



Ginnell Farm, Rochdale

Preliminary Ecological Appraisal

Document:	BOW17_1704 Ginnell Farm, Preliminary Ecological Appraisal			
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Executive Summary

This report presents the findings of a Preliminary Ecological Appraisal and Biodiversity Net Gain Assessment of an area of land at Ginnell Farm, Rochdale which was commissioned by Energyline Limited to inform proposals to demolish all existing buildings and construct eleven residential dwellings.

It is based on information collected from a desk study and Extended UK Habitat Survey carried out in October 2024.

Relevant legislation and planning guidance are also taken into account.

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

Table 1: Key findings and recommendations

Recommendations
Pollution control measures 1.1. Ensure best practice measures are applied to minimise possibility of dust pollution to nearby habitats of importance.
Bats 2.1. Further PRA assessment to be carried out with internal access to Buildings 1 and 4. 2.2. Follow up emergence surveys of any building designated as 'low' or above. 2.3. Design on-site lighting in accordance with the appropriate guidance. 2.4. Install additional enhancement measures, e.g. bat roost features.
Mammals 3.1. All excavations to be managed to allow any animals that may fall in to escape. 3.2. Measures implemented into the final scheme to allow for hedgehog sheltering, foraging and commuting.
Birds 4.1. All vegetation removal and building demolition to be completed outside of nesting bird season (March to August, inclusive), or supported by nesting bird checks. 4.2. Integrated bird boxes incorporated to increase opportunities for birds.
Biodiversity Net Gain 6.1. It is anticipated that the development will result in a net loss of habitat units with -0.16 loss overall, -17.57%. 6.2. 0.16 units of the gain required to be woodland to satisfy BNG trading rules. 6.3. An overall gain of 0.11 hedgerow units will be recorded at the site. 6.4. Should plans change an updated BNG assessment will be required.

1. Introduction

- 1.1 Bowland Ecology Ltd was commissioned by Energyline Limited to undertake a Preliminary Ecological Appraisal and a BNG assessment of an area of land at Ginnell Farm, Rochdale (NGR: SD 91303 10828), hereafter referred to as the 'Site'. This is in relation to proposals to demolish existing buildings and structures and redevelop the site into eleven residential properties with associated access infrastructure and gardens.
- 1.2 The Site comprises a small, developed plot within urban surrounds, bounded by the M62 directly to the south. The Site is adjacent to the B6192 to the east, leading on towards a sizable industrial area, with car parking and loading facilities. The northern and western boundaries lead out into further residential areas making up Rochdale's wider urban sprawl. Further afield, across the M62 to the south lies a wide area of rural habitat leading on towards the town of High Crompton to the southeast.
- 1.3 The assessment 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, an Extended UK Habitat Survey, and an analysis of Biodiversity Net Gain.
- 1.4 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 (EclA).
 - 4) Identify opportunities for biodiversity enhancement.
- 1.5 The 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 & 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 2km of the Site boundary.
- 2.3 Local records of protected sites and species within 1km of the Site were obtained from a data search with Greater Manchester Local Records Centre. This radius was considered appropriate given the largely urban and isolated nature of the site within its surroundings.
- 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 250m of the Site, which may provide aquatic or terrestrial habitat for great crested newt (GCN, *Triturus cristatus*).
- 2.5 It is recommended² that, for developments resulting in permanent or temporary habitat loss at distances over 250m from the nearest pond, careful consideration should be given as to whether a great crested newt survey is appropriate. Although this species may use suitable terrestrial habitat up to 500m from a breeding pond, in this instance a 250m search radius was considered appropriate due to the built up and urban location of the site.

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 the types set out in UKHab classification system (UKHab Ltd, 2023). All habitats within and adjacent to 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 (particularly GCN), water vole (*Arvicola amphibius*), otter (*Lutra lutra*), hedgehog (*Erinaceus europaeus*), invertebrates (e.g. butterflies), nesting birds (including any active or disused bird nests) and reptiles; and
 - The presence of the most common invasive plant species subject to strict legal control including: Japanese knotweed (*Fallopia japonica*), giant knotweed (*F. sachalinensis*), hybrid knotweed (*F. 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 by Luke Hall BSc (Hons), MIFM on the 7th of October 2024. The weather was appropriate for survey at 11°C, dry with light winds (Beaufort level 1) and 60% cloud.

Biodiversity Net Gain

- 2.9 An analysis of Biodiversity Net Gain was carried out using The Statutory Biodiversity Metric (DEFRA 2024)¹ alongside published Tools (Natural England 2024). The Biodiversity Metric calculation spreadsheet was populated based on the extent and characteristics of the habitats recorded during the UK Habitat Survey. The Technical Guidance was referred to in regards to conversion of habitat types and determination of habitat condition. The option for strategic significance was set as low and it was assumed that there would be no delay in habitat creation. Likely changes to habitats were deduced based on an interpretation of landscape plans.

Limitations

- 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 be present within the 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 in some areas, rather than confirm the absence of a species.
- 2.12 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, in particular, 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.
- 2.13 The timing of the survey was outside the optimum period for completing a habitat classification survey (April to September inclusive; JNCC 2010). 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.

- 2.14 Internal access to buildings 1 and building 4 was not possible at the time of the survey, as such, a full assessment of potential to support roosting bats was not possible and roost potential was based entirely on presence of external features.

3. Results

Desk Study

- 3.1 The desk study identified the following designated wildlife sites within 2km of the Site boundary as summarised in Table 2 and Table 3 for statutory and non-statutory designated sites respectively. The site lies within the Impact Risk Zone (IRZ) for Rochdale Canal SSSI (see below) but does not fall under any of the categories that would require consultation with Natural England, the site is therefore not considered further within this report.

- 3.2 **Table 2:** Statutory designated sites within a 2km radius of the Site.

Site Name	Designation	Distance from site boundary	Key features
Rochdale Canal	Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC)	1.8km north	Rochdale Canal contains important habitats for submerged aquatic plants and emergent vegetation, including extensive colonies of the nationally scarce SAC species including floating water-plantain <i>Luronium natans</i> . The site also supports a diverse assemblage of aquatic flora, notably its assemblage of pondweeds, <i>Potamogeton</i> spp; the nine species found in the canal represent a balanced community which reflects the quality of water.

Table 3: Non-statutory designated sites within a 1km radius of the Site.

Site Name	Designation	Distance from site boundary	Key features
Sudden Brook (West)	Site of Biological Importance (SBI)	400m south-west	Grassland (Gr2). Significance: B (of District Importance)
Marsh Near Turf Hill	SBI	1km north-east	Grassland (Gr2). Mud Snail (<i>Omphiscola glabra</i>) (GSG1). Significance: B (of District Importance)
Stanney Brook	SBI	1.3km north-east	Grassland (Gr2). Mud Snail (GSG1). Significance: B (of District Importance)
A627(M) by Tandle Hill	SBI	1.8km west	Grassland (Gr2). Significance: C (of importance within the identified geographic locality)

Rochdale Canal	SBI	1.8km north	As described in Table 2.
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- 3.3 It also identified the areas of habitat summarised in Table 4 within 2km of the Site which potentially qualify as HPI

Table 4: Potential areas of HPI

Description
Deciduous lowland woodland - 41 parcels of broadleaved deciduous woodland were identified, the closest of which is approximately 300m to the south-west along the edge of the M62 motorway.
Two areas of good quality semi-improved grassland, the closest of which is located approximately 350m south-west, in association with Sudden Brook SBI.
14 areas of lowland fens – the closest of which is located approximately 1km to the north-east of the site in association with the marsh near Turf Jill SBI.

One pond was located within a 250m radius of the site located approximately 230m to the east of the site boundary. However, this pond is separated from the site by the M62 motorway, which is a significant barrier to amphibian dispersal.

Habitats

- 3.4 The location of habitats recorded during the Extended UK Habitat Survey is mapped in Appendix B. Each habitat type is described below. Plant species nomenclature follows Stace (2010).

u1b- Developed Land Sealed Surface

- 3.5 The majority of the Site is dominated by built habitats comprising four buildings and associated hardstanding. Buildings have been labelled one to four in the habitat plan, with Buildings 3 and 4 comprising a significant proportion of the Site. While the remaining two comprise smaller buildings including building 1, a car garage, and building 2, a storage shed for the residential property on Site. Remaining developed land comprises the access road leading in from the B6194. Small amounts of typical urban colonising vegetation are scattered throughout the hardstanding, including occasional groundsel (*Senecio vulgaris*) and willowherbs (*Epilobium* sp.). This habitat is of negligible ecological value due to the lack of natural habitat niches and does not require condition assessment in the context of the BNG assessment. Further descriptions of the building structure have been outlined below in relation to potential for use by bats.

g4- Modified Grassland

- 3.6 The majority of the vegetated habitats on Site consist of species poor, modified grassland in 'poor' condition. These habitats consist of former residential garden habitats allowed to progress to a longer sward through reduced management practices (mowing, planting etc). There are also small areas of modified grassland included within the red line alongside the roads surrounding the Site to the north and east. These parcels are similarly species poor, however, they are subject to regular maintenance and mowing and as such have a short, uniform sward, allowing for little diversity of both species and ecological niches within.

- 3.7 Both variations of modified grassland within the Site consist primarily of cocksfoot (*Dactylis glomerata*), false oat-grass (*Arrhenatherum elatius*), annual meadow-grass (*Poa annua*), common dandelion (*Taraxacum officinale*) and herb-Robert (*Geranium robertianum*), along with very occasional non-native snowberry (*Symphoricarpos albus*), bramble (*Rubus* sp.), soft rush (*Juncus effusus*) and ribwort plantain (*Plantago lanceolata*). There is a single area beneath an individual cherry tree in the eastern extent of the site containing occasional wood spurge (*Euphorbia amygdaloides*), male fern (*Dryopteris filix-mas*), ragwort (*Jacobaea vulgaris*) and introduced shrubs. This limited species diversity throughout the site leads to the failure of essential criterion A within the statutory metric condition assessment for low distinctiveness grassland habitats, resulting in a maximum condition score of 'poor'.

h3h- Mixed Scrub (Secondary codes - 523)

- 3.8 Throughout the site there are five areas of mixed scrub of varying composition. The parcel along the eastern edge of the site is composed of non-native ornamental species, along with the small section running along the western edge of building 4. This nonnative composition results in the application of the secondary code 523, nonnative scrub. Furthermore, these ornamental species including hydrangea sp and laurel sp. result in 'poor' condition for these habitat parcels.
- 3.9 The remaining three areas of scrub present to the north and west of building 2 and along the northern site boundary consist of alder (*Alnus glutinosa*), ash (*Fraxinus excelsior*), birch (*Betula pendula*), willow (*Salix* sp.), dog rose (*Rosa canina*) and field maple (*Acer campestre*). These three parcels are also considered to be in 'poor' condition, largely owing to their small size and hard boundaries with surrounding areas of habitat. The scrub parcel along the northern boundary also fails to satisfy criterion C regarding species of suboptimal condition, containing both snowberry and buddleia (*Buddleja* sp.).

W1g- Other Broadleaved Woodland

- 3.10 In the northwestern part of the site is a small patch (~0.04ha) of other broadleaved woodland surrounding a small garden shed and greenhouse area. This habitat consists primarily of semi mature willow, elder (*Sambucus nigra*), oak (*Quercus robur*), ash and beech (*Fagus sylvatica*). Ground flora within this woodland area consist of a continuation of the species diversity and distribution listed above for g4 - modified grassland. As such, the condition score for this parcel of land is 'poor', primarily due to lack of recognisable woodland ground flora, lack of veteran trees and lack of vertical structure.

Off-Site: w1g- Other Broadleaved Woodland

- 3.11 Located just to the south of the site boundary and overhanging the site itself, is a parcel of other broadleaved woodland providing screening from the m62 motorway. This habitat contains ash, oak, beech and occasional willow with a shrub understorey consisting of both native and ornamental species likely planted in association with previous residential operations at the site. These species include privet (*Ligustrum* sp.), snowberry and Darwin's barberry (*Barberis darwinii*). Whilst this habitat is located off site, both overhanging limbs and shrub overgrowth encroach onto the proposed site boundaries.

Species

Bats

- 3.12 A total of 23 records of bats not associated with roosts and six records of roosts were returned from within the search area. Most roost records were not returned with detailed location information to inform how close these were to Site, however, the largest roost (43 common pipistrelle individuals in a maternity roost) was detailed to be present approximately 800m to the north of the site boundary. The other roosts comprised entirely common pipistrelle (*Pipistrellus pipistrellus*), with all non-roost records also consisting entirely of this species.
- 3.13 The buildings on Site were assessed for suitability to support roosting bats, with buildings numbered as per the UK Habitat plan in Appendix B. Building 1 consists of a brick garage in good condition. The roof is gabled and consists of stone tiles, also in good condition. PVC windows and door frames provide no access points, however, there are occasional gaps in the brickwork along the soffit at both gable ends. These gaps are sufficient in size to allow access to the internal structure; however the internal areas were not accessible at the time of the survey. As such the building has been given a preliminary classification of 'low' potential to support roosting bats, with particular consideration towards the building's proximity to the m62 motorway, a considerable source of both noise and light pollution 24 hours a day.
- 3.14 Building 2 consists of a small brick sided, felt roofed shed with an associated wooden build on the western side. This building is in a state of significant disrepair with large openings in both windows, doors and roofing areas. The internal was entirely accessible during the survey and was found to contain significant amounts of damp and water pooling on the floor. There are, however, small areas of roofing still intact which provide potential roosting spots for individual bats along the wooden support beams that remain dry and sheltered. The wooden build on shows significant signs of rot and is damp throughout, providing no additional roosting potential. Overall, while no signs of roosting bats were discovered on the day of the survey visit, this structure is of 'low' potential, primarily due to the presence of features suitable for individual roosting bats.
- 3.15 Building 3 is a concrete breeze block construction with corrugated metal roofing, previously used for storage of both farm equipment and residential items. The roof is significantly degraded, leaving the interior damp throughout. The area to the north, previously used for farm storage remains a little drier, however, there are no features suitable within to support a roosting bat as the interior consists of solid breeze block walls and a single skinned metal roof with no supporting beams. As such, when considering proximity to the m62, ingress of damp throughout all suitable locations and lack of features in any drier locations, this structure is considered to provide 'negligible' potential to support roosting bats.
- 3.16 Finally, Building 4 is the main residential property on site. It is of brick construction with a stone tile roof comprising gable ends on both the main build and northern extension. Whilst most of the external features are in good condition, there are locations for possible internal access located at roof corners around the main door, missing roof tiles throughout, lifted roof lining along the chimney edge and small gaps between soffit boards and the brick walls. Internal access was not possible at the time of the site visit and so the presence of an internal cavity cannot be determined. When considering this potential access to a possible internal cavity, along with the building's proximity to the

m62 motorway, a preliminary assessment of the building suggests it provides 'low' potential to support roosting bats.

- 3.17 Furthermore, no trees within woodland or residential gardens contain potential to support roosting bats.
- 3.18 Overall, whilst the buildings on site may offer roosting opportunities for bats, the potential for their presence is severely limited by the overall disturbance levels present at the Site. The m62 to the south provides a near constant source of loud noise due to regular passage of heavy goods vehicles throughout the day and is also subject to lighting throughout the night. This road disturbance is further compounded by the presence of street lit roads also present to the north and east of the Site. As such, the Site has limited suitability to support foraging and commuting bats. The Site therefore provides 'negligible' potential for foraging and commuting bats.

Birds

- 3.21 A large number of records with limited location data was provided with 781 records noted. Records included a number of notable species. These include bullfinch (*Pyrrhula pyrrhula*), house sparrow (*Passer domesticus*), herring gull (*Larus argentatus*), starling (*Sturnus vulgaris*), song thrush (*Turdus philomelos*), lesser redpoll (*Acanthis cabaret*), dunnock (*Prunella modularis*), lapwing (*Vanellus vanellus*), marsh tit (*Poecile palustris*), and a single record of kingfisher (*Alcedo atthis*).
- 3.22 The buildings had suitability to support opportunistic urban and shrub nesting species such as house sparrow and dunnock, with high levels of bird activity noted within scrub and woodland areas both within and beyond the Site. The habitats on site are not suitable to support nesting of species such as kingfisher, lapwing, herring gull and marsh tit, however, nesting and foraging opportunities are present on Site for the remaining species and others not noted on the desk study.
- 3.23 During the site visit approximately 25 starlings were noted as moving throughout the site, eventually remaining on a mobile reception tower located across the road to the east of the site for approximately 45 minutes.

Otter and water vole

- 3.24 The data search returned only three records of water vole from 2004, with no other records of other species. The closest of these are two records associated with developments to the east at Kingsway, now an extensive industrial estate. The remaining record is again from 2004 and located within the Stanney Brook SBI.

- 3.25 The Site itself has no ability to support any of these species as there are no water bodies present within or adjacent to the site. Connectivity of the site to suitable habitat is also considered to be very poor. As such, these species are considered unlikely to be encountered and will not be considered further within this report.

Notable mammals

- 3.26 A total of 15 records for hedgehog were returned within the search area along with three records for brown hare. Habitat and accessibility for brown hare on the Site is considered sub optimal, however, there is good potential foraging and sheltering habitat for hedgehogs within longer grass, scrub and woodland habitats. Most records for hedgehog are returned from within gardens throughout the wider urban landscape and whilst the site is isolated from surroundings by roads to the north-east and south, the smaller road to the north along with gardens in the west provide potential for hedgehog to commute to the Site.

Amphibians and Reptiles

- 3.27 Six records of GCN were returned on the data search in the form of a single protected license application and five license return results. These records are located approximately 1.7km to the north-east of the site and are separated from the boundary by a significant industrial estate. The only remaining record is of a single common toad (*Bufo bufo*), an SPI within a garden approximately 400m west of the site. There are no ponds within the Site and only a single pond within a 250m radius (located beyond the m62). No records of reptiles are present in the area and considering the distance and lack of connectivity of the site to larger semi natural habitats, their presence on site is considered highly unlikely and therefore will not be considered further within this report.

Invertebrates

- 3.28 The only notable record of invertebrate populations returned on the data search is of mud snail within Stanney Brook SBI. There are no suitable habitats for this species present within or in close proximity to the site. As such, these species will not be considered further within this report.

Invasive Non-Native Species (INNS)

- 3.29 Three records of invasive plant species were returned as part of the search, all records consisting of Himalayan balsam found between 1.7 and 2km south-west of the Site. No invasive non native plant species, as listed on schedule 9 on the wildlife and countryside act of 1981 were recorded during the site visit.

Biodiversity Net Gain

- 3.30 The Biodiversity Net Gain analysis revealed that the number of habitat units provided by the Site is currently 0.90, represented primarily by modified grassland. Landscape designs and planting schemes (Appendix D) were used to calculate post development units, which included a series of gardens with associated trees. However, as these private gardens cannot be secured for a minimum of 30 years, in line with standard practice to deliver BNG units, this habitat and the trees within cannot contribute to the net gain achievable on site. As such, losses are calculated at -17.57% or -0.16 units. All

habitats on site are to be lost during the proposals with areas of scrub, vegetated garden and individual trees set to be introduced in the final scheme. These designs include the provision of a small parcel of scrub within the centre of the site which, due to limited size, will achieve only poor condition. Within this scrub parcel there will be trees retained from baseline scrub areas along with planting of further trees with a targeted condition of 'moderate'. The scrub parcel created in the south of the site will consist of an extension of screening woodland along the m62 motorway and is expected to achieve poor condition due to limited size and possibilities for age diversity.

- 3.31 The site requires provision of a further 0.25 units of habitat to achieve a 10% net gain, with 0.16 units of this delivery consisting of broad woodland habitat of medium distinctiveness.
- 3.32 As per guidance provided within the statutory biodiversity metric user guide, individual trees of size small are not recorded within the BNG calculation when located within residential gardens within the post development scenario.
- 3.33 The landscape proposals include provision of ~60m of native hedgerow, projected to be in poor condition due to limited size, and location within the site. This accounts for a rise of 0.11 units from the baseline scenario.

Table 5: *Summary of gains by habitat units*

Habitat type	Existing value (habitat units)	Value after development (habitat units)
Heathland and shrub	0.12	0.20
Grassland	0.27	0.03
Urban	0.00	0.00
Woodland and forest	0.16	0.00
Individual trees	0.34	0.50
All habitats	0.90	0.74 (-17.57%)

4. Evaluation and Assessment of Constraints

- 4.1 An assessment of potential impacts on designated sites, habitats, species and Biodiversity Net Gain 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 F) and relevant national and local planning policies. If the proposals are changed significantly, the assessment will need to be reviewed.

Development Proposals

- 4.2 The proposals outline the demolition of existing building and structures and redevelopment of the Site to provide eleven residential properties with associated parking and garden space.
- 4.3 The landscaping plans outline tree planting throughout the proposed scheme, along the southern Site boundary, within areas of mixed scrub, with further individual trees planted in the centre and eastern extent of the site, also situated within areas of mixed scrub. The majority of the site will include residential properties and associated gardens.

Designated Sites

- 4.4 Designated sites are a suitable distance from the Site and are not anticipated to be directly impacted by proposals. There is a risk of indirect impacts in the event of a dust pollution incident could impact designated sites present in the surroundings in the absence of pollution prevention measures.

Habitats of Principal Importance

- 4.5 All habitats of principal importance are situated upwards of 300m from the site, with no direct impacts anticipated. There is a risk of indirect impacts in the event of a dust pollution incident could impact HPis present in the surroundings in the absence of pollution prevention measures.

Other Habitats

- 4.6 All habitats and buildings on site are set to be removed and redeveloped throughout the course of the development with the loss of habitat considered to be unavoidable during the course of the proposals. Whilst most habitats on site are considered to be of 'low' distinctiveness, mixed scrub and other broadleaved woodland is of 'medium' distinctiveness. While loss of these habitats is unavoidable, replacement scrub in the southern and central parts of the site, result in an increase of this habitat type on site.

Species

No impacts are anticipated to amphibians, otter, water vole, reptiles or invertebrates due to lack suitable habitat to support notable or protected individuals or populations. Furthermore, the risk of spreading invasive species through works conducted at this site is considered to be negligible.

Bats

- 4.7 Buildings 1, 2 and 4 have been determined as having 'low' potential to support roosting bats with internal access not possible for Buildings 1 and 4. As such, in the absence of appropriate mitigation measures, there is potential to impact roosting bats during demolition of the buildings on site. This may result in the injury/death of individual bats which would constitute an offence (Appendix F).

Notable mammals

- 4.8 The Site is considered to provide habitat capable of supporting, foraging, commuting and sheltering hedgehog. As such, in the absence of mitigation, the works may result in the displacement and/or harm of individuals. Furthermore, the replacement of suitable habitat with residential properties and gardens may result in a reduction in the sites utility by this species once development is complete.

Birds

- 4.9 The scrub and woodland on site outlined to be removed along with the buildings, have suitability to support nesting birds, particularly those common and opportunistic in urban areas. The removal of these features in the absence of mitigation and sensitive working practices is at risk of damaging or disturbing nesting birds.

Biodiversity Net Gain

- 4.10 The provisional Biodiversity Net Gain analysis showed that the number of habitat units provided by the Site could decrease from 0.90 to 0.74, a percentage loss of -17.57%. Primarily, the site will see post development units delivered through the retention and planting of individual trees and creation of scrub throughout the site.
- 4.11 Trading rules are currently not satisfied within current landscaping designs with 0.16 units of medium distinctiveness woodland habitat required within the 0.25 units needed to achieve a 10% net gain on site. As such the appropriate delivery of a minimum 10% net gain on site is not provided by current proposals.
- 4.12 While there is a loss of -17.57% currently proposed on site, there are some areas of private gardens and individual trees which could not be recorded within BNG calculations due to difficulties in securing for the 30 years required to contribute to post development values. However, it is likely that these habitats will remain somewhat vegetated and provide habitat and biodiversity value outside of the calculated values.

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 F), 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.

Habitats of Principal Importance and Off-Site adjacent habitats

- 5.2 To avoid indirect impacts to potential habitats of principal importance within the surrounding area, measures must be put in place to reduce the effects of potential pollutants (e.g. dust). Relevant guidance published by NetRegs should be adhered to during the works, specifically:
- Maintaining high standards of housekeeping at all times during the works.
 - 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.

Species

Bats

- 5.3 There are multiple buildings on site which may offer potential to support roosting bats with Buildings 1, 2 and 4 having 'low' potential. Internal access was not possible to Buildings 1 and 4 during the initial site survey. As such, it is recommended that a full preliminary roost assessment is carried out with full internal access to determine the presence / absence of internal voids which may be able to support a roost of a more significant size than individual external features may suggest.
- 5.4 Following this PRA, if the buildings remain 'low', then a single bat emergence survey during the bat active season (May - August) utilising suitably qualified surveyors and deployment of night vision aids should be undertaken. Should any buildings be upgraded to 'moderate' roost potential then a further emergence survey should be undertaken (totalling two). Surveys will be conducted according to the bat conservation trusts Bat Survey Guidelines document (2024).
- 5.5 Should any bat roosts be detected on site, a Natural England protected species license will be required for works to proceed.
- 5.6 While the site is already subject to regular light and noise disturbance, artificial lighting at night involved with the demolition, construction or operational phase of the project can have a significant detrimental impact on bat behaviour, reducing the ability of bats to traverse through an area. As such, any on site lighting utilised during any phases of the development should be designed in a bat friendly manner, as detailed by the institute of lighting professionals (ILP) in its 2023 guidance note GN 08/23. In particular, light spillage onto suitable foraging habitats within and adjacent to the site should be minimised. This will ensure the overall impacts on foraging and commuting bats as a result of this development will be minimal.

Notable mammals

- 5.7 All excavations must either be backfilled at the end of every working day, fitted with earth ramps or fitted with wooden ramps at a 45° angle to allow any animals that may fall in escape. Excavations must be checked for trapped animals every morning prior to works commencing.
- 5.8 In addition to the above, the following mitigation, in respect of hedgehog will also be undertaken:
- Provision of artificial or natural hedgehog boxes located in quiet undisturbed areas with ground covering vegetation. For example, three or four logs may be arranged to leave an appropriate sized hole for a hedgehog to nest in (big enough for the hedgehog and its nest) and covered with masses of twigs and leaves;
 - The creation of 'hedgehog highways' by leaving holes in boundary and garden fencing to allow the movement of hedgehogs throughout the Site (particularly for residential schemes); and
 - Retaining wood piles from felled trees to attract invertebrates and fungi, providing a good local food source for hedgehogs and possible nesting sites (materials from Site works could be used for this purpose).

Birds

- 5.9 Any vegetation removal works and building demolition should take place outside the breeding bird season which runs from February until August inclusive, in order to prevent any impacts upon nesting birds. Any tree/scrub clearance or building demolition 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 5 m of an identified nest 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.

Biodiversity Net Gain

- 5.10 Biodiversity net gain analysis indicates that the site will result in a -17.57% loss in habitat units by the proposed development totalling a requirement for 0.25 habitat units to achieve a 10% gain. Trading rules require the implementation of 0.16 units of woodland habitat of medium distinctiveness within these 0.25 units, or else the development will be considered unsatisfactory and BNG not met.
- 5.11 Due to the low availability of space within this development, it is likely that these units and trading rules will be satisfied at an off-site location as all efforts have already been made to maximise the habitat availability in the post development scenario. Should off site compensation not be possible, as a last resort, statutory units may be purchased, or a financial compensation package can be discussed with the local council.

Enhancement measures

- 5.12 Bat and bird boxes could be installed to proposed buildings and trees to increase opportunities for these species post-development. These should be integrated wherever possible to deliver longevity of these features through the proposals.

- 5.13 A total of four bird boxes to be sited on proposed trees when mature is proposed (pole mounted or secured on walls until trees reach maturity) and must be sited at least 1.5m from the ground facing in a northerly or easterly direction. The total number of bat boxes required to adequately compensate for building and habitat loss on site will be subject to future recommended bat surveys which will determine the exact extent to which the Site is in use by roosting bats.

Re-survey of the Site

- 5.14 If no works are undertaken on site within 18 months of this survey or if any changes to the proposals are made, a further ecological survey may be necessary.

References

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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>)

Appendix A – Bat Roost Potential and Habitat Suitability Categories

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.

Appendix B – UK Habitat Plan

BOW17/1704 Ginnell Farm
Drawing title: UKHabitats Baseline Plan

Drawn by: LH Checked by: JJ	Date: 25/04/2025	
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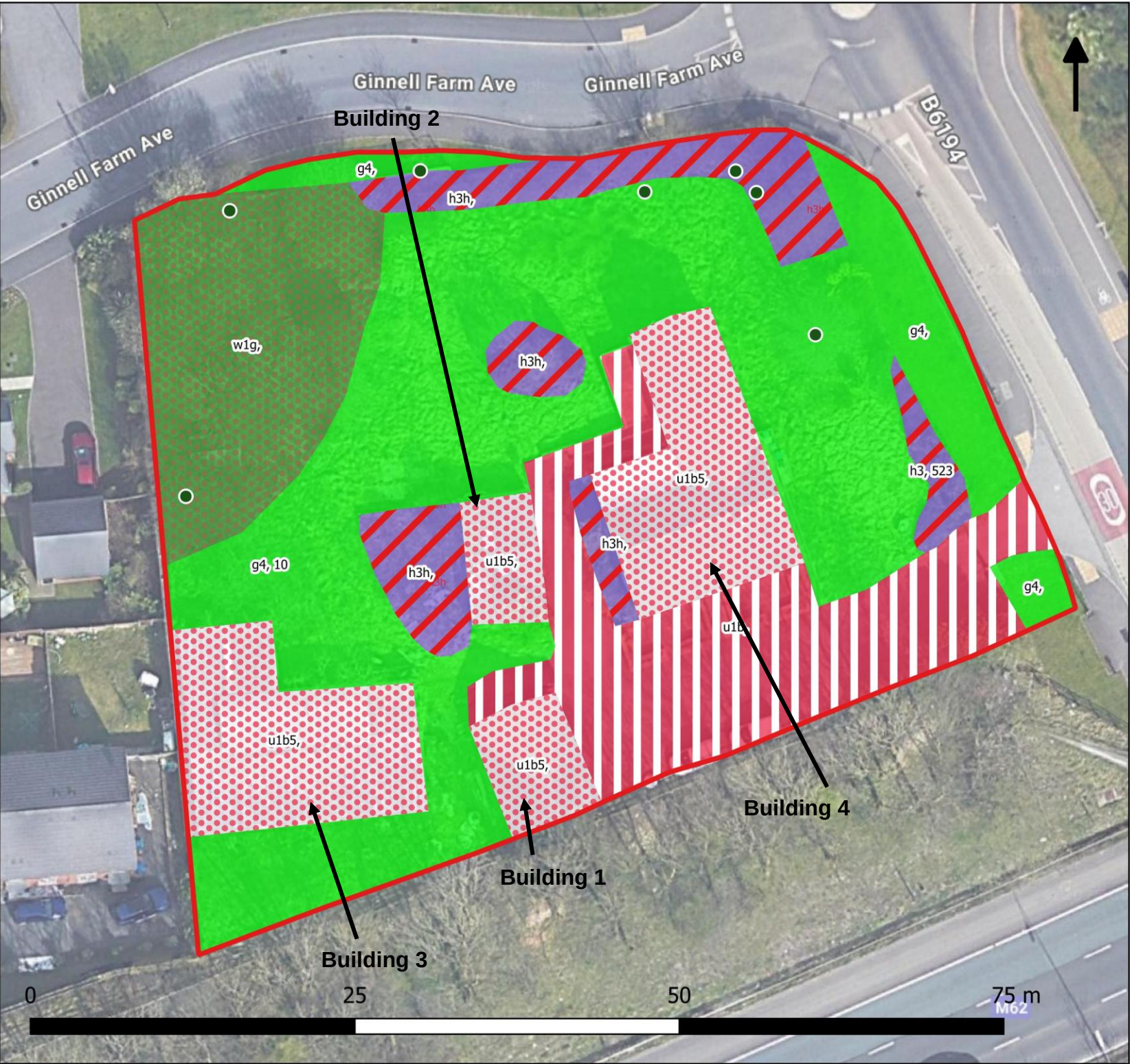
Legend

Broadleaved trees

- Individual trees

Habitats

- g4 - modified grassland
- w1g - other woodland-broadleaved
- h3 - dense scrub
- h3h Mixed scrub
- u1b - developed land, sealed surface
- u1b5 - buildings
- Red Line Boundary



Appendix C – Post Development UK Habitat Plan



Appendix E – Information Sheets for Contractors

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?

Is the bat in immediate danger of injury?

YES

Using gloves or other protection place bat carefully in a lidded ventilated box with a piece of clean cloth and a small shallow container of water.

Call scheme ecologist
Bowland Ecology: 01200 446 777.

Keep box in a safe, quiet location until scheme ecologist arrives.

NO

Stop work immediately and inform Site Manager.

Contact scheme ecologist -
Bowland Ecology: 01200 446 777.

Do not expose bat or cause it to fly away.

The scheme ecologist will assess the situation and advise what needs to happen next. Works may need to stop until a licence has been obtained.

A written record should be kept and made available to Natural England or any police officer on request.

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

version 1 August 2017

Appendix F – 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.
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.

¹ Deliberate capture or killing is taken to include “accepting the possibility” of such capture or killing ² Deliberate disturbance of animals includes in particular any disturbance which is likely a) to impair their ability (i) to survive, to breed or reproduce, or to rear or nurture their young, or (ii) in the case of animals of hibernating or migratory species, to hibernate or migrate; or b) to affect significantly the local distribution or abundance of the species to which they belong. 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. ³ The 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. ⁴ The 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/>

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://jncc.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.