Farington Cricket Ground

Ecological Assessment

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Issue Status

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01	For Comment	AN	MC	09/10/2020
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1.0 Introduction

1.1 Background

1.1.1 This Ecological Assessment has been prepared by BDP on behalf of Lancashire County Council, to inform a future planning application for the proposed Farington Cricket Ground development at the Woodcock Estate, Farington (hereinafter referred to as the "Site").

1.1.2 The proposed Cricket Facility will comprise 2 no. cricket ovals and associated pavilion building and spectator seating, covered cricket nets, access, parking, landscaping and associated works (including temporary event overlay facilities on ticketed match days).

1.2 Location

1.2.1 The Site is located in Farington (grid reference: SD5476824749) bound by Farington Road (A582) to the north, Fowler Lane to the south, Stanfield Lane to the east and Fowler lane and Avenue to the West. The site comprises agricultural land with hedgerow and tree boundaries. The wider landscape is dominated by agricultural land, industrial and residential developments (ref. Figure 1).

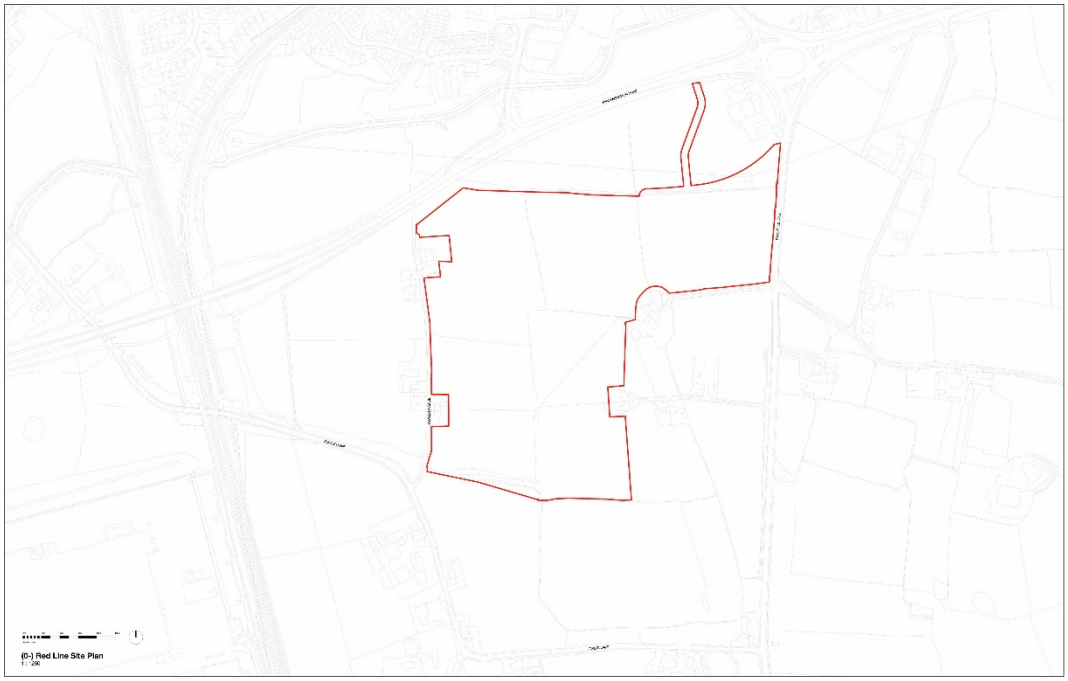

Figure 1. The Farington Cricket Ground site

1.3 Planning

1.3.1 Biodiversity is a material consideration to the planning process and consideration must be given to the protection, retention and improvement of existing biodiversity features. As the proposed Farington Cricket Ground scheme is likely to have impacts for wildlife and biodiversity, consideration should be given to potential protected and notable sites, habitats and species which may be present within and/or adjacent to the Site by the planning authority when considering the development proposals.

1.3.2 In accordance with current planning policy guidance the proposed Farington Cricket Ground development should minimise impacts on and providing net gains for biodiversity. The biodiversity gain target for the project is a 10% net increase in biodiversity measured using the Biodiversity Metric 3.0 Calculation Tool (Natural England, 2021).

1.4 Objectives

1.4.1 The survey was commissioned to accompany the detailed planning application for the proposed redevelopment of the Site. The aim of the survey was to:

- Describe and map the habitats present on the Site;
- Assess any potential impact on protected sites, habitats and/or species;
- Identify where further surveys may be required; and
- Provide recommendations to protect and enhance site ecology

2.0 Methodology

2.1 Desktop Study

2.1.1 A desktop study was carried out to obtain and review ecological information held by the Local Records Centre and other publically accessible online sources. Ecological information for protected and notable sites and species within the Site and a 2km radius thereof was provided by the Lancashire Environment Record Network (LERN).

2.1.2 In addition to the consultation process, a review of the local and national planning framework was carried out, including:

National Policy

- National Planning Policy Framework, July 2021
- Habitats and Species of Principal Importance, August 2010

Local Policy

- Central Lancashire Core Strategy DPD 2012
- South Ribble Local Plan (2015)
- Central Lancashire Biodiversity and Nature Conservation Supplementary Planning Document, July 2015

2.2 Site Survey

2.2.1 An initial site survey was undertaken on the 15 May 2020, within the optimal period for ecological survey. The site survey as undertaken by Anthony Nickson. Anthony holds Natural England survey licences for bats and great crested newts and is also a full member of the Chartered Institute of Ecology and Environmental Management.

2.2.2 Site visits undertaken in 2021 as part of further protected species surveys confirmed there were no significant changes to the habitats present within and adjacent to the site.

Habitats

2.2.3 Site surveys were undertaken in accordance with JNCC standards (JNCC, revised 2016). Habitats present on Site were mapped and assigned a Phase 1 category. Botanical nomenclature follows the New Flora of the British Isles (Stace, 2019).

2.2.4 During the site survey particular attention was given to searching for invasive plant species listed under Schedule 9 of The Wildlife and Countryside Act 1981 (as amended).

Protected Species

2.2.5 Evidence of, and/or the potential for the presence of protected species was recorded during the site survey. Based on the desktop study and habitat types present on Site, particular attention was paid to the following species:

Bats

2.2.6 All British bat species and their roosts are protected under European Law (The Conservation of Habitats and Species Regulations 2017) and UK Law (Wildlife and Countryside Act 1981, as amended). As such it is an offence to undertake the following acts:

- Deliberately capture, injure or kill bats
- Damage or destroy a breeding or resting place
- Obstruct access to their resting or sheltering places
- Intentionally or recklessly disturb a bat while it’s in a structure or place of shelter or protection

2.2.7 As the proposals for the Site will impact existing trees, particular attention was given to bats.

Habitat Suitability

2.2.8 Initially, a review of publically accessible online mapping systems was undertaken to assess the habitats present on Site and in the surrounding area. The review assessed the suitability of the habitats to support and provide connectivity for commuting and foraging bats.

Table 1. Guidelines for assessing the potential suitability of proposed development sites for bats based on the presence of habitat features within the landscape

Suitability	**Commuting and foraging habitats**
Negligible	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	Habitat that could be used by small numbers of commuting bats 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 commuting 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 commuting bats 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, treelined watercourses and grazed parkland. Site is close to and connected to known roosts.

Preliminary Roost Assessment

2.2.9 A preliminary roost assessment of the existing trees to be impacted by the proposed development was undertaken. An external inspection of each tree was undertaken to search for, and to assess the potential for, a bat roost to be present.

2.2.10 The external inspections of the trees involved a visual examination of each tree from the ground using close-focusing binoculars to search the trunk and the canopy for potential roosting features (PRFs). A high-powered torch was used to inspect cavities or shaded areas of the tree. Features of trees commonly used by bats for roosting and shelter, and field signs that may indicate use of trees by bats, were also recorded. Potential roosting features that may be used by bats include:

- woodpecker holes;
- rot holes;
- hazard beams;
- other vertical or horizontal cracks and splits (such as frost cracks) in stems or branches;
- partially detached platey bark;
- knot holes arising from naturally shed branches, or branches previously pruned back to the branch collar;
- man-made holes (e.g. cavities that have developed from flush cuts) or cavities created by branches tearing out from parent stems;
- cankers (caused by localised bark death) in which cavities have developed;
- other hollows or cavities, including butt-rots;

- double-leaders forming compression forks with included bark and potential cavities;
- gaps between overlapping stems or branches;
- partially detached ivy with stem diameters in excess of 50mm;
- bat, bird or dormouse boxes.

2.2.11 Each tree was then assessed in accordance with the guidelines for assessing the potential suitability of proposed development sites for bats (BCT, 2016).

Table 2. Guidelines for assessing the potential suitability of proposed development sites for bats based on the presence of suitable roosting features within a structure

Suitability	**Commuting and foraging habitats**
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.

Presence/Absence Survey

2.2.12 Following the preliminary roost assessment further presence/absence surveys were carried out on the following trees T1 oak, T3 oak, T4 oak, T5 oak, T12 oak, T13 oak, T14 oak, T20 oak, T21 oak, and T22 oak which were identified as supporting moderate or high suitability to support roosting bats.

2.2.13 For each survey surveyors were located strategically to ensure all potential bat access points were accounted for, and monitored the trees visually to determine whether or not any bats emerged from, or entered, the structures (ref. Appendix C for surveyor locations). Further to this, each surveyor used a bat detector to record the echolocations of any bat activity so that the calls could later be identified to species or at least genus level.

Transect surveys

2.2.14 Nine transect surveys were carried out in 2020 and 2021 in order to determine the value of the habitats within the application site for foraging and commuting bats. The surveys involved walking a predetermined transect route, using hand-held bat detectors, in order to record and observe (where possible) any bats foraging and commuting.

2.2.15 During the initial site walkover, habitats which would be affected by the proposed development were identified and an appropriate transect route determined. The route ensured that all habitats were sampled, although the primary focus was on habitats with greater suitability for bats. The transect route is detailed in figure 2.

Figure 2. Transect route

2.2.16 Each transect consisted of a dusk activity survey which started at sunset and continued for at least 2 hours. The transects were walked at a constant speed (so the sampling area was the same per unit time) along the planned route. Full Spectrum bat detectors were used to record each bat echolocation call and link it to a specific location (using GPS points) and time to enable the data to be easily mapped and presented.

2.2.17 The transect survey was carried out as follows:

Table 3. Bat activity transect survey information

Date	Start temperature	End temperature	Weather	Beaufort scale	Sunset
26/07/2020	17ºC	16ºC	Dry, Cloud 30%	3	21:17
16/08/2020	17ºC	15ºC	Dry, Cloud 80%, light drizzle from 23.10	2	20:36
13/09/2020	18ºC	16ºC	Dry, Cloud 30%	1	19:30
26/05/2021	12 ºC	12 ºC	Dry, Cloud 50-70%	1	21.23
28/06/2021	13 ºC	11 ºC	Dry, Cloud 20-30%	1	21.45
31/07/2021	15 ºC	14 ºC	Dry, Cloud 100%, light drizzle from 21.12- 21.34	2	21.09
25/08/2021	19ºC	17 ºC	Dry, Cloud 40-60%	1	20.17
25/09/2021	17 ºC	16 ºC	Dry, Cloud 40-50%	1	19.01
18/10/2021	16 ºC	16 ºC	Dry, Cloud 80-90%	1	18.06

Great Crested Newt

2.2.18 Great Crested Newts (GCN) (*Triturus cristatus*) are protected under European Law (The Conservation of Habitats and Species Regulations 2017) and UK Law (Wildlife and Countryside Act 1981, as amended). As such, it is an offence to deliberately or recklessly undertake the following acts:

- Capturing, killing, disturbing or injuring GCN deliberately
- Damaging or destroying a breeding or resting place
- Obstructing access to their resting or sheltering places (deliberately or by not taking enough care)

2.2.19 Particular attention was given to GCN as there appears to be a former pond within the site boundary.

Habitat Suitability Index

2.2.20 A detailed assessment of the former pond was undertaken using the Habitat Suitability Index (HSI). HSI is a quantitative measure of habitat quality to evaluate the suitability of habitat for GCN. The HSI is a number between 0-1, derived from an assessment of ten habitat variables known to influence the presence of newts. A HSI of 1 is optimal while a HSI of 0 is very poor habitat.

Table 4. Categorisation of HSI scores

HSI	Pond suitability
<0.5	Poor
0.5-0.59	Below average
0.6-0.69	Average
0.7-0.79	Good
>0.8	Excellent

Otter

2.2.21 Otters (*Lutra lutra*), are protected under European Law (The Conservation of Habitats and Species Regulations 2017) and UK Law (Wildlife and Countryside Act 1981, as amended). As such it is an offence to undertake the following acts:

- Deliberately capture, injure or kill an otter
- Damage, destroy or obstruct an its breeding or resting places
- Disturb an otter in its breeding or resting places

2.2.22 Due to a brook running along the southern boundary of the Site and water vole records from the local area being provided; an otter survey was undertaken.

2.2.23 The survey followed the otter survey guidelines (D. Ward, N. Holmes and P. Jose, 1994). This involved surveying along one bank of the ditch for the following field signs: footprints; feeding remains or faeces; and anal jelly.

2.2.24 The surveys were undertaken on the 31 July 2020 and the 13 September 2020 the weather during both surveys was warm and dry.

Water Vole

2.2.25 Water voles (*Arvicola amphibius*), are protected under UK Law (Wildlife and Countryside Act 1981, as amended). As such it is an offence to undertake the following acts:

- Intentionally kill, injure or take (capture) a water vole
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place which water voles use for shelter or protection or disturb water voles while they are using such a place

2.2.26 Due to a brook running along the southern boundary of the Site and water vole records from the local area being provided; a water vole survey was undertaken.

2.2.27 The water vole survey followed the water vole survey methodology, as described in Strachan, Moorhouse and Gelling (2011) and Dean, Strachan, Gow and Andrews (2016). This involved surveying along one bank of the brook for the following field signs: sightings, latrines, burrows, footprints, pathways in vegetation, feeding remains and cropped grass around tunnel entrances.

2.2.28 The surveys were undertaken on the 31 July 2020 and the 13 September 2020 the weather during both surveys was warm and dry.

Badger

2.2.29 Badger (*Meles meles*) and their setts are protected under UK Law (Wildlife and Countryside Act, 1981 as amended, and the Protection of Badgers Act 1992). As such, it is an offence to harm badgers or disturb or damage their setts.

2.2.30 The site walkover involved searching for evidence of badger activity. This included sett holes, dung pits, latrines, snuffle holes, tracks, hair, prints, and scratch marks.

Common Reptiles

2.2.31 All British reptiles are protected under UK Law (Wildlife and Countryside Act 1981, as amended). The common species (adder, common lizard, grass snake and slow worm) are protected from intentional killing and injuring.

Birds

2.2.32 All birds, their nests and eggs are protected at the nest under UK Law (Wildlife and Countryside Act 1981, as amended). As such it is an offence to intentionally undertake the following acts:

- Kill, injure or take any wild bird
- Take, damage or destroy the nest of any wild bird whilst it is in use or being built
- Take or destroy the egg of any wild bird
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

2.2.33 As the proposals for the site will impact existing grassland, hedgerows and trees, particular attention was given to birds and further surveys were undertaken to assess the value of these habitats. The methodology employed was based-upon the Common Bird Census (CBC) methodology, detailed in Gilbert et al. (1998), as adopted by Natural England.

2.2.34 The method utilised five repeat visits on 24 May 2021, 04 June 2021, 14 June 2021, 25 June 2021 and 05 July 2021. The survey period included the optimum potential breeding activity through the breeding season inclusive of both resident and migratory birds. During each survey, a transect route (ref. figure 2) was walked which was chosen to ensure good coverage of each habitat type within the proposal site. No transects were undertaken through the centre of the site as there was visual and audio coverage of this area from the site boundary. All birds demonstrating breeding behaviour were mapped in the field, using standardised British Trust for Ornithology (BTO) species and activity recording codes.

3.0 Results

3.1 Desktop Study

Protected Sites

3.1.1 LERN provided the following ecological information for the Site and a 2km radius:

- Statutory and Non-Statutory Sites
- Protected and other Notable Species

3.1.2 See Appendix A for summary of ecological data search records.

3.1.3 The full list of protected and notable species identified from the data search was analysed, and the relevant issues have been detailed below. It should be noted that although the information provided by the local record centre is based on current records, it does not represent an exhaustive list of all records.

International/National Protected Sites

3.1.4 The desktop study confirmed that there are no sites with European or National statutory designations within a 2km radius of the Site.

Regional/Local Protected Sites

3.1.5 The desktop study confirmed that there is one Local Nature Reserve within a 2km radius of the Site, Preston Junction LNR, approximately 970m north-east of the Site.

3.1.6 The desktop study confirmed that there are no Biological Heritage Sites (BHS) within the Site. The following BHSs were identified within the 2km search area:

- Preston Junction LNR and adjacent habitats, approximately 1165m north-east of the Site
- Cuerden Valley Park and River Lostock, 1310m east of the Site.
- Tennis Court Pond, approximately 1780m south-east of the Site.
- River Lostock, approximately 1580m south-west of the Site.

Protected Species

Bats

3.1.7 The local record centre identified 33 bat records within a 2km radius of the Site, as follows:

Table 5. Summary of the LERN's bat records

Bat Species	Roost Records	Non-Roost Records	Closest Record
Bats (*Chiroptera*)	1	4	The closest record is from a roost in a building, approximately 1600m north-east of the Site.
Brandt's bat (*Myotis brandtii*)	1	0	The record is from a roost in a building, approximately 1330m south-east of the Site.
Common pipistrelle (*Pipistrellus pipistrellus*)	3	16	The closest record is a field record from Lostock View, approximately 231m north-west of the Site. The closest roost record is approximately 755m north-east of the Site.
Daubenton's bat (*Myotis daubentonii*)	0	3	The closest record is a bat detector record, approximately 1200m south-east of the Site.
Noctule bat (*Nyctalus noctula*)	0	2	The closest record is a bat detector record from Farington Moss, approximately 1000m west of the Site.
Pipistrelle bat (*Pipistrellus* sp.)	0	1	The record is a field record from Cuerden Valley Park, approximately 1200m south-east of the Site.
Soprano pipistrelle (*Pipistrellus pygmaeus*)	0	1	The record is a field record from Cuerden Valley Park, approximately 1200m south-east of the Site.
Mouse-eared bat (*Myotis* sp.)	0	1	The Myotis bat field record is from Cuerden Close, approximately 1470m south-east of the Site.

Great Crested Newt

3.1.8 The local record centre provided 11 GCN records within the 2km search area. The closest record is from an undisclosed location, approximately 675m north-east of the Site boundary.

Otter

3.1.9 The local record centre provided 26 otter records within the 2km search area. The closest is from Cuerden Valley Park, approximately 1200m south-east of the Site boundary.

Water Vole

3.1.10 The local record centre provided 20 water vole records within the 2km search area. The closest is from the River Lostock at Sherdley Road, approximately 70m north of the Site boundary. The A582 lies between the record and the Site.

Grass Snake

3.1.11 The local record centre provided a single grass snake record within the 2km search area. The record is from a 10km2 grid square (SD52). The exact location of the record was not provided.

Slow worm

3.1.12 The local record centre provided 2 slow worm records. The closest record is from the footpath between Rosemead Avenue and Prospect Avenue, approximately 785m north of the Site boundary.

Birds

3.1.13 The local record centre provided numerous bird records within 2km of the search area; including species which are known to nest in habitats present within the site such as dunnock (*Prunella modularis*), song thrush (*Turdus philomelos*) and starling (*Sturnus vulgaris*).

3.2 Site Survey

Habitat Description

3.2.1 The Site is approximately 14ha and comprises improved grassland, hedgerow, scattered tree, ditch and marshy grassland. Please see Appendices C for Phase 1 Habitat map.

Improved grassland

3.2.2 The dominant habitat within the Site is improved grassland (ref. plates 1-4, Appendix E) which is also the common habitat type within the surrounding farmland. The improved grassland is subject to fertiliser and herbicide application and grazed on rotation.

3.2.3 The sward is dominated by perennial rye-grass (*Lolium perenne*) and red fescue (*Festuca rubra*) with the following species recorded less frequently annual meadow-grass (*Poa annua*), cock's-foot (*Dactylis glomerata*), common mouse-ear (*Cerastium fontanum*), common ragwort (*Senecio jacobaea*), creeping buttercup (*Ranunculus repens*), creeping thistle (*Cirsium arvense*), cuckooflower (*Cardamine pratensis*), dock (*Rumex* sp.), groundsel (*Senecio vulgaris*), meadow buttercup (*Ranunculus acris*), meadow foxtail (*Alopecurus pratensis*), rough meadow-grass (*Poa trivialis*), Yorkshire-fog (*Holcus lanatus*) and spear thistle (*Cirsium vulgare*).

Hedgerow

3.2.4 The site is bound and divided by a series of species poor hedgerows (UK Priority Habitat) (ref. plates 5-8), the dominant species within the hedgerows is hawthorn (*Crataegus monogyna*). The hedgerows are generally intact and contact mature scattered trees. The hedgerows are generally managed with an average height of ≈1.5-2.5m, although there are a small number of hedgerows which are not managed, which exceed 3m high.

3.2.5 Several of the hedges are located along ditches which at the time of survey were dry and appeared unmanaged, however, it is likely that they become inundated during periods of heavy rainfall when they will provide an important function of alleviating potential flooding of the site.

3.2.6 The following woody species were also recorded within the hedgerows albeit less frequently alder (*Alnus glutinosa*), ash (*Fraxinus excelsior*), blackthorn (*Prunus spinosa*), dog-rose (*Rosa canina*), elder (*Sambucus nigra*), English oak (*Quercus robur*), goat willow (*Salix caprea*), holly (*Ilex aquifolium*) and wych elm (*Ulmus glabra*).

3.2.7 The following species were recorded in the understorey of the hedgerows: bittersweet (*Solanum dulcamara*), bracken (*Pteridium aquilinum*), campion (*Silene* sp.), cleavers (*Galium aparine*), common nettle (*Urtica dioica*), cow parsley (*Anthriscus sylvestris*), ground-ivy (*Glechoma hederacea*), hedge mustard (*Sisymbrium officinale*), Himalayan Balsam (*Impatiens glandulifera*), hogweed (*Heracleum sphondylium*), horsetail (*Equisetum* sp.), ivy (*Hedera helix*), lady-fern (*Athyrium filix-femina*) and male-fern (*Dryopteris filix-mas*).

Scattered trees

3.2.8 There are scattered mature trees (ref. plates 9-32) present within the hedgerows within the Site. The main tree species is oak (*Quercus* sp.) with alder also present. To the north-east boundary of the Site there is a belt of planted broad-leaved lime trees (ref. plate 33) providing a screen between the Site and Farington Road (A582).

3.2.9 There are scattered trees (ref. plate 34) along the western boundary between the Site and a residential dwelling. Species include alder, beech (*Fagus sylvatica*), elder, horse-chestnut (*Aesculus hippocastanum*), Leyland cypress (*x Cuprocyparis leylandii*) and silver birch (*Betula pendula*).

Ditch

3.2.10 As well as the dry ditches along several of the hedgerows there is a ditch (ref. plate 35) located along the southern boundary of the site which flows in an east-west direction along the southern field boundary and native hedgerow. A further ditch flows into the southern boundary ditch from the south western corner of the site. The ditch then flows below Fowler Avenue in a culvert, from where it continues in a westerly direction. The ditch lacks aquatic vegetation. The bank vegetation was typical of the hedgerow understorey planting.

Marshy grassland

3.2.11 There is marshy grassland approximately 25m long by 10m wide to the centre of the site (grid ref: SD5473824599) (ref. plate 36) which appears to once have been a former pond. The marshy grassland was dry during the survey but is likely to become inundated during periods of heavy rainfall. The habitat supports a number of aquatic species including bulrush (*Typha latifolia*), celery-leaved buttercup (*Ranunculus sceleratus*), common water-crowfoot (*Ranunculus aquatilis*), reed canary-grass (*Phalaris arundinacea*), soft-rush (*Juncus effusus*), water-cress (*Nasturtium officinale*) and water-starwort (*Callitriche* sp.).

Target Note 1

3.2.12 Himalayan Balsam was recorded in two different locations within the site, the first in the dry ditch next to the hedgerow to the north west of the site (ref. plate 37) and the second in the ditches to the south of the site (ref. plate 38).

Protected Species

Bats

3.2.13 All British bat species use buildings or trees to roost throughout the year in places which tend to be dark, sheltered and undisturbed; notably pipistrelle and brown long-eared bats which have been recorded within 2km of the Site.

Habitat Suitability

3.2.14 The hedgerows, scattered trees and ditches within the Site provide foraging habitat for bat species found in the local area, in particular the common pipistrelle species.

Preliminary Roost Assessment

3.2.15 Table 6 outlines the results of the PRF inspection survey of each tree which could be impacted by the proposed development.

Table 6. Summary of the preliminary roost assessment of trees

Tree Ref.	Species	Notes	Suitability to support roosting bats
T1	English oak	≈25m, lots of decay within branches, corvid nest	Moderate
T2	English oak	≈20m, no obvious PRFs, corvid nest	Low
T3	English oak	≈12m, 2 no. knot holes @ 5m	Moderate
T4	English oak	≈20m, 1 no. knot hole @ 8m	Moderate
T5	English oak	≈18m, crack @ 10m	Moderate
T6	English oak	≈10m, 1 no. knot hole @ 4m, not an obvious PRF	Low
T7	Alder	≈12m, 1 no. knot holes @ 4m no PRF	Negligible
T8	English oak	≈15m, frost crack @ 6m, not an obvious PRF	Low
T9	English oak	≈12m, no obvious PRF	Negligible
T10	English oak	≈16m, no obvious PRF	Negligible

T11	English oak	≈15m, 1 no. knot hole @ 6m, flaking bark at 12m, no obvious PRFs	Low
T12	English oak	≈20m, crevices in branches @ 6m and 7m, bird nest	Moderate
T13	English oak	≈12m, 1 no. knot hole @ 4m, frost crack @ 4m	Moderate
T14	English oak	≈12m, 1 no. knot hole @ 3m, frost crack @ 4m	Moderate
T15	English oak	≈12m, no obvious PRF	Negligible
T16	English oak	≈15m, large tree, no obvious PRF	Low
T17	English oak	≈20m, large tree, no obvious PRF	Low
T18	English oak	≈24m, large tree, no obvious PRF	Low
T19	English oak	≈22m, large tree, no obvious PRF	Low
T20	English oak	≈16m, several of crevices & cracks present	High
T21	English oak	≈24m, knot hole @ 4m	Moderate
T22	English oak	≈24m, large tree, no obvious PRF	Low
T23	English oak	≈26m, large tree, no obvious PRF	Low
T24	English oak	≈18m, large tree, no obvious PRF	Low
T25	Alder	≈16m, large tree, no obvious PRF	Negligible
T26	Alder	≈16m, large tree, no obvious PRF	Negligible
T27	English oak	≈16m, large tree, no obvious PRF	Low

Presence/Absence Survey

Table 7. Dawn re-entry survey of T12, T13 & T14

Date	**Sunrise Time**	**Surveyors**	**Start and end times**	**Equipment used**	**Weather**
29/07/2020	05:20	- Richard Lowe - Bruce Shortland - Hannah Mercer	03:20-05:36	3 x Anabat Scout	- 14.0°C (start temp) - 13.0°C (end temp) - Dry (precipitation) - 3 (beaufort wind scale)
Notes - No bats were observed emerging from or re-entering any of the trees - Common pipistrelle bats were observed and recorded foraging along the hedgerow. - Noctule bat was also recorded during the survey.					

Table 8. Dawn re-entry survey of T1, T3, T4 & T5,

Date	**Sunrise Time**	**Surveyors**	**Start and end times**	**Equipment used**	**Weather**
28/07/2020	05:18	- Richard Lowe - Bruce Shortland - Emily Traynor - Mathew Holroyd	03:15-05:35	4 x Anabat Scout	- 14.0°C (start temp) - 14.0°C (end temp) - Dry (precipitation) - 3 (beaufort wind scale)
Notes - No bats were observed emerging from or re-entering any of the trees - Several common pipistrelle bats were recorded commuting along the hedgerow.					

Table 9. Dawn re-entry survey of T20 & T21

Date	Sunrise Time	Surveyors	Start and end times	Equipment used	Weather
31/07/2020	05:24	- Richard Lowe - Hannah Mercer - John Lindsay	03:30-05:40	3 x Anabat Scout	- 16.0ºC (start temp) - 15.0ºC (end temp) - Dry (precipitation) - 2 (beaufort wind scale)
Notes - No bats were observed emerging from or re-entering any of the trees - Common pipistrelle bats were observed and recorded foraging along the oak lined footpath. Soprano pipistrelle bats were also recorded.					

Table 10. Dusk re-entry survey of T12, T13 & T14

Date	Sunset Time	Surveyors	Start and end times	Equipment used	Weather
18/08/2020	20:32	- Richard Lowe - Marie Pickering - Aidan Pickering	20:00-21:50	1 x EM Touch Pro 1 x Anabat Walkabout 1 x BatBox Duet	- 18.0ºC (start temp) - 15.0ºC (end temp) - Dry (precipitation) - 1 (beaufort wind scale)
Notes - No bats were observed emerging from or re-entering any of the trees - Several common pipistrelle bats recorded foraging and commuting along the hedgerow. A noctule bat was observed just after dusk feeding high above the trees.					

Table 11. Dusk re-entry survey of T20 & T21

Date	Sunset Time	Surveyors	Start and end times	Equipment used	Weather
21/08/2020	20:25	- Richard Lowe - Marie Pickering - Aidan Pickering - Sue Lonsdale	20:00-21:45	4 x Anabat Scouts	- 18.0ºC (start temp) - 16.5ºC (end temp) - Dry (precipitation) - 2 (beaufort wind scale)
Notes - No bats were observed emerging from or re-entering any of the trees - 2 no. common pipistrelle and 1 no. noctule bat passes during the survey.					

Table 12. Dusk re-entry survey of T1, T3, T4 & T5

Date	Sunset Time	Surveyors	Start and end times	Equipment used	Weather
23/08/2020	20:21	- Richard Lowe - Bruce Shortland - John Lindsay - Matthew Holroyd	19:55-21:36	4 x Anabat Scouts	- 16.0ºC (start temp) - 15.0ºC (end temp) - Dry (precipitation) - 1 (beaufort wind scale)
Notes - No bats were observed emerging from or re-entering any of the trees - Noctule bat recorded shortly after sunset but not observed. - Common pipistrelle bats recorded foraging along the hedgerow during the survey.					

Table 13. Dusk emergence survey of T20

Date	Sunset Time	Surveyors	Start and end times	Equipment used	Weather
14/09/2020	19:28	- Richard Lowe - Bruce Shortland - John Lindsay - Matthew Holroyd	19:05-21:10	4 x Anabat Scouts	- 19.0ºC (start temp) - 17.0ºC (end temp) - Dry (precipitation) - 1 (beaufort wind scale)
Notes - No bats were observed emerging from or re-entering any of the trees - Several common pipistrelle bats were observed foraging along the hedgerow during the survey. - 2 no. noctule bat calls were recorded but the bats not observed.					

Table 14. Dawn re-entry survey of T4 & T5

Date	Sunset Time	Surveyors	Start and end times	Equipment used	Weather
09/06/2021	04:51	- Richard Lowe - Anthony Nickson	03:04-05:09	2 x Anabat Scout	- 12.5ºC (start temp) - 13.0ºC (end temp) - Dry (precipitation) - 1 (beaufort wind scale)
Notes - No bats were observed emerging from or re-entering any of the trees - Common pipistrelle bats were heard/observed passing up and down the hedge line regularly between 03:18 and 03:58.					

Table 15. Dawn re-entry survey of T1 & T3

Date	Sunset Time	Surveyors	Start and end times	Equipment used	Weather
09/07/2021	04:54	- John Lindsay - Emily Traynor	03:00-05:10	2 x Anabat Scout	- 15.0ºC (start temp) - 15.0ºC (end temp) - Dry (precipitation) - 1 (beaufort wind scale)
Notes - No bats were observed emerging from or re-entering any of the trees - A single noctule bat was heard at 03:14 but not seen. - Common pipistrelle bats were heard/observed passing along the hedge line intermittently between 03:17 and 04:03.					

Table 16. Dawn re-entry survey of T20 & T21

Date	Sunset Time	Surveyors	Start and end times	Equipment used	Weather
16/07/2021	05:00	- Richard Lowe - Hannah Mercer - Eleanor Lowe	03:30-05:15	2 x Anabat Scout 1 x EM Touch	- 13.0ºC (start temp) - 14.0ºC (end temp) - Dry (precipitation) - 2 (beaufort wind scale)
Notes - No bats were observed emerging from or re-entering any of the trees - Common pipistrelle bats were heard/observed passing along the tree line at the south of the site between 03:34 and 04:12. - 2 no. noctule bats heard at 04:14 but not seen.					

Table 17. Dawn re-entry survey of T14

Date	Sunset Time	Surveyors	Start and end times	Equipment used	Weather
16/07/2021	05:00	- Emily Traynor	03:30-05:15	3 x Anabat Scout 1 x EM Touch	- 13.0ºC (start temp) - 14.0ºC (end temp) - Dry (precipitation) - 2 (beaufort wind scale)
Notes - No bats were observed emerging from or re-entering any of the trees - 2 no. *Myotis* bats (likely whiskered/Brandt's) heard at 03:36 and 03:46 but not seen. - Single common pipistrelle heard at 03:59 but not seen. - Single noctule bat heard at 04:24 but not seen.					

Table 18. Dawn re-entry survey of T12 & T13

Date	Sunset Time	Surveyors	Start and end times	Equipment used	Weather
29/08/2021	06:12	- Richard Lowe - John Lindsay	04:12-06:27	1 X Anabat Scout 1 x EM Touch	- 12.0ºC (start temp) - 12.0ºC (end temp) - Dry (precipitation) - 2 (beaufort wind scale)
Notes - No bats were observed emerging from or re-entering any of the trees - Common pipistrelle bats heard at 04:24 and 05:03 but not seen. - Single noctule bat heard at 05:14 but not seen.					

Transect surveys

3.2.16 During the 2020 transect surveys 447 common pipistrelle bat passes, 9 noctule bat passes, 1 soprano pipistrelle bat pass and 1 whiskered/Brandt's were recorded. See Appendix D for the location of the bat passes.

3.2.17 On the transect survey on the 26 July 2020, 136 common pipistrelle bat passes and 2 noctule bat passes were recorded.

3.2.18 On the transect survey on the 16 August 2020, 184 common pipistrelle bat passes and 5 noctule bat passes were recorded.

3.2.19 On the transect survey on the 13 September 2020, 127 common pipistrelle bat passes, 2 noctule bat passes, 1 soprano pipistrelle bat pass and 1 whiskered/Brandt's bat pass were recorded.

3.2.20 During the 2021 transect surveys 548 common pipistrelle bat passes, 16 noctule bat passes, 3 soprano pipistrelle bat pass and 1 whiskered/Brandt's were recorded. See Appendix D for the location of the bat passes.

3.2.21 On the transect survey on the 26 May 2021, 39 common pipistrelle bat passes, 2 soprano pipistrelle passes and 4 noctule bat passes were recorded.

3.2.22 On the transect survey on the 28 June 2021, 97 common pipistrelle bat passes were recorded.

3.2.23 On the transect survey on the 31 July 2021, 138 common pipistrelle bat passes and 5 noctule bat passes were recorded.

3.2.24 On the transect survey on the 25 August 2021, 62 common pipistrelle bat passes, 1 soprano pipistrelle, 2 noctule passes and 1 whiskered/Brandt's bat pass were recorded.

3.2.25 On the transect survey on the 25 September 2021, 51 common pipistrelle bat passes and 4 noctule passes were recorded.

3.2.26 On the transect survey on the 18 October, 161 common pipistrelle bat passes and 1 noctule passes were recorded.

3.2.27 Common pipistrelle bats (4 soprano pipistrelle bat passes) were the most frequently recorded bat within the application site, the contacts were regularly distributed along the hedgerows with scattered trees which they are foraging and commuting along.

3.2.28 The small number of noctule bat passes is typical of this species, they hawk for prey high above the ground and the small number of bat passes records suggests the noctule bats were commuting across the site rather than foraging above it.

3.2.29 Whiskered/Brandt's bat are woodland specialists. Only three records were identified during the transect surveys. Given the low incidences of contacts it is likely that the site provides unfavourable foraging habitat for Whiskered/Brandt's bats.

Great Crested Newt

3.2.30 The dry pond (grid ref: SD5473824599) within the site was assessed as being below average for supporting GCN, see habitat suitability score in table 19.

Table 19. HSI score

Suitability Index	**Pond (GR:SD5473824599)**
SI_1 - Location	1
SI_2 - Pond area	0.2
SI_3 - Pond drying	0.1
SI_4 - Water quality	0.33
SI_4 - Shade	1
SI_6 - Fowl	1
SI_7 - Fish	1
SI_8 - Ponds	0.65
SI_9 - Terrestrial habitat	0.67
SI_{10} - Macrophytes	1
HSI	**0.56** **Below average**
HSI calculation ($SI_1 \times SI_2 \times SI_3 \times SI_4 \times SI_5 \times SI_6 \times SI_7 \times SI_8 \times SI_9 \times SI_{10})^{1/10}$	

3.2.31 The dry pond does not provide suitable breeding habitat for GCN and the surrounding habitats within the Site which comprises predominantly of improved grassland is unfavourable for this species.

3.2.32 No other ponds were identified within the site or within 250m of the Site boundary.

Riparian Mammals

3.2.33 A survey for the presence/absence of water vole and otter and their field signs was carried along the entire ditch located along the southern boundary of the site and 10m beyond the site boundary.

3.2.34 The water channel was approximately 50-100cm wide and a depth of water of approximately 5-10 cm during each survey. The ditch banks were approximately 45-60 degrees in angle. The water channel contained deep deposits of mud and no aquatic plant species had established on the mud or within the water, indicating that run-off from field drains into the ditch after a rainfall event was slow, depositing the deep mud because of slow water movement.

3.2.35 The ditch lacked the basic aquatic plant habitat and water depth suitable for water voles and otters and no field signs of either species were identified during the survey.

Badger

3.2.36 The grassland provides foraging habitat for badger and there are some embankments which would be suitable for sett construction, however, no evidence of badger activity was identified within the Site.

Common Reptiles

3.2.37 The Site comprises predominately grazed improved grassland which provides unsuitable habitat for common reptiles such as grass snakes and slow worms which have been recorded within the wider landscape. The hedgerows through the site and dry pond provide limited cover and foraging habitat for these species.

3.2.38 The reptile records provides are from a housing estate approximately 785m north of the Site boundary and Cuerden Valley Country Park approximately 1600m south-east of the Site. The locations of the records are separated from the Site by major roads which would create a barrier to dispersal of reptiles.

Birds

3.2.39 Five survey visits were undertaken as follows: one in the month of May, three in June, and 1 in July, as per the above methodology. During each visit the transect route (ref. figure 2) was walked and birds demonstrating breeding behaviours or evidence that proves breeding, were recorded.

Table 20. Breeding bird survey information

Date	Time start	Time end	Weather
24 May 2021	07.20	10.30	Still, Overcast
04 June 2021	06.10	09.30	Hazy Sunny
14 June 2021	07.05	10.25	Sunny
25 June 2021	18.00	20.50	Overcast - Showers
05 July 2021	06.20	09.30	Still - Sunny

3.2.40 The table below provides the birds recorded on site; either breeding on the site or utilising the site for foraging from a nest or territory located adjacent to or nearby the proposal site.

Table 21. Summary of bird survey results

Species	24/05/21	04/06/21	14/06/21	25/06/21	05/07/21	Site Usage	Designation
Blue Tit	✓	✓	✓	✓	✓	Breeding and foraging	
Great Tit	✓	✓	✓	✓	✓	Breeding and foraging	
Coal Tit		✓		✓		Foraging	
Chaffinch	✓	✓	✓	✓	✓	Breeding and foraging	
Goldfinch	✓	✓		✓		Breeding and foraging	
Dunnock		✓	✓	✓		Breeding and foraging	BoCC Amber
Robin	✓	✓	✓	✓	✓	Breeding and foraging	
Pied Wagtail	✓		✓		✓	Foraging	
Blackbird	✓	✓	✓	✓	✓	Breeding and foraging	
Song Thrush	✓		✓	✓		Breeding and foraging	BoCC Red
Mistle Thrush			✓		✓	Foraging	
Reed Bunting		✓		✓		Foraging	BoCC Amber
Swallow		✓				Foraging	BoCC Red
Sparrow hawk				✓		Foraging	
Great Spotted Woodpecker	✓			✓		Foraging	

Buzzard		✓	✓			Foraging	
Moorhen	✓	✓		✓	✓	Breeding and foraging	
Pheasant	✓	✓	✓			Foraging	
Black Headed Gull				✓		Foraging and roosting	
Mediterranean Gull				✓		Foraging	BoCC Red
Oystercatcher	✓	✓			✓	Foraging and roosting	
Magpie	✓	✓	✓	✓	✓	Breeding and foraging	
Jay	✓	✓		✓		Foraging	
Jackdaw	✓	✓	✓	✓		Foraging	
Carrion Crow	✓	✓	✓	✓	✓	Foraging	

4.0 Evaluation

4.1 Desktop Study

International/National Protected Sites

4.1.1 There are no international/national protected sites within a 2km radius of the Site.

Regional/Local Protected Sites

4.1.2 There are no LNRs within the Site. The only LNR within the 2km search area is Preston Junction LNR, approximately 970m north-east of the Site.

4.1.3 There are no BHSs within the Site. There are three BHS within the 2km search area; the closest is Preston Junction LNR and adjacent habitats, approximately 1165m north-east of the Site.

4.1.4 The closest designated site is 970m from the Site. All of the designated sites are separated from the Site by major roads and areas of development and there is no habitat connectivity between the designated sites and the Site. The proposed redevelopment of the Site will be sensitive to the surrounding landscape and there will be no negative impacts on any of the designated sites.

4.2 Site Survey

Habitats

4.2.1 The Phase 1 habitats within the Site are common throughout the UK and no nationally rare or locally rare plant species were located during the site survey (Preston et al, 2002).

Hedgerow

4.2.2 The site contains approximately 2000m of species poor hedgerows, a UK Priority Habitat. The hedgerows are typical of the local agricultural landscape providing foraging, refuge, nesting and commuting opportunities for the local fauna. The hedgerows within the site are valuable at a local level only.

Non-native invasive plants

4.2.3 Himalayan balsam has been identified with the Site. Under the Countryside and Wildlife Act it is an offence to plant or otherwise cause Himalayan balsam to grow in the wild. If the proposed scheme will disturb areas where this species is present and therefore the removal and disposal of the plants or soil containing the plants from the site must be dealt with effectively prior to commencement of works onsite.

Protected Species

Bats

4.2.4 No bat roosts were identified within any of the trees on the site.

4.2.5 The hedgerows and scattered trees within the Site provide foraging and commuting habitat for foraging bats, in particular the common pipistrelle which was the predominant bat species recorded within the site. The hedgerows and scattered trees should be compensated for as part of the site masterplan and lighting strategy.

4.2.6 The redevelopment of the Site is considered to have a low impact on the foraging and commuting opportunities for local bat population.

Great Crested Newt

4.2.7 The primary habitat within the site; improved grassland provides unfavourable terrestrial habitat for GCN.

4.2.8 The pond within the application site is ephemeral and has a HSI score of 0.56 which equates to below average suitability to support GCN.

4.2.9 There are no other ponds within the site or within 250m of the Site boundary. The nearest GCN record is approximately 675m north-east of the Site boundary. There are 11 GCN records in total which are all separated from the Site by the M6 and A582 which would create a barrier to dispersal for this species.

4.2.10 The survey information suggests that the site provides low suitability to support GCN. The impact of the proposed development on GCN is considered to be negligible.

Riparian Mammals

4.2.11 There is negligible potential for the Site to support otter and water vole. The impact of the proposed redevelopment of on these riparian mammals is therefore negligible.

Badger

4.2.12 Although suitable habitat for badger to construct setts and forage is present within the Site, no signs of the species, such as setts, latrines, prints or hair were recorded during the survey. The impact of the proposed redevelopment of the Site on the local badger population is considered to be negligible.

Common Reptiles

4.2.13 The primary habitat within the site; improved grassland provides unfavourable habitat for common reptiles. Two slow worm records and a single grass snake record have been recorded within the 2km search area. The closest is a slow worm record approximately 785m north of the Site boundary. Both slow worm records are separated from the Site by the M6 and A582 which would create a barrier to dispersal for this species. The grass snake record is from a 10km^2 grid square (SD52), the exact location of the record is unknown.

Birds

4.2.14 The hedgerows, scattered trees and grassland within the Site provide nesting habitat for breeding birds during the nesting season.

5.0 Recommendations

Habitats

5.1.1 Hedgerows are a UK Priority Habitat. The loss of any hedgerows should be compensated for on at least a like-for-like basis. This is currently shown within the landscape design plans.

Invasive plants

5.1.2 The site survey identified the presence of Himalayan balsam within the Site. A management plan should be produced and implemented to eradicate this species from the Site prior to the commencement of development in accordance with the relevant legislation and guidelines.

Bats

5.1.3 High and moderate suitability to support a bat roost was identified within T1, T3, T4, T5, T12, T13, T14, T20 and T21 during the preliminary roost assessment, however, no bat roost were identified during the subsequent presence/absence surveys. The survey information suggests that none of the trees currently supporting roosting bats.

5.1.4 As none of the trees within the Site currently support a bat roost there should be no significant concerns or constraints in relation to roosting bats in the proposals.

5.1.5 It should be noted that bat absence is very difficult to prove definitively due to their mobility and size, and single or small numbers of bats are able to roost in extremely small space. Any future tree works to any of the trees identified as high, moderate or low suitability to support roosting bats should be carried out under Reasonable Avoidance Measures. The trees should be section felled and that the sections are inspected for bats once removed.

5.1.6 If, during any felling works, a bat, or an accumulation of bat droppings (ref. plate 39) is discovered at any time, work is to temporarily cease whilst a bat ecologist is contacted for guidance and assistance. This can be BDP (0161 828 2200) who undertook the initial survey, any licensed bat worker, or the Bat Conservation Trust (BCT) helpline (0845 1300 228).

5.1.7 As the hedgerows and scattered trees within the Site are used by bats for foraging and commuting any loss of hedgerow and/or scattered trees should be compensated for on at least a like-for-like basis.

Birds

5.1.8 All bird species are protected at their nest under the Wildlife and Countryside Act 1981. Due to suitable nesting habitat (hedgerows, scattered trees and grassland) it is recommended that site works that will impact any of these habitats takes place outside the peak bird breeding season (March to September).

5.1.9 If site works to these habitats are to be undertaken within the nesting season, then an appropriately qualified ecologist will be required to undertake a site walkover to visually assess suitable habitat for active nests. If active nests are discovered, then site works must cease until the nest is deemed inactive.

Biodiversity Enhancement

5.1.10 In line with the National Planning Policy Framework the planning system should contribute to and enhance the natural and local environment by providing net gains in biodiversity where possible. In order to comply with National Planning Policy Framework a series of ecological measures have been incorporated into the development.

5.1.11 The landscape design demonstrates:

- Native woodland, native tree, native meadow, native and ornamental shrub planting and a biodiverse attenuation pond will provide recognisable fruit and nectar sources for local birds, small mammals and invertebrates.
- Existing hedges will be supplemented with native infill hedge planting to strengthen connectivity and increase hedge diversity.
- Ecological features will be created to provide refuge for fauna within the site including a range of bird and bat boxes on the retained trees and refuge for small mammals, amphibians and invertebrates such as habitat piles, hibernacula and scattered boulders along the boundary of the site.
- Artificial lighting will be limited to lighting the pavilion, practice nets and along vehicular and pedestrian access routes. The luminaires have been selected so that no light will escape from the horizontal line or any spill to the rear of the luminaires. There will be no light spill on the boundaries of the site.

5.1.12 The Biodiversity Net Gain Design Stage Assessment (Urban Green, July 2022) demonstrates that at least a 10% net gain in habitat area units, linear units and river units has been achieved.

6.0 References

Advice Note on the Lifespan of Ecological Reports & Surveys, CIEEM, April 2019

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Bats and artificial lighting in the UK, Institution of Lighting Professionals, 2018

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Guidelines for Preliminary Ecological Appraisal, 2nd Edition, CIEEM, December 2017

Habitats and Species of Principal Importance, JNCC, August 2010

Handbook for Phase 1 habitat survey: A technique for environmental audit, JNCC, Revised 2016

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New Atlas of the British and Irish Flora. Oxford University Press, Preston, C.D., Pearman, D. & Dines, T. 2002

New Flora of the British Isles, 4th Edition, Stace, February 2019

South Ribble Local Plan, South Ribble Borough Council, Adopted July 2015

Surveying Badgers, Stephen Harris, Penny Cresswell, Don J. Jefferies, 1991

Woodcock Estate (SD5476824749) Biological Record Search, LERN, 06 May 2020

Appendix A - Ecological Data Search

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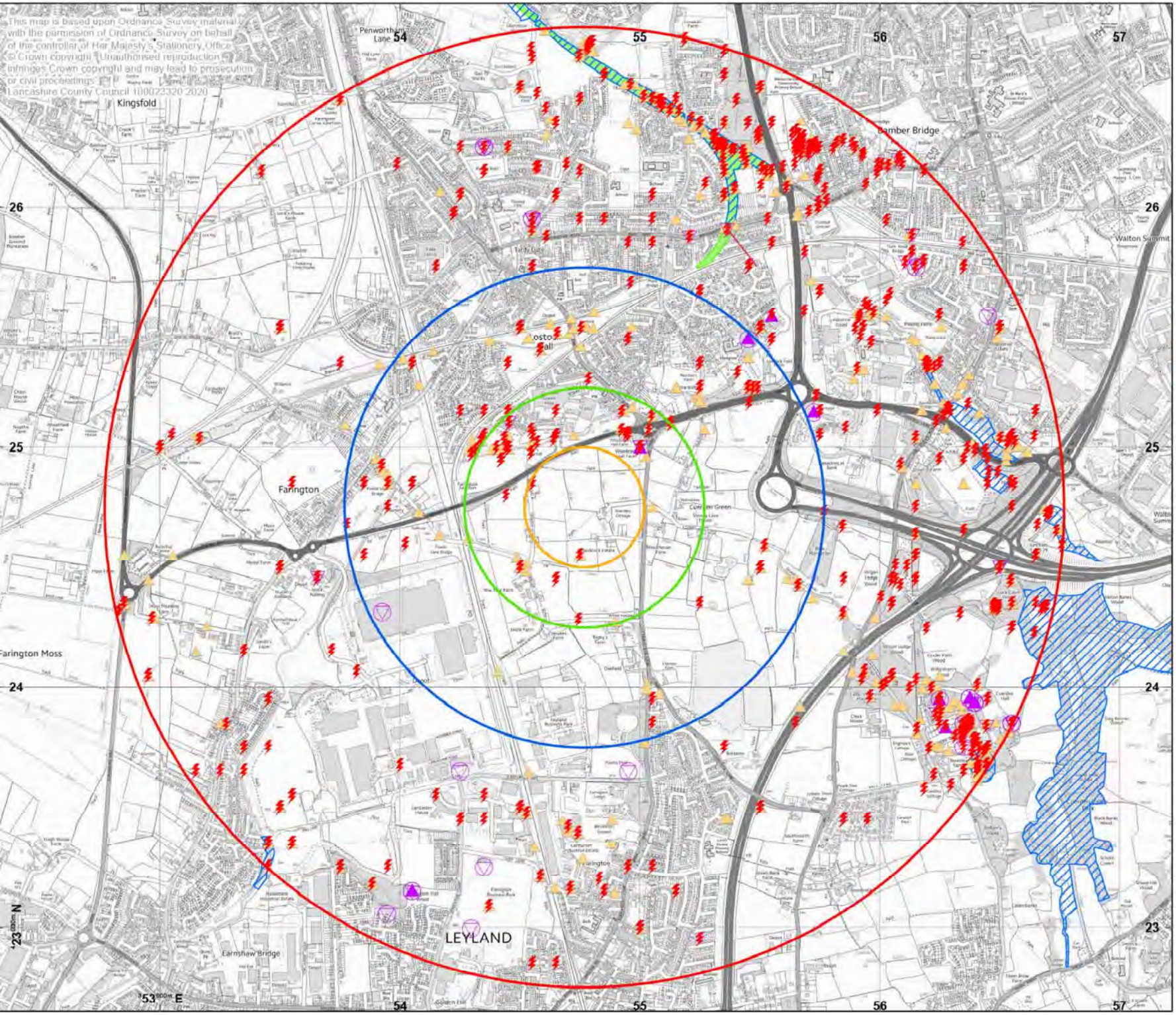


Project:
Woodcock Estate

Client:
Building Design Partnership

Grid Ref: 354768 424749

Legend

- 250 m Buffer
- 500 m Buffer
- 1 km Buffer
- 2 km Buffer
- Lancashire Key Species
- Bat Roost or Possible Roost
- Other Bat Record
- SLBG Bat Roost or Possible Roost
- SLBG Other Bat Record
- Lancashire INNS
- Biological Heritage Sites
- Local Nature Reserve

N.B. THIS IS AN INTERACTIVE PDF LAYERS CAN BE TURNED ON OR OFF TO AID CLARITY.

N

Metres

0 — 1,000

1:15,000

Boundaries of statutory designations (Natura 2000, SSSI etc) are included for information only. Definitive, information for these designations should be obtained from Natural England.

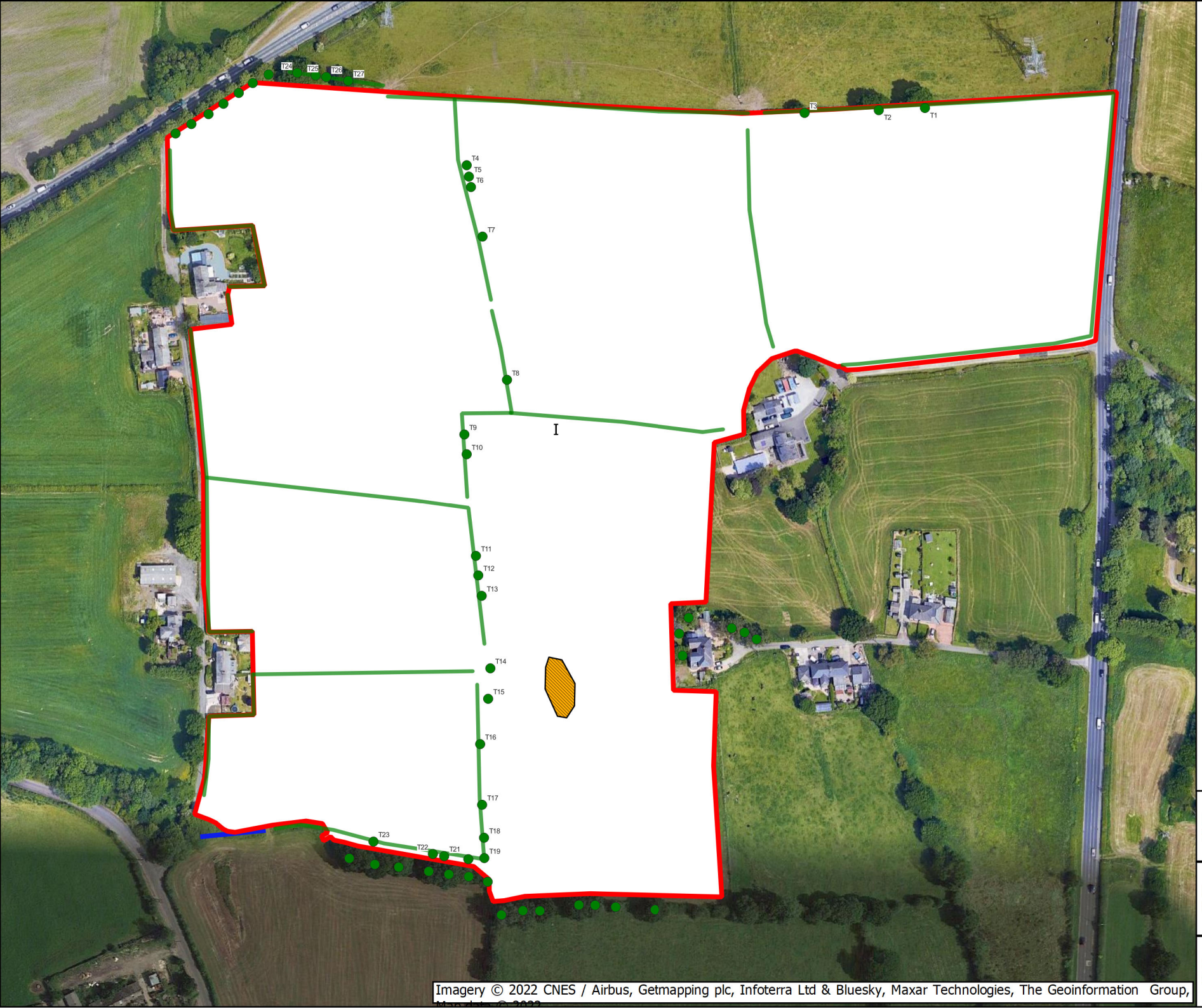
Lancashire Key Species records are plotted at the centre of the area to which they relate (the precision of each record is given in the accompanying attribute data and spreadsheet).

NBN Atlas occurrence download at https://nbnatlas.org accessed on Fri Oct 20 12:44:41 UTC 2017. See supporting documentation for citations and further information.

Lancashire Environment Record Network
C/O Planning Group
Environment Directorate,
Lancashire County Council,
PO Box 100,
County Hall,
Preston. PR1 0LD

lern@lancashire.gov.uk http://www.lancashire.gov.uk/lern.aspx

Appendix B - Phase 1 Habitat Map



Legend

- I — Improved grassland
- Marshy grassland
- Scattered tree
- Hedgerow
- Running water

Project:
Farington Cricket Ground

Drawing Title:
Phase 1 Habitat map

Date:
31/01/2022

Revision:
02

Imagery © 2022 CNES / Airbus, Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies, The Geoinformation Group,

Appendix C - Presence/Absence Surveyor Locations

Imagery © 2020 Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies, The Geoinformation Group, Map data © 2020

Legend

- High Potential
- Moderate Potential
- Low Potential
- Negligible Potential
- Surveyor locations

Project:
Woodcock Estate Planning Strategy

Drawing Title:
Tree Emergence / Re-entry Surveys
July 2020 Surveyor Locations

Date:
17/01/2022

Revision:
01

Legend

- High Potential
- Moderate Potential
- Low Potential
- Negligible Potential
- Surveyor locations

Imagery © 2020 Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies, The Geoinformation Group, Map data © 2020

Project:
Woodcock Estate Planning Strategy

Drawing Title:
Tree Emergence / Re-entry Surveys
August 2020 Surveyor Locations

Date:
17/01/2022

Revision:
01

Legend

- High Potential
- Moderate Potential
- Low Potential
- Negligible Potential
- Surveyor locations

Project:
Woodcock Estate Planning Strategy

Drawing Title:
Tree Emergence / Re-entry Surveys
June 2021 Surveyor Locations

Date:
17/01/2022

Revision:
01

Legend

- High Potential
- Moderate Potential
- Low Potential
- Negligible Potential
- Surveyor locations

Project:
Woodcock Estate Planning Strategy

Drawing Title:
Tree Emergence / Re-entry Surveys
July 2021 Surveyor Locations

Date:
17/01/2022

Revision:
01