

APPENDIX 11.5 BIRDS

1 METHODOLOGY

Introduction

- 1.1 The bird survey results presented in this appendix reflect the survey information available at the time of writing. The breeding bird surveys and automated acoustic monitoring have been completed; however, the interpretation of the results will be reviewed and updated, if necessary, following completion of the wider ecological survey programme and any subsequent design or mitigation updates.

Breeding bird surveys

- 1.2 Three breeding bird surveys were conducted within the breeding season from late March to early June 2026. The dates surveyed were 26th March, 8th May and 10th June 2026. All surveys were led by experienced ornithologists; their qualifications and experience are detailed within Table 1. Survey dates and environmental conditions are shown in Table 3.
- 1.3 Surveys were undertaken by following a set transect route (Figure 1) with information recorded during the survey including all species encountered on the site or land adjacent. The approximate locations of all bird species were plotted on a site map together with behaviours observed such as nest building, nest activity, birds displaying territorial behaviour, singing birds, calling birds and foraging activity. This information was recorded over successive site visits to form a species map of the birds present on site.
- 1.4 All surveys commenced between half an hour before sunrise and half an hour after sunrise.



Figure 1 Breeding bird transect

Automated / static surveys

- 1.5 Bird static surveys were used to provide the composition of bird species present on site and to support the findings of both the winter and breeding bird surveys. Two deployments of bird static surveys were undertaken from late March to late April 2026. Two bird statics were set during each deployment over a five-day period. Recording was set to a time-sampling approach, recording one minute in every ten, twenty-four hours a day. The methodology for the survey was informed by the Bird Survey & Assessment Steering Group (2025).
- 1.6 The calls were processed and analysed using the analytical software Quicksight. This software uses automated recognition of bird vocalisations whilst also considering the location probability and detection confidence of the record. Any calls below a detection confidence of 0.85 were excluded from the results. For accuracy of call classification, a sub-sample of unusual/rare species records, in context of the site location and habitats present, were manually verified using Audacity software. All calls were checked by experienced ornithologists familiar with bird vocalisations and species distribution, with verification supported call comparisons to Xeno Canto. All false records were excluded from the analysis.
- 1.7 The location of the static detectors is shown in Figure 2 and the total species recorded are shown in Table 3.

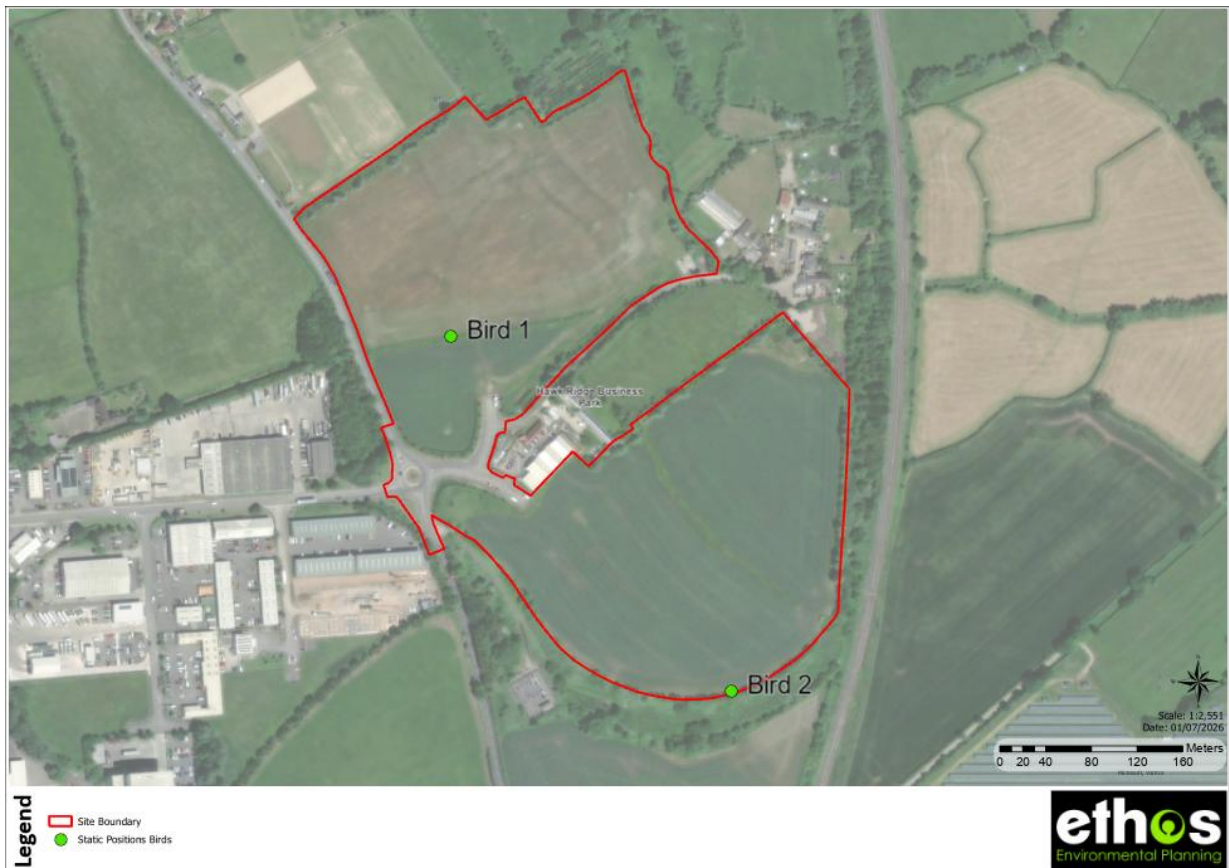


Figure 2 Location of bird statics deployed onsite to record bird acoustics throughout 2026

2 DESK STUDY

Data search

- 2.1 There were over 1,800 bird records returned in the data search within a 2km radius of the site. These were reported between 2000 and 2024.
- 2.2 Records included Schedule 1 listed species, Wildlife and Countryside Act 1981 (Sch1, Pt1) including barn owl (*Tyto alba*), Cetti's warbler (*Cettia cetti*), fieldfare (*Turdus pilaris*), garganey (*Spatula querquedula*), hobby (*Falco Subbuteo*), kingfisher (*Alcedo atthis*), merlin (*Falco columbarius*), peregrine falcon (*Falco peregrinus*), red kite (*Milvus milvus*), and redwing (*Turdus iliacus*).
- 2.3 There were also records for Section 41 (S41) Priority Species (Natural & Rural Environment & Communities Act NERC 2006) excluding those listed above with Sch1 status. Records include: cuckoo (*Cuculus canorus*), grasshopper warbler (*Locustella naevia*), house sparrow (*Passer domesticus*), lapwing (*Vanellus vanellus*), lesser redpoll (*Acanthis cabaret*), reed bunting (*Emberiza schoeniclus*), ring ouzel (*Turdus torquatus*), skylark (*Alauda arvensis*), spotted flycatcher (*Muscicapa striata*) and yellow hammer (*Emberiza citrinella*).

Habitats

- 2.4 The majority of the site is comprised of large arable fields provide low value habitat, however these fields may be used by farmland or ground nesting birds including skylark.
- 2.5 The variety of hedgerow habitats and lines of trees with adjacent arable fields across the site provide shelter and foraging opportunities for a wide range of farmland bird species.
- 2.6 The eastern boundary watercourse on the site and surrounding riparian habitat provide foraging opportunities for a range of common, widespread and waterfowl species.
- 2.7 In addition, the site has parcels of woodland present, providing foraging, sheltering and nesting opportunities for a range of species.

3 BREEDING BIRD SURVEYS

- 3.1 30 species of birds were recorded across all breeding bird surveys. The June survey had the highest number of species recorded (20 of 30) and had the highest number of individual bird records (88). Species of note across the three surveys included:
- Schedule 1 of the Wildlife and Countryside Act 1981 listed Red kite (*Milvus milvus*).
 - Red listed Greenfinch (*Chloris chloris*), Herring gull (*Larus argentatus*), skylark (*Alauda arvensis*).
 - Amber listed bullfinch (*Pyrrhula pyrrhula*), dunnock (*Prunella modularis*), kestrel (*Falco tinnunculus*), lesser black-backed gull (*Larus fuscus*), meadow pipit (*Anthus pratensis*), red-legged partridge (*Alectoris rufa*) and song thrush (*Turdus philomelos*).
- 3.2 The key bird habitats onsite were assessed to be the boundary hedgerows. The arable fields were less abundant in bird species presence; however, these habitats are important for nesting skylark. Any mature trees present are likely important sites for cavity nesting birds and for supporting invertebrate species which help to feed insectivorous bird species.
- 3.3 Based on the number of notable species recorded as likely breeding onsite and utilising the habitats for foraging and shelter, in addition to the number of bird species recorded onsite overall, it is assessed that the site is of **Local Importance** to nature conservation for breeding birds. Bird species are discussed further in relation to species mitigation and enhancements.

4 STATIC MONITORING SURVEYS

Breeding bird surveys

- 4.1 A total of twenty-three bird species, over 427 calls were recorded during the breeding bird static monitoring surveys (see Section 6, Table 3). The highest number of call registrations were from robin, followed by dunnoek and chiffchaff.
- 4.2 Location 2 recorded the most calls, with both locations recording eighteen different species. Both locations were within hedgerows, immediately adjacent to arable land, where there is high variation in habitats present including the nearby eastern boundary watercourse, native hedgerows with mature trees, small areas of grassland habitat and a woodland parcel in the south. These areas of the site will provide a wide range of opportunities for a variety of nesting birds.
- 4.3 Species of note recorded here included dunnoek, skylark, wren, greenfinch, meadow pipit, rook, song thrush bullfinch and common woodpigeon.
- 4.4 Results of the automated surveys will help to inform species-specific habitat enhancements and provisions, which are discussed further below, and will be provided in more detail in the reserved matters application, when species specific enhancements and provisions can be provided in determined locations via detailed planning drawings.

5 ASSESSMENT OF IMPACTS AND MITIGATION MEASURES

5.1 Breeding Birds

Construction Impacts

- 5.1.1 It is recommended that any vegetation removal works are undertaken outside of the breeding bird season (March to August inclusive) to avoid impacts to nesting birds (extended to include September in regard to nesting skylark).
- 5.1.2 Where groundworks cannot be undertaken outside of the breeding season, works should be subject to supervision by a Suitability Qualified Ecologist (SQE). A SQE will undertake a nesting bird check of all areas to be impacted, including areas suitable for ground-nesting birds such as skylark. If active nests are located, the position of the nests will be made known to all on site and a suitable exclusion zone to safeguard the nest will be implemented. The nest will then be monitored until all chicks have fledged and the SQE confirms the nest is inactive, whereby works can safely proceed.
- 5.1.3 Key habitat for birds identified on the development site will be protected from impacts during construction to safeguard the continued use of these resources for a range of bird species as follows:
- Retained hedgerows and woodland habitat will be protected from construction impacts. Tree protection fencing will be installed during the construction phase to avoid above and below ground impacts.
 - Protective fencing adjacent to watercourses and the wet meadow to the north-west will be installed to prevent pollution such as dust deposition and surface water run-off.
 - Sensitive construction lighting will be required to ensure that all onsite hedgerows and water courses are not subject to artificial lighting impacts during the construction period. Any necessary lighting such as security lighting will not be focused on these important ecological features during dawn, dusk and through the night to avoid disturbance to birds using these features.

Operational Impacts

- 5.1.4 Sections of existing hedgerow will be lost as a result of the development. To avoid loss of potential bird nesting habitat, new, native hedgerow will be created onsite. Where possible, to further benefit nesting and foraging birds the hedgerow creation should include the following:
- Wide, tussocky margins with a mix of flowering plants and grasses; and
 - Berry rich native trees and shrub to be used for in-planting and creating new hedgerows.

- 5.1.5 Retention and enhancement of the eastern boundary watercourse and enhancing the riparian habitat associated in the public open green space will benefit notable species such as kingfisher, reed bunting, reed warbler and sedge warbler.
- 5.1.6 Additional nesting provisions to be provided as integrated features into new dwellings will be confirmed once proposals are fixed. These provisions should provide opportunities for species of conservation concern and Priority Species such as starling, house sparrow and swift.
- 5.1.7 Overall, with the implementation of precautionary mitigation during construction, creation and retention of habitat for breeding and wintering birds on site, no significant effects are predicted on birds as a result of the development.

5.2 Skylark

- 5.2.1 As three individual skylark were recorded on one of the bird surveys one, with two displays of nesting or breeding behaviour, it is presumed that there is potential for low-density skylark nesting on site, therefore the below is detailed as well as the above nesting bird mitigation to ensure breeding skylark on site are not significantly impacted by the proposed development.

Construction Impacts

- 5.2.2 Mitigation is required to ensure that skylarks or other ground nesting birds utilising the site are safeguarded from impacts of the proposed development. Vegetation removal may not occur within nesting bird season (March – September, inclusive) to ensure any broods are protected. As skylark typically have three broods per year, with the last brood fledging into September, this month should be avoided for any proposed vegetation removal.

Operational Impacts

- 5.2.3 As the existing suitable habitat for nesting skylark is to be lost as part of the development proposals, it is proposed that a compensation area is required for either:
- A conservation grazing strategy or low-frequency mowing regime to create suitably varied grassland ideal for breeding and foraging skylark where possible, which should be factored into Suitable Alternative Natural Greenspace (SANG) habitat areas, or
 - The creation of two skylark plots within suitably sized parcels of arable land nearby.
- 5.2.4 Overall, with the implementation of precautionary mitigation during construction, and the creation of new habitat for skylark with suitable management, no significant adverse effects are predicted on skylark as a result of development.

6 BIRD SURVEY DATA

Table 1 Environmental conditions recorded during the breeding bird surveys onsite 2026

Date	26/03/2026		08/05/2026		10/06/2026	
Sunset/Sunrise	06:05		05:53		04:56	
Start / End time	06:05	08:39	05:53	07:53	05:30	06:56
Temperature (°C)	2		9		8	
Visibility	Good		Good		Good	
Cloud cover (oktas)	3/8		7/8		7/8	
Beaufort Scale	Calm		Light Air		Gentle breeze	
Rain	None		Drizzle		None	

Table 2 total species recorded during the breeding bird surveys

Common name	26/03/2026	08/05/2026	10/06/2026
Blackbird	2	2	8
Blackcap		7	3
Blue tit	2	1	12
Bullfinch	1		
Buzzard	1		1
Carrion crow	4		1
Chaffinch			1
Chiffchaff	1	11	6
Dunnoek	6	7	4
Goldfinch		3	7
Great spotted woodpecker			1
Great tit	3	3	1
Greenfinch	3	8	2
Herring gull	2		
Jackdaw		1	
Kestrel	1		
Lesser Black-backed gull	1		
Lesser Whitethroat		2	
Long-tailed tit	2		12
Magpie	2	3	2
Meadow Pipit	1		

Red Kite		2	
Red-legged partridge		2	
Robin	5	9	6
Skylark	3		
Songthrush	2	6	2
Swallow		2	
Whitethroat		1	2
Woodpigeon		4	5
Wren	4	10	11

Table 3 Total bird species recorded onsite during the breeding bird static monitoring surveys with the results shown as number of vocalisations recorded at each static position.

Common Name	Position 1	Position 2
Common Chiffchaff	25	55
Common Magpie	2	18
Common Pheasant	1	2
Common Woodpigeon		5
Dunnock	52	54
Eurasian Blackbird		2
Eurasian Blackcap		2
Eurasian Blue Tit	2	
Eurasian Bullfinch		2
Eurasian Green Woodpecker	1	1
Eurasian Jackdaw	5	1
Eurasian Jay		1
Eurasian Skylark	2	
Eurasian Wren	1	38
European Goldfinch	2	1
European Greenfinch	2	12
European Robin	37	74
Great Tit	1	
Long-tailed Tit	7	5
Meadow Pipit	2	
Pied Wagtail/White Wagtail	5	
Rook	1	4
Song Thrush	1	1
Common Chiffchaff	25	55
Common Magpie	2	18

7 REFERENCES

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