



EG On the Move Limited

**Markfield Services, Markfield,
Leicestershire**

**Preliminary Ecological Appraisal, Bat Report
and Biodiversity Net Gain Assessment**

June 2026

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Executive Summary

This report presents the findings of a Preliminary Ecological Appraisal (PEA), commissioned by EG On the Move, of land at Markfield Services, Services, Markfield LE67 9PP [NGR SK 47697 11123]. The PEA informs proposals to demolish existing buildings on Site except the existing Travelodge building, and the creation of a new service station including customer parking bays, HGV parking, EV charging, coffee shop and restaurant, and associated service station structures.

The PEA is based on information collected from a desk study and an Extended UK Habitat Survey carried out on 13th January 2026. It also includes a provisional analysis of Biodiversity Net Gain (BNG). Relevant legislation and planning guidance are also considered.

Key ecological features, potential impacts and outline mitigation measures are summarised in Table 1 below.

Table 1: Key findings and recommendations

Key findings and recommendations	
Designations and Habitats of Principal Importance	
1.1	The Site was located within 2km of three statutory designated sites: Cliffe Hill Quarry Site of Special Scientific Interest (SSSI), Billa Barra Hill Local Nature Reserve (LNR) and Ulverscroft Valley SSSI. The Site lies within the impact risk zone (IRZ) of Ulverscroft Valley SSSI.
1.2	No significant effects to the statutory designations are likely.
1.3	Habitats of Principal Importance (HPI) deciduous woodland is located within 40m of the Site boundary. These habitats will be avoided where possible and protected from indirect impacts including pollution prevention measures and Root Protection Zones (RPZ).
1.4	Ensure strict adherence to a Construction Environment Management Plan (CEMP), which will contain best practice measures with regards to pollution, siltation, and erosion control, along with tree protection measures, to minimise the possibility of pollution/indirect impacts to the on Site Travelodge building and any bats roosting within the building, woodland and off-Site habitats, designated sites and other habitats of importance.
Other Habitats	
2.1	Poor condition broadleaved woodland is present within the Site. Habitat loss will be minimised, and appropriate pollution prevention measures implemented to avoid indirect impacts. Tree planting will be incorporated into the final landscaping plans.
2.2	The off-Site watercourse to the western boundary will be subject to pollution prevention measures which will be adhered to throughout the works.
Roosting Bats	
3.1	One of the buildings (B1) was categorised as having low potential to support roosting bats during a Preliminary Roost Assessment (PRA) undertaken in January 2026. No evidence of roosting bats was recorded during the PRA within the building, which included a search for droppings or feeding remains. However, potential roosting features were recorded, and there was moderate suitability within the surrounding habitat for foraging bats.
3.2	A single dusk emergence survey was carried out on 21 st May 2026. No roosting bats were noted emerging from the building during this emergence survey, and no further surveys were recommended.
3.3	Additionally, it is considered unlikely that the building supports a hibernation roost due to the unsuitability of the building in its present state for maintaining consistent temperature and humidity levels during winter months, as required by hibernating bats.

Foraging Bats

- 3.4 The adjacent Travelodge building was utilised as a linear commuting route by low numbers of bats and suitable precautions should be implemented including no additional directional lighting on the building, and suitable Reasonable Avoidance Measures (RAMS) for bats are to be adhered to during the works, as outlined within a CEMP.
- 3.5 Trees within the woodland to the eastern and northern boundaries were of moderate suitability for foraging and commuting bats. Measures to minimise disturbance to foraging bats during construction include minimising light spillage on adjacent vegetation and retaining trees and woodland wherever possible.
- 3.6 A sensitive lighting strategy should be produced to demonstrate how valuable woodland habitat on-Site to the eastern and northern boundaries, and off-Site HPI woodland to the south-eastern boundary, are to be safeguarded from light pollution and maintained as a dark zone for foraging bats.

Nesting Birds

- 3.7 At the time of the surveys no nests were identified utilising the buildings or vegetative habitats on Site. However, given the presence of mature trees and woodland on Site, it was considered likely that nesting birds would be present on Site during the nesting period (March to end of August inclusive) and therefore there is a risk of birds nesting during any vegetation clearance as a result of the proposed works. Any vegetation removal works should take place outside the breeding bird season. Necessary clearance to be undertaken within the breeding bird season will be subject to a pre-clearance nesting bird check carried out by a suitably experienced ecologist.

Non-native Species

- 4.1 Cotoneaster and buddleja are present on Site. Works should ensure non-native species are not re-introduced to the Site once removed. Disposal/eradication must follow Government guidance.
- 4.2 The Site may be enhanced for biodiversity via removal of non-native species such as buddleia, and replaced with native trees and shrubs as part of the post-development landscape plan.
- 4.3 Landscaping proposals include tree planting and suitable compensation for the loss of grassland and scrub habitats.

Biodiversity Net Gain

- 5.1 A total of 5.07 habitat units and 0.73 hedgerow units are required to meet the 10% net gain.
- 5.2 The Site had an overall unit deficit of 0.29 habitat units and 0.36 hedgerow units. The trading rules are not satisfied.
- 5.3 Landscaping proposals for the proposed development include extensive tree planting, neutral grassland and modified grassland creation, and mixed scrub habitat. Final landscaping must include suitable compensation for the loss of hedgerow habitats; and may include additional mixed scrub planting.
- 5.4 A Biodiversity Net-Gain assessment will be used to inform restoration plans and demonstrate a positive gain for biodiversity.

Resurvey of the Site

- 6.1 If works are delayed beyond 18 months of the date of the last survey, or if any changes to the proposals on Site are made, further ecological survey may be necessary.

1. Introduction

- 1.1 Bowland Ecology Ltd was commissioned by EG On the Move to undertake a Preliminary Ecological Appraisal (PEA) to inform proposed development of land at Markfield Services, Services, Markfield LE67 9PP [NGR SK 47697 11123]. Proposals comprise a planning application for the demolition of existing buildings on Site – except for the existing Travelodge building - and creation of new service station including 150 customer parking bays and additional 28 customer parking bays, 12 HGV parking bays, 12 EV charging bays, coffee shop and restaurant, and associated fuel station structures.
- 1.2 The Site was located west of Markfield, and north-west of Leicester, within the county of Leicestershire. The Site was dominated by hardstanding and built structures including the Travelodge building which is located to the south-west corner of the Site; other structures included an old petrol services building with associated food outlets all closed and abandoned, and a closed and derelict refuelling station building to the northern boundary. All closed buildings on Site were derelict and / or in poor condition with evidence of illegal access and public nuisance activity within the buildings and surrounding land on Site including graffiti and vandalised structures. Other habitats on Site comprised bramble and mixed scrub, non-native ornamental shrubs and occasional individual trees. The total area of the Site measured 2.51 ha.
- 1.3 The habitats within the wider area comprised arable fields, woodland and grassland to the south and west, road network including Little Shaw Lane to the northern and eastern boundaries, and a large granite quarry site further to the southern boundary (Old Cliffe Hill Quarry).
- 1.4 The PEA follows the Guidelines for Preliminary Ecological Appraisal and the Guidelines for Ecological Report Writing (CIEEM 2017a; 2017b) and is in line with the British Standard BS42020:2013 'Biodiversity – Code of practice for planning and development'. It is based on information from a desk study and an Extended UK Habitat Survey.
- 1.5 The key objectives of the PEA are as follows:
 - 1) Identify the likely ecological constraints associated with the proposals, including protected/notable species, designated sites and important habitats occurring within the area.
 - 2) Assess the likely impacts arising from the proposals and identify required mitigation measures (in line with the Mitigation Hierarchy¹).
 - 3) Identify any additional surveys that may be required to inform an Ecological Impact Assessment (EcIA).
 - 4) Identify opportunities for biodiversity enhancement.
- 1.6 This report includes a description of the methods used, habitats and species identified, and recommendations to protect and enhance biodiversity and address legal requirements.

¹ BS 42020:2013 Clause 5.2

2. Methodology

Desk Study

- 2.1 The aim of the desk study was to identify the presence of statutory and non-statutory designated wildlife sites, legally protected species, and Habitats and Species of Principal Importance (HPI and SPI) for the conservation of biodiversity (Section 41 NERC Act 2006) within the search area.
- 2.2 The Multi-Agency Geographic Information for the Countryside (MAGIC) website (www.magic.gov.uk) was reviewed for information on locally, nationally and internationally designated sites of nature conservation importance (statutory sites only) and areas identified as HPI within 2 km of the site boundary.
- 2.3 Local records of protected sites and species within 2 km of the site were obtained from a data search with Leicestershire and Rutland Environmental Records Centre. Where historical records of protected species are returned by the desk study, their likely presence is considered in view of up-to-date information. Records dated only within the last ten years have been utilised for the desk study for the Site.
- 2.4 Ordnance Survey (OS) maps and aerial photographs were reviewed to help identify the presence of water bodies and notable habitats, such as hedgerows and woodland, within 0.25 km of the site, which may provide aquatic or terrestrial habitat for GCN.
- 2.5 It is recommended² that, for developments resulting in permanent or temporary habitat loss at distances over 0.25 km from the nearest pond, careful consideration should be given as to whether a great crested newt (*Triturus cristatus*) (GCN) survey is appropriate. Although GCN may use suitable terrestrial habitat up to 0.5 km from a breeding pond, in this instance a 0.25 km search radius was considered appropriate due to the proliferation of surrounding road networks which act as a barrier to dispersal for amphibians making the Site less suitable for colonisation by GCN.

Extended UK Habitat Classification Survey (UKHab)

- 2.6 An assessment was made of all areas of vegetation within the site boundaries, based on the standardised UKHab survey methodology (Butcher *et al.* 2020). This involved a walkover survey to identify vegetation types, which were then classified against those types set out in UKHab classification system V2.0 (UKHab Ltd, 2023). All habitats within the site boundary were mapped and described.
- 2.7 In addition, evidence of and potential for legally protected and notable species was noted, in particular:
 - Potential roosting sites for bats within structures and trees (undertaken externally or internally to buildings where safe to do so, and in the case of trees from ground level only); an assessment of the suitability of bat roosting, foraging and commuting habitat was undertaken based on Collins (2023) (see Appendix A).

² see the Natural England 'Method statement template for great crested newt mitigation licence', <https://www.gov.uk/government/publications/great-crested-newts-apply-for-a-mitigation-licence>

- Habitats utilised by other notable and protected species, including amphibians, water vole (*Arvicola amphibius*), otter (*Lutra lutra*), badger (*Meles meles*), hedgehog (*Erinaceus europaeus*), invertebrates (e.g. butterflies), nesting birds (including any active or disused bird nests) and reptiles.
 - The presence of the most common invasive plant species subject to strict legal control including: Japanese knotweed (*Reynoutria japonica*), giant knotweed (*R. sachalinensis*), hybrid knotweed (*R. x bohemica*), giant hogweed (*Heracleum mantegazzianum*), rhododendron (*Rhododendron ponticum*, *R. ponticum* x *R. maximum* and *R. luteum*), and Himalayan balsam (*Impatiens glandulifera*).
- 2.8 The survey was carried out on 13th January 2026 by Clare Lusher MSc BSc (Hons), Ecologist, who is licenced to survey for bats (2025-84887-CL18-BAT) and GCN (2025-81266-SCI-CL08) and is experienced in carrying out UK Hab habitat classification surveys, accompanied by Patrick Hamblin MSc BSc (Hons) Assistant Ecologist. The weather was fine, clear with a wind speed (Beaufort Scale) of BF1, 9c, 40% cloud cover and no rain.

Limitations

- 2.9 The heras fenced old refuelling compound could not be accessed, although it could be viewed closely from the fence line using binoculars, telephoto lenses and visual inspection. However, considering the small area, habitats were viewable in their majority from outside the fence. The lack of access is therefore not considered to pose a significant constraint to habitat classification and condition assessment. However, it did prevent a thorough assessment of the suitability of the structure for roosting bats. This limitation is addressed in Section 5 Mitigation and Opportunities.
- 2.10 The habitat survey focused on the most prominent and important species within the time available, rather than aiming to identify all species that might present within site. Ecological surveys are also limited by factors that affect the presence of plants and animals, such as the time of year, migration patterns and behaviour. Therefore the survey of the study area has not produced a complete list of plants and animals.
- 2.11 Desk study data should not be treated as a comprehensive list of species present within a search area. Habitat inventories shown on MAGIC vary in terms of their completeness, precision and reliability. Many species are under-recorded and low numbers of records can indicate a lack of survey effort or local experts in some areas, rather than confirm the absence of a species. Available records may also lack details such as precise location, date, and activity of a species/individual.
- 2.12 The timing of the survey was outside the optimum period for completing a UK Habitat Survey (April to September inclusive). However, the site was fully accessible, and there was sufficient information to confidently recognise the type of habitats present and their potential to support legally protected species.
- 2.13 The list of invasive plant species included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) is extensive and these plants are found in a range of different habitats, including aquatic habitats. The Extended UK Habitat Survey checked for the presence of Japanese knotweed, giant knotweed, hybrid knotweed, giant hogweed, rhododendron and Himalayan balsam. There may be other invasive plant species present on the site which were not recorded, but it is considered that the survey was sufficient to identify any significant constraints posed by invasive plants.

3. Results

Desk Study

- 3.1 Three statutory Sites were identified within 2km of the Site boundary.
- Cliffe Hill Quarry Site of Special Scientific Importance (SSSI), located 0.2km south-west of the Site boundary;
 - Billa Barra Hill Local Nature Reserve (LNR) located 0.6km west of the Site boundary;
 - Ulverscroft Valley SSSI, located 1.7km north-east of the Site boundary.
- 3.2 The Site lies within the impact risk zone (IRZ) of Ulverscroft Valley SSSI.
- 3.3 Statutory sites are described further in **Table 1** below.

Table 1: Statutory designated sites within 2 km of the site

Site Name	Designation	Approximate distance/direction from site	Key features
Cliffe Hill Quarry	SSSI	0.2km south-west	Site area 19.21 ha. The site is a 'Geological Conservation Review' site. Located at grid reference SK 475 105.
Billa Barra Hill	LNR	0.6km west	Site area measures 20.6 ha and located at grid reference SK 466 114. Tree planting has been carried out on quarried exposed rock surfaces. The rest of the site is acid grassland recovering from improved grassland and as nutrient levels reduce the flora becomes more diverse.
Ulverscroft Valley	SSSI	1.7km north-east	The site supports permanent grassland, heath, woodland and wetlands of semi-natural origin. The site area measures 110 ha and was located on grid reference SK 500 126.

- 3.4 No non-statutory Sites were located on or adjacent to the Site.
- 3.5 The Site was located within 1km of several Local Wildlife Site (LWS) and potential LWS, the closest of which was located within 25m of the Site boundary comprising mesotrophic grassland habitat to the east of the Site located on the roundabout of the M1/J22. A further potential LWS was located 35m north of the Site comprising semi-improved mesotrophic grassland habitat.
- 3.6 Non-statutory sites are summarised in **Table 2**.

Table 2: Non-statutory designated sites

Site Name	Designation	Approximate distance/ direction from site	Key features
Markfield Roadside Nature Reserve 2	LWS	0.4km east	Primarily grassland habitat.
Altar Stones	LWS	0.5km east	Drystone walls, scrub and heath-grassland with a variety of plant species, including mat-grass, bilberry, heath bedstraw and tormentil.
Billa Barra Hill	LWS	0.6km west	Primarily acid grassland habitat, this site is dominated by gorse and acid grassland; a rare habitat in Leicestershire. Italian Rye Grass dominates the lower slope, with other species present. The quarry contains a variety of early colonising mosses and vascular plants on rock surfaces that flourish in thin soils.
Markfield, land adjacent to cricket ground	LWS	0.6km	Acid grassland habitat.
Markfield grassland, Stoney Farm	LWS (Candidate)	0.7km south-east	Mesotrophic grassland habitat.
Markfield Roadside Nature Reserve 3	LWS	0.9km east	Mesotrophic grassland habitat.
Hill Hole Meadow	LWS (Potential)	0.9km east	The site is a total of 5.2 hectares, including a water filled quarry, small wooded area, open grassland with exposed rock faces, and allotment gardens.
Ulverscroft Wood	LWS	0.9km east	Woodland and mesotrophic grassland.

- 3.7 The desk study also identified the following areas of habitat within 2km of the Site which potentially qualify as HPI and/or Ancient Woodland as shown in **Table 3**.

Table 3: Potential areas of HPI and Ancient Woodland

HPI	Description
Deciduous woodland	Several areas of priority habitat deciduous woodland was located within 2km of the Site boundary. The closest areas of this habitat was located adjacent to the Site boundary at the south-east corner

	approximately 40m from the redline. Further deciduous woodland was located 60m east of the Site boundary.
Good quality semi-improved grassland	Four areas of good quality semi-improved grassland were located within 2km of the Site. The closest area of semi-improved grassland was located 0.1 km to the west of the Site.
Open Mosaic Habitat	Three areas of open mosaic habitat (draft) were recorded, the closest of which was located 0.7km south-east of the Site boundary.
Ancient woodland	Five areas of ancient woodland were located within 2km of the Site. The closest ancient woodland was located 1.1km north-east of the Site boundary.

- 3.8 No ponds were located within 250m of the Site boundary. A single watercourse was located off-Site to the western boundary.

Habitats

- 3.9 Habitats recorded during the extended UKHab survey are mapped in Appendix A. The Target Notes (TNs) describing key interest features for wildlife are set out in Appendix B. Each habitat type is described below, with the UKHab reference code included in brackets. Plant species nomenclature follows Stace (2010). Habitat condition tables are presented in Appendix C.

Urban – developed land; sealed surface – u1b

- 3.10 The access routes into the Site, customer car parking for the Travelodge, and all other hardstanding including tarmac forecourt and access into the derelict forecourt and refueling building (B2), hardstanding derelict car parking to the rest of the Site, and all buildings on Site comprised 1.77 ha. Buildings and tarmac surfaces were in poor condition overall.
- 3.11 The Site comprised a large building to the south of the Site (B1), and a nearby substation/storage building structure to the east (B4). A derelict forecourt and associated shop and payment brick-built structure was located to the northern section of the Site (B2), and a further small structure was located to the north-east adjacent to the forecourt which had functioned as storage / car wash facility (B3).
- 3.12 There is no statutory biodiversity metric condition assessment sheet associated with urban – developed land; sealed surface therefore no condition assessment is required.

Woodland – other woodland; broadleaved – w1g

- 3.13 Broadleaved woodland was present to the northern and eastern boundaries of immature and semi-mature trees. Species comprised oak (*Quercus robur*), ash (*Fraxinus excelsior*), birch (*Betula pendula*), alder (*Alnus glutinosa*), and beech (*Fagus sylvatica*). The area of this habitat measured approximately 0.28 ha. Two age classes of five species were recorded within the woodland.
- 3.14 There was no evidence of browsing and no non-native species were recorded in the woodland. The ground flora was limited to ivy (*Hedera helix*) and bare ground, and was otherwise dominated by extensive leaf litter due to the time of year and not indicative of year round ground floral assemblage in this section. The canopy was more than 50% cover.

No veteran trees were present and no diseased or dead trees were recorded in this woodland habitat.

Woodland – other woodland; mixed – w1h

- 3.15 Mixed woodland was present to the centre of the Site. The woodland comprised immature and semi-mature sycamore (*Acer pseudoplatanus*), Scots pine (*Pinus sylvestris*), field maple (*Acer campestre*), ash, mountain ash (*Sorbus aucuparia*), and silver birch, with an understory of common ruderals.
- 3.16 Two age classes of six native tree species were recorded within the woodland and no significant browsing damage by herbivores was evident. Cherry laurel and cotoneaster were recorded within the woodland to the centre of the Site, likely remnant from a previous landscaping scheme. Temporary open space within the woodland comprised approximately 10% of cover and some disease or dieback was evident in the mountain ash trees present to the east of the woodland. No recognisable woodland NVC plant community was recorded at ground level flora which comprised bare ground and ivy. Tree height varied over two storeys, and no veteran trees were noted as this appeared to be a relatively young, semi-naturalised woodland. Less than 25% of the woodland comprised deadwood. The area measured approximately 0.13 ha.
- 3.17 Overall the woodland on Site was assessed collectively as in **moderate** condition using the statutory biodiversity metric condition assessment sheets. It is understood the woodland habitat will be removed to facilitate the planned works and compensatory measures will be required.

Heathland and shrub - mixed scrub – h3h

- 3.18 Areas of mixed scrub were located throughout the Site, most notably to the centre of the Site surrounding B1 and extending to the southern and eastern boundary of B1, and to the northern sections connecting to woodland habitat. Species comprised bramble (*Rubus fruticosus* agg), cotoneaster spp., dogwood (*Cornus sanguinea*), elder (*Sambucus nigra*), barberry (*Berberis* sp); and an understorey of common ruderals including cleavers (*Galium aparine*) and wood avens (*Geum urbanum*).
- 3.19 The area of this habitat measured approximately 0.12 ha.
- 3.20 This habitats was assessed as in moderate condition for the purposes of BNG.

Grassland - modified grassland – g4

- 3.21 Modified grassland was present to the western and northern boundaries. The grassland on Site was heavily managed and mown regularly, although the modified grassland to the north had evidently been left to grow to a taller sward height within the previous season. However, species composition was still poor comprising perennial rye grass (*Lolium perenne*) and common meadow grasses (*Poa* spp), with occasional tussocks of false oat grass (*Arrhenatherum elatius*) which had died off over winter.
- 3.22 A further small area of modified grassland was located to the southern boundary which was recently mown and regularly maintained. Species were very limited within this habitat and comprised dominant along with perennial rye-grass, along with occasional creeping buttercup (*Ranunculus repens*), broadleaved dock (*Rumex obtusifolius*), annual meadow grass (*Poa annua*), and dandelion (*Taraxacum* agg.). Grassland towards the Travelodge

building was more heavily managed and utilised by the public, and showed signs of disturbance, damage and bare ground. The area of this habitat measured approximately 0.19 ha.

- 3.23 An average of four vascular species were recorded per m². The grassland appeared to be well managed, although the northern section had longer sward heights of approximately 8-10cm and less management; whilst all other modified grassland was subject to heavy wear and damage from footfall and sward height was low at approximately 5-6cm. Grassland edges were well delineated, located adjacent to hardstanding and access road. The modified grassland was assessed as in **poor** condition using the statutory biodiversity metric condition assessment sheet, meeting five of the criteria needed for good condition and failing criterion A.

Urban - individual trees – (T1-T6)

- 3.24 Six individual trees were identified on the Site shown in the UK Hab Habitat Map as T1-T6. T1-T3 were native ash species located to the north of the Travelodge building within modified grassland. All three were mature trees in good health, with full canopy height and spread and no evidence of disease or dieback. These trees were all assessed as in **moderate** condition for the purposes of condition assessment for BNG.
- 3.25 T4 was a small birch within banked, managed modified grassland to the southern boundary adjacent to wooden fencing, and was recorded as in **poor** condition due to some evidence of disease and dieback, stunted growth and management preventing full canopy height and spread.
- 3.26 T5 was a crab apple (*Malus sp*), which was small and in **poor** condition with evidence of management and limited canopy height and spread, comprising no ecological niches including hollows, rot holes, or fungal fruiting bodies, and no evidence of saproxylic species (e.g., beetle holes, fungi).
- 3.27 T6 was an ash. Although semi-mature it lacked healthy growth and spread and was deformed in shape, leaning to the north, and had some ivy cladding to the main trunk. This tree was assessed as in **poor** condition, scoring 1 pass.
- 3.28 The trees comprised 0.073 ha. Individual trees on Site were all recorded as native species.

Native hedgerow – h2a

- 3.29 Hedgerow was located on the north-western boundary section adjacent to grassland and extended to wooden fencing at the northern boundary. Hedgerow continued to the western boundary, stopping along the western boundary approximately halfway along the boundary line. Hedgerow species within the northern section comprised mature holly (*Ilex aquifolium*), with dense and extensive woody bramble and some mature elder (*Sambucus nigra*). Species within the western hedgerow continued with holly, dogwood, ash and bramble, with traveller's joy (*Clematis vitalba*) also recorded within this section of hedgerow.
- 3.30 The hedgerow was assessed as in **moderate** condition overall, with evidence of some management but growth extensive with good height and spread of the hedgerow of over 2m depth and approximately 3m height. Extensive litter pollution was evident along this habitat.
- 3.31 This hedgerow measured approximately 0.11 km in length, and is classed as a Priority Habitat.

Hedgerow – non-native and ornamental hedgerow – h2b

- 3.32 This habitat was located throughout the Site and was evidently remnants from the original site development landscaping scheme. These areas showed some evidence of ongoing management including cutting back, although dieback and disease was also evident in some of the planting, leaving some gaps within hedgerows and an understorey layer of ivy and common ruderal species along with patches of bare ground.
- 3.33 Species comprised *cotoneaster spp.* and *berberis sp.*, both cultivated plants presumed part of a historic planting scheme on the Site.
- 3.34 Overall, the ornamental hedgerows were assessed as in **poor** condition with limited variety of species and were of very low distinctiveness; although these were considered to offer some value as a habitat for biodiversity, for small passerine nesting birds.
- 3.35 This habitat measured approximately 0.22 km in length.

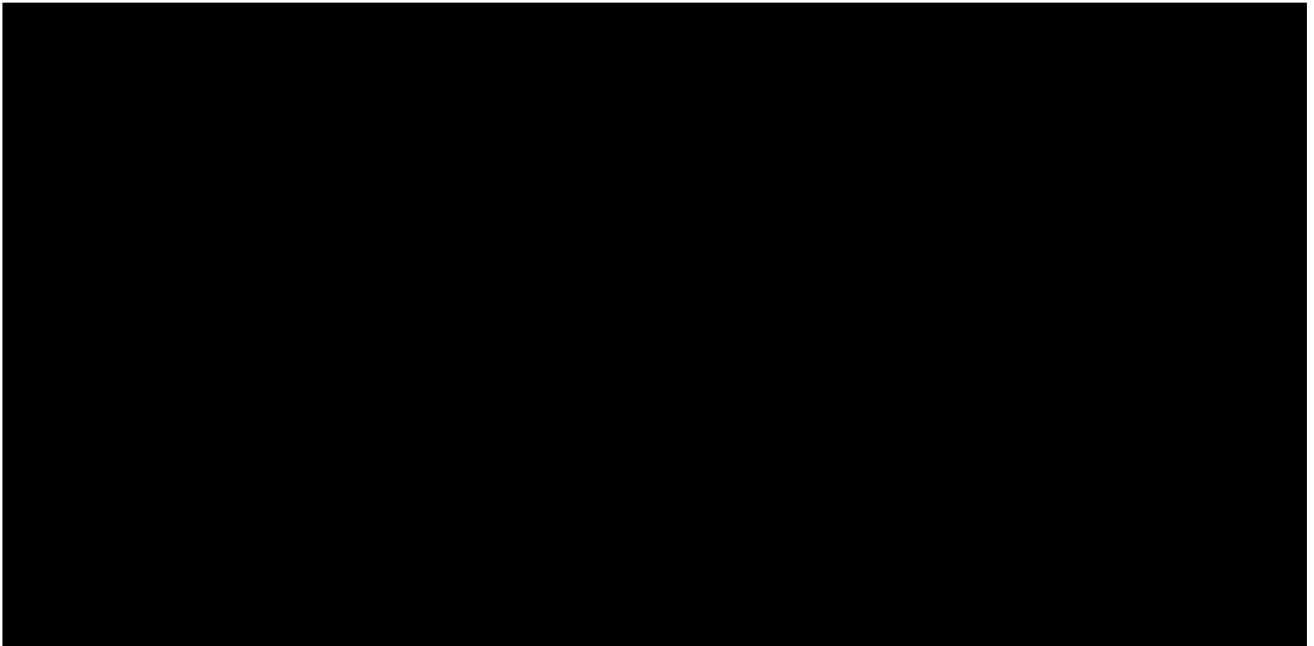
Off-site watercourse – Rivers and streams – r2b

- 3.36 A single watercourse was present to the western Site boundary. The small watercourse was surveyed in winter and as such was wet and flowing; however, it is possible this watercourse runs dry in summer. The watercourse had steep banks and vegetation was absent from within the watercourse itself, with limited to no bankside vegetation. Pollution of the surrounding watercourse footprint was evident which included litter from HGV lorries on Site, and human faeces. Rats were noted as present within the bankside adjacent to the watercourse.

Species

Amphibians

- 3.37 The desk study returned 94 records of GCN, 41 records of smooth newt (*Lissotriton vulgaris*), 53 records of common frog (*Rana temporaria*), 31 records of common toad (*Bufo bufo*), and two records of palmate newt (*Lissotriton helveticus*). The closest record was of common frog, located approximately 0.6km north-east of the Site, dated from 2009.
- 3.38 No ponds were present on the Site or within 250m of the survey area. A small off-Site watercourse was located to the western boundary. The watercourse emerged from a culvert off-Site behind hedgerow at the western boundary approximately adjacent to the Travelodge south-western corner, and became culverted off-Site towards the north-western corner of the Site. The watercourse ran off-Site flowing from south to north along the western boundary within a shallow ditch. The water showed evidence of sediment and was turbid, with mud to the eastern and western banksides and limited vegetation on the banksides.
- 3.39 This watercourse was considered highly unlikely to support GCN. While GCN may use slow-moving, low-predator waterbodies, they are primarily terrestrial and prefer grassland and scrub connected to suitable breeding sites. Considering the aforementioned factors together with a lack of suitable habitats on Site and isolation of the Site in an urban landscape surrounded by road networks to the northern, eastern and western boundaries, it is considered unlikely that GCN or other common amphibians will be present on Site. As such, no further consideration is given to GCN or other amphibians within this report.



Bats

- 3.43 The desk study returned 780 records of bat species. Records included 239 records of common pipistrelle (*Pipistrellus pipistrellus*), 117 records for soprano pipistrelle (*Pipistrellus pygmaeus*), 123 records for brown long-eared bat (*Plecotus auritus*), 91 records for noctule (*Nyctalus noctula*), 57 records for *Myotis spp*, nine records for Daubenton's bat (*Myotis daubentonii*), 23 records for Leisler's bat (*Nyctalis leislerii*), seven records for Nathusius' pipistrelle (*Pipistrellus nathusii*), five records for Natterer's bat (*Myotis nattererii*), nine records for whiskered/Brant's bat (*Myotis mystacinus/Myotis brandtii*), 25 records for *Nyctalus spp.*, and 1 record for an unidentified bat species. The closest record was for *Myotis sp.* located 0.1km from the southern Site boundary.

Roosting bats

- 3.44 All structures on Site were assessed for their suitability to support roosting bats using industry standard guidance (Collins, 2023). Suitable habitats on Site were limited to roosting opportunities within the largest building (B1). Several potential roosting features (PRFs) identified. PRFs recorded within the building included:
- Slipped and missing tiles on the pitched tile roof offering gaps and crevices for day roosting bats;
 - Gaps within ridge tiles on the roof offering suitable crevices and entry points into the roof voids; and
 - Large areas of missing ceiling tiles internally offering bats clear access into the open building spaces and up into the roof voids should they gain entry via the potential access points identified.
- 3.45 B1 was assessed as having **low roost suitability** given the number and type of PRFs identified, the lack of surrounding structures with roost suitability, likelihood of high light levels from the adjacent Travelodge building and associated car parking, and low bat foraging potential

of surrounding habitats on Site surrounding B1 which was dominated by developed land and mixed scrub.

- 3.46 The internal voids accessed were located above extensive floating ceilings with numerous missing tiles evident, allowing light, draughts and noise to permeate into the void spaces from below. These spaces were also filled with wiring, trunking and other debris; and there was the likelihood of rain ingress into the void spaces.
- 3.47 No evidence of bats was recorded in the building during the survey, which included a search for droppings and urine staining, worn areas near openings which may indicate use by bats, and live or dead bats.
- 3.48 Other buildings on Site (B2, B3 and B4) were assessed as having **negligible suitability** for roosting bats, with no access points, no missing tiles, no open voids, and no observed evidence including staining or worn areas around soffits and tiles.
- 3.49 A ground level tree assessment of the individual trees on Site recorded no suitable roosting features and they were therefore considered to have **negligible suitability** for roosting bats.

Bat Surveys (B1)

- 3.50 A dusk emergence survey was conducted on 21st May 2026 on B1, with particular focus on the western and northern elevations of B1 (see Appendix C) with features as identified during the PRA.
- 3.51 The first bat call heard was from a single noctule bat which was recorded at approximately 21:28 and was a single pass from east to west on the southern boundary and was heard not seen. A soprano pipistrelle call was recorded at approximately 21:30 which was a sudden call, heard not seen, but estimated to have come from the southern boundary, close to the Travelodge building to the south-west corner of the Site, and was a single pass. A further soprano pipistrelle call was heard at 21:33, recorded as heard not seen and a single pass. At 21:52 a soprano pipistrelle call was recorded commuting east to west on the southern boundary, and as heard not seen. which was again for a single pass. A final brief bat call was recorded at 22:10 and was a soprano pipistrelle, recorded commuting east to west on the southern boundary and was heard not seen. No emergences from B1 were recorded, and no further bat calls were identified.
- 3.52 Light levels were moderate to high during the surveys due to the surrounding built environment including the adjacent open Travelodge building and associated illumination on the building and car park, and urban nature of the Site which is adjacent to busy road networks and access routes in and out of the Site.
- 3.53 Overall bat activity was low throughout the survey. A soprano pipistrelle commuting route was identified dissecting across the Site from east to west on the southern boundary, and low levels of bat foraging activity were recorded, comprising soprano pipistrelle and noctule bat only with low numbers of passes and all bats heard but not seen.
- 3.54 **Table 4** below details the species observed for the surveys and the timings of first passes.

Table 4: Summary of Bat Species and Activity

	21/05/2026
Time of first bat pass	21:28 *NOC

Approximate number of bat passes	6
Species observed	*NOC, **SP

*NOC = noctule **SP = soprano pipistrelle

Birds

- 3.55 The desk study returned 879 records of birds located within 2km of the Site. Notable species recorded within 2km of the Site included barn owl (*Tyto alba*), black redstart (*Phoenicurus ochruros*), osprey (*Pandion haliaetus*), kingfisher (*Alcedo atthis*), yellowhammer (*Emberiza citrinella*), lesser spotted woodpecker (*Dryobates minor*) and skylark (*Alauda arvensis*).
- 3.56 During the Site survey very low numbers of birds were recorded flying over the Site to the western boundary including buzzard (*Buteo buteo*), magpie (*Pica pica*), robin (*Erithacus rubecula*), and blackbird (*Turdus merula*).
- 3.57 The Site did not contain suitable habitat for overwintering birds, with no suitable areas of grassland habitat and being of limited size. However, the Site contained woodland trees and individual trees suitable to support common breeding/nesting birds, and further consideration should be given to nesting birds during the demolition and construction works as outlined in Section 5.

Riparian animals

- 3.58 The desk study returned three records of otter from within 2km of the Site the closest of which was located 0.1km east of the Site and dated 2017, associated with Markfield, M1 Jn 22 A50 overbridge. Eight records of white-clawed crayfish (*Austropotamobius pallipes*) were returned within 2km of the Site, the closest of which was located 0.4km east of the Site and associated with the River Lin, dated from 2016.
- 3.59 The habitats on Site had no suitability for riparian animals, and no evidence of otter or water vole was recorded during the Site survey. The single watercourse located off-Site to the western boundary lacked aquatic vegetation and suitable vegetated banks, and was subject to regular pollution from the on Site HGV hardstanding parking areas, and so was considered unlikely to support white-clawed crayfish or fish populations, and no evidence of these species was observed during the site survey. No suitable woodland, grassland, or bankside habitats were located on Site near to the watercourse which might support foraging or cover for riparian mammals.
- 3.60 It was considered unlikely that otter, water vole or white-clawed crayfish would be present on Site. No further consideration is given to riparian animals within this report.

Reptiles

- 3.61 The desk study returned 39 records for reptiles, which included two records of slow worm (*Anguis fragilis*) located within 2km of the Site, one record of grass snake (*Natrix helvetica*), one record of adder (*Vipera berus*) and 35 records for common lizard (*Zootoca vivipara*). The closest record was for common lizard located 0.7km east, dated from 2005 and associated with Altar Stones.

- 3.62 Suitable terrestrial habitat for reptiles on Site was limited to the north-west within the taller sward modified grassland and patches of ephemeral weeds as cover adjacent to the watercourse. However, this habitat was limited in size, isolated from any connective habitats including suitable cover from predation and hibernacula, and adjacent to busy roads and access routes in and out of the Site, along with extensive hardstanding and the road networks within the wider area; all of which were considered to place a considerable barrier to dispersal for reptiles to move on and off the Site. Therefore it is considered highly unlikely that reptiles occupy the Site, and no further consideration is given to reptiles within this report.

Invertebrates

- 3.63 The desk study returned 179 records for invertebrates located within 2km of the Site boundary. Notable species included dingy skipper (*Erynnis tages*), purple emperor (*Apatura iris*), white-letter hairstreak (*Satyrus w-album*), and latticed heath (*Chiasmia clathrata*).
- 3.64 The Site offers small examples of habitat suitable for invertebrates, in particular the taller sward modified grassland and mixed scrub habitat which can be valuable to foraging lepidopterans and their larval forms in an otherwise urban landscape. Additionally, a single record for common cudweed (*Filago germanica*) was located on Site and dated from 2016. Common cudweed is an early-successional plant supporting various pollinators and local biodiversity in impoverished, acidic to neutral soils. However, the current condition, size, and connectivity of the habitats on Site was assessed as likely only suitable for low numbers of commonly occurring invertebrates. Nevertheless, it may provide a valuable foraging and nesting resource at a local level.
- 3.65 Further consideration should be given to invertebrates to include compensatory habitat within the landscaping plans post-works such as species-rich grassland and wildflower planting.

Other mammals

- 3.66 The desk study returned 43 records of European hedgehog located within 2km of the Site, the closest of which was located 0.4km south-west of the Site and dated 2019. Three records of hare (*Lepus europaeus*) were located within 2km of the Site and the most recent was dated from 2021, located 0.4km south of the Site and associated with Cliff Hill Quarry. 67 records of Reeve's muntjac (*Muntiacus reevesi*) were recorded located 2km from the Site, the closest of which was located 0.1km south-west of the Site boundary associated with Markfield, Cliffe Lane dated from 2023. Four records for sika deer (*Cervus nippon*) were recorded within 2km of the Site, the closest of which was located 1.5km south-east of the Site dated from 2021.
- 3.67 No evidence of other mammals were recorded during the Site survey, which included a search for evidence of fox (*Vulpes vulpes*), rabbit (*Oryctolagus cuniculus*), brown hare and European hedgehog. It is considered unlikely that other mammals occupy the Site due to the lack of suitable habitats present; although it cannot be ruled out that fox, deer, hedgehog and other small mammals may enter the Site periodically. No further survey is necessary for these species. However, further consideration should be given to other mammals during any works to include reasonable avoidance measures/ precautionary works.

Invasive Non-Native Species (INNS)

- 3.68 The desk study returned records within 2km of the Site for a number of invasive non-native species including cherry laurel (*Prunus laurocerasus*), New Zealand pigmyweed (*Crassula helmsii*), pampas-grass (*Cortaderia selloana*), Himalayan Balsam, buck's-horn plantain (*Plantago coronopus*), Japanese knotweed, montbretia (*Crocsmia aurea x pottsii* = *C. x crocosmiiflora*) and variegated yellow archangel (*Lamiasrum galeobdolon* subsp. *argentatum*). The closest record was for cherry laurel located 0.1km south of the Site dated from 2024.
- 3.69 Non-native Schedule 9 listed species cotoneaster (*Cotoneaster spp*) was identified on Site within the introduced shrub hedgerows within the centre and east of the Site. These species should be avoided or removed from the Site during the works and spread of the species avoided, as outlined further within this report.
- 3.70 Non-native buddleja (*Buddleja davidii*) was identified within mixed scrub vegetation to the eastern boundary. Whilst not a Schedule 9 species, this is considered an invasive species and should be prevented from spreading during the works.

Biodiversity Net Gain

- 3.71 The Site habitat baseline provides a total of 4.61 habitat units and 0.66 hedgerow units within a total area of 2.57 ha. The results of the biodiversity net gain assessment for the habitat areas demonstrated that the post-development habitats proposed for the Site would result in a net change of 0.17 and a net change of -0.29 hedgerow units. Tables 5 to 8 below outline the baseline and unit changes.
- 3.72 The final landscaping plan comprises green landscaping which incorporates retained native hedgerow, some retained trees, mixed shrub planting, tree planting, and modified and other neutral grassland creation with wildflower mixes. The main loss is represented by the modified grassland which represents 0.79 habitat units on the Site although new modified grassland creation comprises 1.68 units. All baseline habitat unit values and unit loss are shown below in **Table 5**.

3.73 *Table 5: Baseline Habitat Area Score*

UK Hab Habitat	Habitat area (ha)	Habitat units
Grassland - Modified grassland	0.197	0.79
Urban - Developed land; sealed surface	1.773	0.00
Woodland – Other woodland; broadleaved	0.29	2.32
Woodland - Other woodland; mixed	0.131	0.52
Heathland and shrub – Mixed scrub	0.122	0.49
Individual Trees (Urban)	0.073	0.49

Total	2.586	4.61
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3.74 Baseline hedgerow unit values are shown below in **Table 6**.

Table 6: Baseline hedgerow area score

UK Hab Hedgerow	Hedgerow length (km)	Hedgerow units
Hedgerow – Native hedgerow	0.11	0.44
Hedgerow – Non-native and ornamental hedgerow	0.22	0.22
Total	0.33	0.66

3.75 **Table 7** below provides a summary of the Site post development with post development habitat unit scores in line with the Statutory Biodiversity Metric, which should be read in conjunction with this document. The landscape plan for the Site is shown in **Appendix B**.

Table 7: Summary Post Development Score – Habitats

UK Hab Habitat	Habitat retained (ha)	Habitat created (ha)	Habitat units
Urban – Developed land; sealed surface	0.00	1.670	0.00
Modified grassland	0.00	0.484	1.68
Other neutral grassland	0.00	0.228	0.85
Woodland – Other woodland; broadleaved	0.087	0.044	0.15
Heathland and shrub – Mixed scrub	0.00	0.084	0.56
Individual Trees	0.073	0.472	1.53
Total	0.355	2.486	3.71

3.76 The baseline score of the habitats within the Site totals 4.61 habitat units; with the on-Site post-development habitat and enhancement units totalling 4.77.

3.77 The baseline score of the hedgerows within the Site totals 0.66 hedgerow units. The on-Site post-development hedge units total 0.37. Hedgerow units are summarised in **Table 8** below.

Table 8: Summary Post Development Score – Hedgerows

UK Hab Habitat	Hedgerow retained and enhanced (km)	Hedgerow created (km)	Hedge units
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Native hedgerow	0.11	0.00	0.37
Non-native and ornamental hedgerow	0.00	0.00	0
Total	0.11	0.00	0.37

- 3.78 The development will therefore result in an overall unit change of 0.17 habitat units resulting in an overall net change of 3.60%; and a net change of -0.29 hedgerow units resulting in an overall net change of -44.21%.

4. Evaluation and Assessment of Constraints

- 4.1 An assessment of potential impacts on designated sites, habitats, species and is presented below. This is based on the information available on the proposed development (see below) and the professional judgement of the ecologists that prepared this report. It considers legal requirements (see Appendix G) and relevant national and local planning policies. If the proposals are changed significantly, the assessment will need to be reviewed.

Proposals

- 4.2 The proposals include the demolition of all buildings on Site and construction of new service station including customer and HGV parking, EV charging, restaurants and associated refuelling site. The works have the potential to indirectly impact surrounding habitats off-Site and nearby designated sites.

Designated Sites

- 4.3 Billa Barra Hill LNR was identified as a statutory designated site located 0.6km west of the Site boundary.
- 4.4 Two SSSI were identified within 2km of the Site including Cliffe Hill Quarry SSSI located 0.2km south-west of the Site boundary and Ulverscroft Valley SSSI, located 1.7km north-east of the Site boundary
- 4.5 The Site lies within the IRZ for Ulverscroft Valley SSSI. The proposed development does not appear to trigger consultation with Natural England. However, should the proposals include the following then further consultation with NE is required:
- Discharge: Any discharge of water or liquid waste of more than 20m³/day that is discharged to ground (ie to seep away) or to surface water, such as a beck or stream;
 - Infrastructure: Pipelines and underground cables, pylons and overhead cables (excluding upgrades and refurbishment of existing network). Any transport proposal including new or extended footways, cycleways, roads/car parks, railways and waterways (excluding routine maintenance). Airports, helipads and other aviation proposals; or
 - Water Supply: Large infrastructure such as warehousing/industry where the total net additional gross internal floorspace following development is 1,000m² or more.
- 4.6 Pollution prevention and control measures will be required for the proposed developed to ensure the nearby Ulverscroft Valley SSSI is not impacted to include dust and run-off prevention.

Habitats of Principal Importance

HPI Deciduous woodland

- 4.7 Priority habitat deciduous woodland was located 40m from the Site boundary at the south-east corner of the Site. This habitat is at risk of indirect impacts from the proposed development including dust pollution, sediment run-off and root damage caused by machinery and should be subject to protection measures during the demolition and construction phases, to include root protection zones (RPZ) using heras fencing or similar as

outlined further within this report. Precautionary measures for off-Site HPI woodland should also be included within a CEMP for the Site. Further priority habitat deciduous woodland located 60m to the eastern boundary off-Site is to be subject to the same precautionary measures.

Habitats

- 4.8 Habitats on Site likely to be lost as a result of the proposed works include all building and hardstanding, the majority of the modified grassland, all non-native introduced shrub hedgerows, and the mixed scrub habitat, with the exception of the Travelodge building and surrounding paths and grassland to the rear of the building.

Other woodland; broadleaved – w1g and Other woodland; mixed

- 4.9 The proposals are anticipated to result in a the direct loss of medium distinctiveness other broadleaved woodland and mixed woodland habitat. These habitats were considered to have moderate to high ecological value, primarily being of value to nesting birds, small mammals, and invertebrates including pollinators. As a result of the proposed development there will be a loss of medium distinctiveness habitat, and this habitat should be retained wherever possible within the final landscaping plan. Any removal of these habitats will require compensatory measures to include replacement of woodland with native species woodland tree planting within the final landscaping plan.

Modified grassland - g4

- 4.10 This habitat was considered to have low ecological value. As a result of the proposed development this habitat will be lost. Compensatory measures should include replacement habitat of the same or higher distinctiveness habitat in the form of species-rich grassland using native species-rich grassland seed mixes of local provenance.

Mixed scrub – h3h

- 4.11 This habitat was considered to have low ecological value, and will be lost to facilitate the works. Replacement planting of low maintenance herbaceous perennial flowering plants and/or native mixed scrub habitat is recommended as compensation, to be included within the final landscaping plan.

Individual trees – (T1-T6)

- 4.12 The individual trees on Site are considered to have low to moderate ecological value, representing structural and linear habitat for a range of species within the urban landscape and had features which offered value to biodiversity on the Site, and these should be retained wherever possible and protected during the works with heras fencing or similar.

Hedgerow – h2a

- 4.13 The native hedgerow to the north-western and western boundary is a Priority Habitat, and has high ecological value. Hedgerows should be maintained and protected during the works with heras fencing and subject to RPZ as outlined within a CEMP.
- 4.14 All other habitats on Site are of negligible ecological value and no further consideration is given.

Off-Site habitats

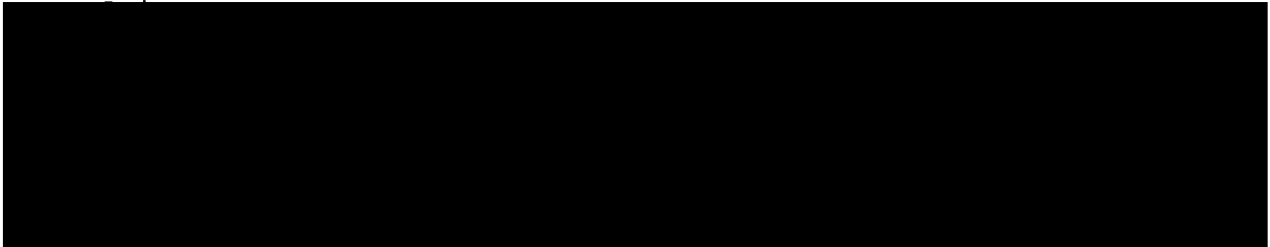
Off-Site watercourse – r1b

- 4.15 The off-Site watercourse should be protected from indirect impacts as a result of the works, to include pollution prevention measures and a clean-up of existing pollution present within and surrounding the watercourse to the north-western boundary to the Site. All other works should be carried out outside of a 10m buffer from the watercourse where possible.

Species

Bats

- 4.16 B1 on Site was assessed to have low potential for roosting bats. A single dusk emergence survey was carried out on the building. No emergences were recorded and no evidence of roosting bats was recorded during the single dusk survey.
- 4.17 Low levels of bat foraging and commuting activity was recorded during the single dusk survey, primarily along the southern boundary habitats. Occasional soprano pipistrelle and a single noctule bat were recorded moving across the Site from east to west along the southern boundary.
- 4.18 The Travelodge building to the east of the Site was associated with commuting and foraging bats considered likely to be utilising the building as a linear habitat on the southern elevations, and as such there is a risk of indirect disturbance to this species during the works. Suitable precautions to prevent disturbance to this species should include high boarding and heras fencing to the eastern aspects of the building to prevent disturbance by noise and dust during demolition, and no night works and no additional night lighting during the works.



Birds

- 4.20 Any removal or disturbance to trees, buildings or scrub has the potential to directly impact nesting birds if undertaken within the nesting bird season (March to August inclusive) and/or without due care and attention. This would constitute an offence (see Appendix G). In the absence of compensation, any loss of trees and buildings would result in a reduction of nesting and foraging habitat for birds. Further consideration for nesting birds should be given prior to any works involving removal of the trees on Site, which may include pre-works checks if works are performed within the nesting season.

Other mammals

- 4.21 It is considered that other mammals may enter the Site periodically. Therefore there is a risk of direct harm to mammals during the demolition and construction phase of the proposed works. If harm arises, this would constitute an offence under the Wild Mammals (Protection)

Act 1996 (see Appendix G). Measures for other mammals should be included within a CEMP for the Site.

Invertebrates

- 4.22 The habitats on Site had some suitability for low numbers of invertebrates including pollinating insects which feed off the nectar of perennial and annual flora, and may utilise some of the floral species recorded on the Site as larval food plants. It is considered that there will be a loss of a small area of foraging for invertebrates as a result of the proposed works. Compensatory habitat for invertebrates should be included within the final landscaping plan to include wildflower mixes within the grassland habitat creation.

Invasive Non-Native Species (INNS)

- 4.23 Non-native Schedule 9 *Cotoneaster* species, buddleja, barberry, and some areas of cherry laurel will be removed as part of the proposed works. Removal should be undertaken with an accompanying management plan as outlined in Section 5 to avoid the spread of these species.

Biodiversity Net Gain

- 4.24 The provisional Statutory Biodiversity Net Gain analysis showed that the number of habitat units provided by the Site was 4.61, and hedgerow units was 0.66 units. There was an overall net change of 0.17 habitat units (3.60%) and -0.29 (-44.21%) hedgerow units. The loss of hedgerow units is due to non-native hedgerow being removed, although this is low distinctiveness habitat.
- 4.25 The Site had an overall unit deficit of 0.29 habitat units and 0.36 hedgerow units. 5.07 habitat units and 0.73 hedgerow units are required to meet the 10% net gain.
- 4.26 Design should aim to minimise biodiversity loss of medium or high distinctiveness habitats as these are often difficult and costly to off-set. These losses have been compensated for by retaining some trees on Site and extensive tree planting within the final landscaping plan; however some broadleaved woodland and mixed woodland habitat on Site will be lost and plans should aim to retain woodland where possible. **Table 9** below details all habitat types identified on Site and their compensation constraints to meet the trading rules.
- 4.27 Off-Site mitigation may be required to achieve 10% net gain to fulfil mandatory BNG requirements.

Table 9: Compensation Constraints

Habitat/ hedgerow type	Compensation
Modified grassland (low distinctiveness)	Same distinctiveness or better habitat required
Urban – developed land; sealed surface (v low distinctiveness)	Compensation not required
Other woodland; broadleaved (medium distinctiveness)	Same broad habitat or a higher distinctiveness habitat required
Other woodland; mixed (medium distinctiveness)	Same broad habitat or a higher distinctiveness habitat required

Mixed scrub (medium distinctiveness)	Same broad habitat or a higher distinctiveness habitat required
Native hedgerow (low distinctiveness)	Same distinctiveness band or better
Non-native and ornamental hedgerow (low distinctiveness)	Same distinctiveness band or better

5. Mitigation and Opportunities

- 5.1 The recommendations set out below aim to ensure that the proposed development take account of important ecological features, legal requirements (see Appendix G), and relevant national and local planning policies. The National Planning Policy Framework (2023) specifically states that development should seek to minimise impacts, incorporate improvements, and provide net gains for biodiversity. If the proposals are changed significantly, the recommendations will need to be reviewed.

Designated Sites and HPI

- 5.2 Cliffe Hill Quarry SSSI is located 0.2km south-west of the Site boundary, and Billa Barra Hill LNR is located 0.6km from the Site although these designations are considered unlikely to be impacted by the works. As a precaution against indirect impacts such as dust and noise pollution, standard pollution measures should be adhered to throughout the development as outlined within a CEMP for the Site.
- 5.3 To avoid indirect impacts to nearby designated sites and HPIs, alongside other habitats including the priority habitat deciduous woodland to the south-east and east of the Site boundary and priority habitat native hedgerow on Site, measures should be put in place to reduce the effects of potential pollutants (e.g. dust, fuel/oil spillage). Relevant guidance published on the NetRegs website¹ should be adhered to during the works. This should be included, along with a detailed working methodology, within a CEMP. Examples of suitable mitigation that can be adopted during site clearance and construction include:
- Vehicle refuelling in designated compounds/areas and fuel stored in double bunded containers at least 10m from the off-Site watercourse on the western Site boundary;
 - Drip trays or plant nappies to be used when refuelling and left under stationary machinery;
 - Oil spill kits to be kept on site and within all vehicles;
 - Maintaining high standards of housekeeping;
 - Enforcing speed limits on site and dampening down working areas and haul roads in dry periods to prevent dust;
 - Using covered wagons and skips;
 - Keeping roads clean with the use of road sweepers and;
 - All materials such as excavated topsoil must be stored in a bunded area, and protected from potential rainfall and runoff, and replaced upon completion of works.

Habitats

- 5.4 All developed land habitats included within the Site surveyed had negligible ecological value and no associated precautions are recommended. Works within developed land, however, will still require standard pollution prevention measures in place to protect nearby retained habitats.

Other woodland; broadleaved – w1g and Other woodland; mixed

- 5.5 Woodland habitat on Site had moderate to high ecological value. The proposed development should aim to avoid loss or at least minimise impacting on-Site woodland. Any losses may require specific compensation and a greater area may be required to account for the time taken and difficulty of creating new habitat. Any woodland removed to facilitate the works

should be replaced with native broadleaved and mixed woodland. Should any of the woodland be retained, and in line with BS 5837:2012 (Trees in Relation to Design, Demolition and Construction), Root Protection Areas (RPAs) should be installed to protect woodland and trees using vertical barriers or appropriate ground protection to create exclusion zones prior to commencement of works.

Individual Trees – (T1-T6)

- 5.6 The trees on Site are of some ecological value to birds and insects, and may provide some linear habitat for commuting bats, and these should be retained where possible. Standard protection measures should be utilised including suitable root protection areas (RPAs) to be implemented around any trees to be retained.
- 5.7 The proposed development should aim to avoid loss or at least minimise impacting on-Site trees. Any losses may require specific compensation and a greater area may be required to account for the time taken and difficulty of creating new habitat. Any trees removed to facilitate the works should be replaced with the same or similar sized native trees. Should any of the trees be retained, and in line with BS 5837:2012 (Trees in Relation to Design, Demolition and Construction), Root Protection Areas (RPAs) should be installed to protect trees using vertical barriers or appropriate ground protection to create exclusion zones prior to commencement of works.

Native Hedgerow – h2a / and non-native and ornamental hedgerow - h2b

- 5.8 The native hedgerow on Site was of some ecological value to nesting birds and may provide some linear habitat for commuting bats, and should be retained where possible. Standard protection measures should be utilised including suitable root protection areas (RPAs) to be implemented around any hedgerows to be retained.
- 5.9 The proposed development should aim to avoid loss or at least minimise impacting on-Site native hedgerow.

Species

Roosting, foraging and commuting bats

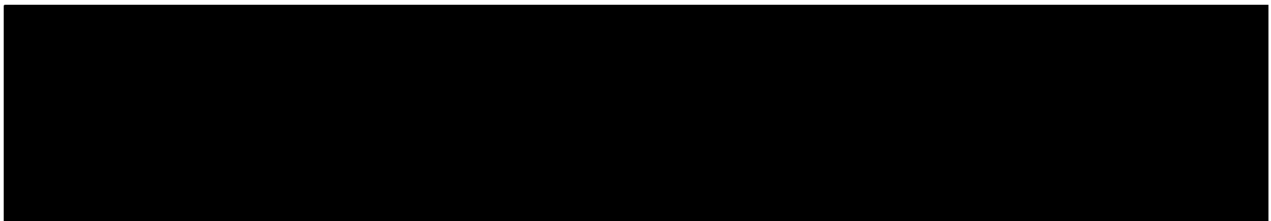
- 5.10 No bats were recorded within B1, B2, B3 and B4 on Site. These buildings are to be demolished to facilitate the proposed works. No direct risk of harm to roosting, foraging or commuting bats was identified on Site for the proposed works.
- 5.11 The Travelodge building adjacent to the main building B1 was associated with some soprano pipistrelle foraging and commuting activity. The building is not part of the planned works and sits outside of the working area, and will not be impacted by the works. However, there is a risk if indirect impacts to commuting and foraging bats during the demolition and construction on Site, and precautionary measures should be adhered to during these works to be outlined within a Reasonable Avoidance Measures (RAMs) for bats on Site as outlined below.
- 5.12 The risk of impacts to bats is considered to be low, however, as bats are mobile species they may occasionally utilise buildings at any time. Therefore as a precautionary measure, the following Reasonable Avoidance Measures (RAMs) are recommended during works and should be adhered to during the development. These RAMS should be included within the CEMP.

5.13 If bats are found or suspected, as a legal requirement, works in that area should cease immediately until further advice has been sought from Natural England or the scheme ecologist. The following recommendations should also be adhered to throughout the duration of the works:

- Before any work proceeds, all contractors should be made aware of the possible presence of bats and the signs to look for (Appendix F);
- Work should be carried out over winter between 1st October and 1st March wherever possible;
- No additional night lighting shall be utilised during the demolition and construction works, and no additional permanent directional lighting to be installed close to or adjacent to the Travelodge building;
- No night works will take place throughout the proposed works;
- Careful removal/demolition of the roof and felting material during demolition of B1; and,
- During the works a suitably licensed ecologist must be on call, so that if a bat is encountered or suspected all works must cease and the ecologist contacted immediately so they can attend site, check the health of the bat and then place it in a safe location.

Birds

5.14 Any vegetation removal works to the woodland, scrub and hedgerows on Site should take place outside of the breeding bird season which runs from March until August inclusive, to prevent any impacts upon nesting birds. Any tree/scrub clearance that must be carried out within the bird breeding season will be subject to a pre-clearance bird survey carried out by a suitably experienced ecologist. No works will be carried out within a suitable buffer of an identified nest depending on species until the young have fledged and are no longer returning to the nest site. Works will only be undertaken once a scheme ecologist has declared the nest to be no longer in use.



Invertebrates

5.16 The proposed development should include compensatory measures for loss of mixed scrub and non-native ornamental hedgerow habitats, which were considered likely to provide habitat for moderate numbers of pollinating insects and other invertebrates. Native scrub creation should include species which provide nuts, berries, fruits and flowers which will attract a range of different species including invertebrates. Compensation may include:

- Natural bee banks re-purposed from existing substrate;
- Wildflower and /or scrub planting within the final landscaping scheme;
- Invertebrate habitat and/or log piles positioned within any green landscaping; or
- A green roof integrated into the design of any new buildings on Site.

Invasive Non-Native Species (INNS)

5.17 The aforementioned INNS including *Cotoneaster spp*, barberry, cherry laurel and buddleja will be impacted by the proposed development. Consideration should be given to the potential to spread and accidentally propagate non-native and invasive species during the demolition and construction phase of the development and all Schedule 9 INNS should be removed and correctly disposed of by a licenced contractor. Removal should be undertaken with an accompanying management plan, and any unavoidable impacts shall be mitigated for with suitable measures including (but not limited to):

- The creation of a management plan should works take place within the root zone of the invasive plants listed as on Site;
- The maintenance of a minimum 10m buffer zone around buddleja scrub, barberry, cotoneaster and cherry laurel;
- Making all contractors aware of the presence of Schedule 9 cotoneaster on the Site;
- Care taken to not cut or otherwise cause the spread of these species in the wild, such as careful management of soil and material disposal where required from within the root zone of the plants to prevent the spread of propagules;
- Maintaining good Site hygiene, including machinery, equipment and clothing; and
- Where possible, the safe eradication of these plants following the management plan.

Biodiversity Net Gain

5.18 The Site had an overall unit deficit of 0.29 habitat units and 0.36 hedgerow units. 5.07 habitat units and 0.73 hedgerow units are required to meet the 10% net gain.

5.19 Off-Site mitigation may be required to achieve 10% net gain to fulfil mandatory BNG requirements. Alternatively, additional hedgerow planting of native species and additional mixed scrub habitat could be included into the final landscaping plan to achieve the required 10% gain.

National Planning Policy Framework

5.20 The National Planning Policy Framework (NPPF) (2023) guides Local Planning Authorities (LPAs) when developing their planning policies and considering planning applications affecting protected habitats, sites and species.

5.21 Planning Policy Statement 15: Conserving and enhancing the natural environment of the NPPF recognises that, planning policies and decisions should contribute to and enhance the natural and local environment. Section D of Paragraph 187 states:

“Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures; In respect of the natural environment.”

5.22 Section B of Paragraph 192 states:

“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”.

5.23 Section D of Paragraph 193 also states:

“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”.

Local Planning Policy

- 5.24 The Hinckley and Bosworth Local Plan 2020-2039 outlines Policy NAT03 Trees, Hedgerows, Woodlands and Development, which states:

“Planning permission will not normally be permitted where the proposal adversely affects trees, woodlands and hedgerows which are:

- a) Protected by a Tree Preservation Order (TPO);*
- b) Ancient woodlands including individual ancient and veteran trees and those defined in Natural England’s inventory of ancient woodlands; or*
- c) Within a site of nature conservation importance which has Statutory Protection*

Development proposals will be supported which provide tree planting on-site, particularly on street frontages and retain existing trees, woodland and hedgerows where appropriate. Where there is an unavoidable loss of trees on site, replacement trees will be required to be planted on site where appropriate.

On development sites of 0.5 hectares or more a tree canopy cover of 20% of the site area will be sought. This will principally be achieved through retention and planting of trees, but where it can be demonstrated that this is impractical the use of other green infrastructure (e.g. green roofs and walls) can be used to deliver equivalent benefit.

Appropriate management measures will be required to be implemented to protect newly planted and existing trees, woodlands and/ or hedgerows.”

- 5.25 Further, Policy NAT07 Protecting Biodiversity states:

“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 (such as ancient woodland and ancient or veteran trees) would only be acceptable where:

The need and benefits of the development in that location clearly outweigh the loss; and,

It has been adequately demonstrated that the irreplaceable habitat cannot be retained with the proposed scheme; and

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:

Firstly, seek an alternative site with a lesser impact than that proposed;

Secondly, and if the first is not possible, demonstrate mitigation measures can be taken on site;

Thirdly, and as a last resort, seek appropriate compensation measures, on site wherever possible and off site where this is not feasible”.

5.26 Additionally, Policy PMD03 Preventing Pollution states that:

“Adverse impacts from pollution will be prevented by ensuring that development proposals demonstrate that:

- It will not adversely impact the water quality, ecological value or drainage function of water bodies in the borough;*
- Appropriate containment solutions for oils, fuels and chemicals are provided;*
- All reasonable steps are taken through design, siting and technological solutions to ensure the abatement of obtrusive light to avoid sky glow, glare and light spillage and intrusion. A Landscape and Visual Impact Assessment will be required for proposed developments that fall in to the E1 (Natural) area, as set out in the latest Environmental Zones Map;*
- It would not cause noise or vibrations of a level which would disturb areas that are valued for their tranquillity in terms of recreation or amenity. Development proposals that generate significant levels of noise must be accompanied by a scheme to mitigate such effects, having regard to the nature of surrounding uses;*
- Appropriate remediation of contaminated land in line with minimum national standards is undertaken;*
- It will not adversely impact air quality;*

- *It will not result in land instability or further intensify existing unstable land; and*
- *The development does not create or exacerbate flooding by being located away from areas of flood risk unless adequately mitigated against in line with National Policy and Policy CC02.”*

Enhancement measures

5.27 Due to the suitability of some of the habitats on Site for bats, badgers, birds, invertebrates and other mammals, the following enhancement measures are recommended to be included within the final landscaping plan:

- Use of native trees and shrubs throughout the Site. Many of these produce flowers, berries and colour that are of aesthetic landscaping value as well providing food and other habitats for wildlife.
- Bird and/or bat boxes could be installed on retained trees within the Site and added as part of the design of new buildings.
- Invertebrate housing and habitats placed within vegetated areas of the Site, which may include simple log and stick piles.

Re-survey of the Site

5.28 If no works are undertaken on site within 12 months of this survey or if any changes to the proposals are made, a further ecological survey may be necessary (because of the mobility of animals and the potential for colonisation of the Site).

References

British Standards Institution (2013) BS 42020:2013 Biodiversity: Code of practice for planning and development. British Standards Institution, London.

Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020) *The UK Habitat Classification User Manual Version 1.1* at <http://www.ukhab.org>

CIEEM (2017a) Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.

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

Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London.

Institute of Lighting Professionals (2018) Bats and Artificial Lighting at Night. The Bat Conservation Trust, London.

Natural England (2022) Biodiversity Metric 3.1: Auditing and accounting for biodiversity (including Technical Guide, Users Guide, Calculation Tool and Habitat Condition Assessment Sheets). Natural England Joint Publication JP039. First published 7 July 2021.

National Planning Policy Framework (2023) Ministry of Housing, Communities and Local Government, London.

Stace, C. (2010) New Flora of the British Isles. Third Edition. Cambridge University Press, Cambridge.

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

Leicestershire and Rutland Environmental Records Centre (2026). Markfield Services Biological Data Request. Leicestershire County Council, Leicester.

Appendix A – Bat Roost Potential and Habitat Suitability Categories

Table 1 - Guidelines for assessing the potential suitability (structures and foraging habitats) of proposed development sites for bats, based on the presence of habitat features within the landscape (Collins, 2023).

Suitability	Description of Roosting Habitat	Commuting & Foraging Habitats
None	No obvious features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels)	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight lines, or generate/shelter insect populations available to foraging bats).
Negligible	No obvious habitat features on site likely to be used by roosting bats, however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flight-paths or by foraging bats, however, a small element of uncertainty remains in order to account for non-standard behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitats to be used on a regular basis or by a larger number of bats (i.e. unlikely to be suitable maternity and not a classic cool/stable hibernation site but could be used by individual hibernating bats).	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
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, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths, such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging, such as trees, scrub, grassland or water.
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 due to their size, shelter, protection, conditions and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.	Continuous high quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats, such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close and connected to known roosts.

Table 2 - Guidelines for assessing the suitability of trees on (proposed development sites for bats

Suitability	Description
NONE	Either no PRFs in the tree or highly unlikely to be any
FAR	Further Assessment Required
PRF	A tree with at least one PRF Present

Table 3 - Guidelines for categorising the potential suitability of PRFs on trees on proposed development site for bats

Suitability	Description
NONE	Either no PRFs in the tree or highly unlikely to be any
PRF-I	Tree with PRF only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats
PRF-M	Tree with PRF suitable for multiple bats and may therefore be used by a maternity colony
CONFIRMED	Confirmed bat roost identified

Appendix B – Site Photographs

See the UK Habitat Plan for location of each Target Note

No	Description	Photograph
1	Site overview with derelict buildings and hardstanding	
2	Hardstanding throughout the Site in poor condition (u1b)	
3	Mixed scrub habitat on Site (h3h)	

4	Mixed scrub (h3h) and buildings	
5	Western elevations of building B1	
6	Northern elevations of B1	

7	Eastern elevations of B1	
8	Internal voids inspected in B1	
9	External PRFs on B1 western elevation	

10	PRFs for bats within slipped and missing tiles on the upper western elevations of the roof of B1	
11	Forecourt and brick-built building (B2)	
12	Non-native introduced ornamental hedgerow (h2b) on Site	

13	Mixed woodland poor condition on Site (w1h)	
	Modified grassland to the south-western boundary (g4) and individual tree (T4-T5) and paving hardstanding, and wooden fencing to the boundary line	
13	North-western boundary with modified grassland, native hedgerow and off-Site trees	

14	Individual trees on Site (T1-T3) western area adjacent to the Travelodge hotel (ash, oak)	
15	Native hedgerow (north-western boundary)	
16	Native hedgerow (western boundary) with T6	

17	Off-Site watercourse adjacent to the western Site boundary	
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Appendix C – Plan of Proposed Development/Works



Appendix D – UK Habitat Plan



Appendix E – Post-Development Habitat Plan



Appendix F – Information Sheets for Contractors








Badgers



Information, legal responsibilities and best practice for the construction industry

Legal Information Badgers are protected by UK law, (Protection of badgers Act 1992) in practical terms this means it is an offence to: • Wilfully kill, injure or take a badger; • Intentionally or recklessly damage, destroy or obstruct access to a badger sett; • Disturb a badger in its sett. It is not illegal to carry out disturbance activities in the vicinity of setts that are not in current use, this must be reliably established through professional surveys. Penalties on conviction: the maximum fine is £5,000, up to six months in prison, per offence and forfeiture of items used to commit the offence, e.g. vehicles, plant, machinery.	Activities that can affect badgers include: • Destroying or damaging their setts • Noise, additional lighting or vibration • Pile driving • Quarry blasting • Lighting fires • Using chemicals • Excavations • Ploughing and harvesting crops • Tree felling and timber extraction • Construction repair of flood defences or waterbodies • Blocking access to setts / foraging areas	Procedure if badgers are found: If you find a badger, sett, sign or suspect badger may be present you must stop works immediately and contact the project manager. Contractors should avoid disturbing badgers or working within 30 m of a sett. Badger sett, sign or Badger is (not) in immediate danger Stop works -----> Call Bowland Ecology (Tel. 01200 446777)
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Recognising badgers and badger signs:







Badger setts are usually D-shaped with a flat bottom (around 30 cm wide by 20 cm high) with signs of fresh excavated material at the entrance or piles of leaves, dry grass, straw or bracken.

Badger hair is usually about 10 cm long and is banded with black and white and can be found at sett entrances or caught on a fence line, plants or tree bark close to badger paths.

Badger's footprints have a kidney-shaped pad with five toes pointing upwards.

Badgers have the characteristic black and white striped face although very occasionally they can be creamy white or red/ginger in colour. Fully grown adults can be up to 1 metre in length and weigh up to 14 kg.

Badgers uniquely dig shallow holes for their droppings (latrines).

BATS



Information, legal responsibilities and best practice for the construction industry

Legal Protection

All UK Bat species are protected by European and UK law, in practical terms this means it is an offence to:

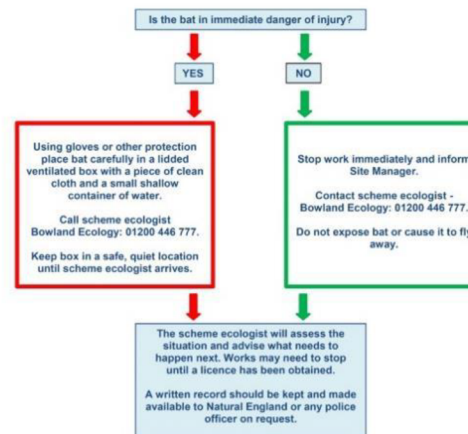
- Deliberately capture, injure or kill a bat;
- Deliberately disturb bats;
- Damage or destroy a breeding site or resting place (even if bats are not occupying the roost at the time);
- Intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb a bat in such a place;
- Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat.

Penalties on conviction: the maximum fine is £5,000 per incident or per bat (some roosts contain several hundred bats), up to six months in prison, and forfeiture of items used to commit the offence, e.g. vehicles, plant, machinery.

Defences include:

1. Tending/caring for a bat solely for the purpose of restoring it to health and subsequent release.
2. Mercy killing where there is no reasonable hope of recovery (provided that person did not cause the injury in the first place – in which case the illegal act has already taken place).

Found a bat during unsupervised works?



Field signs of bat presence:

- Live or dead bats: the smallest UK bat species, the pipistrelle is only 3.5-4.5cm long.
- Droppings: bat droppings look like mouse droppings but will crumble between your fingers (they are dry and made entirely of insects).
- Feeding remains: piles of butterfly/moth wings are often left below bat feeding perches.



Places that bats may use in buildings



Schematic from www.bats.org.uk

Bats can roost in the following places:

- The top of gable end or dividing wall;
- The top of chimney breasts;
- Ridge and hip beams and other roof beams;
- Mortise and tension joints;
- All beams/ceilings/pipework (free hanging bats);
- The junction of roof timbers, especially where ridge and hip beams meet;
- Behind purlins;
- Between tiles and the roof lining;
- Under flat felt roofs;
- Under barge boards;
- In cavity walls;
- In cracks in stone or concrete;
- Behind peeling paint/wall coverings;
- Gaps behind window and door frames;
- Between window panes and timber boarding.
- In trees (cracks/holes/ivy cladding).

Why wear gloves?

There is a small risk that some bats carry a rabies virus – European Bat Lyssavirus. The purpose of wearing gloves is to reduce the chance of being bitten, as the virus is transmitted via bat saliva. Thick leather gloves are appropriate for removing a bat from imminent danger but these should be clean.



In the event that you are bitten, wash the wound, gently but thoroughly, with soap and water. Speak to a health professional immediately, advising them that you have been bitten by a bat.

References:

Bat Conservation Trust. August 2016. Why wear gloves when handling bats?
BCT Bat Surveys for Professional Ecologists, Good Practice Guidelines, 3rd Edition, 2016

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BATS AND ARBORICULTURAL WORKS



Information, legal responsibilities and best practice

Legal Protection

All UK Bat species are protected by European and UK law, in practical terms this means it is an offence to:

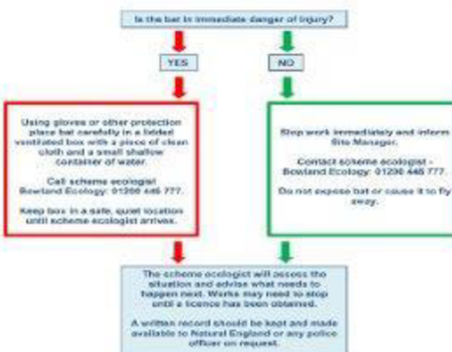
- Deliberately capture, injure or kill a bat;
- Deliberately disturb bats;
- Damage or destroy a breeding site or resting place (even if bats are not occupying the roost at the time);
- Intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb a bat in such a place;
- Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat.

Penalties on conviction: the maximum fine is £5,000 per incident or per bat (some roosts contain several hundred bats), up to six months in prison, and forfeiture of items used to commit the offence, e.g. vehicles, plant, machinery.

Defences include:

1. Tending/caring for a bat solely for the purpose of restoring it to health and subsequent release.
2. Mercy killing where there is no reasonable hope of recovery (provided that person did not cause the injury in the first place – in which case the illegal act has already taken place).

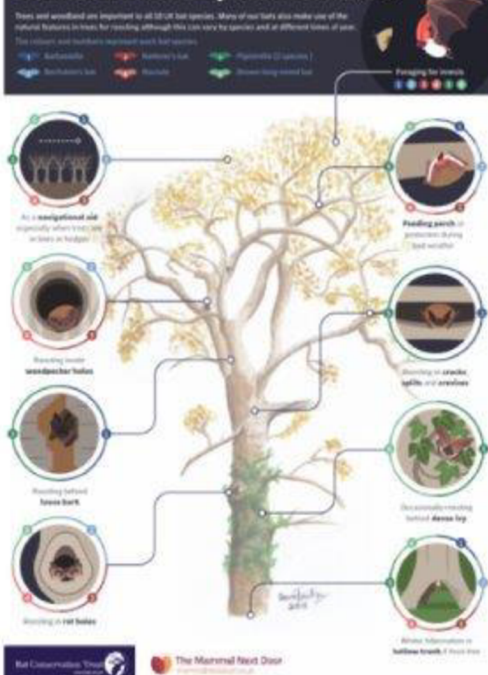
Found a bat during unsupervised works?



References:

Bat Conservation Trust. August 2016. Why wear gloves when handling bats?
BCT Bat Surveys for Professional Ecologists, Good Practice Guidelines, 3rd Edition, 2016

How are trees important to bats?



Bats can roost in the following places:

- Woodpecker holes, rat holes, hazard beams,
- Vertical or horizontal cracks and splits in stems or branches,
- Partially detached platey bark, gaps between overlapping stems, double leaders forming compression forks
- Knot holes arising from naturally shed branches, or branches previously pruned back to the branch collar,
- Man-made holes, cankers caused by localised bark death,
- Cavities created by branches tearing out from parent stems,
- Other hollows and cavities, including butt-rot,
- Partially detached ivy with stem diameters over 50mm.

Field signs of bat presence:

- Live or dead bats: the smallest UK bat species, the pipistrelle is only 3.5-4.5cm long.
- Droppings: bat droppings look like mouse droppings but will crumble between your fingers (they are dry and made entirely of insects).
- Feeding remains: piles of butterfly/moth wings are often left below bat feeding perches.



Why wear gloves?

There is a small risk that some bats carry a rabies virus – European Bat Lyssavirus. The purpose of wearing gloves is to reduce the chance of being bitten, as the virus is transmitted via bat saliva. Thick leather gloves are appropriate for removing a bat from imminent danger but these should be clean.

In the event that you are bitten, wash the wound, gently but thoroughly, with soap and water. Speak to a health professional immediately, advising them that you have been bitten by a bat.



version 1 November 2017



Birds



Information, legal responsibilities and best practice for the construction industry

Legal Information

Birds are protected by European and UK law, in practical terms this means it is an offence to;

- Intentionally kill or injure any wild bird;
- Intentionally destroy or take the egg of any wild bird;
- Intentionally destroy, damage, interfere with, take or obstruct the use of the nest of any wild bird while it is in use or being built.

Prosecution could lead to a fine of up to £5000 per offence and / or 6 months imprisonment.

Additional Legal Information

Special penalties are liable for offences involving birds on Schedule 1 (e.g. most birds of prey, kingfisher, barn owl, black redstart and little ringed plover). For such birds it is also an offence to:

- Intentionally or recklessly disturb a Schedule 1 species while it is building a nest or is in, on or near a nest containing eggs or young;
- intentionally or recklessly disturb dependent young of such a species.

Where are birds found:

Birds usually nest in trees, hedges and scrub however they can also be found nesting on/in buildings, dry-stone walls, dense to sparsely vegetated ground, river banks, cliffs and machinery/equipment/materials.

Any works affecting these habitats during the breeding bird season (March-August inclusive) has the potential to harm birds, their eggs and their eggs.

Guidance Relating to Birds: **DO** and **DON'T**

Ensure that a check is made by a suitably qualified Ecologist that no nesting birds or active nests are present before carrying out site works.

Stop all construction and work in the immediate area if nesting birds are present.

Report the presence of nesting birds to your supervisor



Kill, injure or capture any wild bird.



Take, damage, destroy or disturb a nest or eggs of any wild bird.



Move any machinery, scaffolding or equipment if birds are found nesting.

References: Welcome to the British Trust for Ornithology | BTO - British Trust for Ornithology

Appendix G – Legal Information

This report provides guidance of potential offences as part of the impact assessment. This report does not provide detailed legal advice and for full details of potential offences against protected species the relevant acts should be consulted in their original forms i.e. The Wildlife and Countryside Act, 1981, as amended, The Countryside and Rights of Way Act 2000, The Natural Environment and Rural Communities Act, 2006 and The Conservation of Habitats and Species Regulations 2017.

Species	Legislation	Offences	Notes on licensing procedures and further advice
Species that are protected by European and national legislation			
Badger	Protection of Badgers Act 1992	Wilfully kill, injure or take a badger; Intentionally or recklessly damage, destroy or obstruct access to a badger sett; Disturb a badger in its sett. It is not illegal to carry out disturbance activities in the vicinity of setts that are not occupied.	Where required, licences for development activities involving sett loss, damage or disturbance are issued by Natural England (NE). Licences for activities involving watercourse maintenance, drainage works or flood defences are issued under a separate process. Licences are normally not granted from December to June inclusive because cubs may be present within setts. https://www.gov.uk/badgers-protection-surveys-and-licences
Bats <i>European protected species</i>	Conservation of Habitats and Species Regulations 2017 Reg 41	Deliberately ¹ capture, injure or kill a bat; Deliberate disturbance ² of bats; Damage or destroy a breeding site or resting place used by a bat. The protection of bat roosts is considered to apply regardless of whether bats are present.	An NE licence in respect of development is required in England. https://www.gov.uk/bats-protection-surveys-and-licences <i>European Protected Species: Mitigation Licensing- How to get a licence</i> (NE 2010) <i>Bat Mitigation Guidelines</i> (English Nature 2004) <i>Bat Workers Manual</i> (JNCC 2004) <i>BS8596:2015 Surveying for bats in trees and woodland</i> (BSI, 2015)
	Wildlife and Countryside Act 1981 (as amended) ⁴ S.9	Intentionally or recklessly ³ obstruct access to any structure or place used for shelter or protection or disturb a bat in such a place.	Licence from NE is required for surveys (scientific purposes) that would involve disturbance of bats or entering a known or suspected roost site.

Species	Legislation	Offences	Notes on licensing procedures and further advice
Birds	Conservation of Habitats and Species (Amendment) Regulations 2012	N/A	Authorities are required to take steps to ensure the preservation, maintenance and re-establishment of a sufficient diversity and area of habitat for wild birds in the United Kingdom, including by means of the upkeep, management and creation of such habitat. This includes activities in relation to town and country planning functions.
	Wildlife and Countryside Act 1981 (as amended) ⁴ S.1	Intentionally kill, injure or take any wild bird; Intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built; Intentionally take or destroy the nest or eggs of any wild bird. Schedule 1 species Special penalties are liable for these offences involving birds on Schedule 1 (e.g. most birds of prey, kingfisher, barn owl, black redstart, little ringed plover). Intentionally or recklessly ³ disturb a Schedule 1 species while it is building a nest or is in, on or near a nest containing eggs or young; intentionally or recklessly disturb dependent young of such a species.	No licences are available to disturb any birds in regard to development. Licences are available in certain circumstances to damage or destroy nests, but these only apply to the list of licensable activities in the Act and do not cover development. General licences are available in respect of 'pest species' but only for certain very specific purposes e.g. public health, public safety, air safety. https://www.gov.uk/wild-birds-protection-surveys-and-licences https://www.gov.uk/prevent-wild-birds-damaging-your-land-farm-or-business
Other species			
Rabbits, foxes and other wild mammals For BAP species and Species of Principal Importance, see below	Wild Mammals (Protection) Act 1996	Intentionally inflict unnecessary suffering to any wild mammal.	Natural England provides guidance in relation to rabbits (Technical Information note TIN003, Rabbits- management options for preventing damage, July 2007) and foxes (which are also protected under the Wildlife and Countryside Act 1981 from live baits and decoys, see Species Information notes SIN003 (2011), <i>Urban foxes</i> and SIN004 (2011) <i>The red fox in rural areas</i> as well as other wild mammals. Lawful and humane pest control of these species is permitted.

¹Deliberate capture or killing is taken to include “accepting the possibility” of such capture or killing ²Deliberate disturbance of animals includes in particular any disturbance which is likely a) to impair their ability (i) to survive, to breed or reproduce, or to rear or nurture their young, or (ii) in the case of animals of hibernating or migratory species, to hibernate or migrate; or b) to affect significantly the local distribution or abundance of the species to which they belong. Lower levels of disturbance not covered by the Conservation of Habitats and Species Regulations 2017 remain an offence under the Wildlife and Countryside Act 1981 although a defence is available where such actions are the incidental result of a lawful activity that could not reasonably be avoided. Thus deliberate disturbance that does not result in either (a) or (b) above would be classed as a lower level of disturbance. ³The term ‘reckless’ is defined by the case of Regina versus Caldwell 1982. The prosecution has to show that a person deliberately took an unacceptable risk, or failed to notice or consider an obvious risk. ⁴The Wildlife and Countryside Act (1981) has been updated by various amendments, including the Countryside and Rights of Way Act 2000 and the Natural Environment and Rural Communities Act 2006. A full list of amendments can be found at <https://jncc.gov.uk/our-work/wildlife-countryside-act/>

Site Designation	Legislation	Protection	Guidance
Site of Special Scientific Interest (SSSI)	Wildlife and Countryside Act 1981 (as amended)	It is an offence to carry out or permit to be carried out any potentially damaging operation. SSSIs are given protection through policies in the Local Development Plan.	Owners, occupiers, public bodies and statutory undertakers must give notice and obtain the appropriate consent under S.28 before undertaking operations likely to damage a SSSI. S.28G places a duty on all public bodies to further the conservation and enhancement of SSSIs. Further guidance can be found in the National Planning Policy Framework and the accompanying joint Circular (ODPM Circular 6/2005 & Defra Circular 01/2005) England, which is still valid.
Local Nature Reserve (LNR)	National Parks and Access to the Countryside Act 1949 S.21	LNRs are given protection through policies in the Local Development Plan.	LNRs are generally owned and managed by local authorities. Development proposals that would potentially affect a LNR would need to provide a detailed justification for the work, an assessment of likely impacts, together with proposals for mitigation and restoration of habitats lost or damaged. Further guidance can be found in the National Planning Policy Framework and the accompanying joint Circular (ODPM Circular 6/2005 & Defra Circular 01/2005), which is still valid.
Local Sites	There is no statutory designation for Local Sites	Local Sites are given protection through policies in the Local Development Plan.	Development proposals that would potentially affect a Local Site would need to provide a detailed justification for the work, an assessment of likely impacts, together with proposals for mitigation and restoration of habitats lost or damaged. Further guidance can be found in the National Planning Policy Framework and the accompanying joint Circular (ODPM Circular 6/2005 & Defra Circular 01/2005), which is still valid.

Habitats & Species	Legislation	Guidance
Species and Habitats of Principal Importance for the Conservation of Biodiversity	Natural Environment & Rural Communities Act 2006 S.40 (which superseded S.74 of the Countryside & Rights of Way Act 2000).	S.40 of the NERC Act 2006 sets out the duty for public authorities to conserve biodiversity in England. Habitats and species of principal importance for the conservation of biodiversity in England (identified by the Secretary of State in consultation with NE) are referred to in S.41 of the NERC Act: http://webarchive.nationalarchives.gov.uk/20140605090108/http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habitatsandspeciesimportance.aspx The list of habitats and species was updated in 2007 to ensure that it remained focussed on the correct priorities: https://incc.gov.uk/our-work/uk-bap/ . The criteria for selection included international threat, responsibility and importance, rate of decline/risk, importance of habitats for key species, and other important factors. Ecological impact assessments should include an assessment of the likely impacts to these habitats and species.

Habitats & Species	Legislation	Guidance
Hedgerows	The Hedgerow Regulations 1997	Under the regulations, it is against the law to remove or destroy hedgerows that are classified as “important” under the regulations without permission from the local planning authority. The regulations apply if a hedgerow is in or runs alongside agricultural land, common land including town or village greens, land used for forestry or for the breeding or keeping of horses etc, a local nature reserve or Site of Special Scientific Interest. A hedgerow can be classified as ‘Important’ due to its wildlife and landscape value or due to its heritage value. In general, permission will be required before removing hedges that are at least 20 metres in length, over 30 years old and contain certain species/diversity of plant. The local planning authority will assess the importance of the hedgerow using criteria set out in the regulations. See https://www.gov.uk/guidance/countryside-hedgerows-regulation-and-management for further guidance and information.