



Land at Windrush, High Road, Ashton Keynes,
SN6 6NX

Preliminary Ecological Appraisal



November 2025

All Ecology Ltd

Tel: 01453 374109

Email: info@allecology.co.uk

Web: www.allecology.co.uk

© ALL ECOLOGY 2025

Document Control

Site: Land at Windrush, High Road, Ashton Keynes, SN6 6NX

Title: Preliminary Ecological Appraisal

For: Partridge Homes (Cotswolds) Ltd

Project Number: 25128

Document Version: 1.0

Survey Date(s): 6th August 2025

Document Date: 7th November 2025

Version	Date	Version Details	Prepared by	Reviewed by	Approved by
1.0	07/11/2025	-	JR	JG	JG



England and Wales Office

All Ecology Ltd,
Haw Street,
Coaley,
Dursley,
Gloucestershire,
GL11 5AY.

Scotland Office

All Ecology Ltd,
Achadh Nan Geadh,
Upper Kilchattan,
Colonsay,
PA61 7YR.

Tel: 01453 374109
Email: info@allecology.co.uk
Web: www.allecology.co.uk

All Ecology is the trading name of All Ecology Ltd. Registered in England and Wales, Company Number 8306310

Notice to Readers:

The results of the survey and assessment work undertaken by All Ecology are representative at the time of surveying.

Every endeavour has been made to identify the presence of protected species on site, where this falls within the agreed scope of works.

The flora and fauna detailed within this report are those noted during the field survey and from anecdotal evidence. It should not be viewed as a complete list of flora and fauna species that may frequent or exist on site at other times of the year.

Up to date standard methodologies have been used, which are accepted by Natural England and other statutory conservation bodies. No responsibility will be accepted where these methodologies fail to identify all species on-site.

All Ecology cannot take responsibility where Government, national bodies or industry subsequently modify standards.

All Ecology cannot accept responsibility for data collected from third parties.

Reference to sections or particular paragraphs of this document taken out of context may lead to misrepresentation.

Summary

In August 2025, All Ecology Ltd was commissioned to undertake a Preliminary Ecological Appraisal of a site known as Land at Windrush, High Road, Ashton Keynes, SN6 6NX. The majority of the application site is hardstanding and buildings, with grassland, area of scrub, areas of ruderal/ephemeral and individual trees. The local area consists mostly of arable fields, small pockets of woodland and residential areas.

The proposals for the site are to erect two new dwellings with associated gardens, access and driveways. This will involve removing the majority of the existing habitats, including the buildings, grassland, tall ruderal, area of scrub and the individual trees.

The habitats present on site are of low to moderate ecological value in terms of their vegetation and the development would result in the loss of the majority of these habitats, including the grassland, the ruderal/ephemeral, the individual trees and the scrub, and their replacement with buildings, hard standing and gardens.

The site provides potential habitat for a range of fauna. The following require further consideration/action:

- Bats – The buildings do not provide any potential for roosting bats. Bat are likely to forage over the site and adjacent areas. No further bat activity surveys deemed necessary provided a suitable lighting strategy is implemented.
- Reptiles - Reptile habitat is present in the areas of tall ruderal, tussocky grass and scrub edge. A reptile survey will be required to determine presence/absence.
- Otters – There is a river immediately south of the site. The proposed development of the site will not directly affect the river or bank but suitable measures to be put in place have been detailed to minimise the risk of impacts to Otters, should they pass along this section of river or enter the site during construction.
- Birds – Nesting and foraging opportunities are present across the site. Any vegetation removal and building demolition should commence outside the bird nesting season unless a pre-works survey confirms absence. The proposed landscape scheme and biodiversity net gain measures will ensure there is no overall loss of foraging and nesting habitats and the new buildings provide an opportunity for providing nesting boxes for species such as Swifts and House Sparrows.
- Amphibians - There are no ponds on site; however, there are three ponds within 250 m of the site. Pond 1 was accessible and was subject to the GCN HSI Assessment, and Ponds 2 and 3 were well isolated from the site by the River Thames. Pond 1 scored 0.76, a rating of 'good' and is within close proximity to the site. It is the intention to make an application to NatureSpace to use the district licence.

General suggestions for enhancement have been made e.g. bat and bird boxes.

Contents

Summary	1
Contents	2
1.0 Introduction	4
Background	4
Objectives and Aim	4
Site Location & Aerial Photograph	4
2.0 Methodology	6
Personnel	6
Desk Study	6
Habitat Survey	6
Fauna	7
Valuation of Ecological Features	7
Nomenclature	7
Limitations	8
3.0 Results	9
Desk Study	9
Habitats	10
Fauna	13
4.0 Development Constraints and Recommendations	19
Development Proposals	19
Habitats	19
Fauna	20
References	25
5.0 Plans	26
Plan 1 – Proposed site plan	26

Appendix 1	27
Habitat Suitability Index Assessment	27

1.0 Introduction

Background

- 1.1 In August 2025, All Ecology Ltd was commissioned to undertake a Preliminary Ecological Appraisal of a site known as Land at Windrush, High Road, Ashton Keynes, SN6 6NX. The majority of the application site is hardstanding and buildings, with grassland, area of scrub, areas of ruderal/ephemeral and individual trees. The local area consists mostly of arable fields, small pockets of woodland and residential areas as well as the Cotswold Water Park.
- 1.2 The proposals for the site are to erect two new dwellings with associated gardens, access and driveways. This will involve removing the majority of the existing habitats, including the buildings, grassland, tall ruderal, area of scrub and the individual trees.

Objectives and Aim

- 1.3 The main objectives and aim of the survey were to identify features of ecological interest, undertake a basic search of habitats present for evidence of use, or potential use, by protected species, and to identify any other possible ecological constraints to any further development of the site.

Site Location & Aerial Photograph

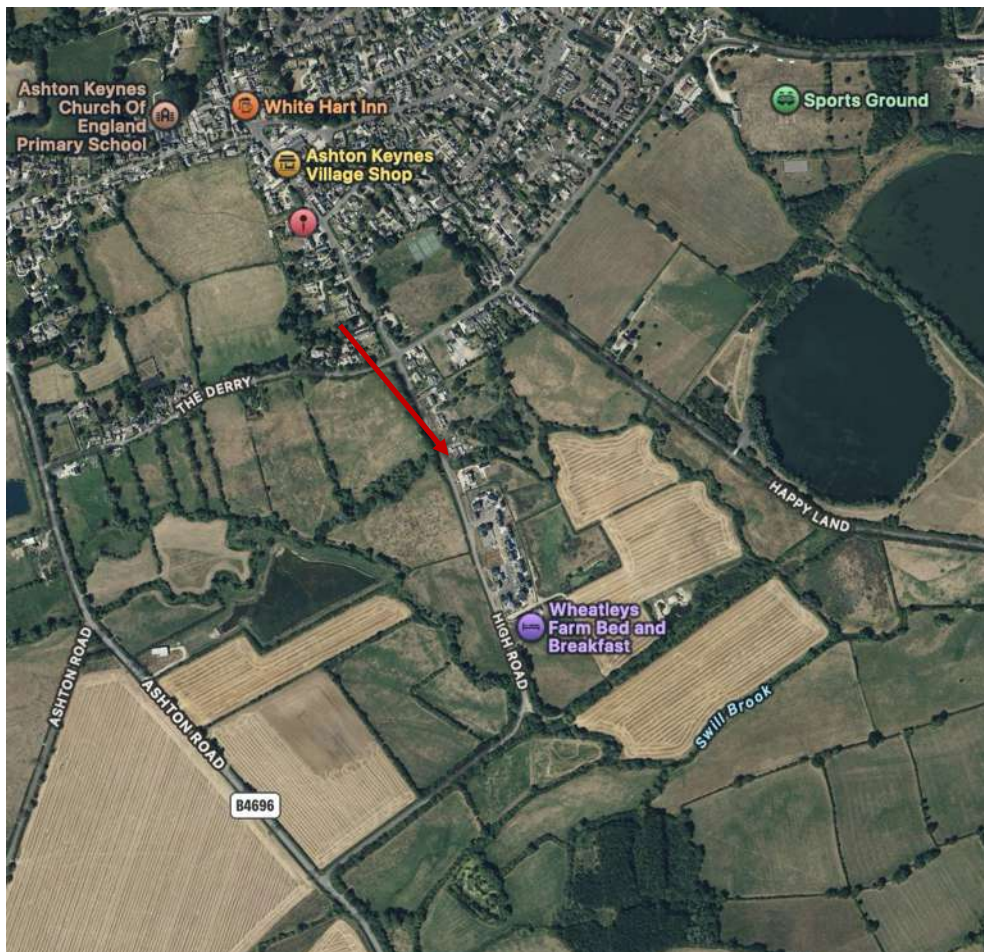


Figure 1: Site location plan.



Figure 2: Aerial view of the site.

2.0 Methodology

Personnel

- 2.1 The survey was carried out by Jacob Richardson BSc Hons and the work overseen by James Godbeer BSc Hons MCIEEM, an ecologist with over 18 years' experience working as a consultant. James has extensive experience of managing environmental contracts, and particular experience in surveying, assessment and mitigation for rare and protected species. He has considerable knowledge of the development and planning process including Ecological Impact Assessments, sustainable ecological design and he has completed ecology chapters of Environmental Statements. James holds a number of protected species licences including bats (all species, all counties, Class Licence Registration No. 2015-12313-CLS-CLS), and Great Crested Newts (Class Licence Registration No. 2019-44282-CLS-CLS). He has successfully obtained European Protected Species mitigation licences for a number of bat species including Lesser Horseshoe, Greater Horseshoe, Serotine, Brown Long-eared, Common Pipistrelle and Natterer's bats, for a number of roost types including maternity and hibernation sites.

Desk Study

- 2.2 In order to compile background information on the site and immediate surroundings Wiltshire & Swindon Biological Records Centre Centre for Environmental Records (WSBRC) was contacted.
- 2.3 Information requested was as follows:
- Statutory site designations on or within 1 km of the site.
 - Non-statutory site designations on or within 1 km of the site.
 - Records of protected species within the 1 km of the site.
 - Records of rare or notable species within the 1 km of the site.
- 2.4 Online OS maps and aerial photographs were inspected for the presence of ponds in the surrounding area. Additionally, MAGIC (Multi-Agency Geographic Information for the Countryside, 2025) was used to establish the distance and direction of statutory and non-statutory designated sites and species records within the search area.

Habitat Survey

- 2.5 The site was visited on the 6th August 2025 and surveyed in accordance with the Joint Nature Conservation Committee (JNCC) Phase I Habitat Survey methodology (JNCC, 2010). This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential that might warrant further study.
- 2.6 In addition to Phase I, UK Habitat Classification (UKHab) methodology was also used to categorise and map the primary habitat types present within the survey area using a standard set of habitat categories, with associated secondary codes/features identified where applicable (UKHab Ltd, 2023). Details of current management and habitat condition have also been recorded where appropriate.

Fauna

- 2.7 The buildings were inspected externally and internally following the methodology set out in the Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines. 4th Ed (Collins, 2023).
- 2.8 The trees were assessed for their potential to support bat roosts by visually inspecting them from the ground using binoculars and high-powered torches where appropriate. Potential features such as holes, cavities or splits are then recorded and then inspected where possible for signs of bats, which include grease/urine stains, scratch marks, droppings or the bats themselves.
- 2.9 The habitats present on the site were searched for signs of animal activity. The site and surroundings, for a minimum distance of 30 m where access was available, were searched for signs of Badgers. These include setts, latrines, dung pits, snuffle marks or hairs caught in hedges or on fencing.
- 2.10 Incidental observations of invertebrates and birds were recorded and a search made for any signs of previous nesting.
- 2.11 Any refuges on site such as logs or other debris were lifted and inspected for reptiles and amphibians.
- 2.12 There are no ponds on site, however there are three ponds within 250 m of the site. Pond 1 was accessible and was subject to the GCN HSI Assessment. Ponds 2 and 3 were well isolated from the site by the River Thames (see Appendix 1).

Valuation of Ecological Features

- 2.13 The valuation process used in this report follows the Guidelines for Ecological Impact Assessment in the UK and Ireland from the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018).
- 2.14 The value of areas of habitat and plant communities has been measured against published criteria where available. Biodiversity Action Plans (BAPs) have been searched to identify whether action has been taken to protect all areas of a particular habitat and to identify current factors causing loss and decline of particular habitats. The presence of injurious and legally controlled weeds has also been taken into account.
- 2.15 When assigning a level of value to a species, its distribution and status (including a consideration of trends based on available historic records) has been taken into account. Other factors influencing the value of a species are: legal protection, rarity and Species Action Plans (SAPs). Guidance, where it is available, for the identification of populations of sufficient size for them to be considered of national or international importance has also been taken into account.

Nomenclature

- 2.16 The English name only of flora and fauna species is given in the main text of this report; however, scientific names are used for invertebrates where no English name is available. Vascular plants and charophytes follow the nomenclature of The Botanical Society for the British Isles (BSBI) 2007 database (BSBI, 2007) with all other flora and fauna following the Nameserver facility of the

National Biodiversity Network Species Dictionary (<http://www.nhm.ac.uk/nbn/>), which is managed by the Natural History Museum.

Limitations

- 2.17 The site was fully accessible with no limitations to undertaking the survey in accordance with the stated methodology.

3.0 Results

Desk Study

3.1 There is one statutory designated site within 1 km of the site:

- Cotswold Water Park Site of Special Scientific Interest (SSSI), surrounds the site and is approximately 318 m to the west of the site at its closest point.

3.2 There are seven non-statutory designated sites within 1 km of the site:

- River Thames or Isis, Local Wildlife Site (LWS), adjacent to the site.
- Swillbrook Field, LWS, a large meadow with small areas of moderately species-rich grassland remaining, approximately 616 m to the southwest of the site.
- Cotswold Water park pit 81, LWS, a relatively small lake in Cotswold water park, approximately 970 m to the northeast of the site.
- Cotswold water Park pits 25, 66, 69, 76 & 200, LWS, a large restored site with a number of large and small lakes resulting from gravel extraction and two large species-poor neutral meadows, approximately 755 m to the northeast of the site.
- Cotswold Water Park Pits 39, 40, 64, 70, 92, 93 & 94, LWS, a large group of lakes, quarries and grassland with some bird interest, approximately 680 m to the northwest of the site.
- Cotswold Water Park Pit 82, LWS, a large former gravel pit, now a lake with associated grassland and wetland habitats, approximately 670 m to the east of the site.
- Cotswold Water Park 83, LWS, a large former gravel pit, now a lake, with surrounding grassland, approximately 318 m to the east of the site.

3.3 River Thames or Isis, Local Wildlife Site (LWS) is adjacent to the site and connects into the wider area. Further consideration of this and other nearby units of the Cotswold Water Park SSSI is given below.

3.4 WSBRC provided the following notable and protected species within 1 km of the site:

- **Mammals** – Otter, Badger, Barbastelle, unidentified Bat species, Serotine, Myotis species, Daubenton's bat, Whiskered/Brandt's Bat, Natterer's Bat, Leisler's Bat, Noctule, Pipistrelle Bat Species, Nathusius's Pipistrelle, Common Pipistrelle, Soprano Pipistrelle, Long-eared Bat species, Brown Long-eared Bat, Lesser Horseshoe Bat, Hedgehog, Water Shrew, Brown Hare, Rabbit, Water Vole and Harvest Mouse.
- **Amphibians** – Common Toad, Common Frog and Great Crested Newt. B
- **Birds** – multiple species records including red/amber listed species.
- **Reptiles** – Grass Snake.
- **Insect** – Rugged Oil-beetle, Small Heath, Small Blue, Wall, Brown Hairstreak, Common Darter, Grey Dagger, Green-brindled Crescent, Small Square-spot, Small Emerald, Barberry Carpet, White Ermine, Buff Ermine, Blood-vein and Cinnabar.
- **Flora** – Narrow-leaved Water Plantain, Opposite-leaved Pondweed, Perfoliate Pondweed, Fennel, Marsh Pennywort, Tubular Water-dropwort, River Water-dropwort, Parsley Water-dropwort, Knotted Hedge-parsley, Green-winged Orchid, Bluebell,

Fringed Water-lily, Great Yellow-cress, Good-King-Henry, Fine-leaved Sandwort, Knotted Pearlwort, Annual Knawel, Small-flowered Catchfly, Night-flowering Catchfly, Corn Spurrey, Greater Chickweed, Keeled-fruited Cornsalad, Narrow-leaved Bird's-foot-trefoil, Spotted Medick, Strawberry Clover, Downy Woundwort, Pink Water-speedwell, Fritillary, Dwarf Spurge, Tutsan, Flat-sedge, Smooth Brome, Meadow Brome, Rye Brome, Distant Sedge, Star Sedge, Needle Spike-rush, Slender Spike-rush, Blunt-flowered Rush, Annual Beard-grass, Rat's-tail Fescue, Barberry, Sweet-briar, Harsh Downy-rose and Great Burnet.

Habitats

3.5 The following table presents a description of the habitats present.

Table 1: Details of habitats present on and bordering the site.

Habitats	Description
g3c – Other neutral grassland	There are two areas of grassland on site, the colonised hard standing east of the existing barn, and the grassland in the northeast area of the site. The grassland to the east area of the barn is dominated by Yorkshire-fog and Creeping Cinquefoil, with frequent Common Nettle, Dove's-foot and Crane's-bill, occasional occurrences of Tufted Hair-grass, Creeping Buttercup and Perennial Rye-grass, and rare occurrences of Ribwort Plantain. The grassland that makes up the area in the northeast of the site had abundant Tufted Hair-grass, frequent False Oat-grass and Cock's-foot, with occasional Yorkshire-fog, Perennial Rye-grass and Creeping Cinquefoil and rare occurrences of Broad-leaved Dock and Bramble ag.
Individual trees	There are three small apple trees.
BNG:231 - Vegetated Garden	The northwest area of the site is part of the existing garden associated with the residential dwelling to the north of the site. The majority of the garden is short amenity grassland.
Ruderal/ ephemeral	The area west of the building contains dense tall ruderal comprising Common Nettle and Creeping Thistle. There is an area of dense Creeping Thistle along the east boundary of the site. The area of hard standing south of the barn is colonised by Common Nettle.
h3d – Bramble scrub	There is an area of Bramble agg. scrub in the southeast corner of the site.
u1b – Developed land; Sealed surface	There are several areas of hard standing on site forming the driveway and the areas surrounding the buildings.
u1b5 – Buildings	There are five buildings on site: a barn, an outbuilding and three dilapidated metal/timber sheds. Further details are presented below in relation to their suitability for roosting bats.



1: West facing view of the site.



2: South facing view of the site.



3: South elevation of the barn and view of hard standing colonised by nettle.



4: East elevation of the barn.



5: View of the north elevation of the barn.



6: View of the sheds and surrounding hardstanding.



7: South elevation of the outbuilding.



8: East elevation of the outbuilding.



9: Southeast corner of the site with areas of Common Nettle and Bramble scrub.



10: View of the individual fruit trees.



11: View of the individual fruit trees.



12: View of the garden that makes up the northwest area of the site.



13: View of the grassland in the northeast section of the site.



14: View of the ruderal area to the west of the barn.

Fauna

3.6 The follow table presents the nature of the habitats surrounding the building and connectivity into the wider area in relation to their potential importance to bats.

Table 2: Details of habitats in relation to foraging and commuting bats.

Habitats	Description
Immediate surroundings	The site is immediately surrounded by fields to the east, south and west, and residential dwellings to the north.
Connectivity	There is connectivity through the south off site line of trees and river to further hedges.
Wider Landscape	The wider landscape contains grass fields, arable land, pockets of woodland to the south, and the village Ashton Keynes to the north.
Potential for presence on site and site value	The site contains five buildings, an area of Bramble scrub, dense areas of tall ruderal, different areas of grassland and a line of trees off site to the south. The areas of scrub and tall ruderal provide habitats for invertebrates and it is expected that at least low numbers common species of bats will forage over the site.

3.7 The following table presents a description of the buildings in terms of their general characteristics, and their potential for roosting bats.

Table 3: Building description and details in relation to its potential for roosting bats.

Barn	Description
External	General: Disused modern barn. Roof: Metal corrugated. Walls: Timber planks, timber boards, concrete blocks and metal corrugated walls. Cladding: Timber cladding on some of the walls. Verges: Timber bargeboards.

	Eaves: Short, functional eaves with exposed corrugated sheets.
Internal	General: Disused barn. Enclosed/Separate Roof Voids: None. Roof Structure: Timber beams and rafters. Roof Lining: None. Insulation: None. Other e.g. Water Tanks, Boilers, AC Units: None.
Potential access points	The barn is permanently open offering large access points through the various entrances.
Potential roosting features	The main interior is open and well-lit and unsuitable for day use with no indication of any night use.
Evaluation	Given the lack of potential roosting features and any evidence of use, the suitability of this building for bats to roost is negligible.



15: General interior of barn.



16: General interior of barn.



17: General interior of west section of the barn.



18: General interior of west section of the barn.



19: General interior of east section of the barn.



20: General interior of east section of the barn.

Table 4: Building description and details in relation to its potential for roosting bats.

Outbuilding	Description
External	General: Small outbuilding. Roof: Corrugated metal flat roof. Walls: Brick, glass and timber plank walls. Cladding: None. Verges: Timber barge boards. Eaves: Short, functional eaves with exposed corrugated sheets and attached guttering.
Internal	General: Used as storage. Enclosed/Separate Roof Voids: None. Roof Structure: Metal corrugated roof. Roof Lining: None. Insulation: None. Other e.g. Water Tanks, Boilers, AC Units: None.
Potential access points	The building is generally well sealed. The building has some minor gaps in the walls but these were all fully inspected and not found to extend into more significant crevices and no evidence of bats was found.
Potential roosting features	Given the general lack of potential roosting features and any evidence of use, the suitability of this building for bats to roost is negligible.



21: General interior view of the outbuilding.



22: General interior view of the outbuilding.

- 3.8 The remaining buildings on site are dilapidated metal/timber shed style buildings that were possibly used as storage. They have sustained severe damage over time and are generally unsuitable for bats.



23: General interior of shed.



24: General interior of shed.



25: View of the sheds.



26: General interior of shed.

3.9 The following table assesses the potential for other protected species to be present.

Table 5: Protected Species Assessment

Fauna	Description
Bats	Records: WSBRC provided one record of Barbastelle (2021), five records of unidentified bat species (2008 – 2014) eleven records of Serotine (2004 – 2021) five records of Myotis Bat species (2013 – 2018) ten records of Daubenton’s Bat (2021), seven records of Whiskered/Brandt’s Bat (2021), ten records of Natterer’s Bat (2010 – 2021) nine records of Leisler’s Bat (2021), eleven records of Noctule (2004 – 2021), 41 records of Pipistrelle Bat species (1990 – 2018), 84 records of Common Pipistrelle (2004 – 2021), six records of Nathusius’s Pipistrelle (2021), 331 records of Soprano Pipistrelles (2008 – 2021), eleven records of Long-eared Bat species (2021), 24 records of Brown Long-eared Bat (1994 – 2021) and one record of Lesser Horseshoe Bat (2023), all within 1 km of the site. Habitats (roosting): See above for buildings. None of the trees on site were suitable for roosting. Habitats (foraging/commuting): The open grassland areas on site are small and provide sub-optimal foraging habitat but the remainder of the site provides varying habitats in sheltered locations that will be used by foraging and commuting bats. Common species will be present but the potential for more notable species would appear to be limited.
Badgers	Records: WSBRC provided one record of Badger in 2020 within 1 km of the site. Habitats: The site provides foraging opportunities for Badgers within the grassland, tall ruderal and scrub habitats on site. Presence/absence: The site was searched for evidence of Badgers such as digging, latrines, setts etc but no evidence was recorded.
Dormice	Records: None. Habitats: None. Presence/absence: Absent
Otters and Water Voles	Records: WSBRC provided 168 records of Otter (2003 – 2024) and 231 records of Water Vole (1997 – 2019) all within 1 km of the site. Habitats: The River Thames is adjacent to the south boundary of the site. Presence/absence: Whilst Water Voles are likely to be absent here; Otters may pass along this watercourse.
Other Mammals	Records: WSBRC provided 82 records of Hedgehog (2002 – 2021), one record of Water Shrew (2004), four records of Brown Hare (1987 and 2018) and nine records of Rabbit (1975 – 2017) all within 1 km of the site. Habitats: The areas of scrub and tall ruderal vegetation provide areas of cover for common small mammals and Hedgehogs and some areas of longer grassland provide additional areas of cover for small mammals. These habitats also provide foraging opportunities for common mammal species.

	Presence/absence: Hedgehogs and common small mammals may be present but other notable species are likely to be absent.
Birds	Records: WSBRC provided multiple species records including red/amber listed species. Foraging Habitats: The site as a whole provides a variety of habitats including grassland and scrub. Nesting Habitats: The grassland is unsuitable for ground nesting birds. Birds have likely nested in the barn previously and could do in the future. Presence/absence: Common bird species are present and it is likely that birds will nest in the barn in the future.
Reptiles	Records: WSBRC provided five records of Grass Snake (1985 - 2014) within 1 km of the site. Habitats: The areas of tall ruderal and scrub in association for grassland and are optimal habitats for reptiles. Presence/absence: No evidence, but significant potential for presence.
Amphibian	Records: WSBRC provided two records of Common Toad (1982 and 2022), 270 records of Common Frog (1978 – 2018) and 142 records of Great Crested Newt (2003 – 2017) all within 1 km of the site. Terrestrial Habitats: The site provides optimal habitat for amphibians in the scrub and tall ruderal habitats in association with grassland and open areas for basking. Aquatic Habitats: There are no ponds on site; however, there are three ponds within 250 m of the site. Pond 1 was accessible and was subject to the GCN HSI Assessment, and ponds 2 and 3 were well isolated from the site by the River Thames. Pond 1 scored 0.71, a rating of 'good'. Presence/absence: If Great Crested Newts are present in Pond 1 they will most likely be present on site.
Invertebrates	Records: WSBRC provided multiple records of notable species within 1 km of the site. Habitats: The habitats on site are common habitats that are mostly poor for invertebrates being buildings and hard standing. Presence/absence: Common assemblages of invertebrates are expected to be present in limited numbers. The potential for notable species to be present is negligible.

4.0 Development Constraints and Recommendations

Development Proposals

- 4.1 The proposals for the site are to erect two new dwellings with associated gardens, access and driveways. This will involve removing the majority of the existing habitats, including the buildings, grassland, tall ruderal, area of scrub and the individual trees.

Designated Sites

- 4.2 The River Thames or Isis, Local Wildlife Site (LWS) is adjacent to the site and the Cotswold Water Park SSSI is present in the nearby surrounding area. The proposed development will redevelop existing developed land and the offsite tree covered banks to the river will be retained. Therefore, no direct impacts to the river or other aquatic habitats in the Cotswold Water Park but there is the potential for indirect impacts such as those from lighting, pollution etc.
- 4.3 The following suggestions are made for the protection of the watercourse during the construction phase of the project but it should be noted that it is likely that assurances and provision will need to be made to address the long-term potential impacts to the watercourse by providing sufficient measures to ensure that the hydrology of the site is not changed to the detriment of the watercourse, and that potential pollutants (chemicals, detergents, nutrient enrichment etc.) that could enter the watercourse through run-off or ground water can be avoided.
- 4.4 During the construction phase of the project on no account should any chemicals, including vehicle fuels or lubricants be left on site at night where they might be accessed by accident or deliberately (e.g. vandals) resulting in spillage to the watercourse either directly or through run-off. Any contractors engaged in works on the site should have in place secure storage facilities and an agreed pollution prevention plan. Appropriate pollution control equipment should be available at the site to control spillages if they do occur. Full details should be provided in Construction and Ecological Management Plan secured by appropriate condition.

Habitats

- 4.5 The grassland on site was identified as other neutral grassland of low value. In order to qualify as a NERC Priority Habitat, grassland typically has to be unimproved (good semi-improved grassland can also qualify) and would have to be examples of grasslands such as lowland calcareous grassland or lowland dry acid grassland, habitats not found on site. Any impacts as a result of loss/changes to the grassland on site, and the ruderal and scrub habitats are considered to be negligible.
- 4.6 Where other new areas of habitat are to be created, consideration should be given to the seeding of these areas using appropriate seed mixes. Where possible these seeds should be locally sourced to support the genetic integrity of local wild plant populations. Where new trees or shrubs are to be planted, native tree and shrub species should be used as these are most beneficial to invertebrates, and many also produce seeds, nuts and berries that are food for native mammals and birds. Planting of non-native plant species should be limited to those that are not invasive and should prioritise those that provide a good source of nectar for invertebrates.

Fauna

Bats

4.7 The buildings on site were unsuitable for roosting bats.

Table 6: General presence/absence survey specification for structures.

Roost Suitability	Survey Specification
Negligible	No further surveys required.
Low	Number of Survey Visits: One survey visit. One dusk emergence survey. Timing: May to August.
Moderate	Number of Survey Visits: Two survey visits. Two dusk emergence surveys. Timing: May to September with a least one of the surveys between May and August. Surveys should be at least two weeks apart.
High	Number of Survey Visits: Three survey visits. Three dusk emergence surveys. Timing: May to September with a least two of the surveys between May and August. Surveys should be at least two weeks apart.
	Dusk Survey Times: Start at 30 minutes* before sunset and end at 1.5 – 2 hours after sunset. Dawn Survey Times: Start at 1.5 – 2 hours before sunrise and end at 15 minutes after sunrise *Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines state that dusk surveys should begin 15 minutes before sunset but repeated/the start times of subsequent surveys adjusted if bats are already in flight. 30 minutes is therefore specified to reduce the risk of having to repeat a survey as species such as pipistrelles will often emerge well before sunset.

Table 7: Required presence/absence surveys for the structures on site.

Building	Further Surveys
Barn, out building and sheds	Number of Surveys (dusk emergence): None. In this instance it has been determined that roosting bats are likely to be absent. Required Number of Surveyors: N/A.

4.8 None of the trees on-site were found to have potential roosting features for bats but when removing trees, overhanging branches or undertaking tree surgery works, the following procedures should be employed in the unlikely event a bat or bats are discovered:

- If the roost is still on the tree and bats are not injured, seek advice from a licensed ecologist. If help is not available, allow bats to fly out of harm's way.
 - If the timber is felled, the roost is not exposed and the bats are not injured, temporarily seal and isolate the roost and seek advice from a licensed ecologist. If advice is not readily available, position the roost off the ground, re-open it and allow bats to relocate of their own accord.
 - If the roost has been exposed, and especially if bats have been injured, collect bats in a secure box or bag (using a glove) and contact a licensed ecologist.
 - Note the date, locality, type of tree, situation in tree and bat species
- 4.9 The site provides foraging habitat in sheltered locations that will be used by foraging and commuting bats.
- 4.10 The proposed development will remove large portions of the site of mostly buildings and hard standing with limited areas of grass, scrub and ruderal habitat also removed. However, the most important habitat, the bordering trees along the River Thames would be retained. Provided a suitable lighting strategy is implemented that retains this as a dark corridor, no significant impacts to bats are predicted and the new gardens will provide new foraging habitats. Further surveys of bat activity are not deemed necessary.
- 4.11 A suitable lighting design strategy should be designed to ensure impacts to foraging and commuting bats are minimised. In general, measures should include the use of lighting only where absolutely necessary utilising highly directional warm white LED lighting, an example being down spots at 2.5 m high using warm white (2700 K) 8W LED lamps, 550 lumens, 35 degree beam angle. These could be individually activated by PIR sensors on a 5 minute cut off to further reduce their impacts. These will assist in lighting only the areas where lighting is required and minimising light spill either directly or through reflected light. Retained boundary vegetation must not subject to more than 0.2 lux of light spill and this must be demonstrated on a Lighting Illumination Plan.
- 4.12 The proposed development provides an opportunity to significantly enhance the site for roosting bats by incorporating roosts into the new buildings and these will usually be requested by the local planning authority. There are many ways that the buildings could be enhanced for crevice-dwelling bat species (virtually all UK bat species) without inconveniencing prospective occupants or requiring any significant design considerations. Bat tubes, panels, shelters or boxes can be installed in suitable locations around the site usually close to cover and at the apices of gable ends. A variety of aspects increases the likelihood of colonisation. Bat boxes could also be installed on retained mature trees on site.

Badgers and other mammals

- 4.13 No further surveys are required but for the protection of Badgers and other wildlife that could pass through the site, it is recommended that during the construction phase of the project any trenches and other excavations should be back-filled before nightfall or a ramp left to allow animals to easily exit, and any open pipes larger than 150 mm should be capped off overnight.

Otters

- 4.14 The River Thames provides habitat for Otters and while it was almost dry at the time of the survey, it had been an exceptionally dry period and it is expected to provide more suitable habitat for the majority of the year.
- 4.15 This watercourse is unlikely to be significantly impacted by works due to its separation from the site but any pollution, or changes to the river could have adverse effects on the flora and fauna within, including passing Otters and Otters could enter the site.
- 4.16 The following recommendations are precautionary and are made to ensure the risk of disturbance to Otters is minimised in the unlikely event they enter the working area:
- All members of the work force engaged on the site will be advised of the possible presence of Otters, and what must be done if either is seen on site, at or close to the site boundary, or in the brook along the development site. The site manager(s) will be given details of the appointed ecologist(s), who will be contacted if required. On no account will any work be undertaken on site if a or Otter is found, and work will not proceed until the ecologist has been contacted.
 - No work will take place on site between the times of one hour after sunset and one hour before sunrise.
 - No lights will be left on overnight on the site unless essential for security reasons. Any such lights must not on any account shed light onto the brook or its banks. This applies to both the construction and operational phases of the development.
 - Any food brought on site will be disposed of into locked steel containers that are secured and cannot be turned over by an animal accessing the site. Otters are great opportunists and will exploit alternative food sources in certain circumstances. Food remains must therefore be properly disposed of.
 - On no account must any chemicals, including vehicle fuels or lubricants be left on site at night where they might be accessed by accident or deliberately (e.g. vandals) resulting in spillage to the watercourse. Otters, like other aquatic life forms, are highly susceptible to pollution and any contractors engaged in works on the site must have in place secure, storage facilities and an agreed pollution prevention plan. If necessary, appropriate pollution control equipment must be available at the site to control spillages if they do occur.
 - Means of escape from any excavations that are to be left open should be provided for animals that may fall into them. Suitable provision may include an earth ramp at one end or a builder's plank, placed so that one end is at ground level and provides a ramp up which animals can climb. The angle for any plank must therefore provide a gentle slope (>45°).

Birds

- 4.17 The site provides foraging habitat in general with the scrub and building providing nesting habitats. Nesting birds are protected under The Wildlife and Countryside Act 1981 (and amendments). The removal of scrub and the demolition of the barn should take place outside the nesting season of March to August. Where this is not possible these habitats would need to be surveyed for nesting birds prior to works taking place.

- 4.18 In order to compensate for any loss of foraging habitat and/or enhance the site, it is recommended that any new planting should concentrate on species that are native to the area and ideally produce a range of seeds and berries at varying times of the year. Nectar rich plants could also be used encourage invertebrates on to the site, which in turn provide food for birds as well as other species such as bats.
- 4.19 The new buildings are likely to provide a good opportunity to enhance the site for birds and the following options could be explored for inclusion on the sides of the buildings:
- Nest boxes for Swifts could be incorporated into the eaves. These not only provide nesting sites for Swifts but can also be used by other species such as House Sparrows and Starlings.
 - House Martin nests could be provided under the eaves or on the north to east sides of the building.
 - Individual boxes, such as the Schwegler Bird Home 1MR, could also be installed at a height of at least 2 m.
 - Groups of multiple small bird boxes could also be installed at a height of least 2 m to provide nesting sites for birds such as House Sparrows.

Reptiles

- 4.20 The area of dense tall ruderal is optimal habitat for reptiles. the scrub and tall ruderal habitats in association with grassland and open areas for basking provide good habitat for reptiles and this extends off-site. There is a high likelihood that reptiles are present.
- 4.21 A reptile survey will be required to determine presence/absence. This can be determined with seven visits undertaken over a period of at least three weeks following the setup of the survey at least 10 days in advance. Survey period is April to September although March and October can also be suitable depending on weather conditions. Should reptiles be recorded it may be necessary to carry out additional visits to allow a population assessment and a suitable mitigation strategy devised.

Amphibians

- 4.22 There are no ponds on site; however there are three ponds within 250 m of the site. Pond 1 was accessible and was subject to the GCN HSI Assessment, and Ponds 2 and 3 were well isolated from the site by the River Thames. Pond 1 scored 0.76, a rating of 'good'.
- 4.23 Great Crested Newts and their places of breeding or rest are protected under the Wildlife and Countryside Act 1981 (and amendments) and The Conservation of Habitats and Species Regulations 2010 making it illegal to kill, injure, capture or disturb a Great Crested Newt and to damage or destroy a breeding or resting site of this species. All activities that would otherwise constitute an offence under The Conservation of Habitats and Species Regulations 2010 must be licensed by Natural England. Great Crested Newts are also a NERC Priority Species.
- 4.24 The site measures approximately 0.15 ha in size. Using Natural England's Great Crested Newt Rapid Risk Assessment, for any land (not just newt habitat) which is within 100 m of any breeding pond where between 0.1 and 0.5 ha is to be lost or damaged, the risk of an offence being committed is rated as 'Amber: Offence likely'. If there is a risk to individual Great Crested Newts

such as capture of newts in excavations, disturbance of newts or killing or injuring of newts then the risk increases to "Red: Offence highly likely". As the overgrown areas provide potential areas of cover, much of which will be removed, there is a risk this could occur. A district licence from NatureSpace will be applied for to permit the works on site, which does not require further survey data.

References

BSBI (2007). BSBI 2007 List. [Online]. Available at: <http://www.bsbi.org.uk/taxonomy.html> [accessed on 7th November 2025].

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

The Conservation of Habitats and Species Regulations 2010, SI 2010/490

Countryside and Rights of Way Act 2000, (c.37), London: HMSO.

Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the United Kingdom. [Online]. Available at: <http://www.cieem.net/ecia-guidelines-terrestrial-freshwater-and-coastal-> [accessed on 7th November 2025].

Joint Nature Conservation Committee (2010) Handbook for Phase I Habitat Survey – a Technique for Environmental Audit. JNCC: London.

Joint Nature Conservation Committee (2021). UK BAP Priority Habitats. [Online]. Available at: <http://jncc.defra.gov.uk/page-5718> [accessed on 7th November 2025].

Joint Nature Conservation Committee (2021a). UK BAP Priority Species. [Online]. Available at: <http://jncc.defra.gov.uk/page-5717> [accessed on 7th November 2025].

Mitchell-Jones, A.J. (2004). *The Bat Mitigation Guidelines*. English Nature: Peterborough.

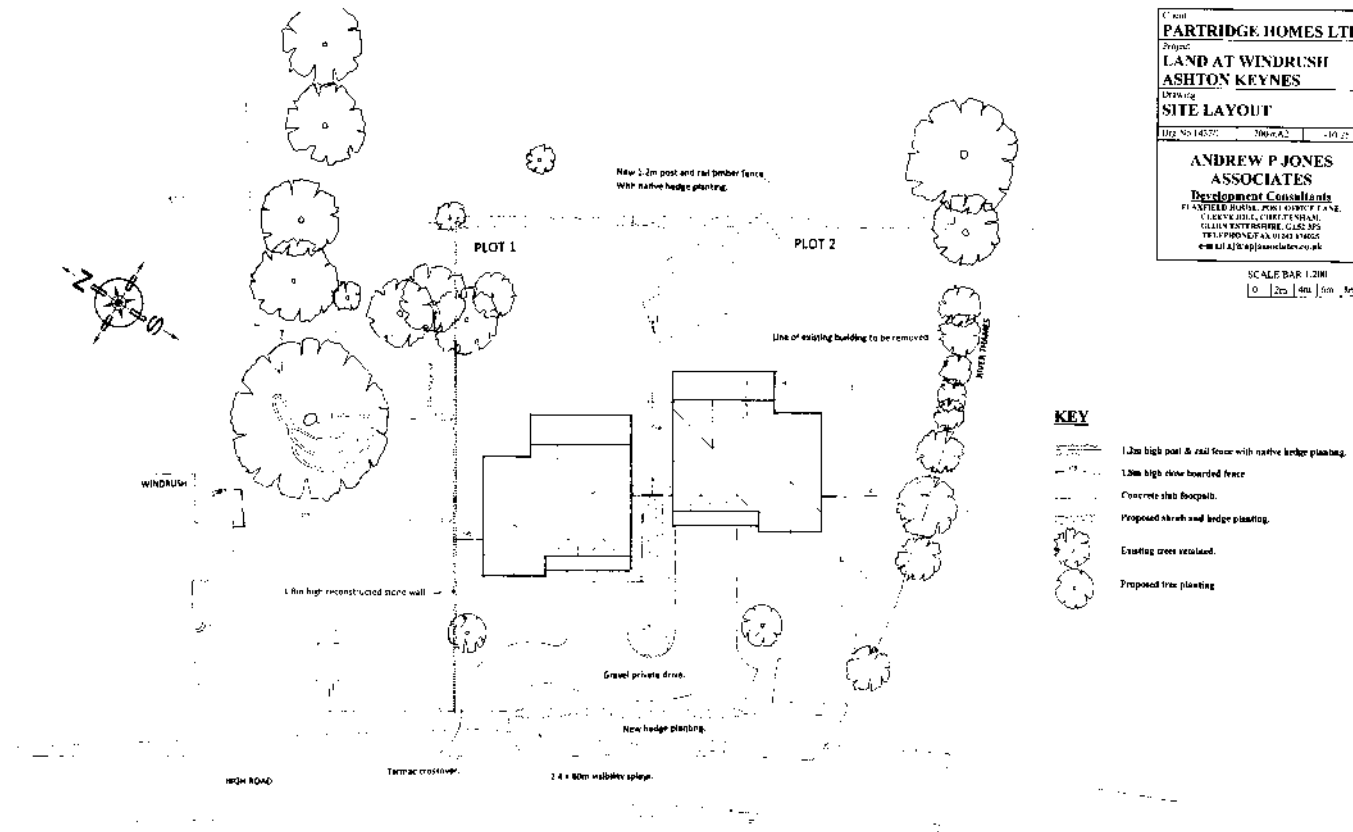
Multi-Agency Geographical Information for the Countryside (2024). MAGIC. [Online]. Available at: www.magic.gov.uk/ [accessed on 7th November 2025].

Natural Environment and Rural Communities Act 2006, (c.16), London: HMSO.

The Protection of Badgers Act 1992, (c.51), London: HMSO.

Wildlife and Countryside Act 1981 (and amendments). (c.69), London: HMSO.

Plan 1 – Proposed site plan



Appendix 1

Habitat Suitability Index Assessment

Methodology

- 5.1 Pond one was subject to the Great Crested Newt Habitat Suitability Index (HSI) Assessment. The assessment was undertaken during the Ecological Appraisal by a licensed ecologist (Class Licence Registration No. 2016-20363-CLS-CLS), trained in the assessment of water bodies for their potential to support populations of Great Crested Newts.
- 5.2 The HSI is a measure of habitat quality using a numerical index between 0 and 1 derived from an assessment of variables known to influence the presence of Great Crested Newts (Oldham et al. 2000). It is used to assess whether a water body warrants detailed surveys to establish presence or absence of newts and aids in the assessment of impacts and the design of mitigation measures. Since January 2008 it has been a requirement to include the results of HSI assessments in European Protected Species (EPS) licence applications.
- 5.3 To calculate the HSI of the water bodies ecologists first record the following variables before applying the HSI calculation to these: pond size; surface area; water depth; water quality; % shade, % macrophyte cover; presence of fish and waterfowl; number of water bodies within 1 km of survey water body; quality of terrestrial habitat surrounding ponds; and type of marginal/aquatic vegetation (Oldham et al. 2000).
- 5.4 Once the HSI score is obtained it can be used to define water body suitability for Great Crested Newts in the following way (National Amphibian Recording Scheme, 2008):

Table 1: HSI Scores

<0.5	Poor
0.5 – 0.59	Below Average
0.6 – 0.69	Average
0.7 – 0.79	Good
>0.8	Excellent

- 5.5 Water bodies scoring less than 0.5 are deemed as unlikely to support Great Crested Newts and further surveys are not usually required.

Results

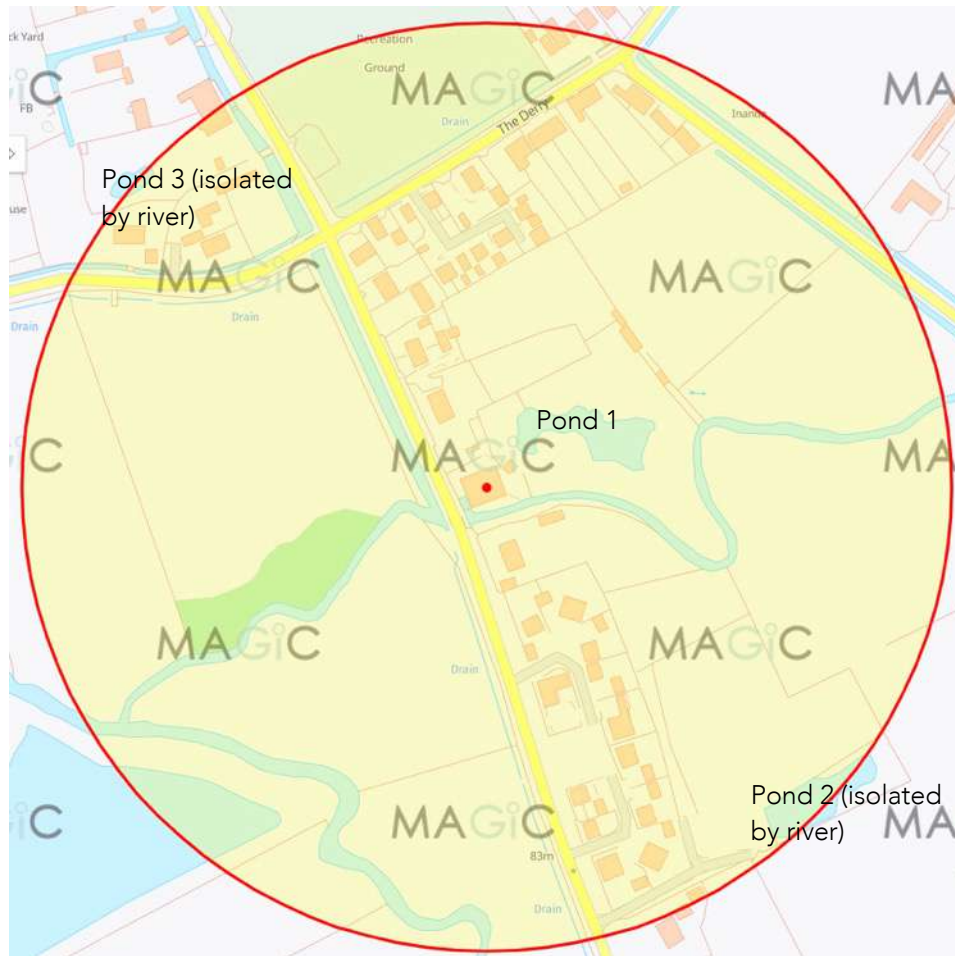


Figure 1: Ponds within 250 m.



Figure 2: Pond 1.

5.6 Pond 1 was subject to the GCN HSI Assessment and scored 0.76, a rating of 'good'.

Table 2: HSI Assessment Result

HSI Variables	Pond 1
SI1 - Location	1
SI2 - Pond area	0.85
SI3 - Pond drying	0.9
SI4 - Water quality	1
SI5 - Shade	0.2
SI6 - Fowl	1
SI7 - Fish	0.67
SI8 - Ponds	0.95
SI9 - Terr'l habitat	1
SI10 -Macrophytes	0.7
HSI Score	0.76