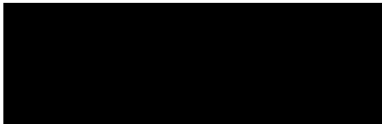


Lidsey Road, Woodgate

Ecology Assessment

January 2021



20 Soames Place, Mulberry Grove
Wokingham, Berkshire RG40 5AT



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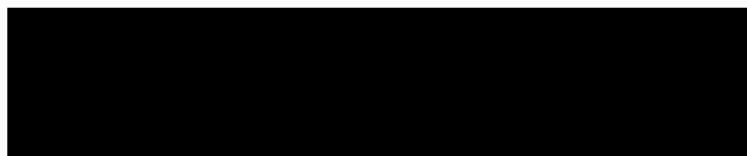
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Report Ref: DFA21007V3

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CONTENTS

1	INTRODUCTION.....	3
1.1	Background.....	3
2	LEGISLATIVE FRAMEWORK.....	4
2.1	National Policy and Guidance.....	4
3	METHODOLOGY.....	8
3.1	Data Search.....	8
3.2	Field Surveys.....	8
4	SITE DESCRIPTION.....	10
4.1	Desk Study.....	10
4.2	Field Survey.....	10
5	EVALUATION.....	14
5.1	Definition of ecological value.....	14
5.2	Site Evaluation.....	16
6	IMPACTS, MITIGATION AND ENHANCEMENTS.....	17
6.1	Impacts and mitigation.....	17
6.2	Enhancements.....	18
7	SUMMARY.....	19
	REFERENCES.....	20

TABLES

Table 1.	HSI Scores and eDNA results.....	12
Table 2.	Preliminary Bat Roost Assessment results.....	13
Table 3.	Summary of Emergence Surveys.....	13
Table 4.	Ecological Evaluation Criteria.....	15

FIGURES

Figure 1.	Phase 1 Habitat Map.....	21
Figure 2.	Pond Locations.....	23



1 INTRODUCTION

1.1 Background

- 1.1.1 Derek Finnie Associates was commissioned by Thakeham Client Ltd on behalf of Southern Housing Group Ltd to prepare an ecological assessment of an area of land known as Lidsey Road, Woodgate, herein referred to as the 'Site'.
- 1.1.2 Previous planning applications have been submitted on the Site, which were supported by several ecology survey reports undertaken by The Ecology Consultancy and Arbeco.
- 1.1.3 Thakeham are currently preparing a new application for the Site which covers the demolition of Wings House and the erection of 71 replacement dwellings (70 net new dwellings), access arrangements, sustainable drainage measures, public open space, landscaping, and all other associated works.
- 1.1.4 The following report presents the findings of the previous ecological surveys of the Site, assesses the biodiversity resources within the Site, and considers the potential impacts of the new proposal upon the identified ecological receptors and outlines the ecological enhancements incorporated within the scheme to offset any ecological impact.

2 LEGISLATIVE FRAMEWORK

2.1 National Policy and Guidance

Legal Framework

- 2.1.1 The legislative framework applicable to this assessment is summarised below and outlined in Appendix 1.

International Conventions and Directives

- Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (EC Habitats Directive);
- Council Directive 2009/147/EC on the Conservation of Wild Birds (Birds Directive);
- The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) 1979;
- The Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) 1983; and
- Convention on Biological Diversity 1992.

National Legislation

- The Wildlife and Countryside Act 1981 (WCA);
- The Conservation of Habitats and Species Regulations 2017;
- The Countryside and Rights of Way Act 2000 (CRoW);
- Natural Environment and Rural Communities Act 2006 (NERC);
- The Protection of Badgers Act 1992; and
- The Hedgerow Regulations 1997.

Statutorily Protected Sites

- 2.1.2 Local Nature Reserves (LNRs); National Nature Reserves (NNRs); Sites of Special Scientific Interest (SSSIs); Special Areas of Conservation (SAC); and Special Protection Areas (SPAs) contain examples of some of the most important natural and semi-natural ecosystems in Europe and receive strict protection under United Kingdom (UK) legislation. Although not strictly protected under legislation, Ramsar sites are given the same level of protection through policy.

Non-Statutory Sites

- 2.1.3 Non-statutory sites of county conservation value are designated by Local Planning Authorities (LPAs); within West Sussex these are known as Local Wildlife Sites (LWS). Such sites are afforded a measure of protection in local development plans.

Protected Species

- 2.1.4 Under UK legislation, a number of species, including bats *Chiroptera* sp. and great crested newts *Triturus cristatus* are strictly protected from death, injury or harm; whilst places used



for their shelter or rest are protected from damage, disturbance and destruction. Certain species such as some reptiles and birds only receive partial protection under UK legislation, e.g. protection from killing / injuring only or protection at certain times of the year only.

Invasive Weeds

- 2.1.5 The WCA 1981 makes it an offence to plant or otherwise cause to grow in the wild numerous species including Japanese knotweed *Fallopia japonica* and giant hogweed *Heracleum mantegazzianum*.

Non-Statutory Policies

- 2.1.6 The UK Biodiversity Action Plan (UK BAP) was established in response to the global Convention on Biological Diversity, 1992. Individual Action Plans define actions and measures to meet the conservation objectives defined in the strategy and specify measurable targets. They determine the broad habitats and species that are of value to the natural environment of the UK and identify actions and projects that could be undertaken to help protect or enhance the national biodiversity.
- 2.1.7 Local Biodiversity Action Plans (LBAPs) are implemented through planning policy, identifying habitats and species in need of conservation action at the local or regional level. BAPs in the UK have no statutory status but provide a framework for implementing conservation requirements.

Planning Policy

National Planning Policy

National Planning Policy Framework

- 2.1.8 The following objectives relating to biodiversity conservation are considered relevant to this assessment. The National Planning Policy Framework (NPPF) seeks to:
- Protect and enhance valued landscapes, geological conservation interests and soils;
 - Recognise the wider benefits of ecosystem services;
 - Minimise impacts on biodiversity and provide net gains in biodiversity, where possible, contribute to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
 - Prevent both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability;
 - Remediate and mitigate despoiled, degraded, derelict, contaminated and unstable land, where appropriate; and
 - Prevent the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.

Local Planning Policy

- 2.1.9 The following policies within the Arun Local Plan 2011 – 2031 (adopted 2018) were considered throughout the assessment process.

Policy ENV SP1

Natural Environment

Arun District Council will encourage and promote the preservation, restoration and enhancement of biodiversity and the natural environment through the development process and particularly through policies for the protection of both designated and non-designated sites. Where possible it shall also promote the creation of new areas for habitats and species. In relation to designated sites, development will be permitted where it protects sites listed in Tables 17.1-17.7 that are recognised for the species and habitats contained within them.

Policy ENV DM1

Designated Sites of biodiversity or geological importance

a. Proposed development likely to have an adverse effect on land with the designated features of any Site of Biodiversity or Geological Importance as listed in Tables 17.1 - 17.7 or any subsequently designated sites (either individually or in combination with other developments), will not normally be permitted. Consideration will be given to the exact designated features present on the site, their scarcity/rarity and recognition of the protection offered by their existing status. Development on wildlife sites with the highest value will only be permitted exceptionally where the following can be demonstrated:

- i. There is no alternative solution (which shall be adequately demonstrated by the developer).*
- ii. There are reasons of public health or public safety or*
- iii. There are benefits of primary importance to the environment or*
- iv. There are imperative reasons of overriding public interest.*

Notwithstanding the above however, the presumption in favour of sustainable development does not apply where development requiring appropriate assessment under the Birds or Habitats Directives is being considered, planned or determined.

b. In determining any planning application affecting Sites of Biodiversity or Geological Importance the Council will ensure that the intrinsic natural features of particular interest are safeguarded or enhanced having regard to;



- i. The European, National or Local status and designation of the site;*
- ii. The nature and quality of the site's features, including its rarity value;*
- iii. The extent of any adverse impacts on the notified features of interest;*
- iv. The need for compensatory measures in order to re-create remaining features of habitats on or off the site.*

Policy ENV DM5

Development and biodiversity

Development schemes shall, in the first instance, seek to achieve a net gain in biodiversity and protect existing habitats on site. They shall also however incorporate elements of biodiversity including green walls, roofs, bat and bird boxes as well as landscape features minimising adverse impacts on existing habitats (whether designated or not). Development schemes shall also be appropriately designed to facilitate the emergence of new habitats through the creation of links between habitat areas and open spaces. Together, these provide a network of green spaces which serve to reconnect isolated sites and facilitate species movement.

Where there is evidence of a protected species on a proposed development site, planning applications shall include a detailed survey of the subject species, with details of measures to be incorporated into the development scheme to avoid loss of the species. This involves consideration of any impacts that will affect the species directly or indirectly, whether within the application site or in an area outside of the site, which may be indirectly affected by the proposals. All surveys shall be carried out at an appropriate time of year and shall be undertaken by a qualified and, where appropriate, suitably licensed person.

All developments shall have regard to Natural England's standing advice for protected species.

3 METHODOLOGY

3.1 Data Search

3.1.1 A review of the Government's MAGIC website was undertaken for the location and extent of statutory protected sites within 2km of the Site, extending to 10km in the case of Natura 2000 sites.

3.1.2 The following reports were also reviewed:

- Arbeco 2017. *Preliminary Ecological Appraisal, Wings Nursey. Woodgate.*
- Arbeco 2017. *Reptile Survey Report, Wings Nursery, Woodgate.*
- The Ecology Consultancy 2019. *Preliminary Ecological Assessment, Wings, Lidsey Road, Woodgate.*
- The Ecology Consultancy 2019. *Habitat Suitability Index and eDNA tests at Wings Nursery.*
- The Ecology Consultancy 2020. *Bat Survey Report. Wings, Lidsey Road, Woodgate.*
- The Ecology Consultancy 2019. *Resurvey of Wings Nursery, Woodgate.*

3.1.3 Combined, the above reports present a comprehensive picture of the ecological status of the Site and have been used for the basis of the current assessment. As the use and management of the Site has not changed since the surveys were undertaken there is no reason to suggest the ecological condition of the Site has changed significantly.

3.1.4 Biological records were also obtained from Sussex Biological Records Centre as part of the previous assessments.

3.2 Field Surveys

Phase 1 Habitat Survey

3.2.1 The Site was originally considered as two separate sites, namely the land at Wings Nursery and land at Wings House. However, as the Site is now considered to be a single unit, the results for the separate surveys have been combined to allow a holistic appraisal to be made (Figure 1).

3.2.2 An 'extended' Phase 1 Habitat Survey was carried out on 20th July 2017 and 3rd April 2019 and across the Wings Nursey section of the site, with an separate survey completed for the Wings House on 14th October 2019. All surveys followed the methodology presented by the JNCC (2010). The Phase 1 technique aims to classify each habitat into categories based on the assemblage of plant species present, with the dominant plant species for each habitat being noted. In some cases, sub-divisions or modifications of the standard categories can be made where this is useful in providing further detail.

3.2.3 An 'extended' form of the basic methodology was employed to determine whether any notable or protected species of fauna utilise the study area, in particular badgers, bats, amphibians, reptiles and birds. In the absence of direct evidence of these species, an assessment was made on the potential for the site to support such species.

Reptile survey

- 3.2.4 A reptile survey, utilising artificial refugia, was conducted across the Wings Nursey site in 2017 by Arbeco. A total of 50 refugia were placed in suitable locations across the Site and were subsequently checked for reptiles on seven occasions throughout September and October 2017.
- 3.2.5 The reptile survey was conducted in line with the methodologies presented in Herpetofauna's Workers Manual (Gent & Gibbons 1998) and Froglife Advice Sheet 10 (Froglife 1999).

Amphibian Survey

- 3.2.6 A Habitat Suitability Index (HSI) (after Oldham *et al.* 2000) was conducted by The Ecology Consultancy in 2019 of four waterbodies within 500m of the Site boundary (Figure 2). An eDNA analysis was conducted on one waterbody, Pond P1, as it was deemed the only waterbody that could potentially support great crested newts, based on the results of the HSI assessment. The eDNA test was conducted in line with Defra guidelines.

Bat Survey

Preliminary Roost Assessment

- 3.2.7 A preliminary bat roost assessment, in line with the Bat Conservation Guidelines (BCT 2016), was undertaken of the main residential property (B1), a linked garage (B2), and a garden shed (B3) (Figure 1) in October 2019. A preliminary ground roost assessment of the trees within the site was undertaken at the same time.

Emergence Surveys

- 3.2.8 Following the preliminary roost assessment, three emergence surveys were conducted on buildings B1 and B2 between May and July 2020, with a single emergence survey conducted on both building B3 and Tree T7 (Figure 1).

4 SITE DESCRIPTION

4.1 Desk Study

- 4.1.1 Pagham Harbour Species Protection Area (SPA) and Site of Species Scientific Interest (SSSI) is located approximately 7.5km to the south west of the Site. The Site is identified as being outside of the SSSI Impact Risk Zone for residential development.
- 4.1.2 There are no other statutory or non-statutory sites designated on ecological grounds within 2km of the Site.
- 4.1.3 Sussex Biological Records Centre do not hold any records specific to the Site. However, they did return records of six bat species within 2km of the Site and three records of badger, with the closest being 1.6km to the north east. Great crested newts are known to be present within 470m of the Site, whilst slow worm, grass snake and common lizard have all been recorded within 2km of the Site.

4.2 Field Survey

Phase 1 Habitat Survey

- 4.2.1 The Site comprises Wings House, which is set in an area of formal grounds, with a small field behind. The Site is more or less isolated by roads or tracks on all four sides. Residential development lies to the east, with a railway line a short distance to the north. More or less open countryside lies to the south and west.
- 4.2.2 The following Phase 1 habitat types were recorded on Site:
- Scattered trees;
 - Hedgerow;
 - Scrub;
 - Tall ruderal;
 - Semi-improved grassland;
 - Species-poor, semi-improved grassland;
 - Amenity grassland;
 - Ditch;
 - Building and hardstanding

- 4.2.3 Each habitat is described below in turn and depicted on Figure 1.

Scattered trees

- 4.2.4 Several scattered trees are located within the Site, more or less restricted to the boundary. Oak *Quercus* sp and willow *Salix* sp were record. Within the grounds of Wings House, there are numerous non-native and ornamental trees including cedar *Cedrus* sp., cypress *Cupressus* sp, cherry *Prunus* sp., eucalyptus *Eucalyptus* sp. and holly *Ilex* sp.

Hedgerow

- 4.2.5 A Leyland cypress *Cupressus × leylandii* hedgerow runs along the eastern boundary of the Site and extends around the southern and eastern boundary of the garden to Wings House.

Scrub

- 4.2.6 Dense scrub, comprising butterfly bush *Buddleja davidii*, common nettle *Urtica dioica* and bramble *Rubus fruticosus* agg. towards the south east of the Site.
- 4.2.7 Additional scrub is located along the south east, south and western boundaries of the Site, where it can be found growing through a post and wire fence.

Tall ruderal

- 4.2.8 Tall ruderal habitat is located in scattered clumps throughout the species-poor, semi-improved grassland areas in the west of the Site. These areas comprise common nettle with abundant curled dock *Rumex crispus*, creeping thistle *Cirsium arvense*, creeping buttercup *Ranunculus repens*, hedge bindweed *Calystegia sepium* and the occasional tufted vetch *Vicia cracca*.

Semi-improved grassland

- 4.2.9 Semi-improved grassland is found within the south east area of the Site. The grassland consists of abundant cock's-foot *Dactylis glomerata*, cinquefoil *Potentilla* sp., yarrow *Achillea millefolium*, broad-leaved dock *Rumex obtusifolius*, speedwell *Veronica* sp., with occasional field bindweed *Convolvulus arvensis*, dandelion *Taraxacum officinale* agg., creeping buttercup, ribwort plantain *Plantago lanceolata*, black medick *Medicago lupulina* and white clover *Trifolium repens*.
- 4.2.10 The species composition to the south of the Site is more diverse, with bird's-foot trefoil *Lotus corniculatus*, black medick, tufted vetch, stitchwort *Stellaria* sp., hawkbit *Leontodon* sp., white clover, sorrel *Rumex acetosa*, selfheal *Prunella* sp., black knapweed *Centaurea nigra*, common mouse ear *Cerastium fontanum*, red clover *Trifolium pratense*, scarlet pimpernel *Anagallis arvensis*, oxeye daisy *Leucanthemum vulgare* and common centuary *Centaureum erythraea*.

Species-poor, semi-improved grassland

- 4.2.11 This is perhaps the most abundant habitat within the Site, covering the majority of the west of the Site; it displays evidence of regular mowing.
- 4.2.12 The sward is dominated by graminoid species including Yorkshire fog *Holcus lanatus*, creeping bent *Agrostis capillaris*, fescue *Festuca* sp. and perennial rye grass *Lolium perenne*. Creeping buttercup, white clover, creeping thistle and broad-leaved dock were also noted.

Amenity grassland

- 4.2.13 Amenity grassland forms the majority of the garden area around Wings House and comprises perennial rye grass, Yorkshire fog, daisy *Bells perennis*, yarrow, dandelion, white clover, ribwort plantain, creeping buttercup and common nettle.

Ditch

- 4.2.14 On the north east boundary of the Site is a water filled ditch approximately 10m in length and 1m wide. The water is heavily shaded by trees present along the boundary line.

Buildings and Hardstanding

- 4.2.15 Three buildings are situated in the centre of the Site and form Wings House. Building B1, Wings House itself, is a two-storey residential dwelling with four main roof pitches. The roof is finished with clay roof and ridge tiles and the upper storey of the building supports clay hanging tiles.
- 4.2.16 Building B2 is a single storey garage; the roof is pitched and hipped with a central timber roof vent. Building B3 is a small, timber framed shed with a pitched roof covered with timber boarding. The buildings are adjacent to areas of tarmacked hardstanding.

Faunal Surveys

Reptile surveys

- 4.2.17 Slow worm and common lizard were recorded on six out of the seven survey visits with a maximum count of seven adult slow worms and five adult common lizard recorded on 29th September 2017. The populations would be classified a Low.
- 4.2.18 The majority of individuals were recorded towards the boundary of the Site, particularly towards the south west corner and along the eastern boundary.

Amphibian Surveys

- 4.2.19 The HSI score for the four waterbodies identified within 500m of the Site are given in Table 1.

Table 1. HSI Scores and eDNA results

Pond Number	HSI Score	Distance	Habitat Suitability	eDNA
1	0.78	470m	Good	Positive
2	No Access	220m	-	-
3	0.61	0m	Moderate	-
4	No access	300m	-	-

- 4.2.20 A subsequent eDNA analysis of Pond P1 confirmed the presence of great crested newts.

Bat Surveys

- 4.2.21 The preliminary bat roost assessment identified multiple features suitable for roosting bats on Building B1 and B2, including lifted, slipped and missing roof tiles as well as loose hip and hanging tiles. A low number of potential roost features were also identified on Building B3, including lifted timbers. Further details are given in Table 2.

Table 2. Preliminary Bat Roost Assessment results

Building Number	Description	Results	Suitability
1	Building 1 was a two-storey residential property with four main roof pitches; two running east-west with two similar sized sections extending north. The roof was covered with clay roof and ridge tiles and the upper storey of the building was covered with clay hanging tiles. Internally, one large roof void was present linking all three roof pitches. The void was approximately 4m in height to the apex and lined with bitumen roofing felt. Cavity walls were present.	No evidence of bats was recorded but multiple suitable roosting features were recorded on the building including lifted roof, ridge and hanging tiles. No droppings were found.	High suitability for roosting bats Sub-optimal for hibernation
2	Building 2 was a single storey garage that had been converted into a swimming pool. The roof was pitched and hipped with a central timber roof vent. Internally, the building had a suspended ceiling with no access into the void above.	No evidence of bats was recorded but multiple suitable roosting features were recorded on the building, including lifted roof, ridge and hip tiles and gaps in the timbers on the roof vent. No droppings were found.	High suitability for roosting bats Sub-optimal for hibernation
3	Building 3 was a small, timber framed shed with pitched roof covered with timber boarding. Internally, the building was open to the apex and the roof covered with timber plyboard.	Lifted timbers on the roof and building provided suitable roosting features for bats. No droppings were found.	Low suitability for roosting bats Unlikely to support hibernating bats.

4.2.22 Tree T7 (Figure 1) was also assessed as having moderate potential to support roosting bats.

4.2.23 Subsequent emergence surveys of Building B1, B2, B3 and T7 were undertaken in May and July 2020. The results are summarised in Table 3.

Table 3. Summary of Emergence Surveys

Building/Tree	Species	Count	Roost potential
B1	Common pipistrelle	Max 5 bats, peak 3 bats	Confirmed
B2	Pipistrelle species	Max/peak count of 2 bats	Confirmed
B3	N/A	N/A	Low
T7	N/A	N/A	Moderate

5 EVALUATION

5.1 Definition of ecological value

- 5.1.1 While some level of subjectivity is unavoidable when apportioning value to ecological features and resources, certain parameters and points of reference can be used to help ensure consistency. Those used in this appraisal are explained below.
- 5.1.2 Sites already possessing statutory or non-statutory nature conservation designations will have been subjected to some form of evaluation process in the past, and their importance defined at a geographical scale (e.g. international, national, local). For these, evaluation will generally reaffirm their qualifying attributes, or in some cases may identify where designation may no longer be appropriate.
- 5.1.3 Factors such as extent, naturalness, rarity, fragility and diversity are all relevant to the determination of ecological value, and for the evaluation of sites and habitat features outside designated sites, these and other criteria as described by Ratcliffe (1977), may be applied. Ratcliffe's criteria are integral to the procedure for selecting both Sites of Special Scientific Interest and many non-statutory designation systems in the UK, and therefore remain an accepted standard for site evaluation.
- 5.1.4 In applying these criteria, attention may be drawn to the relative scarcity or abundance of features within the survey area and in the wider geographical context. Some criteria are however absolute and not relative to scale. Ancient woodland, for example, is fragile irrespective of whether it is being considered in an international or local context. Similarly, the value of an otherwise poor habitat may be elevated if it is central to the survival of a rare species.
- 5.1.5 Where evaluation is important for the purposes of informing decisions related to land-use planning and development control, the above approach needs to be supplemented by consideration of whether individual species are subject to legal protection, or whether habitats or species are present which have been identified as 'priorities' for biodiversity conservation in the UK. Planning authorities have a statutory duty to further biodiversity objectives and the presence of such resources may be material to the determination of development control decisions.
- 5.1.6 Further indications of conservation status for individual species are provided by reference to the Red Data Book system, the Vascular Plant Red Data List for Great Britain (Cheffings and Farrell 2006) or for birds by reference to the Birds of Conservation Concern (Eaton *et al.* 2015) This divides birds into three lists; Red List (birds of high conservation concern), Amber List (birds of moderate conservation concern) and Green List (not of conservation concern).
- 5.1.7 Scales of comparison varying from the international to the context of the local area may be used to define the measure of importance attached to individual features. The definition of geographic terms can vary, but in this evaluation the geographic frame of reference contained within the CIEEM guidelines (CIEEM 2018) is used, as summarised in Table 5.

Table 4. Ecological Evaluation Criteria

Value/Importance	Criteria
International (European)	Habitats An internationally designated Site or candidate Site (Special Protection Area [SPA]), provisional SPA, Special Areas of Conservation (SAC), candidate SAC, Ramsar Site, Biogenetic / Biosphere Reserve, World Heritage Site or an area that would meet the published selection criteria for designation. A viable area of a habitat type listed in Annex I of the Habitats Directive, or smaller areas of such habitat, which are essential to maintain the viability of a larger whole. Species Any regularly occurring population of internationally important species, threatened or rare in the UK (i.e. a UK Red Data Book species) or, of uncertain conservation status or, of global conservation concern. A regularly occurring, nationally significant population/number of an internationally important species.
National (English)	Habitats A nationally designated Site (Site of Special Scientific Interest [SSSI], National Nature Reserve [NNR], Marine Nature Reserve [MNR] or a discrete area), which would meet the published selection criteria for national designation (e.g. SSSI selection guidelines). Species A regularly occurring, regionally or county significant population/number of an internationally/nationally important species. Any regularly occurring population of a nationally important species, threatened or rare in the region or county.
Regional (South east)	Habitats Sites that exceed County-level designations but fall short of SSSI selection criteria. Species Any regularly occurring, locally significant population of a species listed as being nationally scarce, which occurs in 16 of 100 10km² squares in the UK. A regularly occurring, locally significant population / number of a regionally important species. Sites maintaining populations of internationally/nationally important species that are not threatened or rare in the region or county.
Authority Area (e.g. County or District)	Habitats Sites recognised by local authorities, e.g. Local Wildlife Sites (LWS). County/District Sites that the designating authority has determined meet the published ecological selection criteria for designation, including Local Nature Reserves (LNR). A diverse and/or ecologically valuable hedgerow network. Semi-natural ancient woodland greater than 0.25ha. Species Any regularly occurring, locally significant population of a considered regional rarity or localisation. Sites supporting populations of internationally/nationally/regionally important species that are not threatened or rare in the region or county, and not integral to maintaining those populations. Sites/features scarce in the County / District or that appreciably enrich the County/District habitat resource.
Local (immediate local area or village importance)	Habitats Areas of habitat that appreciably enrich the local habitat resource (e.g. species-rich hedgerows, ponds etc). Sites that retain other elements of semi-natural vegetation that due to their size, quality or the wide distribution within the local area are not considered for the above classifications. Semi-natural ancient woodland smaller than 0.25 ha. Species



Value/Importance	Criteria
	Populations/assemblages of species that appreciable enrich the biodiversity resource within the local context. Sites supporting populations of county/district important species that are not threatened or rare in the region or county and are not integral to maintaining those populations.
Site level (Limited ecological importance)	Sites that retain habitats and/or species of limited ecological importance due to their size, species composition or other factors.

5.2 Site Evaluation

- 5.2.1 No part of the Site or the surrounding area is covered by any form of statutory or non-statutory designation on ecological grounds.
- 5.2.2 The majority of the Site comprises common, wide-spread habitats of little ecological value. The semi-improved grassland does have a raised species diversity compared to the other grasslands within the Site, and hence would be assessed as being of **Site** value.
- 5.2.3 Whilst limited in extent, the native, semi-mature trees around the periphery of the Site increase the habitat diversity as well as offering foraging and nesting potential for common bird species. Hence, they would also be assessed as being of **Site** value.
- 5.2.4 The remaining habitats are considered to be of **Negligible** ecological value.
- 5.2.5 Both slow worm and common lizard are both still relatively common widespread reptile species. However, they receive partial protection under the Wildlife and Countryside Act 1981 (as amended) and are considered to be Species of Principal Importance under Section 41 of the NERC Act 2006. Hence the Low populations identified within the Site are considered to be of **Site** value.
- 5.2.6 No evidence of great crested newts was encountered within Site. Given the distance to the nearest known population and the dispersal barriers surrounding the Site, they are considered to be absent. However, given the high level of legal protection afforded to this species, a precautionary approach may be warranted during site clearance works.
- 5.2.7 Building B1 and B2 were shown to contain active bat roost of pipistrelle species, which would be considered to be of Low conservation value (Mitchell Jones 2004) and hence, would be evaluated as being of **Site** value only.

6 IMPACTS, MITIGATION AND ENHANCEMENTS

6.1 Impacts and mitigation.

- 6.1.1 The proposed development would require the demolition of the buildings within the Site as well as the loss of the grassland, scrub and areas of tall ruderal vegetation.
- 6.1.2 The vast majority of the semi-improved grassland and semi-mature native trees would be retained throughout the development, resulting in a **Negligible** impact.
- 6.1.3 The demolition of the buildings would result in the loss of at least two confirmed pipistrelle roosts, which would, in the absence of mitigation, be considered to result in a permanent, **Negative** impact at a **Site** level. The loss of the roost will be offset through the provision of new, alternative roosting sites incorporated into the new development through the provision of bat boxes in retained trees.
- 6.1.4 Due to the confirmed presence of bat roost within both Buildings B1 and B2, the demolition of these structures will need to be conducted under a derogation licence issued under Regulation 55 of the Conservation of Habitats and Species Regulations 2017.
- 6.1.5 On the implementation of the mitigation strategy, the residual impact upon bats is considered to be **Negligible**.
- 6.1.6 The loss of the grassland, tall ruderal and areas of scrub within the Site would result in the loss of foraging habitat for reptiles and, in the absence of mitigation or avoidance strategies, may result in direct impacts upon individual reptiles. This would result in a permanent, **Negative** impact at a **Site** level.
- 6.1.7 However, prior to the commencement of construction activities within the Site, a Reasonable Avoid Method Statement involving habitat manipulation would be undertaken across the Site. The vegetation within the Site would be gradually reduced in height over several weeks during the reptile active season, with the height of the cut reducing each time. The cutting would start in the east of the Site and move towards the west, where an area specifically designated for wildlife will be created (See Section 13 of the *Landscape Strategy*, Allen Pyke Associates Ref: 2949-RE-01). This would encourage any reptile present in the Site to move towards the wildlife area of their own volition. Any structures within the Site that may harbour reptiles would be dismantled by hand, with any reptile encountered caught and immediately released in the wildlife area. On completion of the habitat manipulation, the wildlife area would be surrounded by temporary reptile exclusion fencing to prevent any reptiles re-entering the construction zone.
- 6.1.8 On completion of the development, the reptile fence would be removed, allowing the reptile to colonise green spaces throughout the development, thus ensuring the long term, favourable conservation status of the population would be maintained.
- 6.1.9 On the implementation of the mitigation strategy, the residual impact upon reptiles is considered to be **Negligible**.
- 6.1.10 Although great crested newt is considered to be absent from the Site, the implementation of the Reasonable Avoidance Method Statement undertaken for reptiles would also ensure

no harm or injury occurred to any newts in the highly unlikely situation they were present within the Site. However, if great crested newts are encountered throughout site clearance works, all works should stop and advice sought from Natural England.

6.2 Enhancements

- 6.2.1 Several ecological enhancements have been designed into the landscape strategy for the Site, including the planting of numerous native tree species including field maple *Acer campestre*, cherry *Prunus* sp., silver birch *Betula pendula* and rowan *Sorbus aucuparia* (See Landscape Strategy for more details).
- 6.2.2 Two dedicated wildlife areas will be created within the Site, one along the western boundary and one in the south east corner of the Site. These will be ecologically connected through the existing boundary habitats within the Site. The wildlife areas will be sown with a species rich, native grassland mix and will also incorporate reptile hibernacula and log piles.
- 6.2.3 Bird and bat boxes will be installed in retained trees around the Site, whilst hedgehog gates will be incorporated into garden fences where appropriate.
- 6.2.4 The long-term ecological enhancements for the Site will be managed in a sustainable manner through the implementation of a Landscape and Ecology Management Plan.

7 SUMMARY

- 7.1.1 A suite of ecological surveys has been undertaken across the Site between 2017 and 2020. The Site was found to comprise mainly species-poor, semi-improved grassland with the occasional area of more species diverse, semi-improved grassland. The occasional area of tall ruderal habitat and scrub is also present within the Site, whilst semi-mature trees are found mainly around the periphery. Wings House is located towards the east of the Site. As the use and management of the Site has not changed, the information presented in the previous reports has been assessed as still being relevant.
- 7.1.2 The Site was found to contain a low population of slow worm and common lizard, whilst two pipistrelle roosts were confirmed within Wings House itself.
- 7.1.3 A series of mitigation methods have been proposed to ensure that the reptile and bat populations identified from within the Site are maintained at a favourable conservation status and that no infringement of the relevant legislation occurs during site clearance works.
- 7.1.4 Ecological enhancements have been built into the Landscape Strategy for the Site to ensure that a long term, lasting biodiversity gain is delivered through the implementation of the proposed development.

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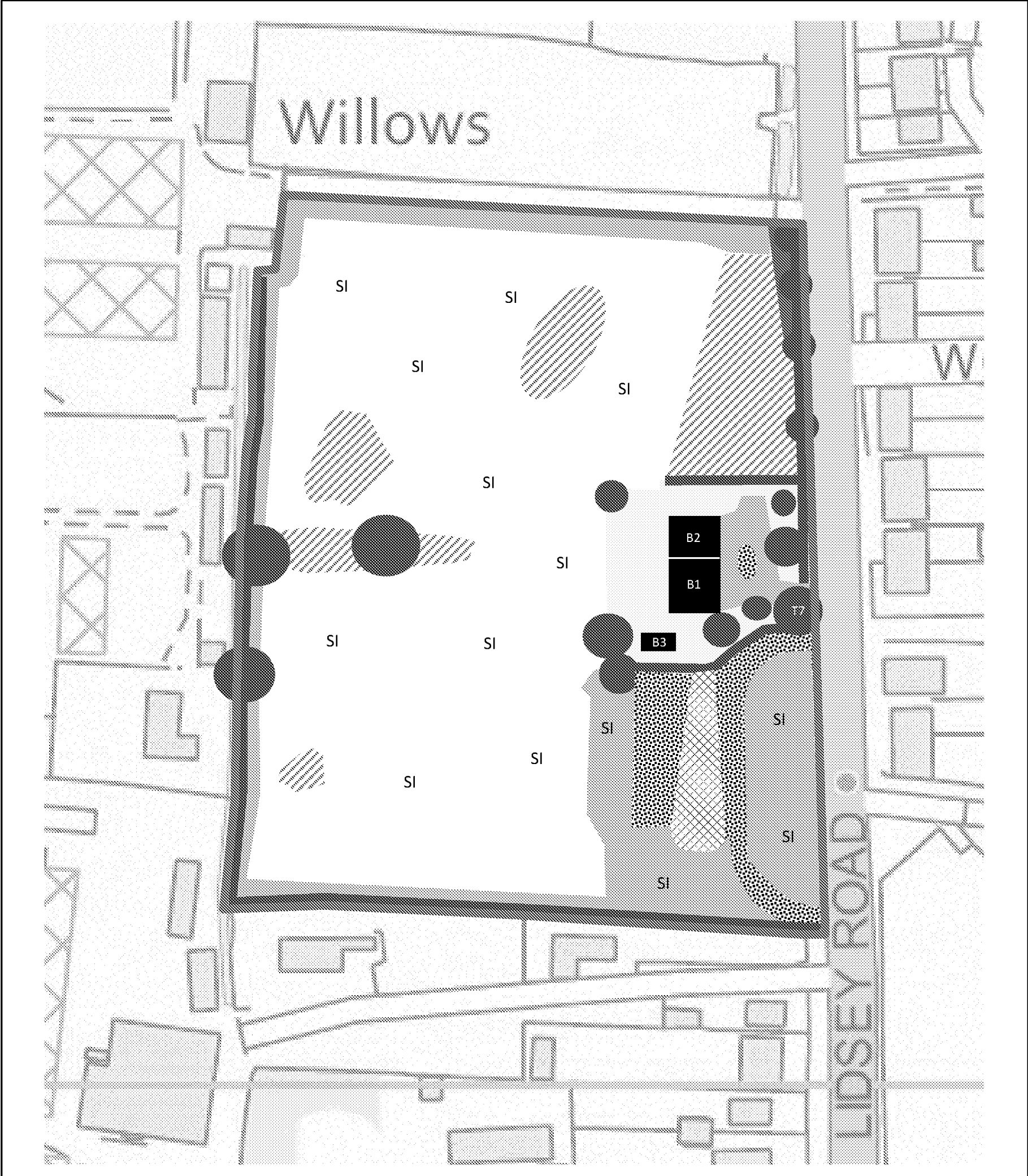
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Legend:

See attached sheet

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Drawing No: Figure 1

Title: Phase 1 Habitat Map

Date: January 2021

Project: Lidsey Road

Client: Thakeham

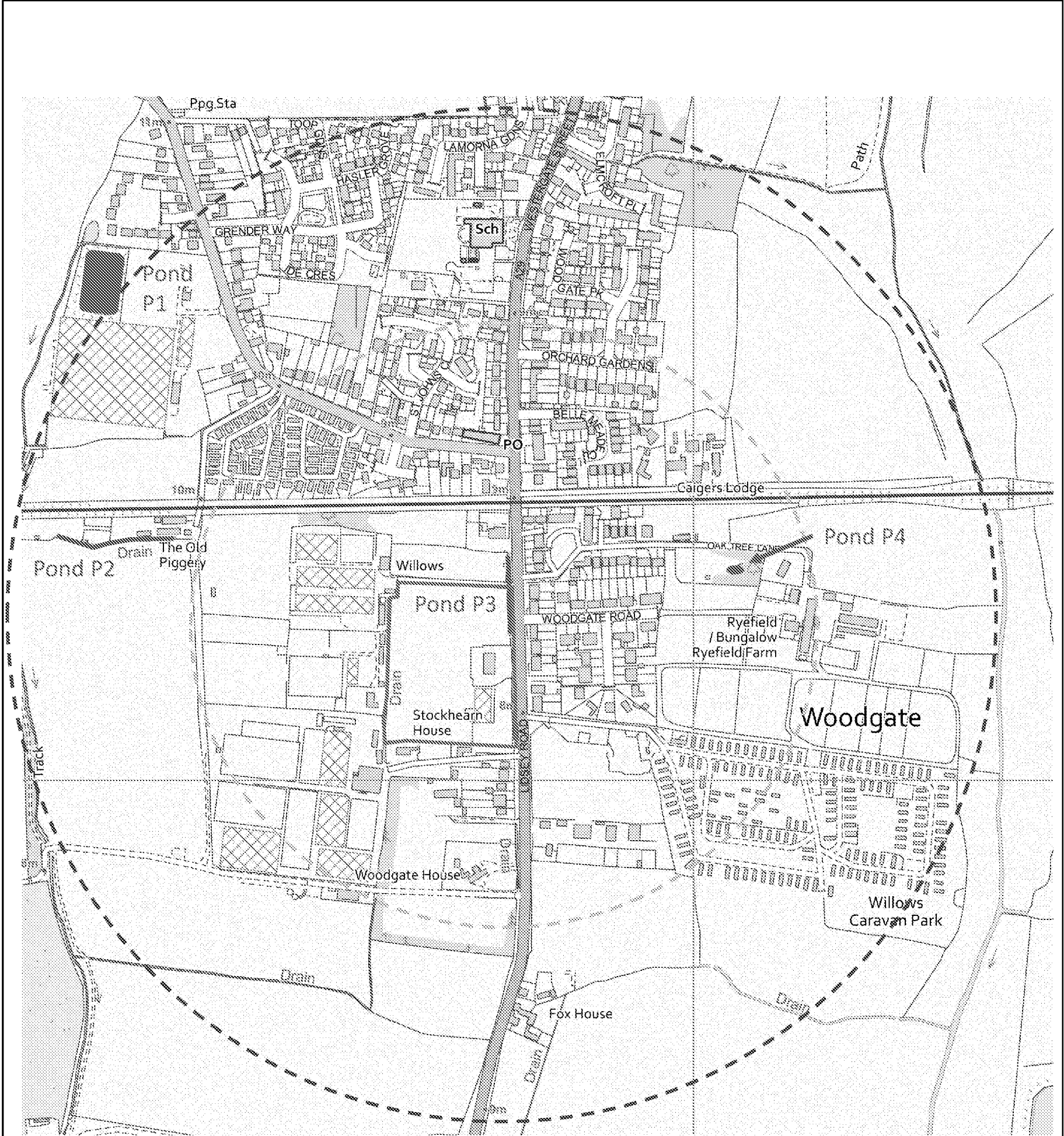


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Phase 1 Habitat Legend

	Scattered tree
	Hedgerow
	Scrub
	Tall ruderal
	Semi-improved grassland
	Species-poor, semi-improved grassland
	Amenity grassland
	Ditch
	Building
	Hardstanding
	Bare ground
	Site Boundary (Approx.)



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Legend: --- 250m Radius --- 500m Radius □ Site boundary 	Drawing No: Figure 2 Title: Pond Locations Date: January 2021 Project: Lidsey Road Client: Thakeham	 Derek Finnie Associates CONSULTANT ECOLOGISTS 20 Soames Place Wokingham Berks RG40 5AT info@derekfinnie.com
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