

Ecological Impact Assessment



Warren Crest Farm Access Track

On behalf of Tony Nasser

June 2025

Ecology by Design Ltd,

Hampden House, Monument Park, Chalgrove, Oxon OX44 7RW.

Tel 01865 893346 www.ecologybydesign.co.uk

Registered in England and Wales No. 9318075.



Project Code	Title	Date of Issue
EBD04442	Warren Crest Farm Access Track EclA	19 June 2025

	Name	Date
Prepared by	Jess Botha BSc (Hons) MSc & Sofia Sanchez Piccone MSc ACIEEM	16 June 2025
Checked by	Jo Sykes BSc (Hons), MCIEEM	18 June 2025

Copyright Ecology by Design Ltd. All rights reserved.

No part of this report may be copied or reproduced by any means without prior written consent from Ecology by Design Ltd. If you have received this report in error please destroy all copies in your possession or control and notify Ecology by Design Ltd.

This report has been commissioned for the exclusive use of the commissioning party unless otherwise agreed in writing by Ecology by Design Ltd; no other party may use, make use of or rely on the contents of the report. No liability is accepted by Ecology by Design Ltd for any of this report, other than for the purposes for which it was originally prepared and provided.

Opinions and information provided in this report are on basis of Ecology by Design Ltd using due skill, care and diligence in the preparation of this report and no explicit warranty is provided as to its accuracy. It should be noted that no independent verification of any of the documents or information supplied to Ecology by Design Ltd has been made.

Under the Construction (Design & Management) Regulations (CDM, 2015) Ecology by Design employees may have designer duties. Ecology by Design staff do not take on the roles of Client, Principal Designer, Principal Contractor, Contractor or Worker. Our staff are appropriately experienced and briefed on health and safety matters. As far as is 'reasonably practical' we seek to eliminate risks and reduce hazards. This applies to all aspects of a development that we have control or influence over. It is the responsibility of the client, principal designer, principal contractor and/or contractor to ensure the specific design and implementation of ecological recommendations satisfy the CDM Regulations.

Contents

1	Executive Summary.....	4
2	Introduction.....	5
2.1	Background.....	5
2.2	Site Description	5
2.3	Proposed Works	5
2.4	Aims of Report.....	5
2.5	Personnel.....	6
3	Methods	7
3.1	Desk Study	7
3.2	Preliminary Ecological Appraisal.....	7
3.3	Ecological Impact Assessment (EclA).....	8
3.4	Bats.....	8
3.5	Badger	9
3.6	Limitations/Constraints	10
4	Results and Interpretation	11
4.1	Designated Sites	11
4.2	Habitats	11
4.3	Species.....	13
5	Potential Impacts and Recommendations	18
5.1	Introduction.....	18
5.2	Designated Sites	18
5.3	Habitats	18
5.4	Protected and Priority Species	19
5.5	Biodiversity Statement	21
6	Relevant Legislation and Policy	23
6.1	Local Planning Policy	23
6.2	Exit from European Union	23
6.3	National Planning Policy Framework.....	24
6.4	Birds.....	26
6.5	Reptiles	27
6.6	Badger	27
6.7	Wild Mammals	28
7	References	29
Appendix 1 -	Photographs	30
Appendix 2 -	Figures.....	31
Appendix 3 -	Definitions of the Geographic Context of Habitat Importance.....	32
Appendix 4 -	Definitions of the Geographic Context of Species Importance.....	33
Appendix 5 -	Baseline Habitat Condition Assessments.....	34

1 Executive Summary

Report purpose	This report identifies the potential ecological impacts, mitigation, compensation and enhancement measures for the proposals at Warren Crest Farm, Wick Hill Lane, Finchampstead, RG40 3PY (central OS grid reference SU 79912 64340), which include the construction of a new access road.
Date and methods of survey	A baseline ecological survey of the site was conducted in December 2024 which included an extended UKHab habitat survey, and badger and daytime bat walkover. Ground level tree assessments for roosting bats took place in May 2025.
Key findings and potential impacts	The access track site is approximately 650m in extent and is proposed to run from the south of the site in a south-westerly direction, to meet the road at the junction of Wick Hill Lane and Jubilee Road. Habitats include bare ground, tall forbs, modified grassland, and scattered trees. There are no ponds within the site and three within 500m of the site, all of which are >250m away. The site lies within the Impact Risk Zone for Longwood Bog Site of Special Scientific Interest, triggering consultation with Natural England. In the absence of mitigation, the proposals are likely to result in net loss of biodiversity within the site. Protected and priority species present or potentially present include: • Opportunities for nesting birds within trees which may result in destruction of nests during site clearance; • Opportunities for reptiles, badger, hedgehog, brown hare and other wild mammals to make use of the site, with the proposals potentially impacting their use of the landscape; and • Negligible opportunities for other protected or priority species. A baseline assessment of habitat value to inform a future Biodiversity Net Gain assessment identified 0.72 habitat units and 0.05 watercourse units currently on site.
Measures to avoid and/or reduce impacts and deliver biodiversity enhancements	• A Biodiversity Net Gain assessment must be conducted using the Statutory Metric to detail how a net gain in biodiversity will be achieved using land within client ownership. • Adjacent trees must be adequately protected using root protection zones. • A Precautionary Working Methods Statement to address the risk to nesting birds, reptiles, badger, hedgehog, brown hare and other wild mammals during site clearance.

2 Introduction

2.1 Background

2.1.1 Ecology by Design was commissioned by Anderson Orr Architects, on behalf of Tony Nasser, to undertake an Ecological Impact Assessment of land at Warren Crest Farm, Wick Hill Lane, Finchampstead, RG40 3PY (central OS grid reference SU 79912 64340). This included a Preliminary Ecological Appraisal, Daytime Bat Walkover, Ground Level Tree Assessment, and badger walkover survey.

2.1.2 An Arboricultural Impact Assessment (AIA) was conducted by Venners Arboriculture in December 2023. For consistency between reports, all tree numbers in this report match the identification system set in the AIA (Venners Arboriculture, 2023).

2.2 Site Description

2.2.1 The proposed access track is approximately 650m in extent (~0.36ha) and extends southwest to the site through two fields, along a woodland parcel, to meet the road at the junction of Wick Hill Lane and Jubilee Road.

2.2.2 The site lies approximately 3km south of Wokingham, Berkshire. In the wider landscape, the site is bordered by agricultural land to the east, west, and south, with residential properties to the north and scattered parcels of woodland throughout the area, particularly to the east.

2.3 Proposed Works

2.3.1 The proposals for the site are for the modification and formalisation of an access track, running from the south of B6 to join the B3348 southwest of the site, including the adjustment of the site entrance over a ditch.

2.4 Aims of Report

2.4.1 This report is an Ecological Impact Assessment (EcIA) which presents the approach and findings of the assessment of the potential ecological impacts of the proposed development works in accordance with industry standard guidance (CIEEM, 2024; BSI Standards Limited, 2013). It has been produced following a Preliminary Ecological Appraisal. The development does not require an Environmental Impact Assessment (EIA), therefore EcIA has been included for clarity on the title page.

2.4.2 This report will be submitted to Wokingham Borough Council to inform the planning application.

2.5 Personnel

- 2.5.1 This project is led by Assistant Ecologist Jess Botha BSc (Hons), MSc who has over one year of experience in ecological consultancy, with support provided by Ecologist Sofia Sanchez Piccone MSc, ACIEEM who has five years of experience in ecological consultancy. Both are experienced in conducting habitat and protected species assessments. The Preliminary Ecological Appraisal survey was completed by Jess and Sofia, who holds a Natural England Level 1 class licence for surveying bats (licence number 2024-11923-CL17-BAT). The report was written by Jess and Sofia.
- 2.5.2 Project supervision and review of the report was provided by Senior Ecologist Jo Sykes, BSc (Hons), MCIEEM, who has been an ecological consultant for eight years.

3 Methods

3.1 Desk Study

3.1.1 A desk study was carried out in 2022 and updated in 2025 to identify:

- Internationally protected sites within the potential zone of influence of the site (minimum of 7km);
- Nationally protected sites within 5km of the site; and
- Non-statutory designated sites and records of protected or priority species within 2km of the site (central OS national grid reference SU 8008 6457).

3.1.2 A 2km search radius for species and non-statutory designated sites is justified due to the small size of the site and small-scale development works being undertaken. It is thought highly unlikely that species or non-statutory sites outside this search zone would be affected by the project. A larger search radius is applied for internationally and nationally designated sites as these sites are protected to a higher level and can often be more sensitive to disturbance. These search distances are also based on industry standard guidance.

3.1.3 Sources consulted include:

- Thames Valley Environmental Records Centre (TVERC) (returned 16th August 2022);
- MAGIC (magic.defra.gov.uk) (last accessed 7th January 2025); and
- Local Planning Policy documents and the local planning portal.

3.2 Preliminary Ecological Appraisal

3.2.1 A Preliminary Ecological Appraisal (PEA) was conducted on 17th December 2024, using standard techniques and methodologies (CIEEM, 2017) and the nomenclature of Stace (2019).

3.2.2 The PEA includes a survey of the habitats utilising the standard UK Habitat Classification system (UKHab Ltd, 2023). Weather conditions during the survey were cool (7°C), calm (wind 1 on Beaufort scale¹) and overcast (cloud 8/8²).

3.2.3 Opportunities for or evidence of protected and priority species were also identified. Where potential impacts on features of ecological interest are identified, the PEA is extended to include an assessment of impact. Any further surveys required are outlined and

¹ The Beaufort scale is an empirical measure from 0-12 which relates wind speed to observed conditions. 0- Calm, 1- Light air, 2- Light breeze, 3- Gentle breeze, 4- Moderate breeze, 5- Fresh breeze etc.

² Cloud cover is measured using the system called oktas. The visible sky is divided into eight and cloud presence is determined within each section. A value of one to eight is then assigned (1 okta being cloudless to 8 oktas being total cloud cover).

recommendations are made for appropriate avoidance, mitigation, compensation and enhancement measures.

3.3 Ecological Impact Assessment (EclA)

3.3.1 Wherever potential impacts as a result of the proposals were identified, an Ecological Impact Assessment (EclA) was undertaken. The function of the EclA was to identify, quantify and evaluate the potential effects of the proposed development on designated sites, notable/protected habitats and species. The EclA was informed by the desk study, PEA and survey work described in Sections 3.4 – 3.5 below and undertaken with reference to best practice guidelines (CIEEM, 2024) whereby:

- the scope of the EclA was informed by a desk study and initial site survey;
- importance of ecological features within the site was established and ecological importance identified with reference to known criteria and geographic context where appropriate and available;
- assessment of potential impacts of the proposed development was made with reference to their significance and geographic context; and
- avoidance, mitigation, compensation and enhancement measures were identified and recommended as appropriate.

3.4 Bats

Daytime Bat Walkover Survey

3.4.1 A daytime bat walkover (DBW) survey was conducted by Jess Botha and Sofia Sanchez Piccone (Natural England level 1 survey class licence number: 2024-11923-CI17-BAT) whilst conducting the PEA survey.

3.4.2 During the DBW the surveyors noted any habitats suitable for roosting, foraging or commuting bats within or adjacent to the site. This includes recording structures, habitat features and trees which could be suitable for bats.

Table 3.1: *Categorisation of Potential Suitability of Sites for Bats (Collins, 2023)*

Suitability	Description of Potential Flightpaths and Foraging Habitats
None	No suitable features for flightpaths and foraging.
Negligible	No obvious flightpath or foraging features but cannot be discounted.
Low	Habitats with limited connectivity suitable for use by low numbers of bats.

Suitability	Description of Potential Flightpaths and Foraging Habitats
Moderate	High habitat connectivity including flightpath or foraging habitats features.
High	Well-connected habitats high quality habitats for foraging which is likely to be in regular use.

Ground Level Tree Assessment

- 3.4.3 A ground level tree assessment (GLTA) was conducted by Sofia on 12th May 2025. Weather conditions were wet from overnight rain, warm (20°C), mostly cloudy (cloud 6/8) and calm (wind 2 on Beaufort scale).
- 3.4.4 The surveyor used a high-power torch (LEDLenser Lamp) and 1.8m telescopic ladder to identify and inspect features of interest. Where possible, each aspect of the tree was inspected to identify features with potential to support roosting bats such as woodpecker holes, rot holes, splits, cracks, flaking bark and/or ivy cover. Where any evidence of use by bats such as droppings, staining or scratches around such features were present this was noted.
- 3.4.5 Collins (2023) categorises the suitability of trees for roosting bats as follows:
- None = Either no Potential Roosting Features (PRFs) in the tree or highly unlikely to be any;
 - FAR = Further assessment required to establish if PRFs are present in the tree; or
 - PRF = A tree with at least one PRF.
- 3.4.6 Where possible, each PRF was assessed using the following criteria;
- PRF-I = PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats; or
 - PRF-M = PRF is suitable for multiple bats and may therefore be used by a maternity colony.

3.5 Badger

- 3.5.1 A badger (*Meles meles*) survey was undertaken whilst conducting the PEA survey. The badger survey involved walking across the site searching for evidence of badgers and badger activity in accordance with standard guidance (Gov.uk, 2015b). Any badger setts found were defined as main / annexe / subsidiary / outlier sett as adapted from Neal and Cheeseman (1996) and Harris *et al.* (1989). In addition to badger setts other evidence of badgers was also recorded. This included:
- Live or dead badgers;
 - Foraging scrapes (distinctive excavations made by badgers when searching for food);
 - Badger dung;

- Dung pits (a badger will often deposit its dung within a small excavated pit);
- Latrines (a collection of dung pits) (Roper, 2010);
- Badger guard hairs;
- Mammal paths; and
- Badger tracks.

3.6 Limitations/Constraints

- 3.6.1 The wildlife and wider ecological interest of a site can change. The report presented here is a statement of the findings of surveys carried out in December 2024 and May 2025. For the purpose of this report the results of site visits are discussed in the present tense. Any appreciable delay in making reference to this report or changes to the proposed development boundary may necessitate a re-survey.
- 3.6.2 The species information gained from local record centres is largely derived from data submitted from members of the public and volunteers. For this reason, it should be understood that the desk study may not provide an exhaustive list of all protected species that could occur in the local area.
- 3.6.3 It is recognised that TVERC records were last requested in 2022 and that more recent records may therefore not be accounted for. However, it is not considered likely that they would materially change the assessment of potential impacts or recommendations of this report therefore an update is not considered proportionate.
- 3.6.4 Weather conditions as detailed in 3.2.2 and 3.3.3 were suitable to conduct the surveys.

4 Results and Interpretation

4.1 Designated Sites

- 4.1.1 The desk study identified one internationally designated site for nature conservation within 7km of the site, nine nationally designated sites for nature conservation within 5km and fourteen non-statutory sites within 2km of the site.

Table 4.1: *Internationally classified / designated sites within 7km of the site*

Name & international reference	Distance & direction from site	Size and interest
Thames Basin Heaths (SPA ³) – UK9012141	3.98km E and S	1,283.85 ha; Lowland heath supporting important populations of Dartford warbler (<i>Sylvia undata</i>), nightjar (<i>Caprimulgus europaeus</i>) and woodlark (<i>Lullula arborea</i>) which are vulnerable ground nesting birds.
Longmoor Bog SSSI – 1000943	1.81km NW	14.4ha; One of Berkshire's few base-poor valley mires containing a well-developed carr, wet heathland and secondary mixed woodland.

- 4.1.2 Only those sites of potential relevance are detailed in Table 4.1, with the remainder scoped out of further assessment due to their size, location, habitat types, lack of connectivity and/or absence of shared features of interest, therefore no potential impacts as a result of the proposals are anticipated. The LPA and Local Records Centre has access to the full list of sites. A full list can be provided upon request.

4.2 Habitats

- 4.2.1 At the time of the survey (December 2024), the habitats described in Table 4.2 were recorded on site. Photographs are included in Appendix 1 and a habitat map is included in Figure 1, Appendix 2.

Table 4.2: *Habitat types identified during the UKHab survey*

Habitat type & UKHab code	Parcel or Feature Reference and Description (Secondary codes are shown in square brackets where applicable)
Modified grassland Code g4	PR1 is a section of rough grassland ~5cm tall dominated by Yorkshire fog (<i>Holcus lanatus</i>). Occasionally encountered in the sward were false oat-grass (<i>Arrhenatherum elatius</i>), fescue (<i>Festuca</i> sp.) and perennial ryegrass (<i>Lolium perenne</i>), with rare instances of sweet vernal grass (<i>Anthoxanthum odoratum</i>), dandelion (<i>Taraxacum</i> spp.), cleavers

³ Special Protection Areas (SPAs) are strictly protected sites classified in accordance with Article 4 of the EC Birds Directive (79/409/EEC), which came into force in April 1979. They are classified for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species.

	(<i>Galium aparine</i>), common nettle (<i>Urtica dioica</i>), bramble (<i>Rubus fruticosus</i> agg.), groundsel (<i>Senecio vulgaris</i>), crane's-bill (<i>Geranium</i> sp.), yarrow (<i>Achillea millefolium</i>), and chickweed (<i>Stellaria media</i>). PR2 has a sward ~5cm in height with greater amounts of bare ground throughout. It was also dominated by Yorkshire fog, with perennial ryegrass and false oat-grass rarely noted in the sward. PR3 has a mostly short sward measuring 2-5cm in height, with small areas exceeding 15cm in height. Abundant in the sward are perennial ryegrass, soft brome (<i>Bromus hordeaceus</i>) and sweet vernal grass, while Yorkshire fog was frequently noted. Bramble and barren brome (<i>Bromus sterilis</i>) were occasionally seen, and common nettle, creeping thistle (<i>Cirsium arvense</i>), dandelion, creeping buttercup (<i>Ranunculus repens</i>), and vetch (<i>Vicia</i> sp.) were rarely seen. There is a stand of ~10 dead trees (TN1) in PR3 - the suitability of trees for roosting bats is detailed in Section 4.3.
Tall forbs Code g4(16)	PR4 is a stand of common nettle and ferns, with some meadow foxtail (<i>Alopecurus pratensis</i>) and bramble interspersed. There are overgrown log piles in this small area, providing some structure.
Bare ground Code u(510)	Areas around field entrances are bare due to high access use, as is the section existing informal access track to the farmhouse.
Ditch Code g(510)	D1 is a wet ditch with clear water. There was a range of emergent and submerged aquatic vegetation, and it was heavily shaded by trees. It was culverted in part (code 851) to allow vehicle access through the existing southern site entrance.
Culvert Code u1(851)	D2 is a culvert allowing vehicular access from the farmyard to the existing informal access track.

Adjacent habitats

- 4.2.2 There are five trees immediately adjacent to the redline boundary (two are shown in the arborist report): T69, a mature oak (*Quercus robur*) 48cm diameter at breast height (dbh) and 8m tall; T70-T72, mature poplars (*Populus nigra*) ~50cm dbh and 24m tall; TG4, a group of coppiced hazel (*Corylus avellana*) measuring 35cm dbh and 4m tall; and a young maple (*Acer* sp.) ~25cm dbh and ~15m tall.
- 4.2.3 There is a line of trees associated with a ditch adjacent to the redline boundary along the existing informal access track. A ~6m gap in the trees allows culvert D2 to connect with the farmyard. This corridor forms part of the connective links in the wider landscape.
- 4.2.4 There was an oak and hazel plantation woodland immediately adjacent to the site to the east; no ground flora and a sparse understorey was noted during the PEA or GLTA. This plantation connects to the wider landscape through mature hedgerows to other woodland parcels in the local area.

- 4.2.5 There are three ponds within 500m of the site, all of which are >300m from site (Figure 2, Appendix 2).

Conclusion

- 4.2.6 The bare ground and modified grassland on site offer negligible ecological value, comprising a limited assemblage of species which are common within a local and national context. The adjacent habitats including the mature trees are of a higher ecological value and are of importance within a local context.

4.3 Species

Bats

Desk Study

- 4.3.1 636 records of at least 12 bat species have been recorded within 2km of the site, including barbastelle (*Barbastella barbastellus*), brown long-eared bat (*Plecotus auritus*), common pipistrelle (*Pipistrellus pipistrellus*), Daubenton's bat (*Myotis daubentonii*), Leisler's bat (*Nyctalus leisleri*), Nathusius's pipistrelle (*Pipistrellus nathusii*), Natterer's bat (*Myotis nattereri*), noctule (*Nyctalus noctula*), serotine (*Eptesicus serotinus*), and soprano pipistrelle (*Pipistrellus pygmaeus*). Of these 636 records, 105 records relate to bat roosts. Ten of the roost records are within the boundary of the site and include soprano pipistrelle, common pipistrelle, and long-eared species. However, the records have a low resolution of 1km square. The most recent of these records is from 2017.
- 4.3.2 35 European Protected Species Licences (EPSLs) for bats have been returned within 2km, with the closest for the destruction of a brown long-eared bat and common pipistrelle resting place in 2015, approximately 0.3km west of the site.

Daytime Bat Walkover

- 4.3.3 Habitats with suitability for foraging or commuting bats within or adjacent to the site include:
- Scattered trees T69-T72 and TG4; and
 - Plantation woodland, lines of trees and hedgerows adjacent to site.
- 4.3.4 Trees with suitability for roosting bats are discussed within the GLTA section below. There are no other habitats with suitability for roosting bats.
- 4.3.5 Overall, the site is identified as being of low suitability for foraging and commuting bats.

Ground Level Tree Assessment

- 4.3.6 The bat roosting suitability of trees affected by the proposals is detailed within Table 4.3.

Table 4.3: Suitability of trees within and/or adjacent to the site for roosting bats

Tree ID	Location, Description and PRFs (None / PRF-I suitable for individual or very small numbers of bats / PRF-M suitable for multiple bats)	Overall Suitability
TN1	TN1 is a group of ~10 dead trees, which are all <30cm dbh. Four had ivy on their trunks, however the ivy did not create features. None of the trees were considered likely to offer any PRFs due to their intact nature.	NONE
T69	T69 is an oak with 48cm dbh. It contains deadwood, pruning wounds and ivy, which would require further assessment to determine its potential suitability for roosting bats. <u>This tree is to be retained and protected from the works; therefore, no further surveys are recommended.</u>	FAR
T70	T70 is a poplar with 51cm dbh and 24m tall. Ivy and dead branches obscure the trunk, constraining assessment. <u>This tree is to be retained and protected from the works; therefore, no further surveys are recommended.</u>	FAR
T71	T70 is a poplar with 47cm dbh and 24m tall. Ivy and dead branches obscure the trunk, constraining assessment. <u>This tree is to be retained and protected from the works; therefore, no further surveys are recommended.</u>	FAR
T72	T70 is a poplar with 48cm dbh and 24m tall. Ivy and dead branches obscure the trunk, constraining assessment. <u>This tree is to be retained and protected from the works; therefore, no further surveys are recommended.</u>	FAR
T73	T73 is a maple with a dbh of ~25cm. No PRFs were found during the survey.	NONE
TG4	TG4 is a group of hazel trees. No PRFs were found during the survey.	NONE

Badger

- 4.3.7 45 records of badger were returned by the desk study, three of which appear to relate to a sett within the site, although the low resolution of these records means that an exact location cannot be identified.
- 4.3.8 A hole consistent with badger creation was found >5m east of the site. No other evidence of badger was found on site. The habitats within the site are unsuitable for sett creation, however the wider landscape of the farm likely provides sett creation opportunities. Badger could also use the site for foraging and commuting.

Other Protected, Priority or Invasive Species

- 4.3.9 The results of the PEA and desk study are presented together in Table 4.4 below. The species / species groups present or potentially present are presented in order of relevance to this development. Relevant legislation and policy are referred to as appropriate and further details are provided in Section 6.
- 4.3.10 There are no watercourses within the site or within 500m of the site therefore species associated with such habitats such as white-clawed crayfish (*Austropotamobius pallipes*), otter

(*Lutra lutra*), water vole (*Arvicola amphibius*), fish and aquatic invertebrates will not be affected by the proposals. As such, they are not discussed further within this report.

Table 4.4: Presence of or potential for protected / notable / invasive species within the site and local area

Species	Protection or Status *	Presence/potential at the site
Birds	W&CA 1981 Sch1 / Sch5	10,076 records of 106 bird species were returned by the desk study, comprising a mix of species typical of urban, arable, wetland and woodland habitats. A large proportion of the records pertain to wetland habitats (Moor Green Lakes), which are not present on or near site. There are opportunities for foraging and nesting birds within the site. Nesting opportunities are limited to the dead trees (TN1). Adverse impacts possible, further consideration likely.
Reptiles	W&CA 1981 Sch5	334 reptile records comprising grass snake (<i>Natrix helvetica</i>), common lizard (<i>Zootoca vivipara</i>), slow-worm (<i>Anguis fragilis</i>), adder (<i>Vipera berus</i>), and smooth snake (<i>Coronella austriaca</i>) were returned by the desk study. The grassland parcels have some commuting suitability on site for wide-ranging reptiles such as grass snake, while the tall forbs offer limited foraging and sheltering opportunities for reptiles. There were more suitable habitats within the surrounding landscape of the farm with potential for resting, foraging, or commuting reptiles. Some potential adverse impacts possible, further consideration required.
Hedgehog (<i>Erinaceus europaeus</i>)	SPI	22 records of hedgehog were returned by the desk study. The habitats on and adjacent to the site are largely unsuitable for hedgehog due to the sparse cover or very small extents. Nonetheless, it is possible individuals could commute across the site. Some potential adverse impacts possible, further consideration required.
Brown hare (<i>Lepus europaeus</i>)	SPI	No records of this species were returned by the desk study. There are no suitable habitats for brown hare on the site, and there was no evidence of this species found during the site visit. There are suitable habitats for the species in the wider landscape of the farm, potentially allowing individuals to commute across the site. Some potential adverse impacts possible, further consideration required.
Great crested newt (<i>Triturus cristatus</i>)	EPS. SPI. W&CA 1981 Sch5	Three records for this species were returned for within 2km of the site, the closest of which was 1.7km from the site, of two individuals recorded in 2012. No EPSLs were returned for great crested newt within 2km of the site.

		Together with the fact that there were no ponds either on site or within 250m of the site and very limited suitable terrestrial habitats on site, impacts upon great crested newt are considered to be unlikely. No adverse impacts likely.
Common toad (<i>Bufo bufo</i>)	SPI	29 records of this species were returned by the desk study. The lack of ponds within the site and within 250m of the site and the very limited suitability of terrestrial habitats on site made the area unsuitable for toads. No adverse impacts likely.
Dormouse (<i>Muscardinus avellanarius</i>)	EPS. SPI. W&CA 1981 Sch5	No records of this species were returned by the desk study. The site contained minimal suitable habitat for dormice to nest or forage, and connectivity within the landscape was poor, therefore they were considered likely absent. No adverse impacts likely.
Invertebrates	SPIs.	189 records of 38 protected invertebrate species were returned by the desk study. 89 of these records are for stag beetles (<i>Lucanus cervus</i>), a Schedule 5 species. The site is unlikely to support an important assemblage and are of no elevated importance when compared with abundant similar opportunities within the immediate surrounds of the site. No adverse impacts likely.
Protected plants	W&CA 1981 Sch8	67 records of 17 protected plant species were returned by the desk study. The common and widespread habitats present within the site were largely unsuitable for protected plant species and therefore it was unlikely that they will be present. No adverse impacts likely.
Invasive species	W&CA 1981 Sch9; IAS Sch4	17 records of two invasive plant species were returned by the desk study, including rhododendron (<i>Rhododendron ponticum</i>), and buddleia (<i>Buddleja davidii</i>). No records of invasive faunal species were returned by the desk study. No Schedule 9 species were found during the PEA survey. No adverse impacts likely.

* Where:

EPS = European Protected Species under the provisions of the Conservation of Habitats and Species Regulations 2017 (as amended)

SPI = Species of Principal Importance under Section 41 of the NERC Act 2006

W&CA 1981 = Wildlife and Countryside Act 1981 (as amended)

IAS = The Invasive Alien Species Regulation (Regulation (EU) 1143/2014)

Sch1 = Schedule 1 Birds which are Protected by Special Penalties (W&CA 1981)

Sch4 = Schedule 4 of the Invasive Alien Species (Enforcement and Permitting) Order 2019

Sch5 = Schedule 5 Animals which are Protected (W&CA 1981)

Sch8 = Schedule 8 Plants which are Protected (W&CA 1981)

Sch9 = Schedule 9 Animals and Plants to which Section 14 Applies (W&CA 1981)

Conclusion

- 4.3.11 The site has the potential to support nesting birds within the scattered dead trees (TN1).
- 4.3.12 The site does not have potential to support roosting bats on any trees affected by the proposals. There is potential for bat foraging within the nearby woodlands and commuting along nearby hedgerows and trees.
- 4.3.13 Reptiles, badger, hedgehog, brown hare and other wild mammals could make use of the site, particularly the areas of rougher grassland.
- 4.3.14 The geographic context of the site's species importance is considered to be local due to the species that could move through the site offering intrinsic value (Appendix 4). Regardless, some species may have implications to development of the site as a result of legislative protection or planning policy.

5 Potential Impacts and Recommendations

5.1 Introduction

5.1.1 This section presents the potential impacts and subsequent recommendations for the proposed development at the site.

Adoption of the Mitigation Hierarchy

5.1.2 In accordance with the National Planning Policy Framework (NPPF) (see Section 6) and British Standard 42020:2013 'Code of Practice for Planning and Development' (BSI Standards Limited, 2013), the 'Mitigation Hierarchy' has been adopted at the site with regards to the potential ecological impacts of the proposals. The mitigation hierarchy outlines a stepwise process as follows:

- **Avoidance** – as a first option, adverse impacts should be avoided through good design, such as retaining and safeguarding important ecological features wherever practicable;
- **Mitigation** – where unavoidable, adverse impacts should be reduced as much as possible, such as reducing land-take of important habitats;
- **Compensation** – where residual effects remain, compensation should be secured to offset adverse impacts, such as through compensatory habitats creation; and
- **Enhancement** – opportunities for net gains in biodiversity should be explored and included wherever appropriate.

5.2 Designated Sites

5.2.1 Natural England defines Impact Risk Zones (IRZs) around SSSI's, SACs, SPAs and Ramsar sites and categories of development for local authorities to determine if they need to consult Natural England in regard to potential impacts upon them.

5.2.2 The site lies within the IRZ of the Logwood Bog SSSI. Consultation with Natural England on this application is required: *"Any transport proposal including new or extended footways, cycleways, roads/car parks, railways and waterways (excluding routine maintenance)".*

5.3 Habitats

Potential Impacts

5.3.1 The proposals will result in the loss of modified grassland (PR1 – PR3), tall forbs (PR4) and scattered trees (TN1 and T73) for the access track, and the partial loss and restoration of ditch D1 by moving the existing culvert west for the new site entrance. It is understood that no artificial lighting is proposed.

- 5.3.2 In line with the mitigation hierarchy, impacts upon habitats should be minimised as much as possible, particularly those of higher ecological value, such as adjacent mature trees and woodlands. The ditch D1 also need to be protected from run-off during site works.

Recommendation R1: Safeguarding Trees

- 5.3.3 Retained trees adjacent to the site will be protected during the enabling and construction phase in line with standard arboriculturist best practice (BS5837:2012), or as otherwise directed by a suitably qualified arboriculturist to safeguard the root protection areas. These root protection areas must be strictly enforced to prevent further damage to the trees on site.

Recommendation R2: Native Planting

- 5.3.4 Included in the proposals wherever appropriate, biodiversity gain should be maximised, for instance through:

- native hedges that include at least three woody species, such as holly, hawthorn (*Crataegus monogyna*), guelder-rose (*Viburnum opulus*), elder (*Sambucus nigra*) or dog-rose (*Rosa canina*) instead of fences.

- 5.3.5 New planting to support biodiversity may comprise a mixture of native and formal landscaping species that simultaneously provide resources to local wildlife and remain appropriate to amenity or residential settings. Examples appropriate to formal and garden settings include the usage of native species such as dogwood (*Cornus sanguinea*) and ornamental varieties of known value to wildlife such as plants for pollinators, for example lavender 'Gros Bleu'.

5.4 Protected and Priority Species

Potential Impacts

- 5.4.1 Site clearance and construction works could result in the killing / injury of nesting birds, wild mammals and reptiles which could make use of the site. This would be considered an offence as these species are all are protected from killing and injury (and disturbance in the case of badger in setts) as well as damage and destruction of active nests and setts (see Section 6).

Recommendation R3: Precautionary Working Method Statement

- 5.4.2 A Precautionary Working Methods Statement (PWMS) is recommended to demonstrate engagement with the ecological mitigation hierarchy and implement appropriate measures to avoid, reduce, minimise and compensate the impacts of the proposals, along with enhancement post development and best practice measures.
- 5.4.3 The PWMS will include a pre-start briefing for all personnel working on the site, regulate the phasing and timing of the works for each species, determine which works are to proceed under

the supervision of a suitably qualified and experienced Ecological Clerk of Works (ECoW), and prescribe habitat suitability reduction works, exclusionary methods and best practice measures to avoid attracting wildlife onto the site.

5.4.4 The following measures should be adopted to safeguard wild animals should they enter the site during construction works, and to discourage wild animals from entering the site. This can be achieved by implementing the following standard mitigation measures:

- works to suitable nesting habitat/features should be scheduled to avoid the bird nesting season (March to August inclusive). Should such works take place during March-August inclusive, they must be immediately preceded by a check for any active nests by a suitably qualified ecologist. Any active nests identified during works (regardless of time of year) would need to be protected and left with a suitable buffer (to be defined by the ecologist) until the nest is no longer active;
- any dismantling of existing brash or log piles is to be done by hand outside of hibernation season (November-March) to avoid harm to vulnerable animals;
- a walkover check to identify mammal holes potentially dug by badger on site is to be undertaken by a suitable experienced ecologist three months prior to works commencing. Should a potential sett be found, a monitoring survey will take place and a licence may be required for the works to proceed lawfully;
- the creation of temporary brash or log piles within the site should be avoided as these may be adopted by wildlife for shelter;
- once works commence, any newly discovered mammal entrances within the site should be safeguarded and left *in situ* and reported immediately to a suitably qualified ecologist, who will advise on appropriate steps if needed for works to resume;
- pipes should be capped off overnight to prevent animals entering and becoming trapped;
- trenches or pits should be backfilled the same day. If left overnight, these will need to be provided with a means of escape for wildlife should any enter such as a collapsed edge or a flat roughened stable plank (no steeper than 45°) acting as a ramp to the surface;
- all trenches and pits will be inspected each morning to ensure no wildlife has become trapped overnight. Should a badger become trapped in a trench it will likely dig itself into the side of the trench. Should a trapped badger be encountered, a suitably qualified ecologist will be contacted immediately for further advice;
- the prolonged storage of uncontained and uncovered topsoil in piles on site will be carefully considered and possibly fenced-off if needed as these are readily adopted by burrowing animals such as foxes (*Vulpes vulpes*) for dens;

- chemicals will be contained in such a way that wild animals cannot access or knock them over;
- fires should be avoided altogether within the site; and
- loose litter and food will not be left in accessible areas of the site overnight.

5.5 Biodiversity Statement

- 5.5.1 It has been identified that the proposed development is not exempt from the Biodiversity Net Gain (BNG) requirements of 10%, therefore a BNG assessment has been completed to identify the biodiversity losses and gains as a result of the proposals.
- 5.5.2 A habitat condition assessment was undertaken by Sofia to inform the BNG baseline value, on 12th May 2025, within the optimal survey period (May-June). Weather conditions at the time of the survey were wet from overnight rain, warm (20°C), mostly cloudy (cloud 6/8) and calm (wind 2 on Beaufort scale).
- 5.5.3 DEFRA's Statutory Metric Calculation tool determines a baseline biodiversity value of 0.72 habitat units and 0.05 watercourse units currently on site (Table 5.1). Appendix 6 includes the baseline habitat condition assessment tables. In the absence of appropriate compensation, the proposals will result in a net loss of -0.50 (-69.31%) habitat units and -0.01 (-23.42%) watercourse units.
- 5.5.4 The Client is committed to meeting this offset within their land ownership (i.e., through a blue line boundary), as the extent of the redline boundary limits the number of units that can be successfully secured.
- 5.5.5 The metric identifies that in order for the proposals to achieve 10% gain and meet the trading rules, a biodiversity offset of 0.79 habitat units and 0.05 watercourse units (of which 0.01 would need to be medium distinctiveness or higher) would be required. This approach is considered feasible through the estimated the securing of ~0.153ha of other neutral grassland and ~0.0059km of ditch.

Table 5.1: Results of Baseline Statutory Metric Calculator

Broad Habitat – Habitat	Habitat Condition	Baseline Unit Value	Habitat Distinctiveness	Trading Rules	Estimated Unit Loss
<i>Habitat Units</i>					
Grassland – Modified grassland	Poor	0.51	Low	Same distinctiveness or better habitat required	0.32

Urban – Tall forbs	Moderate	0.03	Low	Same distinctiveness or better habitat required	0.03
Urban – Bare ground	Poor	0.18	Low	Same distinctiveness or better habitat required	0.15
<i>Watercourse Units</i>					
Ditches	Poor	0.03	Medium	Same habitat required	0.03
Culvert	Poor	0.01	Low	Better distinctiveness habitat required	0.00

6 Relevant Legislation and Policy

6.1 Local Planning Policy

6.1.1 The Wokingham Borough Local Plan lists policies that are of relevance to this development:

Policy CP7 – Biodiversity

6.1.2 This policy states that:

‘Sites designated as of importance for nature conservation at an international or national level will be conserved and enhanced and inappropriate development will be resisted. The degree of protection given will be appropriate to the status of the site in terms of its international or national importance.

Development

- a) *Which may harm county designated sites (Local Wildlife Sites in Berkshire), whether directly or indirectly, or*
- b) *Which may harm habitats or species of principal importance in England for nature conservation, veteran trees or features of the landscape that are of major importance for wild flora and fauna (including wildlife or river corridors), whether directly or indirectly, or*
- c) *That compromises the implementation of the national, regional, county and local biodiversity action plans*

Will only be permitted if it has been clearly demonstrated that the need for the proposal outweighs the need to safeguard the nature conservation importance, that no alternative site that would result in less or no harm is available which will meet the need, and:

- i) *Mitigation measures can be put in place to prevent damaging impacts; or*
- ii) *Appropriate compensation measures to offset the scale and kind of losses are provided.*

6.2 Exit from European Union

6.2.1 The Conservation of Habitats and Species Regulations 2017 (as amended), referred to as the ‘2017 Regulations,’ are one of the pieces of domestic law that transposed the land and marine aspects of the Habitats Directive (Council Directive 92/43/EEC) and certain elements of the Wild Birds Directive (Directive 2009/147/EC) (known as the Nature Directives). Changes to the 2017 Regulations have been made by the Conservation of Habitats and Species (Amendment)

(EU Exit) Regulations 2019 (referred to as the '2019 Regulations') to transfer functions from the European Commission to the appropriate authorities in England and Wales.

- 6.2.2 The amendments prescribed by the 2019 Regulations allow existing protections afforded by current wildlife legislation and transposed EC Council Directives to be operable from 01 January 2021.
- 6.2.3 The 2019 Regulations protect rare and vulnerable birds and the habitats that they depend upon. This is achieved in part through the classification of Special Protection Areas (SPAs). The Habitats Directive aims to protect plants, habitats and animals other than birds. This is achieved in part through the creation of Special Areas of Conservation (SACs). SPAs and SACs are collectively referred to as the 'National Site Network'.
- 6.2.4 Designated Wetlands of International Importance (known as Ramsar sites) do not form part of the National Site Network, however, all Ramsar sites remain protected in the same way as SACs and SPAs.

6.3 National Planning Policy Framework

- 6.3.1 The National Planning Policy Framework (NPPF) was updated in December 2024 (MHCLG, 2024) thereby replacing the older version of December 2023.
- 6.3.2 In relation to planning for climate change, para 162 states: Plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating and drought from rising temperatures. Policies should support appropriate measures to ensure the future health and resilience of communities and infrastructure to climate change impacts, such as providing space for physical protection measures, or making provision for the possible future relocation of vulnerable development and infrastructure.
- 6.3.3 In relation to planning and flood risk, para 182 states 'Applications which could affect drainage on or around the site should incorporate sustainable drainage systems to control flow rates and reduce volumes of runoff, and which are proportionate to the nature and scale of the proposal. These should provide multifunctional benefits wherever possible, through facilitating improvements in water quality and biodiversity, as well as benefits for amenity. Sustainable drainage systems provided as part of proposals for major development should:
 - a) take account of advice from the Lead Local Flood Authority;
 - b) have appropriate proposed minimum operational standards; and

c) have maintenance arrangements in place to ensure an acceptable standard of operation for the lifetime of the development.'

6.3.4 The new framework sets out in section 15 that planning policies and decisions should contribute to and enhance the natural and local environment by ... (d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs (Para 187).

6.3.5 To protect and enhance biodiversity and geodiversity (Para 192), plans should:

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

6.3.6 When determining planning applications, local planning authorities should apply the following principles (Para 193):

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

be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

6.3.7 The following should be given the same protection as habitats sites (Para 194):

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

6.3.8 The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site (Para 195).

6.4 Birds

6.4.1 All nesting wild birds are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition to this, for some rarer species (listed on Schedule 1 of the Act), it is an offence to disturb them whilst they are nest building or at or near a nest with eggs or young, or to disturb the dependent young of such a bird.

6.4.2 The Conservation of Habitats and Species Regulations 2017 (as amended) places duties on competent authorities (including Local Authorities and National Park Authorities) in relation to wild bird habitat. These provisions relate back to Articles 1, 2 and 3 of the EC Directive on the conservation of wild birds (2009/147/EC, 'Birds Directive') (Regulation 10 (3)) requires that the objective is the 'preservation, maintenance and re-establishment of a sufficient diversity and area of habitat for wild birds in the United Kingdom, including by means of the upkeep, management and creation of such habitat, as appropriate, having regard to the requirements of Article 2 of the new Wild Birds Directive...' Regulation 10 (7) states: 'In considering which measures may be appropriate for the purpose of security or contributing to the objective in [Regulation 10 (3)] Paragraph 3, appropriate account must be taken of economic and recreational requirements'.

6.4.3 In relation to the duties placed on competent authorities under the 2017 Regulations (as amended), Regulation 10 (8) states: 'So far as lies within their powers, a competent authority in exercising any function [including in relation to town and country planning] in or in relation

to the United Kingdom must use all reasonable endeavours to avoid any pollution or deterioration of habitats of wild birds (except habitats beyond the outer limits of the area to which the new Wild Birds Directive applies).’

6.5 Reptiles

- 6.5.1 All native reptile species receive legal protection in Great Britain under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Viviparous lizard, slow-worm, grass snake and adder are protected against killing, injuring and unlicensed trade only. Sand lizard and smooth snake receive additional protection as “European Protected Species” under the provisions of The Conservation of Habitats and Species Regulations 2017 (as amended) and are fully protected under the Wildlife and Countryside Act 1981 (as amended).
- 6.5.2 All six native species of reptile are included as ‘species of principal importance’ for the purpose of conserving biodiversity under Section 41 (England) of the NERC Act 2006 and Section 7 of the Environment (Wales) Act 2016.
- 6.5.3 Current Natural England Guidelines for Developers states that ‘where it is predictable that reptiles are likely to be killed or injured by activities such as site clearance, this could legally constitute intentional killing or injuring.’ Further the guidance states: ‘Normally prohibited activities may not be illegal if ‘the act was the incidental result of a lawful operation and could not reasonably have been avoided’. Natural England ‘would expect reasonable avoidance to include measures such as altering development layouts to avoid key areas, as well as capture and exclusion of reptiles.’
- 6.5.4 The Natural England Guidelines for Developers state that ‘planning must incorporate two aims where reptiles are present:
- To protect reptiles from any harm that might arise during development work;
 - To ensure that sufficient quality, quantity and connectivity of habitat is provided to accommodate the reptile population, either on-site or at an alternative site, with no net loss of local reptile conservation status.’

6.6 Badger

- 6.6.1 Badger is protected under the Protection of Badgers Act 1992. It is not permitted to wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so; or to intentionally or recklessly interfere with a sett. Sett interference includes disturbing badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it. A badger

sett is defined in the legislation as “a structure or place, which displays signs indicating current use by a badger”.

- 6.6.2 ODPM Circular 06/2005 (ODPM, 2005) provides further guidance on statutory obligations towards badger within the planning system. Of particular note is paragraph 124, which states that “The likelihood of disturbing a badger sett, or adversely affecting badgers’ foraging territory, or links between them, or significantly increasing the likelihood of road or rail casualties amongst badger populations, are capable of being material considerations in planning decisions.”
- 6.6.3 Natural England provides Standing Advice (Gov.uk, 2015), which is capable of being a material consideration in planning decisions. Natural England recommends mitigation to avoid impacts on badger setts, which includes maintaining or creating new foraging areas and maintaining or creating access (commuting routes) between setts and foraging/watering areas.

6.7 Wild Mammals

- 6.7.1 The Wild Mammals (Protection) Act 1996 (as amended) makes provision for the protection of wild mammals from certain cruel acts, making it an offence for any person to intentionally cause suffering to any wild mammal. In the context of development sites, for example, this may apply to rabbits in their burrows.

7 References

- BCT & ILP (2023). *Guidance Note GN08/23 Bats and artificial lighting at night*. Bats and the Built Environment series
- BSI Standards Limited (2013). *BS42020:2013 Biodiversity: Code of practice for planning and development*.
- BSI Standards Limited (2012). *BS5837:2012 Trees in relation to design, demolition and construction: Recommendations*.
- CIEEM (2021). *Good Practice Guidance for Habitats and Species*. Chartered Institute of Ecology and Environmental Management, Winchester.
- CIEEM (2017). *Guidelines for preliminary ecological appraisal, 2nd edition*. Chartered Institute of Ecology and Environmental Management, Winchester
- Collins, J. (ed.) (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn)*. The Bat Conservation Trust, London.
- DEFRA (2024a). *Statutory Biodiversity Metric Tool* (version 1.0.3).
- DEFRA (2024b). *Statutory Biodiversity Metric User Guide*.
- Gov.uk (2015a). *Guidance. Bats: surveys and mitigation for development projects*. Natural England and Department for Environment, Food & Rural Affairs, Worcester.
- Gov.uk (2015b). *Guidance. Badgers: surveys and mitigation for development projects*. Natural England and Department for Environment, Food & Rural Affairs, Worcester.
- MHCLG (2024). *National Planning Policy Framework*. Ministry of Housing, Communities & Local Government
- Neal, E., and Cheeseman, C.L. (1996). *Badgers*. T & AD Poyser Natural History Ltd, London
- Roper, T.J. (2010). *Badger*. Harper Collins.
- Stace, C. (2019). *New British Flora of the British Isles, fourth edition*. Cambridge University Press.
- UKHab Ltd. (2023). *UK Habitat Classification Version 2.0* at <https://ukhab.org>
- Venners Arboriculture (2023). *Arboricultural Impact Assessment*. Wallingford, Oxfordshire.
- Wokingham Borough Council (2010). *Wokingham Borough Local Development Framework – Core Strategy Development Plan Document* (Adopted – 29 January 2010). Wokingham, Berkshire.

Appendix 1 - Photographs

Photograph 1: Area of existing trackway crossing culverted ditch D2



Photograph 2: Existing trackway to north



Photograph 3: PR1



Photograph 4: PR2 with adjacent plantation



Photograph 5: D1



Photograph 6: PR4 & TN1



Appendix 2 - Figures

Next page:

- Figure 1: Baseline Habitats
- Figure 2: Ponds



LEGEND

Site boundary (0.36 ha)

Habitats

Bare ground (0.0894 ha)

Modified grassland (0.2585 ha)

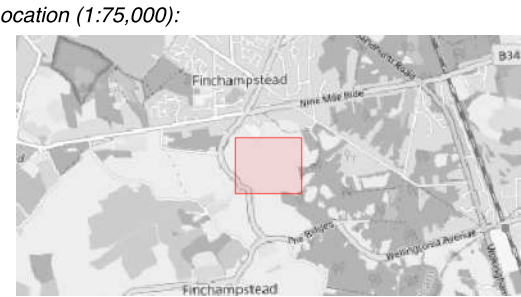
Tall forbs (0.0081 ha)

Rivers

Ditch (0.01 km)

Culvert (0.01 km)

Target note



Project:
**Warren Crest Farm,
Finchampstead**

Client:
Anderson Orr Architects

Drawing Title:
Baseline Habitats

Drawing No.:	Scale (@A3):
EBD_4442_DR001	1:2,000
Central Eastings, Northings:	Date Drawn:
479950, 164330	20/06/2025
Drawn by:	Approved by:
JE	BG

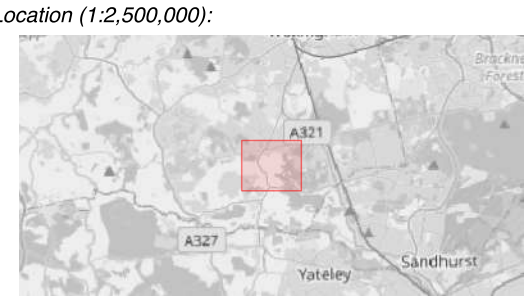
This drawing is the property of Ecology by Design Ltd and must not be reproduced without the written permission of Ecology by Design Ltd.

This drawing contains data reproduced from © OpenStreetMap Contributors and Ordnance Survey data © Crown Copyright and database right 2025 Aerial imagery - Imagery ©2025 Maxar Technologies, Map data ©2025.



LEGEND

- Site boundary (0.36 ha)
- 250m buffer
- 500m buffer
- Pond



Project:
**Warren Crest Farm,
Finchampstead**
Client:
Anderson Orr Architects

Drawing Title:
Pond Map

Drawing No.: EBD_4442_DR002	Scale (@A3): 1:6,000
Central Eastings, Northings: 479950, 164330	Date Drawn: 20/06/2025
Drawn by: JE	Approved by: BG

This drawing is the property of Ecology by Design Ltd and must not be reproduced without the written permission of Ecology by Design Ltd.

This drawing contains data reproduced from © OpenStreetMap Contributors and Ordnance Survey data © Crown Copyright and database right 2025 Aerial imagery - Imagery ©2025 Maxar Technologies, Map data ©2025.

Appendix 3 - Definitions of the Geographic Context of Habitat Importance

Geographic Context of Importance	Examples
International value	Ramsar Sites, Special Protection Areas, Biosphere Reserves, Special Areas of Conservation. Sites supporting populations of internationally important species.
National value	SSSIs or non-designated Sites meeting SSSI selection criteria, NNRs, Marine Nature Reserves, NCR Grade 1 Sites. Sites containing viable areas of key habitats identified in the UK Biodiversity Action Plan.
Regional value	Sites containing viable areas of threatened habitats listed in a Regional BAP (or some Natural Areas), comfortably exceeding SINC criteria, but not exceeding SSSI criteria.
County / Metropolitan	Sites meeting the criteria for county or metropolitan designation (SINC, CWS, etc.). Ancient semi-natural woodland, LNRs or viable areas of key habitat types listed in county BAPs/Natural Areas.
District / Borough	Undesignated Sites or features considered to appreciably enrich the habitat resource in the District or Borough.
Local i.e., Parish / Neighbourhood	Undesignated Sites or features which appreciably enrich the habitat resource within the Parish or Neighbourhood.
Negligible value	Low grade and widespread habitats.

Appendix 4 - Definitions of the Geographic Context of Species Importance

Geographic Context of Importance	Examples
International	Any regularly occurring population of an internationally important species, which is threatened or rare in the UK. i.e. it is a UK Red Data Book species or listed as occurring in 15 or fewer 10km squares in the UK (categories 1 and 2 in the UK BAP) or of uncertain conservation status or of global conservation concern in the UK BAP. A regularly occurring, nationally significant population/number of any internationally important species.
National	Any regularly occurring population of a nationally important species which is threatened or rare in the region or county (see local BAP). A regularly occurring, regionally or county significant population/number of any nationally important species.
Regional	Any regularly occurring, locally significant population of a species listed as being nationally scarce which occurs in 16-100 10km squares in the UK or in a Regional BAP or relevant Natural Area on account of its regional rarity or localisation; A regularly occurring, locally significant number of a regionally important species.
County/ Metropolitan	Any regularly occurring, locally significant population of a species which is listed in a County/Metropolitan “red data book” or BAP on account of its regional rarity or localisation; A regularly occurring, locally significant number of a County/Metropolitan important species.
District / Borough	A population of a species that is listed in a District/Borough BAP because of its rarity in the locality or in the relevant Natural Area profile because of its regional rarity or localisation; A regularly occurring, locally significant number of a District / Borough important species during a critical phase of its life cycle.
Local i.e., Parish / Neighbourhood	Species that are not threatened but are valued at a local level on intrinsic appeal.
Negligible	Common or widespread species.

Appendix 5 - Baseline Habitat Condition Assessments

Next page:

- Grassland – Modified grassland
- Urban – Tall forbs
- Urban – Bare ground
- Ditches - Ditch

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)													
UK Habitat Classification (UKHab) Habitat Type													
Grassland - Modified grassland													
Habitat Description													
ukhab – UK Habitat Classification													
On-site or off-site, site name and location	Warren Crest Farm, Access Track	Survey date and Surveyor name		12/5/2025 SSP									
		Survey reference (if relating to a wider survey)											
Limitations (if applicable)		Habitat parcel reference											
		PR1	PR2	PR3									
		Grid reference											
Condition Assessment Criteria													
		Criterion passed (Yes or No)										Notes (such as justification)	
A	There are 6-8 vascular plant species per m ² present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition. Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m ² (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	0	0	0									
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	0	0	1									
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	1	1	1									
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	0	0	0									
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	1	1	0									
F	Cover of bracken <i>Pteridium aquilinum</i> less than 20%.	1	1	1									
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	1	1	1									
Essential criterion achieved (Yes or No)		No	No	No									
Number of criteria passed		4	4	4									
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved x/✓											
Passes 6 or 7 criteria including passing essential criterion A	Good (3)												
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)												
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)	X	X	X									
Suggested enhancement interventions to improve condition score													
Footnotes													
Footnote 1 – Creeping thistle <i>Cirsium arvense</i> , spear thistle <i>Cirsium vulgare</i> , curled dock <i>Rumex crispus</i> , broad-leaved dock <i>Rumex obtusifolius</i> , common nettle <i>Urtica dioica</i> , creeping buttercup <i>Ranunculus repens</i> , greater plantain <i>Plantago major</i> , white clover <i>Trifolium repens</i> and cow parsley <i>Anthriscus sylvestris</i> .													
Footnote 2 – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.													
Footnote 3 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement.													

Condition Sheet: URBAN Habitat Type													
Habitat Types													
Sparsely vegetated land - Ruderal/Ephemeral Sparsely vegetated land - Tall forbs Urban - Allotments Urban - Biodiverse green roof Urban - Bioswale Urban - Cemeteries and churchyards Urban - Facade-bound green wall Urban - Ground based green wall Urban - Intensive green roof Urban - Open mosaic habitats on previously developed land Urban - Rain garden Urban - Sustainable drainage system (SuDS) Urban - Vacant or derelict land Urban - Bare ground													
Habitat Description													
See the Statutory Biodiversity Metric User Guide for green roofs, and UK Habitat Classification (UKHab) for other habitats: ukhab – UK Habitat Classification													
On-site or off-site, site name and location	Warren Crest Farm, Access Track			Survey date and Surveyor name		12/5/25 SSP							
				Survey reference (if relating to a wider survey)									
Limitations (if applicable)				Habitat parcel reference									
				PR4	Bare ground								
Grid reference													
Condition Assessment Criteria				Criterion passed (Yes or No)								Notes (such as iustification)	
Core Criteria - must be assessed for all urban habitat types :													
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.			1	0								
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.			0	0								
C	Invasive non-native plant species (listed on Schedule 9 of WCA ¹) and others which are to the detriment of native wildlife (using professional judgement ²) cover less than 5% of the total vegetated area ³ . Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).			1	1								
Additional Criterion - must be assessed for Open mosaic habitat on previously developed land only:													
D	The parcel shows spatial variation and forms a mosaic of bare substrate PLUS: - At least four early successional communities (a) to (i); Communities: (a) annuals; (b) mosses/liverworts; (c) lichens; (d) ruderals; (e) inundation species; (f) open grassland; (g) flower-rich grassland; (h) heathland, (i) pools.												
Additional Criteria - must be assessed for Bioswale and SuDS habitat types only:													
E1	Plant species are mostly native. If non-native species are present, they should not be detrimental to the habitat or native wildlife.												
E2	The vegetation is comprised of plant species suited to wetland or riparian situations.												
Additional Criterion - must be assessed for Intensive green roofs only:													
F	The roof has a minimum of 50% native and non-native wildflowers. 70% of the roof area is soil and vegetation (including water features).												
Additional Criterion - must be assessed for Biodiverse green roofs only:													
G	The roof has a varied depth of 80 – 150 mm; at least 50% is at 150 mm and is planted and seeded with wildflowers and sedums or is pre-prepared with sedums and wildflowers. Note – to achieve Good condition, some additional habitat, such as sand piles, stones, logs etc. are present.												
Essential criteria relevant for habitat type achieved (Yes or No)				Yes	Yes								

Number of criteria passed		2	1										
Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓											
Results for habitats requiring assessment of 3 core criteria only (all listed urban habitats except Open mosaic habitat on previously developed land, Bioswale, SuDS and Green roofs) :													
• Passes all 3 core criteria; AND • Meets the requirements for Good condition within criterion C.	Good (3)												
• Passes 2 of 3 core criteria; OR • Passes 3 of 3 core criteria but does not meet the requirements for Good condition within criterion C.	Moderate (2)	X											
• Passes 0 or 1 of 3 core criteria.	Poor (1)		X										
Results for Green roofs and Open mosaic habitat on previously developed land (requiring assessment of 4 criteria only - core criteria plus additional criterion specified for habitat type):													
• Passes all 3 core criteria; AND • Meets the requirements for Good condition within criterion C; AND • Passes additional criterion relevant to specific habitat type (D, F or G).	Good (3)												
• Passes 2 or 3 of 4 criteria; OR • Passes 4 of 4 criteria but does not meet the requirements for Good condition within criterion C.	Moderate (2)												
• Passes 0 or 1 of 4 criteria.	Poor (1)												
Results for Bioswale or SuDS (requiring assessment of 5 criteria - core criteria plus additional criteria specified for habitat type):													
• Passes all 3 core criteria; AND • Meets the requirements for Good condition within criterion C; AND • Passes all additional criteria relevant to specific habitat type (Group E).	Good (3)												
• Passes 3 or 4 of 5 criteria; OR • Passes 5 of 5 criteria but does not meet the requirements for Good condition within criterion C.	Moderate (2)												
• Passes 2 or fewer of 5 criteria.	Poor (1)												
Suggested enhancement interventions to improve condition score													
Footnotes													

Condition Sheet: DITCH Habitat Type			
Habitat Type			
Watercourses - Ditches			
Habitat Description			
See the Statutory Biodiversity Metric User Guide.			
On-site or off-site, site name and location	Warren Crest Farm, Access Track	Survey date and Surveyor name	12/5/2025 SSP
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference		Habitat parcel reference	D1
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	0	
B	A range of emergent, submerged and floating-leaved plants are present. As a guide >10 species of emergent, floating or submerged plants present in a 20 m ditch length.	1	
C	There is less than 10% cover of filamentous algae and or duckweed <i>Lemna</i> spp. (these are signs of eutrophication).	1	
D	A fringe of aquatic marginal vegetation is present along more than 75% of the ditch.	0	
E	Physical damage is evident along less than 5% of the ditch, with examples of damage including: excessive poaching, damage from machinery use or storage, or any other damaging management activities.	0	
F	Sufficient water levels are maintained - as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	1	
G	Less than 10% of the ditch is heavily shaded.	0	
H	There is an absence of non-native plant and animal species ¹ .	1	
Number of criteria passed		4	
Condition Assessment Result (out of 8 criteria)	Condition Assessment Score	Score Achieved x/✓	
Passes 8 criteria	Good (3)		
Passes 6 or 7 criteria	Moderate (2)		
Passes 5 or fewer criteria	Poor (1)	X	
Suggested enhancement interventions to improve condition score			
Footnotes			