

Additional Plots at Lutterworth Road, Burbage

Preliminary Ecological Appraisal Report (PEAR)



Client:

Davidsons Developments Ltd

Report Reference:

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EXECUTIVE SUMMARY

- i RammSanderson Ecology Ltd were commissioned by Davidsons Developments Ltd to undertake a Preliminary Ecological Appraisal to assess the potential ecological constraints in relation to the proposed additional housing plots (hereafter referred to as the Scheme), located at Lutterworth Road, Burbage.
- ii The land within the Scheme Boundary (hereafter referred to as the Site) is approximately 0.91 ha in size and comprised of modified grassland fields, scrub and species-rich native hedgerows.

Ecological Feature	Potential to be affected by the Scheme	Further Surveys, Assessment or Mitigation Recommended?
Designated Sites	No designated sites will be affected by the Scheme.	No further surveys, assessment or mitigation recommended.
Habitats	Grassland and sections of hedgerow and scrub proposed to be removed to facilitate the Scheme.	No further surveys, assessment or mitigation recommended.
Badger	There was no evidence of badger within the Site. However, a mammal path ran through a hedgerow and some areas of dense bramble within the Survey Area. These areas were inaccessible to be checked for badger sett presence.	No further surveys are required. However, good practice for terrestrial mammals is recommended.
Bats	Trees are present within and adjacent to the Site with bat PRF, but it is proposed that all trees with PRF will be retained.	No further surveys are recommended. However, if any trees within or overhanging onto the Site are to be pruned or removed during the works, or subject to significant levels of disturbance, a further ground level tree assessment (GLTA) should be undertaken.
Hazel Dormouse	There was no evidence of hazel dormouse within the Site, and the features which were suitable to support the species offered limited connectivity to suitable nearby habitat.	No further surveys, assessment or mitigation recommended.
Otter and Water Vole	There was no evidence of otter or water vole within the Site, and no features deemed suitable to support the species.	No further surveys, assessment or mitigation recommended.
Great Crested Newt	There are no water bodies present within 250 of the Site. Some ponds are present within 500m of the Site, however these are separated by major barriers, such as roads and development sites.	No further surveys, assessment or mitigation recommended.
Reptiles	Despite the habitats on the Site being suitable for reptiles, any further surveys would be disproportionate since the Site most likely does not hold an important reptile population.	No further surveys are required. However, good practice for reptiles is recommended.
Birds	Small bird boxes were present within the vegetated gardens to the north and west of the Site. Furthermore, hedgerows, trees and scrub present within the Survey Area have the potential to support nesting birds.	No further surveys are required. However, good practice precautionary working methods for birds and additional habitat

Ecological Feature	Potential to be affected by the Scheme	Further Surveys, Assessment or Mitigation Recommended?
		enhancement measures are recommended.
Terrestrial Invertebrates	There were no features deemed suitable to support notable terrestrial invertebrate assemblages, and there are no records of notable invertebrates within the Site or within close proximity.	No further surveys, assessment or mitigation recommended.
Other Notable Species	The Site could be used by hedgehogs for nesting, commuting and foraging.	No further surveys are required. However, good practice for terrestrial mammals is recommended, and it is recommended that hedgehog highways are created as part of the Scheme to ensure habitat connectivity is maintained for hedgehogs.
BNG	The Scheme would result in a net loss of 5.35 area-based habitat units (-86.56%) and a net loss of 0.91 hedgerow units (-30.07%). The trading rules for low and medium distinctiveness area-based habitats, and for high and medium distinctiveness hedgerow habitats are also failed.	Recommendations to achieve 10% BNG include off-site enhancement of grassland, scrub creation and hedgerow planting, within the land directly adjacent to the Site.

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1 INTRODUCTION

1.1 Terms of Reference

- i RammSanderson Ecology Ltd (RS) were commissioned by Davidsons Developments Ltd to undertake a Preliminary Ecological Appraisal (PEA) to assess the potential ecological constraints for the proposed additional housing plots (hereafter referred to as the Scheme), located at Lutterworth Road, Burbage (central Ordnance Survey National Grid Reference: SP 44627 92126). All land situated within the red line of the Scheme is hereafter referred to as the Site (as shown on Figure 1). The PEA aims to inform the full planning application for the Scheme.
- ii The Site lies within a wider Davidsons Developments Ltd residential development ('Land East of Lutterworth Road', planning ref: APP/K2420/W/20/3265143) which is currently under active construction. RammSanderson have previously carried out a successful adder's tongue fern (*Ophioglossum sp.*) translocation and nesting bird checks within the Site as part of the wider residential development.
- iii A biodiversity net gain (BNG) report was previously published by Focus Environmental Consultants for the residential development (Focus Environmental Consultants, 2022), which included assessment of the Site. The previous reports described the Site as an 'Other neutral grassland' meadow and proposed that it was to be retained. The results of this PEA will supersede the findings and recommendations made within previous reports.
- iv The PEA has been undertaken with reference to current good practice¹ and forms part of the technical information commissioned by Davidsons Developments Ltd in connection with the Scheme. The results of the PEA are presented in this PEA report (PEAR), which addresses relevant wildlife legislation and planning policy as summarised in Appendix 1. The PEAR is consistent with the requirements of British Standard 42020:2013 *Biodiversity. Code of Practice for Planning and Development*.
- v This PEAR is intended for advice in respect of Scheme design, site layout and / or site investigation. Further ecological surveys and / or ecological impact assessment (including detailed mitigation measures) may be required in connection with the planning application or to contribute to an Environmental Impact Assessment once the Scheme proposals have been finalised and any required surveys have been completed.

1.2 The Scheme

- i The Scheme proposes an additional 23 residential plots and the construction of a road and public footpaths and the removal of grassland and sections of hedgerow to facilitate this.

1.3 The Site

- i The Site, as shown in Figure 1, is located to the east of Lutterworth Road, on the south-east outskirts of Burbage, Hinckley within the county of Leicestershire (central Ordnance Survey National Grid Reference: SP 44627 92126) and is approximately 0.91 ha in size. The Site lies to the north of the active Davidsons Developments Ltd development.
- ii The Site comprises two adjoining modified grassland meadows, separated by a native species-rich hedgerow with trees which runs east to west through the centre of the Site. The Site is bound by fencing and scrub along the northern and western boundaries, which back onto existing gardens and residential housing. The

¹CIEEM (2017). Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

Site is bound by a native species-rich hedgerow to the south, which lies immediately adjacent to the wider Davidsons Developments Ltd residential development. The Site is bound by arable farmland to the east. The wider landscape comprises Burbage village to the north/west, and predominantly arable farmland to the east and south. The M69 motorway is located approximately 330m south of the Site.

1.4 Scope of the Preliminary Ecological Appraisal

- i This PEAR presents ecological information obtained during the following:
 - A desk-study undertaken on 27th September 2024 to obtain records of designated sites, notable habitats² and protected and notable species³ up to 2 km of the Site (the area covered by the desk study is hereafter referred to as the Study Area); and,
 - A walkover survey of accessible land within and directly adjacent to the Site (the area covered by the survey is hereafter referred to as the Survey Area) on 29th August 2024.
- ii The purpose of the PEAR is to provide a high-level ecological appraisal of the Site, specifically to:
 - establish baseline conditions and determine the presence of Important Ecological Features (IEF)⁴ (or those that could be present), as far as is possible;
 - to identify potential ecological constraints to the Scheme and make initial recommendations to avoid impacts on IEFs, where possible;
 - to identify requirements for mitigation, where possible, including mitigation measures that will be required and those that may be required (depending on results of further surveys or final scheme design);
 - to establish any requirements for more detailed surveys; and,
 - to identify any opportunities offered by the Scheme to deliver biodiversity enhancements.
- iii The methodology followed for undertaking the desk study and field surveys is detailed in Appendix 2.

² Notable habitats are taken as principal habitats for the conservation of biodiversity listed under Section 41 of the Natural Environment and Rural Communities Act 2006; habitats listed under the Leicestershire and Rutland Biodiversity Action Plan (BAP); hedgerows identified as being 'important' under the wildlife criteria of the Hedgerow Regulations 1997, ancient woodlands and veteran trees.

³ Notable species are taken as principal species for the conservation of biodiversity listed under Section 41 of the Natural Environment and Rural Communities Act 2006; any species listed in an IUCN Red Data Book; and any other species listed under the Leicestershire and Rutland BAP.

⁴ Important Ecological Features are habitats, species, ecosystems and their functions and processes that are of conservation importance and could potentially be affected by the Scheme.

2 BASELINE CONDITIONS, CONSTRAINTS AND RECOMMENDATIONS

2.1 Surveyor Competence

- i The walkover survey was led by Katherine Carter, whom has been a professional ecologist for seven years and has the required competencies (Chartered Institute of Ecology and Environmental Management) to undertake this type of survey.

2.2 Limitations to the Assessment

- i General limitations to undertaking desk and field-based assessments are provided in Appendix 2. There were no further limitations to the assessment.

2.3 Designated Sites

2.3.1 Desk Study

- i Table 1 summarises the designated sites situated within the Study Area.

Table 1. Designated Sites within Study Area

Site Name	Designation	Location ⁵	Brief Description
Burbage, land east of Lutterworth road	cLWS ⁶	70m SE, although no boundary is present so the exact extent of the cLWS is unknown	Complex of 8 fields with good species diversity, many meeting LWS criteria. Also mature Ash.
Aston Lane Ash Trees	cLWS ⁶	0.4km N	Mature tree
Burbage, Lychgate Lane (south) hedge	pLWS ⁷	0.2km E	Hedgerow
Burbage, Bullfurlong Lane track hedge (west)	pLWS ⁷	1.0km SW	Hedgerow
Burbage, Aston Lane green lane hedge (north)	pLWS ⁷	0.4km N	Hedgerow
Cemetery hedgerow	pLWS ⁷	0.6km NE	Species-rich hedgerow

⁵ Where designated sites are situated outside of the Site boundary, the distance and direction is given at the closest point of the designated site from the Site

⁶ Local Wildlife Site (Candidate)

⁷ Local Wildlife Site (Potential)

Site Name	Designation	Location ⁵	Brief Description
Lychgate Lane hedgerows	pLWS ⁷	0.3km E	Species-rich hedgerow
Lutterworth Road hedgerow, Oak and Ash	pLWS ⁷	1.1km SE	Species-rich hedgerow and mature trees
Lutterworth Road Oak tree 3	pLWS ⁷	1.1km SE	Mature tree
Workhouse Lane hedgerow	pLWS ⁷	0.7km S	Species-rich hedgerow
Workhouse Lane hedgerow 2	pLWS ⁷	0.3km SW	Species-rich hedgerow
Hedgerow Oak tree	pLWS ⁷	0.7km SW	Mature tree
Long field hedgerow	pLWS ⁷	0.9km SW	Species-rich hedgerow
Horse field hedgerow	pLWS ⁷	1.0km SW	Species-rich hedgerow
Farm track hedgerows	pLWS ⁷	1.1km SW	Species-rich hedgerow
Triangle fields Ash tree	pLWS ⁷	0.5km S	Mature tree
Workhouse Lane hedgerow 3	pLWS ⁷	0.7km S	Species-rich hedgerow
Burbage, Workhouse Lane veteran Ash and Field Maple	cLWS ⁶	0.4km S	Two veteran trees in field hedgerow off Workhouse Lane: Ash@1020mm diameter, and multi-stemmed formerly coppiced Field Maple with two co-dominant stems (460mm and 575mm) and one subdominant (200mm)
Bullfurlong Lane grassland	pLWS ⁷	0.4km S	Rough grassland with scattered and dense scrub. Informal paths throughout. Not fully surveyed. 9 LWS species recorded.
Burbage, Hedgerows north of A5	pLWS ⁷	1.3km S	A number of hedgerows assessed as 'Important' under the ecological criteria of the Hedgerow Regulations
Grassland E of Sherborne Road	pLWS ⁷	0.8km N	Grassland with 7 LWS indicator species recorded

Site Name	Designation	Location ⁵	Brief Description
Trees W of Aston Flamville Road	cLWS ⁶	1.1km NE	3 cLWS Oaks with girths >3.77m, 2 pLWS Ash with approx girths just below 3m
Manor Lime tree, Aston lane	LWS	0.5km NW	Lime tree, girth 3.76m

2.3.2 Constraints and Recommendations

- ii The Site may fall within, or directly adjacent to, Burbage, land east of Lutterworth road cLWS. However, there is no specific boundary provided by the records centre; a central Ordnance Survey National Grid Reference has been provided which puts Burbage, land east of Lutterworth road at 70m SE of the Site, as noted in the table above. Should the Site fall within the cLWS, consideration should be made that, although this is not a statutory or local designation, it highlights that the Site was identified as having good species diversity and potentially meeting the criteria for LWS designation in 2020. The LWS criteria for Leicester, Leicestershire and Rutland (Leicestershire County Council, 2011) have been reviewed, and following the updated UKHab survey as described within this PEAR, it has been deemed that the Site no longer meets LWS criteria. This is due to the grassland species diversity (in particular, herb abundance and diversity) having decreased since 2020, thereby no longer surpassing the threshold for the number of species required to meet LWS designation. Therefore, no further recommendations are required.

2.4 Habitats

2.4.1 Desk Study

- i Table 2 summarises the records of notable habitats and protected or notable flora⁶ (including veteran trees⁷) within the Study Area.

Table 2. Notable Habitats and Protected and Notable Flora within Study Area

Habitat/ Flora Feature	Reason for Conservation Interest	Location ⁸	Desk Study Comments
Deciduous woodland	Priority habitat	0.3km S 0.8km SW 0.8km S 0.9km S	All parcels contain barriers to connectivity in the form of buildings and/or road infrastructure. Two furthest south parcels lie beyond M69 motorway.

⁶ For this assessment 'flora' includes vascular and non-vascular plants, fungi and lichens.

⁷ For this assessment the definition of a veteran tree is taken from Annex 2 of the National Planning Policy Framework (glossary): "A tree which, because of its great age, size or condition is of exceptional value for wildlife, in the landscape, or culturally."

⁸ Where features are situated outside of the Site boundary, the distance and direction is given at the closest point of the designated site from the Site

Habitat/ Flora Feature	Reason for Conservation Interest	Location ⁸	Desk Study Comments
Traditional orchards	Priority habitat	0.6km S	Parcel lies beyond M69 motorway, acting as a major barrier to connectivity.
Bluebells	Schedule 8 species	0.6km NW 0.9km NE	Found within SRA.
Japanese knotweed	Schedule 9, part 2 species	0.2km NE	Found within SRA.
Variegated Yellow Archangel	Schedule 9, part 2 species	0.6km SE	Found within SRA.
Wall cotoneaster	Schedule 9, part 2 species	0.6km NW	Found within SRA.
Himalayan balsam	Schedule 9, part 2 species	0.6km NW	Found within SRA.

2.4.2 Field Survey

- ii Summary descriptions of the habitats within the Survey Area are provided below in Table 3 and shown on Figure 2, with specific features highlighted by TNs.
- iii Habitat types were recorded using UK Habitat Classifications (UKHab Ltd., 2023). The species list provided in this report reflect only those taxa observed during the survey and are not an exhaustive list of all species that may be present, as the survey only provides a snapshot of the Site.
- iv A small area (0.0024 ha) on the western extent of the Site was inaccessible due to hedgerow and fencing. For the purposes of the biodiversity impact assessment, this has been assumed to be a continuation of the adjacent bramble scrub based on review of aerial imagery.

Table 3: Habitats within Survey Area

UKHab Habitat	Description	Habitat Reference	Area (ha)/ Length (km)	Proportion of site (%)	Ecological Importance & Outcome of Proposal	Photograph
g4 Modified Grassland	Grassland to the south of the central hedgerow within the Site. Has not recently been cut and therefore the sward is tall with a height of approximately 40cm throughout. The grassland is uniform and botanical diversity is poor (<9 species per m²), dominated by cocksfoot (<i>Dactylis glomerata</i>) and common bent (<i>Agrostis capillaris</i>). The most frequently occurring herb species include common sorrel (<i>Rumex acetosa</i>), creeping buttercup (<i>Ranunculus repens</i>) and common knapweed (<i>Centaurea nigra</i>). Other grasses and herbs are sparsely found, primarily around the field margins. This grassland is separated from the northern grassland field by the central hedgerow running from east to west through the centre of the Site, however the hedgerow finishes approximately 4m from the western site extent, therefore the grasslands are connected in part. The below species list has been recorded using the DAFOR scale (Dominant, Abundant, Frequent, Occasional or Rare). Species list: cocksfoot D, Yorkshire fog (<i>Holcus lanatus</i>) A, creeping thistle (<i>Cirsium arvense</i>) O, common sorrel F, sweet vernal grass (<i>Anthoxanthum odoratum</i>) O, hogweed (<i>Heracleum sphondylium</i>) O, common bent A, red clover (<i>Trifolium pratense</i>) R, perennial rye grass (<i>Lolium perenne</i>) R, fescue sp. (<i>Festuca</i> sp.) F, creeping buttercup F, ribwort plantain (<i>Plantago lanceolata</i>) R, meadow buttercup (<i>Ranunculus acris</i>) R, yarrow (<i>Achillea millefolium</i>) O, common nettle (<i>Urtica dioica</i>) O, common knapweed F, common dandelion (<i>Taraxacum officinale</i>) R, curled dock (<i>Rumex crispus</i>) R, common ragwort (<i>Jacobaea vulgaris</i>) R, birds-foot trefoil (<i>Lotus corniculatus</i>) R, rough hawkbit (<i>Leontodon hispidus</i>) R, crested dogs-tail (<i>Cynosurus cristatus</i>) R, timothy (<i>Cynosurus cristatus</i>) R, great willow herb (<i>Epilobium hirsutum</i>) R. The grassland was previously classified as 'g3c – Other neutral grassland' (Focus Environmental Consultants,	G1	0.36	39.58%	Limited ecological value ('Low' distinctiveness habitat according to the Statutory Biodiversity Metric (DEFRA, 2023). Habitat is proposed to be lost to the development.	  

UKHab Habitat	Description	Habitat Reference	Area (ha)/ Length (km)	Proportion of site (%)	Ecological Importance & Outcome of Proposal	Photograph
	2022). However, in order to be classified as 'g3c - Other neutral grassland', three of the following four criteria must be met (UKHab Ltd., 2023): "1. >20% cover of broadleaved herbs and sedges; 2. >8 species per m² (including forbs, grasses, sedges and rushes, and excluding bryophytes); 3. ≥1 grass species that is not generally sown for intensive agricultural production (ie. Rye-grasses <i>Lolium</i> spp., Timothy <i>Phleum pratense</i>, Cock's-foot <i>Dactylis glomerata</i>, Meadow fescue <i>Festuca pratensis</i>) is at least abundant; 4. Cover of Rye-grasses <i>Lolium</i> spp. and White Clover <i>Trifolium repens</i>, where present, is <30%." The grassland only achieves criteria 3 and 4, but fails to meet criteria 1 and 2. Furthermore, the 'g4 - Modified grassland' category includes species -poor grasslands which have occurred through natural succession, where cover of <i>Lolium</i> sp. is less than 'abundant', and where grass cover is >75%. Therefore, this grassland meets the criteria for 'g4 - Modified grassland'.					
g4 Modified Grassland	Grassland to the north of the central hedgerow within the Site. Has not recently been cut and therefore the sward is tall with a height of approximately 40cm throughout. The grassland is uniform and botanical diversity is poor (<9 species per m²), dominated by Yorkshire fog. The most frequently occurring herb species are creeping buttercup, meadow buttercup, common knapweed and creeping thistle. Becomes slightly more herb-rich to the east of the Site boundary, with a larger abundance of ribwort plantain and birds-foot trefoil.	G2	0.50	55.55%	Limited ecological value ('Low' distinctiveness habitat according to the Statutory Biodiversity Metric (DEFRA, 2023). Habitat is proposed to be lost to the development.	

UKHab Habitat	Description	Habitat Reference	Area (ha)/ Length (km)	Proportion of site (%)	Ecological Importance & Outcome of Proposal	Photograph
	Species list: cocksfoot A, Yorkshire fog D, creeping thistle O, common sorrel R, sweet vernal grass O, hogweed R, common bent A, red clover R, perennial rye grass R, fescue sp. R, creeping buttercup A, ribwort plantain R, meadow buttercup A, common nettle R, common knapweed O, curled dock R, birds-foot trefoil R, timothy R. The grassland was previously classified as 'g3c – Other neutral grassland' (Focus Environmental Consultants, 2022). However, in order to be classified as 'g3c – Other neutral grassland', three of the following four criteria must be met (UKHab Ltd., 2023): "1. >20% cover of broadleaved herbs and sedges; 2. >8 species per m² (including forbs, grasses, sedges and rushes, and excluding bryophytes); 3. ≥1 grass species that is not generally sown for intensive agricultural production (ie. Rye-grasses <i>Lolium</i> spp., Timothy <i>Phleum pratense</i>, Cock's-foot <i>Dactylis glomerata</i>, Meadow fescue <i>Festuca pratensis</i>) is at least abundant; 4. Cover of Rye-grasses <i>Lolium</i> spp. and White Clover <i>Trifolium repens</i>, where present, is <30%." The grassland only achieves criteria 3 and 4, but fails to meet criteria 1 and 2. Furthermore, the 'g4 – Modified grassland' category includes species -poor grasslands which have occurred through natural succession, where cover of <i>Lolium</i> sp. is less than 'abundant', and where grass cover is >75%. Therefore, this grassland meets the criteria for 'g4 – Modified grassland'.					

UKHab Habitat	Description	Habitat Reference	Area (ha)/ Length (km)	Proportion of site (%)	Ecological Importance & Outcome of Proposal	Photograph
H2a5 – 11 Species- rich native hedgerow (with trees)	Central within the Site, native species-rich hedgerow with two trees; semi-mature ash (<i>Fraxinus excelsior</i>; T2) and mature field maple (<i>Acer campestre</i>; T1). Hedgerow is not regularly managed, with a height of approximately 3m and width of 2m. The hedgerow is continuous with one gap of approx. 1m wide adjacent to the ash tree, and there is no gap between the canopy and ground. There is no distinct ground flora, instead the adjacent grassland adjacent goes up to the hedgerow edge. Species list: blackthorn (<i>Prunus spinosa</i>) O, bramble (<i>Rubus fruticosus</i>) D, dogrose (<i>Rosa canina</i>) O, common hawthorn (<i>Crataegus monogyna</i>) O, English elm, (<i>Ulmus procera</i>) F, ash R, field maple R.	H1	0.11	N/A	Ecologically important ('High' distinctiveness habitat according to the Statutory Biodiversity Metric (DEFRA, 2023). Habitat should be retained where possible. It is expected that the Scheme will retain most of the hedgerow and both trees.	 

UKHab Habitat	Description	Habitat Reference	Area (ha)/ Length (km)	Proportion of site (%)	Ecological Importance & Outcome of Proposal	Photograph
						

UKHab Habitat	Description	Habitat Reference	Area (ha)/ Length (km)	Proportion of site (%)	Ecological Importance & Outcome of Proposal	Photograph
H2a5 Species-rich native hedgerow	Forming the southern boundary of the Site, native species-rich hedgerow, dominated by bramble. Hedgerow is not regularly managed, with a height of approximately 3m and width of 2m. The hedgerow is continuous with one gap of approx. 5m wide for access to the grassland from the development to the south, and there is no gap between the canopy and ground. Ground flora comprises common nettle, creeping thistle and hogweed. Species list: bramble D, common hawthorn A, elder R, ash O, elm O, field maple O.	H2	0.05	N/A	Ecologically important ('Medium' distinctiveness habitat according to the Statutory Biodiversity Metric (DEFRA, 2023). Habitat should be retained where possible.	

UKHab Habitat	Description	Habitat Reference	Area (ha)/ Length (km)	Proportion of site (%)	Ecological Importance & Outcome of Proposal	Photograph
Individual tree (urban tree)	A total of eight individual (urban) trees are present within the Survey Area. Two of these are within the Site boundary, within H1. The two trees within the Site are as follows: T1- Mature field maple of approximately 8m, medium in size. Veteran features present and potential roost features (PRF) include a potential cavity on the trunk, south facing. T2- Semi-mature ash of approximately 12m, large in size. Veteran features are present but no PRF. T1 and T2 are photographed, respectively. Other trees present within the Survey Area fall outside of the Site boundary, within adjacent vegetated gardens/outside of the Site heras fencing. These include: - One mature ash with ivy cover, containing a bird box, outside of the northern Site boundary within a garden. PRF feature- ivy cover. - One small semi-mature crack willow (<i>Salix × fragilis</i>) outside of the northern Site boundary. No veteran or PRF features. - A group of three trees within a vegetated garden outside of the northern Site boundary; a medium semi-mature field maple, a small semi-mature ash, and a small semi-mature pedunculate oak. No veteran or PRF features. - One medium semi-mature ash outside of the western Site boundary within a vegetated garden. No veteran/PRF features.	T1 (field maple), T2 (ash), N/A for trees outside of the Site boundary.	N/A	N/A	Ecologically important ('Medium' distinctiveness habitat according to the Statutory Biodiversity Metric (DEFRA, 2023). Habitat should be retained where possible. It is expected that the Scheme will retain both T1 and T2 which are within the Site, and will also retain all trees outside of the Site boundary.	 

H3h Mixed scrub	Patches of scattered mixed scrub along western boundary of the Site, partially within the Site but predominantly outside of the heras fencing. A patch of snowberry (<i>Symphoricarpos</i> sp.) is present within this scrub (TN1), which is an invasive species (however is not listed as a Schedule 9 invasive species). Species list: elm O, blackthorn F, creeping thistle F, bittersweet nightshade R, snowberry F, bramble A, common nettle F.	MS1	0.008	0.93	Ecologically important ('Medium' distinctiveness habitat according to the Statutory Biodiversity Metric (DEFRA, 2023). Habitat should be retained where possible.
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UKHab Habitat	Description	Habitat Reference	Area (ha)/ Length (km)	Proportion of site (%)	Ecological Importance & Outcome of Proposal	Photograph
H3d Bramble scrub	Outside of the northern boundary of the Site but within the western boundary of the Site, outside of the heras fencing, dense bramble scrub.	BS1	0.035	3.94	Limited ecological value ('Low' distinctiveness habitat according to the Statutory Biodiversity Metric (DEFRA, 2023). Habitat is proposed to be retained as falls outside of the Site boundary.	

2.4.1 Constraints and Recommendations

- v It is anticipated that most of the grassland areas will be lost to the Scheme. The LWS criteria for Leicester, Leicestershire and Rutland (Leicestershire County Council, 2011) have been reviewed, and following the updated UKHab survey, it has been deemed that the Site no longer meets LWS criteria. This is due to the grassland species diversity (in particular, herb abundance and diversity) having decreased since 2020, thereby no longer surpassing the threshold for the number of species required to meet LWS designation for neutral grasslands. Therefore, no further recommendations are required.
- vi Some sections of hedgerow may be lost to the Scheme. As only minimal lengths of hedgerow are proposed to be affected (<20m), therefore, no further surveys are recommended.
- vii If greater lengths of hedgerow are required to be lost to the Scheme, a hedgerow regulations survey may be required to determine the ecological value of the hedgerow. This would be dependant upon the amount of hedgerow proposed to be lost.

2.5 Badger

2.5.1 Desk Study

- i There are two recent records of badger within the Study Area. Both records were recorded approximately 1.0km NW from the Site.

2.5.2 Field Survey

- ii There was no evidence of badger within the Site. There was, however, a mammal path through H1 (TN2) and some areas of dense bramble scrub within the Survey Area, around the northern and western boundaries of the Site. These areas were inaccessible to be checked for badger sett presence. It is unlikely that a badger sett will be present in these areas due to the close proximity to existing houses and vegetated gardens.
- iii Good practise for terrestrial mammals is recommended. To minimise the risk of harm to animals using the Site preventative measures should be in place during construction. Including:
 - Mammal ladders (such as a plank) or earth ramps to be placed in any open excavations at the end of each day to prevent animals from becoming trapped;
 - Cap off any open pipes at the end of each day;
 - Keep all fuel and other harmful substances in a locked area;
 - Ensure any spillages are treated with spill kits;
 - Night work should be avoided where possible, and any flood lighting should face away from the site boundaries; and
 - If any fresh sett digging is observed notify an ecologist immediately and leave a 30m buffer around the area until an assessment can be made.

2.6 Bats

2.6.1 Desk Study

- i There are 35 recent records of bats within the Study Area. The closest/ most relevant of these records is associated with noctule (*Nyctalus noctule*), common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*), all of which was approximately 400 m NW from the Site.

2.6.2 Field Survey

- ii Table 4 summarises the potential for features and habitats within the Survey Area to support roosting bats.
- iii Features and habitats in Table 4 are shown on Figure 2.

Table 4: Summary of features with potential to support Bats

Feature	Description	Location ⁹	Grading	Photographs
Tree (T1)	Mature field maple of approximately 8m, medium in size. Veteran features present and potential roost features (PRF) include a potential cavity on the trunk, south facing. It is not possible to tell from the ground whether the cavity extends into the trunk.	Centre of the Site, within H1	Low	

⁹ Where features are situated outside of the Site boundary, the distance and direction is given at the closest point of the feature from the Site

Feature	Description	Location ⁹	Grading	Photographs
Tree (T2)	T2- Semi-mature ash of approximately 12m, large in size. Veteran features are present but no PRF.	Centre of the Site, within H1	Negligible	
Tree	One mature ash with ivy cover, containing a bird box. PRF feature – ivy cover.	Outside of the northern Site boundary within a garden.	Low	 

Feature	Description	Location ⁹	Grading	Photographs
Tree	One small semi-mature crack willow (<i>Salix × fragilis</i>). No veteran or PRF features.	Outside of the northern Site boundary.	Negligible	
Small group of trees	A medium semi-mature field maple, a small semi-mature ash, and a small semi-mature pedunculate oak. No veteran or PRF features.	Outside of the northern Site boundary.	Negligible	

Feature	Description	Location ⁹	Grading	Photographs
Tree	One medium semi-mature ash. No veteran or PRF features.	Outside of the western Site boundary.	Negligible	

2.6.3 Constraints and Recommendations

- iv Trees are present within and adjacent to the Site with bat PRF, but it is proposed that all trees with PRF will be retained, therefore no further surveys are recommended.
- v If any trees within or overhanging onto Site are to be pruned or removed during works, or subject to significant levels of disturbance by working in close proximity, a further ground level tree assessment (GLTA) should be undertaken. This survey can be completed at any time of the year, though it is optimal between late autumn and early spring when leaves do not obscure the trunk of the tree.
- vi Any trees which are assigned PRF-M (suitability for large numbers and/or maternity) or confirmed as supporting a bat roost will require three further surveys, which can either be aerial climb and inspect surveys or nocturnal emergence surveys. At least two of the surveys should be undertaken between May and August (the third survey can be undertaken in September if necessary) and the three surveys should be spaced at least three weeks apart from each other. Trees that have PRF-I (low numbers/individual bats) bat roosting potential should be soft felled in the presence of an appropriately experienced ecologist. This is best done in winter when bats are less likely to be using the feature as a roost opportunistically, though they can be felled at any time of the year.
- vii Where roosting bats are recorded, any works to the roost will require a protected species mitigation licence to be in place prior to the works taking place, with appropriate mitigation and compensation agreed with Natural England.
- viii Hedgerow habitats within the Site provide Moderate suitability for foraging bats. Due to the nature of the proposed works, and the presence of suitable habitats remaining largely unaffected, no further activity surveys are deemed necessary.
- ix Efforts should be made to minimise the effects of increased artificial lighting upon retained habitats, and night works should not be undertaken. If avoidance of lighting is not possible, any new lighting should follow the guidance set out in Bats and Lighting in the UK (BCT and ILP, 2023). Therefore, associated site lighting proposals should consider the following:
 - Avoid lighting where possible;
 - Install lamps and the lowest permissible density;
 - Lamps should be positioned to direct light to avoid upward spill onto any green corridors that could be used by commuting bats or features with bat roost potential;
 - LED lighting – with no/low UV component is recommended;
 - Lights with a warm colour temperature – 3000K or 2700K have significantly less impact on bats;
 - Light sources that peak higher than 550nm also reduce impacts to bats; and
 - The use of timers and dimmers to avoid lighting areas of the site all night is recommended.

2.7 Hazel Dormouse

2.7.1 Desk Study

- i There are no recent records of hazel dormouse within the Study Area.

2.7.2 Field Survey

- ii There was no evidence of hazel dormouse within the Site, and the features which were suitable to support the species (hedgerows and scrub) offered limited connectivity to suitable nearby habitat, such as woodlands, due to surrounding developments. Therefore, no recommendations are made.

2.8 Otter and Water Vole

2.8.1 Desk Study

- i There are no recent records of otter or water vole within the Study Area.

2.8.2 Field Survey

- ii There was no evidence of otter or water vole within the Site, and no features deemed suitable to support the species, therefore no recommendations are made.

2.9 Great Crested Newt

2.9.1 Desk Study

- i There are no recent records of great crested newts (*Triturus cristatus*) within the Study Area.
- ii There are no water bodies present within 250m of the Site (Figure 3). Some ponds are present within 500m of the Site, however these are separated by major barriers such as roads and development sites.

2.9.2 Field Survey

- iii There were no features deemed suitable to support great crested newts within the Survey Area or within 250m of the Site, therefore no recommendations are made.

2.10 Common Species of Reptile

- i 'Common species of reptile' refers to common lizard, slow worm, adder and grass snake. The Site is located outside of the known range of smooth snake and sand lizard and these species are not considered in this report.

2.10.2 Desk Study

- ii There are two recent records of grass snake within the Study Area. The closest was approximately 0.9km NE from the Site boundary.

2.10.3 Field Survey

- iii No evidence of reptile was found during the survey. The bramble scrub and hedgerows present within the Survey Area provide habitat which could be used by reptiles, however, due to the location of the Site and proximity to an existing active building site and housing it is unlikely that reptiles are present within these areas.

2.10.4 Constraints and Recommendations

- iv Despite the habitats on Site being suitable for reptiles, any further surveys would be disproportionate since the Site most likely does not hold an important reptile population. As reptiles typically hibernate underground or under log or stone piles (hibernacula), they are unlikely to be impacted by vegetation clearance works in winter unless tree stump removal or excavations are required. Where possible stump removal or excavations should be undertaken in the active reptile season (spring/summer/early autumn). This means the ideal time to dig on site is September and October to avoid impacts to breeding birds and reptiles. Where this is not possible an ecologist should be present on site to perform checks immediately prior to works (24hrs).
- v Vegetation clearance is best timed for autumn/winter to avoid active reptiles.
- vi Where vegetation clearance on the Site is required in spring/summer, the habitats should first be cut to a height of 15-20cm by a hand tool such as brush cutter, progressing at walking pace only. The area should be left for 24-48hrs and then cut to 5cm using the same method, working in the same direction as the previous cut. This will allow any reptiles present to disperse into the wider environment unharmed. In the unlikely event

that a reptile is seen during the works they should be allowed to escape unharmed at their own pace. Only a trained ecologist should attempt to move reptiles by hand. If multiple reptiles are encountered, works should cease, and the methodology be re-evaluated.

2.11 Birds (Including Barn Owl)

2.11.1 Desk Study

- i There are recent records for 24 notable¹⁰ bird species within the Study Area, the closest being found 0.4km NW of the Site. These include 8 species listed on Annex I of the EC Birds Directive 1994, 4 species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), 11 Species of Principal Importance (SPI), and one species on the BoCC5 Amber list. The records also include two species of bird that are priority species in Leicestershire listed on the Leicestershire and Rutland Local Biodiversity Action Plan.

2.11.2 Field Survey

- ii Some small bird boxes were present within the vegetated gardens to the north and west of the Site, suitable for blue tits (*Cyanistes caeruleus*) and robins (*Erithacus rubecula*). Furthermore, hedgerows, trees and scrub present within the Survey Area have the potential to support nesting birds.

2.11.3 Constraints and Recommendations

- iii It is highly unlikely that large numbers of notable species or notable assemblages of birds utilise the Site for breeding due to high levels of disturbance of the Site. Partial hedgerow loss is unlikely to have a significant impact on any notable populations since the boundary hedgerows are proposed to be retained. However, it is recommended that, as a compensation or enhancement measure, nest boxes are incorporated into the design, to enhance the value of the Site for bird species.
- iv Additionally, whilst loss of habitat is not deemed to have a significant impact on any notable bird species or populations, there remains a risk of works destroying active nests. Where possible works to buildings should be minimised and undertaken outside the core bird nesting season (1st March and 31st August, though it should be noted that variation in dates is possible, for example from geographical variations in climate, or due to a particularly mild winter) to avoid damage or destruction of occupied nests or harm to breeding birds. If this cannot be achieved, works within the core bird nesting season will require an inspection of the works areas to be cleared for breeding birds and their occupied nests by a suitably qualified ecologist no more than 24 hours prior to any works being undertaken. If any nesting birds are identified during the survey, they will be left in situ for their entire nesting period and alternative approaches to the work proposed. This may include leaving an exclusion zone around the nests to avoid disturbance.

¹⁰ Notable bird species are taken as those listed: on Annex I of the EC Birds Directive (2009/147/EC); on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended); as Species of Principal Importance (SPI) for the Conservation of Biodiversity in England listed in Section 41 of the Natural Environment and Rural Communities Act 2006; as Red or Amber in the Birds of Conservation Concern (BoCC) 4 (Eaton MA, Aebischer NJ, Brown AF, Hearn RD, Lock L, Musgrove AJ, Noble DG, Stroud DA and Gregory RD (2015). Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and Isle of Man. British Birds 108, 708-746); bird species or groups listed under the Leicestershire and Rutland BAP.

2.12 Terrestrial Invertebrates

2.12.1 Desk Study

- i There are no recent records of notable¹¹ terrestrial invertebrates within the Study Area.

2.12.2 Field Survey

- ii There were no features deemed suitable to support notable terrestrial invertebrate assemblages, and there are no records of notable invertebrates within the Site or within close proximity to the Site, therefore no recommendations are made.

2.13 Other Notable Species

2.13.1 Desk Study

- i There are 18 recent records of other notable species¹² within the Study Area. The closest / most relevant of these records is associated with European hedgehog (*Erinaceus europaeus*) which was approximately 120m SW of the Site boundary.

2.13.2 Field Survey

- ii There was no evidence of other notable species within the Site, however, the Site contains suitable habitat for hedgehog nesting, commuting and foraging (hedgerows and scrub).

2.13.3 Constraints and Recommendations

- iii The Site could be used by hedgehogs for nesting, commuting and foraging.
- iv No further surveys are required, however, it is recommended that hedgehog highways are created as part of the Scheme to ensure habitat connectivity is maintained for hedgehogs.

¹¹ Notable terrestrial invertebrates are taken as principal species for the conservation of biodiversity listed under Section 41 of the Natural Environment and Rural Communities Act 2006; any invertebrate listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended); any invertebrate listed under Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended); any invertebrate listed in the IUCN Invertebrate Red Data Book (1991); and any invertebrate listed under a Leicestershire and Rutland BAP.

¹² Notable species are taken as principal species for the conservation of biodiversity listed under Section 41 of the Natural Environment and Rural Communities Act 2006; any species listed in an IUCN Red Data Book; and any other species listed under the Leicestershire and Rutland BAP that are not referred to in previous sections of the report.

3 BIODIVERSITY IMPACT ASSESSMENT

- i A high-level¹³ biodiversity impact assessment (BIA) based on the current Scheme details has been undertaken. This involves making a comparison between the biodiversity value of habitats present within the Site prior to development (i.e. the 'baseline') and the predicted biodiversity value of habitats following the completion of the Scheme (i.e. 'post development'). The comparison is undertaken in terms of 'biodiversity units', with a 'biodiversity metric' providing the mechanism to allow biodiversity values to be calculated and compared. The Scheme is required to achieve 10% biodiversity net gain (BNG) under national legislation (see Appendix 1).
- ii The baseline biodiversity value of the Site is as follows:
 - 6.18 area-based habitat units.
 - 3.03 hedgerow habitat units.
- iii Post development, the Scheme would result in the following:
 - A loss of 5.35 area-based units. This equates to an 86.56% loss.
 - A loss of 0.91 hedgerow units. This equates to a 30.07% loss
- iv The trading rules for low and medium distinctiveness area-based habitats, and for high and medium distinctiveness hedgerow habitats are also failed.
- v Therefore, the Scheme does not achieve the target of 10% BNG, meaning BNG offsetting is required.
- vi The assessment is based on the proposed Scheme details, as summarised in Section 1 and does not include any additional potential compensation or enhancements, which is detailed in Section 4 of this report below.
- vii The methodology for undertaking the assessment is provided in Appendix 2. Full details on the assessment calculations are provided in Appendix 3.

On-site baseline	Habitat units	6.18	
	Hedgerow units	3.03	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.83	
	Hedgerow units	2.12	
	Watercourse units	0.00	
On-site net change (units & percentage)	Habitat units	-5.35	-86.56%
	Hedgerow units	-0.91	-30.07%
	Watercourse units	0.00	0.00%

FINAL RESULTS			
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-5.35	
	Hedgerow units	-0.91	
	Watercourse units	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-86.56%	
	Hedgerow units	-30.07%	
	Watercourse units	0.00%	
Trading rules satisfied?	No - Check Trading Summaries ▲		

¹³ High level refers to the fact that Scheme proposals including landscaping, and any required ecological mitigation are not finalised at this stage of the assessment.

4 OPPORTUNITIES FOR ENHANCEMENTS

- i This section highlights opportunities for providing ecological enhancements, based on the current Scheme details. These are high level opportunities and would need to be developed in greater detail once further surveys have been completed and the Scheme proposals, such as detailed areas of habitat loss are confirmed.

4.1 Biodiversity Net Gain

- i The Scheme would result in a net loss of 5.35 area-based habitat units (-86.56%) and a net loss of 0.91 hedgerow units (-30.07%). The trading rules for low and medium distinctiveness area-based habitats, and for high and medium distinctiveness hedgerow habitats are also failed.
- ii To offset these losses and to achieve +10% BNG for both area-based and hedgerow habitats, whilst also satisfying the trading rules, habitat creation or enhancement is required.
- iii The biodiversity gain hierarchy (UK Government, 2024) states that habitat offsetting for BNG should be focused on-site as a priority. However, due to the small scale of the Site, there are only limited opportunities for habitat compensation/enhancement measures which means that achieving 10% BNG within the Site boundary is unlikely based on the current Scheme design. As such, off-site compensation will be required to offset the BNG losses a result of the Scheme.
- iv The following enhancements could be implemented in order to achieve 10% BNG for area-based and hedgerow habitats whilst also satisfying trading rules:
- v **Area-based Habitat Recommendations:**
It is recommended that the remaining areas of both grassland fields which are outside of the Site boundary (approx. 1.68ha in total) are used to offset the BNG loss for area-based habitats. Within the biodiversity metric, these habitat interventions are classed as 'off-site' due to the areas falling outside of the Site boundary. The areas are currently classified as modified grassland in good condition. It is proposed that 1.655ha of the grassland is enhanced to neutral grassland in good condition. It is recommended that this grassland enhancement should incorporate the species listed within the Leicester, Leicestershire and Rutland LWS neutral grassland criteria list (Leicestershire County Council, 2011), as well as satisfying the Statutory Biodiversity Metric condition assessment criteria for good condition neutral grassland. The remaining 0.025ha of the grassland should be replaced with the creation of mixed scrub in moderate condition. This is the minimum area of mixed scrub required to satisfy the trading rules for medium distinctiveness habitats. If both of these recommendations are implemented, then the Scheme would achieve a gain of 22.13% for area-based habitats, whilst also satisfying the trading rules for low and medium distinctiveness habitats.
- vi **Hedgerow Habitat Recommendations:**
It is recommended that a minimum of 0.12km of species-rich native hedgerow with trees is created on-site or off-site, potentially around the field boundaries which are currently lacking any hedgerow. With this recommendation implemented, the Scheme would achieve a gain of 10.15% for hedgerow habitats, whilst also satisfying the trading rules for medium and high distinctiveness hedgerow habitats.

4.2 Other Enhancements

- i The following enhancements could be delivered for biodiversity as part of the Scheme, which don't contribute towards the calculation of BNG but can still deliver significant improvements for biodiversity:
 - Any landscape planting associated with the Scheme should consider the use of native shrub species and also species such as lavender which provide important sources for pollinating species. The Royal Horticultural Society provide online resources to identify suitable plants for garden areas that

are aesthetically pleasing but of significant value to local pollinators (www.rhs.org.uk/plantsforpollinators).

- Consideration to provision of bird nest boxes could also be given in respects to the retained trees. Use of boxes such as the Schwegler 1B nest box provide a long-term nest box solution requiring limited replacement unlike wooden boxes which need regular replacement as a result of weathering.
- Consideration to provision of bat boxes could also be given in respects to the retained trees. Use of boxes such as the Vivara woodstone box provide a long-term nest box solution requiring limited replacement unlike wooden boxes which need regular replacement as a result of weathering.
- Consideration to provision of bat boxes could also be given in respects to the new building. Use of in-cavity boxes such as Ibstock Enclosed Bat Box C provide a long term nest box solution incorporated into the building.
- Where any close board fencing is proposed within the Site, small 130m x 130m holes should be installed within the fences. Signs such as 'Hedgehog Highway' signs (available from the British Hedgehog Preservation Society) should be installed above gaps, to reduce the risk of homeowners blocking holes.

5 CONCLUSION

- i This PEAR is based on a desk study and ecological surveys undertaken on 29th August and 27th September 2024, to assess the ecological constraints to the Scheme and to provide advice in respect of Scheme design, site layout and / or site investigation.
- ii Currently, no further surveys are recommended to support the Scheme based on the current Scheme design. However, Precautionary working methods have been recommended for bats, birds, terrestrial mammals and reptiles.
- iii The Scheme would result in a net loss of 5.35 area-based habitat units (-86.56%) and a net loss of 0.91 hedgerow units (-30.07%). The trading rules for low and medium distinctiveness area-based habitats, and for high and medium distinctiveness hedgerow habitats are also failed. Recommendations to achieve 10% BNG include off-site enhancement of grassland, scrub creation and hedgerow planting, within the land directly adjacent to the Site.
- iv Other enhancements for biodiversity that could be delivered as part of the Scheme include the provision of bird boxes, bat boxes, hedgehog highways and native planting species.

5.2 Re-Survey of Site

- i Due to the mobility of animals and the potential for colonisation of the Site, it is recommended that an updated ecological survey be undertaken prior to the redevelopment of this Site should this not occur within 12 months of the date of the field survey.

6 FIGURES

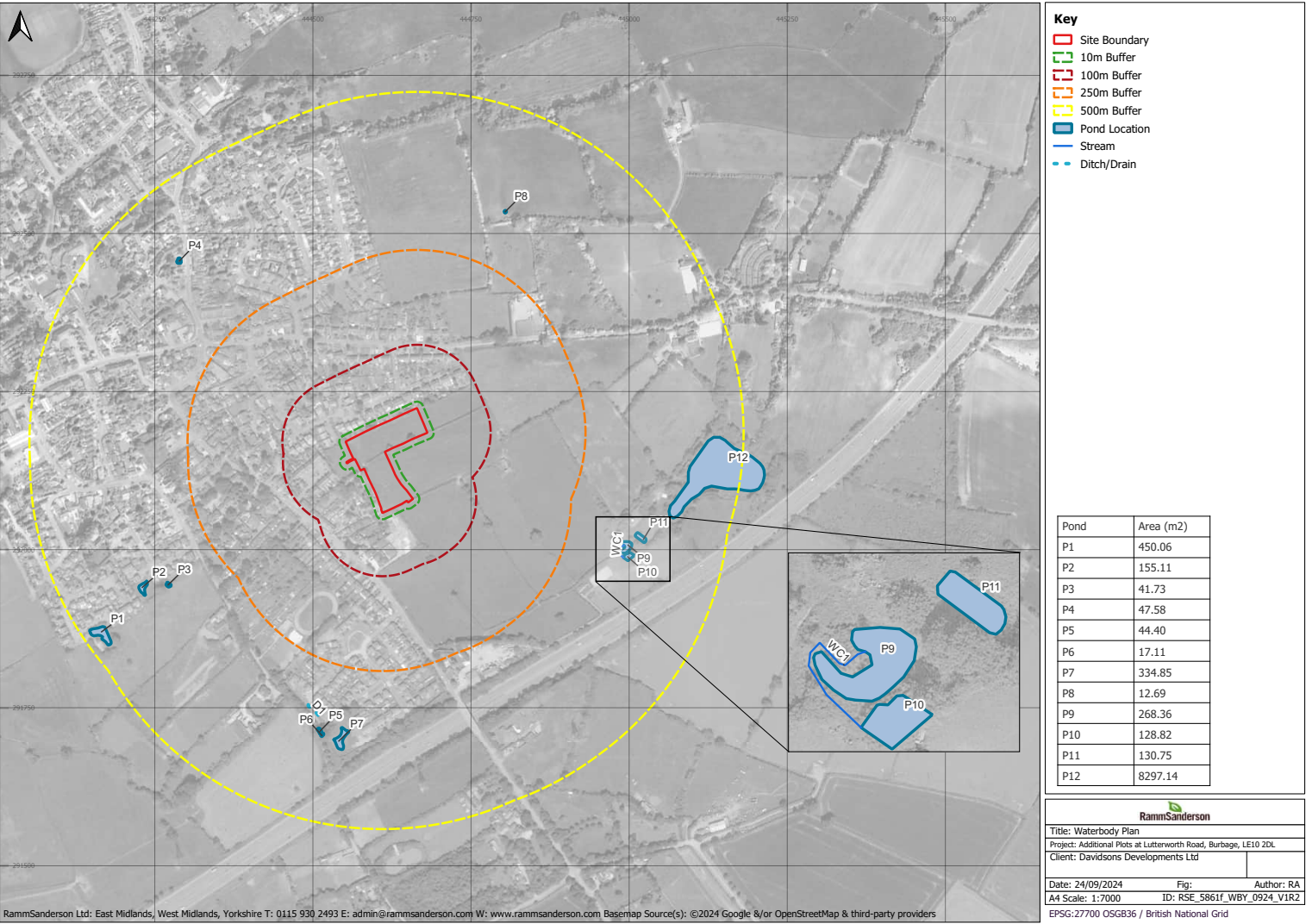
Figure 1: Site Location and Context Plan



Figure 2: UKHab Habitat Plan



Figure 3: Waterbody Plan



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APPENDIX 1: RELEVANT LEGISLATION AND PLANNING POLICY

The UK is no longer a member of the European Union (EU). EU legislation as it applied to the UK on 31 December 2020 is now a part of UK domestic legislation. EU legislation which applied directly or indirectly to the UK before 11.00 p.m. on 31 December 2020 has been retained in UK law as a form of domestic legislation known as 'retained EU legislation'.

The Secretary of State for the Environment, Food and Rural Affairs and Welsh Ministers have made changes to parts of the Conservation of Habitats and Species Regulations 2017 (referred to as the 2017 Regulations) so that they operate effectively. Most of these changes involve transferring functions from the European Commission to the appropriate authorities in England. All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant and are now referred to as The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (the 2019 Regulations).

Designated Sites

Locally Designated Sites

Local Wildlife Sites are sites with 'substantive nature conservation value'. They are defined areas, identified and selected for their nature conservation value, based on important, distinctive and threatened habitats and species within a region.

They are usually selected by the relevant Wildlife Trust, along with representatives of the local authority and other local wildlife conservation groups.

The LWS selection panel, select all sites that meet the assigned criteria, unlike SSSIs, which for some habitats are a representative sample of sites that meet the national standard. Consequently, many sites of SSSI quality are not designated and instead are selected as LWSs. Consequently, LWSs can be amongst the best sites for biodiversity.

Protected Species

Bats / Hazel Dormouse / Otter / Great Crested Newt

These species, known as European Protected Species, are protected under Regulation 43 of the 2017 Regulations as amended by the 2019 Regulations. This makes it an offence to deliberately capture, injure or kill an animal; deliberately disturb an animal; or damage or destroy a breeding site or resting place used by an animal.

Deliberate capture or killing is taken to include "accepting the possibility" of such capture or killing. Deliberate disturbance of animals includes in particular any disturbance which is likely a) to impair their ability (i) to survive, to breed or reproduce, or to rear or nurture their young, or (ii) in the case of animals of hibernating or migratory species, to hibernate or migrate; or b) to affect significantly the local distribution or abundance of the species to which they belong.

Where development works are at risk of causing one or more of the offences listed above, a mitigation licence from Natural England can be obtained to facilitate the works that would otherwise be illegal.

These species are also protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb an animal in such a place.

Lower levels of disturbance not covered by the Conservation of Habitats and Species Regulations 2017 remain an offence under the Wildlife and Countryside Act 1981 although a defence is available where such actions are the incidental result of a lawful activity that could not reasonably be avoided.

Nesting Birds

All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended), with some species afforded greater protection under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). In addition to the protection from killing or taking that all birds receive, Schedule 1 birds and their young must not be disturbed at the nest.

There are no licensing purposes that explicitly cover development activities affecting wild birds.

Common Species of Reptile (common lizard, slow worm, grass snake and adder)

Common species of reptile are protected against intentional killing and injury under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). There is no requirement for a licence where development works affect common species of reptiles. Instead, Natural England (English Nature, 2004) advise that where reptiles are present, they should be protected from any harm that might arise during the development works through appropriate mitigation.

Badger

Badgers and their setts are protected under the Protection of Badgers Act 1992 (as amended). This makes it an offence to wilfully kill, injure or take a badger; or intentionally or recklessly damage, destroy or obstruct access to a badger sett or disturb a badger in its sett.

It is not illegal to carry out disturbance activities near setts that are not occupied, i.e. those that do not show signs of current use.

Where required, licences for development activities involving disturbance or sett interference or closure are issued by Natural England. Licences for activities involving watercourse maintenance, drainage works or flood defences are issued under a separate process.

When assessing the requirement for a licence in respect of development, Natural England (Natural England, 2009) state that badgers are relatively tolerant of moderate levels of noise and activity around their setts, and that a low or moderate level of apparent disturbing activity at or near to badger setts does not necessarily disturb the badgers occupying those setts.

Licences are normally not granted from December to June inclusive (the badger breeding season) because dependent cubs may be present within setts.

Species and Habitats of Principal Importance for the Conservation of Biodiversity

Section 40 of the Natural Environment & Rural Communities Act (NERC) 2006 sets out the duty for public authorities to conserve biodiversity in England.

Habitats and species of principal importance for the conservation of biodiversity are identified by the Secretary of State for England, in consultation with Natural England, are referred to in Section 41 of the NERC Act for England. The list, known as the 'England Biodiversity List', of habitats and species can be found on the Natural England web site.

The 'England Biodiversity List' is used as a guide for decision makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the NERC Act 2006 to have regard to the conservation of biodiversity in England when carrying out their normal functions. The habitats and species on the List, are material considerations of planning, where present on an application site.

Hedgerows

Under The Hedgerow Regulations, 1997, it is against the law to remove or destroy certain hedgerows without permission from the local planning authority. In general, permission will be required before removing hedges that are at least 20 metres in length, over 30 years old and contain certain species of plant. The local planning authority will assess the importance of the hedgerow using criteria set out in the regulations.

Non-native Invasive Plant Species

Under the Wildlife and Countryside Act, 1981 (as amended), it is an offence to plant or otherwise cause these species to grow in the wild.

Any contaminated soil or plant material is classified as controlled waste and should be disposed of in a suitably licensed landfill site, accompanied by appropriate Waste Transfer documentation, and must comply with section 34 of the Environmental Protection Act 1990.

Planning Policy

National Planning Policy Framework, 2021

The National Planning Policy Framework (NPPF) (Department of Communities & Local Government, 2021) sets out the Governments planning policies for England and how these are expected to be applied by Local Authorities within their Local Development Frameworks (LDF).

Regarding the NPPF, the most pertinent paragraphs are:

8.c) “to protect and enhance our natural, built and historic environment, including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy”

174.d) “minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures”

179.b) “promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.”

180.a) “if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.”

180.c) “development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons⁶³ and a suitable compensation strategy exists.”

BNG Policy

The National Planning Policy Framework states that “*planning decisions should minimise impacts on and provide net gain for biodiversity*”. Furthermore, from February 2024, 10% BNG became mandatory under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). This means all relevant developments must achieve at least 10% BNG relative to the baseline biodiversity value of all land within the planning application boundary.

Local Planning Policy

Hinkey and Bosworth Local Plan 2006 to 2026

“The Environment

3.27. The borough’s attractive environment is one of its key strengths in many people’s minds and safeguards to protect the best of its landscapes, wildlife and heritage- whilst encouraging responsible enjoyment of it- must therefore be at the centre of spatial policies.

*3.28. **8. Enhance identity and distinctiveness of the built and natural environment** - A key challenge is to ensure new developments are locally distinctive and contribute to the identity of an area. Concern has been raised in the past about the lack of local distinctiveness in new housing developments. Related to this is the need to*

avoid coalescence of settlements so that separate identities remain and the need to safeguard valuable assets such as conservation areas, listed buildings, sites of archaeological and cultural heritage interest, geology and landscape character. Ten Landscape Character Areas have been identified in Hinckley & Bosworth, each with their own key characteristics which contribute to local distinctiveness and sense of place and it is important that development reflects and embraces these differences. In addition the council has embarked on a programme of conservation area appraisals which it aims to complete across the borough by 2013. The conservation area appraisals will highlight where listed buildings are considered to be at risk.

3.29. 9. Preserve and enhance natural habitats and biodiversity - Despite popular natural attractions such as Burbage Common, Charnwood Forest, Ashby Canal and part of the National Forest, biodiversity is not particularly high overall. In fact, the East Midlands has one of the lowest percentages of woodland cover compared to the UK as a whole. There are 7 Sites of Special Scientific Interest in the borough, of these 60% are in an unfavourable condition and are continuing to decline. There are also numerous local wildlife sites/Sites of Importance for Nature Conservation. There is a strong need to provide protection and enhancement to these sites and the nature conservation sites, habitats and species listed in the Leicester, Leicestershire and Rutland Biodiversity Action Plan (BAP). The development occurring in Hinckley & Bosworth up until 2026 is likely to increase the pressure on the borough's landscapes and green spaces as well as presenting opportunities for enhancing and extending green infrastructure assets, linking and improving biodiversity within the borough.

3.30. 10. Improve resource management - Pollution of air or water is not a major issue for Hinckley & Bosworth compared to some other areas, but diminishing space for landfill of waste is a big concern. To address this issue, it is important to manage waste more sustainably by reducing its creation, recycling as much as possible for example by promoting designs and layouts in new development that integrate waste management facilities to encourage recycling, and reducing the amount of waste going to landfill by recovering value from waste, for example, by energy generation. There is also currently a lack of sustainable construction in the design and build of new developments in the borough – both commercial and residential. Improving resource management, through improved energy efficiency and reduced carbon emissions will help reduce the impacts of climate change. A Strategic Flood Risk for the borough has been undertaken which suggests flooding is not a major issue for this borough. Nevertheless, flood mitigation measures, such as sustainable urban drainage, will need to be incorporated into new developments to ensure this issue is suitably addressed.”

Local Biodiversity Action Plans

Leicester, Leicestershire and Rutland Biodiversity Action Plan:

“Aims:

- Create and maintain inventories of UK and local Priority Habitats listed in the Leicester, Leicestershire and Rutland Biodiversity Action Plan
- Report on changes in condition and extent of UK BAP Priority Habitats through the UK BAP reporting system
- Report on status of BAP Priority Habitat associated with Local Wildlife Sites as part of statutory responsibilities
- Promote management, restoration and creation of BAP habitat through the planning system and other local actions

Habitats of national importance: Broadleaved woodland Calcareous grassland Eutrophic standing water Field margins Heath-grassland Hedgerows Lowland wood-pasture and parkland Mesotrophic lakes Neutral grassland Reedbed Wet woodland Rivers (in preparation)"

APPENDIX 2: METHODOLOGY

Desk Study

Background Records Search

The preliminary ecological assessment includes a desk study to obtain background records relevant to a Site and the Scheme. The data obtained provides contextual information for the scope of field surveys, to aid the evaluation of field survey results, and to provide supplementary information where complete field survey coverage is not possible.

The Study Area is dependent upon the nature, timing and scale of the Scheme, as well as the location of the Site and the surrounding landscape. These variables all contribute to what is referred to as the Zone of Influence (Zoi) of the Scheme, which is the area over which ecological features may be affected by biophysical changes because of the works and associated activities.

On 24/09/2024, Leicestershire and Rutland Environmental Records Centre was contacted to obtain the following ecological data:

- Records of non-statutory designated sites within 1 km of the Site boundary;
- Records of legally protected and notable species (fauna and flora) within 1 km of the Site boundary, including Species of Principal Importance for the Conservation of Biodiversity listed under Section 41 of the Natural Environment & Rural Communities Act 2006 in the England Biodiversity List¹⁴.

The Multi-Agency Geographic Information for the Countryside (MAGIC) (www.magic.gov.uk) website was reviewed for the following information:

- Designated sites of nature conservation importance (statutory sites only) within 1 km of the Site. This was extended to 1 km for internationally designated sites: Special Protection Areas (SPAs), Wetlands of International Importance (Ramsar sites) and Special Areas of Conservation (SACs); and,
- Notable habitats within 1 km of the Site, these being areas of ancient woodland and 'Habitats of Principal Importance for the Conservation of Biodiversity' included in the England Biodiversity List.

Great Crested Newt Pond Search

Ordnance Survey maps and the Where's the Path website (<https://wtp2.appspot.com/wheresthepath.htm>) have been used to identify the presence of water bodies within 500 m of the Site boundary, in order to help establish if the land within and immediately surrounding the Site could be used by great crested newts. This species can use suitable terrestrial habitat up to 500 m from a breeding pond (English Nature, 2001), though there is a notable decrease in great crested newt abundance beyond 250 m from a breeding pond (Natural England, 2004).

Field Survey

The preliminary ecological assessment includes a walkover survey of the Survey Area (all land within the Site and directly adjacent to the Site), broadly following the UKHab survey methodology (UKHab Ltd., 2023). This survey method records information on habitat types and is 'extended' to record any evidence of and potential for protected or notable species to be present. Plant names recorded during the survey follow (Stace, 2019).

¹⁴ Section 40 of the Natural Environment & Rural Communities Act 2006 requires that very public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity. The Secretary of State has drawn up, in accordance with Section 41 of the Act and in consultation with Natural England, a list of habitats and species of principal importance for the conservation of biodiversity in England that is known as the England Biodiversity List

During the walkover survey, the following protected or notable species are considered:

- **Badger:** the survey involves searching for signs of badger activity including setts, tracks, snuffle holes and latrines, following the methodology detailed in (Scottish Natural Heritage, 2018) and (Harris, 1989).
- **Bats:** the survey involves searching for potential roosting sites for bats within trees and structures (such as buildings, bridges or underground features such as mines) and categorising the potential of those trees or structures to support roosting bats (negligible to high, or confirmed roost), in accordance with Bat Conservation Trust (BCT) (Collins, J. (Eds.), 2016) guidance.
- **Hazel dormouse:** the survey involves assessing the potential of habitats within the Survey Area to support hazel dormouse, following English Nature guidance (English Nature, 2006);
- **Otter:** the survey involves assessing the potential of watercourses and water bodies, and adjacent terrestrial habitat within the Survey Area to support otter, following RSPB (Ward, 1994) and (Chanin, 2003) guidance;
- **Water vole:** the survey involves assessing the potential of watercourses and water bodies within the Survey Area to support water vole, following The Mammal Society (Dean, 2016) guidance;
- **Birds:** the survey involves assessing the potential of habitats within the Survey Area to support breeding, wintering or migrating birds, either individually notable species or assemblages of both common and rarer species;
- **Great crested newt:** the survey involves assessing the potential of habitats within the Survey Area to support great crested newt, following English Nature (English Nature, 2001) and Froglife (Froglife, 2001) guidance;
- **Reptiles:** the survey involves assessing the potential of habitats within the Survey Area to support reptiles (typically adder, grass snake, common lizard and slow worm only, though in some locations and habitat types (most notably heathland) may also include smooth snake and sand lizard), following Froglife (Froglife, 1999) and JNCC (Joint Nature Conservation Committee, 2003) guidance;
- **Notable species of invertebrate:** the survey involves assessing the potential of habitats within the Survey Area to support notable species of invertebrates, both terrestrial and aquatic (including white-clawed crayfish);
- **Protected or Notable species of plants:** the survey involves recording protected or notable plant species;
- **Other notable species:** the survey involves assessing the potential of habitat within the Survey Area to support other Notable Species, such as hedgehog, brown hare, polecat or common toad;
- **Non-native invasive plant species:** the survey involves recording evidence of the presence of invasive plants listed on (Wildlife and Countryside Act, 1981 (as amended)) and subject to strict legal control.

Tree Bat Roost Suitability Assessment

Trees were graded as to their suitability for supporting roosting bats using (Collins, J. (Eds.), 2016), an extract of which is provided interpreted in the table below.

Table 5: Criteria for bat roost potential assessment of trees

Roost Potential	Description	Surveys Required (Trees)
PRF	A tree with at least one PRF present	3 – including 1 dawn as a minimum

Roost Potential	Description	Surveys Required (Trees)
FAR	Further assessment required to determine if PRFs are present in the tree	Precautionary Mitigation Approach, some instances may require further survey
None	Either no PRFs in the tree or highly unlikely to be any	None

Biodiversity Accounting

The biodiversity net gains assessment involves making a comparison between the biodiversity value of habitats present within the Site prior to a development (i.e. the 'baseline') and the predicted biodiversity value of habitats following the completion of the Scheme (i.e. 'post development'). The comparison is undertaken in terms of 'biodiversity units', with a 'biodiversity metric' providing the mechanism to allow biodiversity values to be calculated and compared.

The metric assesses and generates separate outputs for area-based habitats and linear based habitats (with rivers reported separately to other habitats like hedgerows). A development cannot claim to achieve net gain until biodiversity net gains are predicted across all area-based, linear based and river based habitats.

The calculation for area-based and linear (non-river) habitats calculates biodiversity units as follows:

- Before Works = Distinctiveness Score x Condition Assessment x Area/Length x strategic significance
- After Works = ((Distinctiveness Score x Condition Score x Area/ Length x strategic significance) / Time to Target Condition) / Difficulty of Creation/Restoration

The five factors are determined as set out below:

- Distinctiveness Score – High, Medium or Low, based on UK habitat classifications.
- Condition Score – Good, Fairly good, Moderate, Fairly poor or Poor, based on habitat condition assessment.
- Area/Length – hectares (ha)/ length (km) of habitat type.
- Strategic significance – High (Within area formally identified in local strategy), Medium (Location ecologically desirable but not in local strategy) and Low (Area/compensation not in local strategy/ no local strategy).
- Time until target condition – time period (in years) until the target condition will be achieved.
- Difficulty of creation/restoration – a score applied to account for risk associated with creating/restoring different types of habitat.

Limitations

The aim of a desk study is to help characterise the baseline context of a proposed development and provide valuable background information that would not be captured by a single site survey alone. Information obtained during the course of a desk study is dependent upon people and organisations having made and submitted records for the area of interest. As such, a lack of records for a particular habitats or species does not necessarily mean that the habitats or species do not occur in the study area. Likewise, the presence of records for particular habitats and species does not automatically mean that these still occur within the area of interest or are relevant in the context of the proposed development.

An ecological survey represents a 'snapshot' in time of the ecological condition of a Site. The ecological character of a Site can change substantially throughout both the course of a year, and from year to year impacting on the extent and quality of habitats potential to support protected species.

APPENDIX 3: BIODIVERSITY IMPACT ASSESSMENT

Please refer to the Statutory Biodiversity Metric tool excel spreadsheet which has been attached alongside this report.