PRO VISION

Bowers Farm, Sherfield English

Preliminary Ecological Appraisal

Prepared on behalf of Will McKenzie

November 2023

Bowers Farm

Ecology 8264

Version 01

Prepared by:	Jake Purchase	V.01	Nov 2023
Authorised by:	Alex Hannam MCIEEM	V.01	Nov 2023

Pro Vision Ecology

The Lodge

Highcroft Road

Winchester

Hants, SO22 5GU

Contents

Page

Appendices

1.0 Executive Summary

1.1 The Client is proposing to develop land at Bowers Farm, Sherfield English. The current proposals for the site include the demolition and replacement of a front porch on the main residential building, as well as the construction of a separate garage. Pro Vision was commissioned in October 2023 to carry out a Preliminary Ecological Appraisal of the site to inform the development proposals.

1.2 The ecological appraisal comprised a desk study of existing ecological data in relation to the site, and an assessment of the sites habitats and suitability to support protected species within the application site.

1.3 The site comprises short sward modified grassland, a parcel of mixed woodland, a pond and mixed scrub, as well as the on-site buildings, gravel driveway, and concrete access paths within the farmyard.

1.4 Three of the buildings (B2, B3 and B5) were assessed as having low potential to support roosting bats. None of these buildings are due to be impacted under the current development proposals. However, if they are to be impacted by future proposals, further survey will be required to inform whether bats are roosting within them. Further details regarding further survey are given in Section 5.0.

1.5 The introduced hedge and shrub due to be removed as part of the development proposals are suitable for nesting birds. Recommendations regarding vegetation clearance and nesting birds are given in Section 5.0.

1.6 The development will provide ecological enhancements in line with national and local planning policy to secure net gains on the site. Further details are provided in Section 5.0.

1.7 Further advice has been provided in Section 5.0 to inform future decision making in relation to the wider site within the client's ownership.

2.0 Introduction

Project Background

2.1 Pro Vision Ecology were commissioned in October 2023 to carry out a Preliminary Ecological Assessment (PEA) of Bowers Farm, Pound Lane, Sherfield English SO51 6EH. For the site location refer to Appendix A. This report will contribute to a forthcoming planning application to be submitted by the Client to Test Valley Borough Council for planning consent for the construction of a garage and the replacement of a front porch. The development proposals are shown in Appendix B.

2.2 This report describes the current ecological baseline of the site based on the findings of the ecological assessment and provides information for further survey requirements and potential mitigation on the site.

Brief

2.3 To carry out a PEA of the land within the site boundaries, to inform the Client of any further survey work required and of the ecological implications of their proposals.

Relevant Legislation and Planning Policy

2.4 The key legislative provisions of relevance to this report with respect to the development proposals and their potential effects on ecological features are listed below:

- The Conservation of Habitats and Species Regulations 2017
- The Wildlife and Countryside Act 1981 (as amended)
- The Natural Environment and Rural Communities (NERC) Act 2006
- [redacted]
- Environment Act 2021

2.5 The UK Biodiversity Action Plan (BAP) was the Governments response to the 1992 Convention on Biodiversity (The Rio Convention), with the aim of halting the loss of biodiversity in the UK. The new UK post-2010 Biodiversity Framework replaced the previous BAP and is the government's response to the new strategic plan on the United Nations Convention on Biological Diversity (CBD). Although the UK post-2010 Biodiversity Framework supersedes the UK BAP, the UK BAP lists of priority species and habitats still remain an important reference source for identifying habitats and species of principal importance within the UK. Within England, Section 41 of the NERC Act (2006) lists species and habitats of principal importance for the conservation of biodiversity.

2.6 The Government has set out its policies for the protection and enhancement of biodiversity through the planning system in the National Planning Policy Framework Section 15 (NPPF, 2023).

2.7 The Environment Act 2021 includes the requirement for future developments to provide 10% net gain, to be evidenced with the use of the relevant Defra metric. This is currently anticipated to

come into force in January 2024. The details for the secondary legislation are currently being determined.

2.8 The site at Bowers Farm is located within The Test Valley. The Test Valley Borough Council revised Local Plan DPD Adopted Local Plan 2011-2029 (2016) which includes the Policy E5 Biodiversity, which states:

Policy E5: Biodiversity Development in the Borough that will conserve, and where possible restore and / or enhance, biodiversity will be permitted.

Development that is likely to result in a significant effect, either alone or in combination, on an international or European nature conservation designation, or a site proposed for such designation, will need to satisfy the requirements of the Habitat Regulations.

Development likely to result in the loss, deterioration or harm to habitats or species of importance to biodiversity or geological conservation interests, either directly or indirectly, will not be permitted unless:

a) the need for, and benefits of, the development in the proposed location outweighs the adverse effect on the relevant biodiversity interest;
b) it can be demonstrated that it could not reasonably be located on an alternative site that would result in less or no harm to the biodiversity interests; and
c) measures can be provided (and secured through planning conditions or legal agreements), that would avoid, mitigate against or, as a last resort, compensate for the adverse effects likely to result from development.

The habitats and species of importance to biodiversity and sites of geological interest considered in relation to points a) to c) comprise:

- Sites of Special Scientific Interest (SSSIs);
- legally protected species; • Sites of Importance for Nature Conservation (SINCs) and Local Nature Reserves (LNRs);
- priority habitats and species listed in the national and local Biodiversity Action Plans99;
- habitats and species of principal importance for the conservation of biodiversity in England100;
- trees, woodlands, ancient woodland (including semi-natural and replanted woodland), aged and veteran trees, and hedgerows; and
- features of the landscape that function as 'stepping stones' or form part of a wider network of sites by virtue of their coherent ecological structure or function or are of importance for the migration, dispersal and genetic exchange of wild species.

The level of protection and mitigation should be proportionate to the status of the habitat or species and its importance individually and as part of a wider network.

3.0 Methodologies

Desk Study

3.1 The desk study methodology is based upon guidelines set out by the Chartered Institute of Environmental and Ecological Management (CIEEM, 2017). A data-gathering exercise was undertaken to obtain any available information relating to statutory and non-statutory nature conservation sites and protected species (Table 1).

Table 1: Summary of information sources used for the Desk Study

Organisation / Source	Information Sought
Hampshire Biological Records Centre (HBIC)	Records of the presence of key protected and notable species and non-statutory wildlife sites within one kilometre of the site.
MAGIC	Locations of and citations for all national statutory wildlife sites, including SSSI, within two kilometres and all international sites including SAC, SPA or Ramsar sites within five kilometres of the site. Records of EPSL's and class licence returns within two kilometres.
Ordnance Survey Maps	Large scale habitat information and identification of off-site habitats which may require consideration (such as ponds) within 500m.

Ecological Assessment

Habitats

3.2 A site visit was carried out on the 30th of October 2023 by ecologist Jake Purchase in overcast weather conditions, still and dry and an ambient temperature of 15°C. The survey employed techniques based on the UK Habitat Classification System.

3.3 The survey was undertaken in October and outside the optimum time to conduct botanical work. Therefore, some species are likely to have been missed however it is considered lil a suitable assessment of the habitats has been possible for the purposes of this application.

Protected species

3.4 The PEA included an assessment of the potential for habitats on or immediately adjacent to the site to support legally protected or conservation-notable species. The location and nature of any signs of the presence of protected species (such as droppings, footprints, burrows, etc.) were documented and mapped accordingly. Indicative survey methods for protected species are outlined below.

[redacted]

Bats

3.6 Bats use features within buildings such as stone crevices or cracks in brickwork, ridge beams, gaps between roofing materials and the main building structure, and any potential access points. An internal and external inspection of the building was conducted by Jake Purchase during the PEA. During the survey any evidence of bats such as droppings, urine staining, claw marks, feeding remains or bats themselves were recorded. An assessment of the potential of the building to support roosts was then made in line with Bat Conservation Trust (BCT) guidelines (2023) shown in Table 2 below.

Table 2: Assessment of buildings to support roosting bats

Potential	Criteria
Negligible	Negligible features on site likely to be used by bats
Low	Potential features present which may support low numbers of bats irregularly but no suitable features for regular use by large numbers of bats.
Medium	A building with one or more potential roost features that may be used by bats due to their size, shelter, protection, condition and habitats present. Unlikely to support a roost of high conservation value.
High	A building with one or more potential roost sites that are suitable for use by a large number of bats on a regular basis.

3.7 The majority of bat species roost within trees. Therefore, an assessment of trees recorded on site was undertaken identifying any Potential Roost Features (PRFs). The assessment was undertaken from the ground looking for features which may support bats such as cavities, crevices, and peeling bark. The assessment was based on BCT guidelines (Collins, 2023) shown below in Table 3.

Table 3: Guidelines for assessing the suitability of trees to support bat roosts

Suitability	Criteria
None	No PRFs on the tree or highly unlikely to be any present.
FAR	Further assessment required to establish if PRFS are present in the tree.
PRF	A tree with at least one PRF present

3.8 Bats use features in the landscape to navigate and also habitats may provide key foraging areas. Foraging and commuting habitat was assessed based on based on BCT guidelines (Collins, 2023) shown in Table 4 below.

Table 4: Assessment of foraging/commuting habitat

Suitability	Criteria
Negligible	Negligible features on site likely to be used by bats
Low	Suitable but isolated habitat that could be used by small numbers of bats.
Medium	Habitat that is well connected to the wider landscape and could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous high-quality habitat that is well connected to the wider landscape and may be used by significant numbers of bats including annex II species.

Birds

3.9 Any habitat features, for example, scrub and trees, which could potentially be used by nesting birds, were surveyed and any nesting activity was noted. The habitat was also assessed regarding its potential for bird activity.

Great Crested Newts (Triturus cristatus)

3.10 Ponds within the vicinity of the site were noted and the potential of the land to act as a commuting route, shelter or foraging resource for great crested newts was assessed.

3.11 A Habitat Suitability Index (HSI) assessment was undertaken of the pond recorded on site in accordance with the current guidance (Oldham et al., 2000). This assessment was undertaken to identify the ponds potential to support breeding newts.

Hazel dormouse (Muscardinus avellanarius)

3.12 An assessment of the suitability of the habitat to support hazel dormouse was undertaken in accordance with The dormouse Conservation Handbook (Bright et al, 2006). Any small mammal feeding signs were checked and assessed, including:

Examination of hazel nuts; and

Evidence of nest building.

Invasive species

3.13 During the survey any invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were noted

Invertebrates

3.14 An assessment was undertaken to assess the potential of the habitats recorded on site to support diverse communities of invertebrates, or any Biodiversity Action Plan (BAP) species. The assessment was based on the presence of a number of habitat features which may support important invertebrate communities such as:

- An abundance of deadwood;
- Presence of diverse plant communities;
- Presence of varied woodland structure and sunny woodland edge;
- Presence of ponds or watercourses; and
- Presence of free draining soil exposures.

Reptiles

3.15 Habitat features that could be suitable as hibernacula, foraging or basking areas were noted. Extant refugia were lifted and examined for evidence of reptiles, including sloughs (shed skins).

4.0 Results and Analysis

Designated sites

Statutory Designated Sites

4.1 The data search returned records of three International Statutory Designated Sites within five kilometres of the site;

The New Forest SAC. The primary reason for this 29,213.57 hectare site's designation is the presence of the following Annex I habitats: oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae); oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea; northern Atlantic wet heaths with Erica tetralix; European dry heaths; molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae); depressions on peat substrates of the Rhynchosporion; Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robori-petraeae or Ilici-Fagenion); Asperulo-Fagetum beech forests; old acidophilous oak woods with Quercus robur on sandy plains; bog woodland; and, alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae). The latter two are priority features. Transition mires, quaking bogs and alkaline fens are also present as qualifying features. Two Annex II species are listed as a primary reason for designation: the southern damselfly (Coenagrion mercuriale) and stag beetle (Lucanus cervus). Great crested newts (Triturus cristatus) are present on site and listed as a qualifying feature. This site is located 1 kilometre south of the proposed development.

New Forest SPA. The site is notified due to the presence of breeding nightjar, (Caprimulgus europaeus), woodlark (Lullula arborea), Dartford warbler (Sylvia undata), honey buzzard (Pernis apivorus) and kingfisher (Alcedo atthis). In the winter the site also supports hen harriers (Circus cyaneus). Other notable species present include hobby (), wood warbler (), lapwing (), redshank (), curlew (), snipe (), stonechat and redstart (). This site is located 1 kilometre south of the proposed development.

New Forest RAMSAR. The site is notified as it supports Valley mires and wet heaths which are of outstanding scientific interest. The site supports a diverse assemblage of wetland plants and animals including several nationally rare species. Seven species of nationally rare plant are found on the site, as are at least 65 British Red Data Book species of invertebrate. This site is located 1 kilometre south of the proposed development.

4.2 The data search returned one record of national designated sites within two kilometres of the site;

The New Forest (SSSI). Covering 29,000 hectares and located 1 kilometre to the south, The New Forest SSSI include heaths, mires, grassland and woodland. It is also home to huge number of notable species. It is estimated that nearly half of the 2,500 species of butterfly and moth have been recorded in the Newt Forest. 9 rare and 25 nationally scarce species of vascular plants have also been recorded. As well as the ecological wealth, the New Forest SSSI also contains areas which are of geological interest.

4.3 The site is located within the catchment of the Solent SPAs and SAC's and the zone of influence of the New Forest. However due to the nature of the proposals it is considered that there will be no impacts associated with additional recreational pressure or increase in nutrient load as the proposed works will not result in an increase in overnight accommodation. No further mitigation measures are required.

Non-Statutory Designated Sites

4.4 The data search returned records of seven Sites of Importance for Nature Conservation (SINCs).

4.5 The closest of these sites, Manor Farm Meadows, Plaitford SINC, is located approximately 550 metres to the northwest of the site and has been designated as a SINC for containing grasslands which have become impoverished through inappropriate management, but which retain sufficient elements of relic unimproved grassland to enable recovery.

4.6 These non-statutory sites are considered to lie outside the zone of influence of the development due to the scale of the works and distances involved. No further action is required.

Ecological Assessment

Introduction

4.7 The results of the PEA are presented below. A habitat survey map is provided in Appendix C. The map illustrates the location and extent of the site surveyed, along with additional notable features.

Habitats

Surrounding habitat

4.8 The site at Bowers Farm is located in a rural setting, where land use is split between rural residential and farmland. The majority of the surrounding habitats comprise arable fields with hedgerows and small pockets of woodland parcels.

Developed land; sealed surface

4.9 The site contains six buildings and associated access road that connects the site to Pound lane to the northwest. The buildings are situated in the centre of the site except for a small outbuilding located in the southwest. The remains of a burnt down barn is also present within this parcel, located north of the other farmyard buildings. The buildings are described in more detail within the bat section of the report.

Figure 1 and 2: Developed land in the form of farmyard buildings and site access road, respectively.

Artificial unsealed surface

4.10 The access road transitions into a gravel track as is passes the main residential building. Areas of gravel are also present around the farmyard buildings.

Modified grassland

4.11 The majority of the site comprises modified grassland (Figure 3 and 4). The largest parcel dominates the northern and eastern areas of the site, split into multiple smaller fields, these are grazed by livestock, maintaining the grass to a short sward of approxiamtely 7 centimetres. The grassland is dominated by cocks foot grass (Dyctalis glomerata), perennial ryegrass (Lolium perenne) and yorkshire fog (Holcus lanatus), along with frequent perennial species including white clover (Trifolium repens), creeping buttercup (Ranunuculus repens), ribwort plantain (Plantago lanceolata) yarrow (Achillea millefolium), thistle (Cirsium spp.) and common dandelion (Taraxacum officinale). These are species characteristic of undistinct modified grassland.

Figure 3 and 4: Modified grassland grazed to short sward.

4.12 A second parcel of modified grassland is located in the southernmost part of the site (Figure 5). The grassland is bordered by a native hedgerow and is fenced off from the rest of the site. The grass within this parcel is tussocky and the sward height is approxiamtely 20 centimetres on average. The species composition is slightly different in this parcel, being dominated by yorkshire fog, with cocks foot grass being less dominant. Perennial species include creeping buttercup, ground ivy (Glechoma hederacea), and cleavers (Galium aparine).

Figure 5: Longer sward, tussocky modified grassland.

Other woodland - Mixed

4.13 A parcel of mixed woodland (Figure 6) is present in the south of the site, the woodland contains trees of various lifestages, with some juvenile trees and shrubs present around the extremeties of the parcel, The majority of the trees are mature scots pine (Pinus slvestris), pedunculate oak (Quercus robur) and lime trees (Tilia spp.), however there are hawthorn (Crataegus monogyna), elder (Sambuccus nigra) and sycamore (Acer pseudoplatanus) trees present in lower numbers. Shrub species include holly (Ilex aquafolium), bramble (Rubus fruticosus) and rhododendron (Rhododendron spp.). The ground layer is comprise of cocks foot grass, perennial ryegrass, holcus lanatus, cut leave cranes bill (Geranium dissectum) and white clover. A pile of logs is located in the northest of the woodland adjacent to the farm yard builings (Figure 7).

Figure 6 and 7: Mixed woodland and log pile, respectively.

Introduced shrub

4.14 A small parcel of introduced shrub is located to the east of the main residential building (B1). The shrub is comprised of a stand of leatherleaf mahonia (Berberis bealei), bay laurel (Laurus nobilis) and dogwood (Cornus spp.) with a short hedge comprised of cedar (Thuga spp.) (Figure 8).

Figure 8: Introduced shrub and hedge.

Mixed scrub

4.15 A parcel of mixed scrub is located in the northeastern corner of the site, adjacent to the modified grassland and the pond (Figure 9). The scrub is comprised of bramble, hazel (Corylus avellana), willow (Salix spp.) as well as common nettle, long sward yorkshire fog and cocks foot grass.

Figure 9: Mixed scrub encroaching into modified grassland.

Pond – non priority

4.16 A pond is present in the east of the site, located in a depression between the modified grassland fields (Figure 10). The pond is fed by a stream that flows in a southeasterly direction as it passes through the site. The pond contains various aquatic plant species including broadleaf cattail (Typha latifolia), speedwell (Veronica spp.) and pond water-starwort (Callitriche stagnalis).

Figure 10: Vegetated pond in the east of site.

Native hedgerow with trees

4.17 The majority of the site is lined by a hedgerow that runs from the site access in the west, through to the southern and eastern site boundaries (Figure 11 and 12). The hedgerow canopy is in good condition overall, though is gappy at points, in the south and southeast in particular. The hedgerow is lined with fences throughout. The shrub species that form the bulk of the hedgerow include hazel, bramble and hawthorn, though the hedgerow contains tree species including pedunculate oak, ash and elder, with some scattered mature trees in the western and southern areas of the site, however in the southeast the hedgerow contains no trees and appears to have been reinforced with shrubs in the recent past.

Figure 11 and 12: Native species hedgerow lining the southern site boundary.

4.18 A second, shorter native hedgerow with trees is present in the north of the site (Figure 13). The hedgerow runs southeast from the site boundary half way down the site within the modified grassland. The hedgerow comprises hazel and hawthorn. A mature ash tree is present towards the north, and the ground layer is comprised of bramble and common nettle.

Figure 13: Native species hedgerow within modified grassland fields in the north of the site.

Line of trees

4.19 A line of scots pine trees borders the access road (Figure 14). The trees are all mature trees with an average height of approximately 10 metres high. Ground layer species are characteristic of the modified grassland parcel adjacent.

Figure 14: Line of mature pine trees.

Protected and/or notable species

[redacted]

Bats

4.23 The HBIC data search returned 46 records within two kilometres of the site between 2010 and 2021 for the following bat species:

Western barbastelle (Barbastella barbastellus)
Serotine (Eptesicus serotinus)
Myotis species (Myotis sp.)
Lesser noctule (Nyctalus Leisleri)
Noctule (Nyctalus noctula)
Pipistrelle species (Pipistrellus sp.)
Common pipistrelle (Pipistrellus pipistrellus)
Soprano pipistrelle (Pipistrellus pygmaeus)
Long-eared species (Plecotus sp.)
Brown long-eared (Plecotus auratus)

4.24 The Defra run website, MAGIC, was searched for a list of granted European Protected Species Licenses (EPSL's). Seven granted EPSL's in respect of bats were returned for common pipistrelle, soprano pipistrelle, brown long-eared, and serotine, with one licence granted for the destruction of common pipistrelle, soprano pipistrelle, brown long eared and serotine maternity roosts granted in 2015, and a second licence granted for the damage of a brown long-eared, common pipistrelle and soprano pipistrelle breeding site.

4.25 A brown long-eared bat roost was recorded within the site boundary during a previous assessment in relation to another application (23/00673/PDQS). The building supporting a bat roost has since burnt down, therefore the roost no longer exists. It's presence, however, suggests that bats will utilise the site where roosting provisions are available.

Buildings

4.26 There is a total of seven buildings on site, comprising the main farmhouse and associated farmyard buildings in the centre of the site, as well as single outbuilding located in the south. Descriptions and photos are provided below (see Table 5) with building locations shown in Appendix D.

Table 5: Building descriptions

Building reference	Photo	External description	Internal description
B1		Two storey residential building Bare red brick walls Pitched roof with slate tiles Two internal chimneys Painted wooden soffits Plastic gutters	Roof void present that runs the length of the building New roof structure, including timbers, bitumen felt, and slate roof tiles Two skylights located on southern elevation of roof No visible points of access into roof void Large volume of rodent droppings found throughout the void. Some droppings potentially belonging to bats were collected and sent to Swift Ecology for DNA analysis
B2		Single storey wooden annex, breezeblock construction with wooden exterior Pitched roof comprising slate roof tiles Plastic guttering on northern and southern elevations	Building used as living space Void present, no access

Building reference	Photo	External description	Internal description
B3		Two-storey building, originally a slaughterhouse Brick construction supporting a pitched roof with slate roof tiles Damage to roof structure on the northern elevation	No loft voids present One room used to keep goats, remaining rooms on the ground floor are empty Water ingress causing damage to ceilings inside the building No access into second floor
B4		Large farmyard barn, previously surveyed by Pro Vision in April 2023 (Report ref: Bowers Farm PRA 28.04.23) Breezeblock walls supporting a corrugated cement sheet roof Larger sliding door on northern elevation	Cement frames supporting roof No void present Used as agricultural storage Single skin wall and roof structure
B5		Large wooden shed double skinned wooden construction supporting pitched roof covered in roofing felt Windows present on northern elevation Some small gaps under wooden cladding Felt roof is damaged and cracked in places, particularly on the eastern elevation	Small void present that runs along the length of the building Interior of building is clad in wood Building originally used to store farm animals No roosting features present outside of the void

Building reference	Photo	External description	Internal description
B6		Single storey animal sheds Breezeblock walls with corrugated roof No external features present	Bare rooms, with bare breezeblock walls, no cladding or features located within
B7		Single storey outhouse Red brick and white render walls supporting pitched roof with roof tiles	Single room with painted walls used to store garden equipment Void may be present within roof structure but no signs of access

4.27 A summary highlighting bat potential and access points for each building assessed on site is shown below (see Table 6).

Table 6: Results of the phase I bat survey

Building reference	Potential access points	Potential Roosting locations	Evidence of bats	Bat potential
B1	No potential access points observed	Gaps between rafters and roof	None	Negligible due to lack of access points into void, high ambient light level due to the two skylight windows present and lack of external roosting features observed. Suspected bat droppings were recorded however DNA analysis confirmed the droppings were from pygmy shrew (Sorex minutus)
B2	Woodpecker hole in wooden cladding on southeastern elevation	No access into roof void	None	Low due to the woodpecker hole creating an access point into a void between the wooden cladding and the breezeblock structure of the building
B3	Through open/broken windows. Damage to eastern roof elevation has created holes and gaps within the roof tiles	No roosting locations within ground floor rooms No access into second floor	None	Low due to the presence of a potential roosting features in the form of the damaged roof and the potential for bats to be accessing the second floor via the window
B4	Gap in wall due to cement cladding braking away.	No internal roosting locations present.	N/A	Negligible due to a lack of roosting features and a building structure unsuitable for use by bats due to the single skinned cement and breezeblock construction. Building likely to experience severe temperature fluctuations making it unsuitable for use by bats.
B5	Through open window.	Potential roosting locations within roof void, however	None	Low due to the presence of damage and wooden cladding on

Building reference	Potential access points	Potential Roosting locations	Evidence of bats	Bat potential
	Through potential gaps in wooden cladding under gable ends. Damage to roofing felt created gaps in roof	void could only be seen through access hatch, no access due to structural integrity of building		building exterior. Roof void also present but could not be accessed
B6	Through open doors	No roosting features present, bare breezeblock walls	None	Negligible due to lack of roosting opportunities and the drafty, bright conditions in the barn as the single skin, construction making the building susceptible to high levels of temperature fluctuation
B7	Through open door	No roosting features present, interior walls and ceiling are plastered and painted	None	Negligible due to lack of roosting opportunities. Open door during survey lead to the building interior being cold and bright. If door is closed no access points are present

Trees – Ground level inspection

4.28 An assessment of the trees within or near to the works area was made to determine their suitability to support bats. No trees were assessed as having potential to support bats, including the line of pine trees that follow the access track opposite the residential house.

4.29 The remaining trees on site, including within the mixed woodland, could not be fully assessed from the ground due to their height and tree density, however these trees are not due to be impacted by the development proposals, therefore no further mitigation measures regarding bats in trees is necessary.

Foraging and commuting habitat

4.30 The site is considered to be of high quality habitat for commuting and foraging bats due to its size, the presence of mature trees and hedgerows, as well as open, vegetated fields, in which bats can commute and forage.

4.31 A number of roosts have also been recorded within the vicinity of the site. It is considered moderately likely that species associated with these roosts could use the site. Recommendations are provided in Section 5.0 to ensure the site remains suitable for bats post development.

Birds

4.32 HBIC provided records for the following red list bird species of conservation concern that may be present on site: bullfinch (Pyrrhula pyrrhula), cuckoo (Cuculus canorus), house sparrow (Passer domesticus), lapwing (Vanellus vanellus), and spotted flycatcher (Muscicapa striata). In addition to these records the following Schedule 1 and/or Annex I species were returned which breed in the area: barn owl (Tyto alba), fieldfare (Turdus piliaris), firecrest (Regulus ignicapilla), goshawk (Accipiter gentilis), honey buzzard (Pernis apivorus), kingfisher (Alcedo atthis), red kite (Milvus milvus), redwing (Turdus iliacus), nightjar (Caprimulgus europaeus), osprey (Pandion haliaetus), peregrine (Falco peregrinus).

4.33 A number of birds were observed flying over the site or within trees and shrubs on site, including long-tailed tit (Aegithalos caudatus), red kite (Milvus milvus), robin (Erithacus rubecula), wood pigeon (Columba palumbus) and blackbird (Turdus merula).

4.34 The site provides nesting opportunities for birds within the buildings, trees, hedgerows and scrub present on site. Recommendations to protected nesting birds during construction are provided in Section 5.0.

Great crested newts

4.35 The HBIC data search returned no records of great crested newt presence within one kilometre of the site. The Defra run website, MAGIC, was searched for a list of granted EPSL's. There were no records of granted EPSL's or positive survey class license returns within two kilometres of the site. One pond survey was conducted 1.4 kilometres to the west of the site, where great crested newt were considered absent from the pond.

4.36 The site contains suitable habitat for great crested newt, with the pond, tussocky grass and scrub providing suitable aquatic and terrestrial habitat in the north of the site, as well as the woodland and tussocky grass in the south of the site. The native hedgerow surrounding the site also provides suitable habitat and connectivity further afield. However, the majority of the site is comprised of hardstanding or artificial surfaces, as well as short sward modified grassland with no tussocky structure present that great crested newt require.

4.37 One waterbody is present on site, a stream fed pond located in the eastern corner of the site (Appendix C). A Habitat Suitability Index (HSI) of the pond was conducted, with the results in Table 7 below. The pond was assessed as having good suitability for great crested newt.

Table 7. Habitat suitability Index Calculations

Pond	Pond 1	
Grid Reference:	SU 28625 20451	
SI Description:	Pond results	SI Value
Geographic location	A	1
Pond area	140m2	0.28
Pond permanence	rarely	1.00
Water quality	moderate	0.67
Shade	10	1.00
Waterfowl effect	minor	0.67
Fish presence	Absent	1.00
Pond Density	8	0.90
Terrestrial habitat	moderate	0.67
Macrophyte cover	33	0.64
HSI Score	0.74	
Pond suitability	Good	

4.38 Although the pond has good suitability to support great crested newt, the development proposals are limited to construction on artificial surfaces, as well as the removal of introduced shrub that is isolated from the suitable great crested newt habitat by hardstanding and shortward modified grassland, therefore, great crested newt will not be impacted by the current proposals.

Hazel dormouse

4.39 The HBIC data search returned no records for hazel dormouse within one kilometre of the site. The Defra run website, MAGIC, was searched for a list of granted EPSL's. There were no records of any granted EPSL's within two kilometres of the site.

4.40 The site boundaries are lined by native hedgerows that provide suitable habitat for hazel dormouse. The woodland in the south of the site is also has limited suitability to support hazel dormouse, though this habitat is isolated by modified grassland and hard standing. A small ornamental hedgerow and stand of introduced shrub located in the centre of the site is due to be removed under the current proposals.

4.41 The native hedgerow is connected to further suitable habitat in the southeast and northeast of the site, where the hedgerow meets other hedgerows and small pockets of woodland.

4.42 Hazel dormice are considered potentially present within the suitable habitats on site. However, these habitats are not due to be impacted by the development proposals.

4.43 The ornamental hedge and shrubs due to be removed are isolated from the further suitable habitat on site and are too small to support hazel dormouse on their own. The works will not impact hazel dormouse. No further action is required.

Invertebrates

4.44 The HBIC data search provided 18 records of invertebrates within one kilometre dated between 207 to 2021. Of these records, 7 were for stag beetle (Lucanus cervus) with the remaining 11 being for species in the Lepdoptera and Odonata groups (Butterflies and moths, and dragonflies and damselflies, respectively).

4.45 The pond and aquatic vegetation present provide suitable habitat for dragonflies and damselflies, however, this habitat is not due to be impacted by the development proposals.

4.46 The large log pile located within the mixed woodland to the south of the farmyard buildings is suitable for stag beetle. This log pile is not due to be removed and therefore stag beetle will not be impacted by the development proposals.

Reptiles

4.47 The HBIC data search returned no records of reptiles within one kilometre of the site.

4.48 The hedgerows and scrub on site provide suitability for reptiles, the pond also provides suitable aquatic habitat for grass snake (Natrix helvetica). The more tussocky modified grasslands in the northeast and southwest also provide limited suitable habitat for reptiles, however, the shorter sward modified grassland fields that are regularly grazed are not suitable for reptiles.

4.49 No suitable reptile habitat is due to be removed under the current development proposals and reptiles are highly unlikely to be impacted. If a reptile is encountered during the works, all working should be halted, and the advice of a suitably experienced ecologist should be sought.

5.0 Impacts and Mitigation

Impacts and Required Mitigation for the Proposed Development

Bats

5.1 The building due to be impacted by the current development proposals, B1, has been assessed as having negligible potential to support bats, and the suspected bat droppings were confirmed to belong to pygmy shrew. Therefore, the demolition and replacement of the front porch on B1 will not impact bats and can proceed with no further surveys necessary.

Bats

5.2 The site provides potential for foraging and commuting bats along the boundaries of the site. If any lighting is proposed, it should adhere to the following guidelines (ILP, 2023):

- Not result in an increase of 1-3 lux on the boundary features.
- LED luminaires should be used of a warm white spectrum (<2700 Kelvin) which will feature peak wavelengths higher than 550 nm.
- Internal luminaires should be recessed to reduce light spill outside the property.
- Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be considered.
- Luminaires should always be mounted horizontally, with no light output above 90° and/or no upward tilt.
- Where appropriate, external security lighting should be set on motion sensors and set to as short as possible.

Birds

5.3 The vegetation on site provides habitat for nesting birds, including the introduced shrub due to be removed under the development proposals. It is an offence under the Wildlife and Countryside Act 1981 (as amended) to take, damage or destroy the nest of any wild bird while that nest is in use. Any vegetation clearance required must be scheduled to avoid peak bird nesting season (1st March to 31st August, although this will vary between species and local conditions) to avoid contravention of protected species legislation; unless inspection by an ecologist concludes that there are no nesting birds present immediately prior to the commencement of works.

5.4 If the presence of nesting birds is confirmed, a 5-metre buffer will be implemented, and no works will be permitted within this buffer. Works will be able to proceed once the young birds have fledged the nest of their own accord.

Enhancement Measures for the Proposed Development

Biodiversity Enhancement

5.5 In accordance with the Natural Planning Policy Framework (NPPF, 2023) 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. Due to the nature of the development proposals, there is the potential for the development to include:

> Any planting of trees and shrubs for any supplementary planting scheme should incorporate native species which benefit a range of wildlife.
>
> One bat and one bird box will be included within the development. These will be integrated into the eastern elevation of the proposed garage. The bird box should target species such as house sparrow (Passer domesticus) and swift (Apodidae). Indicative locations of these boxes is shown on Appendix E.

Advice in relation to the wider site

Designated sites

5.6 Should future proposals for the wider site include an increase in overnight accommodation there is potential that this would result in impacts to the Solent sites through increased nutrient load and increased recreational disturbance to the New Forest sites. Mitigation required will be dependent on proposals.

Bats

5.7 Three buildings B2, B3 and B5, were assessed as having low potential to support roosting bats. If these buildings are to be impacted by future works, then further survey work is required to fully assess whether bats are roosting within the outbuilding.

5.8 One emergence survey must be conducted on each of the buildings. These will be conducted in accordance with the current bat survey guidance (Collins, 2023) during the bat survey period (which runs from May to August). Further surveys will be required if bats are recorded emerging or re-entering the buildings during the survey.

Habitat Retention

5.9 The site contains some valuable habitat likely to be utilised by protected species. It is recommended that the mixed woodland, the native hedgerows, and the tussocky grassland areas should be retained where possible as these habitats provide the most value to protected species.

Great crested newt

5.10 The pond (Appendix C) was assessed as having good suitability to support great crested newt, and the surrounding terrestrial habitat is of moderate quality due to the presence of scrub and tussocky grassland. Development on any of the grassland or infilling the pond has potential to impact great crested newts. Further surveys would be required to confirm presence/ likely absence of great crested newts.

Enhancements to the wider site

Habitat enhancement

5.11 The site contains various habitats that are beneficial to a wide range of species, and these habitats could be enhanced to further their biodiversity value. Recommendations for enhancements include but aren't limited to:

The removal of the rhododendron from the mixed woodland, as this plant is highly invasive, and will eventually outcompete the native shrub and ground level species if left unchecked.

The provision of longer sward and tussocky plant species around the pond margins, to provide an area of more suitable terrestrial habitat for amphibians and invertebrates. This could be achieved by altering the management scheme around the pond to allow plants to grow further before being grazed.

The grassland field in the south of the site could also be managed less frequently through lower intensity grazing to allow a higher quality grassland to develop.

The hedgerow habitat could be improved via infill planting the gaps using native species such as hawthorn (Crataegus monogyna) or hazel (Corylus avellana).

6.0 References and Bibliography

Bright, P., Morris, P. & Mitchell -Jones, T. (2006). The dormouse conservation handbook. (2nd edition) Peterborough, English Nature 73pp.

CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester

CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester

CIEEM (2020) Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management. Winchester, UK.

Collins, J (Ed) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th ed.). Bat Conservation Trust, London.

Hampshire Biological Records Centre data search: Data search reference: 12039

ILP (2023) Guidance note 08/23 Bats and Artificial Lighting at Night

National Planning Policy Framework (2023). National Planning Policy Framework. Ministry of Housing, Communities and Local Government, London.

ODPM (2005). Government Circular 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact within the Planning System. London; Office of the Deputy Prime Minister.

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

Test Valley Borough Council - The Test Valley Borough Revised Local Plan DPD - 2011 – 2029

The British Standard 5837 (2012) Trees in Relation to Design, Demolition and Construction to Construction – Recommendations

UKHab Ltd (2023). UK Habitat Classification Version 2.0 (at https://www.ukhab.org)

Appendices

Appendix A: Site Location

NOTES

1. This drawing is the copyright of PBM Architectural Designs and may not be copied, altered or repro in any way whatsoever neither passed to a third p without their written authority.
2. Dimensions to be checked on site prior to comm any works. Any discrepncies should reported to th project Architect immediately.
3. Do not scale these drawings.
4. If in doubt ask.

REVISIONS

C	05/11/2023	RED LINE REVISED.
B	23/10/2023	ISSUED FOR APPROVAL
A	26/10/2022	ISSUED FOR COMMENT

SCALE BAR

0 1 2 3 4 5M — 1:100 @ A3

0 2 4 6 8 10M — 1:200 @ A3

PROJECT

PROPOSED RE-DEVELOPMENT
AT BOWERS FARM
POUND LANE
PLAITFORD
HAMPSHIRE

DRG. TITLE

SITE LOCATION PLAN

DRAWN	SCALE	DATE
PBM	1:1250	OCT. 2022

CLIENT

TEST VALLEY BUILDERS

DRG No.

22003-304

REVISIONS

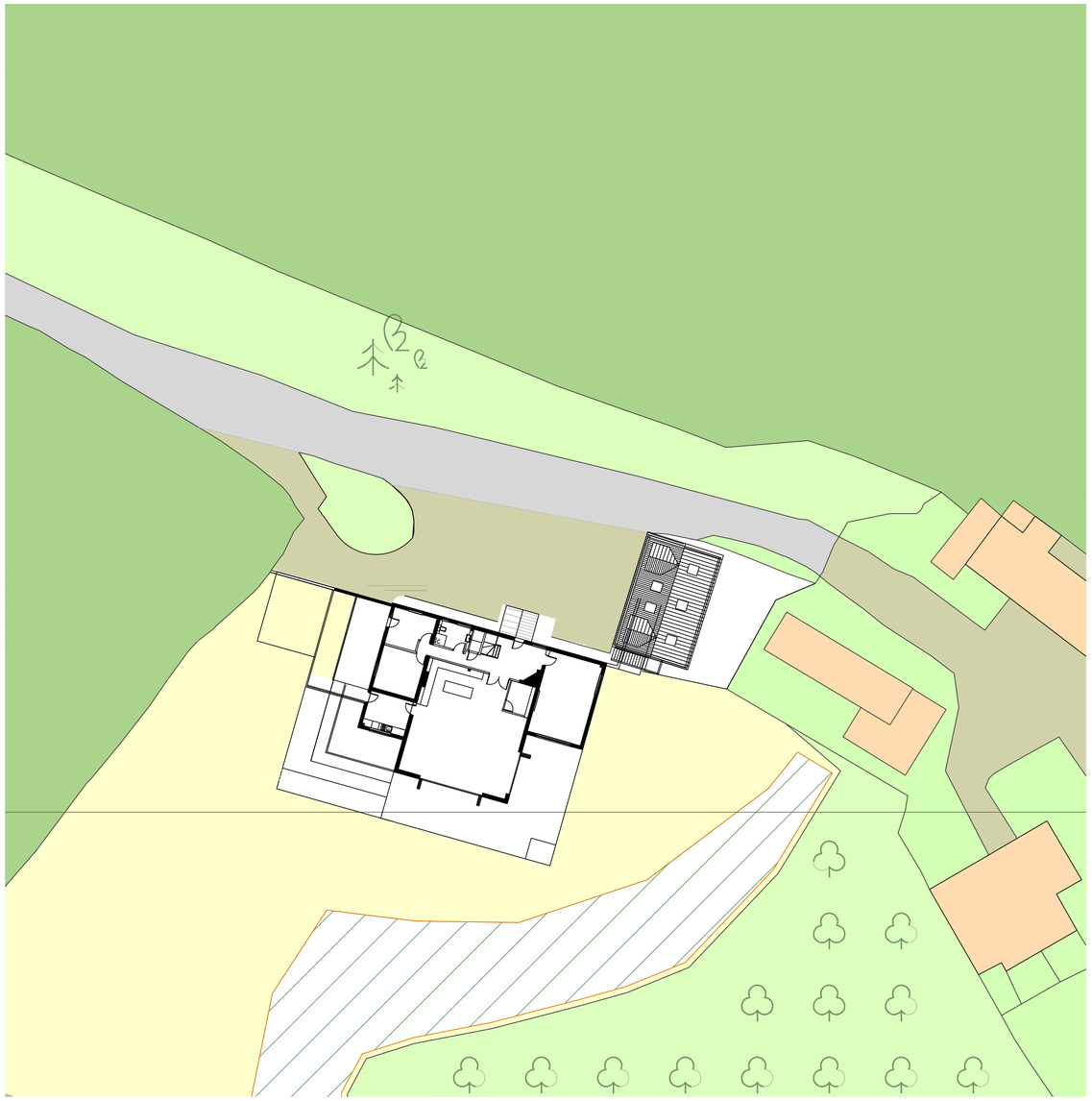
REV. A B C

Appendix B: Development Proposals

NOTES

1. This drawing is the copyright of PBM Architectural Designs and may not be copied, altered or reproduced in any way whatsoever neither passed to a third party without their written authority.
2. Dimensions to be checked on site prior to commencing any works. Any discrepncies should reported to the project Architect immediately.
3. Do not scale these drawings.

4.If in doubt ask.



N

SCALE BAR

0 1 2 3 4 5M — 1:100 @ A1

0 5 10 — 1:250 @ A1

REVISIONS

B	23/10/2023 DRG NUMBER REVISED.
A	17/10/2023 ISSUED FOR COMMENT.

PROJECT

PROPOSED PORCH & GARAGE
AT BOWERS FARM
POUND LANE
PLAITFORD
HAMPSHIRE

DRG. TITLE
PROPOSED SITE LAYOUT

DRAWN	SCALE	DATE
PBM	1:250	OCT. 2023

CLIENT
TEST VALLEY BUILDERS

DRG No.
22003-303

REVISIONS
REV. AB

Appendix C: Habitat Survey Map

The plan shown here is for the purpose of supporting a planning application only. Only scale from this drawing for the purposes of determining a planning application. Do not scale from this drawing for construction purposes.

The proposal presented here is subject to review by specialist consultants, and is to be read in conjunction with all relevant specialist's drawings and information where available. Any discrepancies between this and any other consultant's drawings and information should be reported to Pro Vision immediately.

Legend

- Application boundary
- Survey boundary
- Line of trees
- Native hedgerow with trees
- Stream
- Artificial unvegetated, unsealed surface
- Developed land; sealed surface
- Introduced shrub
- Mixed scrub
- Modified grassland
- Other woodland; mixed
- Ponds (non-priority habitat)

0 50 100

N

ISSUE	DATE	DESCRIPTION	DRAWN	CHECKED
v1	15.11.23	First Issue	JP	AH
v2	21.11.23	Updated to unclude application boundary	JP	AH

CLIENT:	**Will Mckenzie**	
PROJECT:	**Bowers Farm**	
DRAWING:	**Habitat Survey Map**	**1:1750**
NUMBER:	**8264-XX-E0-02**	**A4**
ISSUE:	**v2**	**21.11.23**

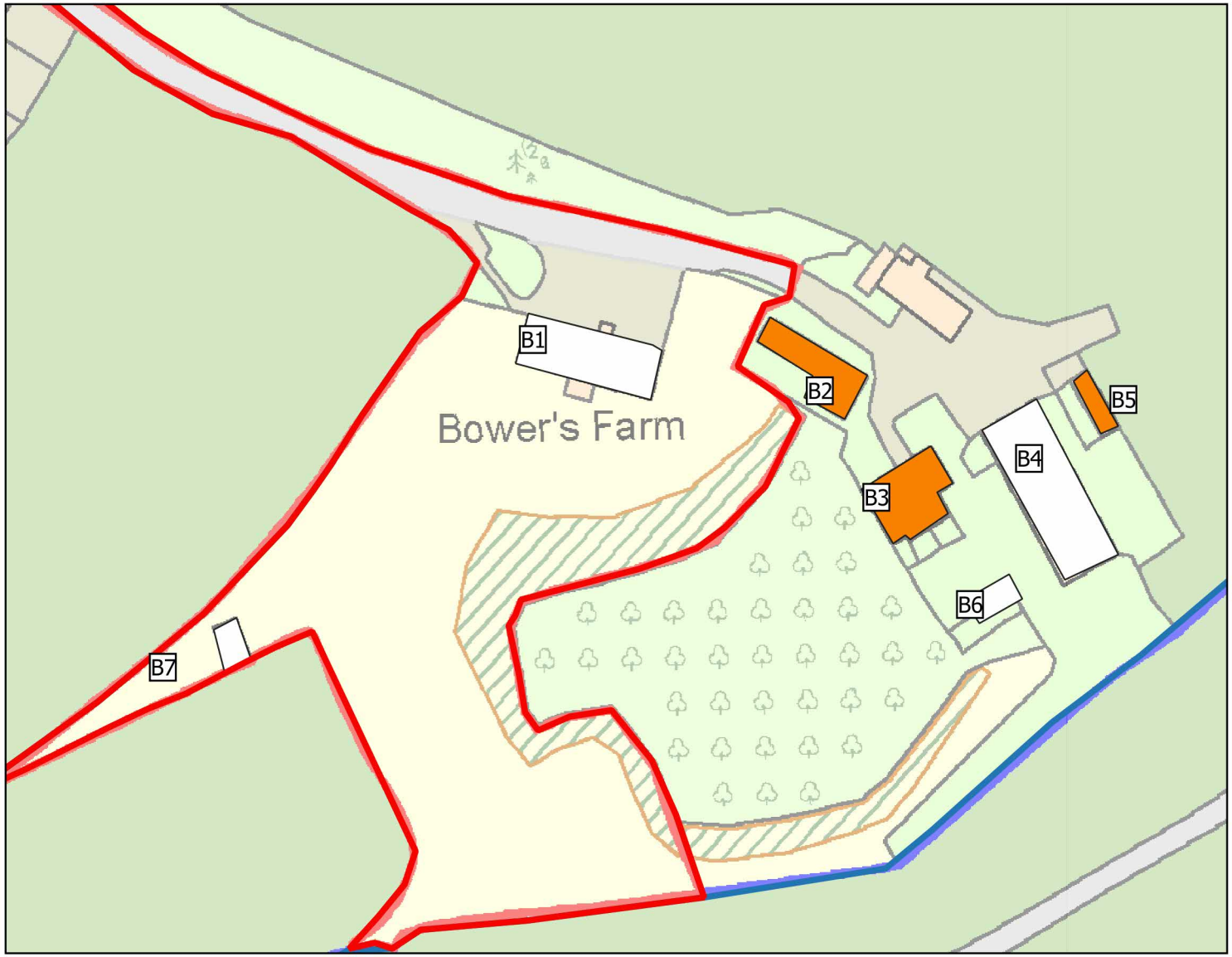
PRO VISION
PLANNING | ARCHITECTURE | URBAN DESIGN | ECOLOGY

www.pro-vision.co.uk

Appendix D: PRA Results

The plan shown here is for the purpose of supporting a planning application only. Only scale from this drawing for the purposes of determining a planning application. Do not scale from this drawing for construction purposes.

The proposal presented here is subject to review by specialist consultants, and is to be read in conjunction with all relevant specialist's drawings and information where available. Any discrepancies between this and any other consultant's drawings and information should be reported to Pro Vision immediately.



Legend

- Application boundary
- Survey boundary
- Low potential
- Negligible potential

0 10 20 30 40 50

N

ISSUE	DATE	DESCRIPTION	DRAWN	CHECKED
v1	15.11.23	First Issue	JP	AH
v2	21.11.23	Add application boundary	JP	AH

CLIENT:	**Will Mckenzie**	
PROJECT:	**Bowers Farm**	
DRAWING:	**PRA Results**	**1:850**
NUMBER:	**8264-XX-E0-03**	**A4**
ISSUE:	**v2**	**21.11.23**

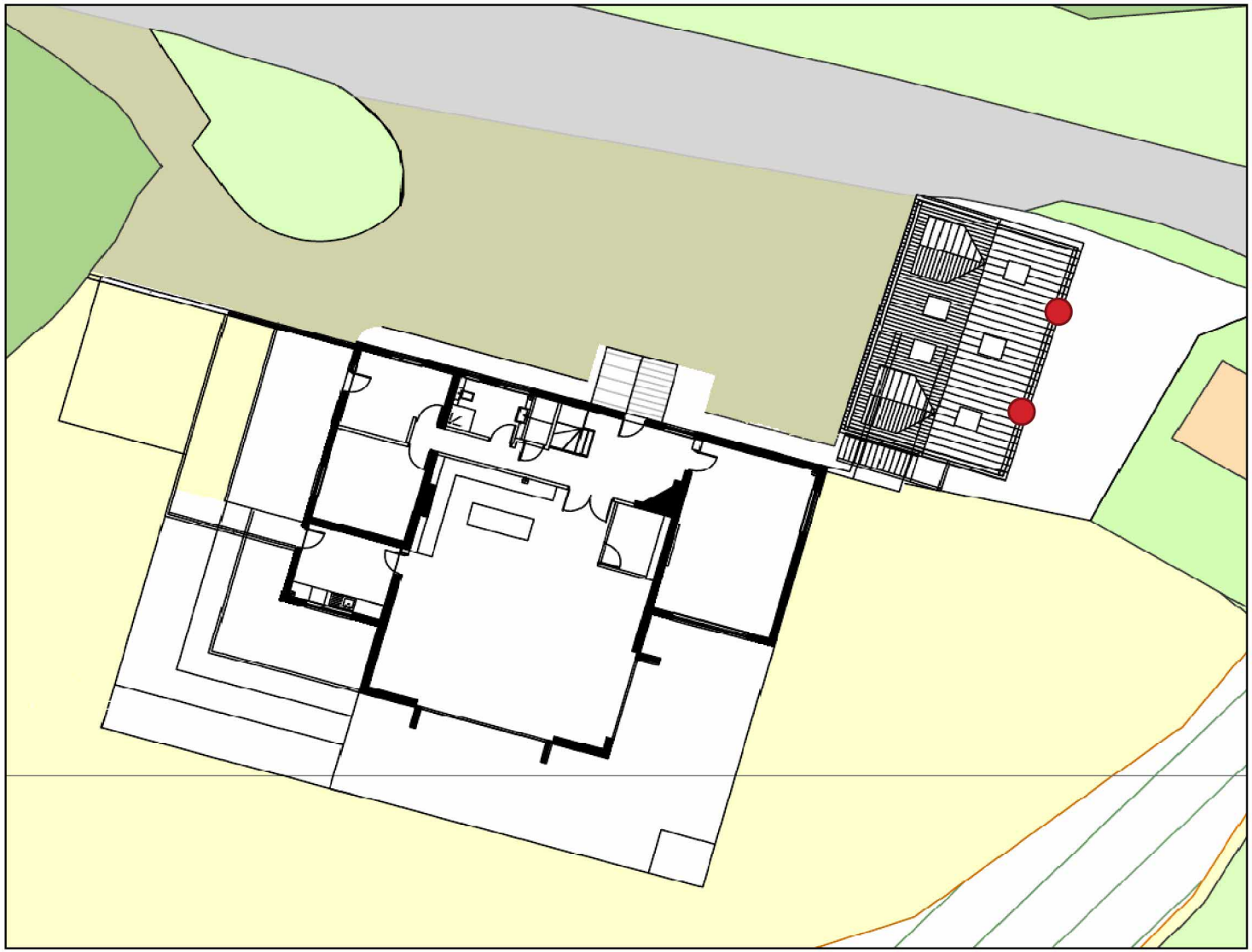
PRO VISION
PLANNING | ARCHITECTURE | URBAN DESIGN | ECOLOGY

www.pro-vision.co.uk

Appendix E: Enhancement Plan

The plan shown here is for the purpose of supporting a planning application only. Only scale from this drawing for the purposes of determining a planning application. Do not scale from this drawing for construction purposes.

The proposal presented here is subject to review by specialist consultants, and is to be read in conjunction with all relevant specialist's drawings and information where available. Any discrepancies between this and any other consultant's drawings and information should be reported to Pro Vision immediately.



Legend

- Proposed bat/bird box locations

0 5 10

N

ISSUE	DATE	DESCRIPTION	DRAWN	CHECKED
v1	21.11.23	First Issue	JP	AH

CLIENT:	**Will Mckenzie**	
PROJECT:	**Bowers Farm**	
DRAWING:	**Enhancement Plan**	**1:250**
NUMBER:	**8264-XX-E0-04**	**A4**
ISSUE:	**v1**	**21.11.23**

PRO VISION

PLANNING | ARCHITECTURE | URBAN DESIGN | ECOLOGY

www.pro-vision.co.uk

Appendix F: Relevant Legislation

THE CONSERVATION OF HABITATS AND SPECIES 2017

The Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations) transpose Habitats Directive into UK legislation. The Habitats Regulations provide for the designation and protection of European Sites and European Protected Species. European Sites include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), which form part of the Natura 2000 network of protected areas across Europe.

European Protected Species (EPS) are those listed under Schedule 2 of the Habitats Regulations and include dormouse, great crested newt, otter and all species of bat. The regulations prohibit the deliberate capture, killing or disturbance of any EPS; it is also an offence to damage or destroy a breeding site or resting place of any of these species. In order to carry out a lawful operation (e.g. development work which has full planning permission) that may result in an offence under the Habitats Regulations, it is necessary to obtain a licence from Natural England. EPS Licences will only be granted after Natural England has been satisfied that there are no satisfactory alternative and that there will not be any adverse impacts on the favourable conservation status of the species.

WILDLIFE AND COUNTRYSIDE ACT 1981

The Wildlife and Countryside Act 1981 is the principle piece of legislative protection of wildlife in Great Britain. Various amendments have occurred since the original enactment. The Wildlife and Countryside Act contains both habitat and species protection. Certain bird, animal and plant species are afforded protection under Schedules 1. 5 and 8 of the Act. Measures for the protection of the countryside, National Parks, Sites of Special Scientific Interest (SSSIs) are also included within the Act.

THE NATURAL ENVIRONMENT AND RURAL COMMUNITIES ACT 2006

The Natural Environment and Rural Communities (NERC) Act 2006 improved wildlife protection by amending the WCA. The main function of the NERC Act was to raise the profile of biodiversity amongst public authorities. Section 40 (S40 of the Act places a 'Biodiversity Duty' on all public bodies to have regard to the conservation of biodiversity when carrying out their normal functions.

[redacted]

ENVIRONMENT ACT 2021

The Environment Act 2021 received royal assent in November 2021 and introduces new environmental protection regimes. This includes the creation of the Office for Environmental Protection who will oversee the framework. The Act includes several measures which impact on the planning application process to provide measures to ensure developments result in a net gain in biodiversity. The Act provides a timeframe of 2 years from receiving royal assent for the production of the required regulations to implement the mandatory requirement of 10% net gain for new developments. This is anticipated to be in November 2023.