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Southam Road, Radford Semele, CV31 1TA

Prepared for Montague Property Group

Preliminary Ecological Appraisal

10th December 2020

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Contents Page

Executive Summary	4
1.0 Introduction and Context	6
1.1 Background	6
1.2 Scope of the Report	6
1.3 Site Context	7
1.4 Project Description	7
2.0 Methods	8
2.1 Desk Study	8
2.2 Extended Phase 1 Habitat Survey	8
2.3 Suitability Assessment and Ecological Value	10
2.4 Limitations	12
3.0 Results and Evaluation	13
3.1 Desk Study	13
3.2 Phase 1 Habitat Survey	14
3.3 Protected Species and Species of Principal Importance	15
3.4. Evaluation	17
4.0 Discussion and Recommendations	18
4.1 Discussion	18
4.2 Recommendations – further surveys	19
4.3 Recommendations – opportunities for enhancement	21
16.0 Bibliography	22
Appendix 1: Phase 1 Habitat Map (current site conditions)	24
Appendix 2: Site plan/proposals	26
Appendix 3: Photographs	27
Appendix 4: Species lists from site visit	35
Appendix 5: Legislation and Planning Policy.....	39
Appendix 6: Desk study data (Designated sites and Priority habitats)	43

Executive Summary

Midland Ecology undertook a Preliminary Ecological Appraisal of a site known as 'Southam Road, Radford Semele, CV31 1TA'. This included an extended Phase 1 Habitat Survey (P1HS). Preliminary Ecological Appraisals are used during the site development process to gather data on existing conditions, with the intention of conducting a preliminary assessment of likely impacts of development schemes or establishing the baseline for future monitoring. As a precursor to a proposed project, evaluation can be made within these appraisals of the ecological features present, as well as scoping for notable species or habitats, identification of potential constraints to proposed development schemes, and recommendations for mitigation.

The development proposal briefly comprises of a small housing development is to be constructed on the site, most likely in the western extents of the site. The development proposals are included in Appendix 2.

Baseline Conditions	
Designated Sites	Direct impacts on designated sites are unlikely to arise as the works would be a sufficient distance to avoid dust, noise and visual effects on the reasons for designation.
Habitats	The P1HS identified few habitats within the survey area, which was dominated by improved grassland bordered by lines of trees.
Species	The survey area is suitable for protected species/assemblages. Notably, the site is confirmed to support breeding birds and foraging badgers, and shows a medium likelihood of supporting foraging bats.
Invasive and non-native species	No schedule 9 species were identified on site. Himalayan bramble was found on site, which although not a schedule 9 plant is quite invasive.

Discussion of Impacts and Recommendations	
Discussion of Impacts and mitigation	Impacts A small housing development is to be constructed on the site, most likely in the western extents of the site.
Recommendations	Recommendations Nesting birds may be present in the trees and introduced shrub during the bird breeding season (March to August inclusive). If work is planned during these months, then a prior check (within a 24-hour period

preceding works) for nesting birds should be undertaken by an ecologist. Any active nests that are found must not be moved until fledglings have dispersed. Removal of trees to be mitigated for by planting more native species within the development area, which would also add a biodiversity net gain. The line of trees to the east at target note 6 should be left intact and planted up with more hedge species such as hawthorn and hazel to restore it as a hedge with mature trees. Nest boxes should be incorporated either on the residential properties or on the trees along the eastern boundary to compensate for any loss of nesting opportunities and to add net gain.



Any trees to be removed are to be done so outside the bat maternity season (May-September) and any potential roosting features to be checked by an Ecological Clerk of Works just prior to a tree being felled.

Bat boxes or bat bricks should be incorporated into the house designs, to mitigate for any loss of future roosting opportunities and to add net gain.

Although no schedule 9 species were found the Himalayan bramble found along the eastern boundary is quite invasive and should be removed to prevent issues arising in the future.

Opportunities for enhancements include planting of an orchard area, installing hedgehog houses within that community orchard area, inclusion of bat and bird boxes onto/into the walls of the new properties, and putting in a wildlife pond/scrape if suitable to the north or east of the site. If most of these measure can be accommodated, then the proposed development should result in a net gain for biodiversity on site.

1.0 Introduction and Context

1.1 Background

Midland Ecology were commissioned by Montague Property Group to undertake a Preliminary Ecological Appraisal (PEA) of a site known as 'Southam Road' (hereafter referred to as 'the site' or 'site') and surrounding land within 50m, where accessible, of the red line boundary. The survey included an Extended Phase 1 Habitat Survey, in line with methodology set out in JNCC's *Handbook for Phase 1 habitat survey – a technique for environmental audit* (JNCC, 2010); the assessment is based on the *Guidelines for Preliminary Ecological Appraisal* (CIEEM, 2017).

This is the first ecological survey to be undertaken on the site by Midland Ecology. The author is not aware of any previous ecological surveys having been undertaken at this site.

1.2 Scope of the Report

This report describes the baseline ecological conditions at the site; evaluates habitats within the survey area in the context of the wider environment; and describes the suitability of those habitats for notable or protected species. It identifies significant ecological impacts as a result of the development proposals; summarises the requirements for further surveys and mitigation measures, to inform subsequent mitigation proposals, achieve Planning or other statutory consent, and to comply with wildlife legislation.

The aim of the PEA was to obtain data on existing ecological conditions, and to conduct a preliminary assessment of the likely significance of ecological impacts on the proposed development. To achieve this, the following steps were taken:

- The desk study area and field survey area (generally 50m from the site boundary/proposed footprint and including the 'zone of influence' of the scheme) have been identified
- A desk study has been carried out, including information from a variety of online sources.
- Baseline information on the site and surrounding area has been recorded through an 'Extended Phase 1 Habitat Survey', including a Phase 1 Habitat Survey (JNCC 2010) and recording further details in relation to notable or protected habitats and species
- The ecological features present within the survey area have been evaluated, where possible (IEEM, 2006)
- Invasive plant and animal species (such as those listed on Schedule 9 of the Wildlife & Countryside Act [WCA]) have been identified
- Likely impacts on features of value, as a result of the development proposals, have been identified
- Recommendations for further survey and assessment have been made

- Recommendations for mitigation and opportunities for enhancement have been provided based on current information

The Phase 1 habitat map of the survey area, with supporting target notes, is included in Appendix 1, the proposed project plan is presented in Appendix 2, and photographs taken during the site survey are included in Appendix 3. A list of flora and fauna found on the survey is listed in Appendix 4. A description of relevant legislation, planning policy, and nature conservation Status' is included in Appendix 5, and desk study information is in Appendix 6.

1.3 Site Context

The site is located at National Grid Reference SP342646, and comprises an area of approximately 1.44 hectares. The site is situated within the Leamington Spa area. The area is mostly built-up sub-urban with some open fields and a river present.

1.4 Project Description

This report is prepared in relation to a planning application for residential development, to inform design and ensure legal compliance.

The development proposals include:

- Building residential properties.

The development proposals are included in Appendix 2.

All works areas, storage and haul routes will be included within the site boundary; access will be provided by existing roads and as such, no additional working footprints are anticipated.

2.0 Methods

2.1 Desk Study

A desk study relating to the site and a surrounding 2km radius (the study area) was undertaken. The study area has been defined at this scale as an assessment of any trees suitable for roosting bats is included within this report. There are no statutory designated sites for bats or birds within 10km of the site. This data search is confidential information that is not suitable for public release; therefore only a summary is given within this report.

Freely available information on designated sites, habitats and species of Principal Importance was also reviewed, including a search on Magic.defra.gov.uk and using OS OpenData (2010). Information obtained from the desk study included:

- Landscape structure
- Habitats and species of Principal Importance (as listed on S41 of the Natural Environment and Rural Communities (NERC) Act 2006 (habitats and species of Principal Importance)
- Information on designated sites
- Information on the surrounding area, including water bodies

In line with CIEEM guidance for sites of apparently low ecological significance, biological records data was not requested from the local records centre. Should the ecological potential of the site be found to be higher than originally anticipated, then such data will inform later reports.

2.2 Extended Phase 1 Habitat Survey

The survey was undertaken by Phillip Playford BSc (Hons) MSc MCIEEM (Bat licence number 2020-44658-CLS-CLS, Great Crested Newt licence number 2015-16699-CLS-CLS) on the 5th December 2020.

The survey area generally comprised all land that will be impacted by the proposals; in this instance taken to be the site boundary and a buffer of 50m. For details of the site boundary and survey area, please refer to Appendix 1.

2.2.1 Habitats and flora

The methodology for the Phase 1 Habitat Survey (P1HS) was based on the best practice publication *Phase 1 Habitat Survey methodology* (JNCC, 2010). All land parcels were described and mapped according to JNCC P1HS habitat types. Target notes provide supplementary information on habitat conditions, features too small to map, species composition, structure and management. Scientific names are given after the first mention of a species in this report, subsequently common names are used.

2.2.2 Protected species and Species of Principal Importance

During the survey, habitats were assessed for their suitability to support protected species and notable species assemblages, and field signs indicating their presence or absence recorded. This assessment took into consideration findings of the desk study, habitat conditions on site and in the context of the surrounding landscape, and the ecology of the species. Special attention was made to the following features suitable for protected species:

- Ponds or other water bodies within 500m of the site were identified. The suitability of these and the available terrestrial habitat for great crested newt was assessed; along with considerations of connectivity. Natural England's Great Crested Newt Mitigation Guidelines (English Nature, 2001) recommend that any water bodies within 500m of a site, and sites with suitable terrestrial habitats within 500m of a water body should be assessed for great crested newt potential. However, the great crested newt Rapid Risk Assessment (RRA; from Natural England's EPSL method statement for the species) assesses habitat losses of up to 5 hectares (ha) of land situated greater than 250m from a breeding pond as 'Green: offence highly unlikely'. Thus, for sites less than 5ha (such as this one), greater emphasis is put upon ponds up to 250m from the site boundary.
- Any vegetation cover and topography suitable for badger *Meles meles* sett construction were investigated, and evidence of badger activity recorded.
- Any habitat complexes with a diverse structure and features suitable for basking, foraging and hibernating reptiles were recorded.
- Any suitable foraging, refuge and/or hibernation areas for hedgehogs were inspected for signs of use.
- Evidence of bird nesting/breeding activity on or adjacent to site.

Due to the lack of suitable habitat, field signs, and their known distribution, it is considered unlikely that the survey area supports any other protected species. Therefore, only those species listed above are considered further in this report.

2.2.3 Invasive / non-native species

The distribution and extent of any invasive species listed on Schedule 9 of the Wildlife and Countryside Act (1981) were also noted throughout the survey area.

2.3 Suitability Assessment and Ecological Value

2.3.1 Likelihood of the presence of protected species

The likelihood of occurrence of protected species is ranked according to the criteria listed in Table 1. The habitats on site were evaluated as to their likelihood to provide sheltering, roosting, foraging, basking or nesting habitat.

Table 1: showing criteria considered when assessing the likelihood of occurrence of protected species

Present	Species are confirmed as present from the current survey or recent confirmed records.
High	The site is of high quality for a given species/species group, due to the presence of e.g. Habitat and features of high quality for species/species assemblage. Species known to be present in wider landscape (desk study records). Good quality surrounding habitat and good connectivity.
Medium	The site is of moderate quality for a given species/species group, due to the presence of e.g. Habitat and features of moderate quality. The site in combination with surrounding land provides all habitat/ecological conditions required by the species/assemblage. Within known national distribution of species and local records in desk study area. Factors limiting the likelihood of occurrence may include small habitat area, habitat isolation, and/or disturbance.
Low	Habitats within the site are of poor to moderate quality for a given species/species group. Few or no records from data search. Despite above, presence cannot be discounted as within national range, all required features/conditions present on site and in surrounding landscape. Limiting factors could include isolation, poor quality landscape, or disturbance.
Negligible	Whilst presence cannot be absolutely discounted, the site includes very limited or poor-quality habitat for a particular species or species group. No local records from desk study; site on edge of, or outside, national range. Surrounding habitats considered unlikely to support species/species assemblage.

2.3.2 Assessment of Ecological Value

The ecological value of the survey area has been assessed based on the *Guidelines for Ecological Impact Appraisal* (CIEEM, 2017) and *Handbook of Biodiversity Methods: Survey, evaluation and monitoring* (David Hill, 2005), using geographic frames of reference. The biodiversity value of the identified designated sites, habitat types and associated species/assemblages has been considered. The criteria listed below have been used to reach an evaluation; examples under each category of biodiversity value are provided in Table 2.

- Presence of designated sites or features
- Presence of UK priority habitats and species (S41 of the NERC Act), and species listed as Birds of Conservation Concern (Eaton *et al* 2009)
- Size of habitat, diversity of species, or population

- Habitats or species which are rare, species which are on the edge of their range
- Large populations of uncommon species, or plant communities that are typical of valued natural/semi-natural vegetation types
- Habitats or features that have supporting value for high value habitats, designated sites or protected species, e.g. buffer habitat to ancient woodland
- Presence of legally protected species

Table 2: Examples of criteria defining conservation evaluation

Evaluation on geographical scale	Examples of criteria defining evaluation
<i>International</i>	Biodiversity feature that is designated or warrants designation as a European Protected Site
<i>National</i>	biodiversity feature that is designated or warrants designation as a National designated site (Site of Special Scientific Interest (SSSI) or National Nature Reserve (NNR))
<i>Metropolitan or County</i>	Biodiversity feature that is designated or warrants designation as a county wildlife site, local nature reserve, or a Site of Metropolitan Importance for Nature Conservation (SMI). Species and habitats of principle importance.
<i>Borough</i>	Biodiversity feature that is designated or warrants designation as a Site of Importance for Nature Conservation (SNCI), or other feature which is one of the best examples of its type within the Borough. Diverse and/or ecologically valuable hedgerow network, or ancient woodland greater than 0.25ha
<i>Local</i>	Biodiversity feature which is one of the best examples of its type within a local context (i.e. within ~1km of the scheme extent)/local Parish. Habitat complex considered to enrich the habitat/biodiversity resource within the context of the local neighbourhood.
<i>within the vicinity of the site</i>	Biodiversity features of value within the zone of influence (site plus approximately 50m buffer).
<i>negligible</i>	Biodiversity features of negligible value.

Following CIEEM guidance it should be noted that legal protection or UK Biodiversity Action Plan (BAP) status does not necessarily imply biodiversity status at the equivalent scale. For example, a badger *Meles meles* sett would receive legal protection at a national scale and a native hedgerow would be a UK BAP priority habitat, but neither feature is likely to be of biodiversity value at a national scale.

Where this report accompanies a planning application, the ecological interest of the study area and the proposed development has also been evaluated in terms of the planning policies relating to biodiversity. It will be clearly stated where a preliminary value can be given and where further information is required.

2.4 Limitations

It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report does not provide a complete characterisation of the site.

Where only four figure grid references are provided for biological data, it is not possible to determine their precise location as they could be present anywhere within the given 1km x 1km National Grid square.

This survey provides a preliminary view of the likelihood of protected species being present. This is based on suitability of the habitats on the site and in the local area, the ecology and biology of species as currently understood, and the known distribution of species as recovered during the desk study.

Ecological surveys are limited by a variety of factors, which affect the presence of flora and fauna (e.g. climatic variation, season and species behaviour). A lack of evidence of a protected species during a survey does not mean that the species is absent; hence the surveys also records and assess' the ability of habitats to support such species. The time frame in which the survey is conducted provides a snapshot of activity within the survey area and cannot necessarily detect all evidence of use by a species. The survey was completed in December but despite that the timings of the habitat survey did not present any issues when classifying habitats.

It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation of the natural environment. The Extended Phase 1 habitat survey does not constitute a full botanical survey. Some plant species may have been under-recorded, unidentifiable or not visible due to the time of year the survey was carried out; i.e. some wildflowers flower earlier in the summer, and will have gone over by December.

3.0 Results and Evaluation

3.1 Desk Study

Further desk study data is reproduced in Appendix 6.

3.1.1 Designated sites

There are three statutory designated sites within the study area:

- Leam Valley LNR (41 hectares of flood meadows, marsh, woodland and dry grassland) located 250m north of the site.
- Welches Meadow LNR (6.6 hectares of flood meadow on the bank of the River Leam) located 1.66km north-west of the site.
- Whitnash Brook LNR (5 hectares of marshy grassland and woodland) located 430m west of the site.

The site does however fall within the Impact Risk Zones of two Sites of Special Scientific Interest (SSSI) further afield; Long Itchington & Ufton Woods SSSI approx. 4.1km south-east and Ufton Fields SSSI approx. 4.5km south-east. Their location and extent are illustrated in Appendix 5.

The site does not share similar habitats or strong connectivity with any of these sites however.

3.1.2 Habitats of principal importance

A search of the Magic.defra.gov.uk database shows deciduous woodland fragments are present throughout the study area; the closest lying approx. 160m to the north-east of the site. Further there is a small traditional orchard (approx. 990m to the south of the site), and two areas of woodpasture/parkland (the closest lying approx. 810m to the north-east of the site). Also present is a fragment of good quality semi-improved grassland approx. 1.5km east of the site and eight areas of floodplain grazing marsh (the closest lying approx. 190m north of the site). These habitats are likely to be classified as Priority habitats of principle importance, and of particular value to bats.

3.1.4 Previously granted European Protected Species Mitigation Licences (EPSML)

A search of the Magic.defra.gov.uk database shows no European Protected Species Mitigation Licences (EPSML) have been granted for bats within 2km of site.

3.1.5 Landscape structure

A review of aerial photographs (Figure 1) and OS maps found that the site has limited potential for importance in the context of the surrounding landscape. While the site has linear boundary features, its position within the landscape means that it is unlikely to connect connecting blocks of woodland to the

wider hedgerow network or river, or to otherwise be part of significant commuting/foraging routes for wildlife.



Figure 1: Aerial photograph of the site and surrounding landscape (Map data 2020 Google)

3.2 Phase 1 Habitat Survey

3.2.1 Summary

The survey area was dominated by improved grassland bordered by lines of trees with a patch of introduced shrub (snowberry) in the north-west corner.

3.2.2 Improved grassland

The majority of the site consisted of improved grassland dominated by Cocksfoot and tufted hair grass with some perennial rye grass and some herbaceous plants (Target note 1).

3.2.3 Line of trees

Along the northern border of the site was a fence with a line of trees backing onto some residential properties (Target note 2). This line of trees had a mix of native garden species.

3.2.4 Line of trees with a brick wall

Further along the northern boundary the metal fence changed to a brick wall and later a wooden fence with a line of young planted trees in front of it (Target note 3). The trees were mostly a mix of hawthorn and white poplar with nettles and brambles dominant.

3.2.5 Introduced shrubs, with trees

In the north-west corner of the site was a patch of snowberry with a barbed wire fence and several ash trees present (Target note 4). There was also bramble, ivy and common hogweed forming tall ruderal vegetation along the fence line.

3.2.6 Line of trees

Along the south-western boundary of the site there was a fence line with a line of trees roadside and a wooden bus shelter (Target note 5). The trees were a mix of different species with ash, oak and alder dominant but with several other species including turkey oak and Italian alder.

3.2.7 Line of trees

Along the eastern boundary of the site there was a line of trees (possibly a former hedge that has over-matured into a line of trees) dominated by hawthorn and cherry with blackthorn, oak and birch present (Target note 6). A mix of bramble, Himalayan bramble, some rose, tall ruderal vegetation and hedge mustard were growing underneath the line of trees

3.3 Protected Species and Species of Principal Importance

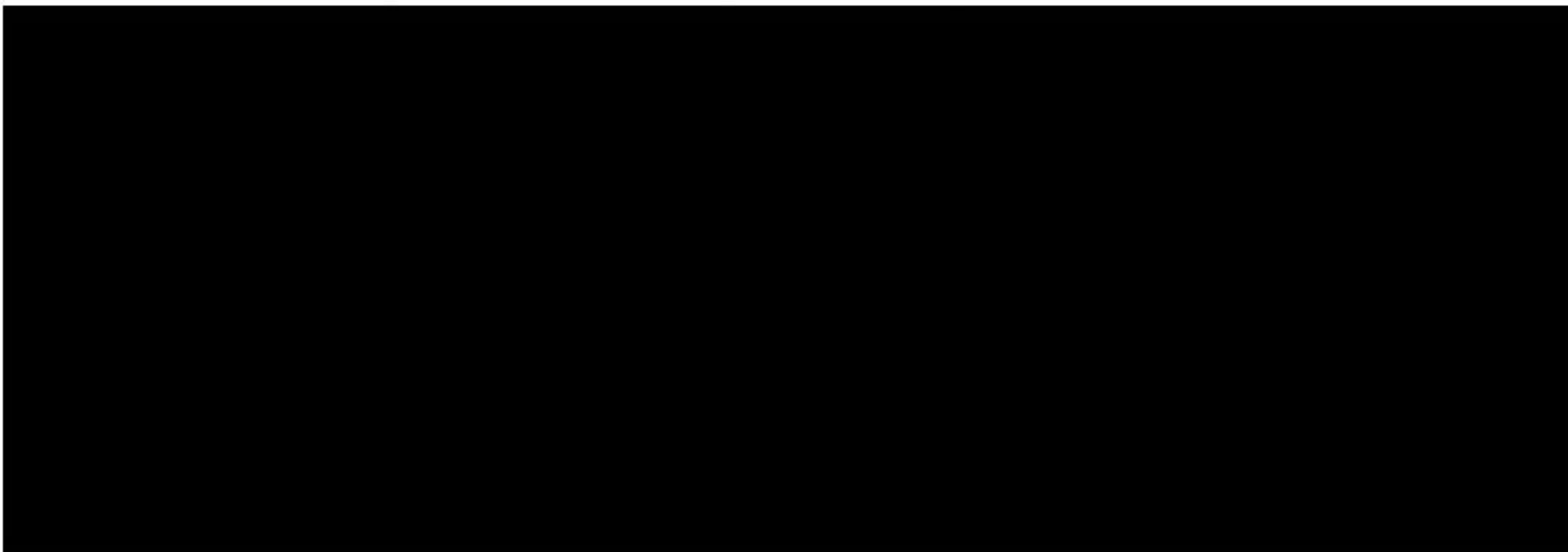


Table 4: Assessment of likelihood of protected and invasive species occurrence

Species/ group	Likelihood of occurrence	Justification for evaluation	Legislation/policy
Bats	Foraging/ commuting: Medium Roosting: Low	<p>The area of improved grassland does have some foraging potential and with the river in close proximity could act as a stepping stone for bats roosting in any houses commuting towards the river. The lines of trees could also provide some foraging potential; particularly for pipistrelles and brown long eared bats.</p> <p>One tree (Target note 7) was observed to have some knot holes with some roosting potential, and several of the trees along the boundary were obscured by ivy so could not be fully inspected.</p>	Wildlife and Countryside Act 1981 (as amended). The Conservation of Habitats and Species Regulations 2017.
Breeding birds	Confirmed	No notable bird species were recorded on site, although an assemblage of common birds was identified during the site visit. The lines of trees on site represents good nesting opportunities for breeding birds with one nest observed (Image 26), along with a bird box (Image 27) and the trees, grassland and introduced shrubs on the site provide some good foraging habitat.	Wildlife and Countryside Act 1981 (as amended).
Great crested newt	Negligible	<p>The introduced shrubs, grassland and the vegetation under the line of trees at target note 6 would provide some suitable foraging habitat. Some of the debris and deadwood along the fence line at target notes 3 and 6 may provide suitable hibernacula opportunities.</p> <p>No suitable ponds were located on site however, and no suitable waterbodies identified within a 250m radius. This species is therefore likely absent.</p>	Wildlife and Countryside Act 1981 (as amended). The Conservation of Habitats and Species Regulations 2017.
Hedgehog	Low	The lines of trees, introduced shrub and grassland would provide suitable foraging habitat and some of the debris along the fence line at target note 3 may provide suitable hibernacula opportunities.	Wildlife and Countryside Act 1981 (as amended).

			The Conservation of Habitats and Species Regulations 2017.
Widespread reptiles	Low	The grassland would provide some suitable foraging habitat and the debris along the hedge may provide suitable hibernacula, particularly for slow worms.	Wildlife and Countryside Act 1981 (as amended).
Invasive plant species	Negligible	No schedule 9 plants found on site on the 5 th December 2020. Himalayan bramble was found, which although not a schedule 9 plant can be quite invasive.	Section 14 and Part II of Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

3.4. Evaluation

Habitats and species across the survey area were evaluated; this evaluation is described in Table 5.

Table 5: Evaluation of ecological receptors

Evaluation	Description of features and explanation of evaluation
International	The site is not designated for its international nature conservation importance. There are no international statutory designated sites within the 2km study area. No species listed on Annex II of the Habitats Directive have been recorded within the survey area; no habitats on site are considered likely to support these species.
National	The site is not subject to any national statutory nature conservation designations and it is not considered that any habitats or species within the site would meet the criteria for the designation of a SSSI.
Metropolitan or County (e.g. Kent)	The site is not subject to any non-statutory nature conservation designations such as Local Wildlife Sites. There are no habitats or species recorded on site considered likely to be of Metropolitan importance.
Borough or District (e.g. Maidstone)	The site is not subject to any non-statutory nature conservation designations such as LWS; nor does it share similar habitats or strong connectivity with nearby LWS.
Local	The site's trees and grassland have the potential to support other protected species (birds, bats, badgers and hedgehog). As such, they are considered to be of some importance locally.
Within the vicinity of the site (approx. 50m)	With the exception of the habitats described above, all habitats within the survey area are considered to be of value within the vicinity of the site only.

4.0 Discussion and Recommendations

4.1 Discussion

The site is not subject to any statutory or non-statutory designations. The site will probably provide foraging opportunities for bats and may support newts, reptiles and hedgehogs by providing places for foraging. All other protected species are likely absent from the site, due to unsuitable habitats, levels of disturbance, species range and landscape context.

4.1.1 Discussion of impacts and the mitigation hierarchy

A description of significant impacts on habitats and species at value greater than the vicinity of the site (that cannot be avoided and can be identified at this stage of the assessment) is provided below. This impact assessment is based on current design proposals; please refer to the project plan in Appendix 2 illustrating and further describing the proposed works. Where sufficient information exists to design mitigation, this is also discussed. Any requirements for further survey to inform detailed mitigation proposals are provided in 4.2. Where further surveys for a particular habitat/complex or species are required prior to Planning Application, mitigation is not discussed in detail at this stage.

Designated sites

Direct impacts on designated sites are unlikely to arise as the works would be a sufficient distance to avoid dust, noise and visual effects on the reasons for designation.

Habitats and plants

The habitats and floral species found on site are common and widespread. The loss of grassland and some of the trees may reduce foraging opportunities for birds, badgers, bats and other mammals. No other significant impacts on biodiversity are anticipated.

Protected species and species of principal importance

Breeding birds: Removal of the shrub or clearance of any of the trees on site would likely affect birds that use the site for breeding by causing a decrease in nesting sites. Loss of these habitats may directly harm nesting birds if carried out during the breeding season (March to August inclusive).

Bats: Removal of the trees and grassland on site would likely affect bats that use the site for foraging and commuting. Loss of these habitats may directly harm roosting bats if carried out during the maternity

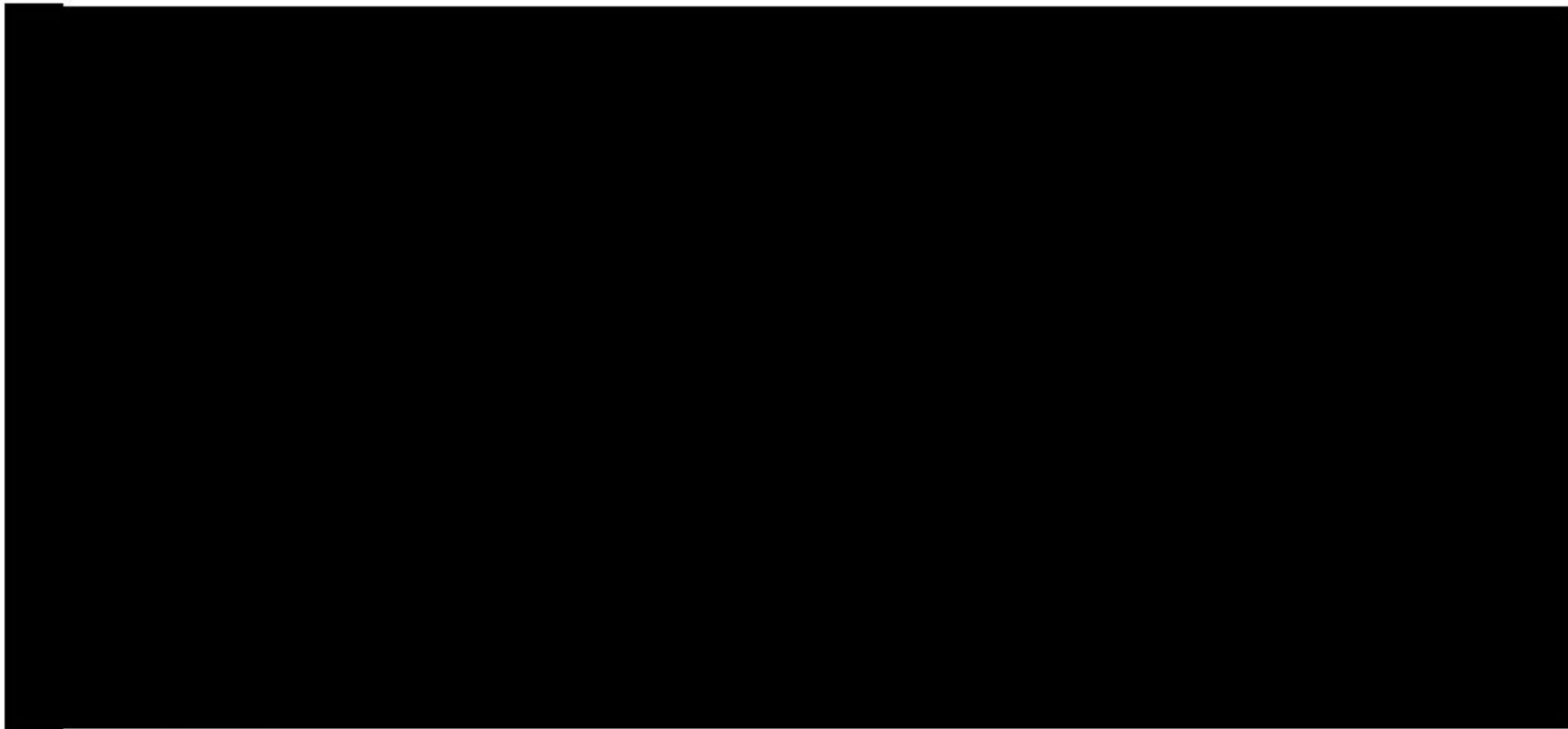
season (May-September inclusive). If bats are roosting in any of the trees then their removal could directly harm bats and reduce roosting opportunities in the future.

Hedgehog: In the event that hedgehogs are present hibernating on site, then there is potential for disturbance and/or direct harm if works are carried out during their hibernation season (September - March).

Reptiles: In the event that reptiles are present hibernating on site, then there is potential for disturbance and/or direct harm if works are carried out during their hibernation season (November-February).

4.2 Recommendations – further surveys

The sections below provide an outline of the additional survey work that should be carried out prior to development, and also a suggested outline for the development of an Ecological Opportunities and Constraints Plan (recommended under BS 42020:2013). Where surveys are required prior to Planning Application, this is clearly stated.



4.2.2 Bats

Further surveys for bats will not be necessary, provided the following avoidance measures can be accommodated:

Any trees to be removed are to be done so outside the maternity season (May-September) and any potential roosting features to be checked by an Ecological Clerk of Works just prior to a tree being felled. Bat boxes or bat bricks should be incorporated into the house designs to mitigate for any loss of roosting opportunities and to add net gain.

4.2.3 Breeding birds

Further surveys for birds are not considered to be necessary, provided the following avoidance measures can be accommodated:

Nesting birds may be present in the trees and introduced shrub during the bird breeding season (March to August inclusive). If work is planned during these months, then a prior check (within a 24-hour period preceding works) for nesting birds should be undertaken by an ecologist. Any active nests that are found must not be moved until fledglings have dispersed.

Removal of trees can be mitigated for by planting more native species within the development area, which would also add a biodiversity net gain. The line of trees to the east at target note 6 should be left intact and planted up with more hedge species such as hawthorn and hazel to restore it as a hedge with mature trees. Nest boxes should be incorporated either on the residential properties or on the trees along the eastern boundary to compensate for any loss of nesting opportunities and to add net gain.

4.2.4 Reptiles

Further surveys for reptiles will not be necessary. Although no reptiles were observed on the site at the time of the survey, they could potentially hibernate (November-February) in some of the debris on the site. Should any evidence of reptile presence be found at any stage during works, then all works must cease and the advice of a suitably qualified Ecologist sought.

4.2.5 Hedgehog

Further surveys for hedgehogs will not be necessary. Although no hedgehogs were observed on the site at the time of the survey, they could potentially hibernate (September-March) in some of the debris in and around the buildings on the site. Should any evidence of hedgehog presence be found at any stage during works, then all works must cease and the advice of a suitably qualified Ecologist sought.

4.2.6 Invasive species

Although no schedule 9 species were found the Himalayan bramble found along the eastern boundary is quite invasive and should be removed to prevent issues arising in the future.

4.3 Recommendations – opportunities for enhancement

Ecological Constraints and Opportunities Plan

The bullet points below represent some broad suggestions that could be included within an ECOP to inform the development proposals. These recommendations should be developed further in coordination with the landscape designers and other specialists as the design progress. It is acknowledged that not all may prove suitable or practical for this development.

- Creation of a community orchard to the rear of the new properties.
- Installing hedgehog houses along the rear of constructed properties backing into the proposed orchard area.
- Putting in a wildlife pond if suitable to the north or east of the site.
- Installation of bird and bat boxes onto/into the walls of the new properties.

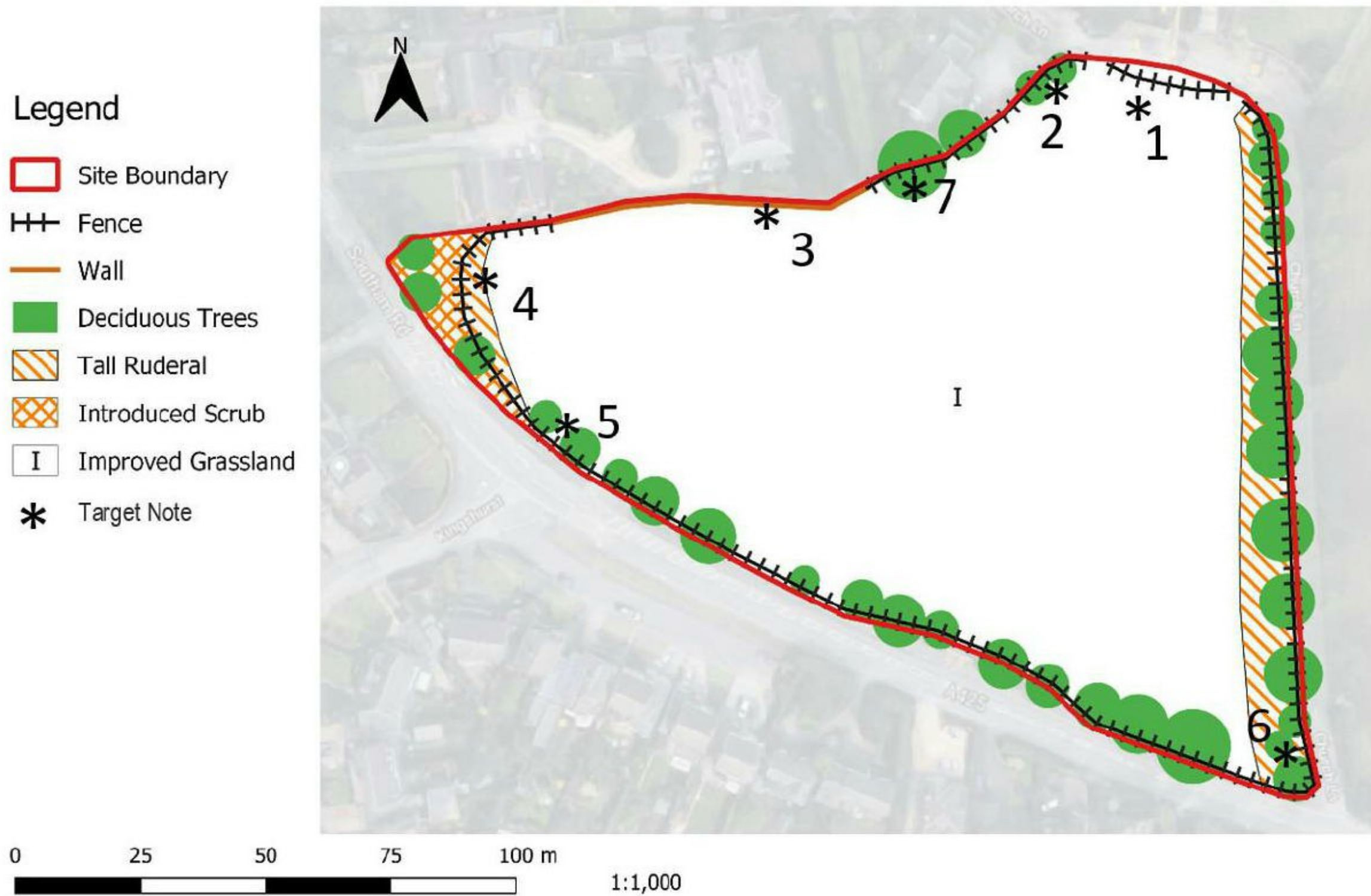
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Appendices

Appendix 1: Phase 1 Habitat Map (current site conditions)

Phase One Habitat Map: Land At Southam Road, Radford, CV31 1TA



Appendix 2: Site plan/proposals



Accommodation Schedule

1no. 5B9P	- 194.0sqm/2088.2sqft
1no. 5B8P	- 172.9sqm/1861.1sqft
3no. 4B7P	- 142.1sqm/1529.6sqft
Total	793.2sqm/8538.1sqft
2no. Double garage	- 35.7sqm/384.3sqm
3no. Single garage (integral)	- 18.9sqm/203.4sqft
Total	128.1sqm/1378.9sqft
Site area	2905sqm/0.72acre



Montague Property Group

Feb2461
**Southam Road
 Radford Semele**
 PLO30
Proposed Site Plan

date: July 2020
 status: Planning

REV **G**

A	Inclusion of Tree Survey and alterations to site accommodation. Layout amended to fit with heritage consultant recommendations.	15/01/21
B	Green space sketch added to the east of the site.	21/01/21
C	Additional buffer planting added within site. Red line amended.	14/02/21
D	Site plan altered to include full site accommodation schedule updated.	18/02/21
E	Corrections to surrounding context. Colour added as per client request.	23/02/21
F	Colour added as per client request.	24/02/21
G	Alterations as per client request. Project name amended.	01/04/21

- Key:
- Existing trees to be retained (and NPO)
 - Trees to be removed
 - Indicative proposed trees



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Appendix 3: Photographs



Image 1: Target note 1 (Improved grassland).



Image 2: Target note 1 (Improved grassland).



Image 3: Target note 1 (Improved grassland).



Image 4: Target note 1 (Improved grassland).



Image 5: Target note 1 (Improved grassland).



Image 6: Target note 1 (Improved grassland).



Image 7: Target note 1 (Improved grassland).



Image 8: Target note 1 (Improved grassland).



Image 9: Target note 2 (line of trees).



Image 10: Target note 2 (line of trees).



Image 11: Target note 3 (line of trees with wall).



Image 12: Target note 3 (line of trees with wall).



Image 13: Target note 4 (Introduced shrub and trees).



Image 14: Target note 4 (Introduced shrub and trees).



Image 15: Target note 5 (Line of trees).



Image 16: Target note 5 (Line of trees).



Image 17: Target note 6 (Line of trees).



Image 18: Target note 6 (Line of trees).



Image 19: Target note 6 (Line of trees).



Image 20: Tree with bat potential at target note 2 (SP34253 64718).



Image 21: Mammal trail at target note 4.



Image 22: Mammal trail at target note 4.



Image 23: Mammal trail at target note 5.



Image 24: Mammal trail at target note 5.



Image 25: Mammal trail at target note 6.



Image 26: Bird's nest at target note 5.

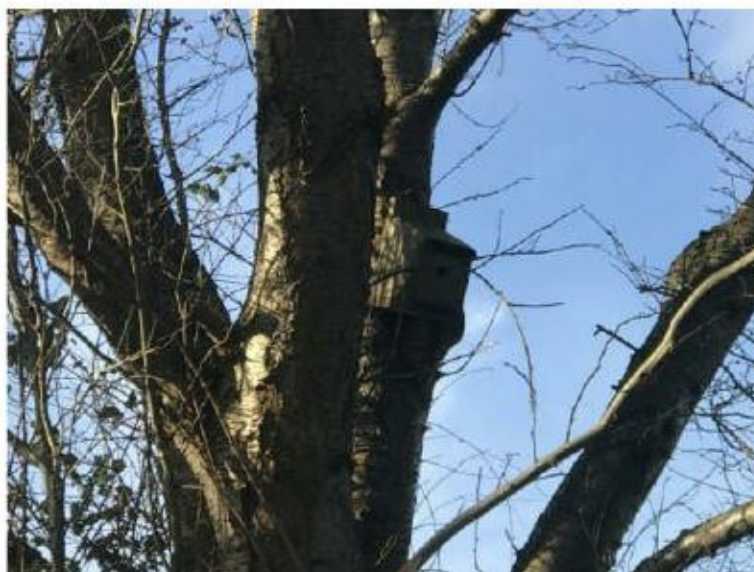


Image 27: Bird box at target note 6.

Appendix 4: Species lists from site visit.

Table 1: Plant species on site 05/12/2020

Target note 1 (Grid reference SP34287 64733): Improved grassland	
Scientific Name	Common Name
<i>Taraxacum officinale agg.</i>	Dandelion
<i>Lolium perenne</i>	perennial rye grass
<i>Deschampsia cespitosa</i>	Tufted hair grass
<i>Dactylis glomerata</i>	Cocksfoot
<i>Rumex obtusifolius</i>	Broad-leaved dock
<i>Ranunculus repens</i>	Creeping buttercup
<i>Urtica dioica</i>	Stinging nettle
<i>Pentaglottis sempervirens</i>	Green Alkanet
<i>Plantago lanceolata</i>	Ribwort plantain
<i>Cyclamen hederifolium</i>	Ivy leaved cyclamen
<i>Leontodon sp.</i>	Hawkbit
<i>Anthriscus sylvestris</i>	Cow parsley
<i>Achillea millefolium</i>	Yarrow
<i>Tussilago farfara</i>	Coltsfoot
Target note 2 (Grid reference SP34287 64733): Line of trees	
<i>Rubus fruticosus agg.</i>	Bramble
<i>Galium aparine</i>	Cleavers
<i>Urtica dioica</i>	Stinging nettle
<i>Hedera helix</i>	Ivy
<i>Betula sp.</i>	Birch
<i>Thuja plicata</i>	Red Cedar
<i>Aesculus hippocastanum</i>	Horse chestnut
<i>Ilex aquifolium</i>	Holly
<i>Ilex sp.</i>	Ornamental hollies
<i>Prunus sp.</i>	Cherry
<i>Laurus nobilis</i>	Bay Laurel
<i>Eucalyptus sp.</i>	Eucalyptus
<i>Picea pungens</i>	Blue Spruce

Target note 3 (Grid reference SP34220 64701): Line of trees with brick wall	
<i>Rubus fruticosus agg.</i>	Bramble
<i>Galium aparine</i>	Cleavers
<i>Urtica dioica</i>	Stinging nettle
<i>Hedera helix</i>	Ivy
<i>Rumex obtusifolius</i>	Broad-leaved dock
<i>Lamium album</i>	White dead nettle
<i>Crataegus monogyna</i>	Hawthorn
<i>Populus alba</i>	White poplar
Target note 4 (Grid reference SP34150 64697): Introduced shrub and trees	
<i>Rubus fruticosus agg.</i>	Bramble
<i>Galium aparine</i>	Cleavers
<i>Urtica dioica</i>	Stinging nettle
<i>Rumex obtusifolius</i>	Broad-leaved dock
<i>Lamium album</i>	White dead nettle
<i>Fraxinus excelsior</i>	Ash
<i>Symphoricarpos albus</i>	Snowberry
<i>Hedera helix</i>	Ivy
<i>Heracleum sphondylium</i>	Common hogweed
Target note 5 (Grid reference SP34153 64675): Line of trees	
<i>Rubus fruticosus agg.</i>	Bramble
<i>Galium aparine</i>	Cleavers
<i>Urtica dioica</i>	Stinging nettle
<i>Crataegus monogyna</i>	Hawthorn
<i>Fraxinus excelsior</i>	Ash
<i>Prunus avium</i>	Cherry
<i>Ilex aquifolium</i>	Holly
<i>Quercus robur</i>	Pedunculate Oak
<i>Quercus cerris</i>	Turkey oak
<i>Castanea sativa</i>	Sweet chestnut
<i>Rosa sp.</i>	Rose
<i>Alnus glutinosa</i>	Alder

<i>Alnus cordata</i>	Italian alder
<i>Anthriscus sylvestris</i>	Cow parsley
Target note 6 (Grid reference SP34311 64600): Line of trees	
<i>Rubus fruticosus agg.</i>	Bramble
<i>Galium aparine</i>	Cleavers
<i>Urtica dioica</i>	Stinging nettle
<i>Hedera helix</i>	Ivy
<i>Rumex obtusifolius</i>	Broad-leaved dock
<i>Geranium robertianum</i>	Herb Robert
<i>Sambucus nigra</i>	Elder
<i>Crataegus monogyna</i>	Hawthorn
<i>Prunus avium</i>	Cherry
<i>Prunus spinosa</i>	Blackthorn
<i>Rosa sp.</i>	Rose
<i>Quercus robur</i>	Pedunculate Oak
<i>Rubus armeniacus</i>	Himalayan bramble
<i>Betula sp.</i>	Birch
<i>Sisymbrium officinale</i>	Hedge mustard

Table 2: Birds species on site 05/12/2020

Scientific Name	Common Name
<i>Columba palumbus</i>	Woodpigeon (direct observation and nest)
<i>Pica pica</i>	Magpie (direct observation)
<i>Turdus merula</i>	Blackbird (direct observation)
<i>Erithacus rubecula</i>	Robin (direct observation)
<i>Troglodytes troglodytes</i>	Wren (direct observation)
<i>Aegithalos caudatus</i>	Long tailed tit (direct observation)

Table 3: Invertebrate species on site 05/12/2020

Scientific Name	Common Name
<i>Araneus diadematus</i>	Garden orb web weaver (direct observation)
<i>Andricus kollari</i>	Oak marble gall wasp (gall)

<i>Stigmella aurella</i>	Bramble leaf miner (direct observation of leaf mines)
<i>Entomobrya intermedia</i>	Springtail (direct observation)
<i>Pogonognathellus longicornis</i>	Springtail (direct observation)
<i>Sminthurus viridis</i>	Springtail (direct observation)
<i>Dicyrtomina saundersi</i>	Springtail (direct observation)

Table 4: Mammal species on site 05/12/2020

Scientific Name	Common Name
<i>Talpa europaea</i>	European mole (direct observation)
<i>Meles meles</i>	Badger (snuffle holes and possible trails)
<i>Oryctolagus cuniculus</i>	Rabbits (trails and droppings)

Table 5: Fungi species on site 05/12/2020

Scientific Name	Common Name
<i>Trametes versicolor</i>	Turkeytail fungus (direct observation)
<i>Puccinia phragmitis</i>	Dock rust fungus (direct observation)
<i>Diatrype stigma</i>	direct observation

Appendix 5: Legislation and Planning Policy

LEGAL PROTECTION

Legislation Afforded to Habitats

National Statutory Designations

Sites of Special Scientific Interest (SSSI) are designated by nature conservation agencies in order to conserve key flora, fauna, geological or physio-geographical features within the UK. The original designations were under the National Parks and Access to the Countryside Act 1949 but SSSIs were then re-designated under the Wildlife & Countryside Act 1981 (as amended). As well as reinforcing other national designations (including National Nature Reserves), the system also provides statutory protection for terrestrial and coastal sites which are important within the European Natura 2000 network and globally. Further provisions for the protection and management of SSSIs have been introduced by the Countryside and Rights of Way Act 2000.

Local Statutory Designations

Local authorities in consultation with the relevant nature conservation agency can declare **Local Nature Reserves (LNRs)** under the National Parks and Access to the Countryside Act 1949. LNRs are designated for flora, fauna or geological interest and are managed locally to retain these features and provide research, education and recreational opportunities.

Non- Statutory Designations

All non-statutorily designated sites are referred to as **Local Wildlife Sites (LWS)** and can be designated by the local authority for supporting local conservation interest. Combined with statutory designation, these sites are considered within Local Development Frameworks under the Town and Country Planning system and are a material consideration during the determination of planning applications. The protection afforded to these sites varies depending on the local authority involved.

National and European Legislation Afforded to Species

The Habitats Directive

The EC Habitats Directive aims to promote the maintenance of biodiversity by requiring Member States to take measures to maintain or restore wild species listed on the Annexes to the Directive at a favourable conservation status, introducing robust protection for those species of European importance. The Directive is transposed into UK law by The Conservation of Habitats and Species Regulations 2010 (the Conservation Regulations) and the Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended). The following notes are relevant for all species protected under the EC Habitats Directive: In the Directive, the term 'deliberate' is interpreted as being somewhat wider than intentional and may be thought of as including an element of recklessness.

The Habitats Regulations do not define the act of 'migration' and, therefore, as a precaution, it is recommended that short distance movement of animals for e.g. foraging, breeding or dispersal purposes are also considered.

In order to obtain a European Protected Species Mitigation (EPSM) licence, the application must demonstrate that it meets all of the following three 'tests':

- the action(s) are necessary for the purpose of preserving public health or safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequence of primary importance for the environment;
- there is no satisfactory alternative; and
- The action authorised will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range.

The Wildlife and Countryside Act (WCA) 1981 (as amended) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and implements the species protection requirements of EC Birds Directive 2009/147/EC on the conservation of wild birds in Great Britain (the birds Directive). The WCA 1981 has been subject to a number of amendments, the most important of which are through the Countryside and Rights of Way (CROW) Act (2000) and Nature Conservation (Scotland) Act 2004.

Other legislative Acts affording protection to wildlife and their habitats include:

- Deer Act 1991
- Natural Environment & Rural Communities (NERC) Act 2006
- Protection of Badgers Act 1992
- Wild Mammals (Protection) Act 1996

Birds

With certain exceptions, all birds, their nests and eggs are protected under Sections 1-8 of the WCA. Among other things, this makes it an offence to:

- Intentionally kill, injure or take any wild bird
- Intentionally take, damage or destroy (or, in Scotland, otherwise interfere with) the nest of any wild bird while it is in use or being built
- Intentionally take or destroy an egg of any wild bird
- Sell, offer or expose for sale, have in his possession or transport for the purpose of sale any wild bird (dead or alive) or bird egg or part thereof.

Certain species of bird, for example the barn owl, bittern and kingfisher receive additional protection under Schedule 1 of the WCA and Annex 1 of the European Community Directive on the Conservation of Wild Birds (2009/147/EC) and are commonly referred to as "Schedule 1" birds. This affords them protection against:

- Intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young
- Intentional or reckless disturbance of dependent young of such a bird

Effects on development works

Works should be planned to avoid the possibility of killing or injuring any wild bird, or damaging or destroying their nests. The most effective way to reduce the likelihood of nest destruction in particular is to undertake work outside the main bird nesting season which typically runs from March to August¹. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

Schedule 1 birds are additionally protected against disturbance during the nesting season. Thus, it will be necessary to ensure that no potentially disturbing works are undertaken in the vicinity of the nest. The most effective way to avoid disturbance is to postpone works until the young have fledged. If this is not feasible, it may be possible to maintain an appropriate buffer zone or standoff around the nest.

Bats

All species are fully protected by Habitats Regulations 2010 as they are listed on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. all bats)
- Deliberate disturbance of bat species in such a way as:
 - to impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - to impair their ability to hibernate or migrate
 - to affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Bats are afforded the following additional protection through the WCA as they are included on Schedule 5:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

Effects on development works

Works which are liable to affect a bat roost or an operation which are likely to result in an illegal level of disturbance to the species will require an EPSM licence. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Wild Mammals (Protection Act) 1996

All wild mammals are protected against intentional acts of cruelty under the above legislation. This makes it an offence to mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

To avoid possible contravention, due care and attention should be taken when carrying out works (for example operations near burrows or nests) with the potential to affect any wild mammal in this way, regardless of whether they are legally protected through other conservation legislation or not.

¹It should be noted that this is considered the main breeding period. Breeding activity may occur outside this period (depending on the particular species and geographical location of the site) and thus due care and attention should be given when undertaking potentially disturbing works at any time of year.

NATIONAL PLANNING POLICY (ENGLAND)

National Planning Policy Framework

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as UK Biodiversity Action Plan priority species) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and The Biodiversity Duty

Section 40 of the Natural Environment and Rural Communities (NERC) Act, 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act (Section 42 in Wales) requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity.' This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

Appendix 6: Desk study data (Designated sites and Priority habitats)

MAGiC

Priority Habitats



<p>Legend</p> <ul style="list-style-type: none"> ■ Priority Habitat Inventory - Coastal and Floodplain Grazing Marsh (England) ■ Priority Habitat Inventory - Good quality semi-improved grassland (Non Priority) (England) Ancient Woodland (England) <ul style="list-style-type: none"> Ancient and Semi-Natural Woodland Ancient Replanted Woodland ■ Priority Habitat Inventory - Deciduous Woodland (England) ■ Priority Habitat Inventory - Traditional Orchards (England) ■ Woodpasture and Parkland BAP Priority Habitat (England) 	<p>0 0.9 1.8 km</p> <p>Projection = OSGB36 xmin = 428300 ymin = 262600 xmax = 439100 ymax = 267600</p> <p>Map produced by MAGiC on 7 December, 2020. Copyright resides with the data suppliers and the map must not be reproduced without their permission. Some information in MAGiC is a snapshot of the information that is being maintained or continually updated by the originating organisation. Please refer to the metadata for details as information may be illustrative or representative rather than definitive at this stage.</p>
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Statutory Designated Sites



Legend

- Local Nature Reserves (England)
- Sites of Special Scientific Interest (England)
- SSSI Impact Risk Zones - to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites (England)

0 0.9 1.8
km

Projection = OSGB36
 xmin = 429100
 ymin = 262200
 xmax = 439500
 ymax = 267500

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