

Appendix 9.3 Breeding Birds



Hallam Land Management Ltd

GREAT WILSEY PARK, HAVERHILL

Breeding Bird Survey Report

Appendix 9.3

August 2015

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Appendix A: Full Breeding Bird Survey 2015 Results and Suffolk LBAP Species

1.0 INTRODUCTION

- 1.1 The following report has been prepared by FPCR Environment and Design Ltd on behalf of Hallam Land Management Ltd. It provides results of breeding bird surveys undertaken in 2015 on Great Wilsey Park, Haverhill, Suffolk (known hereafter as 'the application site' or 'the site').
- 1.2 The proposed development site covers approximately 168.34ha to the north east of Haverhill (Figure 1) and is mainly laid out for arable farming, interrupted by blocks of deciduous and mixed woodland.
- 1.3 The northern and southern boundaries form the sides of a valley within the site, created by a watercourse that flows into the proposed development site from the north west. The watercourse is a tributary of the River Stour, located approximately 1km to the north west of the proposed development site.
- 1.4 The proposed development site is bound by the A143 Haverhill Road to the northwest; open fields delineated by drainage ditches and Little Wrattling hamlet to the north; hedgerows and open fields to the northeast; B1061 Sturmer Road and Calford Green hamlet to the east; Coupals Road to the southeast; the edge of Haverhill to the southwest; Chalkstone Way, a secondary school and houses on the A143 Haverhill Road to the west.
- 1.5 The proposed development will comprise approximately 2,500 residential units, local employment uses, education, community and leisure facilities, public open space and recreation facilities.

Survey Objectives

- 1.6 The objectives of the survey were to:
- Identify the presence and distribution of birds on the site in the breeding season;
 - Assess the conservation importance of the site in relation to local populations;
 - Evaluate the importance of local bird populations and their habitat requirements.

2.0 LEGISLATION & GUIDANCE

The Wildlife & Countryside Act 1981 (as amended)

- 2.1 The Wildlife and Countryside Act 1981 (as amended) 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;
 - Take or destroy the egg of any wild bird.
- 2.2 Species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) are specially protected at all times.

Natural Environment and Rural Communities (NERC) Act 2006

- 2.3 A number of birds feature on the Natural Environment and Rural Communities (NERC) Act 2006, Section 41 (S41) as species which are of principal importance for the conservation of biodiversity in England. The S41 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 NERC Act, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

Non-Statutory Guidance

- 2.4 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 UK¹:
- Red list (high conservation concern) species are those that are Globally Threatened according to IUCN criteria; those whose population has declined rapidly (50% or more) in recent years; and those that have declined historically and not shown a substantial recent recovery.
 - Amber list (medium conservation concern) species are those with an unfavourable conservation status in Europe; whose population or range has declined moderately (between 25% and 49%) in recent years; whose population has declined historically but made a substantial recent recovery; rare breeders; and those with internationally important or localised populations.
 - Green list (low conservation concern) species fulfil none of the above criteria.

Biodiversity Action Plan

- 2.5 The UK Biodiversity Action Plan (UKBAP), published in 1994, was the UK Government's response to the Convention on Biological Diversity, which the UK signed up to in 1992 in Rio de Janeiro. The UKBAP described the biological resources of the UK and provided detailed plans for conservation of these resources.
- 2.6 In 2012, the UKBAP was replaced by the *UK Post-2010 Biodiversity Framework (2012)*². The result of this change is that the BAP process has been devolved to local level with each county deciding its own way forward. Suffolk made the decision in June 2013 to continue to support the Suffolk BAP, still enshrined in law through the NERC Act 2006, and also in planning policy through the National Planning Policy Framework and National Policy Statements.
- 2.7 A full list of Suffolk Local Biodiversity Action Plan (LBAP) bird species is provided in Appendix A.

¹ Eaton, M.A. *et al.* 2009. Birds of Conservation Concern 3: the population status of birds in the United Kingdom, Channel Islands and Isle of Man. *British Birds* 102:296-341

² <http://jncc.defra.gov.uk/page-6189>. All cited websites in this report accessed August 2015.

3.0 METHODOLOGY

Field Survey Methodology

- 3.1 The survey methodology employed was broadly based on that of territory mapping (Bibby *et al*, 1992) as used for the British Trust for Ornithology (BTO) Common Bird Census. Standard BTO species codes and symbols for bird activities were used to identify birds and denote activity, sex and age where appropriate. The criteria used in the assessment of breeding birds has been adapted from the standard criteria proposed by the European Ornithological Atlas Committee³ and are grouped into four categories, each with their own survey codes:

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

- 3.2 To provide a reasonable level of accuracy for determining the population status of the breeding birds on the site, three surveys were undertaken in the main bird breeding season (Apr-Jun) in 2015 between 05.00 and 11.00am.
- 3.3 A route was mapped out prior to the surveys being undertaken, paying particular attention to any linear features, such as hedgerows and tree lines, and natural features such as areas of scrub and waterbodies. Bird surveys were not undertaken

³ European Ornithological Atlas Committee, 1979. Categories of Breeding Bird Evidence. EOAC.

in unfavourable conditions such as heavy rain or strong wind, which may negatively affect the results.

Assessment Methodology

3.1 The conservation value of bird populations has been measured using two separate approaches: nature conservation value and conservation status. The IEEM guidance on ecological impact assessment assesses nature conservation value within a geographical context. To attain each level of value, an ornithological resource or one of the features (species population or assemblage of species) should meet the criteria set out in Table 1 below. In some cases, professional judgement may be required to increase or decrease the allocation of specific value, based upon local knowledge.

Table 1: Definition of Terms Relating to Nature Conservation Value

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. 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. A nationally important assemblage of breeding or over-wintering species. A species present in nationally important numbers (>1% UK population). Rare breeding species (<300 breeding pairs in the UK).
Regional	Species of principal importance under Schedule 41 of the Natural Environment and Rural Communities (NERC) Act (2006), which are not covered above, and which regularly occurs in regionally important numbers. Species present in regionally important numbers (>1% of regional population). Sustainable populations of species which are rare or scarce within a region. Species on the BoCC Red List and which regularly occurs in regionally important numbers.
County	Species of principal importance under Schedule 41 of the Natural Environment and Rural Communities (NERC) Act (2006), which are not covered above and which regularly occurs in county important numbers Species present in county important numbers (>1% of county population). Sustainable populations of species which are rare or scarce within a county, or listed as of principal importance under S41 of the NERC Act. A site designated for its county important assemblage of birds (e.g. a SINC Site). Species on the BoCC Red List and which regularly occur in county important numbers.

Nature Conservation Value	Examples of Selection Criteria
District	<p>Species of principal importance under Schedule 41 of the Natural Environment and Rural Communities (NERC) Act (2006), which are not covered above, and are rare in the locality or in the relevant Natural Area profile.</p> <p>Species present in numbers just short of county importance.</p> <p>Sustainable populations of species which are rare or scarce within the locality.</p> <p>A site whose designation falls just short for inclusion for its county important assemblage of birds (e.g. a SINC Site).</p> <p>Other species on the BoCC Red List and which are considered to regularly occur in district important numbers.</p>
Local	<p>Other species of conservation interest (e.g. all other species on the BoCC Red and Amber List and listed as of principal importance under Schedule 41 of the Natural Environment and Rural Communities (NERC) Act (2006) which are not covered above) regularly occurring in locally sustainable populations.</p>
Site	<p>All other BoCC Green-listed common and widespread species.</p>

4.0 RESULTS

Conservation Status

4.1 A total of 49 species (Appendix A) were recorded within the site boundary during the surveys, including 22 (Table 2) that feature on one or more of the following lists:

- NERC species of principal importance;
- UK BoCC Red and Amber;
- Suffolk LBAP.

Table 2: NERC, UK BoCC Red- and Amber-Listed and Suffolk LBAP Species recorded at the Application Site during Breeding Bird Surveys 2015 and their Recent Breeding Status in Suffolk

Species	Conservation Status	Breeding status on site	Recent Breeding Status in Suffolk ⁴
Mallard	Amber	Possible	Very common resident
Kestrel	Amber	Possible	Common resident
Black-headed gull	Amber	Non-breeder	Very common resident
Stock dove	Amber	Probable	Fairly common resident
Swift	Amber, LBAP	Non-breeder	Very common summer visitor
Green woodpecker	Amber	Possible	Common resident
Skylark	Red, NERC, LBAP	Probable	Common resident
Swallow	Amber	Non-breeder	Very common summer visitor
House martin	Amber	Non-breeder	Very common summer visitor
Starling	Red, NERC, LBAP	Possible	Very common resident
Song thrush	Red, NERC, LBAP	Probable	Fairly common resident
Mistle thrush	Amber	Possible	Fairly common resident
Willow warbler	Amber	Probable	Common summer visitor
Common whitethroat	Amber	Probable	Common summer visitor
Dunnock	Amber, NERC, LBAP	Probable	Very common resident
House sparrow	Red, NERC, LBAP	Non-breeder	Common resident
Yellow wagtail	Red, NERC,	Possible	Summer visitor

⁴ Suffolk Ornithologists' Group (2014): Suffolk Birds 2013; Vol.63. The following definitions are given as a guide to relative species status: Very common – occurs in large numbers in suitable habitat and season; Common – occurs regularly or widely distributed in suitable habitat and season; Fairly common – occurs in small numbers in suitable habitat and season; Scarce – one or two records each year or restricted to specific habitats.

Species	Conservation Status	Breeding status on site	Recent Breeding Status in Suffolk ⁴
	LBAP		
Meadow pipit	Amber	Possible	Common resident
Linnet	Red, NERC, LBAP	Probable	Common summer visitor
Bullfinch	Amber, NERC, LBAP	Possible	Common resident
Yellowhammer	Red, NERC, LBAP	Probable	Common resident
Reed bunting	Amber, NERC, LBAP	Probable	Common resident

- 4.2 A further twenty-five green-listed species of low conservation concern and two unlisted (introduced) species of no conservation concern were recorded.

Breeding Status

- 4.3 Eight low/no conservation concern species were confirmed as breeding onsite: woodpigeon *Columba palumbus*, great-spotted woodpecker *Dendrocopos major*, blue tit *Cyanistes caeruleus*, great tit *Parus major*, long-tailed tit *Aegithalos caudatus*, wren *Troglodytes troglodytes*, robin *Erithacus rubecula* (all Green-listed) and red-legged partridge *Alectoris rufa* (unlisted).
- 4.4 Twenty-three species were considered probable breeders, including the following notable species:
- NERC/Red/LBAP – skylark *Alauda arvensis*, song thrush *Turdus philomelos* and yellowhammer *Emberiza citronella*;
 - NERC/Amber/LBAP – dunnock *Prunella modularis* and reed bunting *Emberiza schoeniclus*;
 - Amber – stock dove *Columba oenas*, willow warbler *Phylloscopus trochilus* and common whitethroat *Sylvia communis*.
- 4.5 Eighteen species were considered possible breeders (12) or non-breeders (6).

5.0 DISCUSSION AND EVALUATION OF IMPACTS

Bird Assemblage Value

- 5.1 The species recorded on site are typical of the main habitats available on site, and are particularly characterised by notable species of open arable farmland and field margins (e.g. kestrel, black-headed gull, stock dove, swift, swallow, skylark, yellow wagtail, meadow pipit, linnet, yellowhammer, reed bunting); woodland (stock dove, green woodpecker, song thrush, mistle thrush, willow warbler, dunnock) hedgerows and trees (song thrush, common whitethroat, dunnock, linnet, yellowhammer,

bullfinch, reed bunting); ponds (mallard) and the urban fringe (swift, starling, house martin, song thrush, dunnoek, house sparrow).

- 5.2 All of the 49 recorded species are fairly common to very common resident or summering species in Suffolk and the UK, and no significant populations were registered. None of the 22 notable species were confirmed breeding species on site.
- 5.3 The application site is considered to be of **Local** nature conservation value in the breeding season for the twenty-two notable species listed in Table 2. For the remaining twenty-five green-listed and two unlisted species, the site is assessed as being of **Site** nature conservation value in the breeding season.

Impacts of Habitat Loss/Change

- 5.4 The impact on breeding bird species arising from the potential 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 (e.g. Red and Amber listed Birds of Conservation Concern 3 (2009); S41 NERC Act priority species and Local BAP species), their local status according to the *Suffolk 2013 Bird Report* and professional judgement.
- 5.5 The species recorded on site that are arguably the most vulnerable to impacts are the eleven notable species that appear on the BoCC Red list and/or are listed as priority species for nature conservation under S41 of the NERC Act or feature on the Suffolk LBAP (swift, skylark, starling, song thrush, dunnoek, house sparrow, yellow wagtail, linnnet, bullfinch, yellowhammer and reed bunting).
- 5.6 The habitat requirements, species account, and nature conservation value of these 11 species are discussed further (Table 3). In addition, residual impacts arising from the proposed development in terms of habitat loss / change have been assessed against the development proposals set out in the Illustrative Masterplan Rev B (August 2015).

Table 3: Habitat Requirements, Account, Nature Conservation Value and Impact Assessment of BoCC Red-listed, NERC Species of Principal Importance and/or Suffolk LBAP Species recorded during Breeding Bird Surveys 2015 at the Application Site

Species <i>Consvn. Status</i>	Breeding Habitat Requirements ⁵	Species Account ⁶ (Counts Apr;May;Jun)	Characterisation of Unmitigated Impact	Suggested Mitigation / Compensation / Enhancements / Comments	Residual Impact ⁷
Swift <i>Amber LBAP</i>	Summer visitor. Breeds almost exclusively in buildings, especially older ones that provide suitable access to roof space.	(0;0;2) Two birds were observed foraging high over the site's western edge in June only. Non-breeding species.	None anticipated	Swift nestboxes should be incorporated into the project design on suitable buildings. This will provide new nesting habitat for the species.	Minor Positive
Skylark <i>NERC Red LBAP</i>	Ground nesting birds favouring open farmland habitats where short, grassy or sparse vegetation provides nesting cover and foraging opportunities	(10;14;15) Up to ten territories (denoted by singing males) in open arable farmland fields across the northern section of the site on all surveys. Probable breeding species.	Loss of probable breeding habitat (arable).	Skylarks are reluctant to use areas that are subject to high levels of regular human disturbance. Areas of grassland are proposed to buffer Calford Green in the east from development; this has the potential to mitigate for some of the lost territories but not all and its suitability as breeding habitat will depend on several factors, including disturbance levels and how open it is. As such, this open-arable field specialist is likely to be mostly lost to development, given the loss of arable habitat and a reduction of an open-field structure.	Minor Negative

⁵ Snow, D. W. & Perrins, C. M. (1998): The Birds of the Western Palearctic Concise Edition

⁶ County contexts are summarised from Nottinghamshire Bird Report 2012

⁷ Assumes that any suggested or proposed mitigation, compensation or enhancements are undertaken in full

Species <i>Consvn. Status</i>	Breeding Habitat Requirements ⁵	Species Account ⁶ (Counts Apr;May;Jun)	Characterisation of Unmitigated Impact	Suggested Mitigation / Compensation / Enhancements / Comments	Residual Impact ⁷
Starling <i>NERC Red LBAP</i>	During breeding season will concentrate where suitable holes are available, either naturally or in apertures of buildings. Invertebrate food fed to young. Forages mainly on the ground in open areas of short grass or sparse vegetation, e.g. cereal stubble, farmyards.	(3;1;5) Adult birds were recorded foraging in arable grassland in the south and west of the site and taking food off-site to existing residential areas along Haverhill Rd and Chalkstone Way, where breeding was likely. Possible breeding species.	Loss of foraging habitat (arable).	Any open space habitats with the GI proposals, particularly in the east towards Calford Green, will continue to provide suitable foraging opportunities for the species. Starlings will also readily breed in residential areas, particularly once gardens mature. Starling nestboxes on suitable trees and buildings should be incorporated into the project design.	Minor Positive
Song thrush <i>NERC Red LBAP</i>	Birds can exist anywhere where trees or bushes accompany open grassland or patches of dead leaves supporting ample invertebrates. Will readily take to hedgerows, railway embankments and small gardens.	(3;3;3) At least two males were singing on all surveys in woodlands and hedgerow trees. Probable breeding species.	None anticipated (woodland and trees to be retained).	Areas in which song thrush was recorded (woodland and trees) are to be retained. Further tree and hedgerow planting within the GI will likely increase the overall useable habitat available to the species and provide a movement corridor through the site. Song thrushes will also readily inhabit residential areas, particularly once established.	Minor Positive
Dunnock <i>NERC Amber LBAP</i>	Commonly invades a wide variety of scrub grown situations. Has adapted to field hedgerows, farms, railway embankments, parks, gardens and vacant urban land. Feeds mainly on insects.	(6;3;7) Recorded on all surveys in intact hedgerows across the site; with a max of 7 birds present in June. Probable breeding species.	Minor loss of potential nesting habitat (e.g. short hedgerow sections, where access roads are proposed).	Much of the hedgerow habitat will be retained and enhanced with native species planting. Further planting will continue to provide a suitable breeding resource for this species. Dunnocks will also readily inhabit residential areas, particularly once established.	Minor Positive

Species <i>Consvn. Status</i>	Breeding Habitat Requirements ⁵	Species Account ⁶ (Counts Apr;May;Jun)	Characterisation of Unmitigated Impact	Suggested Mitigation / Compensation / Enhancements / Comments	Residual Impact ⁷
House sparrow <i>NERC</i> <i>Red</i> <i>LBAP</i>	Often associated with man, will avoid closed or dense vegetation, and except for seasonal foraging in corn fields and other crops, will usually avoid open terrain lacking in shrubs, trees, and other cover.	(up to 5 colonies) Five house sparrow colonies were recorded foraging in hedgerows, field margins and woodland edge on the site boundaries adjacent to existing residential areas: 1 colony in the NW site boundary associated with houses and gardens along Haverhill Rd and Bladon Way; 1 colony associated with the houses and gardens of Calford Green and up to 3 colonies on the SSE boundary associated with houses and gardens along Coupals Rd, Marcus Close and Shetland Way. A 6 th colony was also present at Great Wilsey Farm, just outside of the site boundary. Non-breeding species.	Minor loss of foraging resource (hedgerow and field margin habitats).	House sparrows were not breeding onsite, but in the nearby houses and farm complex. The species will readily habituate to new residential areas. The retention of boundary trees and hedgerows combined with new residential gardens and buildings will support the colonies currently on the peripheries of the site and increase breeding and foraging opportunities. House sparrow nestboxes should be incorporated into the project design in order to augment this.	Minor Positive

Species <i>Consvn. Status</i>	Breeding Habitat Requirements ⁵	Species Account ⁶ (Counts Apr;May;Jun)	Characterisation of Unmitigated Impact	Suggested Mitigation / Compensation / Enhancements / Comments	Residual Impact ⁷
Yellow wagtail <i>NERC</i> <i>Red</i> <i>LBAP</i>	Summer visitor. Found in lowland pastures, water meadows, marshes, riversides and arable fields.	(0;1;0) A female was calling in an arable field in the easternmost section of the site in May; not recorded in April or June. Possible breeding species.	Loss of potential breeding habitat (arable grassland).	Any open space habitats with the GI proposals, particularly the greenspace in the east, will continue to provide suitable foraging opportunities for the species. The single bird recorded suggests that the site is not important for yellow wagtails.	Negligible
Linnet <i>NERC</i> <i>Red</i> <i>LBAP</i>	Nests mainly on gorse-covered commons, rough ground where there are low bushes and scrub, bushy places on open farmland, hedges, young plantations and rural gardens.	(1;2;4) Single birds were recorded in April and May, and two pairs in June, associated with hedgerows surrounding arable fields in the northern half of the application site where breeding was likely. Probable breeding species.	Loss of nesting (hedgerow) and foraging habitats (arable fields and their margins).	Much of the hedgerow will be retained and enhanced. However, linnets are reluctant to use areas that are subject to high levels of regular human disturbance. The proposed eastern green buffer will mitigate for some of the lost foraging habitat but its suitability will depend on disturbance levels. An area of arable weeds, an important food source, should be encouraged to grow within the grassland GI. This open-farmland species is likely to be mostly lost to development, given the loss of arable habitat and a reduction of an open-field structure; however, the low numbers recorded suggests that the site is not overly important for the local linnet breeding population.	Negligible

Species <i>Consvn. Status</i>	Breeding Habitat Requirements ⁵	Species Account ⁶ (Counts Apr;May;Jun)	Characterisation of Unmitigated Impact	Suggested Mitigation / Compensation / Enhancements / Comments	Residual Impact ⁷
Bullfinch <i>NERC Amber LBAP</i>	Nests in thick woodland undergrowth, thickets, shrubby areas and thick hedges. Many of these habitats occur on lowland farmland. Also visits gardens and orchards.	(0;0;1) A male was calling from a tree in hedgerow H5 south of Great Wilsey Farm in June; not recorded in April or May. Possible breeding species.	Minor loss of nesting and foraging resource (hedgerow).	Any newly-planted native tree and hedgerow species should include bud-, berry- and fruit-bearing species. Once mature, residential gardens will be used by bullfinches.	Negligible
Yellowhammer <i>NERC Red LBAP</i>	Associated with areas of grass and arable fields with hedges and banks, railway embankments, commons and heaths.	(10;9;9) Singles and pairs were concentrated in the northern half of the site, particularly on and around hedgerows. Probable breeding species.	Minor loss of nesting (hedgerow) and foraging resource (arable fields and margins).	Like skylark and linnet, yellowhammers occupy open arable and grassland habitats and shy away from areas of regular human disturbance. Much of the hedgerow will be retained, but those surrounded by development will offer little value to the species. The proposed eastern grassland will continue to provide some foraging opportunities.	Minor Negative
Reed bunting <i>NERC Amber LBAP</i>	Traditionally a bird of wet places such as reedbeds, river margins, fens, marshes and coastal grazing marshes. More recently colonised drier habitats such as ditches, young forestry plantations and some farm crops, especially oilseed rape.	(4;1;2) Individuals and pairs of birds were associated with hedgerows and field margins in the north of the site. Probable breeding species.	Minor loss of nesting (hedgerow) and foraging resource (arable fields and margins).	As above, reed buntings are open farmland birds and unlikely to use much of the site post-development. However, the number of reed buntings recorded was unexceptional and this suggests that the site is not overly important to the local population.	Negligible

- 5.7 The proposed development will result in the loss of open arable habitat from the site. This has the potential to impact upon two notable species in the breeding season – skylark and yellowhammer. Neither species thrives close to residential areas and the associated levels of regular human disturbance. Although some suitable habitat will be retained in the east of the application site, these open-farmland specialists are likely to be mostly displaced from the site post-development and residual **minor negative** impacts to the local breeding skylark and yellowhammer populations are predicted.
- 5.8 Swift, starling, song thrush, dunnock and house sparrow are expected to benefit from the proposed GI within the Illustrative Masterplan Rev B, including the retention of many of the existing hedgerows and trees (important for all species), new tree planting (starling and song thrush) and the creation of an area of open greenspace in the east of the site (particularly important for foraging starlings). In addition, all five species show varying degrees of habituation to residential areas, particularly as gardens mature, and an ability to thrive in urban environments. Therefore, **minor positive** residual impacts for swift, starling, song thrush, dunnock and house sparrow are predicted.
- 5.9 Yellow wagtail, linnet, bullfinch and reed bunting were all recorded in modest populations throughout the breeding surveys. **Negligible** residual impacts are expected for the local populations of all four species.
- 5.10 To comply with wildlife legislation, any removal of woody vegetation including hedgerow sections and trees will occur outside of the bird breeding season to minimise the risk of disturbance to breeding birds. If this is not possible, such vegetation will be checked prior to removal by a suitably experienced ecologist to confirm the absence of active nests. If active nests are found, vegetation will be left undisturbed and suitably buffered from works until all birds have fledged. Specific advice will be sought prior to undertaking the clearance.
- 5.11 To mitigate for the loss of any potential bird nesting and foraging habitat on the site it is recommended that the scheme includes habitat enhancements through the planting of native and ornamental trees and shrubs, with preference given to species of value to local bird populations, e.g. berry- and fruit-bearing species such as crab apple *Malus sylvestris*, hawthorn *Crataegus monogyna*, rowan *Sorbus aucuparia*, holly *Ilex aquifolium* and guelder rose *Viburnum opulus*. The scheme will provide habitat buffers adjacent to retained hedgerows to minimise potential impacts to local bird populations in the long-term. New areas of woody species planting throughout the site will in time mature into habitats suitable for use by foraging and nesting birds.
- 5.12 It is recommended that consideration be given to the provision of bird boxes to be affixed to suitable buildings and retained trees to enhance nesting opportunities for birds in the local area and therefore contribute to requirements of NPPF via biodiversity enhancement. A selection of hole- and open-fronted designs should be used in order to encourage a variety of species. Further advice on appropriate siting and box-types can be provided on request.

6.0 CONCLUSIONS

- 6.1 A total of 49 species were recorded within the site boundary during the surveys, including 22 notable species that are either listed as NERC species of principal importance, on the UK Birds of Conservation Concern Red and Amber lists and/or the Suffolk LBAP list. None of the notable species was confirmed as breeding on site.
- 6.2 All of the 49 recorded species are fairly to very common species in Suffolk and the UK, and no significant populations were registered.
- 6.3 Impacts of development were considered for the eleven most vulnerable species recorded on site (i.e. species of highest conservation concern).
- 6.4 The proposed development is expected to result in minor negative residual impacts for skylark and yellowhammer. Negligible residual impacts are predicted for yellow wagtail, linnet, bullfinch and reed bunting.
- 6.5 Other than in the short term, i.e. during the construction phase, the proposals and suggested compensation are expected to have a positive residual impact upon swift, starling, song thrush, dunnock and house sparrow.
- 6.6 The application site is considered to be of **Local** nature conservation value in the breeding season for the 22 notable species listed in Table 2. For the remaining 27 green-listed and unlisted species, the site is assessed as being of **Site** nature conservation value in the breeding season.
- 6.7 The retention of existing vegetation and provision of new semi-natural areas which will provide corridors of movement across the site, along with a new resource of residential gardens, will provide some compensation for the loss of suitable breeding habitats for many of the recorded species. The proposed GI will increase the degree of usable habitat across the site for a number of urban edge species, provide connectivity with the wider landscape and support conservation and biodiversity enhancement. Overall, the developed site is expected to remain a valuable resource for local bird populations, with a shift in emphasis from birds of open arable farmland to those more traditionally associated with urban edge environments.

Appendix A: Haverhill Breeding Bird Survey Results 2015

Survey	Date	Cloud cover (%)	Rain	Wind	Visibility
1	16.04.15	100	None	Gentle breeze	Good
2	07.05.15	10	None	Light air	Good
3	30.06.15	0	None	Calm	Good

Species	Latin		27.05.15	30.06.15	Conservation Status	Breeding Status onsite
Grey heron	<i>Ardea cinerea</i>	1		1	Green list	Non-breeder
Mallard	<i>Anas platyrhynchos</i>	2			Amber list	Possible
Moorhen	<i>Gallinula chloropus</i>	1	1	1	Green list	Probable
Red-legged partridge	<i>Alectoris rufa</i>	5		2	None (Introduced)	Confirmed
Pheasant	<i>Phasianus colchicus</i>	2	3	4	None (Introduced)	Probable
Buzzard	<i>Buteo buteo</i>	1		1	Green list	Possible
Sparrowhawk	<i>Accipiter nisus</i>	1			Green list	Possible
Kestrel	<i>Falco tinnunculus</i>	1			Amber list	Possible
Black-headed gull	<i>Chroicocephalus ridibundus</i>			3	Amber list	Non-breeder
Woodpigeon	<i>Columba palumbus</i>	25	10	41	Green list	Confirmed
Stock dove	<i>Columba oenas</i>	1	3	2	Amber list	Probable
Collared dove	<i>Streptopelia decaocto</i>	2			Green list	Possible
Swift	<i>Apus apus</i>			2	Amber list LBAP	Non-breeder
Magpie	<i>Pica pica</i>	5	6	8	Green list	Probable
Jackdaw	<i>Corvus monedula</i>	10	4	11	Green list	Probable
Carrion crow	<i>Corvus corone</i>	4	4	6	Green list	Probable
Green woodpecker	<i>Picus viridis</i>			2	Amber list	Possible
Great spotter woodpecker	<i>Dendrocopos major</i>	1	1	2	Green list	Confirmed
Goldcrest	<i>Regulus regulus</i>	1	2	2	Green list	Probable

Appendix A: Haverhill Breeding Bird Survey Results 2015

Species	Latin		27.05.15	30.06.15	Conservation Status	Breeding Status onsite
Coal tit	<i>Periparus ater</i>	2	2	2	Green list	Probable
Blue tit	<i>Cyanistes caeruleus</i>	4	5	9	Green list	Confirmed
Great tit	<i>Parus major</i>	9	8	12	Green list	Confirmed
Skylark	<i>Alauda arvensis</i>	10	14	15	NERC Red list LBAP	Probable
Swallow	<i>Hirundo rustica</i>	3	2	8	Amber list	Non-breeder
House martin	<i>Delichon urbica</i>	2	4	12	Amber list	Non-breeder
Long-tailed tit	<i>Aegithalos caudatus</i>	2 flocks	flock	flock	Green list	Confirmed
Wren	<i>Troglodytes troglodytes</i>	5	8	7	Green list	Confirmed
Starling	<i>Sturnus vulgaris</i>	3	1	5	NERC Red list LBAP	Possible
Blackbird	<i>Turdus merula</i>	7	6	10	Green list	Probable
Song thrush	<i>Turdus philomelos</i>	3	3	3	NERC Red list LBAP	Probable
Mistle thrush	<i>Turdus viscivorus</i>	1			Amber list	Possible
Blackcap	<i>Sylvia atricapilla</i>	4	8	5	Green list	Probable
Willow warbler	<i>Phylloscopus trochilus</i>	1	1	1	Amber list	Probable
Lesser whitethroat	<i>Sylvia curruca</i>		2	2	Green list	Probable
Common whitethroat	<i>Sylvia communis</i>	2	8	8	Amber list	Probable
Chiffchaff	<i>Phylloscopus collybita</i>	4	4	5	Green list	Probable
Robin	<i>Erithacus rubecula</i>	7	11	9	Green list	Confirmed
Dunnock	<i>Prunella modularis</i>	6	3	7	NERC Amber list LBAP	Probable
House sparrow	<i>Passer domesticus</i>	Up to 5 colonies			NERC Red list LBAP	Non-breeder
Yellow wagtail	<i>Motacilla flava</i>		1		NERC Red list LBAP	Possible
Pied wagtail	<i>Motacilla alba</i>	2			Green list	Possible
Meadow pipit	<i>Anthus pratensis</i>			2	Amber list	Possible

Appendix A: Haverhill Breeding Bird Survey Results 2015

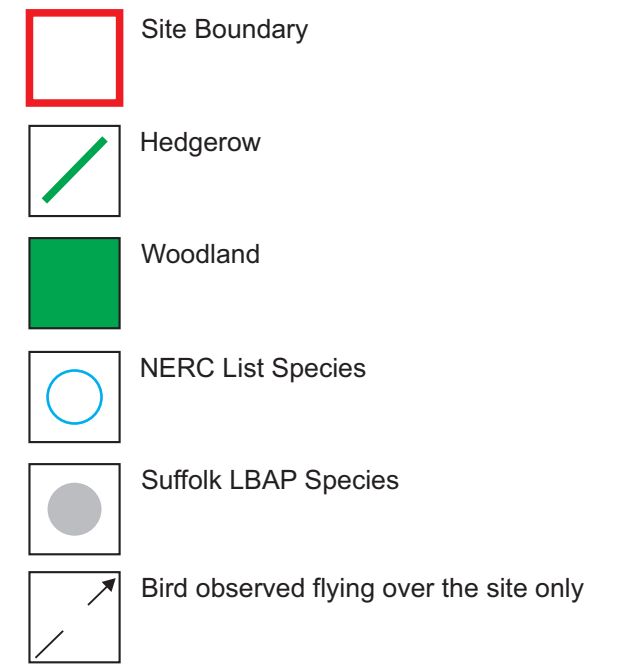
Species	Latin		27.05.15	30.06.15	Conservation Status	Breeding Status onsite
Chaffinch	<i>Fringilla coelebs</i>	11	12	10	Green list	Probable
Greenfinch	<i>Carduelis chloris</i>	6		1	Green list	Probable
Goldfinch	<i>Carduelis carduelis</i>		2	6	Green list	Probable
Linnet	<i>Carduelis cannabina</i>	1	2	4	NERC Red list LBAP	Probable
Bullfinch	<i>Pyrrhula pyrrhula</i>			1	NERC Amber list LBAP	Possible
Yellowhammer	<i>Emberiza citronella</i>	10	9	9	NERC Red list LBAP	Probable
Reed bunting	<i>Emberiza schoeniclus</i>	4	1	2	NERC Amber list LBAP	Probable

Suffolk LBAP Bird Species

Barn Owl *Tyto alba**
 Bullfinch *Pyrrhula pyrrhula*
 Dunnock *Prunella modularis*
 Common Starling *Sturnus vulgaris*
 House Sparrow *Passer domesticus*
 Song Thrush *Turdus philomelos*
 Spotted Flycatcher *Muscicapa striata*
 Bittern *Botaurus stellaris*
 Black-tailed Godwit *Limosa limosa*
 Herring Gull subsp. *argenteus* *Larus argentatus* subsp. *argenteus*
 Cuckoo *Cuculus canorus*
 Grasshopper Warbler *Locustella naevia*
 Curlew *Numenius arquata*
 Hawfinch *Coccothraustes coccothraustes*
 Lesser Redpoll *Carduelis cabaret*
 Lesser Spotted Woodpecker *Dendrocopos minor*
 Little Tern *Sterna albifrons*
 Marsh Tit *Poecile palustris*
 Nightjar *Caprimulgus europaeus*
 Swift *Apus apus**
 Savi's Warbler *Locustella luscinioides*
 Stone Curlew *Burhinus oedicnemus*
 Tree Pipit *Anthus trivialis*
 Twite *Carduelis flavirostris*
 Willow Tit *Poecile montanus*
 Wood Lark *Lullula arborea*
 Wood Warbler *Phylloscopus sibilatrix*
 Corn Bunting *Miliaria calandra*
 Tree Sparrow *Passer montanus*
 Grey Partridge *Perdix perdix*
 Yellow Wagtail *Motacilla flava*
 Northern Lapwing *Vanellus vanellus*
 Turtle Dove *Streptopelia turtur*
 Linnet *Carduelis cannabina*
 Skylark *Alauda arvensis*
 Yellowhammer *Emberiza citronella*
 Reed Bunting *Emberiza schoeniclus*

Appendix A: Haverhill Breeding Bird Survey Results 2015

NB * = Suffolk BAP species (locally important – not national Priority Species)



BoCC Red-listed Birds

- S Skylark
- SG Starling
- ST Song thrush
- HS House sparrow
- LI Linnet
- Y Yellowhammer
- YW Yellow wagtail

BoCC Amber-listed Birds

- K Kestrel
- BH Black-headed gull
- SD Stock dove
- G Green woodpecker
- M Mistle thrush
- D Dunnock
- MP Meadow pipit
- BF Bullfinch
- RB Reed bunting
- SI Swift
- SL Swallow
- HM House martin
- WW Willow warbler
- WH Whitethroat
- MA Mallard



Hallam Land Management Ltd
 Great Wilsey Park,
 Haverhill
 BREEDING BIRD SURVEY 2015:
 DISTRIBUTION OF NOTABLE SPECIES PLAN

Not to scale NC/DAH 28.08.2015



Figure 1 5055-E-01