Breeding Bird Survey 2024

Land at Mercer Road, Horsham

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LIABILITIES:

Whilst every effort has been made to guarantee the accuracy of this report, it should be noted that living creatures are capable of migration and whilst protected species may not have been located during the survey duration, their presence may be found on a site at a later date.

The views and opinions contained within this document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document, or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

It is the duty of care of the landowner/developer to act responsibly and comply with current environmental legislation if protected species are suspected or found prior to or during works.

1.0 Introduction

1.1 The Ecology Partnership was commissioned by Riverdale Developments Ltd to undertake an assessment of breeding birds on land at Mercer Road, Warnham, Horsham, West Sussex, RH12 3RL This specialist survey was identified as needed due to the potential value of the site for farmland birds, the conservation of which is identified as a priority at both national and local levels.

1.2 The site is characterised by a number of fields, used as horse paddocks, with associated margins, the site is split into two separate parcels by Mercer Road. It totals c. 14.6ha. It is situated within a rural setting close to Warnham Railway Station, north of Horsham in West Sussex (central grid reference: TQ 17340 33825).

1.3 The approximate red line boundary of the site and the immediate surrounding area are shown in Figure 1.

Figure 1: Redline boundary of the site.

Proposed development

1.4 The current proposals are for a new housing estate, associated access and landscaping.

Planning context: priority and specially protected species

1.5 Local Planning Authorities should have regard in their "duty to conserve biodiversity", as discussed further below. This duty can reasonably be interpreted as requiring an assessment of breeding bird interest for larger development proposals, to inform the impact assessment.

Domestic legislation

1.6 All bird species are protected against intentional killing or injury, their active nests against intentional damage or destruction and their eggs against intentional destruction, through the provisions of section 1(1) of the Wildlife and Countryside Act 1981, as amended. Certain species, listed on Schedule 1 of the Act, are afforded additional protection against disturbance whilst in or near a nest and disturbance to dependent young, through the provisions of section 1(5) of the Act.

Other species of conservation concern

1.7 A number of farmland birds are in decline in England and the UK and are classified, through inclusion on the Section 41 list of the Natural Environment and Rural Communities Act (NERC) 2006, as of "Principal importance for the purpose of conserving biodiversity" in England. These species and others are also classified as of Red or Amber List concern in the UK (Eaton et al. 2015) due to declines in their breeding or wintering population size or range. This non-statutory assessment is based on more recent national data than the Section 41 List and can be used alongside that list for the purposes of conservation evaluation. The requirement of the Secretary of State under Section 41(3) of the NERC Act to "further the conservation…." of the listed species and "promote the taking by others of such steps" implies obligations to Local Planning Authorities, often met through local Biodiversity Action Plans (BAP).

2.0 Methodology

2.1 The survey period was between April and May 2024. The surveys were conducted by Greg Holland an experienced ornithologist. The British Trust for Ornithology (BTO) Breeding Birds Atlas method (Balmer et al. 2013) was followed and adapted, through the sub-division of observations by habitat type, to provide information on breeding species and activity for each of the main habitats within the site.

2.2 On each visit, the site was walked along linear habitat features with the aim to maximise site coverage. Each bird seen or heard was identified to species, registered to the parcel of land in which it was recorded and given a BTO Atlas breeding evidence code[1].

2.3 The desk study had identified the site as likely to have breeding populations of several Section 41 and Red List. The atlas methods were considered sufficient to identify which of these species were present and likely to be breeding and in which habitats.

Field survey limitations and justification

2.4 More frequent visits could give more precise estimates of the number of territories of skylarks (Chamberlain *et al.* 1999) and some other species. However, this objective is considered beyond the required scope of the impact assessment. An assessment of the number of territories of all species would require typically eight to ten visits[2] and then be accurate, in comparison with even more intensive nest search, for approximately 70% of species. As this monitoring method through territory mapping has been abandoned by the BTO since 2000, there would also be no ready means of comparing such detailed results between the site and national or regional trends, therefore such detailed information would be both inaccurate for some species and not informative on the value of a site for most other species.

2.5 The surveys were completed during dawn to early-morning period, over 6 hours, which is the recommended period to maximise the detection of most species (Balmer *et al.* 2013).

[1] https://www.bto.org/sites/default/files/u36/downloads/breedingcodes.pdf
[2] https://www.bto.org/about-birds/birdtrends/2015/methods/common-birds-census

Nocturnal species could be overlooked. As these would be woodland species and any woodland is to be retained, it was not considered necessary to carry out additional nocturnal surveys.

Data analysis

2.6 Each species was assigned a highest evidence of proof of breeding for each habitat type. The total number of pairs for each species of conservation interest for each habitat type was estimated from the maximum number of apparent territories (birds showing possible, probable or confirmed breeding activity). This number should be considered as giving an indication of the relative abundance of species, rather than being a precise estimate, for reasons discussed above (2.4). When it was considered that a species was present, but not breeding, for example, a migrant singing on one visit, this is mentioned in the results.

Table 1: Survey conditions.

Date	Cloud cover	Temperature (°C)
6th April 2024	100%	14
4th May 2024	0%	6

Evaluation

2.7 The evaluation of farmland birds makes use of the current listing of birds of conservation concern in the UK (Eaton *et al.* 2021) and the Section 41 list. The evaluation of the use of the site's habitats for species of conservation concern, hence any impact and mitigation, references recent literature on habitat and resource selection and response to habitat loss or disturbance for the relevant species.

3.0 Previous Surveys

3.1 Three surveys were conducted on the 5th April, 16th May and 15th June 2018. The surveys were undertaken by Emma Bagguley BSc MSc MCIEEM and assisted by Natalie Kay BSc MSc ACIEEM and Joe Bullard BSc MSc GradCIEEM. The surveys were conducted using standard Common Birds Census (CBC) methodology as developed by the British Trust for Ornithology (BTO).

3.2 The 2018 breeding bird survey (The Ecology Partnership 2017d) recorded 26 species of which at least 18 were considered breeding within the red line, including the priority species yellowhammer, dunnock, starling, house sparrow and song thrush.

3.3 Starling and house sparrow may breed in buildings in the south of the site and there was some evidence that further individuals of these species likely nesting in adjacent residential properties outside the site foraged on the site. Song thrush and dunnock may nest in the site's hedgerows and woodland.

4.0 2024 Survey Results

4.1 In total, the survey recorded 34 possible/probable or confirmed breeding bird species, within the red line or adjacent. A total of 4 of the possible/probable or confirmed breeding are of conservation concern (principal importance, red or amber list). These are discussed in more detail below (Tables 2 and 3). Maps of the species recorded on each visit can be seen in Appendix 1.

Table 2: Species of conservation concern recorded during the breeding bird surveys (Red and Amber List).

Species	Estimated Number of Pairs
Confirmed breeding	
Starling *Sturnus vulgaris*	1 - 2
Wren *Troglodytes troglodytes*	4 - 6
Dunnock *Prunella modularis*	1 - 2
Possible breeding	
House Sparrow *Passer domesticus*	2 - 4

Table 3: Other bird species recorded during the breeding bird surveys.

Species	Estimated Number of Pairs
Confirmed/probably breeding	
Blackbird *Turdus merula*	1 - 2
Great Tit *Parus major*	1 - 2

Table 4: Species of conservation concern - non-breeding bird species recorded during the survey (Red and Amber List and Schedule 1).

Species
Non-breeding
Herring Gull *Larus argentatus*
Greenfinch *Carduelis chloris*
Linnet *Linaria cannabina*
Mistle Thrush *Turdus viscivorus*
Nightingale *Luscinia megarhynchos* (*Off-site*)
Song Thrush *Turdus philomelos*
Black-headed Gull *Chroicocephalus ridibundus*
Moorhen *Gallinula chloropus*
Stock Dove *Columba oenas*
Woodpigeon *Columba palumbus*
Mallard *Anas platyrhynchos*
Grey Heron *Ardea cinerea* (Schedule 1)
Canada Goose *Branta canadensis* (Schedule 1)

4.2 Figure 3 highlights the recorded species of conservation concern across all surveys. A review of the species recorded on site is detailed below;

- House Sparrow. Three possible breeding pairs were recorded across all surveys. This species was possibly breeding along the western boundary of the site.
- Herring gull. Several birds were recorded flying over the site on both surveys.
- Starling. An active nest hole occupied by a starling family on the northern boundary of the site was recorded on 6th April. This species was confirmed to be breeding on site.
- Greenfinch. Bird calls from this species was recorded offsite to the east over the road on the 4th May survey.
- Mistle Thrush. Two individuals were recorded flying south-west over the centre of site on the 4th May survey.
- Linnet. One individual was recorded flying south-west in the north-western corner of the site on the 4th May survey.

- Nightingale. One individual was recorded singing over the road to the east of site (offsite) during the 4th May survey.
- Wren. Four to six breeding pairs were recorded across all surveys throughout the site. This species was possibly breeding within the northern woodland, along the western boundary and in the southern woodland.
- Song Thrush. One individual heard singing in the southern area of woodland on the 6th April survey.
- Moorhen. One individual recorded in the woodland to the north of site during the 6th April survey.
- Mallard. A single individual was recorded flying south-west over the site on 4th May survey.
- Woodpigeon. Multiple individuals were recorded across all surveys. These were recorded across the entire site.
- Dunnock. One to two breeding pairs observed in the northern woodland across all surveys.
- Black-headed Gull. Three individuals flying south across the centre of site during the 6th April survey.
- Stock Dove. A single individual was observed flying east across the site during the 4th May survey.

Species of lower conservation concern

4.3 The most frequent non-priority bird species recorded breeding or probably breeding on site included blue tit, great tit and robin.

Figure 3: Survey Results - Species of Conservation Concern.

5.0 Discussion and Recommendations

5.1 A total of 4 bird species of conservation interest, confirmed/probably/possibly breeding, were recorded within the site; starling, wren, dunnock and house sparrow. These species are associated with nesting and largely feeding in and near hedgerow, scrub and woodland

5.2 The site is bounded by hedgerows and tree lines to the north, west, and south and includes woodland and scrub to the east where these species were recorded. It is noted that a number of access points are going to be made through existing hedgerow habitats, however, planting proposals will include new hedgerows and new areas of scrub planting, creating robust edge habitats and networks. Thus, providing more suitable areas, and it is not considered that these species will be impacted by the proposed development.

5.3 Nightingale was recorded off site, in the scrub to the east across the other side of Langhurstwood Road. The site does not support nightingale. However, consideration for this species through planting proposals has been made. Other species, such as stock dove, greenfinch, mistle thrush, linnet were not recorded breeding on site. Woodpigeon were recorded in reasonable numbers and whilst they were not confirmed as breeding, this species was considered likely to be breeding on site.

5.4 Mallard were not recorded breeding on site, but recorded flying over. The ponds throughout the site where which provide suitability for these bird species, are marked to be retained through the proposals. The proposed development includes new attenuation features which will provide additional opportunities for these species. As such, these species will not be impacted by the proposed development.

5.5 Overall, the proposed development will enhance opportunities for the species recorded within the site and in the local area.

5.6 Black headed gull and herring gull were recorded flying over the site and were not recorded interacting with the habitats on site. As such, the development is not considered to impact upon these species.

Mitigation and Enhancement Measures

5.7 Killing, injury and disturbance of breeding birds during construction will be avoided with the implementation of mitigation measures such as removing vegetation outside of the breeding bird season, March to September inclusively for most species, and clearance under the supervision of a suitably qualified ecologist will be carried out to ensure compliance with Schedules 1 and 5 of the WCA.

5.8 Starlings were recorded nesting within the site, as such it is recommended that starling nest boxes are included as part of the proposed development. Bird boxes can be hung on mature trees around the site to create new nesting opportunities. Recommended boxes include the boxes shown in Figure 4 below.

Figure 4: Vivara Pro WoodStone Starling Nest Box (left) and Vivara Pro Seville 32mm WoodStone Nest Box (right).

6.0 Conclusions

6.1 A total of 4 possible/probable or confirmed breeding bird species were recorded over the survey period of which are of conservation concern. These being starlings, dunnocks, wren and house sparrow.

6.2 The proposals are retaining the vast majority of the boundary habitats, namely the hedgerows and line of trees, as well as already incorporating new high-value habitats such as hedgerows, species-rich grassland and scrub. As such, it is believed that the proposals, in combination with the mitigation and enhancement measures laid out within this report, would result in a net positive for breeding birds within the local area.

7.0 References

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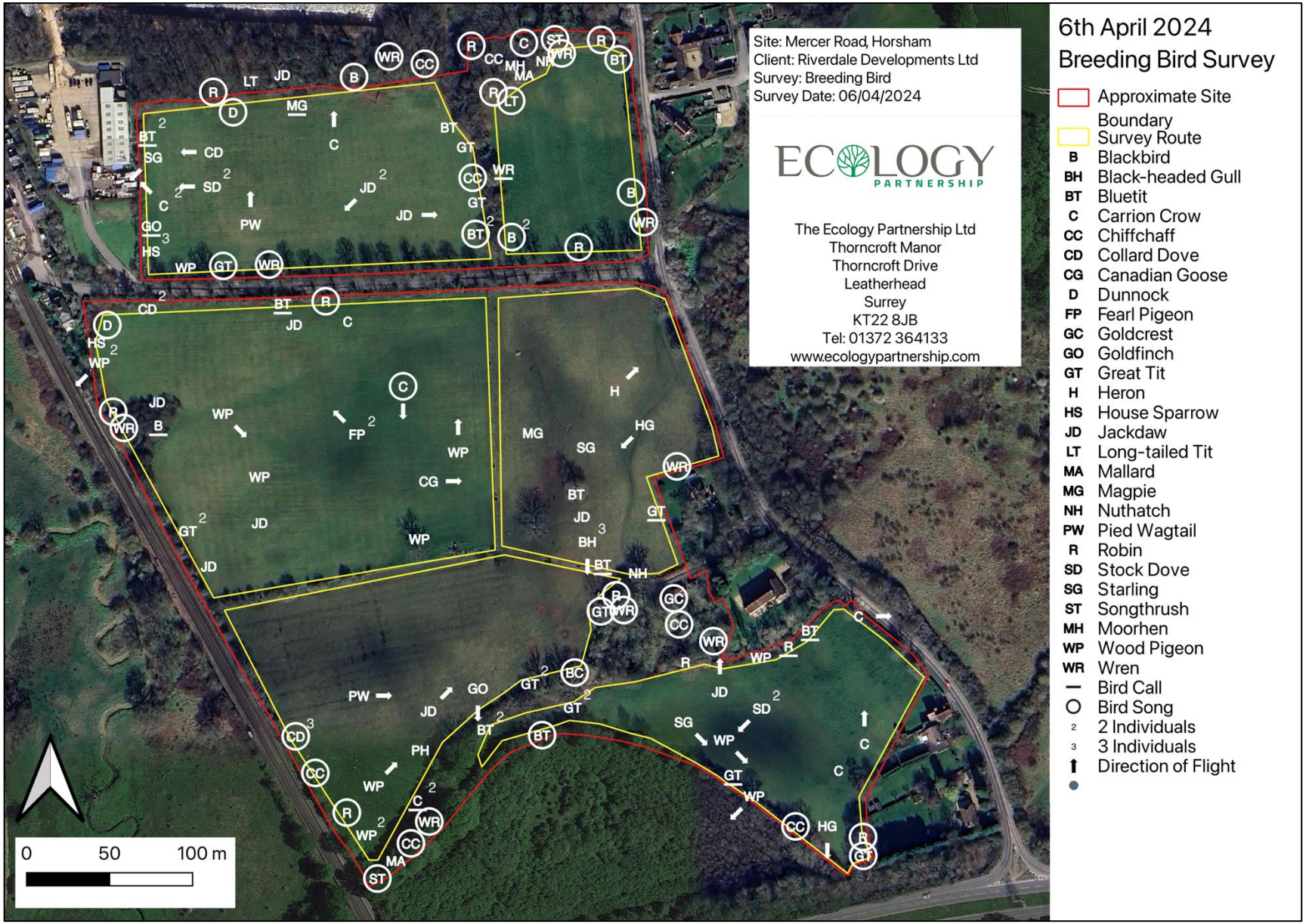
Internet resources:

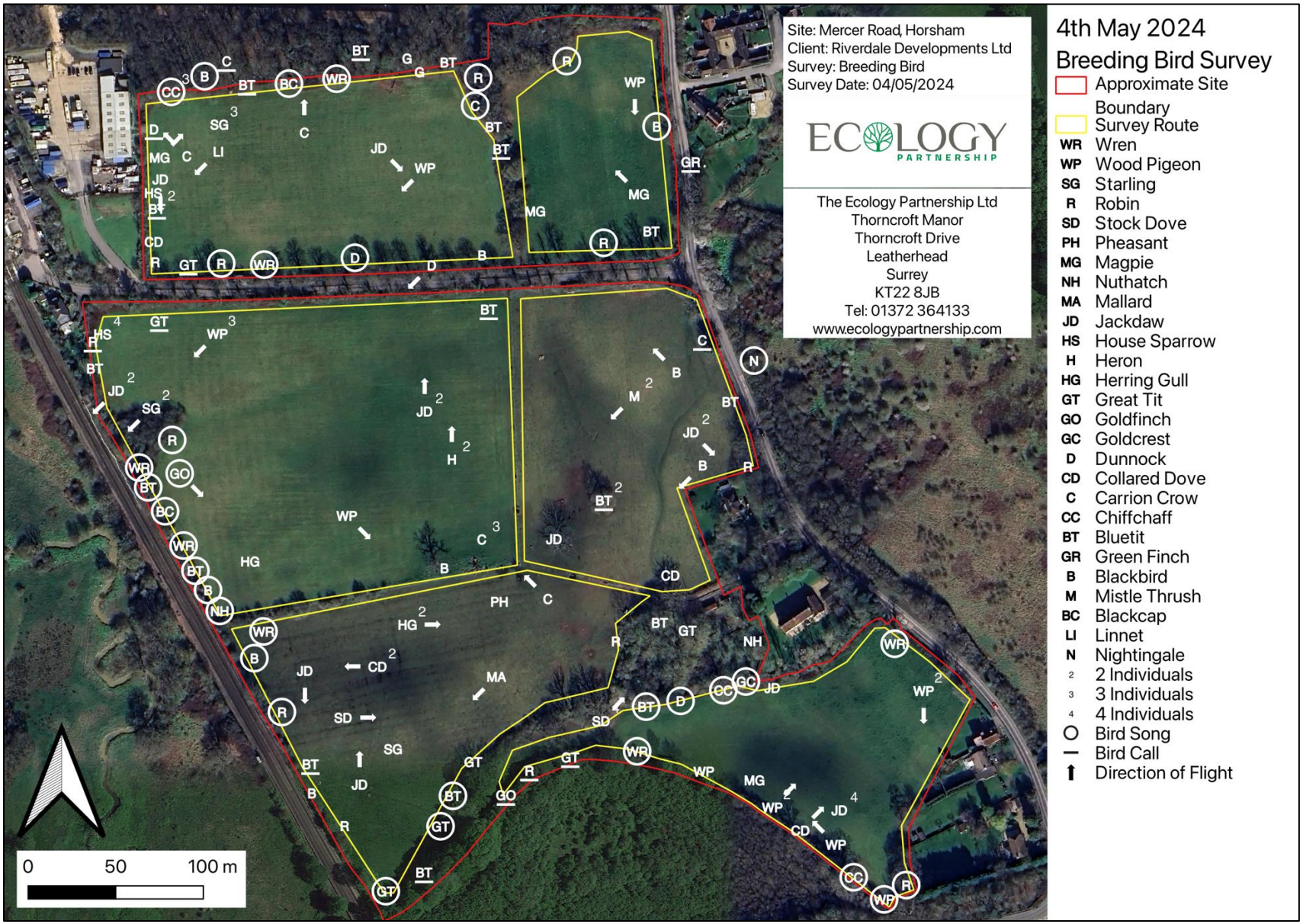
Google Maps: www.maps.google.co.uk

Magic Interactive Map: www.magic.gov.uk

Appendix 1. Breeding bird survey (1 of 2) – 06/04/2024



Appendix 2. Breeding bird survey (2 of 2) – 04/05/2024



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