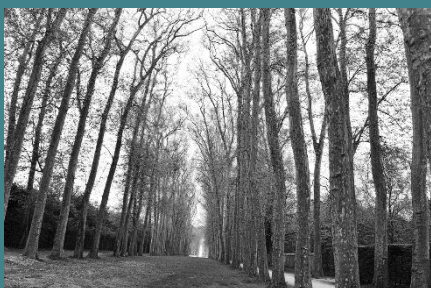


FPCR | environment  
& design



# Ecological Appraisal

Client

**Bellway Homes Ltd. (South Midlands)**

Project

**Land South of Desford**

Date

**May 2025**

CONTENTS

1.0 INTRODUCTION ..... 1

2.0 METHODOLOGY ..... 3

3.0 RESULTS ..... 13

4.0 DISCUSSION ..... 19

5.0 CONCLUSIONS ..... 28

FIGURES

- Figure 1a: Site Location and Consultation Results Plan - Designated Sites
- Figure 1b: Site Location and Consultation Results Plan - Species Records
- Figure 2: Baseline Habitat Plan
- Figure 3a: Bat Flightline Results Plan – May 2024
- Figure 3b: Bat Transect Results Plan – May 2024
- Figure 4a: Bat Flightline Results Plan – July 2024
- Figure 4b: Bat Transect Results Plan – July 2024
- Figure 5a: Bat Flightline Results Plan – Sept 2024
- Figure 5b: Bat Transect Results Plan – Sept 2024

APPENDICES

- Appendix A: Botanical Species Lists
- Appendix B: Hedgerow Survey Data
- Appendix C: Static Detector Results
- Appendix D: GCN eDNA Results
- Appendix E: Breeding Bird Survey Report
- Appendix F: Wintering Bird Report

| Rev | Issue Status | Prepared/Date    | Approved/Date    |
|-----|--------------|------------------|------------------|
|     | Draft        | LFR / 09.01.2025 | LFR / 23.04.2025 |
|     | Final        | LFR / 16.05.2025 | LFR / 21.05.2025 |

## 1.0 INTRODUCTION

1.1 The following report has been prepared by FPCR Environment & Design Ltd. on behalf of Bellway Homes Ltd (South Midlands) and provides details of a Preliminary Ecological Appraisal undertaken at Land South of Desford (Central OS Grid Ref: SK 48440 02950) herein referred to as the 'site'. This report details the findings of an extended Phase 1 Habitat Survey and UK Hab Assessment including initial observations of any suitable habitats for, or evidence of, protected species. From this the requirement for further faunal surveys was identified, which were conducted in the appropriate survey seasons through 2023 / 2024. Faunal surveys completed include the following:

- Badger *Meles meles* Survey;
- Seasonal Bat Activity Surveys – Static and Nighttime Bat Walkover Surveys;
- Wintering Bird Surveys 2023/24
- Breeding Bird Surveys;
- Great crested newt *Triturus cristatus* (GCN) eDNA Surveys; and
- Water vole *Arvicola amphibius* Survey.

### Site Context

- 1.2 The site spans c.38ha of agricultural land on the southern edge of Desford between Leicester Lane in the east and Peckleton Lane in the west. Residential Desford and the Bosworth Academy School flank its northern and western boundaries with further agricultural land extending to the south and east of the site.
- 1.3 Fields within the site were divided by established hedgerows with mature trees and all were either cultivated with maize or had been recently harvested and ploughed at the time of survey.
- 1.4 The northern boundary of the site is identified as a wildlife corridor through Policy ENV3 of the Neighbourhood Plan which presents as the edge of a belt of offsite mature woodland and structural vegetation along much of the northern site boundary.

### Development Proposals

- 1.5 Currently proposals are being brought forward for a hybrid planning application to deliver a total of 500 residential dwellings, a two-form entry primary school, community use building with potential for health care uses, a new link road and associated infrastructure, at the site with retention of key habitats in adjoining public open space. Access to the site would be achieved from Leicester Lane in the east and Peckleton Lane in the west.

### Scope of Appraisal

- 1.6 This Ecological Appraisal describes the current ecological interest within and around the Site, which has been identified through standard desk- and field-based investigations. It then considers the potential ecological impacts and opportunities for ecological enhancement in the context of relevant legislation and planning policy. Finally, it identifies the necessary additional measures to avoid, mitigate or provide compensation for potential impacts, and the mechanisms for securing such measures.



## 2.0 LEGISLATION AND POLICY

2.1 The national policy and legislation most relevant to the proposed scheme are:

- The Conservation of Habitats and Species Regulations ("The Habitats Regulations") (Amendment) 2017 in relation to the European Protected Species (EPS) great crested newt, (GCN), bats (all species) and dormouse; and European protected sites i.e. Special Areas of Conservation (SAC), Special Protection Areas (SPAs) and Internationally protected "Ramsar Sites" (collectively known as "Natura 2000 sites"). Annex II bat species of particular relevance in relation to SACs designated for bats.
- The Wildlife and Countryside Act 1981 (WCA) (as amended) in relation to all wild birds (including Schedule 1 species), other animals (notably Schedule 5 species), flora (those listed in Schedules 8 and 9) and Sites of Special Scientific Interest (SSSI);
- Natural Environmental and Rural Communities (NERC) Act 2006 in relation to various priority species and habitats;
- National Planning Policy Framework (NPPF) (2021);
- Local Nature Reserves (LNR) as designated most recently by the NERC Act 2006;
- Non-statutory protected local sites including County Wildlife Sites (CWS), Sites of Importance for Nature Conservation (SINC), Local Wildlife Sites (LWS) and Ancient Woodland Inventory (AWI) sites;
- Local Biodiversity Action Plans (LBAP)

### Local Policy

#### Hinckley & Bosworth Local Plan 2006 - 2026

##### Policy DM6: Enhancement of Biodiversity and Geological Interest

*Development proposals must demonstrate how they conserve and enhance features of nature conservation and geological value including proposals for their long term future management.*

*Major developments in particular must include measures to deliver biodiversity gains through opportunities to restore, enhance and create valuable habitats, ecological networks and ecosystem services.*

*Proposals where the primary objective is to conserve or enhance biodiversity or geological interest will be permitted where they comply with other relevant policies in the plan.*

*On site features should be retained, buffered and managed favourably to maintain their ecological value, connectivity and functionality in the long-term. The removal or damage of such features shall only be acceptable where it can be demonstrated the proposal will result in no net loss of biodiversity and where the integrity of local ecological networks can be secured.*

*If the harm cannot be prevented, adequately mitigated against or appropriate compensation measures provided, planning permission will be refused.*

*In addition to the above, where specific identified sites are to be affected the following will be taken into account:*

### Internationally and Nationally Designated Sites

*International and Nationally Designated Sites will be safeguarded.*

*Development which is likely to have any adverse impact on the notified features of a nationally designated site will not normally be permitted.*

*In exceptional circumstances, a proposal may be found acceptable where it can be demonstrated that:*

*is not available; and*

*a) A suitable alternative site with a lesser impact than that proposed*

*b) The on-site benefits of the proposal clearly outweigh the impacts on the notified features of the site and where applicable, the overall SSSI or habitat network; and the development management process; and*

*c) All appropriate mitigation measures have been addressed through*

*d) Development likely to result in a significant effect on internationally designated sites will be subject to assessment under the Habitats Regulations and will not be permitted unless adverse effects can be fully avoided, mitigated and/or compensated.*

### Irreplaceable Habitats

*Proposals which are likely to result in the loss or deterioration of an irreplaceable habitat would only be acceptable where:*

*e) The need and benefits of the development in that location clearly outweigh the loss; and*

*f) It has been adequately demonstrated that the irreplaceable habitat cannot be retained with the proposed scheme; and*

*g) Appropriate compensation measures are provided on site wherever possible and off site where this is not feasible.*

### Locally Important Sites

*Development proposals affecting locally important sites should always seek to contribute to their favourable management in the long term.*

*Where a proposal is likely to result in harm to locally important sites (including habitats or species of principal importance for biodiversity), developers will be required to accord with the following sequential*

*approach:*

*h) Firstly, seek an alternative site with a lesser impact than that proposed*

*i) Secondly, and if the first is not possible, demonstrate mitigation measures can be taken on site;*

*j) Thirdly, and as a last resort, seek appropriate compensation measures, on site wherever possible and off site where this is not feasible.*

**Desford Neighbourhood Plan 2018 - 2036****Policy ENV 3: Biodiversity General**

*Development proposals that cannot avoid (through, for example, locating to an alternative site with less harmful impacts), adequately mitigate, or, as a last resort, compensate for, the loss of a locally identified site of biodiversity value will not be supported.*

*Development proposals that conserve or enhance biodiversity, and incorporate biodiversity in and around them, will be supported.*

*Where a development proposal will adversely affect a protected species, an appropriate and suitable survey will be undertaken prior to development, and mitigation measures will be required as a development condition.*

*The Plan designates a wildlife corridor (map Fig. 9) along the two tributaries and the main valley of Rothley Brook and in a southerly direction from Desford village. Development will be expected to protect and enhance these wildlife corridors and other potential habitat links, including natural ponds. It should not create barriers to the permeability of the landscape for wildlife in general, or fragment populations of species of conservation concern.*

Figure 10: Wildlife Corridors indicates a wildlife corridor along the northern fringe of the site.

### 3.0 METHODOLOGY

#### Desktop Study

- 3.1 A Desk Study is an important element of undertaking an initial ecological appraisal of a site proposed for development, enabling the initial collation and review of contextual information, such as designated sites, together with known records of protected and priority species.
- 3.2 The Desk Study completed for this application involved collating biodiversity information from the following sources:
- Leicestershire and Rutland Environmental Records Centre; and
  - Multi-Agency Geographic Information for the Countryside (MAGIC) website<sup>1</sup>.
- 3.3 The search areas were related to the significance of sites and their potential zones of influence<sup>2</sup>, as follows:
- 10km around the Site for sites of International Importance (e.g. Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Ramsar sites);
  - 2km around the Site for sites of National or Regional Importance (e.g. Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs));
  - 2km for European protected species records (e.g. The Conservation of Habitats and Species Regulations 2017, SCHEDULE 2).
  - 1km around the Site for sites of Local or County Importance or statutory sites such as Local Nature Reserves (LNRs) and
  - 1km other species records (e.g. protected, or Section 41 NERC species of principal importance and notable species).
- 3.4 Further inspection, using colour 1:25,000 OS base maps ([www.ordnancesurvey.co.uk](http://www.ordnancesurvey.co.uk)) and aerial photographs from Google Earth ([www.maps.google.co.uk](http://www.maps.google.co.uk)), was also undertaken in order to provide additional context and identify any features of potential importance for nature conservation in the wider countryside.
- 3.5 Other resources at a county and district level have been reviewed, include the Leicestershire Nature Recovery Strategy (NRS) (Draft). Features identified on this tool support the importance of offsite features identified through Policy ENV3 of Local policy but the site is not identified as an Existing Area or Area that Could Become (ACB) important for biodiversity. Likewise, the Natural England Green Infrastructure Framework Map has been reviewed and plots offsite woodland and wetland information, again consistent with information obtained through the desk study described above.

---

<sup>1</sup> [www.magic.gov.uk](http://www.magic.gov.uk).

<sup>2</sup> Zone of Influence - the areas and resources that may be affected by the proposed development

## Field Survey

### Extended Phase 1 Survey - Habitats

- 3.6 An Extended Phase 1 Habitat Survey was undertaken across the majority of the Site on 6<sup>th</sup> September 2023. These surveys involved classification of the broad habitat types present using the system published by the UK Joint Nature Conservation Committee<sup>3</sup>. This comprised a walkover of the Site, mapping and broadly describing the principal habitat types and identifying the dominant plant species present within each habitat type and any invasive weeds (where present). Plant species abundance were made using the DAFOR scale. Vascular plant nomenclature follows Stace (2019)<sup>4</sup>. Whilst the plant species lists obtained should not be regarded as exhaustive, sufficient information was obtained to determine broad habitat types.
- 3.7 Habitats were also identified and mapped broadly following the UKHab 2.0 classification system<sup>5</sup> and assessed for their condition using methodology as detailed within the Statutory Biodiversity Metric Technical Annex 1: Condition Assessment Sheets and Methodology (July 2024)<sup>6</sup>. Biodiversity Net Gain calculations and methodology are discussed in a separate report.
- 3.8 Hedgerows were assessed for their potential ecological value under the Hedgerow Regulations 1997 (Statutory Instrument No:1160)<sup>7</sup> to determine whether they qualified as 'Important Hedgerows' under the Regulations. This was achieved using a methodology in accordance with both the Regulations and DEFRA guidance<sup>8</sup>. An assessment of archaeological importance as defined under the Hedgerow Regulations 1997 was beyond the scope of this assessment.
- 3.9 Hedgerows were also assessed to determine if they met the habitat descriptions for Hedgerow Habitat of Principal Importance as listed within Section 41 of the Natural Environment and Rural Communities (NERC) Act, (i.e. whether they consisted of 80% or more native species) or Priority Habitat of the Leicestershire BAP.
- 3.10 Throughout the walkover surveys consideration was additionally given to the actual or potential presence of protected species, such as, although not limited to those protected under the Wildlife and Countryside Act 1981 (as amended), the Protection of Badgers Act 1992<sup>9</sup> and the Conservation of Habitat and Species Regulations 2017 (as amended).
- 3.11 An update walkover assessment of the baseline habitats was undertaken across the whole Site in January 2025 to determine if that had been any material changes to the habitats and baseline conditions on the Site in the intervening period.

<sup>3</sup> JNCC 2010. Handbook for Phase 1 habitat survey - a technique for environmental audit, ISBN 0 86139 636 7

<sup>4</sup> Stace, C.A. (2019). New Flora of the British Isles. (4th Ed.). Cambridge: Cambridge University Press

<sup>5</sup> UKHab Ltd (2023). UK Habitat Classification Version 2.0 (Available at: <http://www.ukhab.org>)

<sup>6</sup> DEFRA (2024). Statutory Biodiversity Metric Technical Annex 1: Condition Assessment Sheets and Methodology v1.0.2 (Available at <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>)

<sup>7</sup> The Hedgerow Regulations 1997 – Statutory Instrument 1997 No. 1160. [Online]. London: HMSO. Available at: <http://www.legislation.gov.uk/uksi/1997/1160/contents/made> [Accessed 02/10/23].

<sup>8</sup> DEFRA. 1997. The Hedgerow Regulations 1997. A Guide to the Law and Good Practice. London: HMSO

<sup>9</sup> The Protection of Badgers Act 1992 (as amended). [Online]. London: HMSO Available from: <http://www.legislation.gov.uk/ukpga/1992/51/contents>

## Fauna

### Badger

3.12 All hedgerows and other suitable habitats within the Site were searched for evidence of badger *Meles meles* activity. Methodology employed followed that outlined by Harris and Creswell and Jefferies<sup>10</sup>.

3.13 Evidence of badger occupation and activity sought included:

- Setts: including earth mounds, evidence of bedding and runways between setts;
- Latrines: often located close to setts, at territory boundaries or adjacent to favoured feeding areas;
- Prints and paths or trackways;
- Hairs caught on rough wood or fencing; and
- Other evidence: including snuffle holes, feeding and playing areas and scratching posts.

### Bats

#### *Preliminary Roost Assessment*

3.14 A provisional ground level tree assessment (GLTA) of trees was undertaken with the aid of binoculars on 6<sup>th</sup> September 2023 by a suitably experienced ecologist from FPCR. Potential Roosting Features (PRFs) (based on p.16, British Standard 8596:2015 Surveying for bats in trees and woodland, October 2015) which were sought included:

- Natural holes (e.g. knot holes) arising from naturally shed branches or branches previously pruned back to a branch collar;
- Man-made holes (e.g. cavities that have developed from flush cuts or cavities created by branches tearing out from parent stems;
- Woodpecker holes;
- Cracks/splits in stems or branches (horizontal and vertical);
- Partially detached, loose or platy bark;
- Cankers (caused by localised bark death) in which cavities have developed;
- Other hollows or cavities, including butt rots;
- Compression of forks with occluded bark, forming potential cavities;
- Crossing stems or branches with suitable roosting space between;

---

<sup>10</sup> Harris, S., Creswell, P. & Jefferies, D. 1989. *Surveying for Badgers*. Occasional Publication of the Mammal Society No.9. Mammal Society, Bristol.

- Ivy stems with diameters in excess of 50mm with suitable roosting space behind (or where roosting space can be seen where a mat of thinner stems has left a gap between the mat and the trunk); and
  - Bat or bird boxes.
- 3.15 Certain factors such as orientation of the feature, its height from the ground, the direct surroundings, and its location in respect to other features may enhance or reduce the potential value.
- 3.16 Using professional judgement, the ground-based PRA assessment undertaken in 2025 classified any trees identified based upon the presence of suitable features as set out in Bat Surveys for Professional Ecologists: Good Practice Guidelines (BCT, 2023<sup>11</sup>) in which the general bat roost potential groups are defined (refer Table 4.2 of the guidelines) and provided in Table 1 below.

**Table 1: Suitability of trees for bats**

| Suitability | Description                                                                       |
|-------------|-----------------------------------------------------------------------------------|
| NONE        | Either no potential roost features or highly unlikely to be any.                  |
| FAR         | Further Assessment Required to establish if Potential Roost Features are present. |
| PRF         | A tree with at least one Potential Roost Feature.                                 |

- 3.17 The proposals are at an early stage of preparation, such that proposed site layout has not been finalised. The impact of the development on existing trees cannot yet be determined and an updated GLTA survey will be conducted once this has been provided with further survey effort potentially required dependent on the findings.

#### *Foraging and Commuting Bats – Nighttime Walkover Surveys*

- 3.18 Nighttime walkover bat surveys were undertaken seasonally at dusk across the Site in May, July and September 2024. Surveys were conducted in line with current guidance (4th edition) with nighttime bat walkovers undertaken in two parts. The first part was undertaken by stationary surveyors positioned at habitat features most likely to be utilised as commuting routes by bats. Once conditions become too dark to see, or once commuting activity has been observed and had largely ended, surveyors commenced the walked transect sampling of all areas and habitats within the Project Area noting any bat activity heard or observed along the way. With this methodology each survey therefore encompasses two elements, that together record information to provide further context to elements that static detectors cannot always identify such as bat behaviour or presence of multiple bats.
- 3.19 The first part of the survey to observe flightpaths involved a surveyor / survey team being positioned at predetermined location in each section as shown on Figure 3a, 4a & 5a. The surveys each started shortly before sunset and lasted for between 30 minutes and one hour

<sup>11</sup> Collins, J. (ed.) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4<sup>th</sup> edition)*. The Bat Conservation Trust, London.

after sunset. After this the walked transect was started and continued until two to three hours after sunset. The route followed during each transect was repeated on each survey occasion, however the starting point was varied.

- 3.20 Surveyors were equipped with Wildlife Acoustics Inc. Echo Meter Touch® bat detectors in conjunction with Echo Meter Touch® app and either a Samsung Galaxy Tab Active 3® tablet or an Apple Inc. iPad® during the transect surveys to detect bats and aid species identification. A written note was also made of any bat activity observed during the survey.
- 3.21 The Kaleidoscope Viewer© (Wildlife Acoustics, Inc.) software package was used to assess the levels of bat activity recorded within the Project Area, as indicated by the number of bat registrations logged. Measurements including peak frequency, inter-pulse interval, call duration and end frequency were taken to aid in species identification. This analysis was completed by a suitably experienced ecologist as above.
- 3.22 Surveys were undertaken when conditions were suitable (i.e. when the ambient air temperature exceeded 10°C and there was little wind and no rain) see **Table 2**.

**Table 2: Transect Survey Conditions 2024 (Figures 3a – 5b)**

| Survey Date | Survey Conditions                                                                                                              |
|-------------|--------------------------------------------------------------------------------------------------------------------------------|
| 30.05.24    | Flightline Survey 21:15 – 22:15, Walkover Survey 22:25 – 00:20. Starting Temp 12°C, dry. Wind Beaufort 0-1 and 50% cloud.      |
| 25.07.24    | Flightline Survey 21:08 – 22:08, Walkover Survey 22:20 – 00:17. Starting Temp 17°C, dry. Wind Beaufort 0-1 and 80%-30% cloud.  |
| 09.09.24    | Flightline Survey 19:34 – 20:34, Walkover Survey 20:45 – 22:55. Starting Temp 12°C, dry. Wind Beaufort 0-1 and 40 – 80% cloud. |

#### *Foraging and Commuting Bats - Automated Static Bat Detector Survey*

- 3.23 Two passive static recording broadband detectors (Song Meter® SM4BAT+ bat detectors), with outputs saved to an internal storage device, were deployed to supplement the manual transect survey, in line with industry guidance.
- 3.24 Monitoring took place in May, July and September 2024 with the devices staying in place between for a minimum of 5 nights. The output was analysed using the Sonobat™ 30.1 (SonoBat™ Inc.) software package. Data were initially run through the auto-analysis function of the software with manual vetting taking place of every call with the exception of common pipistrelles and soprano pipistrelles. Noise files were also manually vetted. Measurements including peak frequency, inter-pulse interval, call duration and end frequency were taken to aid in species identification. This analysis was completed by a suitably experienced ecologist (analysts are audited internally for quality control purposes and to maintain consistent results).
- 3.25 The recording units were deployed during periods of suitable weather conditions (little no rain/wind and temperatures above 10°C at sunset).

#### Birds

- 3.26 The results of the habitat walkover identified suitable habitat for breeding and wintering birds so further detailed surveys were recommended. Full details of these surveys are provided at Appendix E.

Great Crested Newt

- 3.27 As part of the Phase 1 habitat survey any waterbodies within a 500m radius were identified using OS maps and aerial satellite imagery.

eDNA Survey

- 3.28 Environmental DNA (eDNA) sampling was undertaken of P1, P2 and P3 in the 2024 survey season to determine the presence/absence of GCN in accordance with the Technical Advice Note for field and laboratory sampling of GCN eDNA (WC1067)<sup>12</sup>. This methodology has been approved by Natural England for the determination of GCN presence/absence.
- 3.29 Sampling was undertaken by appropriately licenced ecologists who collected a sample of water from each pond (during suitable weather conditions avoiding heavy rain). Sampling was undertaken using kits obtained from ADAS. The methodology comprised taking samples of agitated water from 20 locations around each pond and mixing thoroughly. 15ml of this water was then placed into each of the six sterile sample tubes containing preservative, precipitates and a DNA sequence that was used for degradation control. All samples were stored in accordance with the protocols provided by the laboratory. The samples were then transported under suitable conditions for analysis. Following analysis, results provided by the laboratory could have one of three outcomes described in **Table 3** below.

**Table 3: Description of Possible Results of eDNA Analysis**

| Result       | Description                                                                                                                                                                                                                                                                                                                                |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Positive     | A positive result means that eDNA from GCN was detected and they have been present within the water in the 20 days preceding sampling. An eDNA score would be provided indicating the number of positive replicates from a series of twelve.                                                                                               |
| Negative     | DNA from GCN was not detected; in the case of negative samples the DNA extract is further tested for PCR inhibitors and degradation of the sample.                                                                                                                                                                                         |
| Inconclusive | Controls indicate degradation or inhibition of the sample, therefore the lack of detection of GCN DNA is not conclusive evidence for determining the absence of the species in the sample provided. Degradation can occur through poor storage of the samples or kits and inhibition can occur through unexpected chemicals in the sample. |

Water Vole

- 3.30 Water Vole *Arvicola amphibius* Surveys were conducted using standard methodology outlined within Strachen et al (2016)<sup>13</sup> was used which involved searching the banks/margins of the drains / ditches for evidence of:
- Latrines - distinct piles of water vole droppings found near nest sites, at the ranges of territorial boundaries and where the animals enter and leave the water;

<sup>12</sup> Biggs J, Ewald N, Valentini A, Gaboriaud C, Griffiths RA, Foster J, Wilkinson J, Arnett A, Williams P and Dunn F 2014. Analytical and methodological development for improved surveillance of the Great Crested Newt. Appendix 5. Technical advice note for field and laboratory sampling of great crested newt (*Triturus cristatus*) environmental DNA. Freshwater Habitats Trust, Oxford.

<sup>13</sup> Dean, M., Strachan, R., Gow, D. and Andrews, R. (2016) The Water Vole Mitigation Handbook (Mammal Society Mitigation Guidance Series). Eds Fiona Mathews and Paul Chanin. Mammal Society, London.

- Burrows - burrow entrances are typically wider than high with a diameter between 4-8cm. Generally these burrow entrances are located at the water's edge;
- Feeding Stations - areas with distinct neat piles of chewed lengths of vegetation cut at 45 degrees along pathways or haul out platforms along the water's edge;
- Footprints - identifiable prints in soft margins of the watercourse;
- Runways - low tunnels that are pushed through the vegetation and often leading to burrows or feeding stations.

3.31 Descriptions of the watercourse were also made to aid any enhancement or mitigation recommendations required.

3.32 In accordance with The Water Vole Mitigation Handbook , two surveys were conducted, one in the first half of the season (25<sup>th</sup> Apr 2024) and one in the second half (6<sup>th</sup> Sept 2023).

#### Other Species

3.33 The potential for other protected and/or notable species was assessed during the habitat survey.

## 4.0 RESULTS

### Desk Study

#### Designated Sites

- 4.1 Results of the desk study are shown on Figure 1a: Site Location and Consultation Results Plan – Designated Sites and Figure 1b: Site Location and Consultation Results Plan – Species Records.
- 4.2 There are no statutory designated sites of international importance recorded within 10km of the site boundary. There were one statutory designated sites of national importance recorded within 2km of the site boundary; Botcheston Bog SSSI.
- 4.3 No statutory designated sites were located within the site, however two Potential Local Wildlife Sites (pLWS) and one Candidate Local Wildlife Site (cLWS) were identified which bordered the perimeter of the site. A further 6 cLWS or pLWS occurred within 1km of the site as well as 13 Historic Sites of potential local nature conservation interest.

**Table 4: Statutory and Non Statutory Designations**

| Site Name                                   | Approx. Distance from Site | Interest Feature(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Botcheston Bog SSSI                         | 1350m                      | The site contains one of the best remaining areas of marshy grassland in Leicestershire and is representative of grazed marsh communities on peaty soils. It is dominated by carnation sedge <i>Carex panicea</i> , hard rush <i>Juncus inflexus</i> , creeping bent <i>Agrostis stolonifera</i> and meadowsweet <i>Filipendula ulmaria</i> , and the plant community includes such characteristic species as marsh valerian <i>Valeriana dioica</i> , bog bean <i>Menyanthes trifoliata</i> , marsh arrow-grass <i>Triglochin palustris</i> , tubular water-dropwort <i>Oenanthe fistulosa</i> , ragged robin <i>Lychnis flos-cuculi</i> and marsh marigold <i>Caltha palustris</i> . |
| Leicester Lane Semi-improved Grassland pLWS | Site Boundary              | Surveyed in October 2019 and recorded 8 indicator species of species rich grassland, but too late to make DAFOR assessment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Peckleton Lane – East pLWS                  | Site Boundary              | Species rich hedgerow                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Peckleton Road Ash cLWS                     | Site Boundary              | Ash tree with girth of 3.7m and pockets of decay at base.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Neovia Logistics Bridleway cLWS             | 100m                       | Narrow verge and ditch alongside west side of well-used bridleway just south of village; species-rich grassland, scrub, tall herbs. Probably originates from wildflower seed but well-established                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| The Range Pond and Marshland cLWS           | 415m                       | Rush-dominated marshy grassland with tormentil, marsh thistle, greater birds-foot trefoil, oval sedge and a small amount of lesser spearwort, plus adjacent pond                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Charity Fields LWS                          | 425m                       | Species rich grassland field with meadow buttercup, birds foot trefoil, pignut, pepper saxifrage, burnet saxifrage, devils bit scabious, lady's bedstraw with damper areas containing ragged robin, marsh thistle and rushes. Two species rich hedgerows also meet LWS status quality. A stream runs along the eastern boundary and a field pond is located centrally.                                                                                                                                                                                                                                                                                                                 |
| Station Road – Ash cLWS                     | 515m                       | Mature Ash with girth of 3.26m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Desford Lane Hedgerow pLWS                  | 650m                       | Species-rich hedgerow with total 12 species recorded. Not surveyed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Hedgerows between Kirkby Rd                 | 780m                       | 8 species-rich hedgerows, with total species recorded between 9 and 16. Not surveyed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

| Site Name                | Approx. Distance from Site | Interest Feature(s) |
|--------------------------|----------------------------|---------------------|
| and Desford Lane<br>pLWS |                            |                     |

### Protected and Notable Species

- 4.4 Several protected or notable species records from recent years surrounding the site were provided by LRERC.
- 4.5 Numerous bird records corresponded with residential areas to the north and west of the site, including linnet *Linaria cannabina*, starling *Sturnus vulgaris* and song thrush *Turdus philomelos*, all red listed species. Record of a potential barn owl *Tyto alba* roost, a WCA1 species corresponded to the west of the site on the other side of Peckleton Lane, recorded in 2020.
- 4.6 Numerous records of bats were identified, many of which were in flight records of common and widespread species. The nearest confirmed bat roost was to the south of the site from survey work undertaken at Forest View Farm. Other small common pipstrelle roosts were identified within the residential area of Desford.
- 4.7 Amphibian records including smooth newt *Lissotriton vulgaris*, common frog *Rana temporaria* and great crested newt (GCN) records were provided, located to the west of the site on the other side of Peckleton road, the nearest GCN record located approx.. 430m west arising from a positive eDNA survey.
- 4.8 Grass snake *Natrix Helvetica* have also been recorded approximately 450m west of the site arising from dedicated reptile refugia surveys undertaken to support applications to extend Neovia Logistics.
- 4.9 Records of otter *Lutra lutra* and water vole were also reported over 500m north east of the site on or near to the Rothley Brook recorded in 2015.
- 4.10 Several records of badger were returned, which included badger sett records suggesting at least one active clan within 1km of the site. Evidence of badger within proximity to the site was recorded as recently as 2021.

### Field Survey

- 4.11 The locations of the habitats described below are illustrated in Figure 2: Phase 1 Habitat Plan. A botanical species list is provided in Appendix 1.
- 4.12 The site comprises a series of agricultural fields under active management for crop production. Fields were divided by established hedgerows which contained mature trees. A watercourse passes through the eastern part of the site and a surfaced farm track enters the site from Leicester Lane in the east. No buildings, ponds or other habitats were recorded within the site boundary.

### Arable

- 4.13 The whole site was in crop production with maize crop present across the north and east of the site and recently harvested and ploughed fields in the south and west. Arable weeds recorded amongst the maize included scented mayweed, black grass, red shank, groundsel and prickly sow thistle. Field margins were narrow, measuring <2m with species poor grassy swards

including perennial rye, false oat grass and Yorkshire fog with herb and ruderal species including hogweed, creeping thistle, broad leaved dock, field bindweed and greater plantain.



**Photograph 1: Typical view of arable and hedge habitat within the site (Hedge H12 / Tree T9).**

### Hedgerows

- 4.14 Hedges across the site were native species dominant, therefore all qualify as UK BAP Priority Habitats. Twenty five hedgerows were recorded, of which six averaged at least 5 species per average 30m section along the hedge length and therefore would be considered species rich (hedges H1, H6, H8, H19, H20 and H24). Hedges H1, H20 and H24 qualified as Important under the Wildlife and Landscape criteria of the Hedgerow Regulations 1997. These are all perimeter hedgerows and hedges H1 and H20 only qualify as a result of their position adjacent to a public by way. Details of hedgerow survey data is provided at Appendix B.

### Dense Mixed Scrub

- 4.15 A former outgrown hedgerow had developed into a linear strip of mature woody scrub between hedgerows H10 and H22. This was >5m tall and wide predominantly comprising elm and holly *Ilex aquifolium* with hawthorn *Crataegus monogyna* and elder *Sambucus nigra*.

### Mature Trees

- 4.16 Within the hedgerows across the site were a variety of broadleaved trees of various sizes and ages, though most were oak *Quercus robur*, sycamore *Acer pseudoplatanus* or ash *Fraxinus excelsior*. Overall, trees were in good condition, (as per UK Hab condition assessment) though more mature specimens demonstrated some deadwood, splits and failed limbs typical of their age and several presented features potentially suitable for roosting bats (discussed further below).

### Watercourse

- 4.17 A watercourse (WC1) passed through the eastern part of the site. This was an open channel with a large capacity but was only noted to have <5cm of water within it at the time of survey. There was a negligible flow of clear water. The banks had an unmanaged grassy sward and the channel was choked with hedge bindweed *Calystegia sepium* at the time of survey with occasional patches of reedmace *Typha latifolia* and greater willowherb *Epilobium hirsutum*. No

other aquatic marginal vegetation was visible, though possibly a greater diversity may be present earlier in the season.



**Photograph 2 & 3: Watercourse – WC1 (left), WC2 (right)**

- 4.18 A second section of watercourse (WC2) flanked part of the southeastern boundary. This was 0.5 – 1m wide with a shallow negligible flow of clear water at the time of survey. It had steep banks that were heavily shaded by the adjacent scrub. On the banks in slightly more open areas tall herb and ruderal vegetation was noted comprising hogweed *Heracleum sphondylium*, greater willowherb, common nettle *Urtica dioica* and meadowsweet *Filipendula ulmaria* with a patch of fools water cress *Helosciadium nodiflorum* the only in channel emergent aquatic vegetation recorded.
- 4.19 Another watercourse was noted offsite, running parallel with the northern site boundary, which was within a wooded belt of trees for much of its length and largely not visible for assessment from within the site. This contributes to the wildlife corridor shown at Figure 10 of the Desford Neighbourhood Plan 2018 – 2036.

#### **Ditches**

- 4.20 Ditches associated with some of the hedgerows were dry at the time of survey and mostly presented a hedge base habitat with no or negligible typical flora of wet conditions. These have not been mapped individually as they are integrated as part of the hedge assessment.

#### **Invasive Species**

- 4.21 No invasive species were recorded at the time of survey.

#### **Offsite Habitats**

##### Offsite Ponds

- 4.22 Three ponds were identified close to the site boundary; two recently created balancing features close to the western edge of the site and an established pond adjacent to the eastern edge of the site. The recently created balancing features were publicly accessible and were assessed as 'poor' suitability to support GCN.

## Species

### Badger

- 4.23 Onsite habitats are potentially suitable to contribute to foraging resources for badgers locally. Desk study indicated an active badger population in the local area. No evidence of badger was confirmed within the site during the 2023 survey though this was completed in a suboptimal time of year for this survey.

### Bats - Roosting

- 4.24 No buildings are present within the Site boundary.
- 4.25 Potential roosting features were identified within several trees within the site. Trees T5, T6, T25, T31, T32 and T33 were considered to present at least moderate potential to support roosting bats during the 2023 assessment.

### Bats - Foraging and Commuting

- 4.26 The hedgerow network provides potentially suitable foraging and commuting habitats for bats, in the context of the wider area with links to other offsite suitable habitats. It was therefore considered likely that bat species would be using the site as commuting and/or foraging habitat and further surveys were completed through 2024.
- 4.27 Individual bats in small numbers were recorded during the nighttime flightline and walkover surveys. The majority of contacts were of common pipistrelle with occasional noctule and soprano pipistrelle bats contacts. Most of the contacts were recorded as exhibiting commuting behaviour. The time, species and location of all bat contacts recorded is displayed at Figures 3a, 3b, 4a, 4b, 5a and 5b.

### *Flightline and Transect Survey*

- 4.28 Flightline A positioned along the broad linear section of scrub consistently recorded an assemblage of common pipistrelle, soprano pipistrelle and noctule with less activity recorded at point B in the west including soprano and common pipistrelle. The transects surveys recorded an assemblage of common pipistrelle, soprano pipistrelle and noctule. Activity recorded was low with no obvious concentrations of activity.

### *Static Detector Survey*

- 4.29 Static Detector Position 1 was located between trees T25 and T26 in hedge H20 along Peckleton Lane. Static Detector Position 2 was located along hedge H7, near its junction with H8. Units deployed at Position 1 along Peckleton Lane recorded totals of 1543, 2523 and 2514 registrations in total across the 5 day recording period. Position 2 recorded totals of 704, 275 and 372 registrations.
- 4.30 The static detectors recorded an assemblage of at least five common and widespread species; common pipistrelle accounted for the majority of registrations (80 – 98% on all survey occasions) and soprano pipistrelle, noctule, brown long eared and *Myotis* species as well as unidentified *Nyctalus* and pipistrelle species. Activity was dominated by common pipistrelle. Besides common pipistrelle, activity from other species was low. Results are shown in **Appendix C**.

- 4.31 The bat assemblage using the site is considered to be typical of managed arable habitat on an urban edge.

#### Birds

- 4.32 A total of 38 bird species were recorded on the breeding bird surveys undertaken April – July 2024 (for complete list see Appendix E). Of these, four were recorded overflying the Site only and are not considered likely to be impacted by the proposed development as they were not recorded interacting with the habitats present. Of the remaining 34 bird species, 16 meet the criteria of at least one of the following pieces of legislation/classifications: Schedule 1 of the WCA; Section 41 of the NERC Act 2006; and BoCC Red or Amber lists. These species are referred to as 'notable' species and their distributions are shown at Figure 2 of Appendix E.
- 4.33 All the species recorded are typical of the arable habitats, perimeter hedgerows, woodland edge and urban edge that constitute the Site, and the breeding bird assemblage is heavily influenced by the management of the Site.
- 4.34 The actively cropped arable field interiors and their associated margins supported moderate numbers of skylark. Adjacent hedgerows demarcating field boundaries also included yellowhammer and linnet, other notable and declining farmland bird species.
- 4.35 In addition to yellowhammer, the hedgerows, individual trees and areas of scrub across the Site hosted several resident and migratory breeding species comprising mostly common and widespread taxa including common thrush, tit, warbler, and finch species. In addition, many of the mature trees across the Site had suitable cavities to support nesting stock doves, and the typically dense scrub layers supported species typical of such habitats including notable wren, whitethroat, dunnock, and greenfinch in addition to common and widespread species typical of such habitats including long-tailed tit and blackcap.
- 4.36 A total of 39 bird species were recorded across the four wintering bird survey occasions in 2023 / 2024. Of these, seven species were recorded overflying the Site only and are therefore considered to not be reliant on the Site for overwintering and thus not anticipated to be impacted by the proposed development as they do not interact with the habitats present.
- 4.37 Sixteen are considered notable under the criteria outlined in Paragraph 4.32 above. The actively cropped arable field interiors supported a limited number of farmland-associated birds which included grey partridge, skylark and linnet. Other non-specialised species recorded in this habitat type were otherwise generalist and/or widespread birds which can be found foraging across numerous habitats regionally. These included such species as woodpigeon, carrion crow, and pied wagtail. Relative to the arable interiors, the hedges and woodland edge habitats supported more species with flocks of wintering thrush species, alongside other notable species such as dunnock, woodpigeon, wren and greenfinch. The distribution of notable species is shown at Figure 2 of Appendix F.

#### GCN

- 4.38 There is no suitable aquatic habitat for GCN breeding within the Site. Two pond features show up on OS mapping within the site, however these features were not recorded to as present during the habitat survey 2023. Onsite ditches were either dry or support shallow flowing water. The field margins do support some poor-quality terrestrial habitat for them if they were locally present.

- 4.39 There were three ponds in the immediate surrounds of the site (Referred to as P1, P2 and P3 at Figure 2). Other ponds identified in the surroundings were either physically separated from the proposed development by the B582 or were more distant from the site.
- 4.40 Offsite ponds P1, P2 and P3 underwent eDNA sampling in April 2024. All samples returned negative eDNA results. The eDNA results are provided at **Appendix D**.

#### Reptiles

- 4.41 There is some poor-quality habitat for reptiles on the Site, however this is limited to the field boundaries.

#### Water Vole

- 4.42 Ditches associated with hedgerows were dry and considered likely to be dry for most of the year and presented a hedge base habitat with no suitable foraging or niches to support water vole. The watercourses along the boundaries of the site were less suitable to support this species largely due to overshadowing and limited suitable foraging material available. No evidence of water vole was recorded within these sections of watercourse. During the September survey the watercourse that runs through the site at its eastern end was choked with bindweed. No evidence of water vole was recorded, however the vegetation was such that it may have obscured any evidence. The April 2024 survey, again did not record any evidence of water vole but it was acknowledged that given the in-course vegetation and ditch profile this section did offer potentially suitable habitat for the species if locally present.

#### Other Notable Mammals

- 4.43 The hedgerows are likely to provide sheltering and foraging opportunities for small numbers hedgehog.
- 4.44 The arable fields may provide some foraging opportunities for brown hare.
- 4.45 The site does not provide suitable habitat for otters and is isolated from identified local records.

## **5.0 DISCUSSION**

### **Statutory Designations**

- 5.1 There are no statutory designated sites of international importance recorded within 10km of the site boundary. There were one statutory designated sites of national importance recorded within 2km of the site boundary; Botcheston Bog SSSI at 1.35KM from the site. The site does fall within the IRZ for this SSSI on the basis of infrastructure (i.e. Any transport proposal including new or extended footways, cycleways, roads/car parks). No pressures are listed on this SSSI but some features are recognised as unfavourable – recovering. National England may consider the proposals to exert a potential risk to the conservation status of the SSSIs and will need to be consulted. Once any potential risk is identified, it is likely to be feasible to mitigate this through compliance with traffic management and Pollution Prevention Guidelines (PPGs) that are capable of being secured through a conditioned Construction Ecological Management Plan (CEMP) prepared for the development. Subject to these measures being fulfilled, it is likely that no significant impacts would be imposed on the SSSI as a result of the development.

## Non Statutory Designations

- 5.2 There are two candidate LWS and one potential LWS that sit at the boundary of the Site. Leicester Lane Semi-improved grassland pLWS sits on the eastern boundary and the hedge along Peckleton Lane and an Ash tree cLWS sit at the western boundary. It is recommended that all of these features are retained and buffered from the proposed development area. Precautionary working methods should be detailed with a Construction Environmental Management Plan to limit the potential for dust, noise and lighting impacts on these features during the construction phase.
- 5.3 All other non statutory sites identified are located some distance from the proposed development such that any direct or indirect effects arising from the proposals would be negligible, thus not influencing the nature conservation value of these features.

## Habitats

- 5.4 The degree to which habitats receive consideration within the planning system relies on a number of mechanisms, including:
- Inclusion within a specific policy, for example veteran trees, ancient woodland and linear habitats within the National Planning Policy Framework (NPPF)<sup>14</sup>;
  - A non-statutory site designation (e.g. LWS);
  - Habitats considered as Habitats of Principal Importance for the conservation of biodiversity as listed within Section 41 of the NERC Act 2006;
  - Habitats identified as being a Priority Habitat within the local Biodiversity Action Plan (Leicestershire BAP).
- 5.5 The habitats identified during the survey that fall within any of the above listed categories are the hedgerows and treelines which bound and divide the field compartments. It is recommended that the proposals retain these habitats and that these are buffered with additional green infrastructure through the development.
- 5.6 The full extent of required hedge and tree loss has not yet been fully analysed but it is anticipated that these will only be minor losses to enable access into the site and between compartments with hedgerow and tree retention maximised as much as possible.
- 5.7 To avoid damage/disturbance of these retained features it is recommended that an Ecological Protection Zone (EPZ) around the retained trees and hedgerows should be established during the construction phase. EPZs can often be achieved through co-ordination with tree protection measures required as good arboricultural practice including BS5837 Trees in Relation to Construction – Recommendations: 2012 for trees and hedgerows, where all retained trees are protected from damage and soil compaction during works by maintaining protected Root

---

<sup>14</sup> <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

Protection Areas (RPAs). This zone is demarcated with temporary protective fencing determined in accordance with BS 5837 (2012) and signage. These measures will also increase the likelihood of retention of rye brome (Nottinghamshire Rare Plant Register species) within the seedbank within the site. It is recommended that details of the measures described above and their implementation are delivered through a CEMP prepared for the Site.

- 5.8 The scrub habitat occurred from an outgrown hedgerow and contributes to the existing habitat network across the site. It is also recommended that this habitat is retained as much as possible, though reduction (eg. of the width) of this habitat is not considered likely to significantly impact local wildlife populations and any unavoidable loss of area of scrub does not necessarily represent a constraint to development.
- 5.9 To comply with local Policy (particularly ENV3 of the Local Plan), it will be important for the design of a scheme at this site to respect the value of the wildlife corridor along the northern edge of the site boundary and this would be an ideal location to offer habitat enhancement with additional woody native planting and other habitat creation.
- 5.10 There is significant scope for species rich grassland and additional tree, scrub and hedgerow creation within the Green Infrastructure proposals for the Site. The following will be incorporated into the landscape design:
  - Retention of a majority of the existing hedgerows and treelines;
  - Creation of SuDS areas to be maintained as a habitat for wildlife;
  - Maximisation of grassland diversity where possible in greenspace through use of appropriate seed mixes and varied management; and
  - Planting of additional hedgerows, native scrub and trees throughout the Site including fruit and seed-bearing species to add structural and species diversity to the Site.
- 5.11 Specifications for new planting and other habitat creation as well as the measures to maintain existing habitats, to ensure successful establishment of new habitats, and to maintain the value of all ecological features in the long-term should be detailed within a Habitat Management and Monitoring Plan (HMMP) secured by planning condition.
- 5.12 Once proposals are available, Biodiversity net gain calculations using the Statutory Defra metric for the development will be provided in a separate ecology technical note. In accordance with mandatory requirements, the scheme will deliver 10% net gain in biodiversity.

### **Species**

- 5.13 Principal pieces of legislation protecting wild species are Part 1 of the Wildlife and Countryside Act 1981 (as amended) (WCA) and the Conservation of Habitats and Species Regulations 2017 (as amended). Some species, for example badgers, also have their own protective legislation (Protection of Badger Act 1992). The impact that this legislation has on the Planning system is outlined in ODPM 06/2005 Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System.
- 5.14 The presence of protected species is a material consideration in any planning decision, it is essential that the presence or otherwise of protected species, and the extent to which they are impacted by proposals is established prior to planning permission being granted. Furthermore,

where protected species are present and proposals may result in harm to the species or its habitat, steps should be taken to ensure the long-term protection of the species, such as through attaching appropriate planning conditions.

5.15 In addition to protected species, there are those that are otherwise of conservation merit, such as Species of Principal Importance for the purpose of conserving biodiversity under the NERC Act 2006. These are recognised in the NPPF, which advises that when determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying a set of principles including:

- If significant harm to biodiversity resulting from a development cannot be avoided, adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

5.16 Potential implications for development at the Site are outlined below.

#### **Badger**

5.17 Badgers are a widespread species that are protected from harm and cruelty by the Protection of Badgers Act 1992.

5.18

[REDACTED]

5.19 Enhancements such as the creation of species-rich grassland would create further foraging areas for this species, along with native tree planting to create significant linkages around the site for badgers. It is also recommended that the planting of fruit-bearing trees is considered in landscape planting in order to provide a foraging resource for badgers. The implementation of these recommendations within future development proposals and maintaining links to the wider landscape such that any negative impacts on potential foraging resources for the small number of badger likely to be using the Site would be negligible.

5.20 A badger sett was historically recorded onsite within hedge / scrub habitat. Updated surveys will be conducted to ascertain if this sett or others are present within the site. It is recommended any sett is retained if feasible within the design of the green infrastructure of the overall development. If present, a minimum buffer of 30m between the sett entrances and any private property would be recommended. If works are required within 30m of a sett a mitigation licence from Natural England will be required. General advice from Natural England states the types of activity requiring a Licence include: using heavy machinery (generally tracked vehicles) within 30m of any entrance to an active sett; using lighter machinery (generally wheeled vehicles), particularly for any digging operation, within 20m; and light work such as scrub clearance or hand digging within 10m. If no setts are present or they are proven to be disused, no such mitigation is required.

- 5.21 To avoid harm to any individuals that might be using the Site during construction, it is recommended that construction best practice measures are detailed within an CEMP be followed and include:
- Directing any security lighting away from the retained hedgerows and offsite woodland;
  - Covering any trenches at the end of each working day, or including a means of escape for badgers (and other mammals); and
  - Capping of temporarily exposed pipe systems out of work hours.
- 5.22 In addition, the use of native fruit and seed-bearing trees within new planting will enhance foraging opportunities on the Site for badger and the sensitive lighting scheme designed for bats will ensure minimal impact on badger.
- 5.23 Subject to these recommendations, the proposed scheme is unlikely to have a negative impact on badger.

### **Bats**

#### Roosting

- 5.24 All UK species of bats and their roosts are listed on the Conservation of Habitats and Species Regulations 2017 (as amended), making it illegal to deliberately disturb any such animal or damage / destroy a breeding site or roosting place of any such animal. Bats are also afforded full legal protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this legislation it is illegal to recklessly or intentionally kill, injure or take a species of bat or recklessly or intentionally damage or obstruct access to or destroy any place of shelter or protection or disturb any animal whilst they are occupying such a place of shelter or protection. Some bat species, including soprano pipistrelle, noctule and brown long-eared bat are also Species of Principal Importance under the NERC Act.
- 5.25 Tree impacts are yet to be finalised, however provisional concept plans indicates the retention of the majority of trees. Trees T5, T6, T25, T31, T32 and T33 were considered to present at least moderate potential to support roosting bats during the 2023 assessment. It is recommended that these trees are retained and buffered from development by new landscape planting.
- 5.26 Should arboricultural works or removal of these trees be required, aerial inspection by a licensed bat worker will be needed prior to such works commencing to further assess potential use by roosting bats. If the presence of a roost is confirmed, a licence from Natural England will be obtained if appropriate prior to tree works commencing.
- 5.27 No other trees present within the site boundary were considered to offer any roosting opportunities for bats as they lacked suitable features such as rot holes, cracks/fissures or loose bark.
- 5.28 To provide enhanced roosting opportunities within the Site, it is recommended that a number of bat boxes are installed on suitable retained mature trees along the site boundaries prior to commencement of site works. Ideally a mix of boxes should be used to provide for different species requirements (for example Schwegler 2F, 2F with double front panel, 1FF and 1FW (hibernation) boxes or similar, equivalent). These should be installed in groups of 2-4 at varying heights between 4-6m in unlit and clutter free environments but adjacent to continuous greenspace.

Foraging and Commuting Bats

- 5.29 A small assemblage of foraging and commuting bats typical of managed urban edge habitats is using the Site. The foraging and commuting habitat is largely limited to the hedgerows and treelines, which it is recommended are to be largely retained (small losses will be required for access roads). Any unavoidable hedgerow and treeline loss can be mitigated for through additional planting. It was noted that static bat detectors deployed along the hedgerow along Peckleton Lane registered more bat contacts than in the interior of the site. Therefore where breaks in this hedge particularly as well as others are required for access, planting of trees to act as 'hop overs' will need to be designed to ensure maintenance of commuting connectivity.
- 5.30 An overall enhancement in terms of commuting and foraging habitat for bats within the Site will be achieved through an enhanced green corridor through the Site. The landscape recommendations outlined below will increase the foraging and commuting value of the Site for bats by not only creating more and stronger corridors but by creating improved microclimates and sheltered areas that will encourage and benefit numerous invertebrate species which will in turn provide enhanced foraging opportunities for bats.
- 5.31 To further minimise potential effects to the local bat population artificial lighting should be carefully designed adjacent to existing and new potential bat foraging areas including the retained woodland and new hedgerows. Where artificial lighting cannot be avoided the lighting scheme will be designed with reference to the Bat Conservation Trust and Institute of Lighting Professionals guidance<sup>15,16,17</sup> and may include the following:
- The strategic use of landscaping and planting to avoid light spill onto sensitive habitats, including the retained woodland, adjacent treelines and the SuDS basin. Additional LUX levels should be no greater than 1Lux within these areas;
  - The avoidance of direct lighting of existing trees or proposed areas of habitat creation / landscape planting. Any lighting should be directed away from retained or created habitats;
  - Unnecessary light spill will be controlled through a combination of directional lighting, low level lighting columns, hooded / shielded luminaires, and strategic planting. Smart lighting should be considered for footpaths and areas of lighting around the edges of the development area to ensure lighting is only provided when necessary;
  - All new column mounted luminaires shall be fitted with flat glass where appropriate to aid 0% upward light discharge to minimise light pollution, and
  - Where located adjacent to green corridors and retained habitats, lights should be installed facing away from the habitats and where appropriate fitted with rear light baffles or cowls to prevent light spill behind them.

---

<sup>15</sup> Bat Conservation Trust 2011. *Statement on the Impact and Design of Artificial Light on Bats*.

<sup>16</sup> Bat Conservation Trust 2018. *Bats and Artificial Lighting in the UK Guidance Note 08/18. Bats and the Built Environment Series*

<sup>17</sup> Institute of Lighting Professionals. 2018. *Guidance note 08/18 Bats and Artificial Lighting in the UK*

- 5.32 Subject to these recommendations, the proposed scheme is likely to have a positive impact on foraging and commuting bats.

#### **Birds**

- 5.33 The proposals will lead to a loss of all agricultural habitat onsite, which will resultantly cause the Site to be fully unviable as foraging habitat for any farmland associated species, such as linnet, grey partridge, yellowhammer and skylark. As these species were recorded in low numbers relative to the area of available suitable habitat, it is not anticipated that the Site presents a particularly significant foraging resource for these species. The density of skylark records obtained in suitable arable habitat throughout the Site mirrored the national average density, however there is alternative equivalent habitat in the surrounding landscape and the numbers recorded are likely to be able to instead utilise suitable arable habitat in the locality to breed. As the limiting factor to successful skylark breeding is foraging resource, loss of onsite habitats is likely to cause a minor adverse impact. There is however potential for partial mitigation of this, given the extent of green space proposed, as it is feasible that the site may still be able to offer some opportunities for foraging under the right management and design.
- 5.34 The majority of hedgerows and mature trees within the Site are to be retained, with some proposed loss of small sections to allow for access and associated visibility splays, and the removal of scrub habitat. The species associated with these habitats are mostly common and widespread generalist species and are tolerant of moderate-to-high levels of anthropogenic disturbance. Some notable species including thrushes and dunnock may be impacted during the construction phase, however once development is complete the proposed green infrastructure throughout the Site will provide appropriate foraging and connective habitat, complimenting adjacent habitat present off-Site.
- 5.35 To avoid disturbance to breeding birds, ground and vegetation clearance works will be undertaken prior to the bird-breeding season (i.e. avoiding March to August, inclusive). If this is not possible, the area will be checked prior to removal of vegetation or ground works by a sufficiently experienced ecologist. If active nests are recorded, vegetation will be left untouched and suitably buffered from works until all birds have fledged. Specific advice will be provided prior to undertaking the clearance. This would be a statutory requirement due to the protection of all nesting birds and their nests under the Wildlife and Countryside Act, 1981 (as amended).
- 5.36 New green infrastructure includes areas of new scrub-woodland creation in addition to grassland habitat, native standard trees and attenuation features that should hold areas of permanent water. By prioritising the use of native fruit and seed-bearing species of local origin this will provide an optimal foraging resource for a range of bird species recorded. Further enhancements include provision of a range of nest boxes on structures and mature trees across the development to support the onsite bird breeding opportunities.

**GCN**

- 5.37 The presence of GCNs can potentially be a constraint on works because individual newts can use habitats up to 500m from a breeding pond<sup>18</sup>. English Nature (now Natural England) guidelines state that suitable terrestrial habitats within 250 metres of a breeding pond are likely to be used most frequently by GCNs. More recent research commissioned by Natural England has shown that GCN densities are very low over 100m from the breeding pond, and that a majority occur within 50m of the pond<sup>19</sup>. This is also supported by previous research, which also suggests that where suitable habitat is present the majority of any GCN population will use terrestrial habitats within 50 metres of the breeding pond (see for example, Jehle (2003)<sup>20</sup>.
- 5.38 There are no waterbodies on Site. All waterbodies within 250m of the Site either tested negative for the presence of GCN, or were deemed physically separated from the proposal by a feature that posed a barrier to dispersal. Distant waterbodies over 250m from the Site had limited connectivity to on-Site terrestrial habitats. The only record of GCN identified during the desk study was located approx.. 430m west arising from a positive eDNA survey with Peckleton Lane a barriers to dispersal in the intervening distance with negative eDNA results from ponds in the immediate surround of the site. The predominantly arable state of the site, under regular management offers very limited terrestrial habitat for this species.
- 5.39 GCN are therefore not considered likely to be present on the Site and are not considered as a constraint to the Proposed Development.

**Reptiles**

- 5.40 The limited number of local records combined with the narrow field margins and high levels of disturbance from agricultural management mean that reptiles are considered very unlikely to be present within the Site in significant numbers. However, low numbers of mobile individuals may occasionally be present in scrub, hedgerows or tree bases at the perimeters of the fields.
- 5.41 As a precaution it is recommended that a precautionary method of working is employed to prevent any harm to these potential individuals:
- Vegetation clearance of hedge, scrub or trees required for the enabling phase should be undertaken between April and September and / or during suitably warm conditions and under supervision by a suitably qualified ecologist.
  - Firstly, any logs or timber or other discarded debris that could form refugia for reptiles will be moved by hand out of the area to be cleared.
  - The vegetation will then be cut down to a height of 150mm and left for 2-3 days, to encourage any reptiles to disperse from the area.

<sup>18</sup> English Nature (2001) GCN Mitigation Guidelines, Peter borough (GCNMG)

<sup>19</sup> Creswel and Whitworth, (2004). An assessment of efficiency of capture techniques and the value of different habitats for the GCN. Herpetological Journal vol. 10, p 143-5

<sup>20</sup> Jehle, R. (2000). The terrestrial summer habitat radio tracked GCNs (*Triturus cristatus* and marbled newts (*Triturus marmoratus*). The Herpetological Journal 10:137-143

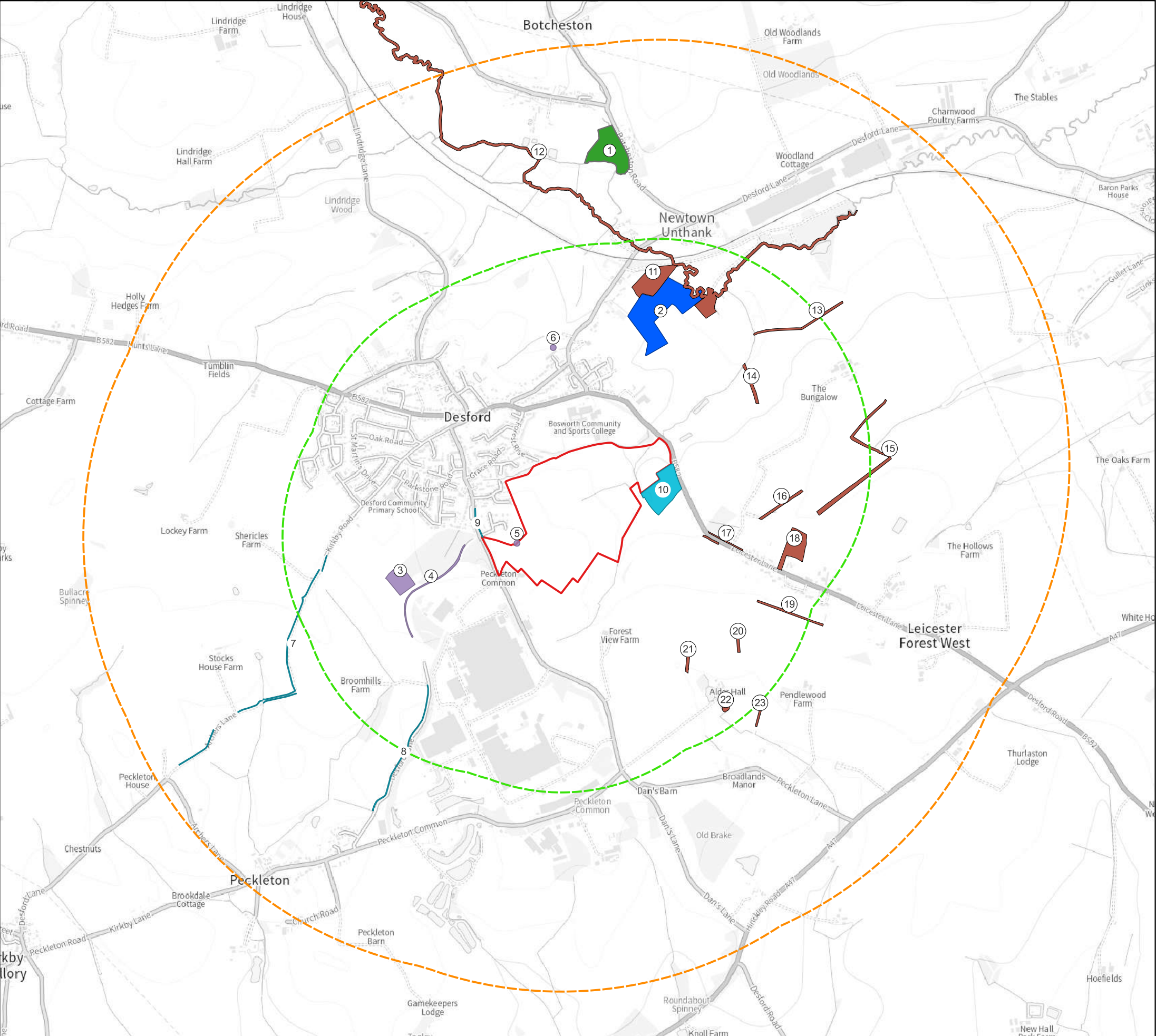
- Any tree or hedgerow root balls that require 'grubbing out' must be removed under supervision.
- All arisings from the vegetation clearance will be taken away from the vicinity of the development footprint no later than the day after vegetation clearance.
- The site must remain in its cleared state to deter reptiles and other wildlife from entering it.

**Other Mammals**

- 5.42 As stated previously, the Site has the potential to support hedgehog in low numbers.
- 5.43 As hedgehogs hibernate within piles of dead vegetation and debris, removal of such material across the site should be conducted outside of November to February inclusive. It is also recommended that during the construction phase materials should not be stored near areas of retained habitat or otherwise should be hand searched prior to removal. The best practice measures to be followed throughout construction for badger (and detailed within an CEMP) will also ensure no harm to hedgehogs occurs.
- 5.44 In addition, it is recommended that all on plot fencing contains hedgehog holes (13 x 13cm holes in closed board fencing) to enable hedgehog to move through gardens to ensure the entire Site remains permeable to hedgehog.
- 5.45 The creation of new habitats, including wetland areas (SuDS) will increase the invertebrate diversity on the Site and so increase foraging quality for hedgehog.
- 5.46 Subject to these recommendations, the proposed scheme is unlikely to have a negative impact on hedgehog.

## 6.0 CONCLUSIONS

- 6.1 The desk- and field-based baseline investigations have demonstrated that the habitats present within and around the Site do not pose an 'in principle' constraint to the proposed development.
- 6.2 It is recommended that the majority of the ecologically valuable habitats within the site design (hedgerows and treelines) together with the scope to create new habitats such as grassland, scrub and hedgerows and create wetlands (SuDS) that can be managed sympathetically for wildlife means that the site is capable of achieving an enhancement for biodiversity in addition to providing additional habitat and opportunities for a range of protected and notable species.
- 6.3 On this basis, by virtue of the relatively limited constraint posed by the limited habitats and protected species interest within the site and the scope for creation of greenspace, the scheme is capable of compliance with relevant planning policy for the conservation of the natural environment.
- 6.4 Precautionary working methods are presented herein to ensure the protection of notable and protected fauna. It is proposed that enhanced opportunities for bats, birds and hedgehogs would include the erection of bat and bird boxes and provision of hedgehog holes in garden fences through the development.
- 6.5 The proposals are at an early stage of preparation, such that proposed site layout has not been finalised. Once proposals are finalised for a formal planning application, this will be reviewed against the position of the trees identified to present potential features for roosting bats and the location of the badger sett. An updated badger survey will be completed. Where proposals are unable to avoid impacts to trees presenting bat roost potential, aerial inspection of these trees will be undertaken. Depending upon the final layout, Natural England licencing for these species may be required.
- 6.6 Biodiversity Net Gain is discussed within a separate report.



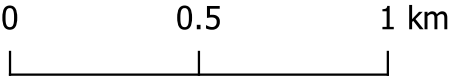
This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd.

Ordnance Survey material - Crown Copyright. All rights reserved.  
Licence Number: 100019980

Key

- Site Boundary
- 1km Buffer
- 2km Buffer
- Sites of Special Scientific Interest (SSSI)
- Local Wildlife Site (LWS)
- Candidate Local Wildlife Site (cLWS)
- Potential Local Wildlife Site (pLWS)
- Historic Sites

- 1 - Botcheston Bog, SSSI
- 2 - Charity Fields, LWS
- 3 - Desford, The Range pond and marshland, cLWS
- 4 - Desford, Neovia logistics bridleway, cLWS
- 5 - Desford, Peckleton Lane Ash, cLWS
- 6 - Desford, Station Road Ash, cLWS
- 7 - Hedgerows between Kirkby Road and Desford Lane, pLWS
- 8 - Desford Lane hedgerow, Peckleton, pLWS
- 9 - Desford, Peckleton Lane (east), pLWS
- 10 - Desford, Leicester Lane, Semi-improved grassland, pLWS
- 11 - Unnamed Semi-improved grassland, Historic site
- 12 - Rothley Brook, Historic Site
- 13 - Unnamed Hedgerow, Historic Site
- 14 - Unnamed Hedgerow, Historic Site
- 15 - Unnamed Hedgerow, Historic Site
- 16 - Unnamed Hedgerow, Historic Site
- 17 - Unnamed Hedgerow, Historic Site
- 18 - Unimproved grassland, Historic Site
- 19 - Unnamed Hedgerow, Historic Site
- 20 - Unnamed Hedgerow, Historic Site
- 21 - Unnamed Hedgerow, Historic Site
- 22 - Peckleton, Alder Hall pool, Historic Site
- 23 - Unnamed Hedgerow, Historic Site





client  
Bellway Homes

project  
Land South of Desford

drawing title  
SITE LOCATION AND CONSULTATION  
RESULTS PLAN - DESIGNATED SITES

scale @ A3  
1:20000

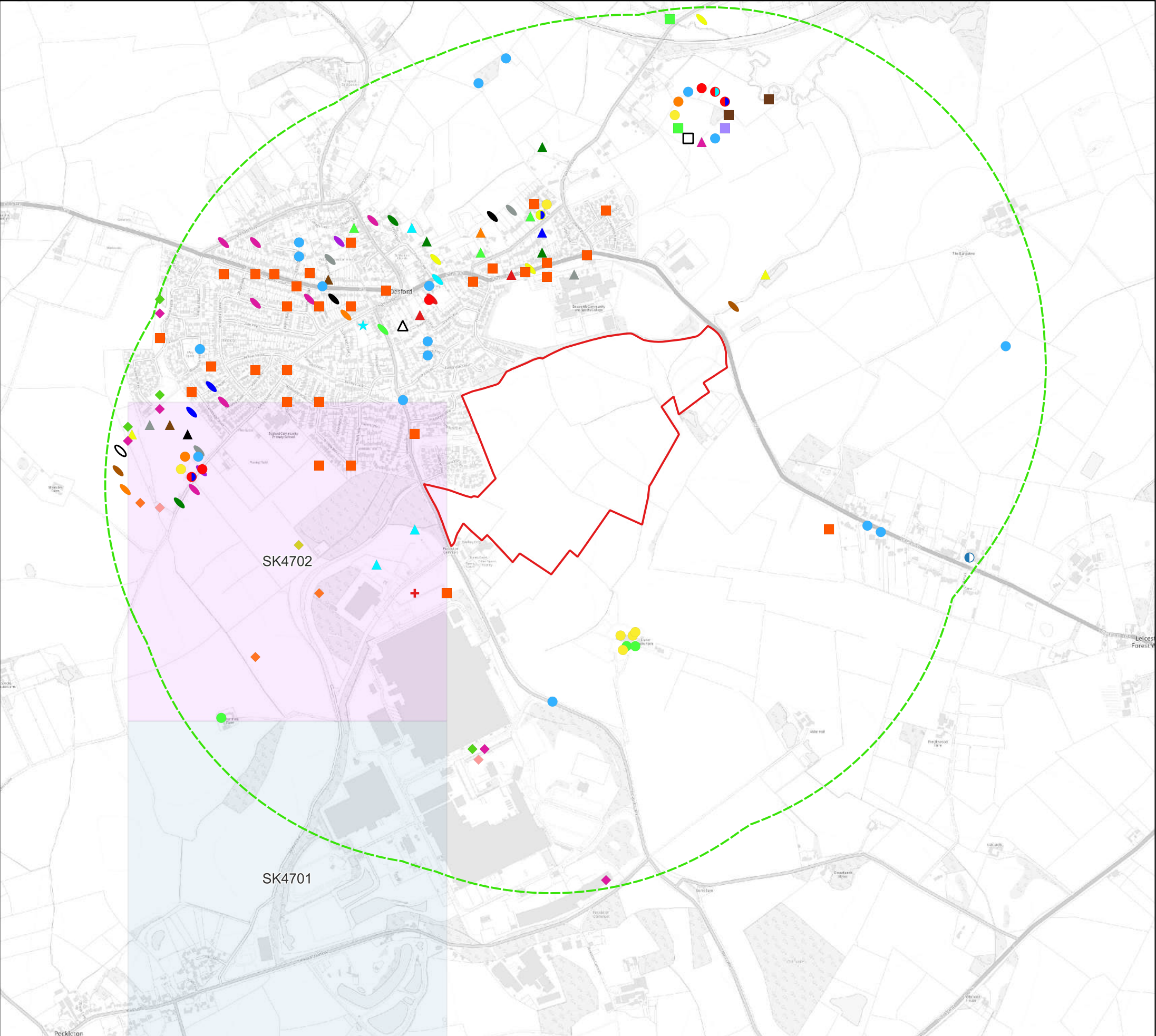
drawn  
KB / LFR

issue date  
19/10/2023

drawing / figure number  
**Figure 1a**

rev  
-





This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd.

Ordnance Survey material - Crown Copyright. All rights reserved.  
Licence Number: 100019980

## Key

Site Boundary 1km Buffer

### Bats

- |                      |                          |
|----------------------|--------------------------|
| Brown Long-eared Bat | Nyctalus Bat species     |
| Common Pipistrelle   | Pipistrelle Bat species  |
| Myotis Bat species   | Soprano Pipistrelle      |
| Natterer's Bat       | Unidentified Bat species |
| Noctule Bat          |                          |

### Birds

- |                |                |                    |
|----------------|----------------|--------------------|
| Barn Owl       | House Sparrow  | Song Thrush        |
| Brambling      | Kingfisher     | Spotted Flycatcher |
| Bullfinch      | Lesser Redpoll | Starling           |
| Cuckoo         | Linnet         | Swallow            |
| Dunnock        | Osprey         | Swift              |
| Fieldfare      | Peregrine      | Tree Sparrow       |
| Grey Partridge | Red Kite       | Wren               |
| Herring Gull   | Redwing        | Yellowhammer       |
| Hobby          | Skylark        |                    |

### Other Notable Species

- |                    |               |
|--------------------|---------------|
| American Mink      | Hare          |
| Common Frog        | Hedgehog      |
| Common Toad        | Japanese Rose |
| Grass Snake        | Otter         |
| Great Crested Newt | Smooth Newt   |
| Grizzled Skipper   | Water Vole    |

### Species Records of 1km Accuracy

- |                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SK4701: Reed Bunting; Japanese Knotweed                                                                                                                           |
| SK4702: : Dunnock; Cinnabar; Grass Snake; Myotis Bat species; Noctule Bat; Nathusius's Pipistrelle; Common Pipistrelle; Soprano Pipistrelle; Brown Long-eared Bat |

client  
**Bellway Homes**

project  
**Land South of Desford**

drawing title  
**SITE LOCATION AND CONSULTATION RESULTS PLAN - BADGER RECORDS**

scale @ A3  
1:12500

drawing / figure number  
**Figure 1b**

drawn  
AJH / LFR

issue date  
20/10/2023

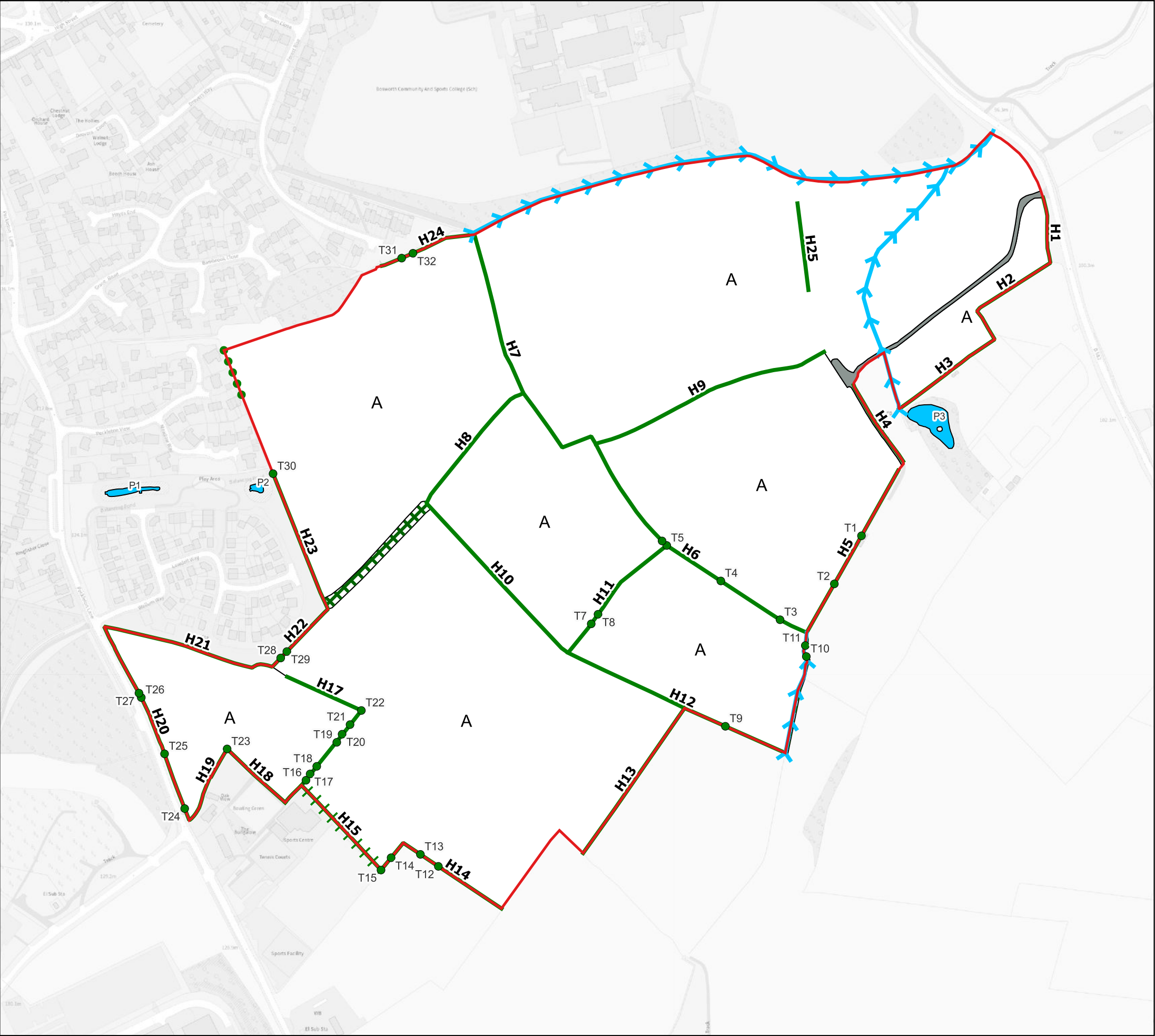
rev  
-

This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd.

Ordnance Survey material - Crown Copyright. All rights reserved.  
Licence Number: 100019980

Key

- Site Boundary
- Built Environment: Buildings/hardstanding
- A Cultivated/disturbed land - arable
- Scrub - dense/continuous
- Standing water
- Broadleaved trees
- Running water
- Intact hedge - species-poor
- Hedge with trees - species-poor
- Broadleaved tree



FPCR Environment and Design Ltd, Lockington Hall, Lockington, Derby, DE74 2RH ■ t:01509 672 772 ■ e: mail@fpcr.co.uk ■ w: www.fpcr.co.uk ■  
masterplanning ■ environmental assessment ■ landscape design ■ urban design ■ ecology ■ architecture ■ arboriculture

0 100 200 m



client  
Bellway Homes  
project  
Land South of Desford

drawing title  
PHASE 1 HABITAT PLAN

scale @ A3  
1:4000  
drawn  
BS/LFR  
issue date  
19/10/2023

drawing / figure number  
Figure 2

rev  
-



N

0

100

200 m

Key:

Site Boundary

Point Count Locations

-->

Flight Arrow

Bats:

Common Pipistrelle

| Ref | Time  | Species name        | Passes | Behaviour |
|-----|-------|---------------------|--------|-----------|
| A   | 21:27 | Noctule             | 1      | C         |
| A   | 21:29 | Common pipistrelle  | 1      | C         |
| A1  | 21:29 | Noctule             | 3      | F         |
| A   | 21:31 | Common pipistrelle  | 2      | C         |
| A   | 21:35 | Noctule             | 1      | C         |
| A   | 21:38 | Common pipistrelle  | 1      | C         |
| A   | 21:50 | Common pipistrelle  | 1      | C         |
| A   | 21:57 | Common pipistrelle  | 2      | F         |
| A   | 22:03 | Common pipistrelle  | 2      | F         |
| B   | 21:41 | Soprano pipistrelle | 1      | C         |
| B   | 22:01 | Common pipistrelle  | 1      | C         |

C - Commuting  
F - Foraging

date

27/01/25

client

Bellway Homes Ltd. (South Midlands)

project

Land South of Desford

title

11966 BAT FLIGHTLINE RESULTS  
PLAN - 30/05/2024

number

FIGURE 3a

drwn/chkd

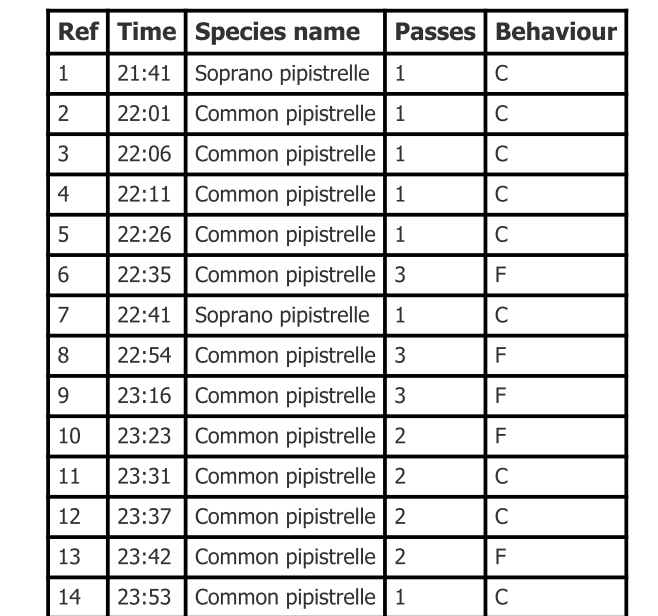
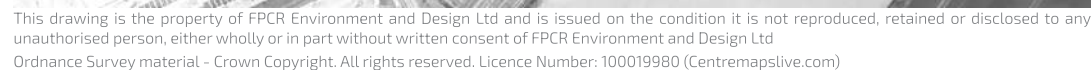
KD / LFR

scale

1:3,291 @ A3

rev

-



**FIGURE 3b** -



N

0

100

200 m

Key:

Site Boundary

Point Count Locations

-->

Flight Arrow

Bats:

Common Pipistrelle

| Ref | Time  | Species name        | Passes   | Behaviour |
|-----|-------|---------------------|----------|-----------|
| A   | 21:37 | Common pipistrelle  | 1        | F         |
| A1  | 21:41 | Common pipistrelle  | Multiple | F         |
| A   | 21:43 | Common pipistrelle  | 1        | C         |
| A   | 21:44 | Noctule             | 1        | C         |
| A1  | 21:51 | Common pipistrelle  | Multiple | F         |
| A   | 21:57 | Common pipistrelle  | 1        | F         |
| A2  | 21:58 | Common pipistrelle  | Multiple | F         |
| A2  | 22:08 | Common pipistrelle  | 1        | C         |
| B1  | 21:51 | Common pipistrelle  | 1        | C         |
| B   | 21:56 | Soprano pipistrelle | 1        | C         |
| B   | 22:00 | Common pipistrelle  | 1        | C         |

C - Commuting  
F - Foraging

date

27/01/25

drwn/chkd

KD / LFR

client

Bellway Homes Ltd. (South Midlands)

project

Land South of Desford

title

11966 BAT FLIGHTLINE RESULTS

scale

1:3,291 @ A3

number

PLAN - 25/07/2024

rev

FIGURE 4a



N

0

100

200 m

Key:

Site Boundary

Transect Route

S

Start point

F

Finish point

Bats:

Common Pipistrelle

Soprano Pipistrelle

Noctule

| Ref | Time  | Species name        | Passes   | Behaviour |
|-----|-------|---------------------|----------|-----------|
| 1   | 22:33 | Common pipistrelle  | 1        | C         |
| 2   | 22:35 | Soprano pipistrelle | 1        | C         |
| 3   | 22:38 | Common pipistrelle  | 2        | F         |
| 4   | 22:48 | Common pipistrelle  | 2        | C         |
| 5   | 22:52 | Soprano pipistrelle | 1        | C         |
| 6   | 22:53 | Common pipistrelle  | 1        | C         |
| 7   | 23:02 | Common pipistrelle  | 1        | C         |
| 8   | 23:19 | Common pipistrelle  | 1        | C         |
| 9   | 23:25 | Soprano pipistrelle | 2        | F         |
| 10  | 23:37 | Common pipistrelle  | 1        | C         |
| 11  | 23:45 | Common pipistrelle  | Multiple | F         |

C - Commuting  
F - Foraging

date

29/01/25

drwn/chkd

KD / LFR

client

Bellway Homes Ltd. (South Midlands)

project

Land South of Desford

title

11966 BAT TRANSECT RESULTS  
PLAN - 25/07/2024

scale

1:3,291 @ A3

number

FIGURE 4b

rev

-



N

0

100

200 m

Key:

Site Boundary

Point Count Locations

-->

Flight Arrow

Bats:

Common Pipistrelle

| Ref | Time  | Species name        | Passes   | Behaviour |
|-----|-------|---------------------|----------|-----------|
| A   | 20:04 | Common pipistrelle  | 1        | C         |
| A   | 20:08 | Soprano pipistrelle | 1        | C         |
| A1  | 20:15 | Common pipistrelle  | 1        | C         |
| A   | 20:23 | Soprano pipistrelle | Multiple | F         |
| A   | 20:28 | Soprano pipistrelle | Multiple | F         |
| B   | 20:04 | Common pipistrelle  | 1        | C         |
| B   | 20:04 | Soprano pipistrelle | 1        | C         |
| B1  | 20:15 | Common pipistrelle  | 1        | C         |
| B   | 20:23 | Soprano pipistrelle | Multiple | F         |
| B   | 20:28 | Soprano pipistrelle | Multiple | F         |
| B   | 20:33 | Soprano pipistrelle | 1        | C         |

C - Commuting  
F - Foraging

date

29/01/25

drwn/chkd

KD / LFR

client

Bellway Homes Ltd. (South Midlands)

project

Land South of Desford

title

11966 BAT FLIGHTLINE RESULTS  
PLAN - 09/09/2024

scale

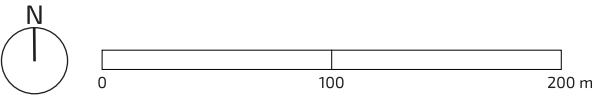
1:3,291 @ A3

number

FIGURE 5a

rev

-



**Key:**  

Site Boundary

Transect Route

S

 Start point

F

 Finish point

**Bats:**  

Common Pipistrelle

| Ref | Time  | Species name       | Passes | Behaviour |
|-----|-------|--------------------|--------|-----------|
| 1   | 20:51 | Common pipistrelle | 1      | C         |
| 2   | 21:02 | Common pipistrelle | 1      | C         |
| 3   | 21:04 | Common pipistrelle | 1      | C         |
| 4   | 21:10 | Common pipistrelle | 2      | F         |
| 5   | 21:16 | Common pipistrelle | 1      | C         |
| 6   | 21:25 | Common pipistrelle | 1      | C         |
| 7   | 21:33 | Common pipistrelle | 1      | C         |
| 8   | 21:57 | Common pipistrelle | 1      | C         |
| 9   | 21:52 | Soprano pipistrlle | 1      | C         |

C - Commuting  
F - Foraging

date  
29/01/25

drwn/chkd  
KD / LFR

client  
Bellway Homes Ltd. (South Midlands)

project  
Land South of Desford

title  
11966 BAT TRANSECT RESULTS  
PLAN - 09/09/2024

scale  
1:3,291 @ A3

number  
FIGURE 5b

rev  
-

## APPENDIX 1: BOTANICAL SPECIES LIST

### Arable – Field Margins

| Common Name         | Latin Name                       | Abundance |
|---------------------|----------------------------------|-----------|
| Annual meadow grass | <i>Poa annua</i>                 | R         |
| Bramble             | <i>Rubus fruticosus</i> agg.     | O         |
| Broad leaved dock   | <i>Rumex obtusifolius</i>        | O         |
| Common nettle       | <i>Urtica dioica</i>             | O         |
| Creeping bent       | <i>Agrostis stolonifera</i>      | F         |
| Creeping thistle    | <i>Cirsium arvense</i>           | O         |
| Dandelion           | <i>Taraxacum officinale</i> agg. | O         |
| False oat grass     | <i>Arrhenatherum elatius</i>     | F         |
| Fathen              | <i>Chenopodium album</i>         | O         |
| Field bindweed      | <i>Convolvulus arvensis</i>      | O         |
| Field speedwell     | <i>Veronica persica</i>          | O/LF      |
| Greater plantain    | <i>Plantago major</i>            | O         |
| Groundsel           | <i>Senecio vulgaris</i>          | O         |
| Hogweed             | <i>Heracleum sphondylium</i>     | R         |
| Italian rye grass   | <i>Lolium multiflorum</i>        | LO        |
| Knotgrass           | <i>Polygonum aviculare</i>       | O/LA      |
| Nipplewort          | <i>Lapsana communis</i>          | O         |
| Perennial rye grass | <i>Lolium perenne</i>            | F         |
| Prickly sowthistle  | <i>Sonchus asper</i>             | O         |
| Poppy               | <i>Papaver thoeas</i>            | O/LF      |
| Redshank            | <i>Persicaria maculosa</i>       | A         |
| Scarlet pimpernel   | <i>Anagallis arvensis</i>        | O/LA      |
| Scented mayweed     | <i>Matricaria chamomilla</i>     | O         |
| Shepherd's purse    | <i>Capsella bursa-pastoris</i>   | O         |
| Yorkshire fog       | <i>Holcus lanatus</i>            | F         |

### Arable – Crop weeds

| Common Name            | Latin Name                       | Abundance |
|------------------------|----------------------------------|-----------|
| Black grass            | <i>Alopecurus myosuroides</i>    | O         |
| Bristly ox-tongue      | <i>Helminthotheca echinoides</i> | F         |
| Common chickweed       | <i>Stellaria media</i>           | O         |
| Doves foot cranes bill | <i>Geranium molle</i>            | O         |
| Fathen                 | <i>Chenopodium album</i>         | O         |
| Field bindweed         | <i>Convolvulus arvensis</i>      | O         |
| Field speedwell        | <i>Veronica persica</i>          | R         |
| Groundsel              | <i>Senecio vulgaris</i>          | O         |
| Mugwort                | <i>Artemisia vulgaris</i>        | LO        |

| Common Name        | Latin Name                   | Abundance |
|--------------------|------------------------------|-----------|
| Prickly sowthistle | <i>Sonchus asper</i>         | F         |
| Redshank           | <i>Persicaria maculosa</i>   | A         |
| Scarlet pimpernel  | <i>Anagallis arvensis</i>    | O         |
| Scented mayweed    | <i>Matricaria chamomilla</i> | O         |
| Wild oat grass     | <i>Avena fatua</i>           | O         |
| Yorkshire fog      | <i>Holcus lanatus</i>        | R         |

#### Tall Ruderal Vegetation

| Common Name      | Latin Name                   | Abundance |
|------------------|------------------------------|-----------|
| Bramble          | <i>Rubus fruticosus agg.</i> | A         |
| Common Nettle    | <i>Urtica dioica</i>         | O         |
| Cow parsley      | <i>Anthriscus sylvestris</i> | O         |
| Creeping thistle | <i>Cirsium arvense</i>       | O         |
| Hedge bindweed   | <i>Calystegia sepium</i>     | O/F       |
| Hogweed          | <i>Heracleum sphondylium</i> | O         |

#### Tree and Hedge Species

| Common Name    | Latin Name                    |
|----------------|-------------------------------|
| Apple          | <i>Malus sp.</i>              |
| Ash            | <i>Fraxinus excelsior</i>     |
| Blackthorn     | <i>Prunus spinosa</i>         |
| Dogwood        | <i>Cornus sanguinea</i>       |
| Dog rose       | <i>Rosa canina</i>            |
| Gum tree       | <i>Eucalyptus sp.</i>         |
| Elder          | <i>Sambucus nigra</i>         |
| Elm            | <i>Ulmus sp.</i>              |
| Field maple    | <i>Acer campestre</i>         |
| Guelder rose   | <i>Viburnum opulus</i>        |
| Hawthorn       | <i>Crataegus monogyna</i>     |
| Hazel          | <i>Corylus avellana</i>       |
| Holly          | <i>Ilex aquifolium</i>        |
| Horse chestnut | <i>Aesculus hippocastanum</i> |
| Oak            | <i>Quercus robur</i>          |
| Plum           | <i>Prunus sp.</i>             |
| Sycamore       | <i>Acer pseudo platanus</i>   |
| Yew            | <i>Taxus baccata</i>          |

## APPENDIX 2: HEDGEROW SURVEY DATA

| Ref | Canopy Sp.                                | Height / Width (m) | Length (m) | Sp. per Av. 30m | Notes                                                     | HEGS Grade | Import. HR* | Cond. Assess. |
|-----|-------------------------------------------|--------------------|------------|-----------------|-----------------------------------------------------------|------------|-------------|---------------|
| H1  | <i>Ca, Cm, Ps, Ia, Sn, Fe, Ac</i>         | 1-2 / 1-2          | 150        | 5               | Wet ditch, No gaps, >1 trees per 50m, beside public byway | 2          | Yes         | Good          |
| H2  | <i>Ca, Cm, Sn</i>                         | 2-4 / 1-2          | 90         | 3               | Dry ditch, No gaps                                        | -2         | No          | Good          |
| H3  | <i>Ca, Cm, Sn, Ah, Plum</i>               | 4+ / 1-2           | 150        | 4               | Dry ditch, No gaps                                        | 2          | No          | Good          |
| H4  | <i>Cm, Sn, Rc, Ps</i>                     | 1-2 / 1-2          | 100        | 4               | No gaps, beside public byway                              | -2         | No          | Good          |
| H5  | <i>Cm, Sn, Rc, Qr, Fe</i>                 | 1-2 / 1-2          | 190        | 4               | Dry ditch, No gaps                                        | 2          | No          | Good          |
| H6  | <i>Cm, Sn, Rc, Ps, Ia, Fe, Qr</i>         | 1-2 / 1-2          | 280        | 5               | No gaps, 4 connections                                    | 2          | No          | Good          |
| H7  | <i>Cm, Ps, Sn, Rc</i>                     | 1-2 / 1-2          | 260        | 3               | Dry ditch, No gaps, 4 connections                         | -2         | No          | Good          |
| H8  | <i>Cm, Sn, Ia, Rc, Qr, Fe, Us</i>         | 2-4 / 2-3          | 150        | 5               | No gaps, 4 connections                                    | 2          | No          | Good          |
| H9  | <i>Cm, Ia, Sn</i>                         | 1-2 / 1-2          | 250        | 2.6             | Dry ditch, No gaps                                        | 3+         | No          | Good          |
| H10 | <i>Ia, Sn, Us</i>                         | 1-2 / 1-2          | 200        | 2               | No gaps, Dry ditch, 4 connections                         | -2         | No          | Good          |
| H11 | <i>Cm, Sn, Ia, Us.</i>                    | 1-2 / 1-2          | 145        | 3               | <10% gaps                                                 | 3+         | No          | Good          |
| H12 | <i>Cm, Rc, Sn, Ia, Us, Fe, Ps, Tb</i>     | 1-2 / 1-2          | 240        | 4.6             | Dry ditch, <10% gaps, 4 connections                       | 2+         | No          | Good          |
| H13 | <i>Cm, Ia, Fe, Sn, Rc, Ac, Ps</i>         | 1-2 / 1-2          | 175        | 4               | No gaps, 4 connections                                    | -2         | No          | Good          |
| H14 | <i>Cm, Sn, Fe, Ap, Qr</i>                 | 1-2 / 1-2          | 150        | 3               | No gaps                                                   | 3+         | No          | Good          |
| H15 | <i>Cm, Ap, Fe, Qr, Ia, Sn</i>             | 4+ / 2-3           | 110        | 4               | >1 trees per 50m, No gaps, 4 connections                  | -1         | No          | Good          |
| H16 | <i>Cm, Ia, Qr, Fe, Ca</i>                 | 1-2 / 1-2          | 115        | 3               | >1 trees per 50m, No gaps, dry ditch                      | 2          | No          | Good          |
| H17 | <i>Cm, Sn, Ia, Qr</i>                     | 1-2 / 1-2          | 72         | 4               | <10% gaps                                                 | 3          | No          | Good          |
| H18 | <i>Cm, Ia, Ca, Ac, Qr</i>                 | 1-2 / 1-2          | 75         | 4               | No gaps                                                   | 2          | No          | Good          |
| H19 | <i>Cm, Vo, Ap, Ms, Ia, Cs, Prunus sp.</i> | 4+ / 1-2           | 80         | 5               | >1 trees per 50m, No gaps                                 | 3+         | No          | Good          |
| H20 | <i>Ca, Cm, Qr, Us, Ps, Ms, Fe, Ia</i>     | 1-2 / 1-2          | 200        | 5.3             | Dry ditch, >1 trees per 50m, No gaps, beside public byway | 2          | Yes         | Good          |

| Ref  | Canopy Sp.                        | Height / Width (m) | Length (m) | Sp. per Av. 30m | Notes                                | HEGS Grade | Import. HR* | Cond. Assess. |
|------|-----------------------------------|--------------------|------------|-----------------|--------------------------------------|------------|-------------|---------------|
| H21  | <i>Cm, Sn, Ms, Prunus sp.</i>     | 1-2 / 1-2          | 160        | 3               | <10% gaps,                           | 3          | No          | Good          |
| H22  | <i>Cm, Ia, Us, Fe</i>             | 4+ / 1-2           | 75         | 4               | >1 trees per 50m, <10% gaps          | -2         | No          | Good          |
| H23  | <i>Cm, Ia, Us, Fe</i>             | 1-2 / 1-2          | 150        | 3.5             | <10% gaps, 4 connections             | -2         | No          | Good          |
| H24  | <i>Cm, Ia, Sn, Fe, Rc, Ah, Qr</i> | 1-2 / 1-2          | 83         | 6               | Dry ditch, >1 trees per 50m, No gaps | 2          | Yes         | Good          |
| H25  | Dense Crop - Inaccessible         |                    |            |                 |                                      |            |             |               |
| LOT1 |                                   |                    |            |                 |                                      |            |             |               |
| LOT2 |                                   |                    |            |                 |                                      |            |             |               |
| LOT3 |                                   |                    |            |                 |                                      |            |             |               |

Species Key: *Ac* *Acer campestre* – Field maple, *Ap* *Acer pseudoplatanus* – sycamore, *Ca* *Corylus avellana* – hazel, *Cs* *Cornus sanguinea* – dogwood, *Cm* *Crataegus monogyna* – hawthorn, *Ee* *Euonymus europaeus* – Spindle, *Fe* *Fraxinus excelsior* – ash, *Ia* *Ilex aquifolium*, *Lv*, *Ligustrum* - privet, *Mal* *sp. Malus sp.* – apple, *Pt* *Populus tremula* – aspen, *Qr* *Quercus robur* – pedunculate oak, *Rc* *Rosa canina* – dog-rose, *Rr* *Ribes rubrum* – Redcurrant, *Sc* *Salix caprea* – goat willow, *Sf* *Salix fragilis* – crack willow, *Sn* *Sambucus nigra* – elder, *Tb* *Taxus baccata* – yew, *Us* *Ulmus* – elm sp., *Vo* *Viburnum opulus* – guelder rose.

## APPENDIX C: STATIC BAT DETECTOR RESULTS

| Date                  | Survey Hours | Total Avg. per hour | Total Registrations | Common Pipistrelle |            |               | Noctule      |            |               | Soprano Pipistrelle |            |               | Nyctalus Species |            |               | Pipistrellus Species |            |               |
|-----------------------|--------------|---------------------|---------------------|--------------------|------------|---------------|--------------|------------|---------------|---------------------|------------|---------------|------------------|------------|---------------|----------------------|------------|---------------|
|                       |              |                     |                     | Period Total       | Peak Count | Avg. per hour | Period Total | Peak Count | Avg. per hour | Period Total        | Peak Count | Avg. per hour | Period Total     | Peak Count | Avg. per hour | Period Total         | Peak Count | Avg. per hour |
| 16/05/2024-21/05/2024 | 44:52        | 34                  | 1543                | 1520               | 481        | 33.867        | 9            | 5          | 0.201         | 4                   | 2          | 0.089         | 1                | 1          | 0.022         | 0                    | 0          | 0.000         |
| 16/05/2024-16/05/2024 | 44:52        | 15                  | 704                 | 586                | 294        | 13.057        | 6            | 4          | 0.134         | 106                 | 34         | 2.362         | 0                | 0          | 0.000         | 0                    | 0          | 0.000         |
| 10/07/2024-15/07/2024 | 43:00        | 58                  | 2523                | 2471               | 1497       | 57.462        | 11           | 5          | 0.256         | 8                   | 7          | 0.186         | 14               | 8          | 0.326         | 0                    | 0          | 0.000         |
| 10/07/2024-15/07/2024 | 42:59        | 6                   | 275                 | 243                | 69         | 5.651         | 2            | 1          | 0.047         | 17                  | 7          | 0.395         | 1                | 1          | 0.023         | 0                    | 0          | 0.000         |
| 04/09/2024-09/09/2024 | 59:09        | 6                   | 372                 | 305                | 132        | 5.156         | 4            | 1          | 0.068         | 46                  | 19         | 0.778         | 1                | 1          | 0.017         | 1                    | 1          | 0.017         |
| 04/09/2024-09/09/2024 | 59:09        | 42                  | 2514                | 2441               | 1763       | 41.262        | 29           | 16         | 0.490         | 30                  | 8          | 0.507         | 6                | 3          | 0.101         | 1                    | 1          | 0.017         |

| Date                  | Survey Hours | Total Avg. per hour | Total Registrations | Brown Long-eared bat |            |               | Myotis Species |            |               | Nathusius' pipistrelle |            |               |
|-----------------------|--------------|---------------------|---------------------|----------------------|------------|---------------|----------------|------------|---------------|------------------------|------------|---------------|
|                       |              |                     |                     | Period Total         | Peak Count | Avg. per hour | Period Total   | Peak Count | Avg. per hour | Period Total           | Peak Count | Avg. per hour |
| 16/05/2024-21/05/2024 | 44:52        | 34                  | 1543                | 8                    | 3          | 0.178         | 1              | 1          | 0.022         | 0                      | 0          | 0.000         |
| 16/05/2024-16/05/2024 | 44:52        | 15                  | 704                 | 2                    | 2          | 0.045         | 4              | 2          | 0.089         | 0                      | 0          | 0.000         |
| 10/07/2024-15/07/2024 | 43:00        | 58                  | 2523                | 19                   | 8          | 0.442         | 0              | 0          | 0.000         | 0                      | 0          | 0.000         |
| 10/07/2024-15/07/2024 | 42:59        | 6                   | 275                 | 1                    | 1          | 0.023         | 11             | 6          | 0.256         | 0                      | 0          | 0.000         |
| 04/09/2024-09/09/2024 | 59:09        | 6                   | 372                 | 5                    | 3          | 0.085         | 8              | 3          | 0.135         | 2                      | 2          | 0.034         |
| 04/09/2024-09/09/2024 | 59:09        | 42                  | 2514                | 5                    | 2          | 0.085         | 2              | 1          | 0.034         | 0                      | 0          | 0.000         |



Client: Beth Sydenham,  
FPCR Environment and Design



ADAS  
Spring Lodge  
172 Chester Road  
Helsby  
WA6 0AR

Tel: 01159 229249  
Email: Helen.Rees@adas.co.uk  
www.adas.uk

Sample ID: ADAS-3596      Condition on Receipt: Low Sediment      Volume: Passed  
Client Identifier: P1 East, 11966      Description: pond water samples in preservative  
Date of Receipt: 26/04/2024      Material Tested: eDNA from pond water samples

| Determinant                                                           | Result                 | Method        | Date of Analysis |
|-----------------------------------------------------------------------|------------------------|---------------|------------------|
| Inhibition Control <sup>†</sup>                                       | 2 of 2                 | Real Time PCR | 30/04/2024       |
| Degradation Control <sup>§</sup>                                      | Within Limits          | Real Time PCR | 30/04/2024       |
| Great Crested Newt*                                                   | 0 of 12 (GCN negative) | Real Time PCR | 30/04/2024       |
| Negative PCR Control<br>(Nuclease Free Water)                         | 0 of 4                 | Real Time PCR | As above for GCN |
| Positive PCR Control (GCN<br>DNA 10 <sup>-4</sup> ng/μL) <sup>#</sup> | 4 of 4                 | Real Time PCR | As above for GCN |

Report Prepared by: Dr Helen Rees      Report Issued by: Dr Ben Maddison

Signed:

Signed:

Position: Director: Biotechnology      Position: MD: Biotechnology

Date of preparation: 02/05/2024      Date of issue: 02/05/2024

*eDNA analysis was carried out in accordance with the stipulated methodology found in the Technical Advice Note (WC1067 Appendix 5 Technical Advice Note) published by DEFRA and adopted by Natural England.*

*\* If all PCR controls and extraction blanks give the expected results a sample is considered: negative for great crested newt if all of the replicates are negative; positive for great crested newt if one or more of the replicates are positive.*

*<sup>†</sup> Recorded as the number of positive replicate reactions at expected C<sub>t</sub> value. If the expected C<sub>t</sub> value is not achieved, the sample is considered inhibited and is diluted as per the technical advice note prior to amplification with great crested newt primer and probes.*

*<sup>§</sup> No degradation is expected within time frame of kit preparation, sample collection and analysis.*

*<sup>#</sup> Additional positive controls (10<sup>-1</sup>, 10<sup>-2</sup>, 10<sup>-3</sup> ng/μL) are also routinely run, results not shown here.*

Client: Beth Sydenham,  
FPCR Environment and Design



ADAS  
Spring Lodge  
172 Chester Road  
Helsby  
WA6 0AR

Tel: 01159 229249  
Email: Helen.Rees@adas.co.uk  
www.adas.uk

Sample ID: ADAS-3597      Condition on Receipt: Good      Volume: Passed  
Client Identifier: P2 West, 11966      Description: pond water samples in preservative  
Date of Receipt: 26/04/2024      Material Tested: eDNA from pond water samples

| Determinant                                                           | Result                 | Method        | Date of Analysis |
|-----------------------------------------------------------------------|------------------------|---------------|------------------|
| Inhibition Control <sup>†</sup>                                       | 2 of 2                 | Real Time PCR | 02/05/2024       |
| Degradation Control <sup>§</sup>                                      | Within Limits          | Real Time PCR | 02/05/2024       |
| Great Crested Newt*                                                   | 0 of 12 (GCN negative) | Real Time PCR | 02/05/2024       |
| Negative PCR Control<br>(Nuclease Free Water)                         | 0 of 4                 | Real Time PCR | As above for GCN |
| Positive PCR Control (GCN<br>DNA 10 <sup>-4</sup> ng/μL) <sup>#</sup> | 4 of 4                 | Real Time PCR | As above for GCN |

Report Prepared by: Dr Helen Rees      Report Issued by: Dr Ben Maddison

Signed:

A handwritten signature in black ink, appearing to read "H. Rees", written over a light blue grid background.

Signed:

A handwritten signature in black ink, appearing to read "B. Maddison", written over a light blue grid background.

Position: Director: Biotechnology      Position: MD: Biotechnology

Date of preparation: 02/05/2024      Date of issue: 02/05/2024

*eDNA analysis was carried out in accordance with the stipulated methodology found in the Technical Advice Note (WC1067 Appendix 5 Technical Advice Note) published by DEFRA and adopted by Natural England.*

*\* If all PCR controls and extraction blanks give the expected results a sample is considered: negative for great crested newt if all of the replicates are negative; positive for great crested newt if one or more of the replicates are positive.*

*<sup>†</sup> Recorded as the number of positive replicate reactions at expected C<sub>t</sub> value. If the expected C<sub>t</sub> value is not achieved, the sample is considered inhibited and is diluted as per the technical advice note prior to amplification with great crested newt primer and probes.*

*<sup>§</sup> No degradation is expected within time frame of kit preparation, sample collection and analysis.*

*<sup>#</sup> Additional positive controls (10<sup>-1</sup>, 10<sup>-2</sup>, 10<sup>-3</sup> ng/μL) are also routinely run, results not shown here.*

Client: Beth Sydenham,  
FPCR Environment and Design



ADAS  
Spring Lodge  
172 Chester Road  
Helsby  
WA6 0AR

Tel: 01159 229249  
Email: Helen.Rees@adas.co.uk  
www.adas.uk

Sample ID: ADAS-3730      Condition on Receipt: Good      Volume: Passed  
Client Identifier: P3, 11966      Description: pond water samples in preservative  
Date of Receipt: 26/04/2024      Material Tested: eDNA from pond water samples

| Determinant                                                           | Result                 | Method        | Date of Analysis |
|-----------------------------------------------------------------------|------------------------|---------------|------------------|
| Inhibition Control <sup>†</sup>                                       | 2 of 2                 | Real Time PCR | 30/04/2024       |
| Degradation Control <sup>§</sup>                                      | Within Limits          | Real Time PCR | 30/04/2024       |
| Great Crested Newt*                                                   | 0 of 12 (GCN negative) | Real Time PCR | 30/04/2024       |
| Negative PCR Control<br>(Nuclease Free Water)                         | 0 of 4                 | Real Time PCR | As above for GCN |
| Positive PCR Control (GCN<br>DNA 10 <sup>-4</sup> ng/μL) <sup>#</sup> | 4 of 4                 | Real Time PCR | As above for GCN |

Report Prepared by: Dr Helen Rees      Report Issued by: Dr Ben Maddison

Signed:

Signed:

Position: Director: Biotechnology      Position: MD: Biotechnology

Date of preparation: 02/05/2024      Date of issue: 02/05/2024

*eDNA analysis was carried out in accordance with the stipulated methodology found in the Technical Advice Note (WC1067 Appendix 5 Technical Advice Note) published by DEFRA and adopted by Natural England.*

*\* If all PCR controls and extraction blanks give the expected results a sample is considered: negative for great crested newt if all of the replicates are negative; positive for great crested newt if one or more of the replicates are positive.*

*<sup>†</sup> Recorded as the number of positive replicate reactions at expected C<sub>t</sub> value. If the expected C<sub>t</sub> value is not achieved, the sample is considered inhibited and is diluted as per the technical advice note prior to amplification with great crested newt primer and probes.*

*<sup>§</sup> No degradation is expected within time frame of kit preparation, sample collection and analysis.*

*<sup>#</sup> Additional positive controls (10<sup>-1</sup>, 10<sup>-2</sup>, 10<sup>-3</sup> ng/μL) are also routinely run, results not shown here.*

## Appendix 1: Interpretation of results

### Sample Condition

Upon sample receipt we score your samples according to quality: good, low sediment, medium sediment, high sediment, white precipitate, and presence of algae.

There are three reasons as to why sediment should be avoided:

1. It is possible for DNA to persist within the sediment for longer than it would if it was floating in the water which could lead to a false positive result i.e. in this case GCN not recently present but present a long time ago
2. In some cases sediment can cause inhibition of the PCR analysis used to detect GCN eDNA within samples which could lead to an indeterminate result.
3. In some cases sediment can interfere with the DNA extraction procedure resulting in poor recovery of the eDNA which in turn can lead to an indeterminate result.

Algae can make the DNA extraction more difficult to perform so if it can be avoided then this is helpful.

Sometimes samples contain a white precipitate which we have found makes the recovery of eDNA very difficult. This precipitate can be present in such high amounts that it interferes with the eDNA extraction process meaning that we cannot recover the degradation control (nor most likely the eDNA itself) at sufficient levels for the control to be within the acceptable limits for the assay, therefore we have to classify these type of samples as indeterminate.

### What do my results mean?

A positive result means that great crested newts are present in the water or have been present in the water in the recent past (eDNA degrades over around 7-21 days).

A negative result means that DNA from the great crested newt has not been detected in your sample.

On occasion an inconclusive result will be issued. This occurs where the DNA from the great crested newt has not been detected but the controls have indicated that either: the sample has been degraded and/or the eDNA was not fully extracted (poor recovery); or the PCR inhibited in some way. This may be due to the water chemistry or may be due to the presence of high levels of sediment in samples which can interfere with the DNA extraction process. A re-test could be performed but a fresh sample would need to be obtained. We have successfully performed re-tests on samples which have had high sediment content on the first collection and low sediment content (through improved sample collection) on the re-test. If water chemistry was the cause of the indeterminate then a re-test would most likely also return an inconclusive result.

The results will be recorded as indeterminate if the GCN result is negative and the degradation result is recorded as:

1. evidence of decay - meaning that the degradation control was outside of accepted limits
2. evidence of degradation or residual inhibition - meaning that the degradation control was outside of accepted limits but that this could have been due to inhibitors not being removed sufficiently by the dilution of inhibited samples (according to the technical advice note)

FPCR | environment  
& design



# Appendix E: Breeding Birds Report

Client

**Bellway Homes Ltd.**

Project

**Land South of Desford,  
Leicestershire**

Date

**May 2025**

CONTENTS

1.0 INTRODUCTION ..... 1

2.0 LEGISLATION AND STATUS ..... 2

3.0 METHODOLOGY ..... 3

4.0 RESULTS & EVALUATION ..... 6

5.0 DISCUSSION AND RECOMMENDATIONS ..... 12

TABLES

- Table 1: Survey Dates & Conditions
- Table 2: Evaluation Criteria
- Table 3: Bird Species Records from Desk Study
- Table 4: Notable Breeding Species and Their Recent Status in Leicestershire
- Table 5: Birds of Local Nature Conservation Importance or Higher

FIGURES

- Figure 1: Site Location Plan
- Figure 2: Breeding Bird Survey Results – Distribution of Notable Species

APPENDICES

- Appendix A: 2024 Breeding Bird Survey Results & EOAC Criteria for Categorisation of Breeding Status

| Rev | Issue Status | Prepared/Date  | Reviewed / Date | Approved/Date |
|-----|--------------|----------------|-----------------|---------------|
| -   |              | 03/01/25 - JTB | LFR/ 23.04.25   | 21/05/25      |
|     |              |                |                 |               |
|     |              |                |                 |               |
|     |              |                |                 |               |

## 1.0 INTRODUCTION

- 1.1 FPCR Environment & Design Ltd. were commissioned by Bellway Homes Ltd. to undertake breeding and wintering bird surveys on land south of Desford, Leicestershire (central grid reference: SK 484 029) hereafter referred to as 'the Site'.
- 1.2 This document should be read in conjunction with the other ecological documents prepared for this application, which includes the Wintering Bird Report and Ecological Appraisal.

### Site Location & Context

- 1.3 The site spans c.38ha of agricultural land on the southern edge of Desford, with Merrylees Industrial Estate bounding the western and southwestern section of the Site, and residential Desford bordering the northern Site boundary. Agricultural land dominates the landscape east and southeast of the Site, with the outer limits of Leicester located 3–3.5km east of the Site.
- 1.4 Fields within the Site were mostly agricultural, and divided by established hedgerows with mature trees. Across the four survey visits which spanned April to July, approximately half the fields contained wheat, and the other half a legume crop.
- 1.5 The northern boundary is identified as a wildlife corridor through Policy ENV3 of the Neighbourhood Plan which presents as the edge of a belt of offsite mature woodland and structural vegetation along much of the northern boundary.

### Development Proposals

- 1.6 Currently proposals are being explored and are conceptual but are investigating the scope for residential development of the site with retention of key habitats in adjoining public open space. Access to the site would be achieved from Leicester Lane in the east and Peckleton Lane in the west.
- 1.7 Based on current proposals, the Green Infrastructure (GI) includes creation of approximately 1.3ha of broadleaved woodland located in the centre and the south of the Site, retention of hedgerows throughout the Site, and areas of informal green space totalling approximately 13.6ha.

### Survey Objectives

- 1.8 The Breeding Bird Survey comprised four survey occasions and was carried out between April and mid-July 2024 inclusive. The objectives of the survey were to:
- Identify the presence of any designated nature conservation sites that support notable breeding bird assemblages within or in the vicinity of the Site.
  - Identify the presence, species, and distribution of breeding birds within the Site.
  - Evaluate the conservation importance of habitats within the Site to local bird populations and identify any areas of ornithological interest.
  - Make recommendations to minimise the potential impact of development and to consider opportunities for additional mitigation, compensation, and enhancement where relevant.

## 2.0 LEGISLATION AND STATUS

- 2.1 The Wildlife and Countryside Act 1981 (as amended) (WCA) is the principal legislation affording protection to UK wild birds. Under this legislation all birds, their nests and eggs are protected by law, and it is an offence, with certain exceptions, to recklessly or intentionally:
- Kill, injure or take any wild bird.
  - Take, damage, or destroy the nest of any wild bird while in use or being built; or
  - Take or destroy the egg of any wild bird.
- 2.2 Additional protection is afforded to species listed on Schedule 1 of the WCA, whereby intentional disturbance whilst building or occupying a nest or disturbance of dependent young is also considered an offence.
- 2.3 Certain species have also been identified as Species of Principal Importance (SPI) under Section 41 of the NERC Act 2006 (NERC S.41). The S.41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the Natural Environment and Rural Communities Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.
- 2.4 The site falls within the Leicester, Leicestershire, and Rutland Local Biodiversity Action Plan (LLRBAP, hereafter referred to as 'the LBAP') which identifies several targets for UK priority species that occur within this area, namely: barn owl *Tyto alba*, nightingale *Luscinia megarhynchos*, redstart *Phoenicurus phoenicurus*, sand martin *Riparia riparia*, and a multi-species action plan for swift *Apus apus*, swallow *Hirundo rustica*, and house martin *Delichon urbicum*.

### Status

- 2.5 In addition to statutory protection, some bird species are classified according to their conservation statuses, such as their inclusion on the Red and Amber lists of Birds of Conservation Concern (BoCC) in the UK.
- 2.6 Red list (high conservation concern) species meet at least one of the following criteria:
- They are globally threatened according to IUCN criteria.
  - Their population has declined rapidly (50% or more) in recent years.
  - They have declined historically and not shown a substantial recent recovery.
- 2.7 Amber list (medium conservation concern) species are those that meet at least one of the following criteria:
- They have unfavourable conservation status in Europe.
  - Their population or range has declined moderately (between 25-49%) in recent years.
  - Their population has declined historically but made a substantial recent recovery.
  - They are rare breeders.
  - They have internationally important or localised populations.
- 2.8 Green list (low conservation concern) species fulfil none of the above criteria.

### 3.0 METHODOLOGY

#### Desk Study

- 3.1 To compile existing baseline ornithological information, the following statutory and non-statutory organisations were consulted for data regarding designated sites for which birds are a qualifying feature, and protected/notable bird records.
- Natural England via the Multi Agency Geographic Information for the Countryside (MAGIC<sup>1</sup>).
  - Leicestershire & Rutland Environmental Records Centre (LRERC).

#### Field Surveys

- 3.2 The survey methodology employed was in accordance with the protocol specified in the best practice guidelines – Bird Survey Guidelines for Assessing Ecological Impacts<sup>2</sup>. All birds encountered (seen or heard) were recorded on a field survey plan using standard BTO species codes and symbols for bird activities and to denote activity, sex, and age where appropriate. Breeding status was inferred for each species based on the sixteen categories implemented by the European Ornithological Atlas Committee (EOAC)<sup>3</sup> and their corresponding definitions, in addition to four additional codes to classify non-breeding species as birds recorded away from suitable breeding habitat, summering non-breeders, passage migrants, or flyovers. Birds were considered to be holding a territory and therefore likely to be utilizing the Site for breeding activities if they were displaying breeding behaviours, such as: singing, nest building, food carrying or territorial defence. If birds did not display such behaviours, e.g. they were only recorded flying over the Site, they were considered non-breeders. These criteria and these definitions are outlined in Appendix A.
- 3.3 To provide a reasonable level of accuracy for determining the population status of the breeding birds on the Site, a total of four surveys were undertaken in 2024. Three were between dawn and 11.00am in April, May, and June, and a single dusk survey in July undertaken an hour prior to sunset and finishing an hour after. The detailed surveys undertaken span the season in which the majority of breeding activity occurs for typical species, and no species with vastly differing breeding cycles are reasonably expected to occur at this site following the consultation results and assessment of the habitats present. Survey effort was reviewed on a rolling basis and throughout returned a basic assemblage of common and widespread birds, with composition and peak counts consistent between survey occasions, such that, given the law of diminishing returns, further survey effort would be unlikely to find significant additional information to change the impact assessment with anticipated impacts expected to be relatively minor based on the widespread retention of suitable breeding habitat for the majority of species recorded.
- 3.4 The dusk survey was undertaken around during failing light and continued into darkness, where surveyors used Pulsar Axion XQ38 thermal imaging monoculars to observe birds, to account for temporal variations in species' detectability being timed to coincide with peak activity of likely crepuscular and/or nocturnal species and identify important roost sites should any be present.

---

<sup>1</sup> [www.magic.gov.uk](http://www.magic.gov.uk)

<sup>2</sup> Bird Survey & Assessment Steering Group. (2023). Bird Survey Guidelines for assessing ecological impacts, v.1.1.1. Available at: <https://birdsurveyguidelines.org> [Accessed: 26.06.24]

<sup>3</sup> Sharrock, J.T.R (1973) Ornithological Atlases. Auspicius 5:13-15.

- 3.5 A route was mapped out prior to the surveys being undertaken, paying particular attention to any linear features, such as hedgerows and watercourses, and other features such as ponds and scrub. Bird surveys were not undertaken in unfavourable conditions, such as heavy rain or persistent strong wind (conditions which can negatively affect the results). To provide inter-survey temporal variation between surveys to account for variation in species' detectability throughout the day, the starting location and direction of walking were stratified across the four surveys. Table 1 provides details of the survey dates and weather conditions.

**Table 1: Survey Dates & Conditions**

| Survey       | Date     | Cloud Cover (%) | Rain | Wind (Beaufort) | Visibility |
|--------------|----------|-----------------|------|-----------------|------------|
| BBS 1        | 24.04.24 | 10              | None | 0 – None        | Excellent  |
| BBS 2        | 15.05.24 | 100             | None | 1 – Light Air   | Good       |
| BBS 3        | 24.06.24 | 0               | None | 0 – None        | Excellent  |
| BBS 4 – dusk | 17.07.24 | 50              | None | 1 – Light Air   | Excellent  |

### Species & Assemblage Assessment

- 3.6 The Chartered Institute of Ecology and Environmental Management (CIEEM) guidance on ecological impact assessment assesses nature conservation importance within a geographical context<sup>4</sup>. To attain each level of importance, an ornithological resource or one of the features (species population or assemblage of species) should meet the criteria set out in Table 2. In some cases, professional judgment may be required to increase or decrease the allocation of importance, based upon local knowledge.
- 3.7 The site has also been assessed against the selection criteria for Local Wildlife Site (LWS) for Leicestershire<sup>5</sup> on a number of criteria set out for breeding birds. LWSs are recognised by central government as an important tool in promoting sustainable development and protecting biodiversity.
- 3.8 The recent county annual bird report, *The Leicestershire & Rutland Annual Bird Report 2020*<sup>6</sup>, was consulted to inform the assessment. The abundance of species referred to by these reports is classified by the following criteria:
- Very Rare – Fewer than ten records ever;
  - Rare – More than ten records ever, but occurring less than annually in the county;
  - Scarce – Fewer than ten individuals or breeding pairs occurring annually in the county;
  - Uncommon – Between ten and 100 individuals or breeding pairs occurring annually in the county;
  - Fairly Common – Between 100 and 1,000 individuals or breeding pairs occurring annually in the county;

<sup>4</sup> [http://www.cieem.net/data/files/Publications/EcIA\\_Guidelines\\_Terrestrial\\_Freshwater\\_and\\_Coastal\\_Jan\\_2016.pdf](http://www.cieem.net/data/files/Publications/EcIA_Guidelines_Terrestrial_Freshwater_and_Coastal_Jan_2016.pdf)

<sup>5</sup> Leicestershire County Council (2011) Guidelines for the selection of Local Wildlife Sites (previously known as Sites of Importance for Nature Conservation or SINC)s in Leicester, Leicestershire and Rutland. 4th edition.

<sup>6</sup> The Leicestershire & Rutland Ornithological Society (2022) Leicestershire & Rutland Annual Bird Report 2020.

- Common – Between 1,000 and 10,000 individuals or breeding pairs occurring annually in the county;
- Abundant – More than 10,000 individuals or breeding pairs annually in the county.

**Table 2: Evaluation Criteria**

| <b>Nature Conservation Value</b> | <b>Examples of Selection Criteria</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| International                    | A species which is part of the cited interest of an SPA and which regularly occurs in internationally or nationally important numbers.<br>A species present in internationally important numbers (>1% of international population).                                                                                                                                                                                                                                                                                                                                |
| National                         | A species which is part of the cited interest of a SSSI and which regularly occurs in nationally or regionally important numbers.<br>A nationally important assemblage of breeding or over-wintering species.<br>A species present in nationally important numbers (>1% UK population).<br>Rare breeding species (<300 breeding pairs in the UK).                                                                                                                                                                                                                  |
| Regional                         | Species listed as being of principal importance under NERC S.41 which are not covered above, and which regularly occurs in regionally important numbers.<br>Species present in regionally important numbers (>1% of regional population).<br>Sustainable populations of species that are rare or scarce within a region.<br>Species on the BoCC Red List & which regularly occur in regionally important numbers.                                                                                                                                                  |
| County                           | Species listed as being of principal importance under NERC S.41 which are not covered above, and which regularly occurs in county important numbers<br>Species present in county important numbers (>1% of county population).<br>Sustainable populations of species that are rare or scarce within a county, or are listed as being of principal importance under S41 of the NERC Act.<br>A site designated for its county important assemblage of birds (e.g. a SINC Site).<br>Species on the BoCC Red List & which regularly occur in county important numbers. |
| Local                            | Other species of conservation interest (e.g. all other species on the BoCC Red and Amber List or species listed as being of principal importance under NERC S.41 which are not covered above) regularly occurring in locally sustainable populations.<br>Sustainable populations of species which are rare or scarce within the locality.                                                                                                                                                                                                                          |
| Site                             | Species that are common and widespread                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## 4.0 RESULTS & EVALUATION

### Desk Study

#### Statutory Designated Sites

- 4.1 A single statutory designated site of national importance for nature conservation was present within 2km of the Site. Full details of this designated site is provided in the Preliminary Ecological Appraisal<sup>7</sup> issued by FPCR in 2023, though as this site did not include significant populations and/or assemblages of birds in its citation, it has not been considered further herein.

#### Non-Statutory Designated Sites

- 4.2 A total of 22 non-statutory designated sites are present within 1km of the Site, full details of which are provided in the Ecological Appraisal issued by FPCR in 2025. None of these sites received designatory status due to having significant populations and/or assemblages of birds, and thus are not considered further.

#### Protected/Notable Species

- 4.3 A total of 51 records were identified within 1km of the Site in the desk study, all pertaining to 26 species. Of these species, all but swallow *Hirundo rustica* are afforded legislative protection of

**Table 3: Bird Species Records from Desk Study**

| Name               |                            | Status    |           |      | Within Site Boundary |
|--------------------|----------------------------|-----------|-----------|------|----------------------|
|                    |                            | WCA Sch.1 | NERC S.41 | LBAP |                      |
| BoCC Red List      |                            |           |           |      |                      |
| Cuckoo             | <i>Cuculus canorus</i>     |           |           |      | No                   |
| Fieldfare          | <i>Turdus pilaris</i>      | +         |           |      | No                   |
| Grey partridge     | <i>Perdix perdix</i>       |           | +         |      | No                   |
| Herring gull       | <i>Larus argentatus</i>    |           | +         |      | No                   |
| House sparrow      | <i>Passer domesticus</i>   |           | +         |      | No                   |
| Lesser redpoll     | <i>Acanthis cabaret</i>    |           | +         |      | No                   |
| Linnet             | <i>Linaria cannabina</i>   |           | +         |      | No                   |
| Skylark            | <i>Alauda arvensis</i>     |           | +         |      | No                   |
| Spotted flycatcher | <i>Muscicapa striata</i>   |           | +         |      | No                   |
| Starling           | <i>Sturnus vulgaris</i>    |           | +         |      | No                   |
| Swift              | <i>Apus apus</i>           |           |           | +    | No                   |
| Tree sparrow       | <i>Passer montanus</i>     |           | +         |      | No                   |
| Yellowhammer       | <i>Emberiza citrinella</i> |           | +         |      | No                   |
| BoCC Amber List    |                            |           |           |      |                      |
| Bullfinch          | <i>Pyrrhula pyrrhula</i>   |           | +         |      | No                   |
| Dunnock            | <i>Prunella modularis</i>  |           | +         |      | No                   |

<sup>7</sup> FPCR (2023) Land South of Desford – Preliminary Ecological Appraisal

| Name                   |                                 | Status    |           |      | Within Site Boundary |
|------------------------|---------------------------------|-----------|-----------|------|----------------------|
|                        |                                 | WCA Sch.1 | NERC S.41 | LBAP |                      |
| Osprey                 | <i>Pandion haliaetus</i>        | +         |           |      | No                   |
| Redwing                | <i>Turdus iliacus</i>           | +         |           |      | No                   |
| Song thrush            | <i>Turdus philomelos</i>        |           | +         |      | No                   |
| Wren                   | <i>Troglodytes troglodytes</i>  |           |           |      | No                   |
| <b>BoCC Green List</b> |                                 |           |           |      |                      |
| Barn owl               | <i>Tyto alba</i>                | +         |           | +    | No                   |
| Brambling              | <i>Fringilla montifringilla</i> | +         |           |      | No                   |
| Hobby                  | <i>Falco subbuteo</i>           | +         |           |      | No                   |
| Kingfisher             | <i>Alcedo atthis</i>            | +         |           |      | No                   |
| Peregrine              | <i>Falco peregrinus</i>         | +         |           |      | No                   |
| Red kite               | <i>Milvus milvus</i>            | +         |           |      | No                   |
| Swallow                | <i>Hirundo rustica</i>          |           |           | +    | No                   |

- 4.4 No species were recorded from within the Site. Several of the notable species for which records were returned are considered unlikely to breed within the Site as there is little to no suitable habitat e.g. herring gull *Larus argentatus*, or are only winter migrants to the region e.g. redwing *Turdus iliacus* and brambling *Fringilla montifringilla*.

### Field Surveys

- 4.5 A total of 38 species were recorded over the course of the four surveys, of which four were only recorded as flying over the Site, and thus are considered insignificant records. Of the remaining 34 species recorded within the Site, 16 are considered notable species as they are included in one of the following pieces of legislation/classifications:
- Schedule 1 of the WCA
  - Section 41 of the NERC Act 2006
  - BoCC Red or Amber lists
- 4.6 Breeding evidence gathered across the four survey occasions was used in the assignment of breeding statuses for each species in the following results.
- 4.7 Of the 34 species recorded utilising the Site, two were confirmed as breeders; magpie *Pica pica* and blue tit *Cyanistes caeruleus*, neither of which are notable species i.e. BoCC Green-listed.
- 4.8 Eleven species were considered to be probable breeders, including five notable species – woodpigeon *Columba palumbus*, skylark *Alauda arvensis*, whitethroat *Currucula communis*, wren *Troglodytes troglodytes*, and dunnock *Prunella modularis*. The remaining six probable breeders were non-notable species and included great spotted woodpecker *Dendrocopos major*, jackdaw *Coloeus monedula*, great tit *Parus major*, blackcap *Sylvia atricapilla*, blackbird *Turdus merula*, and robin *Erithacus rubecula*.

- 4.9 Of the remaining 21 species recorded, 14 were considered possible breeders, of which starling *Sturnus vulgaris*, song thrush *Turdus philomelos*, yellow wagtail *Motacilla flava*, greenfinch *Chloris chloris*, linnet *Linaria cannabina*, and yellowhammer *Emberiza citrinella* were notable species.
- 4.10 House sparrow *Passer domesticus*, rook *Corvus frugilegus*, snipe *Gallinago gallinago*, buzzard *Buteo buteo*, swift *Apus apus*, and mallard *Anas platyrhynchos* were considered non-breeders due to their records being obtained outside their viable breeding habitat, though it is likely that the Site is of some ecological value to these species as supplementary foraging habitat and/or a source of nest building material.
- 4.11 Table 4 provides a summary of the notable species recorded during the breeding bird survey and their respective statuses on-Site, whilst Figure 1 shows their approximate distributions within the Site.

| Species                                   | Legal/<br>Conservation<br>Status | Peak<br>Count/<br>Number of<br>Survey<br>Occasions<br>Recorded | Breeding<br>Status | Recent Status in<br>Leicestershire                     |
|-------------------------------------------|----------------------------------|----------------------------------------------------------------|--------------------|--------------------------------------------------------|
| Dunnock<br><i>Prunella modularis</i>      | Amber List<br>NERC S.41          | 11 / 3                                                         | Probable           | Abundant resident breeder                              |
| Greenfinch<br><i>Chloris chloris</i>      | Red List                         | 6 / 3                                                          | Possible           | Common resident breeder                                |
| House Sparrow<br><i>Passer domesticus</i> | Red List<br>NERC S.41            | Colony / 1                                                     | Non-breeder        | Common resident breeder                                |
| Linnet<br><i>Linaria cannabina</i>        | Red List<br>NERC S.41            | 4 / 1                                                          | Possible           | Common resident breeder                                |
| Mallard<br><i>Anas platyrhynchos</i>      | Amber List                       | 2 / 2                                                          | Non-breeder        | Fairly Common resident breeder                         |
| Rook<br><i>Corvus frugilegus</i>          | Amber List                       | 1 / 1                                                          | Non-breeder        | Abundant resident breeder                              |
| Skylark<br><i>Alauda arvensis</i>         | Red List<br>NERC S.41            | 27 / 3                                                         | Probable           | Common resident breeder                                |
| Snipe<br><i>Gallinago gallinago</i>       | Amber List                       | 1 / 1                                                          | Non-breeder        | Fairly common passage and winter visitor, rare breeder |
| Song Thrush<br><i>Turdus philomelos</i>   | Amber List<br>NERC S.41          | 7 / 2                                                          | Possible           | Common resident breeder                                |
| Starling<br><i>Sturnus vulgaris</i>       | Red List<br>NERC S.41            | 20 / 3                                                         | Possible           | Abundant resident breeder                              |
| Swift<br><i>Apus apus</i>                 | Red List                         | 16 / 1                                                         | Non-breeder        | Common summer migrant breeder                          |
| Whitethroat<br><i>Curruca communis</i>    | Amber List                       | 3 / 3                                                          | Probable           | Common summer migrant breeder                          |
| Woodpigeon<br><i>Columba palumbus</i>     | Amber List                       | 64 / 4                                                         | Probable           | Abundant resident breeder                              |
| Wren<br><i>Troglodytes troglodytes</i>    | Amber List                       | 18 / 4                                                         | Probable           | Abundant resident breeder                              |

| Species                                    | Legal/<br>Conservation<br>Status | Peak<br>Count/<br>Number of<br>Survey<br>Occasions<br>Recorded | Breeding<br>Status | Recent Status in<br>Leicestershire          |
|--------------------------------------------|----------------------------------|----------------------------------------------------------------|--------------------|---------------------------------------------|
| Yellow Wagtail<br><i>Motacilla flava</i>   | Red List<br>NERC S.41            | 1 / 1                                                          | Possible           | Uncommon summer migrant<br>breeder          |
| Yellowhammer<br><i>Emberiza citrinella</i> | Red List<br>NERC S.41            | 3 / 3                                                          | Possible           | Common resident breeder –<br>recent decline |

### Bird Survey Results Description

- 4.12 The majority of species recorded are typical of the habitats present at the Site in a regional context, being heavily influenced by the intensive arable agricultural land use. The actively cropped arable margins which forms the majority of the habitat within the Site supported a limited assemblage of breeding birds – namely skylark, which was considered a probable breeder having been observed displaying and holding territories in arable fields throughout the Site. Yellow wagtail was also recorded within this habitat, though only on one occasion and with no behaviours observed to indicate anything more than it being a possible breeder on-Site. Other species recorded in small numbers within this habitat were not ground nesting species or do not breed in such habitat, and were utilising the open arable fields to forage, of which linnet, snipe, and song thrush were notable species.
- 4.13 Arable field margins supported a small number of species in limited numbers, notably song thrush, yellowhammer, and skylark, all of which would have been utilising the habitat for foraging, though the latter would have been unlikely to have been using field margins for breeding given the reluctance for this species to breed in vicinity of marginal habitats. No species were recorded displaying any behaviour within this habitat that implied confirmed breeding status, though yellowhammer were considered to be probable breeders having been observed defending territory over two survey visits.
- 4.14 The hedgerows, areas of scrub, and individual trees throughout the Site hosted several resident and migratory breeding species including a relatively wide range of common and widespread taxa including common thrush, tit, warbler, and finch species. Many of the mature trees across the Site had suitable cavities to support nesting stock doves, and the typically dense scrub layers supported species typical of such habitats including notable wren, whitethroat, dunnock, and greenfinch in addition to common and widespread species typical of such habitats including long-tailed tit *Aegithalos caudatus* and blackcap *Sylvia atricapilla*.

### Evaluation

#### Breeding Assemblages

- 4.15 Arable fields and their associated margins supported a limited breeding bird assemblage though one that did include numbers of skylark – a farmland specialist and a common breeder within Leicestershire, which was considered to be a probable breeder. Given the presence of similar agricultural habitats in the locality, it is not considered that the Site presents an isolated or exceptional instance of foraging and breeding habitat for this species. Other species present within the arable field centres were mostly found to be utilising the habitat as a foraging resource and included generalist and widespread species including magpie, starling, and

woodpigeon, none of which are limited to using arable habitat as a source of forage and are frequently found in a diverse array of habitats both urban and rural. The presence of the farmland specialist skylark in locally important numbers is somewhat offset by the absence of other species reliant on this habitat for breeding and is thus considered of **Local** nature conservation importance.

- 4.16 The arable field margins supported an ostensibly more diverse assemblage of breeding birds versus the interior components of the arable fields, given the presence of notable BoCC red-listed yellowhammer, and BoCC amber-listed wren and dunnoek, though given the preferred breeding habitat for these species, it is unlikely that this marginal habitat would serve as anything other than one of many foraging resources available on-Site and in the broader landscape. Utilisation for foraging by notable and/or specialised species within this habitat is somewhat offset by the smaller number of species reliant on these habitats – many of which are Common or even Abundant at a county level, and the lack of any species utilising it as breeding habitat. Resultantly, this habitat is considered of Local nature conservation importance.
- 4.17 Hedgerow and scrub habitat within the Site provided breeding and/or foraging habitat for a variety of common and widespread generalist species, as well as farmland specialist yellowhammer, which was considered a probable breeder on-Site, as were BoCC amber-listed whitethroat, wren and dunnoek. Similarly to skylark, yellowhammer is specialised to breeding and foraging within agricultural habitats, and the presence of cereal grain crops bounded by habitat is a typical preferred habitat for the species. The latter abovementioned species are common generalist species, though whitethroat is – similarly to yellowhammer, less tolerant of disturbance – and though these generalist species require suitable scrub or hedgerow habitat for breeding, this habitat is largely abundant in the locality, while they are also less restricted by foraging habitat compared to farmland specialists such as yellowhammer and linnet. Given the non-significant number of records within the Site for these species – which are Common to Abundant at country level, coupled with the abundance of suitable breeding and foraging habitat in the surrounding landscape, the hedgerow and scrub habitat was deemed to be of Local nature conservation importance.

### Individual Species

- 4.18 Table 5 summarises the 6 species recorded within the Site that are of at least **Local** nature conservation importance during the breeding season.
- 4.19 Species of at least Local importance are considered so based on their BoCC listing making them species of conservation interest but that do not occur in county important numbers on the site.
- 4.20 Notable species recorded as migrants, summering non-breeders, or flyovers are also discounted as they were not seen to utilise any of the habitats on site and are arguably, therefore, unaffected by any changes to the land use.
- 4.21 The other bird species recorded utilising the habitats within the Site were either recorded in smaller numbers and/or considered common and widespread species nationally and/or locally. These species are recognised as being of only Site importance and not included in Table 5.

**Table 5: Birds of Local Nature Conservation Importance or Higher**

| Name            |                                | Status   |          | Nature Conservation Value |
|-----------------|--------------------------------|----------|----------|---------------------------|
|                 |                                | WCA Sch1 | NERC S41 |                           |
| BoCC Red List   |                                |          |          |                           |
| Skylark         | <i>Alauda arvensis</i>         |          | +        | Local                     |
| Starling        | <i>Sturnus vulgaris</i>        |          | +        | Local                     |
| BoCC Amber List |                                |          |          |                           |
| Woodpigeon      | <i>Columba palumbus</i>        |          |          | Local                     |
| Wren            | <i>Troglodytes troglodytes</i> |          |          | Local                     |
| Song Thrush     | <i>Turdus philomelos</i>       |          | +        | Local                     |
| Dunnock         | <i>Prunella modularis</i>      |          | +        | Local                     |

## 5.0 DISCUSSION AND RECOMMENDATIONS

- 5.1 The following section provides an assessment of the potential impacts of the proposals upon breeding birds. Where appropriate, recommendations are provided for mitigation and enhancement that take into account the likely ecological effects. Throughout the evaluation, any recommendations for mitigation have been informed by the most up-to-date Development Concept Plan.

### Impact assessment of Breeding Birds

- 5.2 The potential impact of the loss or change of habitat upon breeding bird species arising from the effects of development is based upon an understanding of each species' ecological requirements, the type of development, number of birds recorded on-Site, their nature conservation criteria based on legislation and current guidance, their county status according to *The Leicestershire and Rutland Annual Bird Report 2020*<sup>8</sup> and professional judgment.
- 5.3 The following potential impacts to the recorded bird populations and assemblage may result from the proposals:
- Direct loss / change of breeding and/or foraging habitat
  - Disturbance during construction and/or operation

### Habitat Loss

- 5.4 The proposals will lead to a loss of all agricultural habitat on-Site, which will resultantly cause the Site to be fully unviable for breeding and/or foraging farmland specialised species such as linnet, yellowhammer and skylark. As only limited numbers of yellowhammer and linnet were recorded throughout surveys despite the presence of ostensibly suitable breeding habitat, it is likely that at the time of survey, superior foraging habitat was available for these species elsewhere in the vicinity, especially in the case of linnet, which is particularly associated with oilseed rape crops possibly as a result of the limited foraging potential of intensive cereal or legume crops<sup>9</sup>. Similarly, yellowhammer has shown a tendency to select hedgerows that are in proximity to an optimal source of forage<sup>10</sup>. From the relatively limited number of records obtained for these species throughout the survey occasions, it can be inferred that the habitat present on-Site was not particularly suitable, and that yellowhammer and linnet are more likely to be breeding and foraging elsewhere in the locality, and thus will largely be unaffected by the loss of the agricultural habitat present on-Site.
- 5.5 As the density of skylark records obtained in suitable arable habitat throughout the Site mirrored the national average density for the respective habitats<sup>11</sup>, it is apparent that these habitats then were of at least average suitability for skylark. The skylark associated with these habitats within the Site are likely to be able to instead utilise suitable arable habitat in the locality to breed, but as one of the major limiting factors for breeding skylark is availability of

<sup>8</sup> The Leicestershire and Rutland Ornithological Society (2020) '*The Leicestershire and Rutland Annual Bird Report 2020*'

<sup>9</sup> D. Moorcroft, J.D. Wilson, R.B. Bradbury (2010) '*Diet of nestling Linnets Carduelis cannabina on lowland farmland before and after agricultural intensification*'

<sup>10</sup> Niamh M. McHugh et al (2016) '*Agri-Environment Scheme Habitat Preferences of Yellowhammer Emberiza citrinella on english farmland*'

<sup>11</sup> S. Browne, J. Vickery, D. Chamberlain (2000) '*Densities and population estimates of breeding skylarks Alauda arvensis in Britain in 1997*'

foraging habitat, it is likely that the loss of these arable fields will to some extent impact the local population of breeding skylark, and to a lesser extent, any linnet and yellowhammer that may also forage on-Site. That the on-Site fields only form a fraction of agricultural land somewhat reduces this impact, and as such it is considered that the proposals will have a Minor Adverse impact in both the short and long term. A mitigation strategy to offset this loss of foraging habitat for skylark and other farmland birds is detailed below under Habitat Mitigation.

- 5.6 The majority of hedgerows and mature trees within the Site are to be retained, with some proposed loss of small sections to allow for access and associated visibility splays, and the removal of scrub habitat. The species associated with these habitats are mostly common and widespread generalist species and are tolerant of moderate-to-high levels of anthropogenic disturbance. Some notable species such as song thrush and dunnock may be impacted during the construction phase, however once development is complete the proposed green infrastructure throughout the Site will provide additional foraging, breeding, and connective habitat, complimenting adjacent habitat present off-Site. The hedgerow breeding species which are generally less tolerant of disturbance – i.e. whitethroat, yellowhammer, and linnet, and thus are likely to be wholly lost as potential breeders within the Site both during and post development, despite the retention of hedgerow habitat. Hedgerow habitat on the eastern Site boundary buffered by green space and woodland may offer some scant suitable nesting habitat for these species, though this is dependent on the extent of disturbance present in these areas. As most non-specialised species that are associated with this habitat will be able to continue utilising it after the construction phase, and limited numbers of farmland specialists were recorded in this habitat during survey visits, it is considered that this will have a Minor Adverse impact in the short term, and a Negligible impact in the long term.

### **Disturbance Impacts**

- 5.7 Construction operations have the potential to disturb birds using the development area of the Site for roosting, foraging, and breeding. Operations likely to disturb breeding birds include noise and displacement during vegetation clearance, initial ground works, and some construction activities. During the breeding season, disturbance may lead to nest desertion or the avoidance of the area and reduce the suitability of retained nesting area, such as the retained hedgerows. As there is some potential for breeding success to be reduced, this is expected to have a Minor Adverse impact on the local conservation status of the bird species using the survey area for breeding, none of which were recorded in significant numbers.
- 5.8 To avoid disturbance to breeding birds, ground and vegetation clearance works will be undertaken prior to the bird-breeding season (i.e. avoiding March to August, inclusive). If this is not possible, the area will be checked prior to removal of vegetation or ground works by a sufficiently experienced ecologist. If active nests are recorded, vegetation will be left untouched and suitable buffered from works until all birds have fledged. Specific advice will be provided prior to undertaking the clearance. This would be a statutory requirement due to the protection of all nesting birds and their nests under the Wildlife and Countryside Act, 1981 (as amended).

### **Operational Impacts**

- 5.9 During the operational phase of development, disturbance impacts have the potential to reduce the suitability of the proposed habitats for the species recorded. Most of the generalist species recorded within the Site are able to habituate to anthropogenic disturbance, evidenced by their presence in urban areas, and would be anticipated to make use of these habitats. Species recorded within the Site which are less tolerant of such disturbance are not considered likely to return as breeders within this habitat, but the buffering woodland proposed on the eastern boundary and areas of hedgerow situated adjacent to grassland habitat may provide supplemental foraging habitat to species that were displaced to habitats outside the Site boundary.

### **Habitat Mitigation**

- 5.10 The grassland habitat proposed for creation may be enhanced by seeding with mixes specifically designed to provide foraging resources for birds. Subsequent management should include measures such as a first cut after mid-July to allow plants to set seed. The use of fertilisers and pesticides should be avoided. Recommended enhancements to achieve the above are:
- Native species tussock-forming grassland which will be seeded within the majority of the Site
  - Native species-rich wildflower grassland which will be seeded around the outer edge of the Site
  - Tree planting – using native species and good landscape planting, to create substantive habitat corridors within and around the Site
- 5.11 The proposed attenuation features should hold areas of permanent water, if feasible, since this will prevent any drying of the features and ensuing encroachment of scrub, and provides suitable habitat for wetland bird species. The peripheries of these wet areas should be planted with an appropriate native inundation-tolerant marginal vegetation mix that includes common reed *Phragmites australis* to provide potential nesting opportunities for wetland species, including for species that have not yet been recorded on-Site, such as reed bunting *Emberiza schoeniclus*, and sedge warbler *Acrocephalus schoenobaenus*.
- 5.12 The reedbed should be cut during winter on a biennial basis. This primarily avoids disturbance to any birds breeding within the habitat, but also preserves areas of open water, allows continued dominance of common reed, and preserves mature reeds and litter, which provides good nesting habitat for wetland breeding birds. Non-native plants should be avoided, as many are invasive. The creation of wetland grassland within the temporarily wet/inundated parts of the feature, along with sensitive management, will provide valuable foraging habitat for birds.
- 5.13 Additional planting incorporated into the green infrastructure is recommended, and priority should be given to the use of native fruit and seed-bearing species of local origin to provide an optimal foraging resource for a range of bird species recorded.

### **Enhancements**

- 5.14 External nest boxes are additional enhancements to the BS42021:2022 guidance and do not contribute towards the one nest-box per dwelling requirement. Such enhancements that could be integrated with the on-going management of the Site includes the erection of a mixture of

nest box types within the retained scrub-woodland. The following provides details of suitable nest box types:

- A mixture of small hole (26mm and 32mm) boxes placed along the retained habitat around the proposed development area to provide nesting opportunities for a range of tit species. These boxes generally have a high uptake rate.
- Small open fronted nest boxes placed throughout the Site especially on trees which support a climber such as ivy which provides a degree of concealment. These boxes typically attract robin and blackbird.
- Stove dove boxes, also suitable to provide opportunities for jackdaw, located on retained trees, at least 3m from the ground level, with a clear flight path, or where in closer proximity to the urban edge, placed at 5m to encourage use.
- Starling nest boxes designed with a 45mm entrance hole, placed 2.5m from the ground on the retained trees, as well as on buildings. Ideally including 3 or more boxes in close proximity to encourage a loose colony.
- Sparrow terrace nest boxes with 32mm hole placed on buildings, ideally fitted under eaves as this is preferred by house sparrows.
- The inclusion of swift boxes and artificial house martin nests on buildings within the development to encourage these species, which can take advantage of urban sites to breed. Both swift and house martin are gregarious, so several boxes in close proximity is beneficial. Swift boxes should be installed at a height of at least 5m, with an unobstructed flight path, with house martin nest boxes placed close under eaves at a height of no less than 2m.

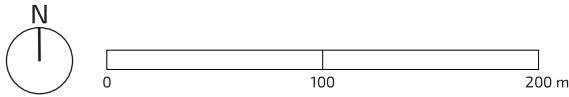
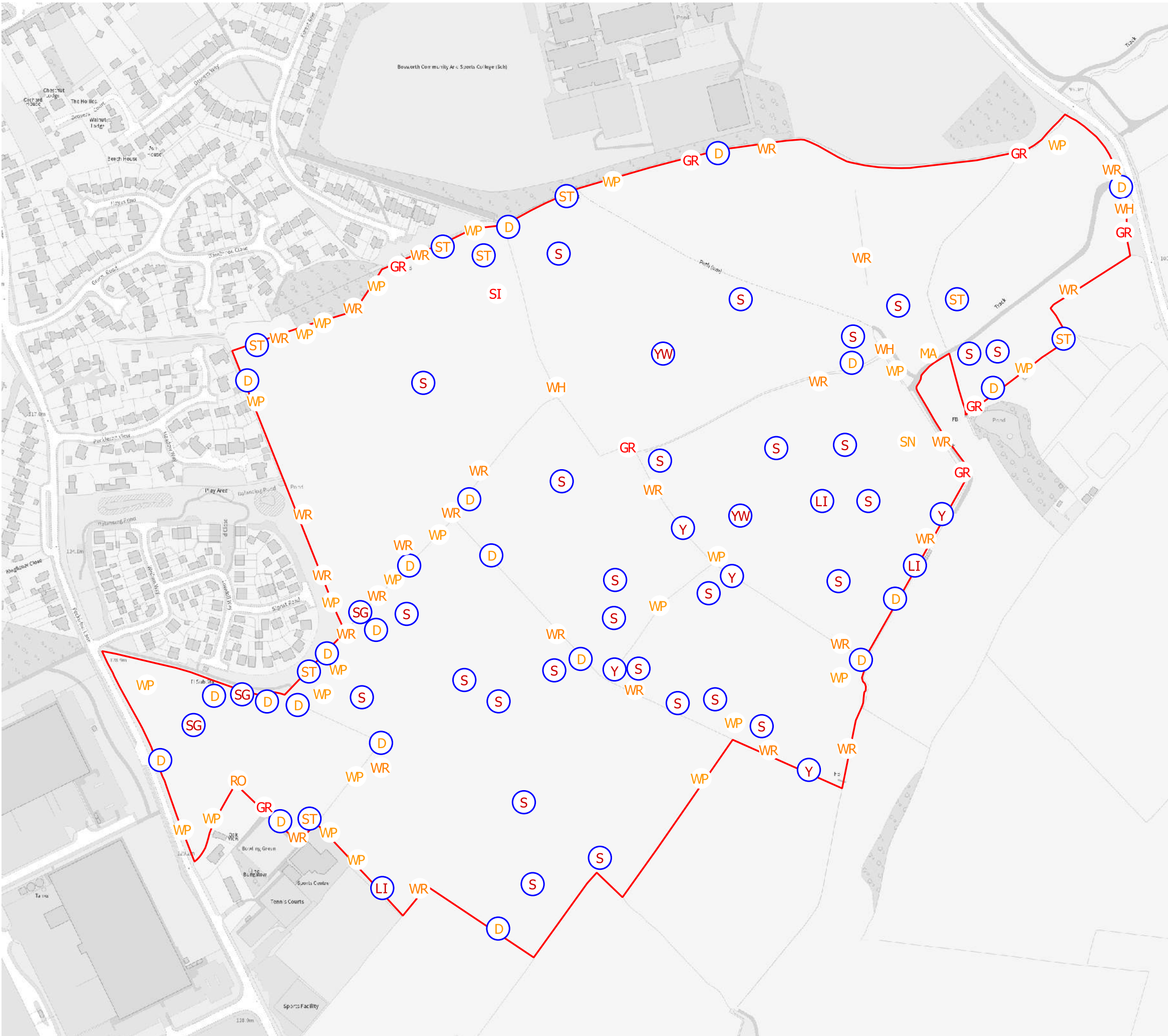
- 5.15 Should any 'gapping up' of retained hedgerows be undertaken, consideration should be given to native and fruit/nut-bearing species, including but not limited to field maple *Acer campestre*, hawthorn *Crataegus monogyna*, dogwood *Cornus sanguinea*, hazel *Corylus avellana*, honeysuckle *Lonicera periclymenum*, blackthorn *Prunus spinosa*, dog-rose *Rosa canina*, elder *Sambucus nigra*, and holly *Ilex aquifolium*.

**FPCR Environment and Design Ltd**

Registered Office: Lockington Hall, Lockington, Derby DE74 2RH

Company No. 07128076. [T] 01509 672772 [E] [mail@fpcr.co.uk](mailto:mail@fpcr.co.uk) [W] [www.fpcr.co.uk](http://www.fpcr.co.uk)

This report is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without the written consent of FPCR Environment and Design Ltd. Ordnance Survey material is used with permission of The Controller of HMSO, Crown copyright 100019980.



Key:

Site Boundary

BoCC Amber List Species

- D Dunnock
- MA Mallard
- SN Snipe
- WH Whitethroat
- RO Rook
- ST Song Thrush
- WP Woodpigeon
- WR Wren

BoCC Red List Species

- LI Linnet
- S Skylark
- SG Starling
- YW Yellow Wagtail
- Y Yellowhammer
- GR Greenfinch
- SI Swift

Additional Protections:

- NERC Species of Principal Importance

|         |                                                                     |           |              |
|---------|---------------------------------------------------------------------|-----------|--------------|
| date    | 16/01/25                                                            | drwn/chkd | LHG / LFR    |
| client  | Bellway Home Limited                                                |           |              |
| project | Land South of Desford, Leicestershire                               |           |              |
| title   | BREEDING BIRD SURVEY RESULTS PLAN - DISTRIBUTION OF NOTABLE SPECIES | scale     | 1:3,500 @ A3 |
| number  |                                                                     | rev       |              |

FIGURE 1

## Appendix A: Desford – 2024 Breeding Bird Survey Results & EOAC Criteria for Categorisation of Breeding Status

| Species:<br>British<br>Common Name | Species:<br>Latin name        | Survey 1          | Survey 2        | Survey 3  | Survey 4<br>(Nocturnal) | Conservation<br>Status &<br>Protection | Breeding<br>status <sup>1</sup> |
|------------------------------------|-------------------------------|-------------------|-----------------|-----------|-------------------------|----------------------------------------|---------------------------------|
| Blackbird                          | <i>Turdus merula</i>          | 15                | 5               | 9         | 4                       | Green List                             | Probable<br>P, A, S, H          |
| Blackcap                           | <i>Sylvia atricapilla</i>     | 9                 | 3               | 3         | 0                       | Green List                             | Probable<br>P, S, H             |
| Blue Tit                           | <i>Cyanistes caeruleus</i>    | 8                 | 2               | 5         | 0                       | Green List                             | Confirmed<br>FL, P, A, H        |
| Buzzard                            | <i>Buteo buteo</i>            | 1                 | 0               | 2 flyover | 0                       | Green List                             | Non-breeder<br>F, UH            |
| Carrion Crow                       | <i>Corvus corone</i>          | 9<br>+2 flyover   | 4<br>+5 flyover | 0         | 0                       | Green List                             | Possible<br>H                   |
| Chaffinch                          | <i>Fringilla coelebs</i>      | 3                 | 1               | 4         | 0                       | Green List                             | Possible<br>S, H                |
| Chiffchaff                         | <i>Phylloscopus collybita</i> | 6                 | 2               | 0         | 0                       | Green List                             | Possible<br>S, H                |
| Cormorant                          | <i>Phalacrocorax carbo</i>    | 1 flyover         | 0               | 0         | 0                       | Green List                             | Non-breeder<br>F                |
| Dunnock                            | <i>Prunella modularis</i>     | 11                | 8               | 8         | 0                       | Amber List<br>NERC S.41                | Probable<br>P. A. S. H          |
| Goldcrest                          | <i>Regulus regulus</i>        | 0                 | 0               | 2         | 0                       | Green List                             | Possible<br>S, H                |
| Goldfinch                          | <i>Carduelis carduelis</i>    | 1<br>+1 flyover   | 4<br>+1 flyover | 0         | 0                       | Green List                             | Possible<br>S, H                |
| Great Spotted Woodpecker           | <i>Dendrocopos major</i>      | 2                 | 0               | 0         | 0                       | Green List                             | Probable<br>P, H                |
| Great Tit                          | <i>Parus major</i>            | 4                 | 1               | 4         | 0                       | Green List                             | Probable<br>P, S, H             |
| Greenfinch                         | <i>Chloris chloris</i>        | 2                 | 6               | 5         | 0                       | Red List                               | Possible<br>S, H                |
| Herring Gull                       | <i>Larus argentatus</i>       | 0                 | 3 flyover       | 0         | 0                       | Red List<br>NERC S.41                  | Non-breeder<br>F                |
| House Sparrow                      | <i>Passer domesticus</i>      | Colony<br>present | 0               | 0         | 0                       | Red List<br>NERC S.41                  | Non-breeder<br>UH               |
| Jackdaw                            | <i>Coloeus monedula</i>       | 1                 | 0               | 0         | 0                       | Green List                             | Probable<br>B, H                |
| Jay                                | <i>Garrulus glandarius</i>    | 2                 | 0               | 0         | 0                       | Green List                             | Possible<br>H                   |
| Lesser Black-backed Gull           | <i>Larus fuscus</i>           | 10 flyover        | 3 flyover       | 0         | 4 flyover               | Amber List                             | Non-breeder<br>F                |
| Linnet                             | <i>Linaria cannabina</i>      | 4                 | 0               | 0         | 0                       | Red List<br>NERC S.41                  | Possible<br>H                   |
| Magpie                             | <i>Pica pica</i>              | 4                 | 3               | 6         | 0                       | Green List                             | Confirmed<br>FL, P, H           |

<sup>1</sup>European Ornithological Atlas Committee, 1979. *Categories of Breeding Bird Evidence*. European Ornithological Atlas Committee.

| Species:<br>British<br>Common Name | Species:<br>Latin name         | Survey 1         | Survey 2          | Survey 3  | Survey 4<br>(Nocturnal) | Conservation<br>Status &<br>Protection | Breeding<br>status <sup>1</sup> |
|------------------------------------|--------------------------------|------------------|-------------------|-----------|-------------------------|----------------------------------------|---------------------------------|
| Mallard                            | <i>Anas platyrhynchos</i>      | 2                | 1 flyover         | 2         | 0                       | Amber List                             | Non-breeder<br>P, UH            |
| Pheasant                           | <i>Phasianus colchicus</i>     | 1                | 3                 | 3         | 0                       | Not Listed                             | Possible<br>S, H                |
| Pied Wagtail                       | <i>Motacilla alba</i>          | 6                | 1<br>+1 flyover   | 1         | 0                       | Green List                             | Possible<br>P, H                |
| Red-legged Partridge               | <i>Alectoris rufa</i>          | 0                | 1                 | 0         | 0                       | Not Listed                             | Non-breeder<br>F                |
| Robin                              | <i>Erithacus rubecula</i>      | 9                | 11                | 2         | 1                       | Green List                             | Probable<br>A, S, H             |
| Rook                               | <i>Corvus frugilegus</i>       | 0                | 0                 | 1         | 0                       | Amber List                             | Non-breeder<br>UH               |
| Skylark                            | <i>Alauda arvensis</i>         | 27               | 9                 | 27        | 0                       | Red List<br>NERC S.41                  | Probable<br>P, A, S, H          |
| Snipe                              | <i>Gallinago gallinago</i>     | 1                | 0                 | 0         | 0                       | Amber List                             | Non-breeder<br>UH               |
| Song Thrush                        | <i>Turdus philomelos</i>       | 0                | 7                 | 3         | 0                       | Amber List<br>NERC S.41                | Possible<br>S, H                |
| Starling                           | <i>Sturnus vulgaris</i>        | 4                | 8                 | 20        | 0                       | Red List<br>NERC S.41                  | Possible<br>H                   |
| Stock Dove                         | <i>Columba oenas</i>           | 1 flyover        | 1 flyover         | 0         | 0                       | Amber List                             | Non-breeder<br>F                |
| Swift                              | <i>Apus apus</i>               | 0                | 0                 | 0         | 16                      | Red List                               | Non-breeder<br>D, UH            |
| Whitethroat                        | <i>Curruca communis</i>        | 1                | 3                 | 2         | 0                       | Amber List                             | Probable<br>A, S, H             |
| Woodpigeon                         | <i>Columba palumbus</i>        | 15<br>+2 flyover | 64<br>+15 flyover | 46        | 4<br>+1 flyover         | Amber List                             | Probable<br>D, P, S, H          |
| Wren                               | <i>Troglodytes troglodytes</i> | 10               | 18                | 8         | 1                       | Amber List                             | Probable<br>A, S, H             |
| Yellow Wagtail                     | <i>Motacilla flava</i>         | 1                | 1 flyover         | 0         | 0                       | Red List<br>NERC S.41                  | Possible<br>H                   |
| Yellowhammer                       | <i>Emberiza citrinella</i>     | 3                | 3                 | 3         | 0                       | Red List<br>NERC S.41                  | Probable<br>S, H, T             |
| <b>Total No. Species</b>           |                                | <b>29</b>        | <b>22</b>         | <b>21</b> | <b>5</b>                |                                        |                                 |

Breeding Status evidence can be broken down into four sections, each with their own codes, as defined by the European Ornithological Atlas Committee:

**Confirmed breeder**

**DD** – distraction display or injury feigning

**UN** – used nest or eggshells found from this season

**FL** – recently fledged young or downy young

**ON** – adults entering or leaving nest-site in circumstances indicating occupied nest

**FF** – adult carrying faecal sac or food for young

**NE** – nest containing eggs

**NY** – nest with young seen or heard

**Probable breeder** - Evidence accumulated during the survey indicates that the bird species is breeding on site.

**P** – pair in suitable nesting habitat

**T** – permanent territory (defended over at least 2 survey occasions)

**D** – courtship and display

**N** – visiting probable nest site

**A** – agitated behaviour

**I** – brood patch of incubating bird (from bird in hand)

**B** – nest building or excavating nest-hole

**Possible breeder** - Evidence accumulated during the survey indicates that the bird species could be breeding on site, but the evidence is less conclusive than that obtained for probable breeders.

**H** – observed in suitable nesting habitat

**S** – singing male

**Non-breeder**

**F** – flying over

**M** – migrant

**U** – summering non-breeder

**UH** – observed in unsuitable nesting habitat

FPCR | environment  
& design



# Appendix F: Wintering Birds Report

Client

**Bellway Homes Ltd.**

Project

**Land South of Desford,  
Leicestershire**

Date

**May 2025**

**CONTENTS**

|     |                                      |   |
|-----|--------------------------------------|---|
| 1.0 | INTRODUCTION .....                   | 1 |
| 2.0 | LEGISLATION AND STATUS .....         | 2 |
| 3.0 | METHODOLOGY .....                    | 3 |
| 4.0 | RESULTS AND EVALUATION .....         | 5 |
| 5.0 | DISCUSSION AND RECOMMENDATIONS ..... | 9 |

**TABLES**

Table 1: Survey Dates & Conditions

Table 2: Evaluation Criteria

Table 3: Bird Species Records from Desk Study

Table 4: Notable Wintering Species Recorded and their Recent Status in Leicestershire

Table 5: Birds of Local Nature Conservation Importance or Higher

**FIGURES**

Figure 1: Wintering Bird Survey Results – Distribution of Notable Species

**APPENDICES**

Appendix A: 2023-24 Wintering Bird Survey Results

| Rev | Issue Status | Prepared/Date  | Review / Date  | Approved/Date    |
|-----|--------------|----------------|----------------|------------------|
| -   | Final        | 21/02/25 - JTB | LFR / 23.04.25 | LFR / 21.05.2025 |
|     |              |                |                |                  |
|     |              |                |                |                  |
|     |              |                |                |                  |

## 1.0 INTRODUCTION

- 1.1 FPCR Environment & Design Ltd. were commissioned by Bellway Homes Ltd. to undertake breeding and wintering bird surveys on land south of Desford, Leicestershire (central grid reference: SK 484 029) hereinafter referred to as 'the Site'.
- 1.2 This document should be read in conjunction with the other ecological documents prepared for this application, which includes the Breeding Bird Report, and Ecological Appraisal.

### Site Location & Context

- 1.3 The site spans c.38ha of agricultural land on the southern edge of Desford, with Merrylees Industrial Estate bounding the western and southwestern section of the Site, and residential Desford bordering the northern Site boundary. Agricultural land dominates the landscape east and southeast of the Site, with the outer limits of Leicester located 3–3.5km east of the Site.
- 1.4 Fields within the Site were mostly agricultural divided by established hedgerows with mature trees. Across the four survey visits which spanned April to July, approximately half the fields contained wheat, and the other half a legume crop.
- 1.5 The northern boundary is identified as a wildlife corridor through Policy ENV3 of the Neighbourhood Plan which presents as the edge of a belt of offsite mature woodland and structural vegetation along much of the northern boundary.

### Development Proposals

- 1.6 Currently proposals are being explored and are conceptual but are investigating the scope for residential development of the site with retention of key habitats in adjoining public open space. Access to the site would be achieved from Leicester Lane in the east and Peckleton Lane in the west.
- 1.7 Based on current proposals, the Green Infrastructure (GI) includes creation of approximately 1.3ha of broadleaved woodland located in the centre and the south of the Site, retention of hedgerows throughout the Site, and areas of informal green space totalling approximately 13.6ha.

### Survey Objectives

- 1.8 The Wintering Bird Survey effort comprised four surveys carried out between November 2023 and February 2024. The objectives of the survey were to:
- Identify the presence and distribution of wintering birds;
  - Evaluate the conservation importance of wintering bird populations present;
  - Evaluate the importance of wintering bird populations and the anticipated residual impacts of the development, and
  - To identify areas of ornithological interest and make recommendations to minimise the potential impact of the scheme.

## 2.0 LEGISLATION AND STATUS

### Legislation

- 2.1 The Wildlife and Countryside Act 1981 (as amended) (WCA) is the principal legislation affording protection to UK wild birds. Under this legislation all birds, their nests and eggs are protected by law, and it is an offence, with certain exceptions, to recklessly or intentionally:
- Kill, injure or take any wild bird.
  - Take, damage, or destroy the nest of any wild bird while in use or being built; or
  - Take or destroy the egg of any wild bird.
- 2.2 Additional protection is afforded to species listed on Schedule 1 of the WCA, whereby intentional disturbance whilst building or occupying a nest or disturbance of dependent young is also considered an offence.
- 2.3 Certain species have also been identified as Species of Principal Importance (SPI) under Section 41 of the NERC Act 2006 (NERC S.41). The S.41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the Natural Environment and Rural Communities Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.
- 2.4 The site falls within the Leicester, Leicestershire, and Rutland Local Biodiversity Action Plan (LLRBAP, hereafter referred to as 'the LBAP') which identifies several targets for UK priority species that occur within this area, namely: barn owl *Tyto alba*, nightingale *Luscinia megarhynchos*, redstart *Phoenicurus phoenicurus*, sand martin *Riparia riparia*, and a multi-species action plan for swift *Apus apus*, swallow *Hirundo rustica*, and house martin *Delichon urbicum*.

### Status

- 2.5 In addition to statutory protection, some bird species are classified according to their conservation status, such as their inclusion on the Red and Amber lists of Birds of Conservation Concern (BoCC) in the UK:
- 2.6 Red list (high conservation concern) species meet at least one of the following criteria:
- They are globally threatened according to IUCN criteria.
  - Their population has declined rapidly (50% or more) in recent years.
  - They that have declined historically and not shown a substantial recent recovery.
- 2.7 Amber list (medium conservation concern) species are those that meet at least one of the following criteria:
- They have an unfavourable conservation status in Europe.
  - Their population or range has declined moderately (between 25% and 49%) in recent years.
  - Their population has declined historically but made a substantial recent recovery.
  - They are rare breeders.
  - They have internationally important or localised populations.

2.8 Green list (low conservation concern) species fulfil none of the above criteria.

### 3.0 METHODOLOGY

#### Desk Study

3.1 To compile existing baseline ornithological information, the following statutory and non-statutory organisations were consulted for data regarding designated sites for which birds are a qualifying feature, and protected/notable bird records.

- Natural England via the Multi Agency Geographic Information for the Countryside (MAGIC<sup>1</sup>)
- Leicestershire & Rutland Environmental Records Centre (LRERC)

#### Field Surveys

3.2 The survey methodology employed was in accordance with the protocol specified in the best practice guidelines – Bird Survey Guidelines for Assessing Ecological Impacts<sup>2</sup>. All birds encountered (seen or heard) were recorded on a field survey plan using standard BTO species codes and symbols for bird activities and to denote activity, sex, and age where appropriate.

3.3 A route was mapped out prior to the surveys being undertaken, paying particular attention to any linear features, such as hedgerows and watercourses, and other features such as ponds and scrub. Bird surveys were not undertaken in unfavourable conditions, such as heavy rain or persistent strong wind (conditions which can negatively affect the results). To provide inter-survey temporal variation between surveys to account for variation in species' detectability throughout the day, the starting location and direction of walking were stratified across each of the suites of Breeding and Wintering Bird Surveys. Table 1 provides details of the survey dates and weather conditions.

3.4 To provide a reasonable level of accuracy for determining the population status of wintering birds on the Site, four surveys were carried out from dawn until early afternoon between November 2023 and February 2024 inclusive.

**Table 1: Survey Dates & Conditions**

| Survey | Date     | Cloud Cover (%) | Rain | Wind (Beaufort)   | Visibility |
|--------|----------|-----------------|------|-------------------|------------|
| WBS 1  | 15.11.23 | 30              | None | 3 – Gentle Breeze | Good       |
| WBS 2  | 24.01.24 | 10              | None | 3 – Gentle Breeze | Good       |
| WBS 3  | 13.02.24 | 100             | 1    | 1 – Light Air     | Good       |
| WBS 4  | 23.02.24 | 0               | None | 1 – Gentle Breeze | Excellent  |

#### Species & Assemblage Assessment

<sup>1</sup> [www.magic.gov.uk](http://www.magic.gov.uk)

<sup>2</sup> Bird Survey & Assessment Steering Group. (2023). Bird Survey Guidelines for assessing ecological impacts, v.1.1.1. Available at: <https://birdsurveyguidelines.org> [Accessed: 26.06.24]

- 3.5 The Chartered Institute of Ecology and Environmental Management (CIEEM) guidance on ecological impact assessment assesses nature conservation importance within a geographical context<sup>3</sup>. To attain each level of importance, an ornithological resource or one of the features (species population or assemblage of species) should meet the criteria set out in Table 2. In some cases, professional judgment may be required to increase or decrease the allocation of importance, based upon local knowledge.
- 3.6 The site has also been assessed against the selection criteria for Local Wildlife Site (LWS) for Leicestershire<sup>4</sup> on a number of criteria set out for breeding birds. LWSs are recognised by central government as an important tool in promoting sustainable development and protecting biodiversity.
- 3.7 The recent county annual bird report, *The Leicestershire & Rutland Annual Bird Report 2020*<sup>5</sup>, was consulted to inform the assessment. The abundance of species referred to by these reports is classified by the following criteria:
- Very Rare – Fewer than ten records ever;
  - Rare – More than ten records ever, but occurring less than annually in the county;
  - Scarce – Fewer than ten individuals or breeding pairs occurring annually in the county;
  - Uncommon – Between ten and 100 individuals or breeding pairs occurring annually in the county;
  - Fairly Common – Between 100 and 1,000 individuals or breeding pairs occurring annually in the county;
  - Common – Between 1,000 and 10,000 individuals or breeding pairs occurring annually in the county;
  - Abundant – More than 10,000 individuals or breeding pairs annually in the county.

**Table 2: Evaluation Criteria**

| Nature Conservation Value | Examples of Selection Criteria                                                                                                                                                                                                                                                                                                                    |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| International             | A species which is part of the cited interest of an SPA and which regularly occurs in internationally or nationally important numbers.<br>A species present in internationally important numbers (>1% of international population).                                                                                                               |
| National                  | A species which is part of the cited interest of a SSSI and which regularly occurs in nationally or regionally important numbers.<br>A nationally important assemblage of breeding or over-wintering species.<br>A species present in nationally important numbers (>1% UK population).<br>Rare breeding species (<300 breeding pairs in the UK). |

<sup>3</sup> [http://www.cieem.net/data/files/Publications/EcIA\\_Guidelines\\_Terrestrial\\_Freshwater\\_and\\_Coastal\\_Jan\\_2016.pdf](http://www.cieem.net/data/files/Publications/EcIA_Guidelines_Terrestrial_Freshwater_and_Coastal_Jan_2016.pdf)

<sup>4</sup> Leicestershire County Council (2011) Guidelines for the selection of Local Wildlife Sites (previously known as Sites of Importance for Nature Conservation or SINCS) in Leicester, Leicestershire and Rutland. 4th edition.

<sup>5</sup> The Leicestershire & Rutland Ornithological Society (2022) Leicestershire & Rutland Annual Bird Report 2020.

| Nature Conservation Value | Examples of Selection Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Regional                  | Species listed as being of principal importance under NERC S.41 which are not covered above, and which regularly occurs in regionally important numbers.<br>Species present in regionally important numbers (>1% of regional population).<br>Sustainable populations of species that are rare or scarce within a region.<br>Species on the BoCC Red List & which regularly occur in regionally important numbers.                                                                                                                                                  |
| County                    | Species listed as being of principal importance under NERC S.41 which are not covered above, and which regularly occurs in county important numbers<br>Species present in county important numbers (>1% of county population).<br>Sustainable populations of species that are rare or scarce within a county, or are listed as being of principal importance under S41 of the NERC Act.<br>A site designated for its county important assemblage of birds (e.g. a SINC Site).<br>Species on the BoCC Red List & which regularly occur in county important numbers. |
| Local                     | Other species of conservation interest (e.g. all other species on the BoCC Red and Amber List or species listed as being of principal importance under NERC S.41 which are not covered above) regularly occurring in locally sustainable populations.<br>Sustainable populations of species which are rare or scarce within the locality.                                                                                                                                                                                                                          |
| Site                      | Species that are common and widespread                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## 4.0 RESULTS AND EVALUATION

### Desk Study

#### Designated Sites

##### Statutory Designated Sites

- 4.1 A single statutory designated site of national importance for nature conservation was present within 2km of the Site. Full details of this designated site is provided in the Preliminary Ecological Appraisal<sup>6</sup> issued by FPCR in 2023, though as this site did not include significant populations and/or assemblages of birds in its citation, it has not been considered further herein.

##### Non-statutory Designated Sites

- 4.2 A number of non-statutory designated sites are present within 1km of the Site, full details of which are provided in the Ecological Appraisal issued by FPCR in 2025. None of these sites received designatory status due to having significant populations and/or assemblages of birds, and thus are not considered further.

#### Protected/Notable Species

- 4.3 A total of 51 records were identified within 1km of the Site in the desk study, all pertaining to 26 species. Of these species, all but swallow *Hirundo rustica* are afforded legislative protection of

**Table 3: Bird Species Records from Desk Study**

<sup>6</sup> FPCR (2023) Land South of Desford – Preliminary Ecological Appraisal

| Name               |                                 | Status    |           |      | Within Site Boundary |
|--------------------|---------------------------------|-----------|-----------|------|----------------------|
|                    |                                 | WCA Sch.1 | NERC S.41 | LBAP |                      |
| BoCC Red List      |                                 |           |           |      |                      |
| Cuckoo             | <i>Cuculus canorus</i>          |           |           |      | No                   |
| Fieldfare          | <i>Turdus pilaris</i>           | +         |           |      | No                   |
| Grey partridge     | <i>Perdix perdix</i>            |           | +         |      | No                   |
| Herring gull       | <i>Larus argentatus</i>         |           | +         |      | No                   |
| House sparrow      | <i>Passer domesticus</i>        |           | +         |      | No                   |
| Lesser redpoll     | <i>Acanthis cabaret</i>         |           | +         |      | No                   |
| Linnet             | <i>Linaria cannabina</i>        |           | +         |      | No                   |
| Skylark            | <i>Alauda arvensis</i>          |           | +         |      | No                   |
| Spotted flycatcher | <i>Muscicapa striata</i>        |           | +         |      | No                   |
| Starling           | <i>Sturnus vulgaris</i>         |           | +         |      | No                   |
| Swift              | <i>Apus apus</i>                |           |           | +    | No                   |
| Tree sparrow       | <i>Passer montanus</i>          |           | +         |      | No                   |
| Yellowhammer       | <i>Emberiza citrinella</i>      |           | +         |      | No                   |
| BoCC Amber List    |                                 |           |           |      |                      |
| Bullfinch          | <i>Pyrrhula pyrrhula</i>        |           | +         |      | No                   |
| Dunnock            | <i>Prunella modularis</i>       |           | +         |      | No                   |
| Osprey             | <i>Pandion haliaetus</i>        | +         |           |      | No                   |
| Redwing            | <i>Turdus iliacus</i>           | +         |           |      | No                   |
| Song thrush        | <i>Turdus philomelos</i>        |           | +         |      | No                   |
| Wren               | <i>Troglodytes troglodytes</i>  |           |           |      | No                   |
| BoCC Green List    |                                 |           |           |      |                      |
| Barn owl           | <i>Tyto alba</i>                | +         |           | +    | No                   |
| Brambling          | <i>Fringilla montifringilla</i> | +         |           |      | No                   |
| Hobby              | <i>Falco subbuteo</i>           | +         |           |      | No                   |
| Kingfisher         | <i>Alcedo atthis</i>            | +         |           |      | No                   |
| Peregrine          | <i>Falco peregrinus</i>         | +         |           |      | No                   |
| Red kite           | <i>Milvus milvus</i>            | +         |           |      | No                   |
| Swallow            | <i>Hirundo rustica</i>          |           |           | +    | No                   |

- 4.4 No species were recorded from within the Site. Several of the notable species for which records were returned are considered unlikely to breed within the Site as there is little to no suitable habitat e.g. herring gull *Larus argentatus*, or are only winter migrants to the region e.g. redwing *Turdus iliacus* and brambling *Fringilla montifringilla*.

### Field Surveys

- 4.5 A total of 39 species were recorded within the Site boundary over the course of four survey occasions between November 2023 and February 2024. Of these, 16 meet the criteria of at least

one of the following pieces of legislation/classifications discussed above: Schedule 1 of the WCA; Section 41 of the NERC Act 2006; and BoCC Red or Amber lists. These species are referred to as 'notable'.

- 4.6 Seven species were recorded only as overflying the Site; these were not considered as pertinent to the objectives except as an indication that these species were present in the locality of the Site, if not within its boundary.
- 4.7 Table 4 provides a summary of the notable species recorded during the wintering bird surveys, whilst figure 2 illustrates their approximate distributions.

**Table 4: Notable Wintering Species Recorded and their Recent Status in Leicestershire**

| Species:<br>British Common Name | Species:<br>Latin name         | Peak<br>Count/Number<br>of Surveys<br>where recorded | Conservation<br>Status & Protection | Recent Status in<br>Leicestershire  |
|---------------------------------|--------------------------------|------------------------------------------------------|-------------------------------------|-------------------------------------|
| Grey Partridge                  | <i>Perdix perdix</i>           | 18 / 2                                               | Red List<br>NERC S.41               | Uncommon resident                   |
| Woodpigeon                      | <i>Columba palumbus</i>        | 63 / 4                                               | Amber List                          | Abundant resident                   |
| Kestrel                         | <i>Falco tinnunculus</i>       | 2 / 1                                                | Amber List                          | Fairly common<br>resident           |
| Rook                            | <i>Corvus frugilegus</i>       | 31 / 2                                               | Amber List                          | Abundant resident                   |
| Skylark                         | <i>Alauda arvensis</i>         | 13 / 3                                               | Red List<br>NERC S.41               | Common resident                     |
| Wren                            | <i>Troglodytes troglodytes</i> | 4 / 4                                                | Amber List                          | Abundant resident                   |
| Starling                        | <i>Sturnus vulgaris</i>        | 35 / 4                                               | Red List<br>NERC S.41               | Abundant resident                   |
| Song Thrush                     | <i>Turdus philomelos</i>       | 2 / 3                                                | Amber List<br>NERC S.41             | Common resident                     |
| Mistle Thrush                   | <i>Turdus viscivorus</i>       | 4 / 1                                                | Red List                            | Common resident                     |
| Redwing                         | <i>Turdus iliacus</i>          | 11 / 3                                               | Amber List<br>WCA Sch.1             | Common winter<br>migrant            |
| Fieldfare                       | <i>Turdus pilaris</i>          | 45 / 3                                               | Red List<br>WCA Sch.1               | Common winter<br>migrant            |
| House Sparrow                   | <i>Passer domesticus</i>       | 1 / 1                                                | Red List<br>NERC S.41               | Common resident –<br>recent decline |
| Dunnock                         | <i>Prunella modularis</i>      | 9 / 4                                                | Amber List<br>NERC S.41             | Abundant resident                   |
| Meadow Pipit                    | <i>Anthus pratensis</i>        | 4 / 2                                                | Amber List                          | Fairly common<br>winter visitor     |
| Greenfinch                      | <i>Chloris chloris</i>         | 2 / 3                                                | Red List                            | Common resident                     |
| Linnet                          | <i>Linaria cannabina</i>       | 4 / 1                                                | Red List<br>NERC S.41               | Common resident                     |

## Bird Survey Results Description

- 4.8 The species recorded over the four survey visits are typical of the habitats present on Site, being heavily influenced by the intensive arable agricultural land use. The actively cropped arable field interiors comprised an equal split of stubble fields and an immature winter cereal crop, and were found to have supported a limited number of farmland-associated birds which included grey partridge *Perdix perdix*, skylark *Alauda arvensis*, and linnet *Linaria cannabina*. Other non-specialised species recorded in this habitat type were otherwise generalist and/or widespread birds which can be found foraging across numerous habitats regionally. These included such species as woodpigeon *Columba palumbus*, carrion crow *Corvus corone*, and pied wagtail *Motacilla alba*.
- 4.9 Marginal habitat on the periphery of open agricultural field habitat was generally attenuated, with width frequently below 2-3m, and played host to a small range of species typical of such habitat, which were recorded utilising the habitat as either foraging or commuting habitat, including grey partridge, kestrel *Falco tinnunculus*, blackbird *Turdus merula*, and pheasant *Phasianus colchicus*.
- 4.10 Hedgerow and wooded habitat throughout the Site supported a rather more diverse array of species compared to the open agricultural field and associated marginal habitats, with flocks of wintering thrush species recorded throughout these habitats including redwing *Turdus iliacus*, fieldfare *Turdus pilaris*, and mistle thrush *Turdus viscivorus*, alongside other notable species such as dunnock *Prunella modularis*, woodpigeon *Columba palumbus*, wren *Troglodytes troglodytes*, and greenfinch *Chloris chloris*.

## Evaluation

### Wintering Assemblages

- 4.11 Arable parcels and their associated margins supported a limited range of wintering bird species including skylark – a specialist of such habitats – though in smaller numbers than were present during the breeding season. Also present were small flocks of woodpigeon, winter thrushes, and meadow pipit, as well as small numbers of pheasant and grey partridge. The farmland bird assemblage recorded is typical of such habitat in the region and whilst this assemblage did include a small number of notable species, most occurred in low numbers relative to the area of suitable habitat available, and most – with the exception of Uncommon grey partridge – are not considered of conservation priority in Leicestershire given that they are deemed Fairly Common to Abundant in the county. Given the low species diversity and their relative abundances, coupled with the fact that there are extensive areas of similar agricultural habitat to the east and south of the site boundary, the Site is considered to be of no more than **Local** importance for its wintering farmland bird assemblage.
- 4.12 Hedgerow and wooded habitat on-Site provided foraging habitat for a variety of common and widespread generalist species. The assemblage recorded is typical of such habitat in the region, and whilst the assemblage did include several notable species as mentioned above – none occurred in significant numbers for the County and none are of conservation priority in Leicestershire due to their County status as Fairly Common to Abundant. Given the limited species diversity and their relative abundances, coupled with the fact that there is abundant equivalent habitat to the east and south, the Site is considered of Local importance for this assemblage.

### Individual Species

- 4.13 Table 5 summarises the \_\_ species recorded within the Site that are of at least Local nature conservation importance during the winter season.
- 4.14 Species of at least Local importance are considered so based on their BoCC listing making them species of conservation interest that do not occur in County important numbers on the Site.
- 4.15 Notable species recorded as migrants, summering non-breeders, or flyovers are also discounted as they were not seen to utilise any of the habitats on Site and are arguably therefore unaffected by any changes to the land use.
- 4.16 The other bird species recorded utilising the habitats within the Site were either recorded in either smaller numbers and/or considered common and widespread species nationally and/or locally. These species are recognised as being of only Site importance and are not included in Table 5.

**Table 5: Birds of Local Nature Conservation Importance or Higher**

| Name            |                         | Status   |          | Nature Conservation Value |
|-----------------|-------------------------|----------|----------|---------------------------|
|                 |                         | WCA Sch1 | NERC S41 |                           |
| BoCC Red List   |                         |          |          |                           |
| Grey Partridge  | <i>Perdix perdix</i>    |          | +        | Local                     |
| Skylark         | <i>Alauda arvensis</i>  |          | +        | Local                     |
| Fieldfare       | <i>Turdus pilaris</i>   | +        |          | Local                     |
| BoCC Amber List |                         |          |          |                           |
| Woodpigeon      | <i>Columba palumbus</i> |          |          | Local                     |

## 5.0 DISCUSSION AND RECOMMENDATIONS

- 5.1 The following section provides an assessment of the potential impacts of the proposals upon winter birds. Where appropriate, recommendations are provided for mitigation and enhancement that take into account the likely ecological effects. Throughout the evaluation, and recommendations for mitigation have been informed by the most up-to-date Development Concept Plan.

### Impact Assessment of Wintering Birds

- 5.2 The potential impact of the loss or change of habitat upon wintering bird species arising from the effects of development is based upon an understanding of each species' ecological requirements, the type of development, number of birds recorded on-Site, their nature conservation criteria based on legislation and current guidance, their county status according to *The Leicestershire and Rutland Annual Bird Report 2020*<sup>7</sup> and professional judgment.
- 5.3 The following potential impacts to the recorded bird populations and assemblage may result from the proposals:
- Direct loss of foraging habitat

<sup>7</sup> The Leicestershire and Rutland Ornithological Society (2020) 'The Leicestershire and Rutland Annual Bird Report 2020'

- Disturbance during construction and/or operation

### **Habitat Loss**

- 5.4 The proposals will lead to a loss of all agricultural habitat on-Site, which will resultantly cause the Site to be fully unviable as foraging habitat for any farmland associated species, such as linnet, grey partridge, and skylark. As these species were recorded in low numbers relative to the area of available suitable habitat, it is not anticipated that the Site presents a particularly significant foraging resource for these species, which are generally transient and tend towards moving to areas that present optimal foraging resources – as is apparent from the fluctuant number of records obtained for each of these species across the four survey occasions. Given that the Site does not appear to present any significant foraging resource beyond supplementary for farmland species, it is anticipated that the loss of this habitat will lead to a Minor Adverse impact in both the short term and long term.
- 5.5 The majority of hedgerows and mature trees within the Site are to be retained, with some proposed loss of small sections to allow for access and associated visibility splays, and the removal of scrub habitat. The species associated with these habitats are mostly common and widespread generalist species and are tolerant of moderate-to-high levels of anthropogenic disturbance. Some notable species including thrushes and dunnocks may be impacted during the construction phase, however once development is complete the proposed green infrastructure throughout the Site will provide appropriate foraging and connective habitat, complimenting adjacent habitat present off-Site. As most species that were recorded in association with this habitat will be able to continue utilising it after the construction phase, and limited numbers of farmland specialists were recorded in this habitat during survey visits, it is considered that this will have a Minor Adverse impact in the short term, and a Negligible impact in the long term.

### **Disturbance Impacts**

- 5.6 Construction operations have the potential to disturb birds using the development area of the Site for roosting and foraging. Operations likely to disturb winter birds include noise and displacement during vegetation clearance, initial ground works, and some construction activities. This disturbance may lead to some abandonment of otherwise suitable foraging habitats – e.g. hedgerows dominated by fruit-bearing species – though this loss of foraging habitat is somewhat nullified by the abundance of equivalent habitat in the locality which will still be available for winter birds. Resultantly, it is anticipated that the potential Disturbance Impact will be Negligible for the local population of winter birds utilising the survey area.

### **Operational Impacts**

- 5.7 During the operational phase of development, disturbance impacts have the potential to reduce the suitability of the proposed habitats for the species recorded. Most of the generalist species and thrush species recorded within the Site are able to habituate to anthropogenic disturbance, evidenced by their presence in urban areas, and would be anticipated to make use of these habitats. Species recorded within the Site which are less tolerant of such disturbance are not considered likely to return as breeders within this habitat, but the buffering woodland proposed on the eastern boundary and areas of hedgerow situated adjacent to grassland habitat may provide supplemental foraging habitat to species that were displaced to habitats outside the Site boundary.

## Mitigation & Enhancements

### Habitat Mitigation

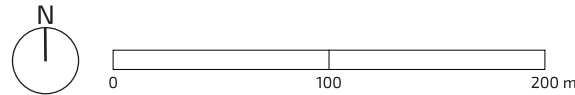
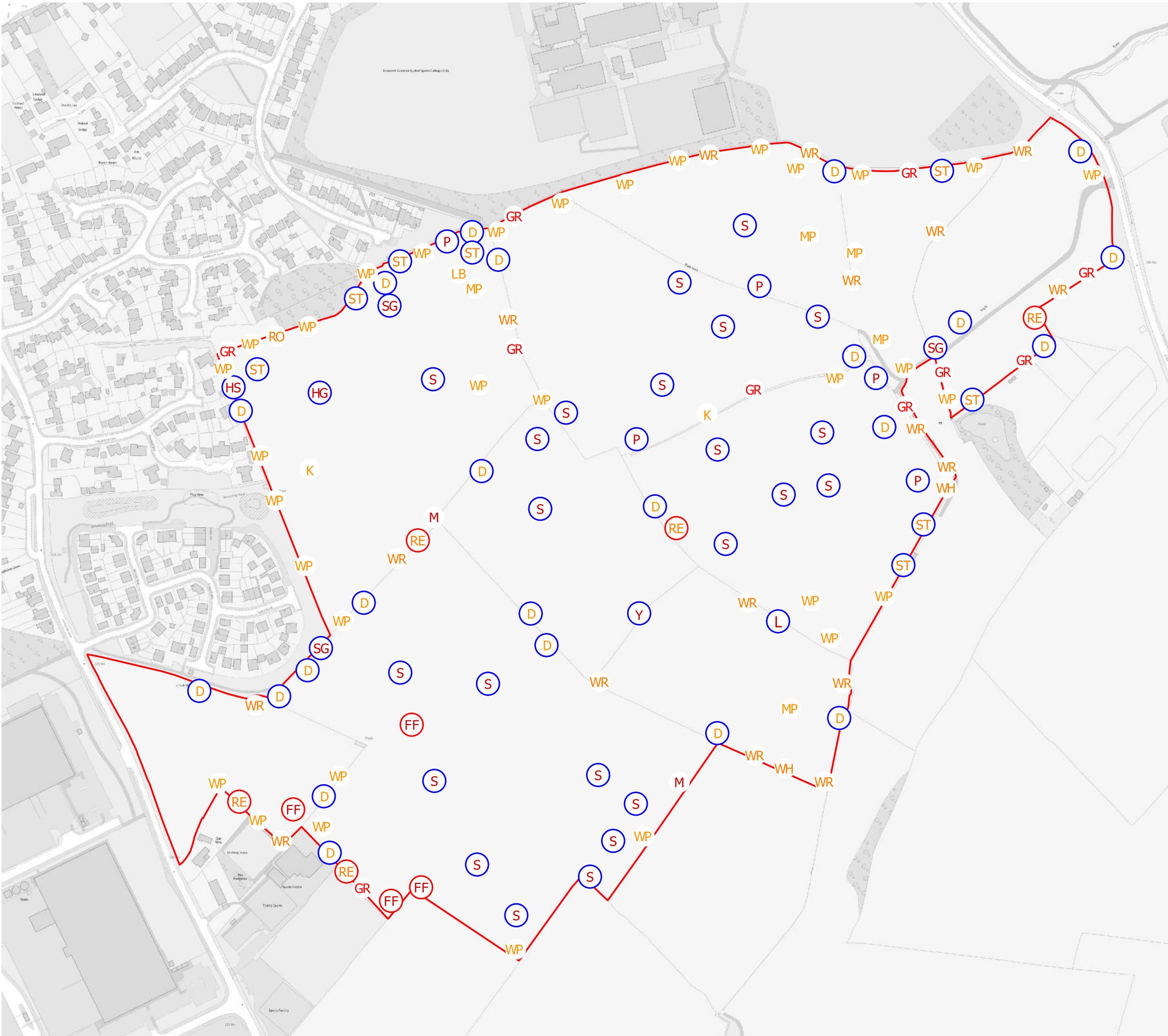
- 5.8 The grassland habitat proposed for creation may be enhanced by seeding with mixes specifically designed to provide foraging resources for birds. Subsequent management should include measures such as a first cut after mid-July to allow plants to set seed. The use of fertilisers and pesticides should be avoided. Recommended enhancements to achieve the above are:
- Native species tussock-forming grassland which will be seeded within the majority of the Site
  - Native species-rich wildflower grassland which will be seeded around the outer edge of the Site
  - Tree planting – using native species and good landscape planting, to create substantive habitat corridors within and around the Site
- 5.9 The proposed attenuation features should hold areas of permanent water, if feasible, since this will prevent any drying of the features and ensuing encroachment of scrub, and provides suitable habitat for wetland bird species. The peripheries of these wet areas should be planted with an appropriate native inundation-tolerant marginal vegetation mix that includes common reed *Phragmites australis* to provide potential roosting opportunities for wetland species, including for species that have not yet been recorded on-Site, such as reed bunting *Emberiza schoeniclus*, and sedge warbler *Acrocephalus schoenobaenus*.
- 5.10 The reedbed should be cut during winter on a biennial basis. This primarily avoids disturbance to any birds breeding within the habitat, but also preserves areas of open water, which provides a good foraging resource for wetland birds. Non-native plants should be avoided, as many are invasive. The creation of wetland grassland within the temporarily wet/inundated parts of the feature, along with sensitive management, will also provide valuable foraging habitat for wetland birds.
- 5.11 Additional planting incorporated into the green infrastructure is recommended, and priority should be given to the use of native fruit and seed-bearing species of local origin to provide an optimal foraging resource for a range of bird species recorded.

**FPCR Environment and Design Ltd**

Registered Office: Lockington Hall, Lockington, Derby DE74 2RH

Company No. 07128076. [T] 01509 672772 [E] [mail@fpcr.co.uk](mailto:mail@fpcr.co.uk) [W] [www.fpcr.co.uk](http://www.fpcr.co.uk)

This report is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without the written consent of FPCR Environment and Design Ltd. Ordnance Survey material is used with permission of The Controller of HMSO, Crown copyright 100019980.



Key:

Site Boundary

BoCC Amber List Species

- D Dunnock
- K Kestrel
- LB Lesser Black-backed Gull
- MP Meadow Pipit
- WH Whitethroat
- RE Redwing
- RO Rook
- ST Song Thrush
- WP Woodpigeon
- WR Wren

BoCC Red List Species

- FF Fieldfare
- P Grey Partridge
- HG Herring Gull
- HS House Sparrow
- L Lapwing
- M Mistle Thrush
- S Skylark
- SG Starling
- Y Yellowhammer
- GR Greenfinch

Additional Protections:

- NERC Species of Principal Importance
- Schedule 1 Species

date 16/01/25 drwn/chkd  
LHG / LFR

client  
Bellway Home Limited

project  
Land South of Desford,  
Leicestershire

title WINTER BIRD SURVEY RESULTS PLAN - DISTRIBUTION OF NOTABLE SPECIES scale 1:3,500 @ A3

number rev

FIGURE 1

FPCR | environment & design

## Appendix A: Desford – 2023/2024 Wintering Bird Survey Results

| Species:<br>British Common<br>Name | Species:<br>Latin name            | Survey 1          | Survey 2          | Survey 3          | Survey 4         | Conservation<br>Status &<br>Protection |
|------------------------------------|-----------------------------------|-------------------|-------------------|-------------------|------------------|----------------------------------------|
| Mallard                            | <i>Anas platyrhynchos</i>         | 0                 | 0                 | 2 flyovers        | 0                | Amber List                             |
| Grey Partridge                     | <i>Perdix perdix</i>              | 18                | 2                 | 0                 | 0                | Red List<br>NERC S.41                  |
| Pheasant                           | <i>Phasianus colchicus</i>        | 5                 | 5                 | 1                 | 0                | Not Listed                             |
| Feral Pigeon                       | <i>Columba livia f. domestica</i> | 0                 | 0                 | 0                 | 3                | Not Listed                             |
| Woodpigeon                         | <i>Columba palumbus</i>           | 37<br>+2 flyovers | 63<br>+9 flyovers | 32<br>+14 flyover | 11<br>+1 flyover | Amber List                             |
| Black-headed Gull                  | <i>Chroicocephalus ridibundus</i> | 8 flyovers        | 110 flyovers      | 4 flyovers        | 9 flyovers       | Amber List                             |
| Common Gull                        | <i>Larus canus</i>                | 0                 | 1 flyover         | 0                 | 0                | Red List                               |
| Herring Gull                       | <i>Larus argentatus</i>           | 1                 | 2 flyovers        | 0                 | 0                | Red List<br>NERC S.41                  |
| Lesser Black-backed Gull           | <i>Larus fuscus</i>               | 0                 | 0                 | 0                 | 1 flyover        | Amber List                             |
| Grey Heron                         | <i>Ardea cinerea</i>              | 0                 | 1 flyover         | 0                 | 0                | Green List                             |
| Red Kite                           | <i>Milvus milvus</i>              | 1 flyover         | 0                 | 0                 | 0                | Green List<br>WCA Sch.1                |
| Buzzard                            | <i>Buteo buteo</i>                | 2 flyovers        | 2                 | 0                 | 3                | Green List                             |
| Green Woodpecker                   | <i>Picus viridis</i>              | 0                 | 1                 | 0                 | 0                | Green List                             |
| Kestrel                            | <i>Falco tinnunculus</i>          | 2                 | 0                 | 0                 | 0                | Amber List                             |
| Magpie                             | <i>Pica pica</i>                  | 2                 | 8                 | 2                 | 4                | Green List                             |
| Jackdaw                            | <i>Coloeus monedula</i>           | 18 flyovers       | 11 flyovers       | 0                 | 7 flyovers       | Green List                             |
| Rook                               | <i>Corvus frugilegus</i>          | 0                 | 31                | 0                 | 1                | Amber List                             |
| Carrion Crow                       | <i>Corvus corone</i>              | 2<br>+10 flyover  | 2<br>+3 flyovers  | 4<br>+10 flyover  | 4<br>+3 flyovers | Green List                             |
| Blue Tit                           | <i>Cyanistes caeruleus</i>        | 6                 | 16                | 19                | 8                | Green List                             |
| Great Tit                          | <i>Parus major</i>                | 3                 | 7                 | 13                | 6                | Green List                             |
| Skylark                            | <i>Alauda arvensis</i>            | 0                 | 6                 | 6                 | 13               | Red List<br>NERC S.41                  |
| Long-tailed Tit                    | <i>Aegithalos caudatus</i>        | 3                 | 0                 | 0                 | 5                | Green List                             |

| Species:<br>British Common<br>Name | Species:<br>Latin name         | Survey 1          | Survey 2         | Survey 3         | Survey 4        | Conservation<br>Status &<br>Protection |
|------------------------------------|--------------------------------|-------------------|------------------|------------------|-----------------|----------------------------------------|
| Goldcrest                          | <i>Regulus regulus</i>         | 0                 | 0                | 5                | 0               | Green List                             |
| Wren                               | <i>Troglodytes troglodytes</i> | 3                 | 4                | 4                | 3               | Amber List                             |
| Starling                           | <i>Sturnus vulgaris</i>        | 35<br>+77 flyover | 7                | 1<br>+2 flyovers | 3               | Red List<br>NERC S.41                  |
| Song Thrush                        | <i>Turdus philomelos</i>       | 0                 | 2                | 2                | 2               | Amber List<br>NERC S.41                |
| Mistle Thrush                      | <i>Turdus viscivorus</i>       | 4                 | 0                | 0                | 0               | Red List                               |
| Redwing                            | <i>Turdus iliacus</i>          | 2                 | 11<br>+2 flyover | 0                | 1               | Amber List<br>WCA Sch.1                |
| Blackbird                          | <i>Turdus merula</i>           | 8                 | 11               | 27               | 11              | Green List                             |
| Fieldfare                          | <i>Turdus pilaris</i>          | 45                | 10               | 0                | 24              | Red List<br>WCA Sch.1                  |
| Robin                              | <i>Erithacus rubecula</i>      | 2                 | 7                | 18               | 8               | Green List                             |
| House Sparrow                      | <i>Passer domesticus</i>       | 0                 | 0                | 0                | 1               | Red List<br>NERC S.41                  |
| Dunnock                            | <i>Prunella modularis</i>      | 3                 | 5                | 6                | 9               | Amber List<br>NERC S.41                |
| Pied Wagtail                       | <i>Motacilla alba</i>          | 2<br>+1 flyover   | 1 flyover        | 0                | 4<br>+1 flyover | Green List                             |
| Meadow Pipit                       | <i>Anthus pratensis</i>        | 0                 | 7 flyovers       | 0                | 6               | Amber List                             |
| Chaffinch                          | <i>Fringilla coelebs</i>       | 4<br>+4 flyovers  | 2<br>+1 flyover  | 2                | 1               | Green List                             |
| Greenfinch                         | <i>Chloris chloris</i>         | 0                 | 2                | 2<br>+2 flyovers | 2<br>+1 flyover | Red List                               |
| Linnet                             | <i>Linaria cannabina</i>       | 0                 | 0                | 4<br>+7 flyovers | 0               | Red List<br>NERC S.41                  |
| Goldfinch                          | <i>Carduelis carduelis</i>     | 6                 | 5<br>+1 flyover  | 3<br>+1 flyover  | 1               | Green List                             |
| <b>Total No. Species</b>           |                                | <b>22</b>         | <b>22</b>        | <b>18</b>        | <b>24</b>       |                                        |