The Orchard, Ridding Lane, Whalley BB7 9TW

ECOLOGICAL SURVEY AND ASSESSMENT

January 2026

ERAP (Consultant Ecologists) Ltd Reference: 2025-249

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CONTENTS

List of Tables

List of Figures

Document Control

Survey Type:	**Surveyors**[1]	**Survey Date(s)**
Ecological appraisal surveys	Victoria Burrows B.Sc. (Hons) M.Sc. CEnv MCIEEM Principal Ecologist	13th August 2025
Reporting	**Personnel**	**Date**
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Checked	Rebecca Bayley	6th January 2026
Revised and issued	Victoria Burrows	8th January 2026
Report issued to	Wilson Mason	
Version Number	1	

[1] *Licence reference numbers*

Bats

Victoria Burrows, Natural England Class Survey Licence (bats, Level 2) Registration Number 2015-10390-CLS-CLS

SUMMARY

Introduction and Scope

i. This report presents the results of a preliminary ecological appraisal carried out at the land known as The Orchard, Ridding Lane, Whalley BB7 9TW. The site is currently used on an irregular basis to host events in teepees / marquees. A planning application seeks to expand the use and have the facilities in place from May to September each year. Although the proposals and associated habitat area to be impacted are relatively minor, it is understood that this will require an application for a change in use class from agriculture to commercial.

ii. This report presents the results of a desktop study and data search, an extended Phase 1 Habitat Survey and the results of the survey and assessment for relevant protected species. The surveys were carried out by a licensed, qualified and experienced ecologist and are in accordance with recognised survey guidelines.

iii. The scope of survey undertaken is appropriate and proportionate to the conditions present and has facilitated the application of the mitigation hierarchy and an assessment of the likely impact of the proposals on designated sites for nature conservation habitats and protected species. The collated baseline surveys have informed the scope of recommendations and actions to be accommodated by the site proposals to avoid significant effects on features of ecological value, minimise impacts where avoidance is not possible, and to secure maximised opportunities for biodiversity as part of the proposals.

Results of Survey and Assessment

iv. The approximately 0.7394 hectare (ha) site is located on the south side of Ridding Lane and lies adjacent to the Whalley Abbey East Gatehouse. The site comprises a field of mown modified grassland with margins of tall forbs and areas of planted mixed scrub over neutral grassland. At the eastern area of the site is an area of less frequently mown other neutral grassland. The site also contains an area of orchard. In addition to a semi-mature Pear and small fruit trees within the orchard, there are 11 individual trees within the site comprising 10 mature Horse-chestnut trees along the northern site margin (T01 to T10) and a young Silver Birch (T11) at the southern site margin.

v. In consideration of the distances, and the absence of direct habitat and hydrological connectivity between the site and any statutory and non-statutory designated sites for nature conservation in the wider area, it is considered that the proposals will have no direct or indirect effect on any designated sites for nature conservation or their features of special interest.

vi. No semi-natural or irreplaceable habitats are present at the site. The orchard at the eastern area of the site is a Priority Habitat; the orchard will be retained by the proposals and the nearby grasslands will be enhanced to complementary habitats as part of the proposals and statutory biodiversity net gain (BNG) requirements. Indian Balsam and Giant Hogweed are present in the site and the proposals provide an opportunity to eradicate and secure the long-term control of non-native invasive plant species within the site, as listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) (**Section 5.3**).

vii. Habitats at the site margins and in the wider area are likely to be used by foraging bats. Inappropriate use of artificial lighting at the site may have an adverse effect on use of the local area by foraging bats and other wildlife. Guidance to avoid a significant impact on foraging bats and to conserve habitats for use by foraging bats is provided at **Sections 4.4** and **5.2**.

viii. Mandatory measures to be applied to ensure the protection of nesting birds during and prior to the site preparation works are described at **Section 5.4** and recommendations for the provision of nesting opportunities for conservation targets and woodland birds are detailed in **Section 5.5**.

ix. The habitats at the site are suitable for use by badger and Priority Species such as hedgehog. Best practice guidance for the protection of wildlife to be applied prior to and during site clearance and construction operations is described in **Section 5.5**.

x. Appropriate and proportionate survey effort and / or assessment, in accordance with standard survey guidelines has been applied to discount adverse effects on other relevant protected species. No further surveys for other protected species are necessary to inform a planning application.

Recommendations and Conclusion

xi. It is concluded that the proposals at The Orchard are feasible and acceptable in accordance with the identified ecological considerations and relevant planning policy.

xii. The mitigation hierarchy has been applied and, in the presence of mandatory actions and best practice measures described in **Section 5.0**, adverse effects on designated sites for nature conservation are reasonably discounted and appropriate mitigation / compensation to address identified and potential impacts on protected species such as nesting birds are feasible and can be secured.

xiii. The report describes the appropriate and proportionate measures and recommendations that aim to enhance the value of the site for wildlife such as roosting bats, nesting birds and biodiversity. The recommendations comprise landscape planting, habitat creation and the application of positive habitat management in the long-term to achieve measurable gains for biodiversity and compliance with the National Planning Policy Framework, local planning policy and best practice.

1.0 INTRODUCTION

1.1 Background and Rationale

1.1.1 ERAP (Consultant Ecologists) Ltd was commissioned to carry out an ecological survey and assessment at the land known as 'The Orchard' off Ridding Lane, Whalley BB7 9TW (hereafter the 'site'). The Ordnance Survey (OS) grid reference at the centre of the site is SD 72855 36156. An aerial image of the site and its surrounding habitats is appended at **Figure 1** (source image: ESRI World Imagery).

1.1.2 The site is currently used on an irregular basis to host events in teepees / marquees. A planning application seeks to expand the use and have the facilities in place from May to September each year. Although the proposals and associated habitat area to be impacted are relatively minor, it is understood that this will require an application for a change in use class from agriculture to commercial.

1.2 Scope of Works

1.2.1 The scope of ecological works undertaken in August 2025 comprised:

a. A desktop study and data search for known ecological information at the site and the local area;

b. A preliminary ecological appraisal which has comprised an extended Phase 1 Habitat Survey and assessment, and assessment of the habitats present at the site using the UK Habitats Classification;

c. Assessment of the ecological value of the habitats within the site with the use of the National Vegetation Classification (NVC) and the Ratcliffe criteria, as presented in *A Nature Conservation Review* (Ratcliffe, 1977);

d. A daytime bat walkover survey for bats, which has comprised an assessment of the suitability of the habitats within the site and the surrounding area for foraging and commuting bats, preliminary roost assessment of relevant structures and a ground level tree assessment;

e. Survey and assessment of all habitats for relevant statutorily protected species[1] and other wildlife including badger (*Meles meles*), otter (*Lutra lutra*), bird species, great crested newt (*Triturus cristatus*) and reptiles;

f. The identification of any potential ecological constraints on the proposals and the specification of the scope of mitigation and ecological enhancement required in accordance with wildlife legislation, planning policy guidance and other relevant guidance; and

g. The identification of any further surveys or precautionary actions that may be required to inform the progression of the site through the planning process or prior to the commencement of on-site activities.

[1] In accordance with *Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact on the Planning System* (Office of the Deputy Prime Minister, 2005) developers should not be required to undertake surveys for protected species unless there is reasonable likelihood of the species being present and affected by the development.

2.0 METHOD OF SURVEY

2.1 Desktop Study and Data Search

2.1.1 The following sources of information and ecological records were consulted:

a. MAGiC Maps: A web-based interactive map which brings together geographic information on key environmental schemes and designations, including details of statutory nature conservation sites;

b. Ancient Tree Inventory (Woodland Trust, 2025): An online database of ancient and veteran trees;

c. Environment Agency Main River Map (Environment Agency, 2025);

d. Lancashire Local Nature Recovery Strategy (LNRS);

e. Lancashire Environment Record Network (LERN), the local biological record centre; and

f. Lancashire Biodiversity Action Plan (BAP).

2.2 Survey Date, Surveyor and Conditions

2.2.1 The site was surveyed by Victoria Burrows B.Sc. (Hons) M.Sc. CEnv MCIEEM on 13th August 2025. The weather conditions were dry and sunny with a light air (Beaufort scale 1) and an air temperature of 30°C.

2.3 Vegetation and Habitats

2.3.1 A Phase 1 Habitat Survey map was prepared for the site and the immediate surrounding area and is appended at **Figure 2**. The mapping is based on the Joint Nature Conservation Committee Phase 1 Habitat Survey methodology (JNCC, 2010) with minor adjustments to illustrate and examine the habitats with greater precision.

2.3.2 On site habitat mapping was assisted via use of GPS technology, using a Land Registry plan as a base plan.

2.3.3 The plant species within the site boundary were determined with estimates of the distribution, ground cover, abundance and constancy of individual species. The estimation of abundance was based on the DAFOR system, where D = Dominant, A = Abundant, F = Frequent, O = Occasional and R = Rare, this being a widely used and accepted system employed by ecological surveyors. The terms L = Locally and V = Very were additionally used to describe the plant species distributions with greater precision.

2.3.4 Stands of vegetation and habitats were described and evaluated using the National Vegetation Classification (NVC). The NVC provides a systematic and comprehensive analysis of British vegetation and is a reliable framework for nature conservation and land-use planning.

2.3.5 Habitats within the site were assessed in accordance with *The UK Habitat Classification Version 2.0* (UKHab Ltd, 2023). The UK Habitat Classification, or 'UKHab' has been designed to function at two scales of minimum mappable unit (MMU): fine scale (25m^2 or 5 metres length) and large scale (400m^2 or 20 metres length). It has been considered for the purposes of this survey that the fine scale of 25m^2 or 5 metres length MMU is appropriate.

2.3.6 Searches were made for uncommon, rare and statutorily protected plant species, those species listed as protected in the *Wildlife and Countryside Act 1981* (as amended) and species which are indicators of important and uncommon plant communities. Plant nomenclature follows *New Flora of the British Isles 3rd Edition* (Stace, 2010).

2.3.7 Searches were carried out for the presence of invasive species, including those listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended), including Japanese Knotweed (*Fallopia japonica*), Indian Balsam (*Impatiens glandulifera*) and Giant Hogweed (*Heracleum mantegazzianum*).

2.4 Relevant Protected Animal Species and Other Wildlife

Bat Species

Surveyor

2.4.1 The site was assessed for its suitability to support roosting bats by Victoria Burrows, Natural England Class Survey Licence WML CL18 (Bat Survey Level 2), Registration Number 2015-10390-CLS-CLS. The surveyor's qualifications and experience meet the criteria as defined in the *Technical Guidance Series Competencies for Species Survey: Bats* (CIEEM, 2013).

Habitat Assessment for Commuting / Foraging Bats

2.4.2 Habitats within and adjacent to the site were assessed for their value and suitability for commuting and foraging bats in accordance with guidance provided in Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn)* (Collins, J. (ed), 2023). Reference has been made to the categories, descriptions and examples presented in **Table 2.1**.

Table 2.1: Consideration of Suitability of Foraging and Commuting Habitat for Bats

Suitability	Potential Flight Paths and Foraging Habitats
None	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade / protection for flight-lines, or generate/shelter insect populations available to foraging bats).
Negligible [a]	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.
[a] Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute).	

Preliminary Roost Assessment: Whalley Viaduct

2.4.3 There are no buildings or other structures within the site. Whalley Viaduct lies immediately adjacent to the site (with brick pillars each side of the access track). The viaduct will not be directly affected by the proposals. The lower sections of the pillars were examined for their suitability for use by roosting bats and searched for potential roost features with reference to standard methods including the *Bat Mitigation Guidelines* (Mitchell-Jones, 2004), the *Bat Workers' Manual 3rd Edition* (Mitchell-Jones & Mcleish, 2004) and *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn)* (Collins, J. (ed), 2023).

2.4.4 Discussion in relation to the suitability of the section of viaduct nearest the site for use by roosting bats and the risk of any adverse impacts to roosting bats in the presence of the proposals is presented in **Section 3.3**.

Ground Level Tree Assessment

2.4.5 Although no trees will be removed by the proposals, for completeness, a ground level tree assessment of the trees within the site was conducted to assess their suitability for use by roosting bats, and to inform whether further surveys or precautionary measures were required.

2.4.6 Trees were assessed from the ground using binoculars and a high-powered torch. Each tree was searched for the presence of the following features:

Woodpecker holes, rot holes, hazard beams, other vertical or horizontal cracks or splits in stems and branches, partially decayed platey bark, knot holes, man-made holes, tear-outs, cankers in which cavities have developed, other hollows or cavities, including butt-rots, double-leaders forming compression forks with included bark, gaps between overlapping stems or branches, partially detached Ivy (Hedera helix) with stem diameters in excess of 50mm and bat, bird or dormouse (Muscardinus avellanarius) boxes.

2.4.7 Terms used to describe any features present follow (where possible) those outlined and described in *Bat Tree Habitat Key, 2nd Edition* (Andrews, H (ed), 2013) and *Bat Roosts in Trees: A Guide to Identification and Assessment for Tree-care and Ecology Professionals* (BTHK, 2018).

2.4.8 Trees have been assessed and described using the categories presented at Tables 4.2 and 6.2 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn),* (Collins, J. (ed), 2023), as presented in **Table 2.2**.

Table 2.2: Definition of Terms and Suitability Categories Used in Tree Survey for Roosting Bats

Terms and Suitability Categories	Description
PRF	Potential Roost Feature
None	Either no PRFs in the tree(s) or highly unlikely to be any.
FAR	Further Assessment Required to establish if PRFs are present in the tree
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
PRF-M	PRF is suitable for multiple bats and may therefore be used by a maternity colony.

Equipment

2.4.9 A list of equipment used is detailed in **Table 2.3**.

Table 2.3: Survey Equipment used during Daytime Bat Survey

Ladders
LED Lenser P14 torch
Canon Ixus digital camera
8x20 binoculars
Ridgid Micro Inspection Camera Borescope CA-300

Badger

2.4.10 The survey area for badger covered the site (as annotated on **Figure 2**) and extended to accessible land within a radius of 50 metres from the site boundary. Private gardens / land beyond the site margins such as the private gardens of the Abbeycroft properties to the east were not accessed; these areas were viewed from the site boundary.

2.4.11 The survey was conducted in accordance with guidance presented within *Badgers and Development* (Natural England, 2007) and Badgers*: advice for making planning decisions* (Natural England, 2022).

2.4.12 The following signs of badger activity were searched for:

a. Sett entrances, e.g. entrances that are normally 25 to 35cm in diameter and shaped like a 'D' on its side;

b. Large spoil heaps outside sett entrances;

c. Bedding outside sett entrances;

d. Badger footprints;

e. Badger paths;

f. Latrines;

g. Badger hairs on fences or bushes;

h. Scratching posts; and

i. Signs of digging for food.

2.4.13 Habitats within and surrounding the site were assessed in terms of their suitability for use by foraging and sheltering badger in accordance with their known habitat preferences as detailed in current guidance and *Badger* (Roper, 2010).

Otter

2.4.14 The site lies within 25 metres of the northern bank of the River Calder. The river corridor will not be directly impacted by the proposals. For completeness and to determine the presence / absence of an otter holt the northern bank of the site adjacent to the site boundary was surveyed for evidence of otter.

2.4.15 The otter survey was undertaken with reference to the habitat requirements and preferences detailed in *Ecology of the European Otter. Conserving Natura 2000 Rivers, Ecology Series 10* (Chanin, 2003) and searches were made for signs of otter in accordance with *Monitoring the Otter Lutra lutra. Conserving Natura 2000 Rivers Monitoring Series No 10* (Chanin, 2003) and *Otters: advice for making planning decisions* (Natural England, 2022).

Bird Species

2.4.16 Bird species observed and heard during the survey were recorded.

2.4.17 Habitats throughout the site and in the immediate surrounding area were assessed for their value to roosting, feeding and nesting birds, as indicated by the amount of shelter, feeding value, woody vegetation structure and species diversity of tree and shrub species in the site.

Great Crested Newt and Other Amphibian Species

Desktop Search for Ponds

2.4.18 In accordance with *Great crested newts: advice for making planning decisions* (Natural England, 2022) all ponds within an unobstructed 500 metres of a site should be considered for their suitability to support breeding great crested newts and other amphibians including Priority Species such as common toad (*Bufo bufo*).

2.4.19 The search of habitats in the wider area up to a distance of 500 metres from the site boundary revealed the presence of two ponds, as detailed in **Table 2.4**.

Table 2.4: Ponds within 500 metres of the Site

Pond Reference	OS Grid Reference	Distance from Site Boundary	Location (refer to Figure 1)
1	SD 72639 36403	261 metres	Likely SuDS pond adjacent to Abbey Farm View road and separated from the site by existing built development.
2	SD 72421 36176	375 metres	In a field on the opposite side of the River Calder to the west of the site.

Consideration of Requirement for Further Survey

2.4.20 The requirement for further survey at each pond was then assessed using the following criteria:

a. Presence of dispersal barriers to amphibian movements between ponds and the site, as detected during the walkover survey; and

b. Distance of ponds from the site, and the potential influence of the proposed development of the site on any populations of great crested newt (if present at ponds), using the Natural England rapid risk assessment tool.

Presence of Dispersal Barriers and Consideration of Distance of Ponds from Site and Relative Size of Site

2.4.21 As illustrated on **Figure 2** and described in **Table 2.4**:

a. Pond 1 is a SuDS pond (examination of Google Earth indicates that the pond was created between 2015 and 2018). Pond 1 is separated from the site by existing built development which creates a physical barrier to the migration of amphibian species; and

b. Pond 2 is separated from the site by the River Calder.

2.4.22 It is considered that both Ponds 1 and 2 are located outside the zone of potential influence of the small scale proposals. Adverse impacts on great crested newt and other amphibian species and their habitats are reasonably discounted. There is no requirement for further survey for amphibian species to inform this assessment.

2.4.23 This assessment is further supported by the Natural England Rapid Risk Assessment tool from *GCN Method Statement WML-A14-2 (Version April 2020)* (Natural England, 2020) which is presented in **Table 2.5**. The tool has been completed based on the distances of the ponds from the site, and the total site area 0.7394 hectares (i.e. worst case). The rapid risk assessment tool assumes that great crested newt are present.

Table 2.5: Rapid Risk Assessment Result

Component	Likely Effect	Notional Offence Probability Score
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	No effect	0
Land >250m from any breeding pond(s)	0.5 - 1 ha lost or damaged	0.03
Individual great crested newts	No effect	0
Maximum:		0.03
Rapid risk assessment result:	GREEN: OFFENCE HIGHLY UNLIKELY	

2.4.24 The result of the Natural England Rapid Risk Assessment indicates that the development activities are of such a type, scale and location that it is highly unlikely any offence would be committed should the development proceed.

Reptile Species

2.4.25 The site and its surroundings were assessed in terms of their suitability for use by reptile species using the important characteristics for reptiles outlined in the draft document *Reptile Mitigation Guidelines* (Natural England, 2011), and the *Reptile Habitat Management Handbook* (Edgar, et al., 2010). These habitat characteristics are outlined in **Table 2.6**.

Table 2.6: Important Habitat Characteristics for Reptiles

1. Location (in relation to species range)	7. Connectivity to nearby good quality habitat
2. Vegetation Structure	8. Prey abundance
3. Insolation	9. Refuge opportunity
4. Aspect	10. Hibernation habitat potential
5. Topography	11. Disturbance regime
6. Surface geology	12. Egg-laying site potential

Other Relevant Protected Species and Wildlife

2.4.26 Incidental observations / evidence of other wildlife observed whilst on site, but for which specific surveys were not made, was recorded and have been included in this report where it is considered of relevance to the planning application.

2.4.27 Habitats have been assessed for their suitability for other protected and Priority Species identified in the data search results where this is considered relevant to the application.

2.5 Survey and Reporting Limitations

2.5.1 No limitations on the intended scope of survey were experienced.

2.5.2 All measurements within this report are approximate only, and have been either estimated whilst on site or calculated using mapping software (QGIS) or internet-based mapping services such as MAGiC Maps and Google Earth.

2.6 Evaluation Methods

2.6.1 The habitats, vegetation and animal life were evaluated with reference to standard nature conservation criteria as described in *A Nature Conservation Review* (Ratcliffe, 1977). These are size (extent), diversity, naturalness, rarity, fragility, typicality, recorded history, position in an ecological or geographical unit, potential value and intrinsic appeal.

2.6.2 Habitats have been assessed to determine whether they meet those described in *UK Biodiversity Action Plan: Priority* Habitat *Descriptions* (Maddock, A (ed), 2008); these lists are used to help draw up the statutory lists of Priority Habitats, as required under Section 41 of the *Natural Environment and Rural Communities* (NERC) *Act 2006*. Where suitable, the ecological value of the habitats present has been assessed using the terms outlined in *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* (CIEEM, 2018). Each habitat and individual trees have been assessed to determine whether they are 'irreplaceable habitat', defined in *National Planning Policy Framework* (Ministry of Housing, Communities & Local Government, 2024)[2] as '*Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen'*. The further detail presented in *The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024* (GOV.UK, 2024) has also been referred to.

2.6.3 Government advice on wildlife, as set out in the NPPF and associated government circulars has been taken into consideration. Legislation relating to protected species, such as those listed under Schedules 1, 5, 6 and 8 of the *Wildlife and Countryside Act 1981* (as amended) and *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*, is referenced where applicable, and any impacts to protected species are evaluated in accordance with current guidance.

2.6.4 The presence of any Priority Species, as listed under Section 41 of the *Natural Environment and Rural Communities (NERC) Act 2006* is noted, and habitats are assessed in terms of their suitability and value for these species. The presence of habitats and / or species listed by the Lancashire BAP has been taken into account in the evaluation of the site.

3.0 SURVEY RESULTS

3.1 Desktop Study and Data Search

Statutory Designated Sites for Nature Conservation and SSSI Impact Risk Zones

3.1.1 The site and adjoining land have no statutory designation for nature conservation.

3.1.2 The site lies within a Site of Special Scientific Interest (SSSI) Impact Risk Zone for the Cock Wood Gorge SSSI located 2.2 kilometres to the south-east, Light Clough SSSI located 2.64 kilometres to the north-east and Hodder River Section SSSI located 4.25 kilometres to the north-west.

3.1.3 The SSSI Impact Risk Zone requires the Local Planning Authority to consult with Natural England on likely risks from the following development categories (Natural England, 2025):

[2]Hereafter the NPPF

Minerals, Oil and Gas: Planning applications for quarries, including: new proposals, Review of Minerals Permissions, extensions, variations to conditions etc. Oil and gas exploration / extraction.

3.1.4 The proposals do not meet this development category and the Natural England SSSI impact risk zone guidance states:

'You do not need to consult Natural England on the proposed development at this location.

The Impact Risk Zones for Sites of Special Scientific Interest (SSSI IRZs) indicate that at the location selected, the proposed development is unlikely to have a harmful effect on terrestrial Sites of Special Scientific Interest (SSSIs) and the Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites that they underpin.

Therefore, you do not need to consult Natural England on the likely impacts of development on terrestrial SSSIs and the SACs, SPAs or Ramsar sites that they underpin.'

Non-statutory Designated Sites for Nature Conservation

3.1.5 The site and adjoining land have no non-statutory designation for nature conservation, called 'Biological Heritage Sites' or 'BHS' in Lancashire.

3.1.6 Twelve BHS are located within a 2 kilometres radius from the centre of the site, and are summarised in **Table 3.1**.

Table 3.1: BHS Within a 2 Kilometres Radius from the Centre of the Site

BHS Name	Distance and Direction from the Site	Reasons for Designation
Calder Bank, Broken Brow	0.89 kilometres east	A steep banking situated along the north side of the River Calder, approximately 0.5km east of Whalley. It is notable for the occurrence of Rough Horsetail (*Equisetum hyemale*), a species listed as vulnerable in the *Provisional Lancashire Red Data List of Vascular Plants*. This is currently the only known location for Rough Horsetail in Vice County 59.
Spring Wood	0.94 kilometres east	Semi-natural woodland which is identified within Natural England's Inventory of Ancient Woodland.
Sir John's Wood and Lords Park Wood	1.06 kilometres east	Semi-natural woodland which is identified within Natural England's Inventory of Ancient Woodland.
Banks Wood and Marsh	1.13 kilometres south-east	Ancient semi-natural woodland listed in the *Lancashire Inventory of Ancient Woodland (Provisional)*, (English Nature, 1994), with flushes and areas of alder carr, fen and species-rich grassland, along the western banks of the River Calder in Great Harwood. Of particular interest is Yellow Star-of-Bethlehem, a species included in the *Provisional Lancashire Red Data List of Vascular Plants*.
Calderstones Hospital Woodland/Railway Line	1.24 kilometres north	An area of Alder-Willow carr woodland with adjoining swamp and grassland to the west and a section of dismantled railway to the east.

BHS Name	Distance and Direction from the Site	Reasons for Designation
Chew Bank Wood	1.43 kilometres west	Woodland which is ancient semi-natural in character.
Planes Wood	1.43 kilometres south-west	Semi-natural woodland which is identified within Natural England's Inventory of Ancient Woodland.
Mitton Wood	1.45 kilometres north-west	A large, semi-natural woodland situated approximately 1.5 km south of Great Mitton at the confluence of the river Calder with the river Ribble. It is listed in the *Lancashire Inventory of Ancient Woodland (Provisional)*, (English Nature, 1994). Yellow Star-of-Bethlehem (*Gagea lutea*), a plant categorised as 'endangered' in the *Provisional Lancashire Red Data List of Vascular Plants*, occurs in the wood. An uncommon mollusc, the ash-grey slug (*Limax cinereonige*), has also been recorded here.
Hard Hill Common	1.71 kilometres north	Small-localised areas of Purple Moor-grass / rush pasture and diverse flushed habitats adjacent to the stream crossing the field (a priority habitat in the UK Biodiversity Action Plan).
Barrow Brook Field	1.72 kilometres north	Located approximately 500 metres to the west of Barrow near Whalley and comprises a triangular field south of Barrow Brook and alongside the railway. It supports damp, species-rich, semi-natural, neutral grassland referable to the MG4 *Alopecurus pratensis-Sanguisorba officinalis* grassland of the National Vegetation Classification.
Smalley's Farm	1.74 kilometres south-west	Represents one of the most diverse sites known in the country for grassland fungi. In total, nearly 600 macro-fungi are present, including at least 23 species or varieties of pink-gills (*Entoloma spp.*), 35 waxcaps (*Hygrocybe* spp.), 18 fairy clubs (*Clavaria* spp., *Clavulinopsis spp.* and *Clavulina spp.*) and 4 earth tongues (*Geoglossum spp.* and *Trichoglossum* spp.).
Dean Wood and Higher Dean Wood	1.83 kilometres south	Two semi-natural ancient woodlands following the course of Dean Brook, a tributary of the River Calder. The woodlands are separated by Dean Lane. Dean Wood and Higher Dean Wood are ancient semi-natural woodlands listed in the *Lancashire Inventory of Ancient Woodland (Provisional)*, (English Nature, 1994).

3.1.7 The presence of the BHS is considered further at **Section 4.2**.

Lancashire Local Nature Recovery Strategy

3.1.8 No areas of site lie within an 'Area of Particular Importance' as detailed on the Lancashire Local Nature Recovery Strategy area.

3.1.9 The site (and adjoining land) are identified on the 'Potential Measures' layer of the Lancashire Local Nature Recovery Strategy area. The following measures are suggested:

- *Bioengineering and nature-based solutions for moderation of water flows, such as reedbed filters, living dams, living revetments, tree and hedge planting and kested hedgerows.*
- *Create more connected pollinator wildflower-rich habitat in and through urban centres seeking connectivity to the B-Lines approach for example hedgerows, arable margins and headlands, green roofs, and with parks and gardens containing wetland features, wilder areas with native plants including tall ruderals.*
- *Wooded habitat creation and enhancement in urban open spaces such as orchards, street trees, micro-woods, urban woodland and hedgerows.*
- *Create and enhance waterbodies, wetlands and other aquatic habitats in urban areas, considering connectivity such as garden ponds, aerial ponds, bioswales, rain gardens and biodiverse sustainable drainage systems.*
- *Establish riparian woodland and trees along water courses, riparian corridors and floodplains, through appropriate planting or natural colonisation, where biodiversity gains and improved habitat connectivity can be achieved.*

Main River Designation

3.1.10 The River Calder, which lies within 25 metres of the site boundary, is an Environment Agency main river (Environment Agency, 2025).

Priority Habitats Inventory

3.1.11 The Priority Habitats Inventory[3] was checked via MAGiC Maps. The eastern area of the site is allocated as an area of Traditional Orchard Priority Habitat on MAGiC Maps. No other Priority Habitats are identified at the site.

Ancient Tree Inventory

3.1.12 No ancient or veteran trees are identified at the site by the inventory.

Protected and Notable Species

3.1.13 Records of protected and notable species for a 2 kilometres radius from the centre of the site are summarised in **Table 3.2**.

Table 3.2: Records of Protected Species Within a 2 Kilometres Radius from the Centre of the Site

Taxon Group	Species Name and Designations[1] and Notes
Amphibians	Common frog (*Rana temporaria*): WCAs5 & LBAP. 33 records, dated between 1985 and 2013. The closest record is 105 metres to the south-east, and from 2011.
	Common toad (*Bufo bufo*): WCAs5, PS & LBAP. 8 records, dated between 1985 and 2021. The closest record is 105 metres to the south-east, and from 2011.
	Great crested newt (*Triturus cristatus*): EPS, WCAs5, PS & LBAP. 43 records, dated between 1914 and 2017. The closest record is 610 metres to the north-east, and from 2011.

[3] A spatial dataset that describes the geographic extent and location of Natural Environment and Rural Communities Act (2006) Section 41 habitats of principal importance.

Taxon Group	Species Name and Designations[1] and Notes
	Palmate newt (*Lissotriton helveticus*): WCAs5. 29 records, dated between 1997 and 2011. The closest record is 105 metres to the south-east, and from 2011.
	Smooth newt (*Lissotriton vulgaris*): WCAs5. 14 records, dated between 1997 and 2011. The closest record is 610 metres to the north-east, and from 2011.
Birds – Priority & LBAP Species	**PS & LBAP:** Skylark (*Alauda arvensis*), tree pipit (*Anthus trivialis*), cuckoo (*Cuculus canorus*), yellowhammer (*Emberiza citrinella*), reed bunting (*Emberiza schoeniclus*), herring gull (*Larus argentatus*), grasshopper warbler (*Locustella naevia*), yellow wagtail (*Motacilla flava*), spotted flycatcher (*Muscicapa striata*), curlew (*Numenius arquata*), house sparrow (*Passer domesticus*), tree sparrow (*Passer montanus*), grey partridge (*Perdix perdix*), wood warbler (*Phylloscopus sibilatrix*), dunnock (*Prunella modularis*), bullfinch (*Pyrrhula pyrrhula*), starling (*Sturnus vulgaris*), song thrush (*Turdus philomelos*) and lapwing (*Vanellus vanellus*). **PS Only:** Lesser redpoll (*Acanthis cabaret*), linnet (*Linaria cannabina*) and marsh tit (*Poecile palustris*). **LBAP Only:** Common sandpiper (*Actitis hypoleucos*), meadow pipit (*Anthus pratensis*), swift (*Apus apus*), grey heron (*Ardea cinerea*), black-headed gull (*Chroicocephalus ridibundus*), lesser spotted woodpecker (*Dryobates minor*), kestrel (*Falco tinnunculus*), snipe (*Gallinago gallinago*), oystercatcher (*Haematopus ostralegus*), lesser black-backed gull (*Larus fuscus*), willow warbler (*Phylloscopus trochilus*) and redshank (*Tringa totanus*).
Birds – WCAs1 Species	Fieldfare (*Turdus pilaris*): WCAs1. 1 record from 1968. An accurate estimation of distance of the record to the site cannot be made due to the locational data being less than a six figure grid reference.
	Goshawk (*Accipiter gentilis*): WCAs1 & LBAP. 1 record from 2010, located 900 metres to the south-east.
	Osprey (*Pandion haliaetus*): WCAs1. 1 record from 1968. An accurate estimation of distance of the record to the site cannot be made due to the locational data being less than a six figure grid reference.
	Redwing (*Turdus iliacus*): WCAs1. 3 records, dated between 1968 and 2005. The closest record is 1615 metres to the west, and from 2005.
Bony Fish	**PS & LBAP:** European eel (*Anguilla anguilla*), atlantic salmon (*Salmo salar*) and brown/sea trout (*Salmo trutta*). **LBAP Only:** Bullhead (*Cottus gobio*) and brown trout (*Salmo trutta subsp. fario*).
Fern	Moonwort (*Botrychium lunaria*): LBAP 1 record from 1899. An accurate estimation of distance of the record to the site cannot be made due to the locational data being less than a six figure grid reference.
Flowering Plants	**PS & LBAP:** Lesser Butterfly-orchid (*Platanthera bifolia*). **LBAP Only:** Green-winged Orchid (*Anacamptis morio*), White Bryony (*Bryonia dioica*), Thin-spiked Wood-sedge (*Carex strigosa*), Yellow Star-of-Bethlehem (*Gagea lutea*), Common Fragrant-orchid (*Gymnadenia conopsea*), Herb-Paris (*Paris quadrifolia*), Black-poplar (*Populus nigra subsp. betulifolia),* Bird's-eye Primrose (*Primula farinosa*), Northern Yellow-cress (*Rorippa islandica*), Dark-leaved Willow (*Salix myrsinifolia*), Common Meadow-rue (*Thalictrum flavum*) and Globeflower (*Trollius europaeus*).
Horsetail	Rough horsetail (*Equisetum hyemale*): LBAP. 6 records, dated between 1975 and 2016. The closest record is 955 metres to the east, and from 2016.

Taxon Group	Species Name and Designations[1] and Notes
Butterflies	**PS & LBAP:** Small heath (*Coenonympha pamphilus*) and wall (*Lasiommata megera*). **LBAP Only:** Ringlet (*Aphantopus hyperantus*).
Moths	**PS Only:** Grey dagger (*Acronicta psi*), dusky brocade (*Apamea remissa*), small square-spot (*Diarsia rubi*), small phoenix (*Ecliptopera silaceata*), white ermine (*Spilosoma lubricipeda*) and cinnabar (*Tyria jacobaeae*).
Terrestrial Mammals	Badger (*Meles meles*): PBA. 2 records, dated 1989 and 2021. The closest record is 1660 metres to the west, and from 1989.
	Bat (*Chiroptera*): EPS, WCAs5 & LBAP. 1 record from 2009, located 1080 metres to the north-east.
	Brown hare (*Lepus europaeus*): PS & LBAP. 1 record from 2009, located 1940 metres to the south.
	Brown long-eared bat (*Plecotus auritus*): EPS, WCAs5, PS & LBAP. 1 record from 2015, located 1370 metres to the north.
	Common pipistrelle (*Pipistrellus pipistrellus*): EPS & WCAs5. 3 records, dated between 2010 and 2015. The closest record is 490 metres to the south-east, and from 2014.
	Hedgehog (*Erinaceus europaeus*): PS & LBAP. 25 records, dated between 2013 and 2023. The closest record is 175 metres to the south-west, and from 2020.
	Myotis bat species (*Myotis*): EPS, WCAs5 & LBAP. 3 records, dated between 2014 and 2015. The closest record is 490 metres to the south-east, and from 2014.
	Noctule (*Nyctalus noctula*): EPS, WCAs5, PS & LBAP. 3 records, dated between 2014 and 2015. The closest record is 490 metres to the south-east, and from 2014.
	Otter (*Lutra lutra*): EPS, WCAs5, PS & LBAP. 2 records, dated 2015 and 2022. The closest record is 465 metres to the west, and from 2015.
	Pipistrelle (*Pipistrellus*): EPS, WCAs5 & LBAP. 11 records, dated between 1998 and 2018. The closest record is 240 metres to the south, and from 1998.
	Soprano pipistrelle (*Pipistrellus pygmaeus*): EPS, WCAs5, PS & LBAP. 5 records, dated between 2010 and 2015. The closest record is 490 metres to the south-east, and from 2014.
	Water vole (*Arvicola amphibius*): WCAs5, PS & LBAP 1 record from 1969. An accurate estimation of distance of the record to the site cannot be made due to the locational data being less than a six figure grid reference.

[1]Key to Designation Codes:
EPS = European Protected Species under The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.
WCAs1 = Species receives full protection under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended).
WCAs5 = Species receives full protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).
PBA = Protection of Badger Act 1992.
PS = Priority Species listed under Section 41 of the NERC Act 2006.
LBAP = Species listed on the Lancashire Biodiversity Action Plan.

3.1.14 The presence of these protected and notable species within the wider area has been taken into account throughout this report.

3.2 Vegetation and Habitats

General Description

3.2.1 The approximately 0.7394 hectare (ha) site is located on the south side of Ridding Lane and lies adjacent to the Whalley Abbey East Gatehouse. The site comprises a field of mown modified grassland with margins of tall forbs and areas of planted mixed scrub over neutral grassland. At the eastern area of the site is an area of less frequently mown other neutral grassland. The site also contains an area of orchard.

In addition to a semi-mature Pear (*Pyrus* sp.) and small fruit trees within the orchard, there are 11 individual trees within the site comprising 10 mature Horse-chestnut (*Aesculus hippocastanum*) trees along the northern site margin (T01 to T10) and a young Silver Birch (*Betula pendula*) (T11) at the southern site margin.

3.2.2 The northern site boundary is demarcated by a stone wall along Ridding Lane (**Photo 4**). The western site boundary meets the timber post and wire fence that separates the site from the brick pillars of Whalley Viaduct and the verges of tall forbs and scattered shrubs. The southern site boundary is demarcated by a timber post and wire fence, beyond which is a belt of young, planted trees and shrubs leading to the northern bank of the River Calder. The eastern site boundary is also demarcated by a timber post and wire fence.

3.2.3 A Phase 1 Habitat Survey is appended at **Figure 2**. Photographs of the site are appended in **Section 8.1**.

Modified Grassland

3.2.4 Refer to **Photos 1** to **3**. Modified grassland occupies the majority (63%) of the site and is characterised by constant and abundant Perennial Rye-grass (*Lolium perenne*), locally abundant / frequent Creeping Buttercup (*Ranunculus repens*), Rough Meadow-grass (*Poa trivialis*), abundant Yorkshire-fog (*Holcus lanatus*), frequent Dandelion (*Taraxacum officinale* agg.) and White Clover (*Trifolium repens*). Red Fescue (*Festuca rubra*) is locally frequent and Broad-leaved Dock (*Rumex obtusifolius*) is occasional. A plant species list is appended at **Table 8.2**.

3.2.5 At the southern margin is a young Silver Birch (T11) and a small Rowan (*Sorbus aucuparia*) tree. A stone lined path with a bark mulch surface extends from the gate in the stone wall at the northern site margin into the site (**Photo 13**).

3.2.6 The modified grassland is characteristic of an MG7 *Lolium perenne* ley community of the NVC (Rodwell, 1992), and is described by the UKHab as g4 modified grassland with the secondary codes 200 tree and 106 mown.

Orchard

3.2.7 Refer to **Photos 5** to **7**. The mown modified grassland extends beneath the fruit trees in the orchard area at the eastern margin of the site. The majority of the Apple (*Malus* sp.), Hazel (*Corylus avellana*) and Pear trees in the orchard are young (less than 75mm diameter at breast height (DBH)). One semi-mature Pear tree (T12) is present (**Photo 7**). The orchard is described by the UKHab as g4 modified grassland with the secondary code 27 traditional orchard.

Margins of Neutral Grassland, Tall Forbs and Shrubs

3.2.8 The western site margin and areas along the eastern site margin are less frequently mown. The neutral grassland is characterised by constant and abundant Cock's-foot (*Dactylis glomerata*) and False Oat-grass (*Arrhenatherum elatius*), frequent Common Nettle (*Urtica dioica*), Yorkshire-fog, Rough Meadow-grass and Common Couch-grass (*Elytrigia repens*). Creeping Thistle (*Cirsium arvense*) is frequent / locally abundant and Common Hogweed (*Heracleum sphondylium*) and Red Fescue are locally frequent. Areas closer to the river support locally abundant stands of Indian Balsam. Silverweed (*Potentilla anserina*), Knot-grass (*Persicaria aviculare*), Marsh Horsetail (*Equisetum palustre*), Great Willowherb (*Epilobium hirsutum*), Greater Plantain (*Plantago major*) , Hedge Woundwort (*Stachys sylvatica*) and Cleavers (*Galium aparine*) were recorded as very locally frequent. Woody species comprise Hazel and Hawthorn (*Crataegus monogyna*). A plant species list is appended at **Table 8.3**.

3.2.9 The margins of the site are characteristic of the MG1 *Arrhenatherum elatius* grassland and the OV25 *Urtica dioica – Cirsium arvense* tall herb communities of the NVC (Rodwell, 2000), and are described by the UKHab as g3c other neutral grassland with the secondary code 16 tall forbs and h3h mixed scrub.

Sparse Ruderal on Compacted Ground

3.2.10 Refer to **Photo 8** and **9**. At the western margin of the site is an area of compacted gravel (used for parking vehicles) the gravel is colonised by sparse ruderal herbs comprising frequent Greater Plantain, Annual Meadow-grass (*Poa annua*), very locally frequent White Clover, Broad-leaved Dock and Creeping Bent (*Agrostis stolonifera*) with occasional Dandelion and Black Medick (*Medicago lupulina*). The vegetation is characteristic of the OV21 *Poa annua - Plantago major* community of the NVC (Rodwell, 2000) and is described by the UKHab as u1f sparsely vegetated urban land.

Bare Ground with Horse-chestnut Trees

3.2.11 Refer to **Photos 10** to **12**. A line of 10 mature Horse-chestnut trees is present to the northern site boundary. The ground beneath the trees is shaded and devoid of vegetation.

Invasive Plant Species

3.2.12 No Japanese Knotweed is present at the site.

3.2.13 As illustrated on **Figure 2,** stands of Indian Balsam and a plant of Giant Hogweed are present in the site. Beyond the site boundary and closer to the River Calder the stands of Indian Balsam and Giant Hogweed are more abundant. These species are listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended); it is an offence to spread or cause their spread in the wild. This is considered further at **Section 4.3** below.

3.3 Relevant Protected Animal Species and Other Wildlife

Bat Species

Habitat Assessment for Commuting / Foraging Bats

3.3.1 The lines of trees, orchard and neutral grassland with tall forbs around the margins of the site have good habitat connectivity with other established woodland habitats and watercourses in the wider area, particularly in the grounds of the off-site properties to the east and along the River Calder.

3.3.2 The habitats present are assessed to be suitable for and contribute to the wider foraging area for use by common species of edge-feeding foraging bats, such as common pipistrelle (*Pipistrellus pipistrellus*), and also bat species known to forage over open habitats and over wide areas, such as noctule (*Nyctalus noctula*). The habitats at the site, in combination, with the connectivity to the surrounding habitats are assessed to be of 'moderate' suitability for use by foraging bats.

Whalley Viaduct

3.3.3 No structures or structures suitable for use by roosting bats will be affected by the proposals. The access track to the site extends beneath the brick viaduct. No gaps, cracks or crevices suitable for use by roosting bats were found in the lower sections of the brick pillars / areas to be passed by vehicles (**Photo 18**).

Trees

3.3.4 No confirmed roosts or trees considered to be PRF-M[4] were recorded.

3.3.5 Refer to **Photo 19**. T2 (a mature Horse-chestnut) supports lifted bark along the main stem (northern side) and minor areas of lifted bark are present at the other Horse-chestnut trees (T1, T3 to T10). The 10 Horse-chestnut trees are therefore assessed as PRF-I[5]. As these trees will be retained by the proposals there was no requirement for further inspection at this stage.

Badger

3.3.6 The habitats at the site are suitable for use by badger. However, no signs of badger such as setts, snuffle holes, tracks, hairs or burrows were detected at the site and survey area. The presence of badger setts is reasonably discounted at this stage, although precautionary best practice measures are recommended at **Section 5.4**.

Otter

3.3.7 Refer to **Photo 14** to **17**. The site lies within 25 metres of the River Calder. The riparian vegetation between the site and the water is colonised by neutral grassland characterised by abundant Cock's-foot, Meadow Foxtail (*Alopecurus pratensis*), Yorkshire-fog and Red Fescue with frequent Creeping Buttercup, Common Nettle and Creeping Thistle and occasional Meadow Vetchling (*Lathyrus pratensis*) and Cow Parsley (*Anthriscus sylvestris*). The grassland is planted with young trees of Silver Birch, Rowan and Alder (*Alnus glutinosa*). Stands of Indian Balsam and Giant Hogweed are abundant.

3.3.8 No otter holts or other evidence of otter was found along the northern bank of the River Calder adjacent to the site (or elsewhere within the site). Due to the presence of suitable habitats and the know presence of otter in the area it is very likely that otter pass along the River Calder and this discussed further in **Section 4.4**.

Bird Species

3.3.9 Birds detected in the site on 13th August 2025 are listed in **Table 3.3**.

Table 3.3: Bird Species Detected on 13th August 2025

Scientific Name	Common Name	BOCC Status[1]	Habitats
Coloeus monedula	Jackdaw	Green	Resting in grassland
Egretta garzetta	Little Egret	Green	Feeding on River Calder
Erithacus rubecula	Robin	Green	In scrub
Pica pica	Magpie	Green	In Horse-chestnut trees
Turdus merula	Blackbird	Green	In Hawthorn shrubs
[1]BOCC: Birds of Conservation Concern (Stanbury, et al., 2021).			

3.3.10 No ground nesting birds were recorded at the site. It is considered that the relatively enclosed conditions at the field due to the presence of the boundary lines of trees and the proximity of the tall viaduct and roads create sub-optimal conditions for the attraction of ground nesting birds such as lapwing and skylark.

[4] PRF-M = PRF is suitable for multiple bats and may therefore be used by a maternity colony

[5] 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

3.3.11 The trees and hedgerow habitats are suitable for use by nesting passerine (i.e. perching) species, including those detected within the site during the survey and Priority Species such as dunnock and song thrush. This is considered further at **Section 4.4**, below.

Reptiles

3.3.12 The regularly disturbed land and areas of mown grassland within the site provides poor quality habitat for sheltering, basking and hibernating reptiles. There are no piles of garden waste or other suitable debris for use by sheltering or hibernating reptiles.

3.3.13 The site is not adjacent or linked to any areas of favourable habitat for reptile species. In consideration of all information available the presence of reptiles within the site is reasonably discounted.

Other Wildlife

3.3.14 An incidental observation of large white (*Pieris brassicae*) butterfly was made; this is a common and widespread species in the UK.

3.3.15 The habitats within the site are suitable for use by hedgehog (*Erinaceus europaeus*), a Priority Species and this is discussed in **Section 4.4**.

4.0 EVALUATION AND ASSESSMENT

4.1 Introduction and Description of Proposals

4.1.1 The proposals are outlined on the *Proposed Site Plan* (Wilson Mason, 2025), hereafter the 'proposals plan'.

4.1.2 The proposals comprise an extension in time for the presence of a teepee / marque at the site to facilitate use of site for events between May and September and will involve the formalisation of a portion of the western area of the field allocated for car parking. It is understood that vehicles will access the site off Ridding Lane via the track beneath the viaduct and part at the northern end of the western site margin.

4.1.3 The proposals will not directly impact any habitats (including all trees) with the exception of the following:

- Loss of 0.0129 ha of modified grassland for use as a larger car park. Although the car park area will not be a formal surface, as the car park area is likely to be more frequently used resulting in compaction and shading the modified grassland will be 'lost' and a change in habitat type to an area of sparse, ruderal vegetation is likely;
- Loss of 0.0442 ha of modified grassland at the footprint of the teepee. Although the teepee is a temporary structure, it's presence between May to September will compact the ground and shade out the modified grassland. This will result in the loss of the modified grassland in this area and it was considered to be appropriate and proportionate to consider that this area will become bare ground; and
- Loss of 0.005 ha of modified grassland as a result of the extension and use of the informal paths and likely more regular use which will result in likely loss of modified grassland and creation of an artificial unvegetated; unsealed surface.

4.1.4 Note the footprint of the other proposed temporary structures such as the silent generator, toilet and bin store as annotated on the proposals plan have not been included in the post-intervention habitats as these features are moveable and transient.

4.1.5 **Section 4.2** provides an assessment of any impacts of the proposed development on the designated sites for nature conservation present in the wider area. The ecological value of habitats within the site is evaluated at **Section 4.3**, and protected and notable species are considered at **Section 4.4**.

4.2 Designated Sites for Nature Conservation

4.2.1 The site has no terrestrial or hydrological links to any designated sites for nature conservation in the wider area. It is considered that the proposed development will not have any adverse direct or indirect adverse effect on any statutory or non-statutory designated sites present in the wider area.

4.3 Vegetation and Habitats

4.3.1 All plant species recorded at the site are common and widespread plant species. None of the habitats present are representative of semi-natural habitat or are an irreplaceable habitat.

4.3.2 All recorded NVC communities present are common and widespread across lowland Britain and are typical of the geographical area and the managed conditions present.

4.3.3 The orchard at the eastern area of the site is a Priority Habitat. No other Priority Habitats are present at the site.

4.3.4 In terms of each habitat's importance in a geographical context[6], the orchard and the mature and semi-mature trees are considered to be of 'local' importance as they create habitat connectivity with the wider tree and woodland network, support habitats of value to nesting birds and foraging birds and bats, and contribute to the creation of habitat structural diversity at the site and local area.

4.3.5 The areas of unmanaged neutral grassland, and mixed scrub are assessed to be of 'site' value for their value for use by breeding birds and provision of habitat connectivity.

4.3.6 The modified grassland, hardstanding and sparse ruderal vegetation are not considered to hold any importance on a geographical scale.

4.3.7 Indian Balsam and Giant Hogweed, both listed as invasive species listed under Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) are present. It is considered that the proposals present an opportunity for the eradication these species as part of the habitat management to be secured by the proposals. Further guidance is presented at **Section 5.3**.

4.4 Protected Species and Other Wildlife

Bats

4.4.1 Retention and protection of the orchard, trees and grassland habitats with connectivity to adjacent habitats and the additional actions secured as part of the *Assessment of Biodiversity Net Gain* and will conserve the opportunities at the site for use by foraging and commuting bats.

4.4.2 Inappropriate use and siting of artificial lighting at the site has the potential to degrade the value of the retained habitats, habitats in the wider area and the new habitats for use by foraging bats. It is recognised

[6] Using the terms presented at Section 4.7 of *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* (CIEEM, 2018), i.e. International and European, National, Regional, Local Authority-wide area, River Basin District, Estuarine system / Coastal cell or Local. The term 'site' value is additionally used to highlight ecological features considered to be of importance in the context of the wider site habitats, but which are of negligible value in the context of the local area.

that there is a risk that headlights from parked cars using the temporary car park surface at the western margin of the site may disturb nocturnal and crepuscular wildlife using the habitats at the site and particularly the off-site river corridor. This risk and any associated impacts are assessed to be minor as the presence of headlights is temporary and, in addition, the site / car park area is screened from the habitats beyond the site at all site margins by the presence of existing established and establishing planting of trees and shrubs and the stone wall (refer to **Figure 2**).

4.4.3 In accordance with the mitigation hierarchy, the avoidance of permanent artificial lighting and in the presence of an appropriate lighting strategy and mitigation strategy, as outlined in **Section 5.2**, it is advised that adverse effects are reasonably discounted and opportunities for foraging bats and other nocturnal / crepuscular wildlife will be conserved (and enhanced) at the site and local area in the presence of the proposals.

Breeding Birds

4.4.4 Activities such as the removal of vegetation (including works as part of the recommended habitat enhancement and management works), have the potential to represent a direct effect on breeding and nesting birds in contravention of the *Wildlife and Countryside Act 1981* (as amended).

4.4.5 Mandatory actions to protect nesting birds during works and measures to provide enhanced opportunities for nesting birds including Priority Species and conservation targets as part of the proposals are recommended at **Sections 5.2** to **5.5**. The measures as described in **Section 5.0** aim to attract other bird species by, for example, by the provision of opportunities for conservation target species.

Hedgehog and Other Wildlife

4.4.6 The habitats at the site are suitable for use by badger and Priority Species such as hedgehog and other wildlife. Best practice guidance for the protection of wildlife to be applied prior to and during site clearance and construction operations are described in **Section 5.4**.

Other Protected Species / Animal Life

4.4.7 Appropriate survey effort and / or assessment in accordance with standard guidance, has been carried out to reasonably discount adverse effects on relevant protected species. No further surveys for other protected species are necessary to inform a planning application.

5.0 RECOMMENDATIONS AND ECOLOGICAL ENHANCEMENT

5.1 Introduction

5.1.1 The recommendations and guidance provided in this section of the report, follow 'The Mitigation Hierarchy' (i.e. avoid, mitigate, compensate) and describe the measures / habitat enhancement works necessary to secure statutory biodiversity net gain[7] and to ensure compliance with Chapter 15, paragraph 193(d) of the NPPF which states:

'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'.

[7] Refer to the separate *Assessment of Biodiversity Net Gain* (ERAP (Consultant Ecologists) Ltd, 2025) report for more detail.

5.1.2 Where possible, opportunities to enhance the ecological interest and habitat connectivity and seek biodiversity gain through appropriate landscape planting, habitat creation and long-term management in conjunction with the proposals have been identified.

5.2 Recommendations in Relation to Site Design

Retention / Enhancement of Existing Habitats

5.2.1 In accordance with the mitigation hierarchy, assessment of biodiversity net gain and ecological guidance the proposals achieve the following:

a. Retention of all trees and all areas of mixed scrub / scattered shrubs;

b. Enhancement of the relevant area of modified grassland and tall forbs / herb vegetation at the site margins by appropriate overseeding and management to secure other neutral grassland of a greater plant species diversity for the attraction of invertebrates and their predators;

c. Enhancement of the bare ground beneath the Horse-chestnut trees by seeding with a shade-tolerant native species grassland to create other neutral grassland; and

d. Eradication / control of the non-native and invasive plant species (see below).

5.2.2 It is considered that the habitat creation and enhancement proposals are appropriate for the continued use of the site for hosting events. It is also considered that the proposals make a contribution to the Potential Measures identified for the site in the Lancashire Local Nature Recovery Strategy (refer to **Section 3.1**). For example, the creation of additional areas of wildflower habitat for the attraction of invertebrates and their prey such as bird and bat species. In addition, it is considered that the proposed habitats are complementary to the riverside location of the site.

5.2.3 An appropriate Habitat Management and Monitoring Plan (HMMP) (or similar) will be required to secure the target habitat condition assessments as presented in the separate *Assessment of Biodiversity Net Gain* report (ERAP (Consultant Ecologists) Ltd, 2025).

Appropriate Use of Lighting

5.2.4 Paragraph 198(c) in Chapter 15 (conserving and enhancing the natural environment) of the NPPF states that development should:

"*limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation*"

5.2.5 It is advised that external lighting is avoided as much as possible. Any temporary external lighting to be installed at the site must involve the use of appropriate products and screening, where necessary, to ensure no excessive artificial lighting shines over the retained vegetation and the habitats outside the curtilage of the site and areas of planting, as lighting overspill may deter use by wildlife such as foraging bats.

5.2.6 The lighting scheme will be designed with reference to current guidance, namely:

a. *Guidance Note 08/23: Bats and Artificial Lighting at Night* (Institution of Lighting Professionals & Bat Conservation Trust, 2023); and

b. Bats and lighting: Overview of current evidence and mitigation guidance (Stone, 2014).

5.2.7 In addition, it may be appropriate to install signs around the car park area advising users / visitors to turn off their engines and headlights when stationary / parked.

5.3 Invasive Plant Species and Biosecurity

5.3.1 It is an offence under the *Wildlife and Countryside Act 1981* (as amended) to cause the spread Indian Balsam and Giant Hogweed in the wild. It is advised that the removal of the Indian Balsam and Giant Hogweed and on-going control of the invasive plant species within the site (as there is a source of seed of these species from the off-site river corridor) is carried out as part of the enhancement / management of habitats to be secured by the Habitat Management and Monitoring Plan (HMMP) (or similar)

5.3.2 To minimise the risk of introduction of invasive species to the site and retained habitats, all machinery / plant to be brought to the site must be clean.

5.3.3 Wheels / tracks of machinery / plant must have been pressure washed before use at the site. No excessive remnant soil or plant material from other sites must be present on the machinery / plant or in the tyre treads as this may increase the risk of spread of non-native and invasive plant species e.g. Japanese Knotweed (*Fallopia japonica*) and Giant Hogweed (*Heracleum mantegazzianum*).

5.4 Nesting Birds and Other Best Practice for the Protection of Wildlife

Nesting Birds

5.4.1 All wild birds are protected under the *Wildlife and Countryside Act 1981* (as amended) while they are breeding. It is advised that any works that will affect habitats suitable for use by nesting birds are scheduled to commence outside the bird nesting season. Commencement of works in the nesting season must be informed by a pre-works nesting bird survey, carried out by a suitably experienced ecologist. The bird breeding season typically extends between March to August inclusive.

5.4.2 If breeding birds are detected the ecologist will issue guidance in relation to the protection of the nesting birds in conjunction with the scheduled works. This may involve cordoning off an area of the site until the young birds have fledged.

Best Practice for the Protection of Other Wildlife

5.4.3 During the site preparation and operation, for the protection of wildlife, including hedgehog and common toad, it is essential that the following best practice is applied:

a. No trenches must be left open overnight. Trenches or holes created (for the installation of cables for example) must be properly covered with a board or fitted with a means of escape (such as ramped edge or a sloping plank of timber). This will ensure that any inquisitive wildlife do not become trapped;

b. No fires must be lit at the site;

c. Any chemicals or harmful materials must be safely and correctly stored so that they cannot be accessed by inquisitive wildlife;

d. Between the current time and the commencement of works (i.e. installation of the teepee each year) it is recommended that the current mowing management at the site is continued and the habitats to be affected by the temporary structures are not permitted to grow dense or rank which may increase the opportunities for attraction of sheltering wildlife. If this is not possible

then arrangements must be made for the progressive flailing of the vegetation on the site prior to commencement of works on the site; and

e. Any queries / issues in relation to wildlife on site must be directed to ERAP (Consultant Ecologists) Ltd (01772 750502).

5.5 Additional Measures for the Enhancement of Biodiversity Within the Site

5.5.1 The following measures should be accommodated at the site to secure opportunities for wildlife:

Roosting Bats

5.5.2 To enhance the opportunities at the site for roosting bats it is recommended at least three bat boxes are installed on suitable retained trees within the site. An ecologist will advise on the siting of the bat boxes as needed.

5.5.3 Bat boxes should be installed to the following guidelines (Bat Conservation Trust, 2024)

a. At least 4 metres above the ground (where safe installation is possible);

b. Sheltered from strong winds and exposed to the sun for part of the day (usually south or south-west). Ideally several bat boxes will be installed to provide a variety of different thermal options for bats. Grouping a number of boxes each with a different aspect can achieve this; while a number of boxes is preferable to one, a single box is still viable and may be used by roosting bats;

c. Located close to unlit linear features, such as lines of trees or hedgerows; and

d. Installed where the bat box entrance is not cluttered or impeded by branches, or accessible to predators (such as cats) by large branches underneath them.

5.5.4 Suitable bat boxes are the Schwegler 1FF, Greenwood Ecohabitat's single or double cavity boxes and Schwegler 1FD, see **Insert 1**.

Insert 1: Schwegler 1FF, Greenwood Ecohabitat's single cavity and Schwegler 1FD bat boxes

Nesting Birds

5.5.5 Bird boxes suitable for use by woodland bird species should be installed at the retained trees within the site. An ecologist will advise on the siting of the bird boxes. The boxes should be at least 4 metres from ground level. A selection of the boxes presented at **Insert 2** should be used.

Insert 2: Schwegler 3S, Schwegler 1N, Schwegler 2M and Schwegler 2H bird boxes, suitable for a variety of woodland birds.

5.6 Landscape and Habitat Management and Maintenance / Habitat Management and Monitoring Plan

5.6.1 To secure long-term benefits for biodiversity at the retained and created habitats at the site and to comply with the requirements of the *Assessment of Biodiversity Net Gain* it is recommended that a Habitat Management and Monitoring Plan (HMMP) (or similar) is prepared.

6.0 CONCLUSION

6.1 It is concluded that the proposals at The Orchard are feasible and acceptable in accordance with the identified ecological considerations and relevant planning policy.

6.2 The mitigation hierarchy has been applied and, in the presence of mandatory actions and best practice measures described in **Section 5.0**, adverse effects on designated sites for nature conservation are reasonably discounted and appropriate mitigation / compensation to address identified and potential impacts on protected species such as nesting birds are feasible and can be secured.

6.3 The report describes the appropriate and proportionate measures and recommendations that aim to enhance the value of the site for wildlife such as roosting bats, nesting birds and biodiversity. The recommendations comprise landscape planting, habitat creation and the application of positive habitat management in the long-term to achieve measurable gains for biodiversity and compliance with the NPPF, local planning policy and best practice.

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8.0 APPENDIX 1: TABLES AND FIGURES

8.1 Photographs

Table 8.1: Photographs

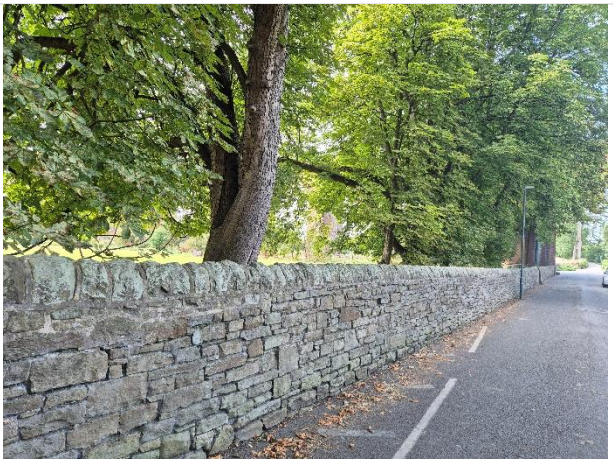
	
Photo 1: Modified grassland in the site showing the Horse-chestnut trees (within the site) and the Whalley Abbey East Gatehouse (off-site)	**Photo 2:** Modified grassland in the site showing the Horse-chestnut trees (within the site) and Whalley Viaduct (off-site)
	
Photo 3: Modified grassland and mixed scrub along western site margin	**Photo 4:** Stone wall along Ridding Lane at the northern site boundary

Photo 5: Orchard area over mown modified grassland

Photo 6: Orchard area over mown modified grassland

Photo 7: Pear tree (T12) in orchard

Photo 8: Sparse ruderal vegetation cover compacted hardcore

Photo 9: Sparse ruderal vegetation cover compacted hardcore at western margin of site

Photo 10: Bare ground beneath Horse-chestnut trees at northern margin of site

Photo 11: Line of Horse-chestnut at northern site margin (trees T01 to T04)

Photo 12: Line of Horse-chestnut at northern site margin (trees T05 to T10)

Photo 13: Bark covered path from northern gate

Photo 14: Off-site riparian habitats along River Calder (neutral grassland with Indian Balsam and mixed scrub)

Photo 15: Off-site riparian habitats along River Calder (young planted trees over neutral grassland with Giant Hogweed)

Photo 16: Off-site riparian habitats along River Calder (young planted trees over neutral grassland)

Photo 17: Off-site section of River Calder adjacent to the site

Photo 18: Viaduct pillars each side of the access track

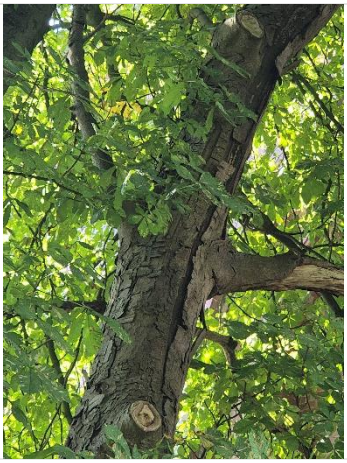


Photo 19: Lifted bark at Horse-chestnut tree

8.2 Plant Species Lists

Table 8.2: Plant Species List for Mown Modified Grassland

Scientific Name	Common Name	DAFOR[1]	Cover
Carex pendula	Pendulous Sedge	R	<1%
Festuca rubra	Red Fescue	LF	1%
Holcus lanatus	Yorkshire-fog	A	20%
Lolium perenne	Perennial Rye-grass	A*	35%
Poa annua	Annual Meadow-grass	VLF	<1%
Poa trivialis	Rough Meadow-grass	F/LA	20%
Ranunculus repens	Creeping Buttercup	F/LA	20%
Rumex obtusifolius	Broad-leaved Dock	O	<1%
Senecio jacobaea	Common Ragwort	R	<1%
Taraxacum officinale agg.	Dandelion	F	1%
Trifolium repens	White Clover	F	10%

[1]Key to DAFOR: D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare, V=Very, L=Local and *denotes a constant species

Table 8.3: Plant Species List for Neutral Grassland, Tall Forbs and Scattered Shrubs at Western Boundary

Scientific Name	Common Name	DAFOR[1]	Cover
Aesculus hippocastanum	Horse Chestnut sapling	R	<1%
Arctium minus	Lesser Burdock	R	<1%
Arrhenatherum elatius	False Oat-grass	A*	35%
Calystegia sepium	Hedge Bindweed	R	<1%
Cirsium arvense	Creeping Thistle	F/LA	10%
Corylus avellana	Hazel	R	1%
Crataegus monogyna	Hawthorn	F	25%
Dactylis glomerata	Cock's-foot	A*	10%
Elytrigia repens	Common Couch	F	1%
Epilobium hirsutum	Great Willowherb	VLA	<1%
Equisetum arvense	Field Horsetail	LA	1%
Equisetum palustre	Marsh Horsetail	VLF	<1%
Festuca rubra	Red Fescue	LF	1%
Galium aparine	Cleavers	VF	<1%
Heracleum mantegazzianum	Giant Hogweed	O	<1%
Heracleum sphondylium	Common Hogweed	LF	5%
Holcus lanatus	Yorkshire-fog	F	15%
Impatiens glandulifera	Indian Balsam	LA	2%
Lamium album	White Dead-nettle	VLA	1%
Lathyrus pratensis	Meadow Vetchling	VLA	<1%
Plantago major	Greater Plantain	VLF	<1%
Poa trivialis	Rough Meadow-grass	F	10%
Polygonum aviculare	Knot-grass	VLF	<1%
Potentilla anserina	Silverweed	VLF	<1%
Rumex obtusifolius	Broad-leaved Dock	O	<1%
Senecio jacobaea	Common Ragwort	R	<1%
Senecio vulgaris	Groundsel	R	<1%
Silene dioica	Red Campion	R	<1%
Stachys sylvatica	Hedge Woundwort	VLF	<1%
Urtica dioica	Common Nettle	F	5%

[1]Key to DAFOR: D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare, V=Very, L=Local and *denotes a constant species

8.3 Figures

Figure 1: Aerial Image of the Site and its Surroundings Showing Ponds within 500 metres

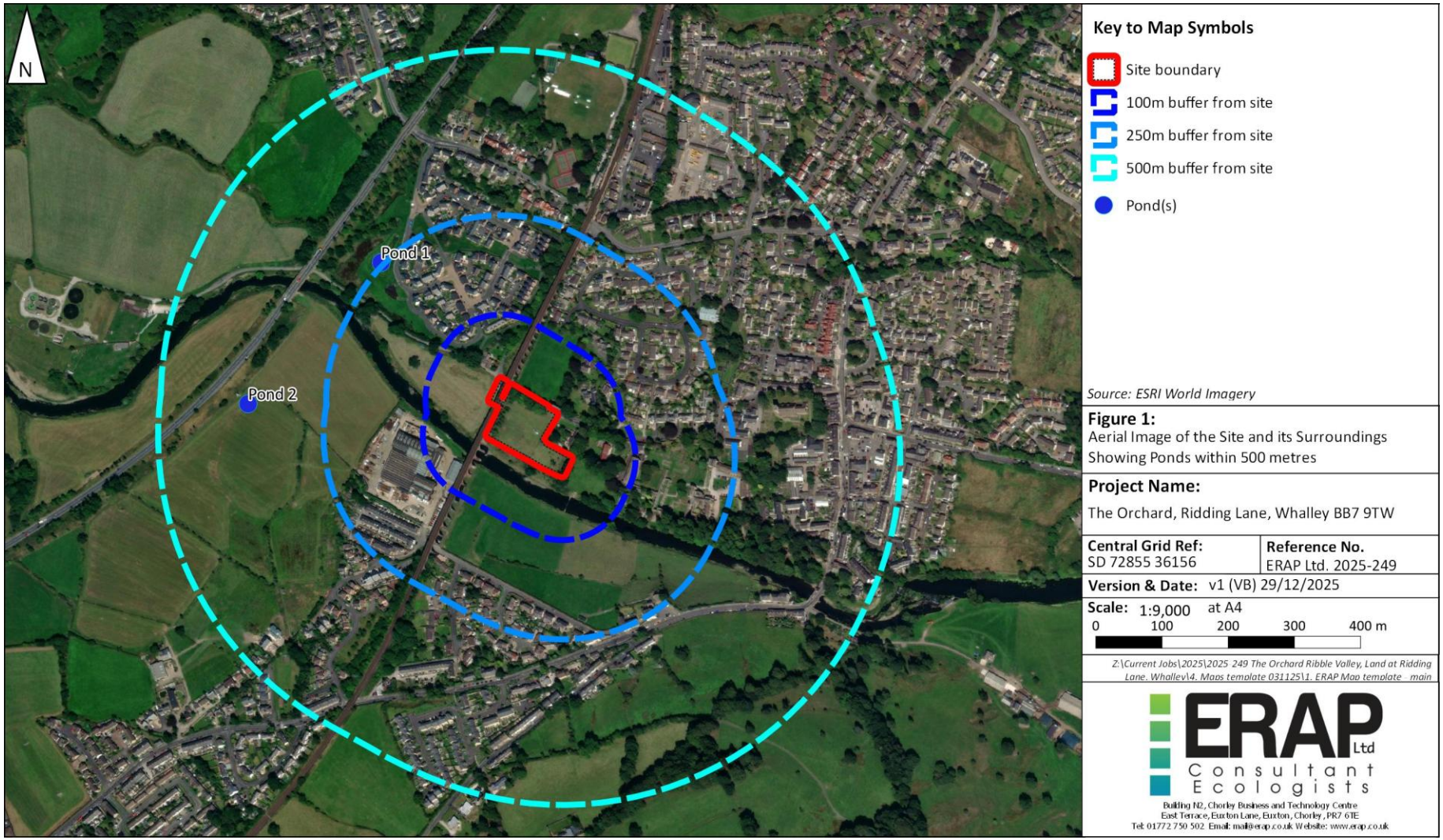


Figure 2: Phase 1 Habitat Survey