk of killing / injury to reptiles. The Method Statement will specify reasonable avoidance measures including timing restrictions (works to be carried out during the reptile active season, broadly March to October), progressive reduction of vegetation height to displace any reptiles present into suitable surrounding areas of retained habitat, and works will be carried out under the supervision of a suitably qualified ecologist. Once vegetation removal is complete, the survey area should be maintained in unsuitable condition to prevent recolonisation.

- 5.3 The following protection measures (Table 4) should be carried out as part of the proposed scheme.

Table 4: Ecological protection measures

#	Recommended ecological protection measures
R4	Hedgerow habitat will, wherever possible, be retained and protected during construction, and will also provide a focus for ecological enhancement measures.
R5	Buffers of less intensively managed vegetation (e.g. coarse grasses, native scrub and wildflowers, including the use of tussock-forming grass species such as cock’s foot, Yorkshire fog, tufted hair-grass <i>Deschampsia cespitosa</i> and false oat-grass <i>Arrhenatherum elatius</i>) will be created within soft landscaped areas within the Proposed Development, towards the survey area boundaries and alongside attenuation features. This will help to maintain / enhance ecological connectivity through the survey area for reptiles, amphibians and small mammals, and provide forage for invertebrates.
R6	Standard site procedures to prevent impacts on trees will be adhered to during construction.

#	Recommended ecological protection measures
R7	The use of external lighting will be avoided or minimised to prevent impacts to nocturnal species such as bats. Lighting will not be directed towards the boundary trees or hedgerows.
R8	At the end of each working day excavations will be covered over and open pipework capped to prevent entrapment of mammals, amphibians and other fauna.
R9	Small access gaps will be provisioned at the base of new fence boundaries to enable continued dispersal of small mammals across the survey area.
R10	Where fox dens are to be damaged or destroyed as part of the proposed works, this will be done in accordance with the Mammals Act 1996 by a registered pest control company.

5.4 The following ecological enhancements (Table 5) should be considered to improve the survey area for wildlife following construction.

Table 5: Recommendations for ecological enhancement

#	Preliminary recommendations for ecological enhancement
R11	Hedgerow creation and / or restoration will use a range of native fruit, seed, nut and nectar-bearing shrub species of local provenance.
R12	The value of the survey area for birds will be enhanced by installing a range of artificial nest boxes onto new buildings and retained trees.
R13	The value of the survey area for bats will be enhanced by installing a range of artificial roost boxes onto new buildings and retained trees.
R14	Habitat piles for amphibians, invertebrates and reptiles will be created within areas of retained rough grassland, scrub or hedgerow.

6 Summary and Conclusions

- 6.1 An EWS was carried out in 2023 for the site of a proposed residential development at Lindfield Close, Portslade, East Sussex. Its purpose was to assess any changes in the extent, character or condition of habitats present, and reassess their potential to support protected species, since the 2019 PEA survey undertaken by UEEC and changes to the survey area boundary in 2023.
- 6.2 The survey area comprises c.0.63ha of developed land including a village hall, garages, hardstanding, amenity grassland, scrub, introduced shrub, tall ruderal, scattered trees and hedgerows. The wider landscape is characterised by residential properties and gardens with a number of parks and allotments together with some woodland and a railway line.
- 6.3 The character and condition of habitats present within the survey area is broadly unchanged since 2019, with only minor variations in structure, extent or composition. Previous conclusions made in the 2019 PEA report regarding protected species and ecological impacts are considered to still be valid and remain unchanged. Recent survey area boundary alterations and observations arising from the ecological walkover have been examined and addressed in this report.

6.4 In conclusion, the majority of land proposed for development is of low ecological value. Proportionate and effective mitigation is likely to be available to protect the few significant constraints to development which were identified. Current development proposals are unlikely to result in significant ecological impacts provided that recommendations R1- R10 are implemented, with R11 to R14 being advisable for the ecological enhancement of the survey area. No further surveys are required prior to submitting a planning application.

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Appendix I: Updated Phase 1 Habitat Map

Lindfeld Close Portslade Brighton & Hove

-  Site boundary
-  Scrub - dense/continuous
-  Scrub - scattered
-  Amenity grassland
-  Introduced shrub
-  Building
-  Hardstanding
-  Not accessed
-  Species-poor hedgerow
-  Hedge with trees (species-poor)
-  Fence
-  Wall
-  Mammal run
-  Target note
-  Scattered tree



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Ordnance Survey 0100031673

Scale (at A4): 1:750 Created by: MT

Date: Nov 2023 Reviewed by: NP

Drawing number:
UE0558ECO-LindfieldClose_HabitatMap_231124



Appendix II: Preliminary Ecological Appraisal (2019)

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URBAN EDGE
ENVIRONMENTAL
CONSULTING

NATURAL PROGRESSION

**Lindfield Close,
Portslade, East Sussex**

Preliminary Ecological Appraisal Report

September 2019

Lindfield Close, Portslade, East Sussex

Preliminary Ecological Appraisal Report

Client:	Brighton and Hove County Council	
Report No.:	UE0331_LindfieldClose_PEA_0_190918	
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Revision No.:	Status/Comment:	Date:
0	Final	18 September 2019

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Abbreviations

CHS	Conservation of Habitats and Species Regulations 2017
EPS	European Protected Species
GCN	Great crested newt
LWS	Local Wildlife Site
NERC	Natural Environment and Rural Communities Act 2006
NP	National Park
PEA	Preliminary Ecological Assessment
PRF	Potential (bat) Roost Feature
SxBRC	Sussex Biological Records Centre
TN	Target Note
WCA	Wildlife & Countryside Act 1981 (as amended)

0 Executive Summary

0.1 Introduction

0.1.1 A Preliminary Ecological Appraisal was undertaken for the site of a proposed residential development at Lindfield Close, Portslade, East Sussex (Grid Reference: 525510, 106155). The report was prepared to inform the design process for the proposal, record the ecological baseline and identify key ecological features within and around the proposal site.

0.2 Results

0.2.1 There is one statutory designated site (South Downs National Park) and three non-statutory Local Wildlife Sites within the 1km desk study search area. There are records of a range of protected or notable species in the locality, including amphibians, birds, invertebrates, terrestrial mammals, flowering plants and terrestrial reptiles, together with two priority habitats: Deciduous woodland and Open water.

0.2.2 The survey area lies to the south of Portslade village in the city of Brighton and Hove, East Sussex. The site comprises c.0.45ha of land including a village hall, garages, hard-standing, amenity grassland, scrub, tall ruderal and trees. The site is bounded to the west by residential property fronting Windlesham Close, and to the north, east and south by residential property with associated gardens. The site is set in an urban setting with the wider area characterised by mainly residential property. A number of parks and allotments are situated within the wider environment, along with some woodland and a railway line. No ponds lie within 500m of the survey area.

0.3 Evaluation

0.3.1 Table 0.1 presents a summary of ecological constraints and opportunities identified within the survey area.

Table 0.1: Summary of ecological constraints and opportunities

Feature	Detail
Constraints:	
Designated sites	None of the statutory or non-statutory wildlife sites within the desk-study search zone are likely to be affected by the proposed development, considering the size and scale of the proposal and its distance from the designated sites.
Priority habitats	All the hedgerows on site (H1-H3) are priority habitats, and provide habitats suitable for a range of protected species, including nesting birds, invertebrates, bats and reptiles. It is currently anticipated that the hedgerows will be retained and protected during construction.

Feature	Detail
Amenity grassland, Tall ruderal, Trees and Scrub	Permanent losses of up to c.0.17ha of amenity grassland, tall ruderal, trees and scrub across the site, depending on the extent and layout of development proposals. These areas are of relatively low ecological value but provide habitats suitable for a number of protected species (e.g. nesting birds and reptiles).
Birds (nesting)	Possible permanent loss of nesting habitats (trees, hedgerows, scrub).
Bats (roosting)	Possible permanent loss of one tree (TN2) with low suitability for roosting bats.
Reptiles	Possible permanent losses of suitable habitats (tall ruderal, scrub, hedgerow).
Opportunities:	
Priority habitats	The hedgerow priority habitats within the survey area are of comparatively greater ecological value and could provide a focus for ecological enhancement measures.
Habitat creation / enhancement	Habitat creation and enhancement opportunities include wildflower meadow planting, hedgerow restoration, and bird/bat boxes. It is not currently known which of these can be accommodated within proposals for the site.

0.4 Recommendations

0.4.1 No further surveys for protected species are required. Preliminary recommendations are made for the protection of important ecological features to avoid or mitigate ecological impacts, and to deliver ecological net gain on site post-construction; these are summarised in Table 0.2. It is intended that these preliminary recommendations should be considered during future changes to the design of development proposals so that protection of important ecological features is secured and opportunities for ecological enhancement are realised.

Table 0.2: Summary of recommendations

#	Summary of recommendations
Precautionary measures	
R1	Removal of nesting bird habitats (including vegetation and buildings) will be undertaken outside of the bird nesting season, which runs from 1 March to 31 August. It will therefore be carried out between September and February.
R2	If works to fell or lop the low suitability tree at TN1 are required, they will be undertaken during March-April or September-October to avoid critical maternity and hibernation periods, and in accordance with a Non-Licensed Method Statement to reduce the risk of killing/injury to roosting bats.
R3	Vegetation clearance works will be undertaken during the reptile active season (broadly March to October) and in accordance with a Precautionary Working Method Statement to reduce the risk of killing/injury to reptiles.
Ecological protection measures	
R4	The hedgerow priority habitats within the survey area will be retained and protected during construction.
R5	Standard site procedures to prevent impacts on trees should be adhered to during construction.

#	Summary of recommendations
R6	The use of external lighting should be avoided or minimised to prevent impacts to nocturnal species such as bats. Lighting should not be directed towards the boundary hedgerows.
R7	At the end of each working day excavations should be covered over and open pipework should be capped to prevent impacts on mammals, amphibians and other fauna.
R8	To enable dispersal of small mammals across the site and within the local area following development, small access gaps to measure c.13x13cm are recommended to be provisioned at the base of all new fence boundaries.
R9	Where fox dens or rabbit warrens are to be damaged or destroyed as part of the proposed works, this should be done in accordance with the Mammals Act 1996 by a registered pest control company.
Ecological net gain	
R10	Green spaces should be sown with a locally-sourced native wildflower and grass seed mix.
R11	Hedgerow enhancement should use a range of native fruit, seed, nut and nectar-bearing species shrub species of local provenance.
R12	The value of the site for birds could be enhanced by installing a range of artificial nest boxes onto new buildings and retained trees.
R13	The value of the site for bats could be enhanced by installing a range of artificial roost boxes onto new buildings and retained trees.

0.5 Conclusions

0.5.1 The land proposed for development is of low ecological value. Proportionate and effective mitigation is likely to be available to protect the few significant constraints to development which were identified. No further surveys are required prior to submitting a planning application.

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1 Introduction

1.1 Purpose of this Report

1.1.1 This report presents a Preliminary Ecological Appraisal for the site of a proposed residential development at Lindfield Close, Portslade, East Sussex (Grid Reference: 525510, 106155). The report has been prepared to inform the design process for the proposal, record the ecological baseline and identify key ecological features within and around the proposal site.

1.2 Objectives and Approach of the Study

1.2.1 The objectives of the Preliminary Ecological Appraisal were to:

- ▶ Identify features present on the site or adjacent which are ecologically significant and which may act as constraints or opportunities to the proposed development;
- ▶ Consider the need for further ecological surveys which may be necessary; and
- ▶ Make preliminary recommendations for the protection of ecological features, to avoid or mitigate ecological impacts, and to enhance the ecology of the site post-construction, with the aim of achieving an overall net gain for biodiversity.

1.2.2 The approach to establishing the ecological baseline found within this report has been achieved through:

- ▶ A desk study involving a review of statutory and non-statutory nature conservation sites, and records of habitats and species from the local area (1km radius from the centre of the proposed development site);
- ▶ An extended Phase 1 habitat survey identifying the main habitats on site and adjacent, and the presence of, or potential for, protected and/or notable species; and
- ▶ A Preliminary Ecological Appraisal of the effects of development proposals with respect to the nature conservation value of the site.

1.3 Survey Area

1.3.1 The survey area lies to the south of Portslade village in the city of Brighton and Hove, East Sussex. The site comprises c.0.45ha of land including a village hall, garages, hard-standing, amenity grassland, scrub, tall ruderal and trees.

1.3.2 The site is bounded to the west by residential property fronting Windlesham Close, and to the north, east and south by residential property with associated gardens. The extent of the survey area is outlined in red on Figure 1.1.

- 1.3.3 The site is set in an urban setting with the wider area characterised by mainly residential property. A number of parks and allotments are situated within the wider environment, along with some woodland and a railway line. No ponds lie within 500m of the survey area.

1.4 Proposed Construction Activities

- 1.4.1 Planning consent is being sought for a residential development. The proposals would include demolition of existing buildings and hard-standing, removal of most of the trees and construction of new dwellings, together with parking, access, landscaping, and associated facilities. Figure 1.2 presents an indicative proposed site layout.

Lindfield Close, Portslade, East Sussex


 Survey area

Figure 1.1: Survey area



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Ordnance Survey 0100031673

Scale: 1:5,000 Created by: AD
Date: Sep 2019 Reviewed by: NP
Drawing number:
UE03331ECO-Site190903





Figure 1.2: Indicative proposed plan

2 Survey Methodology

2.1 Desk Study

2.1.1 A desk-based study was undertaken to examine published information and biological records from within the search area (site centroid plus 2km for bats, and 1km for all other data). The desk study established the presence of designated sites of nature conservation interest, or records of protected/notable habitats/species within the site and its surrounding area. This information was collected from the following sources:

- ▶ The 'MAGIC' (Multi-agency Geographic Information for the Countryside) website: www.magic.gov.uk; and
- ▶ Sussex Biological Records Centre (SxBRC).

2.2 Preliminary Ecological Appraisal

2.2.1 The Preliminary Ecological Appraisal (compliant to British Standard BS42020:2013) is based on a survey of the site undertaken on 7 August 2019 by an experienced ecologist. Weather conditions were warm (c.16°C), with a light breeze (Beaufort Scale 2), 20% cloud cover and no precipitation.

2.2.2 Within the survey area every parcel of land was classified, recorded and mapped using standard colour codes, in accordance with a list of ninety habitat types specified within the methodology for Phase 1 habitat survey (Joint Nature Conservation Council, 2010). This allows rapid visual assessment of the extent and distribution of different habitat types. Target notes were used to provide supplementary information on features which are particularly interesting or significant to specific construction proposals, or too small to map, or to provide additional details, for example relating to species composition and structure.

2.2.3 This basic methodology was extended to provide more detail in relation to habitats with potential to support rare or protected fauna, as described by the Chartered Institute of Ecology and Environmental Management's *Guidelines for Preliminary Ecological Appraisal* (CIEEM, 2017b). The assessment of habitat suitability for protected, rare or priority species is based on current good practice guidance such as that presented in the *Herpetofauna Workers' Manual* (Gent and Gibson, 2003) and *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collin (ed.), 2016).

2.2.4 Where a species/group is not specifically evaluated, this indicates that no habitat of potential value for the species was identified during the survey.

Scope of the survey

- 2.2.5 The buffer zone for the desk study was set at 1km from the centre of the site (2km for bats) – a distance within which any notable ecological features likely to be affected by the proposed scheme would be identified.
- 2.2.6 All habitats within the survey area as indicated on the Phase 1 Drawing in Appendix I were identified in order to identify any ecological constraints that would be likely to apply to the scheme from within this zone. Smaller areas of potential habitat or of floristic interest were target noted. Adjacent habitats were also surveyed where appropriate in order to identify constraints falling outside of the proposed development site and to place the survey area in its ecological context.

Evaluation criteria

- 2.2.7 Important ecological features were evaluated where possible in relation to a geographical frame of reference, i.e. international/European value being most important, then national, regional, metropolitan/county/district/borough, and lastly local (based on CIEEM, 2018).
- 2.2.8 Value judgements are based on various characteristics that contribute to the importance of ecological features. These include site designations (such as Sites of Special Scientific Interest (SSSI), or for undesignated features, the extent, naturalness, conservation status (locally, nationally or internationally important), and quality of the ecological resource. Quality can refer to habitats (for instance if they are particularly diverse, are a good example of a specific habitat type, or provide for the requirements of important species or assemblages), other features (such as connectivity provided by wildlife corridors or mosaics of habitats) or the richness and abundance of species populations or assemblages.

2.3 Limitations

- 2.3.1 Biological records gathered during the desk study can provide an indication of the likely presence of a species on or adjacent to a site, however, the absence of records for protected species does not equate to evidence of their absence from the locality. Data search accuracy is variable and records are often georeferenced to the nearest 1km grid square.
- 2.3.2 Time of year when the survey was carried out and other variations will influence the results of the survey. Botanical species vary considerably in their flowering, seeding and fruiting periods, and surveys outside of these periods can confound accurate species identification. Where this is the case plants have been identified to lowest possible taxonomic group, normally genus. The possibility nonetheless exists for other species to be present on the site which were not recorded or otherwise indicated by the survey. Ornamental species are not included in botanical listings.
- 2.3.3 The survey reported herein was carried out in mid-summer, during the flowering period for many botanical species, and the timing of the survey is not considered to be a significant limitation to meeting the objectives of the survey.

- 2.3.4 There were no difficulties in gaining access to survey the site's habitats and assess protected species suitability. Adjacent habitats were also surveyed where appropriate in order to identify constraints falling outside of the proposed development site and to place the survey area in its ecological context.
- 2.3.5 This report aims to provide general advice on the ecological constraints associated with development proposals for the site and includes recommendations for further survey where appropriate. Where impacts are likely or further ecological surveys are recommended, a more detailed Ecological Impact Assessment (EclA) of the effects of the proposed development should be carried out based on the results of recommended surveys. The EclA will include detailed advice on ecological avoidance, mitigation, enhancement and/or compensation measures. This is in line with the latest guidance from the Chartered Institute of Ecology and Environmental Management (CIEEM, 2017a, 2017b, 2018).
- 2.3.6 See Appendix IV for general Legal and Technical Limitations which apply to this document.

2.4 Personnel

- 2.4.1 The site survey was carried out by Anna Douglas BSc(Hons) MSc GradCIEEM, an Ecologist with four years' professional consultancy experience in ecological field survey for a wide range of sites and development projects. Anna holds Natural England Class Licences to survey for great crested newt (WML-CL09), and bats (WML-CL17). The report was extensively reviewed by Becci Bond BSc(Hons) MCIEEM, a Senior Ecologist with eight years' professional consultancy experience. Becci holds Natural England Class Licences to survey for great crested newt (WML-CL08), Dormouse (WML-CL10A) and bats (WML-CL17). The report was further reviewed by Nick Pincombe BA(Hons) MSc CEnv MIEMA MCIEEM, Director of Urban Edge Environmental Consulting, who has fourteen years' experience in leading survey and impact assessment teams for a wide range of ecology and environmental planning projects. Nick holds Natural England Class Licences to survey for bats (WML-CL18) and great crested newt (WML-CL08).

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3 Results

3.1 Desk Study

Statutory and non-statutory site designations

3.1.1 SxBRC and a search of the MAGIC database returned records of one statutory designated site (South Downs National Park) and three non-statutory Local Wildlife Sites (LWS) within the 1km desk study search area. The information provided by SxBRC regarding these sites is presented in Table 3.1, while shows their locations in relation to the survey area.

Priority habitats

3.1.2 Priority habitats include those listed on local Biodiversity Action Plans and habitats of principal importance listed under section 41 of the Natural Environment and Rural Communities Act 2006. SxBRC and a search of the MAGIC database returned the following data on priority and other habitats within the desk study search area: Deciduous woodland, and Open Water. Neither of these are shown as present within the survey area.

Records of protected, rare and notable species

3.1.3 Biological records were obtained from SxBRC for the desk study search area and are summarised in Table 3.2.

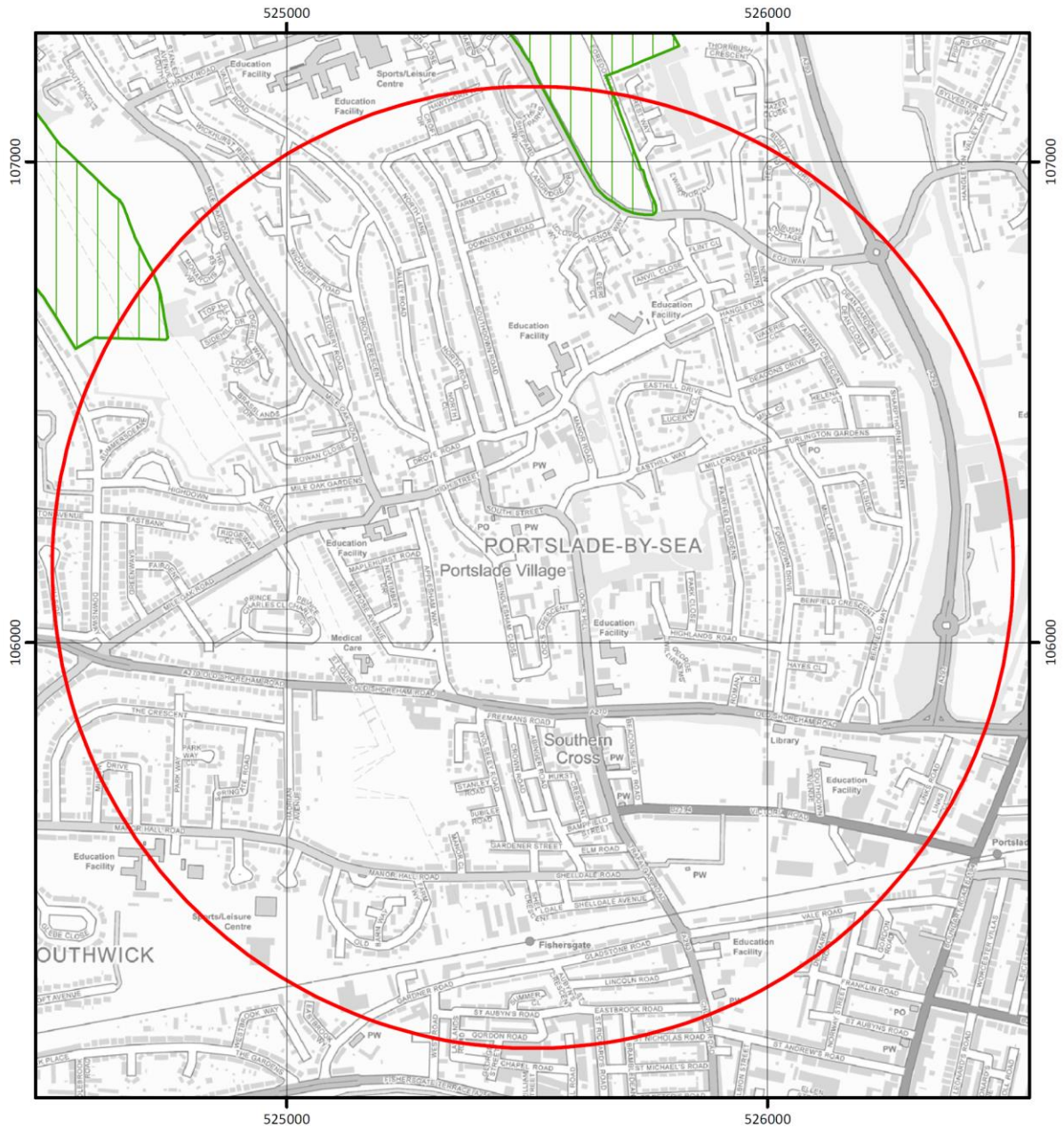
Table 3.1: Nature conservation sites within the desk study search area

Site name	Location	Description
South Downs National Park	c.910m north	The area, which covers more than 600 sq miles of countryside in Sussex and Hampshire, and comprises a mosaic of habitats including chalk grassland, heathland, ancient woods, river valleys, greensands and clays. The South Downs Way spans the entire length of the park and is the only National Trail that lies wholly within a national park.
Emmaus Garden & St Nicholas LWS	c.260m north east	This site is ecologically important because it supports an unusual diversity of habitats in this urban context. The churchyard is also important because of an unusual assemblage of Lichens. The site is also important for experiencing urban nature. Trees and shrubs throughout the site help to give a 'semirural' appearance to central Portslade. The woodland is managed specifically for nature conservation by a local group. The whole site is historically important, being part ancient churchyard and part of the walled gardens of an old manor house.
Benfield Valley LWS	c.770m east	Important for being a very large and diverse site which brings countryside deep into the urban area. Features of particular interest include mature Elm trees, anthills, part of an ancient

Site name	Location	Description
		Saxon hedgeline and specially protected species. The site also includes one of the largest areas of woodland to be found in Hove. Areas of species-poor grassland are included because of their importance for Badger foraging and to ensure the integrity of the site as a viable unit.
Foredown Allotments LWS	c.995m north east	This site is important for the variety of habitats it supports, including rough grassland, hedgerow, planted woodland and a pond. There is also a specially protected species. Although public access is currently limited, it is popular with local people in adjoining houses. The close proximity of this urban wildlife site to the Foredown Tower interpretation centre is a further asset.

Map 1: Statutory site designations

Land at Lindfield Close, Portslade + 1km radius
 SxBRC/19/389 - 06/08/2019



Statutory designated site boundaries supplied by Natural England. Contains public sector information licensed under the Open Government Licence v3.0.

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- Key to Map:
- Search area
 - National Park

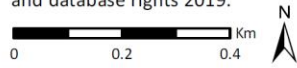
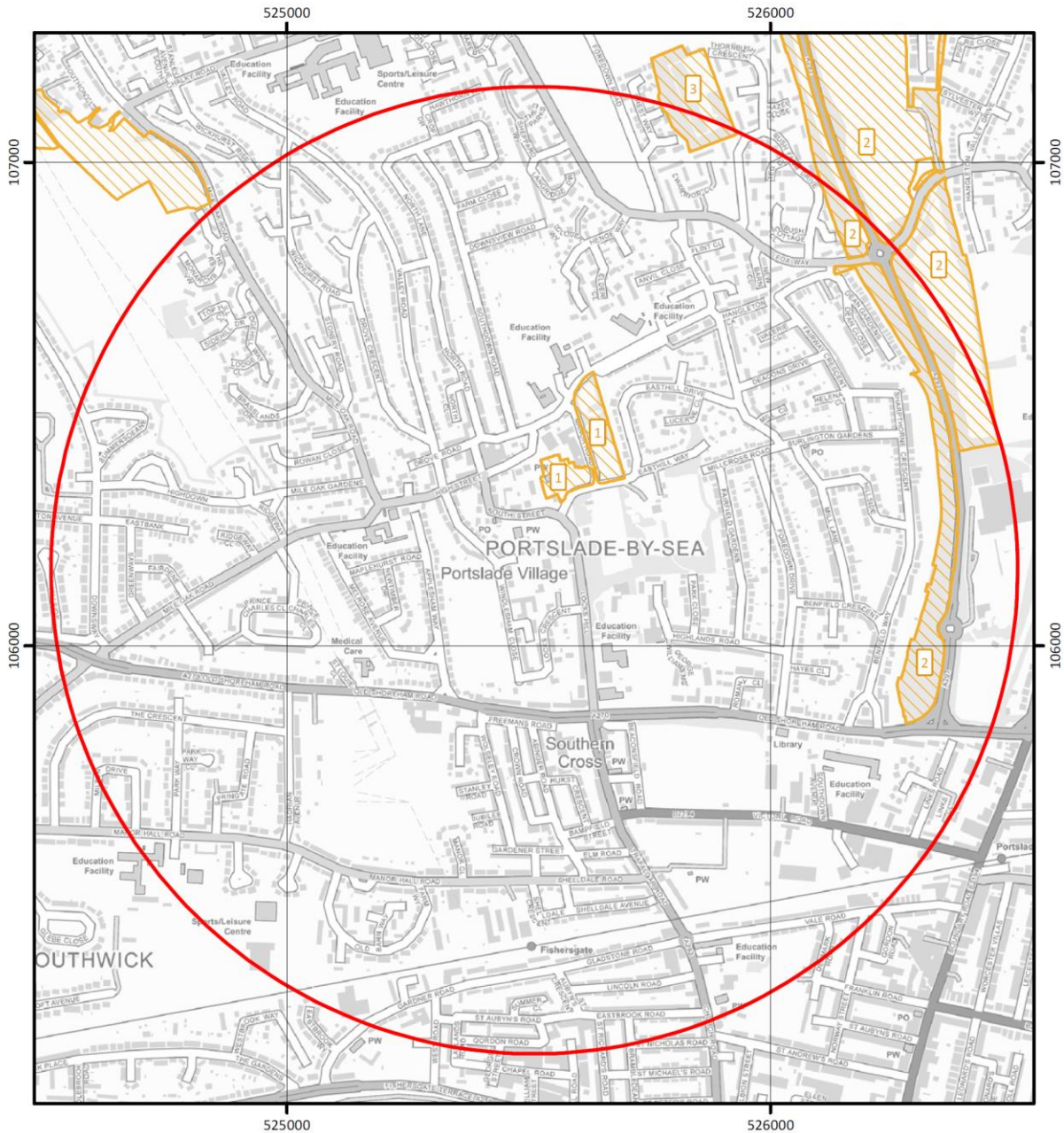


Figure 3.1: Statutory nature conservation sites within the desk study search area

Map 2: Non-statutory site designations

Land at Lindfield Close, Portslade + 1km radius
 SxBRC/19/389 - 06/08/2019



Local Wildlife Site and Notable Road Verge data provided by local authorities. Local Geological Site data created by SxBRC in partnership with Sussex Geodiversity Group.

Key to Map:
 Search area
 Local Wildlife Site

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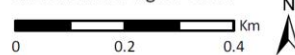


Figure 3.2: Non-statutory nature conservation sites within the desk study search area

Table 3.2: Records of protected, rare & notable species within the desk study search area

Group	Species	Protection
Amphibians	Common Toad <i>Bufo bufo</i>	WCA Sch.5 partial, NERC s41
	Smooth Newt <i>Lissotriton vulgaris</i> , Common Frog <i>Rana temporaria</i>	WCA Sch.5 partial
Birds (note: species may appear more than once)	Kingfisher <i>Alcedo atthis</i> , Short-eared Owl <i>Asio flammeus</i> , Barnacle goose <i>Branta leucopsis</i> , Marsh harrier <i>Circus aeruginosus</i> , Little Egret <i>Egretta garzetta</i> , White Stork <i>Ciconia ciconia</i> , Merlin <i>Falco columbarius</i> , Peregrine <i>Falco peregrinus</i> , Great northern diver <i>Gavia immer</i> , Red-throated Diver <i>Gavia stellata</i> , Little Bittern <i>Ixobrychus minutus</i> , Woodlark <i>Lullula arborea</i> , Mediterranean Gull <i>Larus melanocephalus</i> , Red Kite <i>Milvus milvus</i> , Osprey <i>Pandion haliaetus</i> , Honey Buzzard <i>Pernis apivorus</i> , Slavonian Grebe <i>Podiceps auritus</i> , Common tern <i>Sterna hirundo</i> , Arctic Tern <i>Sterna paradisaea</i> , Sandwich Tern <i>Sterna sandvicensis</i> , Golden Plover <i>Pluvialis apricaria</i> , Little Gull <i>Hydrocoloeus minutus</i> , Hen Harrier <i>Circus cyane</i>	Birds Dir.Ax.1
	Kingfisher <i>Alcedo atthis</i> , Short-eared Owl <i>Asio flammeus</i> , Purple Sandpiper <i>Calidris maritima</i> , Ringed Plover <i>Charadrius dubius</i> , Quail <i>Coturnix coturnix</i> , Merlin <i>Falco columbarius</i> , Peregrine <i>Falco peregrinus</i> , Red-throated Diver <i>Gavia stellata</i> , Little Bittern <i>Ixobrychus minutus</i> , Wryneck <i>Jynx torquilla</i> , Mediterranean Gull <i>Larus melanocephalus</i> , Common Crossbill <i>Loxia curvirostra</i> , Woodlark <i>Lullula arborea</i> , Red Kite <i>Milvus milvus</i> , Whimbrel <i>Numenius phaeopus</i> , Osprey <i>Pandion haliaetus</i> , Honey Buzzard <i>Pernis apivorus</i> , Black Redstart <i>Phoenicurus ochruros</i> , Spoonbill <i>Platalea leucorodia</i> , Slavonian Grebe <i>Podiceps auritus</i> , Firecrest <i>Regulus ignicapillus</i> , Little Gull <i>Hydrocoloeus minutus</i> , Hobby <i>Falco Subbuteo</i> , Black-Necked Grebe <i>Podiceps nigricollis</i> , Hen Harrier <i>Circus cyane</i> , Fieldfare <i>Turdus pilaris</i> , Redwing <i>Turdus iliacus</i>	WCA Sch.1
	Lesser Redpoll <i>Acanthis cabaret</i> , Skylark <i>Alauda arvensis</i> , Cuckoo <i>Cuculus canorus</i> , Yellowhammer <i>Emberiza citrinella</i> , Reed Bunting <i>Emberiza schoeniclus</i> , Corn Bunting <i>Emberiza calandra</i> , Dunnock <i>Prunella modularis</i> , Herring Gull <i>Larus argentatus</i> , Linnet <i>Linaria cannabina</i> , Grasshopper Warbler <i>Locustella naevia</i> , Yellow Wagtail <i>Motacilla flava</i> , Spotted Flycatcher <i>Muscicapa striata</i> , House Sparrow <i>Passer domesticus</i> , Balearic Shearwater <i>Puffinus mauretanicus</i> , Bullfinch <i>Pyrrhula pyrrhula</i> , European Turtle Dove <i>Streptopelia turtur</i> , Starling <i>Sturnus vulgaris</i> , Song Thrush <i>Turdus philomelos</i> , Ring Ouzel <i>Turdus torquatus</i> , Lapwing <i>Vanellus vanellus</i> , Hen Harrier <i>Circus cyane</i> , Grey-headed Wagtail <i>Motacilla flava subsp. thunbergi</i>	NERC s41
	Lesser Redpoll <i>Acanthis cabaret</i> , Skylark <i>Alauda arvensis</i> , Cuckoo <i>Cuculus canorus</i> , Long-tailed duck <i>Clangula hyemalis</i> , Ringed plover <i>Charadrius hiaticula</i> , Corn Bunting <i>Emberiza calandra</i> , Yellowhammer <i>Emberiza citrinella</i> , Merlin <i>Falco columbarius</i> , Pied Flycatcher <i>Ficedula hypoleuca</i> , Herring Gull <i>Larus argentatus</i> , Linnet <i>Linaria cannabina</i> , Grasshopper Warbler <i>Locustella naevia</i> , Nightingale <i>Luscinia</i>	RL

Group	Species	Protection
	<p><i>megarhynchos</i>, Grey Wagtail <i>Motacilla cinerea</i>, Yellow Wagtail <i>Motacilla flava</i>, Spotted Flycatcher <i>Muscicapa striata</i>, Whimbrel <i>Numenius phaeopus</i>, House Sparrow <i>Passer domesticus</i>, Black Redstart <i>Phoenicurus ochruros</i>, Slavonian Grebe <i>Podiceps auritus</i>, Balearic Shearwater <i>Puffinus mauretanicus</i>, Kittiwake <i>Rissa tridactyla</i>, Whinchat <i>Saxicola rubetra</i>, Woodcock <i>Scolopax rusticola</i>, Turtle Dove <i>Streptopelia turtur</i>, Arctic skua <i>Stercorarius parasiticus</i>, Starling <i>Sturnus vulgaris</i>, Ring Ouzel <i>Turdus torquatus</i>, Mistle Thrush <i>Turdus viscivorus</i>, Song Thrush <i>Turdus philomelos</i>, Lapwing <i>Vanellus vanellus</i>, Red-necked Grebe <i>Podiceps grisegena</i>, Fieldfare <i>Turdus pilaris</i>, Redwing <i>Turdus iliacus</i></p>	
	<p>Kingfisher <i>Alcedo atthis</i>, Wigeon <i>Anas penelope</i>, Meadow Pipit <i>Anthus pratensis</i>, Garganey <i>Anas querquedula</i>, Gadwall <i>Anas strepera</i>, Swift <i>Apus apus</i>, Turnstone <i>Arenaria interpres</i>, Short-eared Owl <i>Asio flammeus</i>, Brent goose <i>Branta bernicla</i>, Barnacle goose <i>Branta leucopsis</i>, Sanderling <i>Calidris alba</i>, Dunlin <i>Calidris alpina</i>, Purple Sandpiper <i>Calidris maritima</i>, Black-headed Gull <i>Chroicocephalus ridibundus</i>, Marsh harrier <i>Circus aeruginosus</i>, Stock Dove <i>Columba oenas</i>, Quail <i>Coturnix coturnix</i>, Mute Swan <i>Cygnus olor</i>, House Martin <i>Delichon urbicum</i>, Reed Bunting <i>Emberiza schoeniclus</i>, Kestrel <i>Falco tinnunculus</i>, Fulmar <i>Fulmarus glacialis</i>, Great northern diver <i>Gavia immer</i>, Oystercatcher <i>Haematopus ostralegus</i>, Common Gull <i>Larus canus</i>, Lesser Black-backed Gull <i>Larus fuscus</i>, Great Black-backed Gull <i>Larus marinus</i></p> <p>Iceland gull <i>Larus glaucoides</i>, Glaucous gull <i>Larus hyperboreus</i>, Mediterranean Gull <i>Larus melanocephalus</i>, Yellow-legged gull <i>Larus michahellis</i>, Osprey <i>Pandion haliaetus</i>, Honey Buzzard <i>Pernis apivorus</i>, Redstart <i>Phoenicurus phoenicurus</i>, Spoonbill <i>Platalea leucorodia</i>, Dunnock <i>Prunella modularis</i>, Willow Warbler <i>Phylloscopus trochilus</i>, Eider <i>Somateria mollissima</i>, Common tern <i>Sterna hirundo</i>, Sandwich Tern <i>Sterna sandvicensis</i>, Tawny Owl <i>Strix aluco</i>, Guillemot <i>Uria aalge</i>, Black-Necked Grebe <i>Podiceps nigricollis</i>, Snipe <i>Gallinago gallinago</i></p>	AL
Invertebrates	<p>Stag Beetle <i>Lucanus cervus</i></p>	Habs.Dir.Ax.2, WCA Sch.5 partial, NERC s41
	<p>Adonis Blue <i>Polyommatus bellargus</i>, Chalk Hill Blue <i>Polyommatus coridon</i>, White-letter Hairstreak <i>satyrium w-album</i>, Brown Hairstreak <i>Thecla betulae</i>, Small Blue <i>Cupido minimus</i>, Silver-spotted Skipper <i>Hesperia comma</i></p>	WCA Sch.5 partial
	<p>Small Heath <i>Coenonympha pamphilus</i>, Small Blue <i>Cupido minimus</i>, Wall <i>Lasiommata megera</i>, Knot Grass <i>Acronitica rumicis</i>, Mouse moth <i>Amphipyra tragopoginis</i>, Dusky Brocade <i>Apamea remissa</i>, Garden Tiger <i>Arctia caja</i>, Mottled Rustic <i>Caradrina Morpheu</i>, Centre-barred Sallow <i>Atethmia centrargo</i>, Sallow <i>Cirrhia icteritia</i>, Latticed heath <i>Chiasmia clathrata clathrate</i>, Small Square-spot <i>Diarsia rubi</i>, Dusky Thorn <i>Ennomos fuscantaria</i>, Galium Carpet <i>Epirrhoe galiata</i>, Spinach</p>	NERC s41

Group	Species	Protection
	<i>Eulithis mellinata</i> , Garden Dart <i>Euxoa nigricans</i> , Rustic <i>Hoplodrina blanda</i> , Small Emerald <i>Hemistola chrysoprasaria</i> , Ghost Moth <i>Hepialus humuli humuli</i> , Rosy Minor <i>Litoligia literosa</i> , Lackey <i>Malacosoma Neustria</i> , Dot Moth <i>Melanchra persicariae</i> , Pretty Chalk Carpet <i>Melanthia procellata</i> , Powdered Quaker <i>Orthosia gracilis</i> , Buff Ermine <i>Spilosoma lutea</i> , Brown Hairstreak <i>Thecla betulae</i> , White-letter Hairstreak <i>satyrium w-album</i> , Large Wainscot <i>Rhizedra lutos</i> , Cinnabar <i>Tyria jacobaeae</i> , Shaded Broad-bar <i>Scotopteryx chenopodiata</i> , White Ermine <i>Spilosoma lubricipeda</i> , Hedge Rustic <i>Tholera cespitis</i> , Blood-Vein <i>Timandra comae</i> , Oak Hook-tip <i>Watsonalla binaria</i>	
Mammals (terrestrial)	Noctule <i>Nyctalus noctula</i> , Soprano Pipistrelle <i>Pipistrellus pygmaeus</i>	Habs.Dir.Ax.4, CHS Sch.2, WCA Sch.5 full, NERC s41
	Serotine <i>Eptesicus serotinus</i> , Nathusius' Pipistrelle <i>Pipistrellus nathusii</i> , Common Pipistrelle <i>Pipistrellus pipistrellus</i>	Habs.Dir.Ax.4, CHS Sch.2, WCA Sch.5 full
	West European Hedgehog <i>Erinaceus europaeus</i>	NERC s41
Plants	Red Star-thistle <i>Centaurea calcitrapa</i> ,	NERC s41
Reptiles (terrestrial)	Slow Worm <i>Anguis fragilis</i> , Grass Snake <i>Natrix natrix</i> , Adder <i>Vipera berus</i> , Common Lizard <i>Zootoca vivipara</i>	WCA Sch.5 part, NERC s41

Birds Dir.Ax.1	Wild Birds Directive 2009/147/EC Annex 1
Habs.Dir.Ax.2/4	Habitats Directive 92/43/EEC Annex 2 or 4
CHS Sch.X	Conservation of Habitats & Species Regulations 2017 Schedules 2 (EPS animals) or 5 (EPS plants)
WCA s1/Sch.X	Wildlife and Countryside Act 1981 Section 1 / Schedules 1, 5 (fully or partially protected), 6 or 8
PBA	Protection of Badgers Act 1992
NERC s41	Natural Environment & Rural Communities Act 2006 Section 41 Species of Principal Importance
RL/AL	Red/Amber Listed (IUCN or Birds of Conservation Concern 4 (Eaton et al., 2015))

3.2 Phase 1 Habitats

3.2.1 The following Phase 1 habitats were identified within or adjacent to the survey area and are shown on the Phase 1 habitats map at Appendix I. The habitats are described below broadly in the order of their extent.

- ▶ Hard standing;
- ▶ Amenity grassland;
- ▶ Buildings;
- ▶ Hedgerow;
- ▶ Scattered trees; and
- ▶ Scrub and tall ruderal.

Hard standing

- 3.2.2 Areas of hard standing covered approximately 50% of the site, these included a playground to the centre the site and parking areas to the north and west of the site with associated access pathways to the buildings.



Central playground area



Carpark/entranceway to garages in the west



Northern access road and carpark area

Amenity grassland

- 3.2.3 Amenity grassland made up approximately 35% of the site. Species found within this habitat type included: perennial rye grass *Lolium perenne*, cock's-foot *Dactylis glomerata*, rough hawkbit *Leontodon hispidus*, common daisy *Bellis perennis*, creeping buttercup *Ranunculus repens*, field bindweed *Convolvulus arvensis* and ribwort plantain *Plantago lanceolata*. The amenity grassland had a largely uniform sward, with little structural diversity; it looked to be managed regularly. At the time of survey the sward was c.8cm in height. Three banks ran north to south within this habitat type (Target Note TN1).



Amenity grassland on bank to eastern boundary



Amenity grassland south eastern corner



Amenity grassland west of playground

Buildings

Building B1

- 3.2.4 Building B1 is currently in use as a village centre, with numerous uses including office areas and for community events. The building was a single storey, brick built structure with securely fitted uPVC windows and doors. The building was assessed internally and externally for signs of roosting bats. The roof had a pitched section to the east running broadly north to south; this section, above the main hall had corrugated roofing material. The remainder of the building had a flat felt covered roof. The soffit and fascia boards were in generally good condition, however, some damage was noted in the fascia to the northern aspect which could form a potential roost feature (PRF) for crevice-roosting bats such as pipistrelles *Pipistrellus spp.*. Further gaps were noted to the structural fastenings under the soffit to the eastern aspect which may offer similar opportunities.
- 3.2.5 The PRFs to the northern and eastern aspects were observed using an endoscope during a subsequent site visit on 2 September 2019. On closer inspection these features were found to be heavily cobwebbed. No bats or evidence of bats were noted during the endoscope inspection.
- 3.2.6 A small extension was noted to the north of the building, the structure had gappy wooden slats forming the eastern wall, which could give access into this less used room. No bats or evidence

of bats was found however and the roof in this section was flat, with no potential void. The room was exposed to the elements and did not provide suitable roosting features for bat species.

- 3.2.7 The internal assessment of the main building provided no observable roosting features or evidence of bats. The main part of the pitched roof section had a vaulted ceiling with no roof void. A small section to the west of the pitched roof section of the building had been sectioned off creating a void. This void was accessed through a false ceiling. The void measured c.5.8m x3.1m and was c.3.2m at the apex. The void was dark, no access into the void was observable, and no rough joists, crevices or other potential roosting features were noted within the void. No bats or evidence of bats were noted within the void.
- 3.2.8 On the roof of the building was a small water tank storage room, this was accessed from a ladder onto the roof. This small room measured c.3.7mx2.9mx2.3m, the space was cluttered and provided no observable roosting features, and the internal brick work was in good condition. No bat or evidence of bats were noted from within this section.
- 3.2.9 Overall, building B1 was classified as negligible suitability for roosting bats, due to a lack of evidence of roosting bats along with an absence of suitable features.

Garages

- 3.2.10 A line of garages made up the western boundary of the site. They were all made of concrete and had flat roofs. No observable roost features were noted in any of the garages. They are considered to be of negligible suitability for roosting bats.



Void structure, northern section of pitched roof



Vaulted roof in main hall



Water tank room



External view of water tank room



Northern extension, storage room



Interior of northern extension



Gaps in fascia to northern aspect



Eastern face



Cobwebbed potential roost feature, eastern aspect



Garages, western boundary

Hedgerows

- 3.2.11 Three hedgerows formed part of the site boundary to the north, east and south.
- 3.2.12 Hedgerow H1 formed a small section of the southern boundary. The hedgerow measured c.15m length, c.1.5m wide, and c.3m in height, with the associated trees measuring c.7m. Species composition included: Holly *Ilex aquifolium*, ivy *Hedera helix*, bird cherry *Prunus padus*, and elder *Sambucus nigra* with an understory consisting of bramble *Rubus fruticosus*, ivy and bind weed. This hedgerow was classified as species-poor.
- 3.2.13 Hedgerow H2 formed the eastern border of the site and surrounded a metal fence. The hedgerow measured c.45m length, c.3-4m in height and c.1m in width. Species composition included: privet *Ligustrum ovalifolium*, bramble, sycamore *Acer pseudoplatanus*, holly and bindweed. This hedgerow was classified as species-poor.
- 3.2.14 Hedgerow H3 formed the eastern section of the northern boundary. It measured c.8m in length, c.10m in height and c.0.5m in width. Species composition included: bramble, elder and beech *Fagus sylvatica*. This hedgerow was classified as species-poor.



H1: Along southern boundary



H2: Along eastern boundary



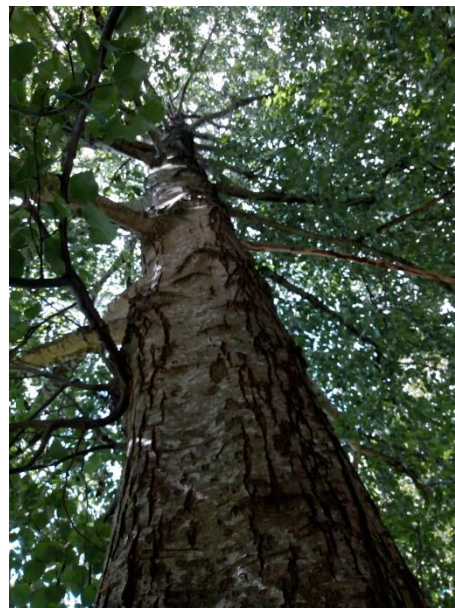
H3: Along northern boundary

Scattered trees

3.2.15 A number of scattered trees were noted within the site boundary, ranging from young to semi mature, species included: bird cherry, sycamore *Acer pseudoplatanus*, beech, willow *Salix sp.*, ash *Fraxinus excelsior*, silver birch *Betula pendula*, elder, rowan *Sorbus aucuparia*, and alder. An alder tree in the north western corner of the site (TN2) had cracked bark and a possible hole into the lower trunk; this tree was classified as low suitability for roosting bats. All the remaining trees had negligible suitability for roosting bats.



Alder tree (TN2): low suitability for roosting bats



Alder tree (TN2): low suitability for roosting bats

Scrub and tall ruderal

3.2.16 A small section of scrub was located within the north west of the most westerly section of amenity grassland. The scrub was located on a bank, and consisted of predominantly bramble, with occasional young elder. The scrub was dense, and had an understory of grasses and nettle *Urtica dioica*. Tall ruderal vegetation was noted to the southern boundary, close to the fence line. The species that predominated was nettle.

4 Evaluation

4.1 Introduction

4.1.1 This section evaluates the survey area in terms of the habitats and species present or potentially present on site or its immediate vicinity, in the context of relevant legislation and planning policy. See Appendix III for a review of the legislation and planning context.

4.2 Designated Sites

4.2.1 None of the statutory or non-statutory wildlife sites within the desk-study search zone are likely to be affected by the proposed development, considering the size and scale of the proposal and its distance from the designated sites; the closest designation is c.230m north south east (Emmaus Garden & St Nicholas LWS).

4.3 Habitats

4.3.1 Priority habitats present within the survey area or at its boundaries include:

- ▶ Hedgerows

4.3.2 Hedgerows H1, H2 and H3 were classified as species-poor. Priority hedgerow habitats are defined "as any boundary line of trees or shrubs over 20m long and less than 5m wide, and where any gaps between the trees or shrub species are less than 20m wide..., consisting predominantly (i.e. 80% cover or more) of at least one woody UK native species" (any bank, wall, ditch or tree within 2m of the centre of the hedgerow is considered to be part of the hedgerow habitat, as is the herbaceous vegetation within 2m of the centre of the hedgerow) (Maddock, 2008). The survey area's hedgerows broadly fall into this classification, and provide habitats suitable for a range of protected species, including nesting birds, invertebrates, bats and reptiles. However, although detailed proposals for the site are not yet finalised, it is currently anticipated the hedgerows will be retained and protected during construction.

4.3.3 The proposed development would result in permanent losses of up to c.0.17ha of amenity grassland, tall ruderal, trees and scrub across the site, depending on the extent and layout of development proposals. These areas are of relatively low ecological value but provide habitats suitable for a number of protected species (e.g. nesting birds and reptiles).

4.4 Species

Amphibians (excluding great crested newt)

4.4.1 The survey area is predominantly hardstanding which is unsuitable habitat for amphibian species. However, some habitats within the survey area such as grassland, scrub and hedgerow are potentially suitable terrestrial habitats for common and widespread amphibian species such as common frog *Rana temporaria*, common toad *Bufo bufo* and smooth newt *Lissotriton vulgaris* which have been recorded in the desk-study search zone. However, the grassland is largely sub-optimal due to its uniform structure and short sward height, and habitats of better suitability are widely available in the surrounding area. Common amphibians are not considered to present a constraint to the development proposals and no further surveys for this group are required.

Great crested newt

4.4.2 SxBRC returned no records of great crested newt (GCN) *Triturus cristatus* from within the desk-study search zone.

4.4.3 The survey area contains predominantly sub-optimal terrestrial habitat for GCN, comprised mainly of hardstanding, buildings and amenity grassland with a short sward height, uniform structure and intensive management. Grasslands of this nature are occasionally used by foraging or dispersing GCN but contain few shelter habitats and are unlikely to support high numbers. Small patches of better habitat for this species are present, including the scrub, tall ruderal and hedgerow, which together provide potential foraging, shelter and hibernation opportunities.

4.4.4 There are no ponds within the survey area, and analysis of Ordnance Survey maps and aerial photography indicates that there are also no ponds present within 500m of the site. The scope for potential impacts to GCN is negligible due to the absence of potentially suitable breeding ponds connected to the site. GCN is not considered to present a constraint to the development proposals and no further surveys for this species are required.

Birds (nesting)

4.4.5 SxBRC returned 1,710 records of 85 notable bird species from within the desk-study search zone during a date range of 1981 to 2013.

4.4.6 The survey area's boundary hedgerow, trees and scrub are suitable for nesting birds such as wren *Troglodytes troglodytes*, dunnock *Prunella modularis* (an Amber-listed bird of conservation concern (BoCC4); Eaton *et al.*, 2015), robin *Erithacus rubecula* and chaffinch *Fringilla coelebs*, while the buildings provide some limited suitability for species such as house sparrow *Passer domesticus* (BoCC4 Red-listed) and swallow *Hirundo rustica*. Precautionary measures for nesting birds are recommended at section 5.2.

Invertebrates

- 4.4.7 SxBRC returned 156 records of protected or notable invertebrate from within the desk-study search zone, during a date range of 1987 to 2018, principally of Lepidoptera (moths and butterflies) but also including stag beetle *Lucanus cervus*.
- 4.4.8 The buildings, hard-standing and amenity grassland which dominate the survey area are largely unsuitable for invertebrates and are unlikely to support a diverse or abundant invertebrate fauna in general. The smaller patches of scrub, hedgerow and trees provide some limited opportunities for a range of common and widespread invertebrates. These habitats are abundant within the wider landscape, and thus the limited losses within the site resulting from redevelopment proposals are not considered likely to significantly affect invertebrate communities. Invertebrates are not considered to present a constraint to the development proposals and no further surveys for this group are required.

Mammals (terrestrial)

Badger

- 4.4.9 SxBRC do not supply badger *Meles meles* records.
- 4.4.10 The survey area provides some limited suitable foraging and sett creation potential. A search for badger setts and signs of their presence was undertaken within a 30m radius of the site boundary. Sett building habitats were restricted to the hedgerows, banks and scrub, and no setts were found despite extensive searching. There was no observable evidence of badger activity within or around the survey area, such as badger paths, footprints, latrines, badger hairs caught at fence lines, or scratching posts. Badger is not considered to present a constraint to the development proposals and no further surveys for this species are required.

Bats

- 4.4.11 SxBRC returned 46 records of five species of bat from within 2km of the survey area, during a date range of 1986 to 2018, including serotine *Eptesicus serotinus*, noctule *Nyctalus noctula*, Nathusius' pipistrelle *Pipistrellus nathusii*, common pipistrelle *P. pipistrellus* and soprano pipistrelle *P. pygmaeus* bats.
- 4.4.12 Following full internal and external survey, and subsequent close inspection of PRFs with an endoscope, building B1 was considered to be of negligible suitability for roosting bats due to its form, condition and general absence of exploitable features. The garages on site were also considered to be of negligible suitability for roosting bats. The buildings do not present a constraint in relation to roosting bats and no further surveys are required.
- 4.4.13 The alder tree in the north western corner of the site (TN2) had cracked bark and a possible rot hole into the lower trunk. This tree is of low suitability for roosting bat species and, should felling or arboricultural works be required, reasonable avoidance measures will be needed to prevent impacts to roosting bats, as recommended at section 5.2.

- 4.4.14 The rest of the trees within the survey area did not display any potential roost features during a ground-level assessment and were of negligible suitability. These trees do not present a constraint in relation to roosting bats.
- 4.4.15 The hardstanding and amenity grassland habitats which dominate the survey area provide negligible to low suitability foraging habitat for bats. The boundary hedgerows may serve as a navigation route or foraging feature for bats, and are of low to moderate suitability, but it is anticipated that these will remain unaffected during the works. Given the scale of development proposed and the small area of habitat to be lost, significant impacts to foraging/commuting bats are unlikely. Further bat activity surveys are not required.

Hazel dormouse

- 4.4.16 SxBRC returned no records of hazel dormouse *Muscardinus avellanarius* within the desk study search area.
- 4.4.17 The hedgerows within the survey area provide potential habitat for dormouse, however, they are considered to be sub-optimal due to their short length and limited connectivity to other areas of mature hedgerow and woodland. In any case, the hedgerows are to be retained under proposals for the site. Dormouse is not considered to present a constraint to the development proposals and no further surveys for this species are required.

Plants, native

- 4.4.18 SxBRC returned three records of one protected botanical species from within the desk-study search zone during a date range of 1993 to 2014. No rare or protected species of flora were recorded within the survey area and, based on the habitat types present (hardstanding, grassland and scrub) and past and current management regimes, it is considered unlikely that these are present. Botanical species are not considered to present a constraint to the development proposals and no further surveys for this group are required.

Plants – invasive non-native species and injurious weeds

- 4.4.19 No invasive plant species (i.e. species listed on Schedule 9 of the Wildlife and Countryside Act) were located during this survey. No significant stands of injurious weed species were noted (ragwort *Senecio jacobea*, spear thistle *Cirsium vulgare*, creeping thistle *Cirsium arvense*, curled dock *Rumex crispus*, and broad-leaved dock *Rumex obtusifolius*). Invasive plant species and injurious weeds are not considered to present a constraint to the development proposals and no further action for this group is required.

Reptiles (terrestrial)

- 4.4.20 SxBRC returned 48 records of terrestrial reptile species from within 1km of the survey area, during a date range of 1988 to 2017. All four widespread species have been recorded in the vicinity; slow worm *Anguis fragilis*, grass snake *Natrix natrix*, common lizard *Zootoca vivipara* and adder *Vipera berus*.

- 4.4.21 The survey area contains predominantly sub-optimal habitat for reptiles, comprised mainly of buildings, hardstanding and amenity grassland with a short sward height and little structural diversity. Short amenity grasslands contain few shelter habitats and are unlikely to support high numbers of reptiles. However, small patches of potentially suitable habitat are present at the boundaries including scrub, tall ruderal and hedgerow, providing shelter and foraging opportunities. Any works within the scrub, tall ruderal or hedgerow should be undertaken in accordance with a Precautionary Working Method Statement to reduce the risk of killing/injury to reptiles, as recommended at section 5.2.

Other protected, rare or notable species

- 4.4.22 SxBRC returned 30 records of hedgehog *Erinaceus europaeus* from within the desk-study search zone during a date range of 2003 to 2017, with the majority recorded in the last seven years. The survey area contains habitats suitable for this species, including grassland, hedgerow and scrub. Hedgehog is listed as a species of principal importance under the NERC Act 2006 and is undergoing a significant population decline. Measures should be taken to continue accommodating this species on the site post-development (see section 5.2.).

5 Recommendations

5.1 Introduction

- 5.1.1 With regard to the objectives of this Preliminary Ecological Appraisal, recommendations are made below for the protection of important ecological features, and/or to avoid or mitigate ecological impacts, and to enhance the ecology of the site post-construction, with the aim of achieving an overall net gain for biodiversity.
- 5.1.2 It is intended that these preliminary recommendations should be considered during future changes to the design of development proposals so that protection of important ecological features is secured and opportunities for ecological enhancement are realised, and changes may also be necessary if the development proposals are amended.

5.2 Precautionary Measures

- 5.2.1 The following species/groups (Table 5.1) require specific precautionary measures to be adhered to prior to and during construction to ensure that an offence under the relevant legislation is avoided.

Table 5.1: Recommended precautionary measures

#	Recommendations for precautionary measures
R1	Removal of nesting bird habitats (including vegetation and buildings) will be undertaken outside of the bird nesting season, which runs from 1 March to 31 August. It will therefore be carried out between September and February. Any construction works undertaken within the bird breeding season where suitable bird breeding habitat exists will require a site check for nesting birds by a suitably qualified ecologist. This will take place no more than two days prior to works commencing. This is to ensure that no disturbance to active bird nests occurs. If a nest is found it must be cordoned off and works adjacent to the nest must be delayed until such time that the chicks have fledged from the nest. This will be supervised by a suitably qualified ecologist.
R2	If works to fell or lop the low suitability tree at TN1 are required, they will be undertaken in accordance with a Non-Licensed Method Statement to reduce the risk of killing/injury to roosting bats. The Method Statement will specify reasonable avoidance measures including timing restrictions (works to be carried out during March-April or September-October to avoid critical maternity and hibernation periods), 'soft felling' techniques to enable bats to disperse, and will be carried out under the supervision of a suitably qualified ecologist.
R3	Vegetation clearance works in the small areas of tall ruderal vegetation, scrub and hedgerows, found mainly towards the edges of the site, will be undertaken in accordance with a Precautionary Method Working Statement to reduce the risk of killing/injury to reptiles. The Method Statement will specify reasonable avoidance measures including timing restrictions (works to be carried out during the reptile active season, broadly March to October),

	<p>progressive reduction of vegetation height to displace any reptiles present into suitable surrounding areas of retained habitat, and will be carried out under the supervision of a suitably qualified ecologist. Once vegetation removal is complete, the site should be maintained in unsuitable condition to prevent recolonisation.</p>
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5.3 Ecological Protection Measures

5.3.1 The following protection measures (Table 5.1:) will be carried out as part of the proposed scheme.

Table 5.2: Recommended ecological protection measures

#	Recommended ecological protection measures
R4	The hedgerow priority habitats within the survey area are of intrinsic ecological value and provide habitats suitable for a range of protected species, including nesting birds, invertebrates, bats and reptiles. These features will be retained and protected during construction, and could also provide a focus for ecological enhancement measures.
R5	British Standard BS 5837:2012 and/or National Joint Utilities Group Guidelines (NJUG, 1995) will be followed at all times during construction when working in close proximity to trees or shrubs which are to be retained. According to NJUG Guidelines the root protection zone or precautionary area is 4x the circumference of the trunk (circumference is measured around the trunk at a height of 1.5m above ground level). The distance is measured from the centre of the trunk to the nearest part of any excavation or other work. If a separate tree survey is carried out for the proposed development, works will be undertaken in accordance with the recommendations therein.
R6	Avoid the use of external lighting, or keep its use to the minimum required for its intended purpose, during both construction and operation. This will be of benefit to nocturnal species e.g. bats. Where external lighting is to be provided, it should be low-level, directional lighting with minimal spill and glare, and consideration should be given to reduced hours of operation and/or a movement responsive system of control. Use narrow-spectrum bulbs and light sources that emit minimal UV light, avoiding white and blue wavelengths of the spectrum. Use glass lantern covers instead of plastic to filter UV light. Lighting should not be directed towards the boundary hedgerows.
R7	All excavations left overnight will either be covered over, or provided with a ramp to enable easy escape of badgers, hedgehogs, small mammals, amphibians and other fauna, and inspected each morning prior to recommencement. Open pipework greater than 150mm outside diameter will be blanked off at the end of each working day
R8	To enable dispersal of hedgehogs (which require large territory sizes) and other small mammals across the site and within the local area following development, small access gaps to measure c.13x13cm are recommended to be provisioned at the base of all new fence boundaries. These will allow easy passage for small mammals to continue foraging in the area while still being small enough to contain pets.
R9	Where fox dens or rabbit warrens are to be damaged or destroyed as part of the proposed works, this will be done in accordance with the Mammals Act 1996 by a registered pest control company.

5.4 Recommendations for Ecological Net Gain

5.4.1 The following ecological enhancements (Table 5.3) should be considered for the site to achieve an overall net gain for biodiversity in line with the requirements of local and national policy and guidance.

Table 5.3: Preliminary recommendations for ecological net gain

#	Preliminary recommendations for ecological net gain
R10	It is recommended that new green spaces are sown with a locally-sourced native wildflower and grass seed mix (i.e. wildflower meadow). This should be particularly targeted towards retained habitat features such as hedgerows, but should also be extended to public realm areas such as open spaces and road verges. A wildflower meadow treatment would provide a greater botanical diversity than currently present, and will benefit local populations of invertebrates such as butterflies and bees and their predators. Even if planted only at the margins of areas of amenity grassland, particularly if adjacent to other features such as hedgerows, this would provide a habitat enhancement for reptiles, small mammals and invertebrates.
R11	Hedgerow enhancement as part of the landscaping plan for the site should use a wide range of native shrub species of local provenance. Fruit, seed, nut and nectar-bearing species should be used preferentially when selecting a palette of species for landscape planting, so that food sources are available throughout most of the year (e.g. hazel <i>Corylus avellana</i> , hawthorn <i>Crataegus monogyna</i> , blackthorn <i>Prunus spinosa</i> , rowan <i>Sorbus aucuparia</i> and honeysuckle <i>Lonicera periclymenum</i>). If an evergreen hedge is required for landscape screening, suitable native species include holly <i>Ilex aquifolium</i> , holm oak <i>Quercus ilex</i> although both can be rather slow growing, ivy <i>Hedera helix</i> and privet <i>Ligustrum vulgare</i> . Beech <i>Fagus sylvatica</i> and hornbeam <i>Carpinus betulus</i> are also widely used as hedging plants and, although not evergreen, these will keep their brown leaves through winter if trimmed in late summer.
R12	The value of the site for birds should be enhanced by installing a range of artificial nest boxes. It is recommended that these are placed on retained trees within the development, or incorporated within building facades. For instance: <ul style="list-style-type: none"> ▪ New buildings: nest boxes could be installed under the eaves for birds that utilise buildings for nesting, e.g. house martin <i>Delichon urbica</i>, house sparrow <i>Passer domesticus</i>, and swift <i>Apus apus</i>. These species are of principal importance, of conservation concern and/or are notable in Sussex. ▪ Trees: nest boxes with entrance holes suitable for tit species, and open-fronted boxes suitable for spotted flycatcher <i>Muscicapa striata</i> or song thrush <i>Turdus philomelos</i>, and treecreeper <i>Certhia familiaris</i> boxes.
R13	The value of the site for bats should be enhanced by installing a range of artificial roost boxes. It is recommended that these are placed on retained trees within the development, or incorporated within buildings facades. Boxes suitable for a wide range of species should be used, for instance: <ul style="list-style-type: none"> ▪ New buildings: integral bat tubes could be installed within buildings which face vegetated areas. Bat tubes can be incorporated into the design of the building so that only the access holes are visible from the exterior of the building. The Schwegler 1FR or 2FR Bat Tube is designed to meet the characteristic requirements of the types of bats that inhabit buildings such as pipistrelles <i>Pipistrellus spp.</i> or serotines <i>Eptesicus serotinus</i>. It is designed to be installed on the external walls of buildings, either flush

or beneath a rendered surface.

- Pipistrelles *Pipistrellus sp.*: bat boxes suitable to install on mature trees either within or at the edges of the development include the Schwegler 1FF Flat Bat Box, or other manufacturer's equivalent.
- Noctules *Nyctalus spp.* and brown long eared bats *Plecotus auritus*: bat boxes suitable to install on mature trees either within or at the edges of the development include the Schwegler 2F General Purpose Bat Box or the 2FN Woodland Bat Box, or other manufacturer's equivalent.
- Bat boxes should ideally be located south-facing (between south-east and south-west) and above 4m from ground level. If possible they should be installed facing vegetation features such as mature hedgerows or trees, but with a clear line of flight for bats entering or leaving the roost, and away from sources of artificial light. The exact numbers and locations of boxes within the site and the surrounding woodland should be specified by an ecologist once the proposed site layout has been worked up in further detail.

6 Summary and Conclusions

6.1 Introduction

6.1.1 A Preliminary Ecological Appraisal was undertaken for the site of a proposed residential development at Lindfield Close, Portslade, East Sussex. The report was prepared to inform the design process for the proposal, record the ecological baseline and identify key ecological features within and around the proposal site.

6.2 Results

6.2.1 There is one statutory designated site (South Downs National Park) and three non-statutory LWS within the 1km desk study search area. There are records of a range of protected or notable species in the locality, including amphibians, birds, invertebrates, terrestrial mammals, flowering plants and terrestrial reptiles, together with two priority habitats: Deciduous woodland and Open water.

6.2.2 The survey area lies to the south of Portslade village in the city of Brighton and Hove, East Sussex. The site comprises c.0.45ha of land including a village hall, garages, hard-standing, amenity grassland, scrub, tall ruderal and trees. The site is bounded to the west by residential property fronting Windlesham Close, and to the north, east and south by residential property with associated gardens. The site is set in an urban setting with the wider area characterised by mainly residential property. A number of parks and allotments are situated within the wider environment, along with some woodland and a railway line. No ponds lie within 500m of the survey area.

6.3 Evaluation

6.3.1 Table 6.1 presents a summary of ecological constraints and opportunities identified within the survey area.

Table 6.1: Summary of ecological constraints and opportunities

Feature	Detail
Constraints:	
Designated sites	None of the statutory or non-statutory wildlife sites within the desk-study search zone are likely to be affected by the proposed development, considering the size and scale of the proposal and its distance from the designated sites.
Priority habitats	All the hedgerows on site (H1-H3) are priority habitats, and provide habitats suitable for a range of protected species, including nesting birds, invertebrates, bats and reptiles. It is currently anticipated that the hedgerows will be retained and protected during construction.

Feature	Detail
Amenity grassland, Tall ruderal, Trees and Scrub	Permanent losses of up to c.0.17ha of amenity grassland, tall ruderal, trees and scrub across the site, depending on the extent and layout of development proposals. These areas are of relatively low ecological value but provide habitats suitable for a number of protected species (e.g. nesting birds and reptiles).
Birds (nesting)	Possible permanent loss of nesting habitats (trees, hedgerows, scrub).
Bats (roosting)	Possible permanent loss of one tree (TN2) with low suitability for roosting bats.
Reptiles	Possible permanent losses of suitable habitats (tall ruderal, scrub, hedgerow).
Opportunities:	
Priority habitats	The hedgerow priority habitats within the survey area are of comparatively greater ecological value and could provide a focus for ecological enhancement measures.
Habitat creation / enhancement	Habitat creation and enhancement opportunities include wildflower meadow planting, hedgerow restoration, and bird/bat boxes. It is not currently known which of these can be accommodated within proposals for the site.

6.4 Recommendations

6.4.1 No further surveys for protected species are required. Preliminary recommendations are made for the protection of important ecological features to avoid or mitigate ecological impacts, and to deliver ecological net gain on site post-construction; these are summarised in Table 6.2. It is intended that these preliminary recommendations should be considered during future changes to the design of development proposals so that protection of important ecological features is secured and opportunities for ecological enhancement are realised.

Table 6.2: Summary of recommendations

#	Summary of recommendations
Precautionary measures	
R1	Removal of nesting bird habitats (including vegetation and buildings) will be undertaken outside of the bird nesting season, which runs from 1 March to 31 August. It will therefore be carried out between September and February.
R2	If works to fell or lop the low suitability tree at TN1 are required, they will be undertaken during March-April or September-October to avoid critical maternity and hibernation periods, and in accordance with a Non-Licensed Method Statement to reduce the risk of killing/injury to roosting bats.
R3	Vegetation clearance works will be undertaken during the reptile active season (broadly March to October) and in accordance with a Precautionary Working Method Statement to reduce the risk of killing/injury to reptiles.
Ecological protection measures	
R4	The hedgerow priority habitats within the survey area will be retained and protected during construction.
R5	Standard site procedures to prevent impacts on trees should be adhered to during construction.

#	Summary of recommendations
R6	The use of external lighting should be avoided or minimised to prevent impacts to nocturnal species such as bats. Lighting should not be directed towards the boundary hedgerows.
R7	At the end of each working day excavations should be covered over and open pipework should be capped to prevent impacts on mammals, amphibians and other fauna.
R8	To enable dispersal of small mammals across the site and within the local area following development, small access gaps to measure c.13x13cm are recommended to be provisioned at the base of all new fence boundaries.
R9	Where fox dens or rabbit warrens are to be damaged or destroyed as part of the proposed works, this should be done in accordance with the Mammals Act 1996 by a registered pest control company.
Ecological net gain	
R10	Green spaces should be sown with a locally-sourced native wildflower and grass seed mix.
R11	Hedgerow enhancement should use a range of native fruit, seed, nut and nectar-bearing species shrub species of local provenance.
R12	The value of the site for birds could be enhanced by installing a range of artificial nest boxes onto new buildings and retained trees.
R13	The value of the site for bats could be enhanced by installing a range of artificial roost boxes onto new buildings and retained trees.

6.5 Conclusions

6.5.1 The land proposed for development is of low ecological value. Proportionate and effective mitigation is likely to be available to protect the few significant constraints to development which were identified. No further surveys are required prior to submitting a planning application.

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Appendix I: Phase 1 Habitats Map

Please see insert.

Lindfield Close, Portslade, East Sussex

-  Hard standing
-  Dense scrub
-  Tall ruderal
-  Amenity grassland
-  Buildings
-  Scattered trees
-  Species poor hedgerow
-  Fence
-  Wall
-  Target notes
-  Survey area





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Ordnance Survey 0100031673

Scale: 1:500 Created by: AD
Date: Sep 2019 Reviewed by: NP
Drawing number:
UE03331ECO-Phase1_190903



Appendix II: Target Notes

Target Note	Photo
<p>1. Example of one of the banks on site.</p>	
<p>2. Alder tree in north western corner of the site had cracked bark and a possible hole into the lower trunk, this tree is of low suitability for roosting bat species</p>	

Appendix III: Legislation and Planning Context

Legislation

General

The main legislative instruments for ecological protection in England and Wales are the Wildlife and Countryside Act 1981 (WCA; as amended), Countryside and Rights of Way Act 2000 (CRoW; as amended), Natural Environment and Rural Communities Act 2006 (NERC) and the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations).

WCA 1981 consolidated and amended pre-existing national wildlife legislation in order to implement the Bern Convention and the Birds Directive. It complements the Habitats Regulations, offering protection to a wider range of species than the latter. The Act also provided for the designation and protection of nationally important conservation sites of value for their floral, faunal or geological features, termed Sites of Special Scientific Interest (SSSI). Schedules of the act list protected species of flora and fauna, as well as invasive species, and detail the possible offences that apply to these species.

The CROW Act 2000 amended and strengthened existing wildlife legislation detailed in the WCA. It placed a duty on government departments and the National Assembly for Wales to have regard for biodiversity, provided increased powers for the protection and maintenance of SSSI, and created a right of access to parts of the countryside. The Act contained lists of habitats and species (Section 74) for which conservation measures should be promoted, in accordance with the recommendations of the Convention on Biological Diversity (Rio Earth Summit) 1992.

The NERC Act 2006 consolidated and replaced aspects of earlier legislation. Section 40 of the Act places a duty upon all local authorities and public bodies in England and Wales to promote and enhance biodiversity in all of their functions. Sections 41 (England) and 42 (Wales) list habitats and species of principal importance to the conservation of biodiversity (otherwise known as priority habitats/species as listed in the now superseded UK Biodiversity Action Plan). These lists supersede Section 74 of the CRoW Act 2000. These species and habitats are a material consideration in the planning process.

The Habitats Regulations 2017 consolidate and update the Conservation of Habitats and Species Regulations 2010 and all its various amendments. The Regulations are the principal means by which Council Directive 92/43/EEC (The Habitats Directive) is transposed into English and Welsh law, and place a duty upon the relevant authority of government to identify sites which are of importance to the habitats and species listed in Annexes I and II of the Habitats Directive. Those sites which meet the criteria are, in conjunction with the European Commission, designated as Sites of Community Importance, which are subsequently identified as Special Areas of Conservation (SAC) by the European Union member states.

The Habitats Regulations also place a duty upon the government to maintain a register of European protected sites designated as a result of Council Directive 2009/147/EC on the Conservation of Wild Birds (The Birds Directive). These sites are termed Special Protection Areas (SPA) and, in conjunction with SACs, form a network of sites known as Natura 2000. The Habitats Directive introduces for the first time for protected areas, the precautionary principle;

that is that projects can only be permitted having ascertained no adverse effect on the integrity of the site. Projects may still be permitted if there are no alternatives, and there are imperative reasons of overriding public interest.

The Habitats Regulations also provide for the protection of individual species of fauna and flora of European conservation concern listed in Schedules 2 and 5 respectively (European Protected Species (EPS)). Schedule 2 includes species such as otter and great crested newt for which the UK population represents a significant proportion of the total European population. It is an offence to deliberately kill, injure, disturb or trade in these species. Schedule 5 plant species are protected from unlawful destruction, uprooting or trade under the regulations. Under the Habitats Regulations disturbance includes any activity which is likely to: impair the ability of a EPS to survive, breed, reproduce, or rear/nurture its young; impair the ability of a EPS to migrate or hibernate; or significantly affect the local distribution or abundance of the species.

Badgers (Meles meles)

Badgers are listed under Schedule 6 of the Wildlife and Countryside Act which grants them partial protection. This protection is extended by the Protection of Badgers Act 1992 (Badger Act) which makes it an offence to take, injure or kill a badger, interfere with a sett, sell or possess a live badger, or mark or ring a badger without a licence. Under the Act disturbance is illegal without a licence. Natural England has published guidelines to be adopted when determining whether an activity is 'disturbing' i.e. a licence is required when, for example, using heavy machinery (generally tracked vehicles) within 30m of any entrance to an active sett. Licences are not normally issued during the badger breeding season (December – June inclusive).

Bats (Chiroptera)

Bats and their roosts are fully protected by protected by the WCA and the Habitats Regulations. The legislation makes it an offence, *inter alia*, to:

- ▶ Intentionally kill, injure or take a bat.
- ▶ Possess or control a live or dead bat, any part of a bat, or anything derived from a bat.
- ▶ Intentionally or recklessly damage, destroy or obstruct access to any structure or place that a bat uses for shelter or protection. This is taken to mean all bat roosts whether bats are present or not.
- ▶ Intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection.
- ▶ Make a false statement in order to obtain a licence for bat work.

Birds

Birds are protected by the Wildlife and Countryside Act, 1981 (as amended). This legislation makes it an offence to intentionally kill, injure or take away any wild bird. It is also an offence to take, damage or destroy the nest of any wild bird while it is in use or being built or to take or destroy the egg of any wild bird. In addition, certain species are listed on Schedule 1 of the WCA (such as kingfisher *Alcedo atthis*). This makes it an additional offence to intentionally or recklessly disturb the adults while they are in and around their nest or intentionally or recklessly disturb their dependent young. Such species are considered to be in greater need of legal protection or of high nature conservation priority.

Birds of Conservation Concern ("BoCC4) are included on Red and Amber lists (Eaton *et al.*, 2015). Birds on the Red list are those of highest conservation priority due significant and sustained population decreases and/or range

contractions (e.g. house sparrow *Passer domesticus* and starling *Sturnus vulgaris*). Birds on the Amber list are the next most critical group and include species whose population/range have shown moderate declines, or which have recovered to some extent from historical decline, such as dunnoek *Prunella modularis*.

Dormouse (*Muscardinus avellanarius*)

Dormouse is fully protected by the WCA and the Habitats Regulations. The legislation makes it an offence, *inter alia*:

- ▶ Intentionally kill, injure or take a dormouse.
- ▶ Possess or control a live or dead dormouse, any part of, or anything derived from a dormouse.
- ▶ Intentionally or recklessly damage, destroy or obstruct access to any structure or place that a dormouse uses for shelter or protection.
- ▶ Intentionally or recklessly disturb a dormouse while it is occupying a structure or place that it uses for shelter or protection.

Great crested newt (*Triturus cristatus*; GCN) (and natterjack toad *Bufo calamita*)

GCN is fully protected by the WCA and the Habitats Regulations. The legislation makes it an offence, *inter alia*, to:

- ▶ Intentionally kill, injure or take a GCN (including its eggs).
- ▶ Possess or control a live or dead GCN, any part of, or anything derived from a GCN.
- ▶ Intentionally or recklessly damage, destroy or obstruct access to any structure or place that a GCN uses for shelter or protection.
- ▶ Intentionally or recklessly disturb a GCN while it is occupying a structure or place that it uses for shelter or protection.

Otter (*Lutra lutra*)

Otter is fully protected by the WCA and the Habitats Regulations. The legislation makes it an offence, *inter alia*, to:

- ▶ Intentionally kill, injure or take an otter.
- ▶ Possess or control a live or dead otter, any part of, or anything derived from an otter.
- ▶ Intentionally or recklessly damage, destroy or obstruct access to any structure or place that an otter uses for shelter or protection.
- ▶ Intentionally or recklessly disturb an otter while it is occupying a structure or place that it uses for shelter or protection.

Reptiles

The four common species (slow-worm *Anguis fragilis*, common lizard *Zootoca vivipara*, adder *Vipera berus* and grass snake *Natrix natrix*) are partially protected under the WCA. They are protected, *inter alia*, against intentional killing and injuring. The handling and translocation of these reptiles does not require a licence.

Smooth snake *Coronella austriaca* and sand lizard *Lacerta agilis* are fully protected by the WCA and the Habitats Regulations. The legislation makes it an offence, *inter alia*, to:

- ▶ Intentionally kill, injure or take a smooth snake or sand lizard.

- ▶ Possess or control a live or dead smooth snake or sand lizard, any part of, or anything derived from a smooth snake or sand lizard.
- ▶ Intentionally or recklessly damage, destroy or obstruct access to any structure or place that a smooth snake or sand lizard uses for shelter or protection.
- ▶ Intentionally or recklessly disturb a smooth snake or sand lizard while it is occupying a structure or place that it uses for shelter or protection.

Water vole (*Arvicola amphibious*)

Water vole is fully protected by the WCA. The legislation makes it an offence, *inter alia*, to:

- ▶ Intentionally kill, injure or take a water vole.
- ▶ Possess or control a live or dead water vole, any part of, or anything derived from a water vole.
- ▶ Intentionally or recklessly damage, destroy or obstruct access to any structure or place that a water vole uses for shelter or protection.
- ▶ Intentionally or recklessly disturb a water vole while it is occupying a structure or place that it uses for shelter or protection.

Weeds Act 1959 / Ragwort Control Act 2003

This legislation provides for orders to be made for control where notifiable weed species such as ragwort are said to be a problem. The act does not make it illegal to have ragwort (or other weed species) on your land, make it illegal to allow ragwort to spread, or force landowners automatically to control it. However, if DEFRA is satisfied that there are injurious weeds to which this Act applies growing upon any land it may serve upon the occupier of the land a notice in writing requiring them, within the time specified in the notice, to take such action as may be necessary to prevent the weeds from spreading.

Planning context

National Planning Policy Framework (Section 15: Conserving and enhancing the natural environment)

The National Planning Policy Framework (NPPF), published in February 2019, outlines the Government's commitment to the conservation of wildlife and natural features. It is concerned with:

- ▶ Protecting and enhancing valued landscapes, sites of biodiversity or geological conservation value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- ▶ Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- ▶ Maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- ▶ Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current & future pressures;
- ▶ Preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air,

water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and

- ▶ Remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

The NPPF requires that local plans should “distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value...; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries”.

To protect and enhance biodiversity and geodiversity, the NPPF states that planning policies should:

- ▶ Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
- ▶ Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

When determining planning applications, local planning authorities should aim to protect and enhance biodiversity by applying the following principles:

- ▶ if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- ▶ development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
- ▶ development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- ▶ development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

The following wildlife sites should be given the same protection as habitats sites:

- ▶ potential Special Protection Areas and possible Special Areas of Conservation;
- ▶ listed or proposed Ramsar sites; and

- ▶ 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.

The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site. The policies within the NPPF (and additional guidance contained within Circular 06/2005) are a material planning consideration.

UK/Local Biodiversity Action Plan Designations and Birds of Conservation Concern and Red Data Book Listings

Note that BAP designations and status as RSPB Birds of Conservation Concern or Red Data Book species does not offer any further legal protection, but planning authorities are required to prevent these species from being adversely affected by development in accordance with National Planning Policy and the CROW and NERC Acts. The United Kingdom Biodiversity Action Plan (UKBAP), first published in 1994 and updated in 2007, was a government initiative designed to implement the requirements of the Convention of Biological Diversity to conserve and enhance species and habitats. The UKBAP contained a list of priority habitats and species of conservation concern in the UK, and outlined biodiversity initiatives designed to enhance their conservation status.

However, as a result of devolution, and new country-level and international drivers and requirements, much of the work previously carried out by the UK BAP is now focussed at a country-level rather than a UK-level, and the UK BAP was succeeded by the 'UK Post-2010 Biodiversity Framework' in July 2012. The UK lists of priority habitats and species nonetheless remain an important reference source and were used to draw up statutory lists of priority habitats and species in England, Northern Ireland, Scotland and Wales. The priority habitats and species correlate with those listed on Section 41 and 42 of the NERC Act.

The UKBAP required that conservation of biodiversity be addressed at a County level through the production of Local BAPs. These are targeted towards species of conservation concern characteristic of each area. In addition, a number of local authorities and large organisations have produced their own BAPs. Where they exist, Local BAP targets with regard to species and habitats are a material consideration in the planning process.

Appendix IV: Legal and Technical Limitations

- This report has been prepared by Urban Edge Environmental Consulting Ltd (UEEC Ltd) with all reasonable skill, care and diligence within the terms of the contract made with the Client to undertake this work, and taking into account the information made available by the Client. No other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by us.
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- The advice provided in this report does not constitute legal advice. As such, the services of lawyers may also be considered to be warranted.
- Unless otherwise stated in this report, the assessments made assume that the sites and facilities that have been considered in this report will continue to be used for their current planned purpose without significant change.
- All work carried out in preparing this report has utilised and is based upon UEEC Ltd's current professional knowledge and understanding of current relevant UK standards and codes, technology and legislation. Changes in this legislation and guidance may occur at any time in the future and may cause any conclusions to become inappropriate or incorrect. UEEC Ltd does not accept responsibility for advising the Client or other interested parties of the facts or implications of any such changes;
- Where this report presents or relies upon the findings of ecological field surveys (including habitat, botanical or protected/notable species surveys), its conclusions should not be relied upon for longer than a maximum period of two years from the date of the original field surveys. Ecological change (e.g. colonisation of a site by a protected species) can occur rapidly and this limitation is not intended to imply that a likely absence of, for instance, a protected species will persist for any period of time;
- This report has been prepared using factual information contained in maps and documents prepared by others. No responsibility can be accepted by UEEC Ltd for the accuracy of such information;
- Every effort has been made to accurately represent the location of mapped features, however, the precise locations of features should not be relied upon;
- Populations of animals and plants are often transient in nature and a single survey visit can only provide a general indication of species present on site. Time of year when the survey was carried out, weather conditions and other variables will influence the results of an ecological survey (e.g. it is possible that some flowering plant species which flower at other times of the year were not observed). Every effort has been made to accurately note indicators of presence of protected, rare and notable species within and adjacent to the site but the possibility nonetheless exists for other species to be present which were not recorded or otherwise indicated by the survey;
- Any works undertaken as a consequence of the recommendations provided within this report should be subjected to the necessary health & safety checks and full risk assessments.

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