

Ecological Impact Assessment



**Hill Lane, Markfield
26th November 2025**



**Tyler
Grange**

TG Report No. 13587_R04b_WR

Project No:	Report No.	Date	Revision
13587	R04b	26th November 2025	b
Admin QA	Author	Checked	Approved
WR	William Rose BSc (Hons)	Conor Aynsley MSc BSc (Hons)	Hazel Murrells BSc (Hons) MSc MCIEEM CEnv

Disclosure:

This report, all plans, illustrations, and other associated material remains the property of Tyler Grange Group Ltd until paid for in full. Copyright and intellectual property rights remain with Tyler Grange Group Ltd.

The contents of this report are valid at the time of writing. Tyler Grange shall not be liable for any use of this report other than for the purposes for which it was produced. Owing to the dynamic nature of ecological, landscape, and arboricultural resources, if more than twelve months have elapsed since the date of this report, further advice must be taken before you rely on the contents of this report. Notwithstanding any provision of the Tyler Grange Group Ltd Terms & Conditions, Tyler Grange Group Ltd shall not be liable for any losses (howsoever incurred) arising as a result of reliance by the client or any third party on this report more than 12 months after the date of this report.



Contents:

Summary

Section 1: Introduction and Context	2
Section 2: Ecological Features and Evaluation	4
Section 3: Ecological Impacts, Mitigation, and Enhancement	15
Section 4: Biodiversity Net Gain	22
Section 5: Conclusions	34

Appendices:

Appendix 1: Proposed Site Plan [GDA05-PL002]

Appendix 2: Legislation and Planning Policy

Appendix 3: Methodology and Results

Appendix 4: Badger Legislation, Methodology and Results

Appendix 5: Bat Legislation, Methodology and Results

Appendix 6: Reptile Legislation, Methodology and Results

Plans:

Plan 1: 13587/P03a Habitat Features and PBRA Plan

Plan 2: 13587/P04a Post-development Habitat Features

Plan 3: 13587/P05a Badger Survey Results Plan (See **Appendix 4**)





Summary

S.1. This report has been prepared by Tyler Grange Group Limited on behalf of Glenalmond Developments Ltd. It sets out the findings of an Ecological Impact Assessment for a parcel of land located at Hill Lane, Markfield, Leicestershire (OS Grid Reference SK4871510531), hereinafter referred to as 'the site'. The proposals are for the erection of 67 residential units, with associated infrastructure and landscaping.

S.2. The site is approximately 2.99 ha and is dominated by bramble scrub, along with areas of other neutral and modified grassland with hedgerows and lines of trees throughout the site boundaries and in the interior of the site.

S.3. No statutory or non-statutory designated sites are to be affected as a result of development provided that standard best practice measures are fully implemented, which will be detailed in a Construction Environmental Management Plan (CEMP).

S.4. The loss of habitats required to facilitate the development on site will be compensated for through the creation of new habitat including tree, native hedgerow, and native shrub planting, areas of grassland creation including areas managed for biodiversity, and ecologically designed sustainable drainage (SuDS) features.

S.5. The site supports an assemblage of bats considered to be of **local ecological** importance, badgers, and has potential for birds and common amphibians. Reptile surveys were undertaken but they were found to be likely absent from the site. Opportunities to enhance the site for a wide variety of protected and priority species are incorporated into the proposed habitat creation scheme including ecologically functional Sustainable Drainage System (SuDS), grassland creation and tree planting, and through the provision of bat and bird boxes as well as hibernacula and refugia. Species specific enhancements will be detailed in an Ecological Enhancement Plan (EEP).

S.6. The Statutory Biodiversity Metric calculated that the proposed development would result in a total net biodiversity unit change of **-5.21** habitat units equating to a **-35.72%** net loss; and **+1.58** hedgerow units equating to a **+14.54%** net gain.

S.7. The trading rules for medium distinctiveness habitats are not satisfied due to the loss of scrub, trees and woodland. The applicant would therefore make a financial contribution to a third-party provider to secure off-site habitat units, to compensate for the deficit in habitat units, ensure a 10% uplift on baseline habitat values and meet the trading rules. 6.67 habitat units would be required through an off-site provider for the scheme to achieve a 10% biodiversity net gain and meet the trading rules.

S.8. In conclusion, in anticipation of the implementation of any necessary mitigation, the proposed development will be compliant with relevant planning policies including Local Core Policy 21: National Forest, Policy DM6 and Policy M4 of the Markfield Neighbourhood Plan, as well as relevant legislation with regard to ecology.



Section 1: Introduction and Context

Introduction

1.1. This report has been prepared by Tyler Grange Group Ltd on behalf of Glenalmond Developments Ltd. It sets out the findings of an Ecological Impact Assessment (EIA) at Hill Lane, Markfield, Leicestershire, LE67 9UB (OS Grid Reference SK4871510531), hereafter referred to as 'the site'. See **Figure 1.1** for the indicative red line boundary.



Figure 1.1: Indicative red line boundary (© Google Aerial Imagery)

1.2. This assessment has been undertaken to inform a planning application for the development of 67 residential units on site, with associated infrastructure and landscaping. The site proposals are shown in **Appendix 1**.

Site Context

1.3. The site is approximately 2.99 ha and is dominated by dense bramble scrub, along with areas of other neutral and modified grassland with hedgerows and lines of trees throughout the site boundaries and in the interior of the site.

1.4. The site is bordered to the north and east by residential housing, Hill Lane and an industrial site to the west, and predominantly trees and arable fields with residential properties to the south.



Purpose

1.5. This report:

- Uses available background data and results of the field surveys to describe and evaluate the ecological features present within the likely “Zone of Influence”^{1 2} (ZoI) of the proposed development;
- Describes the actual or potential ecological issues and opportunities that might arise as a result of the site’s development.
- Where appropriate, makes commitments for mitigation measures for adverse effects on ecological features as well as ecological enhancements, to ensure conformity with policy and legislation listed in **Appendix 2** and
- Can be used to inform a planning application for the site’s development.

1.6. This assessment and the terminology used are consistent with published guidance^{3 4}. A full methodology is set out in **Appendix 3**.

Methodology

1.7. Full methods for the data search and ‘extended’ UK Habitat survey can be found in **Appendix 3**. The methodologies for protected species surveys, including bat surveys, reptile surveys, and badger *Meles meles* surveys are set out in **Appendices 4-6**.

Quality Control

1.8. All ecologists at Tyler Grange Group Limited are members of the Chartered Institute of Ecology and Environmental Management (CIEEM) or are working towards membership, and act under the direction of members and abide by the Institute’s Code of Professional Conduct⁵.

¹ CIEEM (2018) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Chartered Institute of Ecology and Environmental Management, Winchester.

² Defined as the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities. This is likely to extend beyond the project site, for example where there are ecological or hydrological links beyond the site boundaries.

³ CIEEM (2017) *Guidelines for Preliminary Ecological Appraisal*, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

⁴ CIEEM (2018) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Chartered Institute of Ecology and Environmental Management, Winchester.

⁵ CIEEM (2022) *Code of Professional Conduct*. CIEEM, Winchester.



Section 2: Ecological Features and Evaluation

Designated Sites

- 2.1. The site is not covered by any site which is designated on account of its nature conservation importance.
- 2.2. The data search returned two statutory designated sites within 2 km of the site. A total of 59 non-statutory designated sites were returned within 2 km of the site designated as notified, candidate or potential local wildlife sites (LWS). Additionally, 40 historic LWS were also identified within 2 km of the site.
- 2.3. Given the large number of non-statutory sites identified within the study area, only those non-statutory designated sites located within the area bounded by the Markfield Bypass to the north and east, the M1 to the west, and Forest Road to the south are discussed in detail in this report. It is however considered that the avoidance and mitigation measures to be discussed in **Section 3** of this report will ensure that adverse impacts to those non-statutory sites not discussed in specific detail below will be avoided. This is either due to the distances between and lack of connectivity to the site, or due to the shared potential impact pathways with the discussed non-statutory sites. The non-statutory sites specifically considered within this report are detailed in **Table 2.1** below.



Table 2.1. Designated Sites

Designated site	Distance and direction from site	Citation	Ecological Importance
Ulverscroft Valley Site of Special Scientific Interest (SSSI)	1.5 km northeast	The combination of grassland, heath, woodland and wetland produces one of the best wildlife Sites in Leicestershire.	National
Billa Barra Hill Local Nature Reserve (LNR)	1.7 km west	Consists of a variety of habitats including acid grassland and an old conifer plantation, which is ecologically significant at a local level. Pools in the abandoned quarry support a variety of species, including a rare lichen found only at one other site in Leicestershire.	Local
Hill Hole Meadow (LWS)	Adjacent to south of site	Mesotrophic grassland.	County
Markfield, land adj Cricket Ground (LWS)	0.011 km west	Acid grassland, mesotrophic grassland, early successional communities	County
Markfield, land adj to Raunscliffe Farm (LWS)	0.052 km north	Series of horse-grazed pasture, moderately species-rich, but further survey needed	County
Altar Stones (LWS)	0.073 km northeast	Acid grassland.	County
Hill Hole Quarry (LWS)	0.09 km south	Acid grassland and Red Data Book species, with mesotrophic grassland and scrub.	County
Raunscliffe (LWS)	0.137 km north	Acid grassland.	County
Field north of Leicester Road (LWS)	0.207 km east	Transitional mesotrophic/wet grassland	County
Markfield Roadside Verge Nature Reserve 1 (LWS)	0.246 km north	Acid grassland.	County
Markfield Roadsive Verge Nature Reserve 2 (LWS)	0.255 km northwest	Mesotrophic grassland.	County
Markfield, veteran Horse Chestnut off Main St (LWS)	0.255 km southeast	Large Horse Chestnut of diameter 1200mm	County
Markfield Cemetery, Leicester Road (LWS)	0.512 km east	Species-rich grassland, 12 indicator spp including Lady's Mantle. Also, with good assemblage of waxcaps and locally rare Beige Coral <i>Clavulinopsis umbrinella</i> .	County
Markfield, Grassland off Leicester Rd (LWS)	0.546 km east	Mesotrophic/mixed grassland with 18 indicator species recorded across two fields.	County

2.4. The site falls into the SSSI Impact Risk Zone for Ulverscroft Valley SSSI. However, the development does not fall into any of the criteria set out by Natural England requiring further assessment which requires residential development of 100 units or more. As such, consultation with Natural England is not considered necessary and **is not discussed further within this report**.

National Forest

2.5. The site falls within the catchment area of the National Forest, a strategy to create a new forest across 200 square miles of central England (see **Appendix 2**). Planning policies for the national forest, including guidelines for creating attractive, ecologically beneficial, wooded settings for new development have been adopted into the Hinckley and Bosworth Borough Council Core Strategy as Policy 21: National Forest. The proposed residential development meets thresholds requiring 20% of site to be Forest green infrastructure, as per guidelines⁶.

Habitats and Flora

2.6. The habitats present on site are summarised below in **Table 2.2**, along with a description of the composition of the main plant species present and an assessment of their ecological importance. The location of habitats is shown on the **Habitats Features and Preliminary Bat Roost Assessment Plan 13587/P03a**.

⁶The National Forest (2012) *National Forest Guide for Developers & Planners: Summary* [Accessed: 06/11/2025]



Table 2.2. Habitats and Flora

Habitat	Description and Species	Ecological Importance	Photograph
Bracken	Two discrete areas of site comprised stands of bracken <i>Pteridium aquilinum</i> .	This habitat is considered to be of negligible ecological importance	
Buildings	Building 1: Wooden shed Building 2: Open-sided farm shelter.	Buildings are considered to be of negligible ecological importance but may provide opportunities for protected and priority fauna.	
Bramble scrub and Mixed scrub	<p>A large proportion of the site comprised dense bramble <i>Rubus fruticosus</i> scrub, with some Rosebay willowherb <i>Chamerion angustifolium</i> noted in the north-eastern section of site.</p> <p>In addition to the dense stands of bramble scrub some discrete areas of mixed scrub are also present having encroached from hedgerows or in association with individual trees. This habitat includes hawthorn <i>Crataegus monogyna</i>, elder <i>Sambucus nigra</i>, blackthorn <i>Prunus spinosa</i>, willow <i>Salix</i> sp. and oak <i>Quercus robur</i></p>	Whilst this habitat is common and widespread in the wider area, it covers an extensive area of the site and likely provides opportunities for a range of wildlife. It is therefore considered to be of local ecological importance .	



Habitat	Description and Species	Ecological Importance	Photograph
Ditch	<p>Ditches were present along the south-eastern boundary, separating the southern fields, and laterally through the centre of site.</p> <p>These ditches were covered with scrub, dry and heavily shaded at the time of survey.</p>	<p>The ditches provide connectivity within the site and to the surrounding area and is considered to be of local ecological importance.</p>	
Drystone wall	<p>A derelict stone wall was present in the south-west of site, adjacent to parking on Hill Lane.</p>	<p>Drystone walls are considered to be of negligible ecological importance but may provide opportunities for protected and priority fauna.</p>	
Line of trees and native hedgerows	<p>Lines of trees and hedgerows borders most of the north, east, and south of site as well as separating fields. Species include common hawthorn <i>Crataegus monogyna</i>, blackthorn <i>Prunus spinosa</i> common ash <i>Fraxinus excelsior</i>, common holly <i>Ilex aquifolium</i>, pedunculate oak <i>Quercus robur</i> and elder <i>Sambucus nigra</i>.</p> <p>On-site hedgerows were species-rich, priority native hedgerows that have been unmanaged.</p>	<p>All hedgerows consisting predominantly (80% or more) of at least one woody UK native species is considered to be a Habitat of Principal Importance (HoPI), identified on the UK Biodiversity Action Plan, and given protection under Section 41 of the NERC Act (2006). They are therefore considered to be of local ecological importance.</p>	

Habitat	Description and Species	Ecological Importance	Photograph
Ornamental hedgerows	Two sections of ornamental hedgerow are present including a well-managed privet <i>Ligustrum</i> sp. hedge on the northwest boundary and a short section of Leyland cypress <i>Cupressus x leylandii</i> on the eastern boundary in association with an off-site garden.	These hedges are ornamental although do provide some opportunities for wildlife and connectivity and are assessed as being of local ecological importance .	
Tall forbs	The western field of the site whilst comprising an underlying grassland sward is dominated by tall herbs, including stinging nettles <i>Urtica dioica</i> , cleavers <i>Galium aparine</i> , brambles <i>Rubus fruticosus</i> agg., <i>Rubus armeniacus</i> , thistles <i>Cirsium arvense</i> , perennial sow-thistle <i>Sonchus arvensis</i> , spiny sow thistle <i>Sonchus asper</i> , scattered hawthorns <i>Crataegus monogyna</i> and hedge bindweed <i>Calystegia sepium</i> .	This habitat is dominated by species poor ruderal vegetation which is common locally and of negligible ecological importance .	
Modified grassland	The northwest boundary of the site consists of a grass verge of modified grassland dominated by perennial rye grass <i>Lolium perenne</i> and rosebay willowherb. This verge is subject to management on occasion.	Modified grassland is very common and widespread habitat local. Less than 6-8 vascular plant species per m ² were recorded where this habitat is present on site. This habitat is therefore considered to be of negligible ecological importance .	

Habitat	Description and Species	Ecological Importance	Photograph
Other neutral grassland	<p>Other neutral grassland was present in the central southern field, south-eastern and north-eastern fields. Species include cocksfoot grass <i>Dactylis glomerata</i>, meadow fescue <i>Schedonorus pratensis</i>, false oat grass <i>Arrhenatherum elatius</i>, perennial rye grass <i>Lolium perenne</i>, stinging nettles <i>Urtica dioica</i>, brambles, dog rose <i>Rosa canina</i>, creeping thistle <i>Cirsium arvense</i> and rushes <i>Juncus</i> spp.</p>	<p>Other neutral grassland is a species-rich grassland habitat that provides opportunities for fauna such as amphibians in their terrestrial phase, foraging bats, foraging birds and invertebrates. This habitat is therefore considered to be of at least local ecological importance.</p>	
Other woodland; Broadleaved	<p>The northwestern field of the site comprises a small area of woodland which has established around the site of a former allotment. This woodland has a low canopy of maturing trees along with a dense, younger understory with species including silver birch <i>Betula pendula</i>, ash, <i>Fraxinus excelsior</i>, oak, elder, Scots pine <i>Pinus sylvestris</i> and hawthorn.</p>	<p>This woodland is small in size but contains a range of species and whilst common locally is considered to be of at least local ecological importance.</p>	<p>No photo available.</p>
Individual trees	<p>In addition to the trees present with the hedges, lines of trees and woodland, a number of individual trees have been mapped where they are not directly associated with these features. This includes a low number of individual trees within the bramble and mixed scrub which are more established. Species include common hawthorn and pedunculate oak.</p>	<p>Many of the trees are native, mature species. As such, although they are very common in the wider landscape, they are considered to be of local ecological importance.</p>	

Protected and Notable Species

Amphibians

2.7. The data search returned records of common frog *Rana temporaria*, common toad *Bufo bufo*, palmate newt *Lissotriton helveticus*, smooth newt *Lissotriton vulgaris*, and great crested newt (GCN) *Triturus cristatus* within 2km of the site. The nearest of these was a record of common frog and smooth newt, both 0.1km north of the site in 2022 and 2024 respectively. No European Protected Species (EPS) licences were returned for GCN within 2 km of the site.

2.8. The data search found 7 waterbodies on or within 250 m of the site, which is generally considered to be within the typical migratory range of GCN from a waterbody⁷. No waterbodies are present within the site boundary, and on-site ditches were dry at the time of survey and only considered likely to hold water following periods of heavy rainfall.

2.9. The nearby water-filled quarry south of the site is considered unsuitable for GCN due it's depth and the presence of fish, including roach *Rutilus rutilus* and perch *Perc fluviatilis*⁸. All other potential suitable waterbodies are separated from the site by barriers to dispersal, including residential development, major roads, and an industrial site to the east with access from Hill Lane, directly adjacent to site. The terrestrial habitats on site offer some suitable habitat for GCN; however, given the lack of aquatic habitat within the site and surrounding area, as well as barriers to dispersal to off-site ponds the site is considered unlikely to support GCN. As such GCN are considered **likely absent from the site** and will not be discussed further in this report.

2.10. Other more mobile amphibian species such as common toad may be present. Common toads are a priority species under The Natural Environment and Rural Communities (NERC) Act 2006⁹. It is considered any population utilising terrestrial habitats on site, such as hedgerows and scrub, will also be using further habitats beyond the site boundary and would not be wholly dependent upon the Site.

2.11. As such any population of amphibians such as common toad on site would be of **negligible ecological importance**.

Badgers

2.12. For reasons of confidentiality, information relating to badgers is provided in a Confidential Badger Appendix (TG Ref: 13587_R05a_Appendix 4_26th November 2025_WR).

⁷ Cresswell, W. & Whitworth, R., 2004. *An assessment of the efficiency of capture techniques and the value off different habitats for the great crested newt Triturus cristatus*: English Nature Research Report 576. Peterborough: English Nature.

⁸ Hinckley & Bosworth Borough Council (n.d.) Hill Hole Quarry https://www.hinckleybosworth.gov.uk/info/200073/parks_open_spaces_and_trees/362/hill_hole_quarry [Accessed: 12/11/2025]

⁹ Section 40 of the NERC Act puts a duty on local authorities to have regard for the conservation of species and habitats listed at Section 41, including when considering planning applications.



Bats

2.13. The data search returned 1085 records for 13 bat species within 2 km of the site. Species included:

- Barbastelle *Barbastella barbastellus*;
- Serotine *Eptesicus serotinus*;
- Brandt's bat *Myotis brandtii*;
- Daubenton's bat *Myotis daubentonii*;
- Whiskered bat *Myotis mystacinus*;
- Natterer's bat *Myotis nattereri*;
- Leisler's bat *Nyctalus leisleri*;
- Noctule *Nyctalus noctule*;
- Nathusius' pipistrelle *Pipistrellus nathusii*;
- Common pipistrelle *Pipistrellus pipistrellus*;
- Soprano pipistrelle *Pipistrellus pygmaeus*; and
- Brown long-eared bat *Plecotus auritus*.

2.14. The closest of these was a record of common pipistrelle 0.5 km north of the site in 2024. In addition, nine granted EPS licences for bats were returned within a 2km radius of the site. The closest licence was located 1.3 km northeast of the site (case reference: EPSM-2012-5160) and was granted for impact on a breeding site, destruction of a breeding site and destruction of a resting place of brown long-eared bat, common pipistrelle and whiskered bat.

Bat Activity

2.15. The site provides foraging and commuting routes for bats with scrub, grassland, hedgerows and lines of trees on site. Lighting is currently limited along these features which increases suitability for bats. Night-time bat walkovers (NBW) and static detector deployments were undertaken in the optimal season to determine levels of bat activity across the sites. Results of these surveys can be found in **Appendix 5**.

2.16. Bat activity surveys showed use of the site for foraging and commuting by bats. Activity was generally low, given suitable habitat and wider site context. Of the activity recorded, usage of the site was greater at the central and southern fields and boundary features than those at the north of site. Species include common pipistrelle, soprano pipistrelle, noctule and brown-long eared bat. These species are common and widespread in the wider area, and as such the assemblage of bats utilising the site for foraging and commuting is considered to be of **local ecological importance**.



Preliminary Bat Roost Assessment

2.17. A Preliminary Bat Roost Assessment (PBRA) was conducted alongside the 'extended' Phase 1 Habitat survey. This assessment was carried out on the buildings on and directly adjacent to site, which may be impacted by the development. See **Appendix 5** for methodology and results, and the **Habitat Features and Preliminary Bat Roost Assessment Plan 13587/P03a** for locations.

2.18. Two buildings were present on site.

- B1: a wooden shed, and;
- B2: an open-sided farm shelter.

2.19. As detailed in **Appendix 6**, the buildings were not able to be fully inspected during the PBRA due to dense vegetation preventing access. These buildings were subject to a previous PBRA in 2021 and were assessed as negligible potential to support roosting bats. Given the nature of the buildings, it is unlikely that significant changes to the composition of the buildings would have occurred and are considered likely to still be negligible potential; however, precautionary measures including an updated inspection once appropriate vegetation clearance has occurred will be implemented prior to demolition.

Ground Level Tree Assessment (GLTA)

2.20. A GLTA was undertaken that identified 6 trees as PRF-I, including: T1, T2, T4, T5, T15 and T24. Therefore, no further survey effort will be required on these trees, but they will require inspection prior to felling. See **Appendix 6** for full results.

Birds

2.21. The data search returned a number of records of protected and notable birds species within 2 km of the site. Schedule 1 species records returned include: Barn owl *Tyto alba*, brambling *Fringilla montifringilla*, Fieldfare *Turdus pilaris*, Hobby *Falco subbuteo*, Peregrine *Falco peregrinus*, Red Kite *Milvus milvus*, Redwing *Turdus iliacus*. Species on the Birds of Conservation Concern – Red list include: Fieldfare, Grasshopper warbler *Locustella naevia*, Hawfinch *Coccothraustes coccothraustes*, Herring gull *Larus argentatus*, House martin *Delichon urbicum*, House sparrow *Passer domesticus*, Lesser spotted woodpecker *Dryobates minor*, Linnet *Linaria cannabina*, Marsh tit *Poecile palustris*, Spotted flycatcher *Muscicapa striata*, Starling *Sturnidae*, Swift *Apus apus*, Tree Pipit *Anthus trivialis*, Willow tit *Poecile montanus* and yellowhammer *Emberiza citrinella*.

2.22. On-site habitats including the scrub, hedgerows and trees, and the buildings, have the potential to support a range of priority and common bird species. Given the limited scale of the site, and the prevalence of the on-site habitats within the wider area, detailed breeding bird surveys were not considered to be proportionate or appropriate. It is considered likely that the assemblage of birds utilising the site for nesting and foraging, are of no more than **local ecological importance** and that any birds utilising the site would not be wholly dependent upon the site. Nevertheless, consideration for nesting birds to avoid a breach of legislation is discussed in **Section 3** of this report.



Hedgehog

2.23. LRERC returned 59 records of hedgehog with the closest being 0.157 km southeast of site. The on-site scrub, hedgerows and buildings may provide sheltering and hibernation habitat for hedgehogs, and the grassland habitats may provide foraging opportunities. Given the availability of suitable habitat in the wider area, any hedgehogs utilising the site are unlikely to be wholly dependent upon the site and are therefore considered to be of no more than **local ecological importance**.

Invertebrates

2.24. Habitats on site are suitable for a wide variety of common and priority species. The scrub, grassland and hedgerow and treeline habitats present offer the highest value habitat to invertebrates. Given the availability of suitable habitat in the wider area, any invertebrates utilising the site are unlikely to be wholly dependent upon the site and are therefore considered to be of no more than **local ecological importance**.

Reptiles

2.25. The data search returned records of slow-worm *Anguis fragilis*, grass snake *Natrix Helvetica* and common *Zootoca vivipara* within 2 km of the site. The nearest of these was a record of common lizard 0.12 km northeast of the site.

2.26. Suitable habitat on site for reptiles comprises hedgerow, treelines, grassland and scrub, as well as buildings and a drystone wall that may provide sheltering and hibernacula for reptiles.

2.27. A suite of reptile surveys was undertaken over 2024 and 2025 that determined the likely absence of reptiles from the site. No reptiles were recorded and no further mitigation is considered necessary. Full results are available in **Appendix 6**.



Section 3: Ecological Impacts, Mitigation, and Enhancement

Proposed Development

3.1. The proposals are for the development of the site erection of up to 67 dwellings and associated infrastructure and landscaping. The potential impacts at this site as a result of the proposed development are set out below, with reference to relevant legislation and planning policy where appropriate, which is summarised in **Appendix 2**.

Designated Sites

Statutory Sites

3.2. No Natura 2000 sites were identified within 10 km of the site.

3.3. Ulverscroft Valley SSSI is located 1.5 km northeast of the site boundary. Billa Barra Hill Nature Reserve LNR is located 1.5 km west of the site boundary. The site does not trigger the SSSI Impact Risk Zones indicated by MAGIC, given the size and location of the proposals. Due to the scale of the development and the distances from the sites, it is considered that there is no potential for adverse direct effects to these sites during the construction phase, providing that precautionary methods are adopted. These precautionary methods, including safe storage of any chemicals, reducing airborne dust, and minimising use of overnight lighting, could be controlled via a CEMP, which would be produced as a pre-commencement condition.

3.4. Given the scale of the site and distances to statutory designated sites, there is not considered to be a notable increase in recreational pressures on these sites resulting from development, in line with Local Policy DM6, therefore operational impacts would not be anticipated.

Non-statutory Sites

3.5. The site is immediately adjacent to Hill Hole Meadow LWS and Hill Hole Quarry LWS, with a further 10 LWS within the area considered by this report, as detailed in **Section 2**.

3.6. Due to the proximity of these LWS from the site, it is considered that in the absence of mitigation, there will likely be adverse effects to non-statutorily designated sites during the construction phase of the development. Potential impacts through the construction phase of development can be controlled through best practice pollution prevention measures, which can be implemented in a CEMP as a pre-commencement condition (i.e. tree protection fencing on the southern hedgerow in order to prevent accidental storage into the adjacent LWS).

3.7. Given the proximity to the site, there is the potential for increased recreational usage of publicly accessible LWSs during the operational phase of the proposed development. Several of the LWS are designed to accommodate recreational use such as Hill Hole Meadow and Hill Hole Quarry which comprise Hill Hole Nature Reserve, as well as Altar Stones and Markfield Roadside Verge Nature Reserve 2 which comprise Altar Stones Nature Reserve.



- 3.8. The proposed development includes circular walking routes, formal and informal play areas and areas of green public open space (POS) to encourage recreational use within the site. Homeowner information packs can be provided to new homeowners informing them of the importance of LWS and include guidance on avoiding impacts to them as well as information on alternative recreational opportunities in the wider area.
- 3.9. Due to the provision of recreational areas in the proposed site layout, the allocation of several nearby LWS as recreational areas and / or publicly accessible nature reserves, and considering the scale of the site, it is considered unlikely likely that the development will result in notable increased recreational pressures on nearby LWS. Contributions to their long-term management may be sought by the Local Planning Authority (LPA) in line with local core strategy policy DM6 and Policy M4 of the Markfield Neighbourhood Plan.

National Forest

- 3.10. Proposals include provisions of forest green infrastructure in-line with National Forest guidelines and Local Core Policy 21: National Forest. The proposed development delivers 13,440 m² of compliant planting equal to 44.5% of the site, exceeding the 20% threshold required (equating to 6031 m² of site). Specifically, proposals include provision of 162 newly planted trees, mixed native hedgerow, SuDS, areas of green POS including new recreational facilities such as equipped children's play areas, informal play spaces and accessible areas of green space throughout the design.
- 3.11. The current landscape proposals include creation of habitat in-line with National Forest guidelines and Core Strategy Policy 21: National Forest (Shown in **Appendix 2**). Specifically, the proposals include provision of 162 newly planted trees, mixed native hedgerow, and areas of green POS including provision of new recreational facilities such as equipped children's play area, informal play spaces and accessible areas of natural green space throughout the site.

Habitats and Flora

- 3.12. Through Local Policy DM6, the local authority expects that '*development proposals must demonstrate how they conserve and enhance features of nature conservation value, including proposals for their long-term future management*' and that '*major developments must include measures to deliver biodiversity gains through opportunities to restore, enhance and create valuable habitats, ecological networks and ecosystem services*'.
- 3.13. To facilitate the proposed development, modified grassland and buildings will be lost. These habitats are of **negligible ecological importance** and therefore no specific mitigation is required.
- 3.14. Areas of scrub, other neutral grassland, native hedgerow and lines of trees are of **local ecological importance** and will be mitigated for by the habitat creation scheme as outlined below.
- 3.15. Without sufficient mitigation, there is a risk of adverse effects to the retained boundary habitats due to the necessary construction works. These impacts would be avoided by employing industry best practice measures with regard to root protection areas of the trees



and hedge plants, as well as general precautionary construction measures which would be controlled via a CEMP.

- 3.16. Retained hedgerows will be kept within the public domain, and new hedgerow creation will be within the public domain where possible. Keeping hedgerows in the public domain will reduce the risk of damage, removal and general poor management from future property owners and protect the long-term viability of the hedgerows.
- 3.17. Habitat creation, including new tree planting, native hedgerow planting, and SuDS will provide habitats of greater ecological importance once mature and provide some mitigation for the habitat loss required for the proposals. The SuDS will be ecologically functional and offer on-site aquatic habitat for amphibians and invertebrates while also providing foraging habitat for a range of species, such as bats.
- 3.18. Further opportunities have been explored for enhancing habitats, particularly within areas of POS. Areas of green POS will be utilised where practicable to provide dedicated areas for biodiversity. This will include creation of a species diverse grassland sown with a seed mix including wildflowers. The proposed habitat creation scheme will provide opportunities for a range of species, including amphibians, badgers, bats, birds, reptiles and invertebrates.
- 3.19. In order to maximise the biodiversity value of the newly created habitats in-line with Local Policy DM6, the development should be subject to a Habitat Management and Monitoring Plan (HMMP), secured as a condition of planning.

Protected and Notable Species

Amphibians

- 3.20. It is considered that the suitable terrestrial habitat on site could support common amphibians such as common toad. Although common toad is not afforded legislative protection from killing and injury, it is a UK priority species, hence regard must be had for its conservation.
- 3.21. As common toad are not considered likely to be wholly dependent upon the site due to the abundance of similar habitat in the wider area, adverse impacts are not anticipated to any subpopulation of common toad that may be utilising the site and wider area.
- 3.22. A precautionary approach should be adopted to reduce the risk of harm to any individual common amphibians should they be present. A phased clearance of vegetation, including grassland and scrub habitat should be implemented ahead of the works, with the habitat taken down to approximately 20 cm firstly to allow any common toad or other wildlife to disperse, before being taken down to ground level. Any common amphibians encountered during the works should be carefully moved by hand away from harm's way, into an alternative area of suitable habitat in proximity to the site, such as retained hedgerows and treelines. Details of the precautionary vegetation clearance will be provided in a CEMP.
- 3.23. Although considered unlikely, if a GCN were to be found during the construction phase, all work on site would stop immediately, and an ecologist contacted for advice. A Natural England EPS licence may then be required to ensure the development is not in breach of any legislation that affords protections to GCN.



3.24. Following development, the creation of an on-site SuDS pond will provide breeding habitat for common amphibians that is not currently present. Retained and created hedgerow, scrub and shrub planting will ensure suitable terrestrial habitat for these species is present post-development and allows amphibian species to move freely throughout the site.

3.25. Hibernacula and refugia would provide suitable sheltering and hibernation for a range of amphibian species, as well as other common and protected and priority species, including reptiles and invertebrates. An example hibernaculum design is provided in **Figure 3.1** below. The exact specifications and locations of refugia and hibernacula could be provided within a HMMP or EEP.

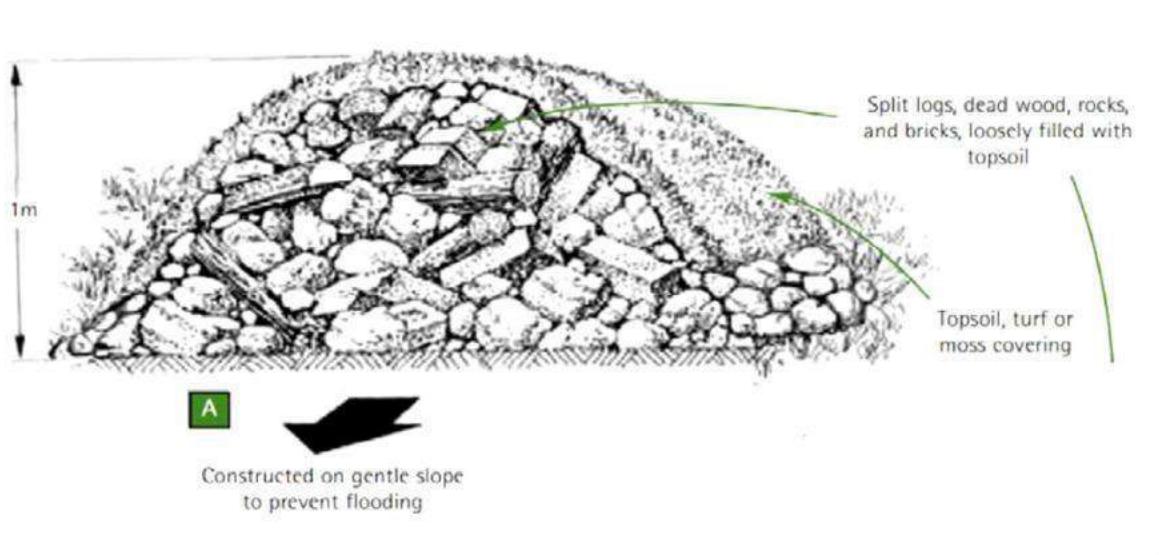


Figure 3.1 Example of hibernaculum design for amphibians and reptiles.

Badgers

3.26. Information relating to badgers is supplied in a separate Confidential Badger Appendix (TG Ref: 13587_R05a_Appendix 4_26th November 2025_WR).

Bats

Roosting Bats

3.27. Six trees on site were identified as having bat roosting potential of PRF-I, indicating they may be suitable for individuals or small numbers of roosting bats. Another tree, T26, was identified as having bat roosting potential in 2021, but could not be accessed due to dense scrub. The location of these trees is shown on **13587/P03a** and comprises T1, T2, T4, T5, T15 and T26 in regard to their bat roosting potential. Two buildings were not able to be fully inspected during the PBRA due to dense scrub preventing access. The location of these buildings is shown on **13587/P03a** and comprises B1 and B2.

3.28. T4, T5, T15 and T24 are retained within the design layout. Precautionary methods should be adopted to minimise impacts to these trees during construction, such as maintaining appropriate buffers from the tree root protection areas and care taken in regard to lighting



and noise to mitigate impacts to bats and other fauna using these trees during construction. Details of such measures can be included in a CEMP.

- 3.29. During the operational phase, a sensitive lighting strategy should be implemented to ensure these trees remain suitable for low numbers of bats.
- 3.30. T1 and T2 are expected to be lost to development. In line with best practice guidance¹⁰ no further survey effort is required, however PRF-I trees lost to development will need to be soft-felled in sections in the presence of a suitably qualified ecologist (SQE). Any sections of the tree with potential roost features should be inspected by a bat ecologist with a minimum of a level 2 bat licence.
- 3.31. T26 was not able to be fully inspected in 2025 due to dense scrub preventing access. Inspections undertaken in 2021 identified the tree as having 'moderate' potential (under previous BCT guidelines¹¹) and emergence surveys were undertaken that did not record emerging bats. Given the dense scrub obstructing access to suitable features, it is considered likely that the tree would be classified as PRF-I if fully inspected under the new guidelines. It is therefore considered highly unlikely that the tree could support more than individual or low numbers of bats. If a roost were to be present, this could be mitigated through the provision of bat boxes. As part of the precautionary measures to be implemented on the site prior to commencement of works, following the necessary clearance of scrub vegetation to allow full access, T26 will be subject to an update inspection.
- 3.32. B1 and B2 were subject to a previous PBRA in 2021 and were assessed as **negligible** potential to support roosting bats. Given the nature of the buildings, it is unlikely that significant changes to the composition of the buildings would have occurred and are considered likely to still be **negligible** potential; however, precautionary measures including an updated inspection once appropriate vegetation clearance has occurred will be implemented prior to demolition.
- 3.33. A 'bat mitigation strategy', detailing the results of the update inspection of T26, B1 and B2 prior to the removal of any features that could support roosting bats could be secured through a carefully worded condition of planning.
- 3.34. To enhance the site for roosting bats, it is recommended that roosting bat boxes should be incorporated into the structure of the new buildings. The precise location and number of bat boxes to be installed would be specified in an EEP.

Foraging and commuting bats

- 3.35. Activity surveys showed low levels of activity across the site. The southern and western sections of site saw the highest levels of activity, with regular usage of hedgerow through the centre of site. Current proposals retain these commuting routes where practicable, particularly the central, southern and western hedgerows showed the most activity. Tree and

¹⁰ Collins, J. (ed.) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th Edition). The Bat Conservation Trust, London. ISBN-978-1-7395126-0-6

¹¹ Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd Edition). The Bat Conservation Trust, London.



native hedgerow planting are expected to contribute to commuting habitat once mature. Proposed grassland and shrub planting, as well as created gardens and SuDS is expected to increase opportunities for invertebrates and therefore foraging bats with habitats that were not previously present. SuDS specifically may provide greater suitability of the site for a wider range of bat species than are currently using the site. Full results of activity surveys are found in **Appendix 5**.

- 3.36. An ecologically sensitive lighting strategy should be adopted to retain and create dark corridors throughout the site identified to be of importance or potential importance to foraging and commuting bats. This could be secured by a suitably worded condition.
- 3.37. Through the measures described foraging and commuting bats may continue to use the site post-development.

Birds

- 3.38. All birds, their nests and eggs, are protected by law and as such it is an offence to intentionally kill, injure, or take any wild bird; intentionally take, damage, or destroy the nest of any wild bird while it is in use or being built; and intentionally take or destroy the egg of any wild bird.
- 3.39. To avoid triggering the legislation protecting nesting birds, clearance of suitable habitat (the buildings, trees, and hedgerow) should be timed outside the nesting bird season (generally taken as March to September inclusive, though this is not defined in law and birds may nest outside of this time). If any clearance works to nesting habitats are required during the nesting season, then pre-removal checks for nesting birds must be carried out by a suitably experienced Ecological Clerk of Works (ECoW), no more than 48 hours prior to the works commencing. If any nesting birds are found to be present, an appropriate buffer zone will be implemented, within which works are excluded for the duration of the breeding attempt. Any active nests will need to be left in situ until a suitably experienced ecologist confirms that the chicks have fledged and the nest is no longer active.
- 3.40. Habitat creation such as native shrub and tree planting is expected to increase nesting opportunities on site. Additionally, bird boxes are recommended to be incorporated within scheme, targeting species of conservation concern known to be present (expected to be secured via a suitably worded planning condition).

Hedgehog

- 3.41. The site provides suitable habitat for hedgehog, including hedgerows, scrub, bracken and grassland.
- 3.42. Any piles of vegetation or debris on site should be dismantled by hand and removed in order to not injure hibernating or sheltering hedgehog. Should any hedgehog be discovered during works, they should be carefully moved with gloved hands, to suitable and safe habitat away from any works. These measures to safeguard any hedgehogs present on site during the construction period will be detailed fully in a CEMP.
- 3.43. The proposed habitat creation scheme includes the retention and creation of habitats of known value to hedgehogs, including scrub, hedgerows, grassland, and creation of



residential gardens. Incorporating ‘hedgehog highways’¹² into residential gardens will allow hedgehogs to move freely throughout the site. Management of mature trees and newly planted trees could result in brash and deadwood, which could be left in-situ to create natural refugia for hedgehogs, invertebrates, amphibians and other species.

Invertebrates

- 3.44. The habitat on site is considered suitable to support a small assemblage of common and priority invertebrates.
- 3.45. The suitable habitats to be lost are common and widespread, and their loss within the development area is not considered likely to have an adverse impact on local subpopulations of the invertebrate species.
- 3.46. To compensate for the suitable habitat lost to development, opportunities for invertebrate species are incorporated into the design through the creation of the SuDS and tree, shrub, hedge and grassland planting as well as areas of green POS. These habitats will support an assemblage of invertebrates across various life cycle stages. Planting mixtures, where appropriate, should include nectar providing species which will maximise opportunities for invertebrates.

Reptiles

- 3.47. Reptile surveys were carried out in 2024 and 2025 which concluded that reptiles were likely absent from the site.
- 3.48. Retained and created areas of hedgerow, treelines, scrub and grassland will ensure suitable habitat for reptiles post-development should they colonise the site in the future. As described with amphibians and hedgehogs, hibernacula and refugia could be installed to increase opportunities for reptiles via an EEP.

¹² <https://www.hedgehogstreet.org/help-hedgehogs/link-your-garden/>



Section 4: Biodiversity Net Gain

Introduction

- 4.1. A Biodiversity Net Gain (BNG) Assessment has been completed for the proposals in order to establish the biodiversity value of the site before and after the proposed development. This BNG assessment for the site was undertaken by Tyler Grange using Natural England's latest BNG Metric (The Statutory Biodiversity Metric) which should be looked at in conjunction with this assessment (ref: **13587_Statutory Biodiversity Metric_25112025**). This assessment was completed in November 2025 with the findings summarised below.
- 4.2. The post-development habitat areas were calculated using the soft landscape proposals plan shown in **Appendix 1**.
- 4.3. This BNG Assessment was informed by the findings of the 'extended' Phase I habitat survey (see **Appendix 3**). As part of the BNG process, all mapped habitats were assessed with reference to the UK Habitat Classification and the Biodiversity Metric Condition Assessment Spreadsheet to determine their condition and ecological importance.
- 4.4. The design of the scheme has been informed by the BNG assessment process and the mitigation hierarchy, through avoiding impacts to habitats where possible, then minimising the impact, using mitigation, and finally compensating for a loss of habitat where this cannot be avoided.

Strategic Significance

- 4.5. An assessment of the strategic significance of habitats, both baseline and post-development, has been completed with reference to the Leicestershire Local Nature Recovery Strategy (LNRS)¹³ and associated maps which was published in August 2025.
- 4.6. In accordance with The Statutory Biodiversity Metric user guidance, where a LNRS is published, all baseline habitats are assessed as being of low strategic significance (Area/compensation not in local strategy/ no local strategy).
- 4.7. For post-development habitat those habitats which align with the priorities of the LNRS and are located with the associated mapped area are assigned High strategic significance (Formally identified in local strategy). Those habitats which do not align with the LNRS objectives are assigned Low strategic significance.
- 4.8. Within the LNRS, the site and surrounding areas are mapped as part of the "Mapped Areas that Could Become of particular importance for Biodiversity (ACB)". As such habitat creation and enhancements which align with the opportunities for Urban Living Landscape are assessed as being of High strategic significance. This includes:

¹³ <https://www.leicestershire.gov.uk/environment-and-planning/local-nature-recovery-strategy/leicestershire-leicester-and-rutland-local-nature-recovery-strategy>



- Create and manage high quality sustainable urban drainage systems (SuDS) (Measure UB008)
- Create new green and blue spaces and manage them to keep them in favourable ecological conditions (Measure UB005)
- Create wildlife-friendly road verges with native wildflowers and grasses (Measure NN003)
- Increase the urban tree canopy by planting native and climate-resilient tree species (Measure UB003)
- Protect existing hedgerows and promote the planting of new native hedgerow (Measure NN001)

4.9. As such, new habitat creation including, tree and scrub planting, wildflower/neutral grassland creation, hedgerow enhancements and hedgerow planting are all assessed as being of High strategic significance.

Baseline Habitats

4.10. The following habitats were present within the red line boundary during the UKHabs survey in September 2025 (see **Appendix 3**) and are shown on Habitat Features Plan (**Plan 1**). A summary of each habitat is provided below along with the habitat condition with detailed descriptions provided in Section 2. Full habitat condition assessments are provided in the supporting excel template which should be read in conjunction with this assessment (ref: **13587_Biodiversity Metric Condition Sheets_25112025**). In addition to the below summaries **Table 4.1** also lists the existing baseline habitats and their conditions in accordance with UKHabs¹⁴ definitions, along with their habitat value as calculated within the BNG metric.

Bramble Scrub (Heathland and shrub)

4.11. The site is dominated by dense stands of bramble scrub. In accordance with the UKHabs¹, this habitat is automatically assigned a 'condition assessment N/A' and as such no condition assessment is required.

Mixed Scrub (Heathland and shrub)

4.12. In addition to the dense stands of bramble scrub some discrete areas of mixed scrub are also present which contain mix of woody species and as such are assessed separately. This habitat is assessed as being of moderate condition.

Bracken (Grassland)

¹⁴ UKHab Ltd (2023) UK Habitat Classification Version 2.0 (at <https://www.ukhab.org>)



4.13. Two discrete areas of site comprised stands of bracken adjacent to hedgerows. In accordance with the UKHabs¹, this habitat is automatically assigned a 'condition assessment N/A' and as such no condition assessment is required.

Modified Grassland (Grassland)

4.14. A narrow strip of modified grassland is present adjacent to Hill Lane. This grassland is subject to management on occasion and is dominated by grasses and is therefore distinct from the adjacent area which is less intensively managed and dominated by tall forbs (see below). This grassland is however species poor and contains a high proportion of suboptimal species and is assessed as being of poor condition.

Tall Forbs (Sparsely Vegetated Land)

4.15. The western field of the site, whilst comprising an underlying grassland sward is dominated by tall herbs and as such is assessed as Tall forbs habitat. This habitat is dominated by single structural component and is species poor being dominated by common nettle and as such is assessed as being of poor condition.

Other Neutral Grassland (Grassland)

4.16. The central fields of the site comprise other neutral grassland with a range of grass species present and a low abundance of rye grass. This habitat is however species poor and being encroached by bramble and other suboptimal species and overall is assessed as being of poor condition.

Other Woodland; Broadleaved (Woodland)

4.17. The northwestern field of the site comprises a small area of recently established woodland. This woodland is dominated by native species but lacks old and veteran specimens and is subject to disturbance and overall is assessed as being of moderate condition.

Developed Land; Sealed Surface (Urban)

4.18. Two small buildings are present to the north of the site. In accordance with the BNG technical supplement no condition assessment is required.

Rural Trees (Individual Trees)

4.19. In addition to the trees present with the hedges, lines of trees and woodland, a number of individual trees have been mapped where they are not directly associated with these features. This includes a low number of individual trees within the bramble and mixed scrub which are more established and therefore not fully in line with the habitat description. In accordance with The Statutory Biodiversity Metric user guidance, individual trees have also been mapped where these are to be lost within scrub or hedgerows.

4.20. These trees are predominantly small in size and offer limited habitat niches for wildlife and overall are assessed as being of moderate condition (see **Appendix 4**).



Non-native Ornamental Hedgerow

4.21. Two sections of ornamental hedgerow are present on the northwestern and eastern site boundaries in association with off-site gardens. In accordance with the BNG condition assessment tool, this habitat is automatically assigned poor condition.

Native Hedgerows

4.22. A number of native hedgerows are present at the site and include species-rich hedges associated with ditches and species poor hedgerows. These features are tall and dense and overall assessed as being of good and moderate condition respectively.

Lines of Trees

4.23. In addition to the hedgerows, a number of line of trees are present which comprise mature trees without an associated understorey. Whilst the tree line through the centre of the site is of good condition, those features on the boundaries associated with off-site gardens are of moderate condition due to a lack of undisturbed margins on both sides.



Existing Habitats

4.24. The following habitats are present within the red line boundary of the site and are shown on Habitat Features Plan.

Table 4.1. Baseline Habitats

Broad Habitat	Habitat Type	Area (hectares)	Distinctiveness	Condition	Strategic sig.	Baseline Units	Area retained (hectares)	Area enhanced (hectares)	Area lost (hectares)	Units Lost
Heathland and shrub	Bramble scrub	1.789	Medium	Condition Assessment N/A	Low	7.16	0	0	1.79	7.16
Heathland and shrub	Mixed scrub	0.193	Medium	Moderate	Low	1.54	0.016	0	0.18	1.42
Grassland	Bracken	0.054	Low	Condition Assessment N/A	Low	0.11	0	0	0.05	0.11
Grassland	Modified grassland	0.034	Low	Poor	Low	0.07	0.025	0	0.01	0.02
Sparingly vegetated land	Tall forbs	0.189	Low	Poor	Low	0.38	0	0	0.19	0.38
Grassland	Other neutral grassland	0.62	Medium	Poor	Low	2.48	0	0	0.62	2.48
Woodland and forest	Other woodland; broadleaved	0.099	Medium	Moderate	Low	0.79	0	0	0.10	0.79
Urban	Developed land; sealed surface	0.009	V.Low	N/A - Other	Low	0.00	0	0	0.01	0.00
Individual trees	Rural tree	0.257	Medium	Moderate	Low	2.06	0.041	0	0.22	1.73



Table 4.2. Baseline Hedgerows

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	Strategic sig.	Baseline Units	Length retained (km)	Length enhanced (km)	Length lost (km)	Units Lost
H1	Non-native and ornamental hedgerow	0.049	V.Low	Poor	Low	0.05	0.049	0	0.05	0.00
H2	Species-rich native hedgerow with trees - associated with bank or ditch	0.1	V.High	Good	Low	2.40	0.052	0	0.01	1.15
H3	Species-rich native hedgerow with trees - associated with bank or ditch	0.126	V.High	Good	Low	3.02	0.113	0	0.02	0.31
H4	Species-rich native hedgerow with trees - associated with bank or ditch	0.094	V.High	Good	Low	2.26	0.072	0	0.02	0.53
H5	Species-rich native hedgerow with trees - associated with bank or ditch	0.031	V.High	Good	Low	0.74	0.015	0	0.00	0.38
H6	Native hedgerow	0.106	Low	Moderate	Low	0.42	0.106	0	0.00	0.00
H7	Non-native and ornamental hedgerow	0.009	V.Low	Poor	Low	0.01	0.009	0	0.00	0.00
H8	Non-native and ornamental hedgerow	0.02	V.Low	Poor	Low	0.02	0.02	0	0.03	0.00
LoT 1	Line of trees	0.126	Low	Good	Low	0.76	0.099	0	0.00	0.16
LoT 2	Line of trees	0.051	Low	Moderate	Low	0.20	0.051	0	0.00	0.00
LoT 3	Line of trees - associated with bank or ditch	0.106	Low	Moderate	Low	0.42	0	0.106	0.01	0.00
LoT 4	Line of trees	0.123	Low	Moderate	Low	0.49	0	0.112	0.00	0.04



LoT 5	Line of trees	0.019	Low	Moderate	Low	0.08	0.019	0	0.05	0.00
-------	---------------	-------	-----	----------	-----	------	-------	---	------	------



Proposed Habitats

4.25. The proposals, as shown within **Appendix 1** have been used to calculate the post-development habitat areas. The rationale for habitat selection and target condition assessments is outlined below.

Developed Land; Sealed Surface (Urban – Hardstanding and Building)

4.26. The new development will include the new residential buildings and new hardstanding areas in the form of access roads, parking and pathways which comprise urban built form and as such no condition assessment is required.

Vegetated Gardens (Urban)

4.27. As part of the proposals vegetated gardens will be created including formal planting in front gardens and the building curtilage. These areas are assessed as a whole as vegetated gardens and in accordance with the statutory BNG guidance no condition assessment is required.

Modified Grassland (Grassland)

4.28. The landscape scheme for the site includes areas identified as amenity grassland on the road, verges and public open space. Given the location of this grassland and the regular management it would receive this grassland has been classified as a Modified grassland habitat which would be achieve poor condition

Other Neutral Grassland (Grassland – Conservation meadow grass and attenuation basins)

4.29. As part of the landscape proposals, new areas identified as meadow grass will be created comprising grassland in open space and in SUDs attenuation features (see **Appendix 1**).

4.30. Both of these areas will be sown with a diverse mix of wildflowers and slow growing grasses suitable to dry and wet conditions and which are broadly representative of the UKHab type 'Other neutral grassland' which through appropriate management would be anticipated to achieve Moderate condition.

Mixed Scrub (Heathland and shrub)

4.31. Native mixed scrub planting is proposed within areas of open space at the site. Existing bramble scrub and bracken below retained treelines and hedgerow edges will also be replaced with new mixed scrub ensure these features are protected as well as providing some mitigation for the loss of bramble scrub habitat. Whilst these areas would contain at least three native species and with an absence of invasive non-native plants, overall this habitat would not be anticipated to achieve greater than poor condition.



Trees (Urban Trees)

4.32. Tree planting that will comprise native species and native species cultivars of known wildlife importance, is proposed across the site, increasing species diversity and providing enhanced opportunities and connectivity for wildlife, such as bats and birds, through the site. Post-development, these trees which will be individual and subject to appropriate management would achieve moderate condition.

Species-rich native hedgerow, species-rich hedgerow with trees and species-rich native hedgerow with trees- associated with bank or ditch

4.33. The new native hedgerow planting will take place within and around the boundaries of the site to improve habitat connectivity. The new hedgerow will provide both an aesthetic value to the built form, as well as new habitat, refugia and sources of food for wildlife, including invertebrates, small mammals and birds. Some of these hedgerows will be planted with standard trees and therefore meet the definition for species-rich hedgerow with trees.

4.34. In order to meet trading rules for hedgerow habitats it is assumed that 0.08 km of species-rich hedgerow with trees – associated with bank or ditch will be created as part of hedgerow planting on site.

4.35. This habitat will be small in size and regularly managed and would therefore not be anticipated to achieve greater than moderate condition.

Enhanced Lines of Trees

4.36. Existing lines of trees would be planted with new hedgerow understories and sensitively managed to achieve species-rich hedgerow with trees status and to achieve at least moderate condition.

Table 4.3. Created Habitats

Broad Habitat	Proposed habitat	Area (hectares)	Created/ enhanced	Distinctiveness	Target condition	Strategic sig.	Units Generated
Urban	Developed land; sealed surface	1.205	Created	V.Low	N/A - Other	Low	0.00
Urban	Vegetated gardens	0.614	Created	Low	Condition Assessment N/A	Low	1.19
Grassland	Modified grassland	0.105	Created	Low	Poor	Low	0.20
Grassland (Conservation grass)	Other neutral grassland	0.205	Created	Medium	Moderate	High	1.58
Grassland (SUDS)	Other neutral grassland	0.382	Created	Medium	Moderate	High	2.94
Heathland and shrub	Mixed scrub	0.435	Created	Medium	Poor	High	1.93



Individual trees	Urban tree	0.293	Created	Medium	Moderate	High	1.03
------------------	------------	-------	---------	--------	----------	------	------

Table 4.4. Created and Enhanced Hedgerows

Habitat type	Length (km)	Created/ enhanced	Distinctiveness	Target condition	Strategic sig.	Units Generated
Species-rich native hedgerow with trees – associated with bank or ditch	0.08	Created	V. High	Moderate	High	1.03
Species-rich native hedgerow with trees	0.094	Created	High	Moderate	High	0.91
Species-rich native hedgerow	0.017	Created	Medium	Moderate	High	0.13
Species-rich native hedgerow with trees	0.051	Enhanced	High	Moderate	High	0.54
Species-rich native hedgerow with trees – associated with bank or ditch	0.106	Enhanced	V.High	Moderate	High	1.44
Species-rich native hedgerow with trees	0.112	Enhanced	High	Moderate	High	1.19

Results Summary

4.37. The Statutory Biodiversity Metric calculated that the proposed development will result in a total net biodiversity unit change of:

- **-5.21** habitat units equating to a **-35.72%** net loss; and
- **+1.58** hedgerow units equating to a **+14.54%** net gain.

4.38. An extract of the BNG metric headline results are shown in **Figure 4.1** below



FINAL RESULTS																							
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)			<i>Area habitat units</i> -5.21																				
<i>Hedgerow units</i>			1.58																				
<i>Watercourse units</i>			0.00																				
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)			<i>Area habitat units</i> -35.72%																				
<i>Hedgerow units</i>			14.54%																				
<i>Watercourse units</i>			0.00%																				
Trading rules satisfied?	No - Check Trading Summaries ▲																						
<table border="1"> <thead> <tr> <th>Unit Type</th><th>Target</th><th>Baseline Units</th><th>Units Required</th><th>Unit Deficit</th></tr> </thead> <tbody> <tr> <td><i>Area habitat units</i></td><td>10.00%</td><td>14.58</td><td>16.04</td><td>6.67</td></tr> <tr> <td><i>Hedgerow units</i></td><td>10.00%</td><td>10.88</td><td>11.97</td><td>0.00</td></tr> <tr> <td><i>Watercourse units</i></td><td>10.00%</td><td>0.00</td><td>0.00</td><td>0.00</td></tr> </tbody> </table>				Unit Type	Target	Baseline Units	Units Required	Unit Deficit	<i>Area habitat units</i>	10.00%	14.58	16.04	6.67	<i>Hedgerow units</i>	10.00%	10.88	11.97	0.00	<i>Watercourse units</i>	10.00%	0.00	0.00	0.00
Unit Type	Target	Baseline Units	Units Required	Unit Deficit																			
<i>Area habitat units</i>	10.00%	14.58	16.04	6.67																			
<i>Hedgerow units</i>	10.00%	10.88	11.97	0.00																			
<i>Watercourse units</i>	10.00%	0.00	0.00	0.00																			

Figure 4.1: Biodiversity Net Gain Assessment Results Summary, taken from The Statutory Biodiversity Metric.

4.39. The trading rules of the metric are not satisfied due to an overall deficit in medium distinctiveness habitat units due to the loss of bramble scrub, woodland and individual trees. The other medium distinctiveness habitat lost as part of the proposals namely grassland would be fully replaced by new medium distinctiveness other neutral grassland creation.

Off-site Compensation

4.40. It is not considered practicable or achievable to increase the quantum, distinctiveness, or the condition of habitats created, due to the nature of the proposed development, and the realistic expectations for the successful establishment of selected habitats.

4.41. Consequently, it is considered that the most appropriate way to compensate for the loss of on-site habitat units is through financial contribution to a local (inside Local Planning Authority (LPA) boundary or National Character Area (NCA) of the site) habitat unit provider, with a biodiversity net gain plan conditioned to demonstrate the legal agreements between the applicant and the selected third-party provider, to illustrate how 10% biodiversity net gain is being achieved through off site contribution. As shown in Figure 4.1, 6.67 Habitat Units would be required through an off-site provider for the scheme to achieve a 10% biodiversity net gain.

BNG Conclusion

4.42. The proposed development has followed the biodiversity net gain hierarchy, been sensitively designed overall to limit ecological impacts by retaining habitats of the highest ecological importance, the hedgerows and line of trees and the selection of appropriate habitat creation, focussing where possible on habitats of local conservation priority.



- 4.43. The proposed development will deliver **-35.72%** BNG for habitats and **+14.54%** for hedgerow. The trading rules for medium distinctiveness habitats are not satisfied due to the loss of scrub, trees and woodland.
- 4.44. The applicant would therefore make a financial contribution to a third-party provider to secure off-site habitat units, to compensate for the deficit in habitat units, ensure a 10% uplift on baseline habitat values and meet the trading rules. 6.67 habitat units would be required through an off-site provider for the scheme to achieve a 10% biodiversity net gain and meet the trading rules.
- 4.45. Evidence of this agreement, and how it will contribute to a 10% BNG can be conditioned through a Biodiversity Gains Plan, which illustrates how this agreement, in tandem with habitat creation proposals, delivers an uplift in baseline habitat units.
- 4.46. The BNG that will be delivered complies with national policy, and existing core policies in the current Leicestershire Local Plan (see **Appendix 2**).
- 4.47. To deliver the BNG, habitats will be maintained for at least 30-years post-development. This would be secured through an HMMP via a suitably worded planning condition attached to any planning consent.
- 4.48. The proposals to achieve BNG have been developed with consideration of wider wildlife benefits. The habitat enhancement and creation will increase connectivity across the site and will provide commuting, foraging and refuge opportunities for a variety of wildlife which could potentially use the site such as bats and birds. However, further measures to improve biodiversity should be included post-development, such as species-targeted enhancements including the provision of bat and bird boxes.



Section 5: Conclusions

- 5.1. No ecological features that would affect the principle of development at the site have been identified.
- 5.2. Two statutory designated sites: Ulverscroft Valley SSSI and Billa Barra Hill LNR were assessed. No impacts are anticipated due to the nature of the proposals. Twelve non-statutory sites were assessed, and no impacts are anticipated as a result of development, as long as standard best practice is followed to control impacts via air, run-off, and other pollutants. These are to be incorporated into a CEMP. No recreational impacts are anticipated due to recreational design incorporated into the masterplan, as well as within LWS and nature reserves in proximity to the site.
- 5.3. The loss of habitats on site will be compensated for through the creation of new habitat including a large SuDS pond, tree, native hedgerow, and native shrub planting, areas of soft landscaping such as grassland sown with a seed mix including wildflowers and wet meadow.
- 5.4. One tree (T26) and two small buildings are being lost to development that will require updated survey as part of a bat mitigation strategy pre-commencement. Other trees identified with bat roost potential of PRF-I will require inspection prior to felling. Potential adverse impacts during the operational phase of the development should be mitigated through an appropriately designed lighting strategy.
- 5.5. Precautionary working methods during the construction phase will be required with regard to badgers, bats birds, common amphibians and hedgehogs. Opportunities to enhance the site for a wide variety of protected and priority species have been incorporated into the proposed habitat creation scheme including ecologically functional SuDS, grassland creation and tree planting, and through the provision of bat and bird boxes and other species-specific enhancements detailed in an EEP.
- 5.6. An appropriately worded planning condition is expected to secure a suitable HMMP, lighting strategy and EEP to ensure the long-term management of the proposed habitat creation, including proposed tree, hedge, and shrub planting, as well as provision of enhancements and mitigation for specific species groups such as bats and birds.
- 5.7. The Statutory Biodiversity Metric calculated that the proposed development would result in a total net biodiversity unit change of **-5.21** habitat units equating to a **-35.72%** net loss; and **+1.58** hedgerow units equating to a **+14.54%** net gain.
- 5.8. The trading rules for medium distinctiveness habitats are not satisfied due to the loss of scrub, trees and woodland. The applicant would therefore make a financial contribution to a third-party provider to secure off-site habitat units, to compensate for the deficit in habitat units, ensure a 10% uplift on baseline habitat values and meet the trading rules. 6.67 habitat units would be required through an off-site provider for the scheme to achieve a 10% biodiversity net gain and meet the trading rules.
- 5.9. In conclusion, in anticipation of the implementation of any necessary mitigation, the proposed development will be compliant with relevant planning policies including Local Core

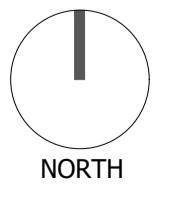


Policy 21: National Forest, Policy DM6 and Policy M4 of the Markfield Neighbourhood Plan, as well as relevant legislation with regard to ecology.



Appendix 1: Proposed Site Plan [GDA05-PL002]





SCALE BAR 1:500
0 10 20 30 40 50

Client: Glenalmond Developments Ltd
Project: Markfield
Title: Site Layout Coloured
Job No: GDA05 Drawing No: PL002
Scale: 1:500 Sheet Size: A1
Date: Sept 2025 Rev: D
Drawn: DM Checked: -
T: 0121 439 1151 A: 1 Legge Lane, Birmingham, B1 3LD
E: admin@ophirarchitecture.com
ophir
Registered in England and Wales, Company No: 1153447
A copy of the Site Layout Plan must be submitted to verification by Contractor
This drawing and design are © Copyright of Ophir Architecture Ltd.
The reproduction or alteration of plans without prior written consent

Appendix 2: Legislation and Planning Policy

Legislation

A2.1. Specific habitats and species receive legal protection in the UK under various pieces of legislation, including:

- The Environment Act 2021;
- The Wildlife and Countryside Act (WCA) 1981 (as amended);
- The Conservation of Habitats and Species Regulations 2017 (as amended);
- The Countryside and Rights of Way (CRoW) Act 2000;
- The Natural Environment and Rural Communities Act (NERC) 2006;
- The Hedgerows Regulations 1997; and
- The Protection of Badgers Act 1992.

A2.2. The European Council Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, 1992, often referred to as the 'Habitats Directive', provides for the protection of key habitats and species considered of European importance. Annexes II and IV of the Directive list all species considered of community interest. The legal framework to protect the species covered by the Habitats Directive has been enacted under UK law through The Conservation of Habitats and Species Regulations 2017 (as amended).

A2.3. In Britain, the WCA 1981 (as amended) is the primary legislation protecting habitats and species. SSSIs, representing the best examples of our natural heritage, are notified under the WCA 1981 (as amended) by reason of their flora, fauna, geology or other features. All breeding birds, their nests, eggs and young are protected under the Act, which makes it illegal to knowingly destroy or disturb the nest site during nesting season. Schedules 1, 5 and 8 afford protection to individual birds, other animals and plants.

A2.4. The CRoW Act 2000 strengthens the species enforcement provisions of the WCA 1981 (as amended) and makes it an offence to 'recklessly' disturb a protected animal whilst it is using a place of rest or shelter or breeding/nest site.

Environment Act 2021: Town and Country Planning Act

A2.5. The Environment Act gained Royal Assent in November 2022. Whilst the premise of Biodiversity Net Gain (BNG) has been around prior to this, the Assent of the Act sets the Framework for future legislation to be changed. This will be in the form of the Town and Country Planning Act (TaCPA), specifically Schedule 14 of the TaCPA, which will make Biodiversity Net Gain a condition of planning (not a planning condition). The target 'gain' is currently set at 10% but the Secretary of State has the ability to change this. The changes to the Act were legally enforceable from February 2024.



National Planning Policy

National Planning Policy Framework (NPPF), December 2024

A2.6. The NPPF was published in December 2024 and sets out the Government's planning policies for England and how these should be applied. It replaces the previous NPPF originally published in March 2012 and most recently in December 2023.

A2.7. Paragraph 11 states that:

"Plans and decisions should apply a presumption in favour of sustainable development."

A2.8. Section 11 of the NPPF, paragraph 125, sub-section a) states that planning policies and decisions should:

- a) *"encourage multiple benefits from both urban and rural land, including through mixed use schemes and taking opportunities to achieve net environmental gains - such as developments that would enable new habitat creation or improve public access to the countryside;"*
- b) *"recognise that some undeveloped land can perform many functions, such as for wildlife, recreation, flood risk mitigation, cooling/shading, carbon storage or food production"*

A2.9. Section 13 refers to development in the Green Belt and introduces 'Golden Rules' that, at paragraph 159, state how such development should *"support nature's recovery"* and *"where land has been identified as having particular potential for habitat creation or nature recovery within Local Nature Recovery Strategies, proposals should contribute towards these outcomes"*.

A2.10. Section 15 of the NPPF (paragraphs 187 to 195) considers the conservation and enhancement of the natural environment.

A2.11. Paragraph 187 states that planning and decisions should contribute to and enhance the natural and local environment by:

- a) *"protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);"*
- b) *"recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;"*
- c) *"maintaining the character of the undeveloped coast, while improving public access to it where appropriate; and"*
- 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 and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs"*



A2.12. Paragraph 188 states that plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

A2.13. Paragraph 192 states that in order to protect and enhance biodiversity and geodiversity, plans should:

- a) *"Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity¹⁵; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation¹⁶; and*
- 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."*

A2.14. When determining planning applications, Paragraph 193 states that local planning authorities should apply the following principles:

- 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;*
- b) *development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- 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 reasons¹⁷ and a suitable compensation strategy exists; and*
- d) *development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate."*

A2.15. As stated in paragraph 194 the following should be given the same protection as habitats sites:

- a) *"potential Special Protection Areas and possible Special Areas of Conservation;*

¹⁵ Circular 06/2005 provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.

¹⁶ Where areas that are part of the Nature Recovery Network are identified in plans, it may be appropriate to specify the types of development that may be suitable within them.

¹⁷ For example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat.



- b) listed or proposed Ramsar sites¹⁸; and
- c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites."

A2.16. Paragraph 195 states that

"The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site".

Local Planning Policy

Hinckley & Bosworth Borough Council Local Development Framework Core Strategy 2006-2026 (Adopted 2009)

A2.17. Policies relating to ecology and nature conservation can be found in Chapter 4.0: The Spatial Strategy, which are summarised as follows:

Policy 21: National Forest

To support the implementation of the National Forest to the north east of the borough, proposals that contribute to the delivery of the National Forest Strategy (increasing woodland cover; enhancing biodiversity; developing a new woodland economy for timber products and wood fuel energy; outdoor recreational and sports provision; and tourism developments, especially overnight quality accommodation linked to tourism in the Forest) will be supported provided that:

- *The siting and scale of the proposed development is appropriately related to its setting within the Forest*
- *The development respects the character and appearance of the wider countryside and*
- *The development does not adversely affect the existing facilities and working landscape of either the Forest or the wider countryside*

Within the National Forest new developments will be required to reflect the Forest context in their accompanying landscape proposals. Developments shall provide on-site or nearby landscaping that meets the National Forest development planting guidelines. Landscaping will generally involve woodland planting but can also include creation and management of other appropriate habitats, open space provision and the provision of new recreational facilities. The appropriate mix of landscaping features will depend upon the setting and the opportunities that the site presents.

¹⁸ Potential Special Protection Areas, possible Special Areas of Conservation and proposed Ramsar sites are sites on which Government has initiated public consultation on the scientific case for designation as a Special Protection Area, candidate Special Area of Conservation or Ramsar site.



In exceptional circumstances, where planting and landscaping cannot be accommodated on or nearby the development site due to lack of land, a commuted sum will be negotiated. This will be towards the cost of purchasing land for planting, creating a new woodland, providing public access to it and maintaining the site for at least 5 years. Commuted sums will normally be paid to the local authority, who in partnership with the National Forest Company will decide how they should be utilised.

Best practice guidance on the creation and future management of Forest-related planting and landscaping schemes should be followed, as set out in the National Forest Company Guide for Developers and Planners.

Site Allocations and Development Management Policies DPD (Adopted 2016)

A2.18. Policies relating to ecology and nature conservation can be found in Chapter 13: Natural Environment, which are summarised as follows:

Policy DM6: Enhancement of Biodiversity and Geological Interest

Development proposals must demonstrate how they conserve and enhance features of nature conservation and geological value including proposals for their long term future management.

Development proposals must demonstrate how they conserve and enhance features of nature conservation and geological value including proposals for their long term future management.

Proposals where the primary objective is to conserve or enhance biodiversity or geological interest will be permitted where they comply with other relevant policies in the plan.

On site features should be retained, buffered and managed favourably to maintain their ecological value, connectivity and functionality in the long-term. The removal or damage of such features shall only be acceptable where it can be demonstrated the proposal will result in no net loss of biodiversity and where the integrity of local ecological networks can be secured.

If the harm cannot be prevented, adequately mitigated against or appropriate compensation measures provided, planning permission will be refused.

In addition to the above, where specific identified sites are to be affected the following will be taken into account:

Internationally and Nationally Designated Sites

International and Nationally Designated Sites will be safeguarded.

Development which is likely to have any adverse impact on the notified features of a nationally designated site will not normally be permitted.



In exceptional circumstances, a proposal may be found acceptable where it can be demonstrated that:

- a) A suitable alternative site with a lesser impact than that proposed is not available; and*
- b) The on-site benefits of the proposal clearly outweigh the impacts on the notified features of the site and where applicable, the overall SSSI or habitat network; and*
- c) All appropriate mitigation measures have been addressed through the development management process; and*
- d) Development likely to result in a significant effect on internationally designated sites will be subject to assessment under the Habitats Regulations and will not be permitted unless adverse effects can be fully avoided, mitigated and/or compensated.*

Irreplaceable Habitats

Proposals which are likely to result in the loss or deterioration of an irreplaceable habitat would only be acceptable where:

- e) The need and benefits of the development in that location clearly outweigh the loss; and,*
- f) It has been adequately demonstrated that the irreplaceable habitat cannot be retained with the proposed scheme; and*
- g) Appropriate compensation measures are provided on site wherever possible and off site where this not is feasible.*

Locally Important Sites

Development proposals affecting locally important sites should always seek to contribute to their favourable management in the long term.

Where a proposal is likely to result in harm to locally important sites (including habitats or species of principal importance for biodiversity), developers will be required to accord with the following sequential approach:

- h) Firstly, seek an alternative site with a lesser impact than that proposed;*
- i) Secondly, and if the first is not possible, demonstrate mitigation measures can be taken on site;*
- j) Thirdly, and as a last resort, seek appropriate compensation measures, on site wherever possible and off site where this is not feasible.*

Markfield Neighbourhood Plan

A2.19. Policy M4: Ecology and Biodiversity



To be supported development proposals that cannot avoid harm to the biodiversity, or the geological significance of the following sites must include adequate mitigation, or as a last resort compensate for that harm:

Billa Barra Hill Local Nature Reserve

Hill Hole Quarry Nature Reserve

Altar Stones Nature Reserve

Local Wildlife Sites:

12544 Billa Barra Hill Nature Reserve

25283 Field South of Ulverscroft Wood

25374 Field North of Leicester Road

33856 Hill Hole Meadow

39269 Markfield Roadside Verge Nature Reserve 1

42896 Markfield Roadside Verge Nature Reserve 3

48479 Markfield Roadside Verge Nature Reserve 2

54201 Raunscliffe

64650 Bardon Woodland Belt 1

65169 Shaw Lane, Hedgerow Ash

72527 Billa Barra Hill

72528 Hill Hole Quarry

80053 Altar Stone

90453 Land Adjacent Cricket Ground

90695 Lower Grange Farm Hedge

91172 Veteran Horse Chestnut off Main Street

91533 Elliott's Lane Hedge

91534 Cliffe Hill Road Verge

91816 Grassland by Stoney Farm

Regionally Important Geological Sites:



12603 Markfield Hill Hole Quarry

12619 Groby Upper Park

12620 Graves Park

12622 Altar Stones

Proposals for biodiversity conservation or enhancement of the following types will be supported:

1. Management of woodlands, open grasslands and water features;
2. Restoration of drystone walls;
3. Planting of gaps in hedgerows to strengthen historic field patterns and management of over-mature hedges;
4. Tree planting to replace mature/veteran trees as they come to the end of their lives.
5. Maintenance of or creation of new stock fencing to prevent damage to the above.

Leicestershire and Rutland Local Nature Recovery Strategy

A2.20. Leicestershire and Rutland Local Nature Recovery Strategy¹⁹ details measures for the following priority species and habitats:

- Species: Palmate newt; adder; osprey; turtle dove; nightingale; willow tit; swift; starling; house sparrow; woodcock; marsh tit; curlew; lapwing; tree pipit; white-clawed crayfish; dingy skipper; grizzled skipper; black hairstreak; white-letter hairstreak; dark green fritillary; glow worm; brown trout; spined loach; European eel; barbastelle; Daubenton's bat; Leisler's bat; water vole; hedgehog; hazel dormouse; vascular plant (Gene-bank Assemblage); vascular plant (In-situ Conservation Assemblage); lichen (In-situ Conservation Assemblage)
- Habitats: Arable field margins; hedgerows; lowland mixed deciduous woodland (all); lowland mixed deciduous woodland (Ancient Woodland); wet woodland; wood-pasture and parkland; traditional orchards; mature trees (all); ancient trees; lowland calcareous grassland; lowland meadows – neutral; lowland dry acid grassland; lowland heathland; coastal and floodplain grazing marsh; purple moor-grass and rush pastures; lowland fens; reedbeds; rivers; eutrophic standing water (canals, reservoirs); ponds; ponds (Sphagnum); inland rock outcrop and scree habitats; open mosaic habitats on previously developed land; and
- Habitats listed under 'other important habitats': built environment and gardens; railways; railways (historic); roadside verges of local wildlife site standard; springs and flushes

¹⁹ Leicestershire County Council (2025) Leicestershire and Rutland Local Nature Recovery Strategy
<https://www.leicestershire.gov.uk/environment-and-planning/local-nature-recovery-strategy/leicestershire-leicester-and-rutland-local-nature-recovery-strategy> [Accessed: 06/11/2025]



Appendix 3: Methodology and Results

Data Search

A3.1. A desk-based study was conducted whereby records of designated sites and records of protected and priority species were purchased and interrogated for the site and the surrounding landscape. The aim of the data search is to collate existing ecological records for the site and adjacent areas. Obtaining existing records is an important part of the assessment process as it provides information on issues that may not be apparent during a single survey, which by its nature provides only a 'snapshot' of the ecology of a given site.

A3.2. The following resources were consulted/contacted:

- Multi-Agency Geographic Information for the countryside (MAGIC) website²⁰;
- Leicestershire and Rutland Environmental Records Centre (LRERC)²¹; (Data ordered and received on 31st July 2025);
- Hinckley & Bosworth Borough Council website²²;
- Joint Nature Conservation Committee (JNCC) website²³;
- Natural England (NE) designated sites website²⁴;
- Ordnance Survey mapping; and
- Google Maps, including aerial photography.

A3.3. The following areas of search around the boundary of the site boundary were applied:

- 2 km for protected and priority species, national statutory designated and non-statutory sites; and
- 10 km for European statutory sites.

'Extended' Phase I Habitat Survey and UKHabs

A3.4. An 'extended' Phase 1 survey was carried out on the 2nd September 2025 by Philip Playford BSc (Hons) MSc, a suitably experienced ecologist and full member of CIEEM (MCIEEM). The methods used during the walkover survey broadly followed methods used in an 'extended' Phase 1 habitat survey²⁵ and entailed recording the main plant species and classifying and

²⁰ <https://magic.defra.gov.uk/> [Accessed 05/11/2025]

²¹ <https://my.lerc.online/?src=lr> [Accessed: 05/11/2025]

²² <https://www.hinckley-bosworth.gov.uk/> https://www.hinckley-bosworth.gov.uk/downloads/file/487/core_strategy_adopted_document [Accessed 05/11/2025]

²³ <https://jncc.defra.gov.uk/ProtectedSites/> [Accessed 05/11/2025]

²⁴ <https://designatedsites.naturalengland.org.uk/> [Accessed 05/11/2025]

²⁵ Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey - a technique for environmental audit. JNCC, Peterborough.



mapping habitat types with reference to the Habitat Definitions provided by the UK Habitat Classification Working Group²⁶.

- A3.5. Additionally, the habitats identified were evaluated for their potential to support legally protected and notable fauna species. Where access allowed, adjacent habitats were also considered in order to assess the site within the wider landscape and to provide information with which to assess possible impacts within the context of the site boundary.
- A3.6. All habitats were assessed utilising the relevant condition criteria for the relevant habitat type under Statutory Biodiversity Metric, which included confirming 'pass' / 'fail' criteria taken from the UK Habitat/Phase 1 methodology where necessary.

²⁶ Butcher, B., Carey, P., Edmons, R., Norton, L. and Treweek, J. (2020). UK Habitat Classification – Habitat Definitions V1.1



Appendix 4: Badger Legislation, Methodology and Results

A4.1. To keep information regarding badgers confidential, **Appendix 4** is supplied separately as a Confidential Badger Appendix (TG Ref: 13587_R05a_Appendix 4_26th November 2025_WR).



Appendix 5: Bat Legislation, Methodology and Results

Legislation and Conservation Status

A5.1. All U.K bat species are listed on Appendix II of the Bern Convention and on Annexes II and IV of the EU Natural Habitats Directive. In England and Wales bats are protected under Schedule 2 of the Conservation of Habitats and Species Regulations 2017 and under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). It is an offence, with certain exceptions, to:

- Intentionally or deliberately capture, kill, or injure a bat;
- Intentionally or recklessly damage, destroy, and disturb bats in a place used for shelter or protection, or obstruct access to such areas;
- Damage or destroy a bat breeding site or resting place;
- Possess a bat, or any part of it, unless acquired lawfully; and
- Sell, barter, exchange, transport, or offer for sale a bat or parts of them.

A5.2. Actions that are prohibited can be made lawful by a licence issued by the appropriate Statutory Nature Conservation Organisation.

A5.3. Several species of bats barbastelle *Barbastella barbastellus*, Bechstein's *Myotis bechsteinii*, brown long-eared *Plecotus auritus*, greater horseshoe *Rhinolophus ferrumequinum*, lesser horseshoe *Rhinolophus hipposideros*, noctule *Nyctalus noctula* and soprano pipistrelle *Pipistrellus pygmaeus* are listed as Priority Species under the 'UK Post-2010 Biodiversity Framework which provides a statutory list of priority species in England, Scotland, Wales and Northern Ireland, as required under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (England), Section 7 of the Environment (Wales) Act 2016, Section 2(4) of the Nature Conservation (Scotland) Act 2004, and Section 3(1) of the Wildlife and Natural Environment Act (Northern Ireland) 2011. Decision-makers such as Local Planning Authorities must have regard for Priority species in all their activities, including when making decisions on planning applications.

Survey Methodologies

A5.4. The surveys followed standard methodologies set out in the Bat Mitigation Guidelines²⁷, the Bat Workers Manual²⁸ and Bat Surveys for Professional Ecologists- Good Practice Guidelines 4th Edition²⁹ and comprised:

- Preliminary Roost Assessment (PRA) – External and internal building inspection survey to assess potential of buildings on site to support roosting bats;

²⁷ Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Chartered Institute of Ecology and Environmental Management, Ampfield.

²⁸ Mitchell-Jones, A.J. & McLeish, A.P. (eds). (2004) 3rd Edition Bat Workers' Manual., JNCC, Peterborough, ISBN 186107558

⁸

²⁹ Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London. ISBN-978-1-7395126-0-6



- Ground Level Tree Assessment (GLTA) – Ground level inspection of trees to assess potential of trees on site to support roosting bats;
- Night-time bat walkover – to assess the species assemblage present at the site and to identify significant commuting routes and foraging locations; and
- Automated static detector deployment – to supplement the activity transect surveys by leaving static bat detectors to record for five consecutive nights per transect survey.

A5.5. All GLTA and NBW surveys were led by Philip Playford, Natural England bat licence holder 2020-44658-CLS-CLS.

Building Preliminary Roost Assessment (PBRA)

A5.6. A PBRA was undertaken on 2nd September 2025 on all buildings within the site boundary. All surveys were daytime inspections and the conditions for all surveys were considered optimal. The location of the buildings at the site are shown on **Plan 13587/P03a**.

A5.7. All buildings were inspected from the ground using binoculars, high powered torch, digital camera and endoscope for accessible features. In relation to buildings, such signs may include bat droppings, urine splashes, staining and features suitable for allowing bats access to roost (e.g. gaps behind soffits / hanging tiles / ridge tiles, lifted slates / flashing). The internal inspection of the buildings comprised a thorough search for evidence of roosting bats in accessible loft spaces (i.e. droppings, urine stains) and an assessment of the presence of potential roosting features internally.

A5.8. The potential of the buildings to support roosting bats was assessed using the criteria shown in **Table A5.1** below.

Table A5.1. Building / Structure Assessment Criteria – adapted from Collins, 2023.

Suitability	Description of Roosting Habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain Potential Roost Features (PRFs) but with none seen from the ground or features seen with only very limited potential.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only).
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time.



A5.9. Consideration of the structures suitability to be utilised as a hibernation roost was also considered in line with published guidance^{30 31}.

Limitations

A5.10. Buildings were covered in dense scrub and unable to be inspected fully. Recommendations are made regarding this in **Section 3**.

Ground Level Tree Assessment

A5.11. A GLTA was undertaken on all trees within the Site boundary. The assessment was undertaken on 2nd September 2025 by Philip Playford. All surveys were daytime inspections and weather conditions for all surveys was considered optimal. The location of the trees at the Site are shown on **Habitat Features and PBRA Plan 13587/P03a**. All trees were inspected from the ground using binoculars, high powered torch, digital camera and endoscope for accessible features. Potential Roosting Features (PRFs) of interest include at detailed in **Table A5.2** below.

Table A5.2. PRF Types that can be Exploited by Bats and How they Form - adapted from Collins, 2023.

PRFs formed by disease and decay	PRFs formed by damage	PRFs formed by association
woodpecker holes squirrel holes knot holes pruning cuts tear outs wounds cankers compression forks butt rots	lightning strikes hazard beams subsidence cracks shearing cracks transverse snaps welds lifting bark desiccation fissures frost cracks	fluting ivy

A5.12. The potential of trees to support roosting bats was assessed using the criteria shown in **Table A5.3** below and results are shown in **Table 2.3** located in **Section 2**.

Table A5.3. Assessment of Tree Suitability Criteria - adapted from Collins, 2023.

Roost Suitability	Description of Roosting Habitat
NONE	Either no PRFs in the tree or highly unlikely to be any
FAIR	Further assessment required to establish if PRFs are present in the tree
PRF-I	A tree with feature with potential to support individual or low numbers of bats

³⁰ Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London. ISBN-978-1-7395126-0-6

³¹ Middleton, N. (2019) Assessing Sites for Hibernation Potential. A Practical Approach, including a Proposed Method & Supporting Notes. Author: Neil Middleton (BatAbility Courses & Tuition) Version: Draft/V2.2019 Dated: 08.10.2019 [Assessing-Sites-for-Hibernation-Potential-BatAbility-10.2019.pdf](https://www.batability.co.uk/Assessing-Sites-for-Hibernation-Potential-BatAbility-10.2019.pdf)



PRF-M

A tree with features with potential to support higher conservation value roosts, including maternity roosts



Results

A5.13. The results of the GLTA are presented in **Table A5.4** below.

Table A5.4. GLTA Results

Tree no.	Potential Roost Feature (PRF)	Suitability	Photograph
T1	PRF1 – Branch tear-out PRF2 – Desiccation cracks	PRF-I	
T2	PRF1 – Knot hole	PRF-I	
T4	PRF1 – Branch tear PRF2 – Desiccation cracks Ivy obscuring this tree.	PRF-I	
T5	PRF1 – Branch tear-out PRF2 – Desiccation cracks Ivy obscuring this tree.	PRF-I	
T15	PRF1 – Knot holes PRF2 – Desiccation cracks	PRF-I	
T24	PRF1 – Branch tear-out PRF2 – Desiccation cracks	PRF-I	
T26	This tree could not be accessed due to the density of scrub surrounding the tree.	FAR	No photo available.



Limitations

A5.14. T26 was inaccessible and therefore could not be inspected fully. Recommendations are made regarding this in **Section 3**.

Bat Static Monitoring

A5.15. Static monitoring surveys of the site were completed between May – October 2024, excluding August, due to a missed deployment at the site which was then completed in August 2025. These surveys were designed to record bat species over an extended period and to determine whether any habitat features are of importance to bats.

A5.16. During each static survey, four Anabat Swift/Express devices were deployed in treeline and hedgerow habitat. See **Figure 5.1** below for locations. The detectors were left in situ for a minimum of five nights in total as per guidance³².



Figure 5.1 Bat static detector locations

A5.17. The detectors were programmed to record from 30 minutes before sunset to 30 minutes after sunrise. Echolocation calls were later analysed utilising the British Trust for Ornithology (BTO) Pipeline. Due to the low error rate for common pipistrelle, soprano pipistrelle, and lack of implications for mitigation, BTO result output was not subject to further auditing.

³² Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London. ISBN-978-1-7395126-0-6



A5.18. Weather conditions for surveys are recorded, including the air temperature, wind speed and precipitation at sunset. **Tables A5.5-A5.11** includes sunset and sunrise times for each survey.

Table A5.5. Static Survey V1 - Weather Conditions

Date	Sunset Time	Sunrise Time	Weather conditions		
			Air temperature at sunset (° C)	Precipitation	Wind (Beaufort scale)
08/05/2024	20:44	05:19	14	Dry	3
09/05/2024	20:46	05:17	13	Dry	3
10/05/2024	20:47	05:16	13	Dry	3
11/05/2024	20:49	05:14	14	Dry	3
12/05/2024	20:51	05:12	14	Dry	3

Table A5.6. Static Survey V2 - Weather Conditions

Date	Sunset Time	Sunrise Time	Weather conditions		
			Air temperature at sunset (° C)	Precipitation	Wind (Beaufort scale)
30/05/2024	21:17	04:49	15	Light rain	2
31/05/2024	21:18	04:48	16	Dry	2
01/06/2024	21:20	04:47	17	Dry	3
02/06/2024	21:21	04:45	18	Dry	3
03/06/2024	21:23	04:44	18	Dry	3

Table A5.7. Static Survey V3 - Weather Conditions

Date	Sunset Time	Sunrise Time	Weather conditions		
			Air temperature at sunset (° C)	Precipitation	Wind (Beaufort scale)
21/06/2024	21:04	04:59	23	Dry	2
22/06/2024	21:06	04:58	22	Dry	2
23/06/2024	21:07	04:56	25	Dry	2
24/06/2024	21:09	04:55	26	Dry	2
25/06/2024	21:10	04:54	27	Dry	2

Table A5.8. Static Survey V4 - Weather Conditions

Date	Sunset Time	Sunrise Time	Weather conditions		
			Air temperature at sunset (° C)	Precipitation	Wind (Beaufort scale)
26/07/2024	21:09	05:17	18	Light shower	3
27/07/2024	21:07	05:18	17	Dry	3
28/07/2024	21:06	05:20	17	Dry	3
29/07/2024	21:04	05:21	16	Dry	3
30/07/2024	21:02	05:23	16	Dry	3

Table A5.9. Static Survey V5 - Weather Conditions

Date	Weather conditions



	Sunset Time	Sunrise Time	Air temperature at sunset (° C)	Precipitation	Wind (Beaufort scale)
25/09/2024	18:53	06:52	14	Dry	
26/09/2024	18:56	06:56	12	Dry	2
27/09/2024	18:54	06:58	12	Dry	2
28/09/2024	18:52	07:00	10	Dry	2
29/09/2024	18:50	07:02	16	Dry	2

Table A5.10. Static Survey V6 - Weather Conditions

Date	Sunset Time	Sunrise Time	Weather conditions		
			Air temperature at sunset (° C)	Precipitation	Wind (Beaufort scale)
09/10/2024	18:23	07:20	14	Dry	2
10/10/2024	18:23	07:23	15	Dry	2
11/10/2024	18:25	07:25	14	Dry	2
12/10/2024	18:27	07:27	10	Dry	2
13/10/2024	18:29	07:29	14	Dry	2

Table A5.11. Static Survey V7 - Weather Conditions

Date	Sunset Time	Sunrise Time	Weather conditions		
			Air temperature at sunset (° C)	Precipitation	Wind (Beaufort scale)
13/08/2025	20:33	05:43	18	Dry	3
14/08/2025	20:31	05:45	17	Light rain	2
15/08/2025	20:29	05:47	17	Dry	3
16/08/2025	20:27	05:48	16	Dry	3
17/08/2025	20:25	05:50	16	Dry	3

Limitations

A5.19. Due to static detector failure, data was not recorded on V01 at L01. Due to the bat species identified through the remaining static deployments and night bat-walkovers, this is not considered to impact any recommendations made in this report.

Results

Night-time Bat Walkover (NBW) Results

A5.20. A total of 53 bat passes were recorded during the transect survey visits and all calls were identified to a species level or genus level following review in BatExplorer bat sound analysis software. See **Table A5.12** for results.

A5.21. These passes were from at least three species comprising common pipistrelle (71.70% of all activity), soprano pipistrelle (9.43% of all activity) and noctule bat (13.21% of all activity), with one recording identified to *Pipistrellus* spp. (1.89% of all activity), and a further two recordings identified to *Nyctalus/Epstesicus* (3.77%) due to ambiguity.



A5.22. NBW showed general low-levels of activity through the site given its suitability. Commuting activity was noted mostly along the central hedgerows of the site. Foraging was seen mostly in the fields divided by the central hedgerows, and in the western area adjacent to Hill Lane.

Table A5.12. Activity Surveys

Date	Species					Total
	Ppi	Ppy	Noct	Nyctaloid	Pip spp.	
14/04/2024	13	1	7	2	1	24
05/09/2024	6	0	0	0	0	6
06/08/2024	19	4	0	0	0	23
% of bats across activity surveys	71.70	9.43	13.21	3.77	1.89	



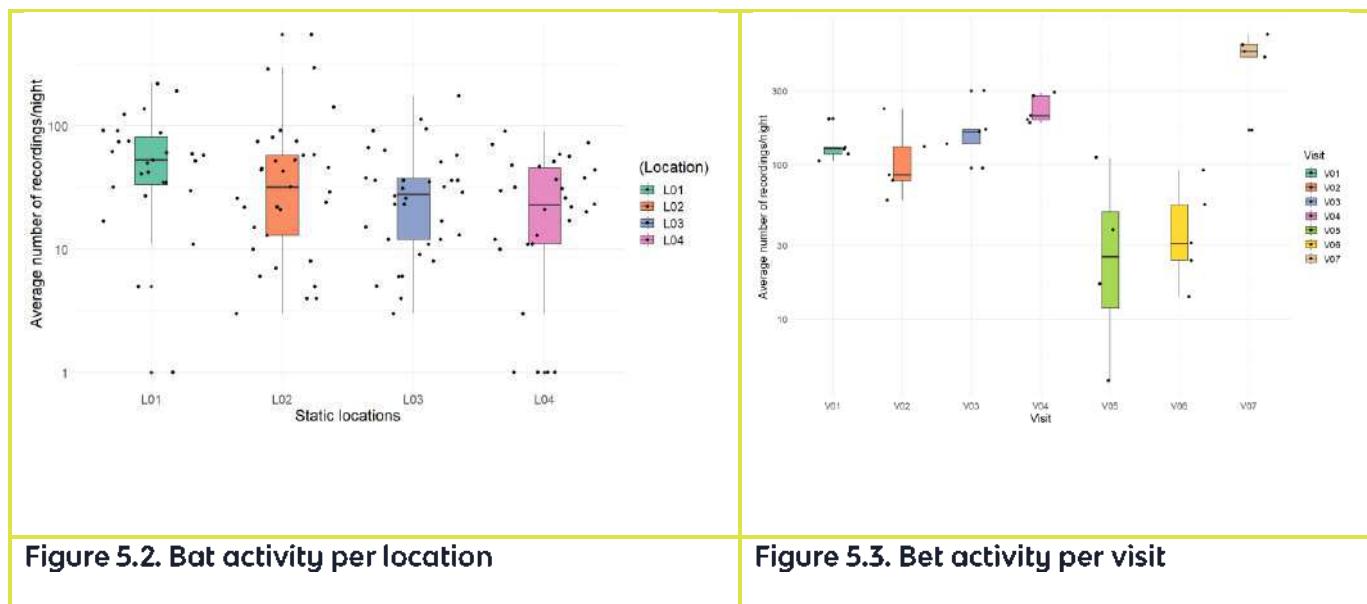
Bat Static Results

5.10. The static bat detectors recorded common pipistrelle, soprano pipistrelle, pipistrelle spp., Myotis spp., Natterer's bat, Nyctalus spp., Nyctaloid bats and brown-long eared bat. Pipistrelle species accounted for 76.04% of all recorded activity. See **Table A5.13** below for full results.

Table A5.13. Static Survey Results

Static Location	Species								Total
	Ppi	Ppy	Pip Spp.	My Spp.	MyNat	Nyc Spp	Nyctld	BLE	
L01	1117	269	5	119	19	175	4	60	1768
L02	1502	285	4	70	5	323	12	52	2253
L03	760	205	-	34	28	181	10	25	1243
L04	420	128	2	19	1	321	6	16	913
Total	3799	887	11	242	53	1000	32	153	
% of bats across static surveys	61.50	14.36	0.18	3.92	0.86	16.19	0.52	2.48	

5.11. Bat activity was significantly higher at L01 compared to L03, and at L01 compared to L04 (Kruskal-Wallis, $P < 0.005$). See **Figure 5.2** and **Figure 5.3** below.



Appendix 6: Reptile Legislation, Methodology and Results

Legislation and Conservation Status

A6.1. All of Britain's native reptiles are protected under the Wildlife and Countryside Act 1981 (as amended) (WCA). The four common species of reptile: adder *Vipera berus*, grass snake *Natrix natrix helvetica*, slow worm *Anguis fragilis* and common lizard *Zootoca vivipara* are listed on Schedule 5, Section 9, Parts 1 and 5, of the WCA and as such, it is an offence to:

- Intentionally kill, injure or take reptiles; and
- Sell, offer or advertise for sale any live or dead specimen or anything derived from reptiles.

A6.2. Smooth snake *Coronella austriaca* and sand lizard *Lacerta agilis* are afforded additional protection under the Conservation of Habitats and Species Regulations 2018 (as amended) but the site is not within the known geographical distribution of these species, and no habitat exists within the site with the potential to support them.

A6.3. All native reptile species are Priority Species in the 'UK Post-2010 Biodiversity Framework which provides a statutory list of priority species in England, Scotland, Wales and Northern Ireland, as required under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (England), Section 7 of the Environment (Wales) Act 2016, Section 2(4) of the Nature Conservation (Scotland) Act 2004, and Section 3(1) of the Wildlife and Natural Environment Act (Northern Ireland) 2011. Decision-makers such as Local Planning Authorities must have regard to Priority species in all their activities, including when making decisions on planning applications.

Reptiles Methodology

A6.4. Reptile surveys within the site were undertaken by Tyler Grange on 24/06/2024, 28/06/2024, 20/09/2024, 17/06/2025, 20/07/2025, 17/09/2025 and 25/09/2025. These surveys were conducted in line with published guidance³³ ³⁴, and were completed within the active season for reptiles (March to October inclusive) by experienced field ecologists competent in reptile survey.

A6.5. Refugia was left in situ for a minimum of 10 days to settle in, before seven subsequent survey checks were undertaken during suitable weather conditions (dry, warm, air temperature between 9°C to 18°C, with intermittent sun and light winds). The metadata for these surveys is shown in Table A6.1 below.

³³ Froglife (1999) *Reptile Survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation*. Froglife Advice sheet 10. Froglife, Halesworth.

³⁴ Natural England (2022) Reptiles: advice for making planning decisions. Available at:

<https://www.gov.uk/guidance/reptiles-advice-for-making-planning-decisions#:~:text=This%20is%20Natural%20England's%20standing,standing%20advice%20for%20protected%20species.>
[Accessed 06/11/2025]



A6.6. During each visit, the refugia, were checked visually from a distance to determine whether reptiles are basking on their surface. The refugia were then carefully approached and lifted to check for reptiles sheltering beneath them. Searches of natural refugia were also undertaken, where these were present.

Table A6.1. Dates and Weather Conditions of Reptile Surveys

Survey visit	Date	Weather conditions	Temperature (°C) (Start/End)
V1	24/06/2024	Dry	18/19
V2	28/06/2024	Dry	14/15
V6	20/09/2024	Dry	13/14
V3	17/06/2025	Dry	14/15
V4	20/07/2025	Dry	15/16
V5	17/09/2025	Dry	13/14
V7	25/09/2025	Dry	14/14

Limitations

A6.7. These surveys were conducted over two years. However, they were undertaken in optimal timings and weather conditions, and no reptiles were recorded on site during these, or any other, ecological surveys. We therefore consider this to be a valid conclusion.

Results

A6.8. During each survey visit, refugia were examined for reptiles either basking on or sheltering underneath.

A6.9. No observations of reptiles were made during any survey visit.

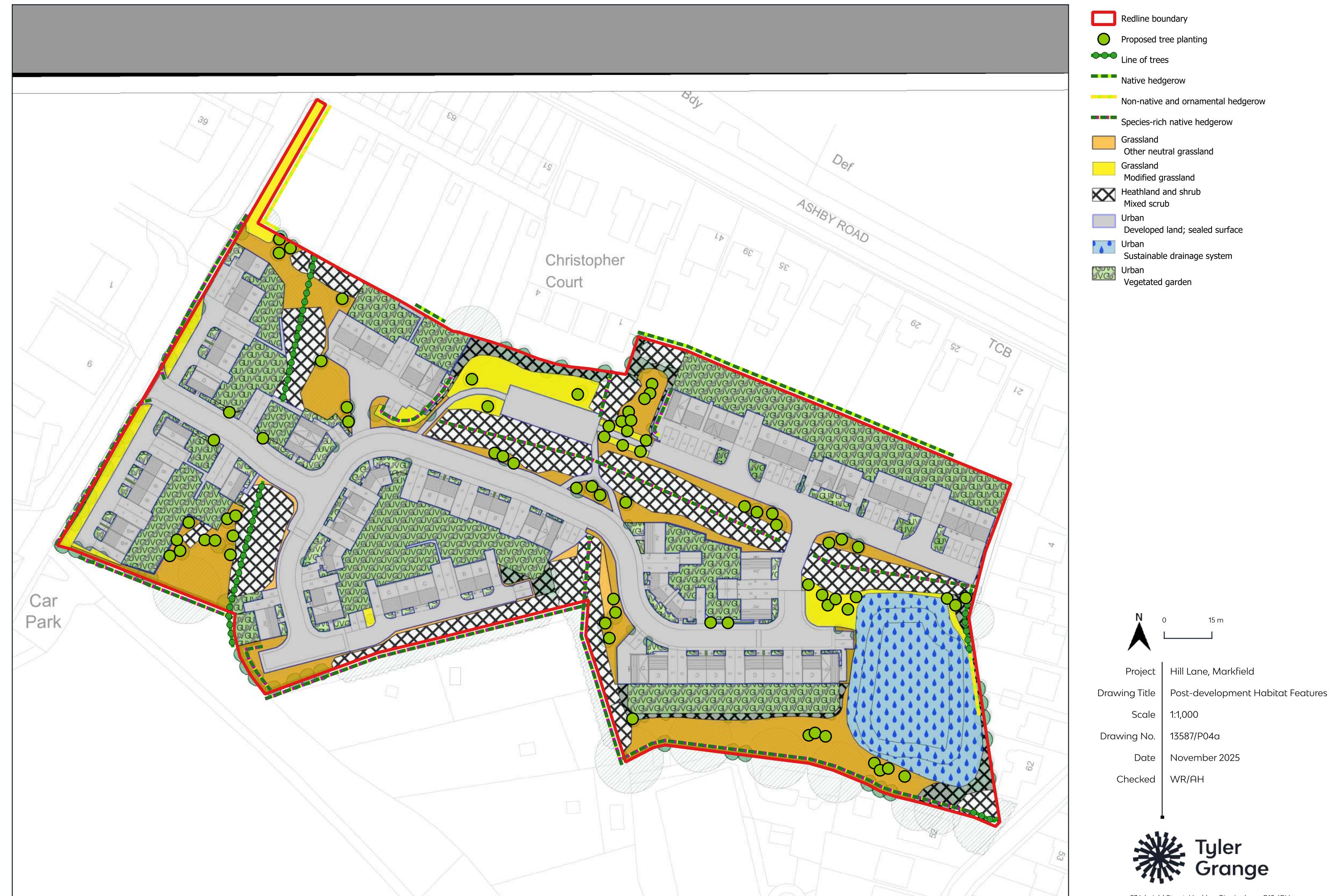


Plans:

- Plan 1: 13587/P03a Habitat Features and PBRA Plan
- Plan 2: 13587/P04a Post-development Habitat Features
- Plan 3: 13587/P05a Badger Survey Results Plan (See **Appendix 4**)









Step into
our world

www.tylergrange.co.uk



Tyler
Grange

Landscape | Ecology | Arboriculture