

Ecological Headlines: Salden Chase Extension (NLV020)

Technical Note

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Subject: Ecological headlines **Date:** 26th April 2019
Status: FOR INFORMATION **Rev:** -

Originated **Technical reviewed** **Approved**
JJH/DI JP HSM

BACKGROUND

Client AVDC
Consultant Bradley Murphy Design Ltd.

SITE

Location Salden Chase Extension
National Grid Reference Approx. centre SP 824321
Over-view The Site comprises of an area of agricultural land to the south-west of Milton Keynes
Landscape context The Site is located in a rural context south-west of Milton Keynes

DEVELOPMENT & PLANNING BACKGROUND

Proposed works The Site is being promoted as a housing allocation site for the local plan.
Planning stage Local Plan Allocation Site – proposed

ASSESSMENT

Date 26th April 2019
Assessor James Patmore BSc (Hons) CEcol CEnv MCIEEM
Data sources *MAGIC*. Natural England and DEFRA Open Source Data. The Draft Natural England Open Mosaic Habitat Database. The Woodland Trust Ancient Tree Inventory. Readily available maps and imagery.
Site walkover Undertaken on 16th April 2019

This Technical Note has been produced to document the ecological headlines of a desk-based assessment with the principle purpose of identifying potential constraints and opportunities and what further survey work would be necessary to inform a planning application. This desk study has been supplemented by a Site visit, restricted to public rights of way.

A comprehensive review of likely constraints and opportunities can only be completed following full Extended Phase I and Phase II surveys, a number of which are seasonally constrained.

Declaration of compliance with professional code of ethics or conduct

The information which we have prepared and provided is true and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bonafide opinions.

Every reasonable attempt has been made to comply with the relevant best practice guidelines and BS42020:2013 (Biodiversity: Code of practice for planning and development).

1. INTRODUCTION

1.1 The Site

1.1.1 The Site comprises a series of intensively-grazed grassland fields and associated boundary hedgerows, drains and margins, situated to the south-west of Milton Keynes. Other habitats present within the Site include a narrow tree-lined watercourse, hedge and tree features, scattered trees, areas of rough grassland and three small ponds.

1.2 Present Context

1.2.1 The Site is bound to the north-west by Broadway and Thrift Wood, to the north-east by Whaddon Road and to the south-east by railway embankment planting. At a wider context, the Site is bound on all sides by predominantly agricultural countryside with occasional woodland pockets; beyond which lies Milton Keynes to the north-east and further open countryside in all other directions.

1.2.2 With the exception of the construction of three large warehouse buildings to the north-east between 2003 and 2007, a review of readily available aerial imagery indicates that there has been little change in the landscape character in the last 19 years. The Site itself has remained under continuous agricultural management for the last 19 years.

1.3 Methods

1.3.1 Desk Study

1.3.2 The desk study involved gathering and analysing existing ecological focused data within the site boundary and extending up to 5 km. The results of the desk study aid in the interpretation of the walkover survey results.

1.3.3 Desk study data was collated as follows –

- Statutory European Sites – up to 5 km
- Statutory Sites – 2 km search area
- Priority and Notable habitats – 1 km search area
- Proacted and notable species – development licence applications and returns – 2 km search area

1.3.4 Site Walkover

1.3.5 A high-level site walkover was undertaken restricted to public highways and rights of way to provide context to judgements made in the desk study assessment.

1.4 Ecological assets

1.4.1 Table 1.1 summarises the ecological considerations for this Site.

Table 1.1 Summary of ecological considerations

| Ecological consideration | Potential to occur on Site/confirmed | Within anticipated zone of influence (zone of influence) | Implications |
|---------------------------|--|--|--|
| Sites | | | |
| Statutory protected sites | No protected sites but the Site is within Impact Risk Zones (IRZs) for a number of Statutory designated sites. The IRZs comprise risk categories that are not relevant to likely developments at the Site – <i>aviation proposals, oil & gas exploration/extraction, slurry lagoons and manure stores, industrial combustion or sewage treatment, landfill and composting</i> – indicating that the proposed development of the Site is at a distance from the SSSI's that would not result in indirect impacts associated with residential development e.g. increased visitor pressure. | Oxley Mead Site of Special Scientific interest (SSSI) and Howe Park Wood SSSI. | The provision of well-designed public open space would likely mitigate additional recreational pressures on nearby statutory designated sites |
| Habitats | | | |
| Priority habitats | None listed within the Site on <i>MAGIC</i> . Hedgerows present within the Site are likely to be Priority habitat as they support native species. The three ponds within the Site have potential to qualify as Priority Habitats based on the standard definition if they support breeding populations of Priority Species such as common toad. | Site lies in immediate proximity to UK Priority Habitat: Deciduous Woodland and close proximity to the UK Priority Habitat: Traditional Orchards UK Priority Habitat Open Mosaic Habitat also present in the locality. | Retention where practicable. Buffering. Replacement of losses Creation and enhancement. |
| Ancient woodland | None on Site | Site lies adjacent to ancient replanted woodland to the north-west. | Natural England/Forestry Commission consultation may be required. Safeguarding measures and easement will be necessary such as minimum 15 buffer against the woodland. |

| Ecological consideration | Potential to occur on Site/confirmed | Within anticipated zone of influence (zone of influence) | Implications |
|--------------------------|---|---|--|
| Ancient/veteran trees | None included within the Woodland Trust Inventory. | None. | Tree surveys will be required during planning stage to map and assess the tree resource and to identify any notable trees (for example a number of mature trees are present within the hedgerows and on the boundaries of the site). |
| Other notable habitats | Waterbodies (three small ponds), wooded watercourse bisecting northern portion of Site, hedgerows. Other notable areas of habitat are associated with the southern boundary including an area of semi-improved grassland with scattered scrub in the south-western corner of the Site. The public right of way bisecting the Site in the south also supports a mature hedge and tree feature that links across the Site. | No main habitat but additional habitats exist (non-Priority). The Site also abuts a dismantled railway (to be the East West Rail route) that includes rough grass, scrub mosaic with denser wooded section along the eastern portion of the southern boundary. | Safeguarding of off-Site notable habitats. Avoid-mitigate-compensate hierarchy to be followed for any notable habitats within the Site. |
| Species: Mammals | | | |
| Badger | Some potential due to presence of hedges and Site-adjacent woodland blocks and grazing pastures with hedge network within the Site | Numerous small wooded areas and areas of varied topography to the west and south and associated with the A4146 to the south-east. | A detailed survey would be required at planning stage to assess badger activity and presence of any setts within or near to the Site. Mitigation would include retention and buffering of setts where possible, or sett closures (under licence) and sett creation elsewhere. |

| Ecological consideration | Potential to occur on Site/confirmed | Within anticipated zone of influence (zone of influence) | Implications |
|--------------------------|--|--|--|
| Bats | <p>No granted licence applications returned within the Site or immediate proximity.</p> <p>Bats likely to commute and forage across the ancient woodland edges and along the wooded watercourse. Elsewhere, the Site is dominated by sub-optimal foraging habitat due to the areas of open, agricultural fields. As such, bat activity would likely be restricted to the linear habitat features associate with the Site such as hedgerows and along the more wooded feature of the dismantled railway line to the south</p> <p>Bat roosting opportunities are likely to be limited to a few mature trees.</p> | <p>Partially wooded riparian corridor continues off-Site to the north-east and south-west, creating a well-established commuting corridor in and out of the developed area of Milton Keynes (where urban roosting opportunities are likely to be present) and significant foraging resource. Site lies within 2 km of one licence application for bats. Site-adjacent farm buildings and mature trees may support roost feature.</p> | <p>Surveys would be required at planning stage to assess the Site for potential roost sites and also any key foraging areas.</p> <p>Likely to require retention of key habitat areas for foraging (riparian corridor along the western Site boundary) and provision of roosting sites (e.g. features within buildings, installation of bat boxes etc).</p> |
| Dormouse | <p>The Site contains a network of hedgerows and lies adjacent to area of ancient woodland >20 ha in size and as such some potential for mature hedgerows to support dormouse.</p> | <p>Site lies within 2 km of numerous wooded areas, including ancient woodlands to the north and linear woodlands aligning a disused railway to the south which are likely to be relatively free of human disturbance.</p> | <p>Some potential to occur on Site and in Site-adjacent habitats. Surveys likely to be required.</p> |
| Otter | <p>Watercourse bisecting northern portion of the Site may provide foraging and commuting habitat for otter.</p> | <p>Watercourse continues to the north-east and south-west.</p> | <p>Survey extending beyond Site boundary (200 m) to be undertaken at planning stage.</p> <p>Mitigation may be needed if present but generally stream and drain network considered likely to remain within new development areas, retained and enhanced.</p> <p>Some protective planting and access management may be required to minimise disturbance impacts.</p> |

| Ecological consideration | Potential to occur on Site/confirmed | Within anticipated zone of influence (zone of influence) | Implications |
|---|---|--|--|
| Water vole | The watercourse bisecting the Site and nearby ditches may provide suitable habitats. However, given the heavily over-shaded nature of the on-Site watercourse, it is unlikely to be of high suitability. On-Site ponds appear to be over-shaded by adjacent trees and hedgerows and are likely to be subject to poaching from stock within pastural fields. As such, it is unlikely that these ponds are of high suitability for water vole. | The watercourse continues to the north-east and south-west and the wider surrounds contain numerous field ditches and waterbodies. | Survey extending beyond Site boundary (200 m) to be undertaken at planning stage if watercourse deemed suitable. General watercourse safeguarding measures. Further specific safeguarding and mitigation may be needed if water vole present confirmed. |
| Other notable mammals | Brown hare may be present within the open agricultural fields on Site. Hedgehog may be present in hedgerow features and scrub areas. | Further opportunities for hedgehog and brown hare in adjacent habitats. | Evidence of and assessment of the Site to support other notable species to be undertaken at planning stage. Mitigation may be needed if key species present. |
| Species: Amphibians and reptiles | | | |
| Great crested newt | No records for the Site. Site contains three ponds associated with hedgerows and lies within 250 m of a further five as indicated by OS mapping which could provide suitable breeding conditions for great crested newt. | Multiple great crested newt presence records (licence return data) beyond 500 m north of the Site, with no significant barriers to dispersal separating records from the Site. Multiple ponds within 500 m of the Site in all directions with no major barriers to dispersal, interspersed with high value terrestrial habitats such as disused railway, woodlands and rough grasslands. Milton Keynes is known to support widespread populations of great crested newt. | Further pond assessments of all ponds within 500 m at planning stage including presence/absence and population surveys. Mitigation requirements to be informed by results of survey work but, if required, would be prudent to include habitat provision within the northern portion of the Site. |

| Ecological consideration | Potential to occur on Site/confirmed | Within anticipated zone of influence (zone of influence) | Implications |
|--------------------------|--|--|--|
| Reptiles | Generally, the Site lacks areas of habitat suitable for reptile species such as common lizard and slow worm due to dominance of agricultural fields. Areas of suitable habitat are limited to the watercourse corridor, edge of the woodland to the north, rough edges against hedgerows and an area of semi-improved grassland with scattered scrub in the south-western portion of the Site. Ponds and watercourse features could be suitable for grass snake. | Areas of woodland, scrub and smaller field parcels, ponds and watercourses could provide a range of habitats for common and widespread reptiles such as common lizard, grass snake and slow-worm. | Targeted surveys at planning stage of suitable reptile habitat or commuting corridors are identified during the detailed habitat survey of the Site. Mitigation likely to be limited as core habitat features would be retained and enhanced in the event of a planning application at the Site. Opportunities to enhance the Site for reptiles. |
| Other amphibians | Ponds may support habitat for species such as common frog and common toad. | Common frog, smooth newt and common toad are widespread and likely to be present within the surrounding area. | Limited implications if present, aim to retain and enhance pond features where possible. Opportunities to provide new, small pond features for amphibians as part of any final landscape design for an application at the Site. |
| Species: birds | | | |
| Schedule 1 | Habitats on Site generally limited but could provide foraging habitat for barn owl, particularly along southern edge of the Site. Widespread Schedule 1 species such as red kite may also be supported by the Site. | Similar opportunities to those within the Site provided by agricultural land. | In order to confirm the species present, breeding bird surveys would be required at planning stage. Presence of Schedule 1 birds would require bespoke mitigation with regard to nesting sites, working near to active nests and provision of new habitats for such species. |
| Breeding birds | Nesting habitats on Site are limited to areas of agricultural field, hedgerows and scattered trees. Open grazed grassland areas and arable field could support ground nesting species such as skylark but none recorded during the walkover (limited to public rights of way) | The surrounding areas support a wider range of habitats that are likely to support a range of breeding bird species with additional habitat areas such as woodlands, wetlands and grassland and urban areas. | In order to assess the species present, breeding bird surveys would be required at planning stage. The presence of breeding birds will require mitigation and habitat replacement. If notable assemblages of farmland breeding species are present then off-Site mitigation may be required for loss of farmland habitat for such species. |

| Ecological consideration | Potential to occur on Site/confirmed | Within anticipated zone of influence (zone of influence) | Implications |
|---------------------------|---|---|---|
| Wintering birds | <p>The Site habitats are limited to areas of agricultural fields, small features such as hedges and scattered trees and the watercourse.</p> <p>The Site is unlikely to be of elevated value for wintering birds within the local area with lacking wetland areas on Site.</p> <p>The Site comprises several grassland fields with hedges which may be of value to terrestrial wintering birds (such as fieldfare and redwing).</p> | <p>The surrounding areas support a wide range of habitats that are likely to support a similar assemblage of wintering birds, no large waterbodies such as lakes lie within 2 km of the Site.</p> | <p>In order to assess the species present, wintering bird surveys would be required at planning stage.</p> <p>The presence of wintering birds will require mitigation and habitat replacement.</p> <p>If notable assemblages of wintering species are present then off-Site mitigation may be required for loss of farmland habitat used by such species.</p> |
| Farmland bird assemblages | <p>There are no arable or grassland farm assemblage of birds on the Site as confirmed by <i>MAGIC</i>.</p> <p>During the walkover bird species were limited to scrub and hedgerow species such as chiffchaff, willow warbler, whitethroat, blackcap, dunnock etc.</p> <p>Ground nesting species such as skylark and meadow pipit may utilize the southern arable field and central sheep grazed areas, with only limited suitability in the horse grazed paddocks in the north.</p> | <p>An arable farmland assemblage and grassland farmland assemblage of three and two species respectively lies within 1 km to the west of the Site as depicted by <i>MAGIC</i>. These assemblages include curlew, grey partridge, lapwing, tree sparrow and turtle dove, none of which overlap with the Site. Yellow wagtail is also depicted within 2 km of the Site by <i>MAGIC</i>.</p> <p>Generally, it is considered that the intensive grazing of the Site may limit the distribution of such species but their absence from the Site cannot be assumed.</p> <p>Furthermore, species such as corn bunting, yellow wagtail and grey partridge may make use of field boundary features such as hedgerows, rough grass with scrub and the wooded watercourse.</p> | <p>In order to assess the species present, breeding bird surveys would be required at planning stage.</p> <p>The presence of breeding birds will require mitigation and habitat replacement. If notable assemblages of farmland breeding species are present then off-Site mitigation may be required for loss of farmland habitat for such species.</p> |
| Fish | | | |

| Ecological consideration | Potential to occur on Site/confirmed | Within anticipated zone of influence (zone of influence) | Implications |
|-----------------------------|--|--|---|
| Notable fish | The watercourse within the Site appears heavily over-shaded by adjacent trees throughout its onsite length and is therefore unlikely to support populations of notable fish such as Bullhead. | The watercourse within the Site appears to originate from various field drains to the south-west and culminates within a stocked fishing lake to the north-west within Milton Keynes (Furzton Lake) after running through multiple weirs. This watercourse does not appear directly connected to any major or natural rivers and is unlikely to support notable fish populations within the zone of influence of the Site. | Specific survey work in respect of fish is unlikely to be required to inform a planning application at the Site. In the likely event that the watercourse is retained in development proposals, opportunities for significant enhancement for fish are present such as the reduction of over-shading. |
| Invertebrates | | | |
| White-clawed crayfish | The watercourse within the Site may have some suitability for white-clawed crayfish but generally appeared limited due to silt and heavy shading. | Watercourses surrounding the Site, particularly to the south could provide opportunities for white-clawed crayfish. | Specific survey work may be required depending on detailed habitat suitability assessment. The watercourse is likely to be safeguarded under development proposals for the Site. |
| Other notable invertebrates | The Site is dominated by intensively grazed fields and is therefore unlikely to support habitats of significantly elevated value for invertebrates within the context of the local area. Hedgerows and scrub edges of the Site may support features suitable for notable species such as black hairstreak butterfly. | Site-adjacent ancient woodlands and other habitats such as OMHs and deciduous woodlands within the zone of influence may support notable invertebrate assemblages. | Safeguarding of nearby habitats of elevated value. Retention of key habitat corridors and features. Creation and enhancement to benefit invertebrates in general as part of wider green infrastructure design of the Site. |

1.5 Ecological opportunities

1.5.1 Developing the Site offers the following opportunities for biodiversity net gain and supporting local policy based on the current indicative masterplan for the Site:

- Significant enhancement of adjacent ancient woodlands by provision of well-designed edge habitats within buffer zones such as mixture of native scrub and wildflower-rich grassland;
- Significant enhancement of watercourse by retention and buffering of watercourse with thinning of over-shading vegetation, bespoke management of the riparian corridor and elimination of stock poaching;
- Opportunities for significant improvement of habitat connectivity within the wider area by linking ancient woodlands to the north-west of the Site with the watercourse within the Site and the disused railway and deciduous woodlands to the south-east of the Site;

- Possibility of coordination of wildlife-beneficial greenspace provision with adjacent Saldon Chase housing allocation land to provide landscape-level ecological enhancements and improve ecological connectivity;
- Retention and enhancement of existing hedgerow and tree features within the Site;
- Retention and enhancement of drain features;
- creation of linear habitat corridors as part of the wider green infrastructure in an area of former arable land, improving ecological connectivity and increasing species diversity;
- Increasing number of ponds and wetland areas in an area devoid of such features through habitat creation works and also use of multi-functional SUDS (designed to benefit wildlife) in close proximity to nearby ponds, ensuring good connectivity with adjacent wetland areas;
- Targeted species enhancements that could include:
 - Bats. Bat friendly planting in soft landscape areas, bat box installation, integration of bat roosting features into buildings, new hedges and linear tree planting;
 - Birds. Boxes/integrated nesting features for key species, provision of undisturbed open areas to facilitate ground nesting species, new hedges, woodland and scrub for nesting and foraging;
 - Hedgehogs. Provision of shelter features and thoroughfares;
 - Invertebrates. Micro-topographical features within landscaped areas, log piles and vegetation heaps in retained and created habitat areas, integrated features such as bug boxes; and
 - Amphibians and reptiles. Purpose-built habitat piles and hibernacula near to retained and created ponds, new pond features, log and stone piles, etc.

2. DETAILED DESK STUDY SCOPING EXERCISE

2.1 Statutory designated sites of nature conservation importance

2.1.1 A data search on *MAGIC* was completed on 16th April 2019. A summary of features checked is provided in Table 2.1.

Table 2.1 Summary of statutory nature conservation sites within 2 km of the Site (extending to 5 km for European designated sites)

| Site designation | Number of sites | | | | |
|------------------|---|---------|--------|--------|--------|
| | Total | On Site | 0-1 km | 1-2 km | 2-5 km |
| AONB | 0 | | | | NA |
| LNR | 1 | | | 1 | NA |
| NNR | 0 | | | | NA |
| National Park | 0 | | | | NA |
| Ramsar | 0 | | | | |
| SSSI | 2 | | | 2 | NA |
| SAC | 0 | | | | |
| SPA | 0 | | | | |
| Impact Risk Zone | Yes – Oxley Mead SSSI and Howe Park Wood SSSI | | | | |

2.1.2 The Site itself does not lie within any Statutory designated sites of nature conservation importance. Details of designated sites returned by the desk study within 2 km of the Site are provided in Table 2.2

Table 2.2 Detail of statutory designated sites of nature conservation importance within 2 km of the Site

| Site | Designation ¹ & area | Proximity (distance/direction) & connectivity to Site | Summary description |
|--------------------------------|---------------------------------|---|---|
| Oxley Mead Ref: 1006202 | SSSI c. 3.43 ha | c. 2 km N Connected to the Site via open habitat and tree-lines | An ancient hay meadow on the southern-edge of Milton Keynes with a nationally rare grassland type confined to major river valleys of southern/ central England. |
| Howe Park Wood Ref: 1000856 | SSSI c. 24.19 ha | c. 1.8 km NE Connected to the Site via open grassland habitat and tree-lines | An ancient semi-natural woodland dating back to the early medieval period situated on heavy poorly drained calcareous boulder clays. The wood is known to support a rich diversity of moths including buff footman and slender brindle and butterflies including nationally scarce wood white and nationally rare black hairstreak. |

2.1.3 The Site lies within the Impact Risk Zones (IRZs) of Oxley Mead SSSI and Howe Park Wood SSSI. The following have been identified as potential risks and causes of risk to these designated sites if such development takes place within the area under assessment:

- **Infrastructure:** Airports, helipads and other aviation proposals;

- **Wind & solar energy, minerals, oil & gas:** Planning applications for quarries including new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions including oil and gas exploration/ extraction; and
- **Air pollution:** Livestock and poultry units with floorspace >500 m², slurry lagoons >7500 m² and manure stores >3500t.

2.2 Habitats

2.2.1 A summary of Priority and Notable habitats within 1km of the Site is presented in Table 2.3.

Table 2.3 Summary of priority (and notable) habitats within 1 km of the Site

| Broad category | Priority Habitat Inventory | Other habitats | On Site | 0-1 km |
|---------------------|--------------------------------------|---|---------|--------|
| Coastal | Saltmarsh | | | |
| | Sand Dunes | | | |
| | Vegetated Shingle | | | |
| | Maritime Cliffs and Slopes | | | |
| | Mudflats | | | |
| | Saline Lagoons | | | |
| Grassland | Calaminarian Grassland | | | |
| | Coastal and Floodplain Grazing Marsh | | | |
| | | Good quality semi-improved grassland (non-priority) | | |
| | Lowland Calcareous Grassland | | | |
| | Lowland Dry Acid Grassland | | | |
| | Lowland Meadows | | | 1 |
| | Purple Moor Grass and Rush Pasture | | | |
| | Upland Calcareous Grassland | | | |
| Upland Hay Meadows | | | | |
| Heath | Lowland Heathland | | | |
| | Mountain Heaths and Willow Scrub | | | |
| | Upland Heathland | | | |
| Limestone pavements | Limestone Pavements | | | |
| Marine | Intertidal Substrate Foreshore | | | |
| Wetland | Blanket Bog | | | |
| | Lowland Fens | | | |
| | Lowland Raised Bog | | | |
| | Reedbeds | | | |
| | Upland Flushes, Fens and Swamps | | | |
| Woodland | | Ancient: Semi-natural | | 3 |
| | | Ancient: Replanted | | 4 |
| | Deciduous Woodland | | | 66 |
| | | National Inventory of Woodland & Trees | | 27 |
| | Traditional Orchards | | | 2 |

| Broad category | Priority Habitat Inventory | Other habitats | On Site | 0-1 km |
|----------------|---|---|---------|--------|
| | Wood pasture and Parkland BAP Priority Habitat | | | |
| Other | | Fragmented heath (Non-Priority) | | |
| | | Grass Moorland (Non-Priority) | | |
| | | No main habitat but additional habitat exists | | 21 |

Priority habitats

2.2.2 Priority habitats returned by the desk study are listed below. In summary, the following UK Priority Habitats occur (as depicted on *MAGIC*) on the Site or within 1 km of the Site:

- **Deciduous woodland:** 66 parcels – Parcels are scattered around the Site with the nearest parcel situated immediately adjacent to western Site boundary; and
- **Traditional orchards:** Two parcels – Parcels are located west and north-east of the Site with the nearest parcel situated adjacent to the north-eastern Site boundary.
- **Lowland Meadow** – 1 parcel situated 2km to the north-east, associated with Tattenhoe Park.

2.2.3 There was one mapped Open Mosaic Habitats (OMH) within 1 km of the Site as depicted on Natural England’s Draft OMH Inventory Database (downloaded 17/01/2018) located approximately 0.6 km south of the Site with Ref: 2206.

Notable habitats

2.2.4 The following non-priority but notable habitats occur within 1 km of the Site:

- **Ancient woodland:** Three semi-natural parcels and four replanted parcels – Parcels are situated west and south of the Site with the nearest replanted parcel immediately adjacent to the western Site boundary. the nearest semi-natural parcel is located adjacent to the southern Site boundary; and
- **No main habitat but additional habitats present:** 21 parcels – Parcels are located south-west and north of the Site with the nearest parcel located 0.1 km north of the Site.

2.2.5 A review of the Woodland Trust Ancient Tree Inventory highlighted three known veteran trees within 1 km of the Site; these are described in Table 2.4.

Table 2.4 Woodland Trust Ancient Tree Inventory trees within 1 km of the Site

| Tree sp. | WT ref. | Location | Distance | Direction |
|----------|---------|------------|----------|-----------|
| Oak | 44370 | SP83053294 | 0.7 km | NE |
| Oak | 48352 | SP80983223 | 0.9 km | SW |
| Oak | 48353 | SP80963239 | 0.9 km | SW |

2.3 Protected Species

2.3.1 A search of publicly available great crested newt licence return data retrieved from Natural England highlighted 37 licence returns within 2 km of the Site. The nearest record is located approximately 0.7 km north-west of the Site with the most recent record from the 1st July 2018.

2.3.2 A search on *MAGIC* returned six licence applications within 2 km of the Site relating to European Protected Species; these are detailed in Table 2.5.

Table 2.5 Development licence applications within 2 km of the Site identified during the data search

| Species | Date | Proximity (distance/direction) & connectivity to Site | Licensed activity |
|--|-------------------------|--|---|
| Great crested newt | 14/10/2015 – 31/10/2020 | c. 1.6 km E Connected to the Site via treelines and grassland habitat | Damage of a resting place Destruction of a resting place |
| Great crested newt | 18/03/2015 – 31/07/2016 | c. 2 km NE Connected to the Site via small ponds and woodland parcels with potential urban barriers | Damage of a resting place Destruction of a resting place |
| Great crested newt | 28/10/2013 – 31/07/2016 | c. 2 km NE Connected to the Site via small ponds and woodland parcels with potential urban barriers | Destruction of a resting place |
| Great crested newt | 18/04/2013 – 31/08/2015 | c. 1.4 km NE Connected to the Site via small ponds and small woodland parcels | Destruction of a resting place |
| Common/ soprano pipistrelle, daubenton's, brown long-eared bat | 02/01/2013 – 31/08/2014 | c. 1.4 km S Connected to the Site via treelines, small woodland parcels and grassland habitat | Impact on a breeding site Destruction of a breeding site Destruction of a resting place |

| | | | |
|--------------------|-------------------------|--|---|
| Great crested newt | 26/04/2017 – 31/12/2017 | c. 1.6 km NE Connected to the Site via small ponds and woodland parcels with potential urban barriers | Damage of a resting place Destruction of a resting place |
|--------------------|-------------------------|--|---|

2.4 Notable species

2.4.1 There is an arable farmland bird assemblage of four species and grassland farmland bird assemblage of two species within 2 km of the Site, as depicted by *MAGIC*. These are summarised in Table 2.6. These assemblages include curlew, grey partridge, lapwing, tree sparrow, turtle dove and yellow wagtail. None of these species overlapped with the Site itself.

Table 2.6 Farmland bird assemblages in relation to the Site

| Farmland bird assemblages | On Site | 0-1 km | 1-2 km |
|--|----------|----------|----------|
| Arable (max number of species) | 0 | 3 | 4 |
| Grassland (max number of species) | 0 | 2 | 2 |
| Black grouse | | | |
| Cirl bunting | | | |
| Corn bunting | | | |
| Curlew | | ✓ | ✓ |
| Grey partridge | | ✓ | ✓ |
| Lapwing | | ✓ | ✓ |
| Redshank | | | |
| Snipe | | | |
| Stone curlew | | | |
| Tree sparrow | | ✓ | ✓ |
| Turtle dove | | ✓ | ✓ |
| Twite | | | |
| Yellow wagtail | | | ✓ |

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PLANS

Ecological Constraints: Drawing BMD.19.016.DRE.902 Ecological Assets Plan

PHOTO SHEETS



Photograph 1: Horse grazed pastures in north of Site with stream corridor in distance, view looking south from northern boundary.



Photograph 2: Boundary with ancient replanted woodland along northern boundary of Site, view looking west.



Photograph 3: Sheep grazed fields with hedgerow boundaries, central portion of the Site, view looking north from southern Public right of way.



Photograph 4: Public right of way within the southern portion of the Site with mature hedge and tree features, view looking west.



Photograph 5: Large arable field in the south-eastern portion of the Site.



Photograph 6: Field parcel supporting area of rough grass and scattered scrub in south-west portion of the Site

Scientific names of species mentioned within this report

| Amphibians & Reptiles | |
|----------------------------------|----------------------------------|
| Common frog | <i>Rana temporaria</i> |
| Common lizard | <i>Zootoca vivipara</i> |
| Common toad | <i>Bufo bufo</i> |
| Grass snake | <i>Natrix helvetica</i> |
| Great crested newt | <i>Triturus cristatus</i> |
| Slow worm | <i>Anguis fragilis</i> |
| Smooth newt | <i>Lissotriton vulgaris</i> |
| Birds | |
| Barn owl | <i>Tyto alba</i> |
| Black grouse | <i>Lyrurus tetrix</i> |
| Buzzard | <i>Buteo buteo</i> |
| Cirl bunting | <i>Emberiza cirius</i> |
| Corn bunting | <i>Emberiza calandra</i> |
| Curlew | <i>Numenius arquata</i> |
| Fieldfare | <i>Turdus pilaris</i> |
| Grey partridge | <i>Perdix perdix</i> |
| Lapwing | <i>Vanellus vanellus</i> |
| Red Kite | <i>Milvus milvus</i> |
| Redshank | <i>Tringa totanus</i> |
| Redwing | <i>Turdus iliacus</i> |
| Skylark | <i>Alauda arvensis</i> |
| Snipe | <i>Gallinago gallinago</i> |
| Stone curlew | <i>Burhinus oedicnemus</i> |
| Tree sparrow | <i>Passer montanus</i> |
| Turtle dove | <i>Streptopelia turtur</i> |
| Twite | <i>Linaria flavirostris</i> |
| Yellow wagtail | <i>Motacilla flava</i> |
| Bats | |
| Brown long-eared | <i>Plecotus auratus</i> |
| Common pipistrelle | <i>Pipistrellus pipistrellus</i> |
| Soprano pipistrelle | <i>Pipistrellus pygmaeus</i> |
| Invertebrates | |
| White-clawed crayfish | <i>Austropotamobius pallipes</i> |
| Mammals (Excl. Bats) | |
| Badger | <i>Meles meles</i> |
| Brown hare | <i>Lepus europaeus</i> |
| Dormouse | <i>Muscardinus avellanarius</i> |

| | |
|------------|----------------------------|
| Otter | <i>Lutra lutra</i> |
| Water vole | <i>Arvicola amphibius</i> |
| Hedgehog | <i>Erinaceus europaeus</i> |