

Frog Hall Farm Sheepy Magna, Leicestershire

Ecological Appraisal August 2021



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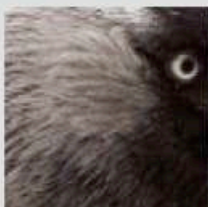
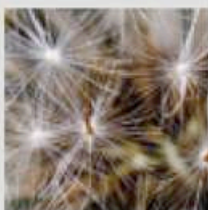
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1 Summary

1.1 The Proposed Development

- 1.1.1 This document provides an ecological appraisal of the site at Frog Hall Farm, Sheepy Magna, related to proposals to redevelop the farm buildings and access track.
- 1.1.2 This report describes and assesses features of ecological value found to be present at the site. It also provides advice to help minimise any adverse ecological impacts, thereby enabling the development to comply with current nature conservation policy and legislation.

1.2 Ecological Receptors

- 1.2.1 The ecological assessment, set out in detail below, has found a moderate level of nature conservation interest on the site with the buildings having potential to support roosting bats and breeding birds, including barn owl *Tyto alba*. The hedgerows, trees and pasture field also have potential to support farmland breeding birds.
- 1.2.2 There are no internationally or nationally designated sites within 1 km of the site. There are 12 county designated sites present nearby - 6 potential Local Wildlife Sites, 2 candidate Local Wildlife Sites and 4 potentially historic Local Wildlife Sites. These range in distance from 205 m to 762 m from the Site.

1.3 Recommended Actions

- 1.3.1 Further surveys are recommended for bats.
- 1.3.2 Ecological impacts on features of interest will need to be avoided, or appropriate mitigation put in place to reduce the effects of development.

2 Introduction

2.1 Site Description

- 2.1.1 Frog Hall Farm, Sheepy Magna, Leicestershire, CV9 3QX is centred on OSNGR SK 30643 00918.
- 2.1.2 The surveyed area consists of the farm buildings with associated hard standing, an area of amenity grassland with trees to the east of the farm buildings and a pasture field to the south of the farm buildings. The access track runs along the eastern and northern boundaries of this field, and a hedgerow runs along the western boundary.
- 2.1.3 The wider landscape is agricultural land – largely arable.

Figure 1. Site Location



2.2 Study Scope

- 2.2.1 Baker Consultants was commissioned by the client to undertake the following works in relation to the Site:
- Desk-based study with local records centres and online databases to identify designated sites of nature conservation importance, areas of priority habitats and records of protected and/or notable species;

- Phase 1 Habitat survey to record the nature and extent of vegetation and habitats within and adjacent to the Site; and
- Appraisals for protected and/or notable flora and fauna.

2.2.2 This report takes into account standard guidance from a variety of sources including the Chartered Institute of Ecology and Environmental Management ^{1 2 3}, British Standards Institution ⁴, and www.gov.uk ⁵.

2.2.3 The report considers, in particular, potential effects on the following biodiversity features:

- Designated Sites (international, national and local)
- European Protected Species
- National Protected Species
- Habitats and Species of Principal Importance for Conservation
- Habitats and species of local interest

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

² CIEEM (2015). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.

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

⁴ BSI (2013). BS42020:2013 Biodiversity – Code of Practice for Planning and Development

⁵ <https://www.gov.uk/guidance/protected-species-how-to-review-planning-applications>

3 Methods

3.1 Surveyor Qualifications and Experience

- 3.1.1 Senior Invertebrate Ecologist David Goddard BSc (Hons) MCIEEM has over 14 years' consultancy experience and holds Natural England survey licences for great crested newt (GCN), white-clawed crayfish, barn owl and dormouse. David undertook the site survey and has authored this report.
- 3.1.2 Wherever appropriate during surveys, Natural England's Standing Advice on Protected Species ⁶ was taken into account, along with a wide range of other best practice guidance on survey methods. These are referenced in the text below. However, the professional judgement of the surveyors was also applied in relation to the site conditions and target species/habitats being considered. This may have required changes to the published guidance.

3.2 Desk Study

- 3.2.1 A data search was undertaken for designated sites of nature conservation interest, priority habitats and records of protected and priority species. Data for these was gained through the sources listed in Table 1 below:

Table 1. Desk Study Data Sources

Organisation/source	Data sought	Search area
Multi-Agency Geographic Information for the Countryside (MAGIC)	Statutory designated sites, Habitats of Principal Importance and Ancient Woodland, European Protected Species Licences	2 km
Local Biological Records Centre	Non-statutory designated sites of nature conservation and records of protected/notable species.	1 km

- 3.2.2 Natural England's online Impact Risk Zone tool was utilised ⁷. This identifies whether developments are likely to have an impact on Sites of Special Scientific Interest (SSSIs), based upon their type and location, and whether Natural England should be consulted as part of proposals.

3.3 Extended Phase 1 Habitat Survey

- 3.3.1 A Phase 1 Habitat Survey ⁸ was carried out by David Goddard on the 29th June 2021. The vegetation types and habitats present were described and mapped during a walkover of the site, using the standard published guidelines for Phase 1 Habitat survey. Features of particular interest were recorded as Target Notes (TNs).
- 3.3.2 In addition, the habitats within the site and surrounding land were appraised for their suitability to support protected or notable species, or assemblages that could be sensitive

⁶ <https://www.gov.uk/guidance/protected-species-how-to-review-planning-applications>

⁷ Available at: <http://www.magic.gov.uk>

⁸ Joint Nature Conservation Committee (2010). Handbook for Phase I Habitat Survey: A Technique for Environmental Audit. JNCC, Peterborough.

to the development proposals, in accordance with 'Guidelines for Preliminary Ecological Appraisal'⁹.

- 3.3.3 During the survey, consideration was given to features such as potential breeding bird habitat, bat roosting locations, badger sett locations, reptile habitat and the suitability of water features for amphibians and riparian mammals.
- 3.3.4 Invasive species, such as Japanese knotweed *Fallopia japonica* and giant hogweed *Heracleum mantegazzianum*, were noted by the surveyor if present. These species can have implications for development activity and human health respectively.
- 3.3.5 Weather conditions during the survey were overcast with moderate rain for the initial part of the survey before stopping and brightening.
- 3.3.6 The survey approach taken is designed to identify broad habitat types at a site and the potential of these habitats to support notable / protected species, and to assist in providing an overview of the ecological interest at a site. It is the most widely used and professionally recognised method for initial ecological site appraisal.

⁹ CIEEM (2017). Guidelines for Preliminary Ecological Appraisal. Chartered Institute of Ecology and Environmental Management, Winchester.

4 Results

4.1 Study Limitations

- 4.1.1 It is important to note that, even where data is returned for a desk study, a lack of records for a defined geographical area does not necessarily mean that there is a lack of ecological interest since the area may simply be under-recorded. Equally, due to the level of recording, some species should be considered more frequent than indicated by the records provided within a desk study.
- 4.1.2 Whilst every effort was made in the field survey to provide a comprehensive description of the site, no investigation can ensure the complete characterisation and prediction of the natural environment. Also, natural and semi-natural habitats are subject to change, species may colonise the site after surveys have taken place and results included in this report may become less reliable over time.
- 4.1.3 Survey data is generally only considered valid if it is from the current or previous active season. In some cases, surveys up to 3 years old may be considered acceptable by consultees if the habitats have not significantly changed in the intervening period.
- 4.1.4 The rain during the initial part of the survey is considered to have constrained the identification of some plants to species level, but this is not considered to be a significant constraint to the identification of habitat types.
- 4.1.5 Access was restricted to the redline boundary shown in Figure 1, except for the pond to the north-east of the site, therefore the existence and / or absence of protected and / or notable species e.g. badger, could not be determined outside of the survey area. This is however not considered to be a limitation, as the proposed development is for the redevelopment of the farm buildings and access track, all well within the boundary.

4.2 Designated Sites

- 4.2.1 The desk study provided information on the designated sites listed below in Table 2 (see Appendix 1).

Table 2. Designated Sites

Name	Status	Location/distance Interest
Crow Lane hedgerow	pLWS	East of the site/ 415m, hedgerow
Atherstone Road hedgerow, west	pLWS	South-south-east of the site/ 762m, hedgerow
Parish hedgerow, Pinwall	pLWS	South of the site/ 570m, hedgerow
Benn Hills pond	cLWS	North-north-east of the site/ 648m, standing water
B5000 hedgerows, tree & verge	cLWS	South of the site/ 542m, hedgerow, mature tree
Frog Hall Oak	pLWS	South of the site/ 205m, mature tree
Crow Lane/Sheepy Road hedgerow	pLWS	East-south-east of the site/ 422m, hedgerow
Atherstone Road hedgerow, east	pLWS	South-south-east of the site / 756m, hedgerow
Sheepy Magna, Crow Lane, old sand pit	phLWS	North-east of the site/ 586m, no data given
Sheepy, pond	phLWS	East of the site/ 474m, pond
Sheepy, Highfield farm pond	phLWS	West of the site/ 516m, pond
Sheepy, pond	phLWS	East of the site/ 377m, pond

Key: pLWS potential Local Wildlife Site, cLWS candidate Local Wildlife Site, phLWS potentially historic Local Wildlife Site

- 4.2.2 Natural England's online MAGIC tool identified that no SSSIs are present within 2 km of the site.
- 4.2.3 The proposed redevelopment falls within the 'Impact Risk Zone' for Birches Barn Meadows SSSI, situated approximately 2.5 km northwest of the site. However, it is considered that the proposed redevelopment does not fall within any of the development categories that would affect Birches Barn Meadows SSSI.

4.3 Habitats

- 4.3.1 Scientific names are provided with the first occurrence of the species, then with common names only used. Standard nomenclature ¹⁰ is used for vascular plant species.

Habitats Overview

- 4.3.2 The habitat types recorded on site during the Phase 1 Habitat survey are described in turn below. Particular features of interest, recorded during the survey, are listed as Target Notes in Appendix 3, with their locations shown in the Appendix 2 Phase 1 Habitat plan.

Woodland and Scrub

- 4.3.3 The area of plantation mixed woodland being approximately 420 m² is located along the western boundary below the farm buildings. It contains leyland cypress *Cupressus x leylandii*, poplar *Populus* sp., ash *Fraxinus excelsior*, with a shrub layer containing hawthorn *Crataegus monogyna* and dog-rose *Rosa canina* (TN4, see Figures 2 and 3).

Figure 2. Plantation mixed woodland



Figure 3. Plantation mixed woodland



Hedgerows and Boundaries

- 4.3.4 A species-poor hedgerow, circa 2m high and 3m wide with trees, forms the western boundary of the improved grassland area to the south of the farm buildings. The hedgerow contains elm *Ulmus* sp., hawthorn, blackthorn *Prunus spinosa*, elder *Sambucus nigra*, and field maple *Acer campestre*, with oak *Quercus* sp. and ash trees. Climbers included dog-rose, bramble *Rubus fruticosus* agg., common ivy *Hedera helix* and bittersweet *Solanum dulcamara*. The field layer contains cleavers *Galium aparine*, cow

¹⁰ Stace, C. (2012). New Flora of the British Isles. Third Edition. Cambridge University Press, Cambridge.

parsley *Anthriscus sylvestris*, common nettle *Urtica dioica*, false oat-grass *Arrhenatherum elatius* and hedge woundwort *Stachys sylvatica* (TN3, see Figures 4 and 5).

Figure 4. Hedgerow with trees



Figure 5. Hedgerow with trees



Grassland and Marsh

- 4.3.5 A field of improved grassland is located within the southern half of the site, it includes cock's-foot *Dactylis glomerata*, perennial rye-grass *Lolium perenne*, buttercup *Ranunculus* sp., shepherd's-purse *Capsella bursa-pastoris*, cow parsley, crane's-bill *Geranium* sp., sow-thistle *Sonchus* sp., dock *Rumex* sp., dandelion *Taraxacum* agg. (TN1, see Figures 6 and 7).
- 4.3.6 There is also an area of amenity grassland located to the east of the farm buildings which had been recently mown prior to the survey, with scattered trees and introduced shrubs planted within it (see Figures 8 and 9).

Figure 6. Improved grassland field



Figure 7. Improved grassland field



Figure 8. Amenity grassland



Figure 9. Amenity grassland



Broad-leaved Scattered Trees

- 4.3.7 There are two area of broad-leaved scattered trees, the first being within the amenity grassland, and containing species such as ash, apple *Malus* sp. cherry *Prunus* sp., field maple, sycamore *Acer pseudoplatanus*, horse-chestnut *Aesculus hippocastanum* and pear *Pyrus* sp. (TN2, see Figures 10 and 11).
- 4.3.8 The second area is along the eastern edge of the improved grassland field. The tree here had been recently planted as they were all staked and most had their plant labels attached. The species included sweet chestnut *Castanea sativa*, copper beech *Fagus sylvatica* f. *purpurea*, maple *Acer* sp., and field maple (Appendices 2 and 3).

Figure 10. Broad-leaved Scattered Trees



Figure 11. Broad-leaved Scattered Trees



Figure 12. Broad-leaved Scattered Trees



Figure 13. Broad-leaved Scattered Trees



Introduced Shrub

- 4.3.9 There are two areas of introduced shrubs on the site, including fuchsia *Fuchsia* sp., rose *Rosa* sp., verbascum *Verbascum* sp., wall cotoneaster *Cotoneaster horizontalis*, rose of sharon *Hypericum calycinum*, and foxglove *Digitalis purpurea*. One of these stands is within the amenity grassland, and the second is adjacent to the farm house, which also contains ivy (TN5, see Figures 14 to 17).

Figure 14. Introduced Shrubs



Figure 15. Introduced Shrubs



Figure 16. Introduced Shrubs



Figure 17. Introduced Shrubs



Hard Standing

4.3.10 Areas of hard standing on the site include the access track and areas around the farm buildings (see Figures 18 to 21).

Figure 18. Access Track



Figure 19. Hard Standing around Farm Buildings



Figure 20. Hard Standing around Farm Buildings



Figure 21. Hard Standing around Farm Buildings



Open Water

- 4.3.11 A recently created pond is present approximately 80m to the north-east of the site. This has a depth of approximately 1 m, and supports marginal vegetation, including soft rush *Juncus effusus* and yellow iris *Iris pseudacorus*. There is no submerged vegetation present and only a few water-lily *Nymphaeaceae* sp. providing any floating vegetation within the pond (TN6, see Figures 22 and 23). This pond is outside of the site's redline boundary.

Figure 22. Pond



Figure 23. Pond



Buildings

- 4.3.12 There are a total of eight buildings on site. These have been numbered Buildings B1 to B8.
- 4.3.13 Building B1 is an open fronted barn, having a metal girder structure, with the lower part of the walls constructed from breeze blocks, and with wooden slats to the roof line. The roof is constructed from corrugated asbestos sheeting and corrugated plastic sheeting in a double pitched roof, see Figures 24 and 25.

Figure 24. Building B1



Figure 25. Building B1



- 4.3.14 Building B2 is an open fronted barn having a metal girder structure with the lower part of the walls constructed from breeze blocks or wood, and with corrugated asbestos sheeting forming the upper walls to the roof line. The pitched roof is constructed from corrugated asbestos sheeting and corrugated plastic sheeting (see Figures 26 and 27).

Figure 26. Building B2



Figure 27. Building B2



- 4.3.15 Building B3 is a series of connected barns, having a metal girder structure with the lower part of the walls constructed from breeze blocks and corrugated metal sheeting to the roof line. The pitched roof is constructed from corrugated asbestos sheeting and corrugated plastic sheeting (see Figures 28 to 31).

Figure 28. Building B3



Figure 29. Building B3



Figure 30. Building B3



Figure 31. Building B3



- 4.3.16 Building B4 is an open fronted barn having a metal girder and wooden pole structure,

with the walls constructed of corrugated metal sheeting to the roof line. The sloping roof is constructed from corrugated metal sheeting (see Figures 32 and 33).

Figure 32. Building B4



Figure 33. Building B4



4.3.17 Building B5 is a brick-built single-storey building with gable ends and a pitched tile roof, (see Figures 34 and 35).

Figure 34. Building B5



Figure 35. Building B5



4.3.18 Building B6 is the farm house, which is a brick-built two-storey building, with gable ends and a pitched tile roof. The doors and windows are constructed of wood (see Figures 36 to 43).

Figure 36. Building B6



Figure 37. Building B6



Figure 38. Building B6



Figure 39. Building B6



Figure 40. Building B6



Figure 41. Building B6



Figure 42. Building B6



Figure 43. Building B6



4.3.19 Building B7 is a series of smaller buildings connected together to form one larger complex, all of which are a single-storey brick construction, with gable ends and pitched tile roofs (see Figures 44 to 49).

Figure 44. Building B7



Figure 45. Building B7



Figure 46. Building B7



Figure 47. Building B7



Figure 48. Building B7



Figure 49. Building B7



4.3.20 Building B8 is a wooden structure which is in a poor state of repair, surrounded by trees and shrubs (see Figures 50-53).

Figure 50. Building B8



Figure 51. Building B8



Figure 52. Building B8



Figure 53. Building B8



4.4 Species Overview

4.4.1 The notable species recorded on or near the site by desk study or field survey are

summarised in the following sections. Further details of the desk study results are also provided in Appendix 1.

4.5 Bats

4.5.1 The desk study returned no records for bats within 1 km of the site and MAGIC reported no EPSL bat licenses within 2 km of the site., see Appendix 1

Bat Roost/Habitat Survey

4.5.2 None of the trees on site were considered to have features which could support roosting bats.

4.5.3 The commuting and foraging habitats on the site can be assessed using the factors listed in Tables 3.

4.5.4 The buildings on the site can be assessed for their bat roosting potential using the factors listed in Tables 3 and 4 below. The buildings on site were assessed from the outside only during the survey.

Table 3. Bat Roost/Habitat Assessment Categories

Category	Roosting sites	Commuting and foraging habitats
Confirmed Roost	Evidence of a bat roost recorded.	-
High	A structure or tree with one or more potential roost sites that are suitable for use by large numbers of bats on a regular basis and for long periods of time due to the size, shelter, protection, conditions and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting and foraging bats (e.g. river valleys, streams, grazed parkland, hedgerows, broadleaved woodland, lines of trees and woodland edge). Site is close to and connected to known roosts.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to the size, shelter, protection, conditions and surrounding habitat - but unlikely to support a roost type of high conservation status (i.e. maternity or hibernation).	Continuous habitat connected to the wider landscape that could be used by bats for commuting and foraging (e.g. lines of trees, scrub, grassland, water or linked back gardens).
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. Insufficient space, shelter, protection, conditions and/or surrounding habitat to be used on a regular basis or by large numbers of bats.	Suitable, but isolated habitat that could be used by small numbers of commuting and foraging bats (e.g. a gappy hedgerow, unvegetated stream, or a patch of scrub).
Negligible	A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential. Negligible habitat features likely to be used by roosting bats.	Negligible habitat features likely to be used by commuting or foraging bats.

Table 4. Bat Roost Building Assessment

Positive indicators for roosting bats	Negative indicators for roosting bats
Cluster of old buildings with varied structure	Modern, active industrial premises, built after the 1970s
Not affected by artificial light levels	Potential roost sites with high levels of artificial light
In rural location, close to woodland or water	In a heavily urbanised area with few green spaces
Immediately connected to commuting habitats	Isolated from commuting habitat
In sheltered lowland location	Exposed site at high altitude
Has numerous cracks or crevices present	Intact and tightly sealed structure

Positive indicators for roosting bats	Negative indicators for roosting bats
Pitched roof with an uneven clay tile/slate covering	Flat roof with sheet material construction
Large internal roof space, with clear flying spaces	Small or cluttered roof space
Large rough roof timbers with cracks, joints and holes	Modern smooth timber roof trusses
Hanging tiles or wood cladding, esp. on south-facing walls	Walls prefabricated with steel and sheet materials

- 4.5.5 Building B1 has been assessed as having **negligible** bat roost potential.
- 4.5.6 Building B2 has been assessed as having **negligible** bat roost potential.
- 4.5.7 Building B3 has been assessed as having **negligible** bat roost potential.
- 4.5.8 Building B4 has been assessed as having **negligible** bat roost potential.
- 4.5.9 Building B5 has been assessed as having **moderate** bat roost potential, as there are missing tiles and gaps around doors / windows as well as having an opening at one end of the building.
- 4.5.10 Building B6 has been assessed as having **high** bat roost potential due to missing and/or slipped tiles on the roof, missing mortar on the ridge tiles, pipework emerging from the roof, missing brick work around cables/pipes, missing mortar between bricks on the gable end and ivy covering a significant proportion of the building's frontage.
- 4.5.11 The buildings comprising the B7 complex have been assessed as having **high** bat roost potential due to missing and/or slipped tiles on the roof, missing mortar on the ridge tiles, and open fronts or doors. Internally, the wooden beams and roof trusses have gaps around joints, and there is ivy covering a proportion of the buildings.
- 4.5.12 The building B8 has numerous openings which would allow bats entry into the building. However, part of the roof is open to the elements which reduces its potential to support roosting bats, and this building have been assessed as having **low** bat roost potential.
- 4.5.13 The habitats on site have been assessed as being of **moderate** suitability for commuting and foraging bats.

4.6 Badger

- 4.6.1 The desk study returned no records for badgers within 1 km of the site.
- 4.6.2 No evidence of badgers was recorded during the survey.

4.7 Amphibians

- 4.7.1 The desk study returned no records for amphibians within 1 km of the site and the MAGIC desk study indicated no EPSL licenses for great crested newts within 2 km of the site.

Habitat Appraisal

- 4.7.2 The habitats present on site, especially the hedgerow, mixed woodland, introduced

shrubs offer potential habitat capable of supporting amphibians.

- 4.7.3 A Habitat Suitability Index (HSI) survey was undertaken to determine suitability of the pond for supporting great crested newt populations (Table 5). The pond just north of the site was found to be of 'Average' suitability (HSI = 0.61).

Table 5. Habitat Suitability Index Assessment

Feature	Category	Pond HSI score
SI1 - Location	Zone A - Optimal	1.00
SI2 - Pond area	275m ²	0.50
SI3 - Pond drying	Never	1.00
SI4 - Water quality	Moderate	0.33
SI4 - Shade	Up to 60%	1.00
SI6 - Fowl	Minor	0.67
SI7 - Fish	Possible	0.67
SI8 - Ponds	3 per 1 km	0.95
SI9 - Terrestrial habitat	Poor	0.33
SI10 - Macrophytes	0%	0.30
Habitat Suitability Index		0.61

- 4.7.4 Given that there are no records for great crested newts or EPSL within 1 km of the site and the HSI score for the newly created pond is 'average' it is considered that it is unlikely for great crested newts to be present at the site.

4.8 Reptiles

- 4.8.1 The desk study returned no records for reptiles within 1 km of the site.
- 4.8.2 The hedgerow, mixed woodland and introduced shrubs offer limited potential habitat capable of supporting common reptiles.

4.9 Birds

- 4.9.1 The desk study returned one record of red kite *Milvus milvus* within 1 km of the site.
- 4.9.2 A total of 11 species of birds were recorded during the site survey, of which 8 species were probably breeding. Of these, three are Birds of Conservation Concern (BoCC) red-listed: house sparrow *Passer domesticus*, song thrush *Turdus philomelos* and yellowhammer *Emberiza citrinella*.

4.10 Invertebrates

- 4.10.1 The desk study returned one record of harlequin ladybird *Harmonia axyridis* within 1 km of the site.
- 4.10.2 The habitats present on site are common and widespread within the surrounding area and not considered to be likely to support protected and/or notable invertebrates, or a significant assemblage of invertebrates.

4.11 Plants

- 4.11.1 The desk study returned three records for plants, one for buck's-horn plantain *Plantago*

coronopus and two records for fennel *Foeniculum vulgare* all within 1 km of the site.

4.11.2 No protected and/or notable plants were recorded during the survey.

4.12 Invasive Species

4.12.1 The desk study returned no records of invasive species within 1 km of the site, and no invasive species were recorded during the survey.

5 Assessment

5.1 National Policy

- 5.1.1 The National Planning Policy Framework (NPPF 2021) sets out the Government's planning policies for England and how these should be applied. It states that the purpose of the planning system is to contribute to the achievement of sustainable development, combining economic, social and environmental objectives, and 'protecting and enhancing our natural --- environment; including ---helping to improve biodiversity'. Within this framework, the requirements in relation to biodiversity are included within several policies. The two most relevant to individual planning decisions are Paragraphs 174 and 180, shown below:
- 174: Planning policies and decisions should contribute to and enhance the natural and local environment by:
- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
 - b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
 - c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
 - d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures; etc...
180. When determining planning applications, local planning authorities should apply the following principles:
- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
 - b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
 - c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons⁶³ and a suitable compensation strategy exists; and
 - d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.
- 5.1.2 Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 places a duty on every public authority to have regard to conserving biodiversity. Section 41 of the same Act requires that the Secretary of State must publish a list of the living organisms and types of habitats that are of 'Principal Importance' for the purpose of conserving

biodiversity. The Secretary of State must take steps, as appear reasonably practicable, to further the conservation of those living organisms and habitats in any list published under this section. The list of species and habitats of principal importance currently includes 943 species and 56 habitats.

5.2 Local Policy

- 5.2.1 The Local Plan is made up of several planning documents built around a Core Strategy. The Local Plan along with the NPPF sets out how to manage sustainable development in the area.
- 5.2.2 The Hinckley & Bosworth Borough Council¹¹ within their Green Infrastructure Strategy 2020 has Theme 2: Biodiversity, which has the following Biodiversity key issues and opportunities which are relevant:
- BD2: Intensive agricultural management and the role of agri-environment schemes.
 - BD3: Habitat connectivity.

5.3 Legislation

- 5.3.1 The Wildlife and Countryside Act 1981 (as amended by the CRoW Act 2000) provides for the notification and confirmation of Sites of Special Scientific Interest (SSSIs). These sites are identified for their flora, fauna, geological or physiographical features by Natural England. The Act also contains measures for the management of SSSIs and protection against damaging operations. Impact Risk Zones (IRZs) define zones around each site which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts ¹².
- 5.3.2 The Wildlife and Countryside Act 1981 (as amended by the CRoW Act 2000) is the primary legislation which protects native animals, plants and habitats in the UK. The Act makes it an offence to intentionally kill, injure or take any wild animal listed on Schedule 5, and prohibits interference with places used for shelter or protection, or intentionally disturbing animals occupying such places. The Act also makes it an offence to intentionally pick, uproot or destroy any wild plant listed in Schedule 8, or any seed or spore attached to any such wild plant.
- 5.3.3 European Protected Species (EPS), such as bats and great crested newts, are protected under both the Wildlife and Countryside Act 1981 (as amended by the CRoW Act 2000) and under the Conservation of Habitats and Species Regulations 2017. Taken together, these make it an offence to:
- a) Deliberately capture, injure or kill a EPS;
 - b) Deliberately disturb any EPS, in particular any disturbance which is likely to (i) impair their ability to survive, breed, reproduce or to rear or nurture their young; or in

¹¹ Available at: file:///Users/dave/Downloads/HBBC_GI_Strategy_reduced_size__Web_version.pdf

¹² Available at: <http://www.magic.gov.uk>

the case of hibernating or migratory species, to hibernate or migrate; or (ii) to affect significantly the local distribution or abundance of the species to which they belong.

c) To be in possession or control of any live or dead EPS or any part of, or anything derived from a EPS;

d) Damage or destroy a breeding site or resting place of a EPS;

e) Intentionally or recklessly obstruct access to any place that a EPS uses for shelter or protection;

f) Intentionally or recklessly disturb a EPS while it is occupying a structure or place that it uses for shelter or protection.

5.4 Impacts on Designated Sites

5.4.1 The section below provides an evaluation, description of potential impacts and assessment of ecological effects for designated sites relevant to the study area. This information is summarised in Table 6.

Table 6. Designated Sites Potential Impacts Summary

Is the development within 10 km of a Special Area of Conservation (SAC), Special Protection Area (SPA) or Ramsar Site?	Yes
Is the development within the Impact Risk Zone of a Site of Special Scientific Interest (SSSI)?	Yes
Is the development within 250 m of a Local Wildlife Site?	Yes

5.4.2 The closest internationally designated site to the study area is the River Mease SAC, which is approximately 9.5 km north-north-east. The site is an inland waterway designated because it supports both spined loach *Cobitis taenia* and bullhead *Cottus gobio*.

5.4.3 It is considered that there will be no impacts upon the River Mease SAC due to the distance from the site and that there is no obvious hydrological link from the site to the River Mease SAC.

5.4.4 There are no SSSI's within 2 km of the site and it is considered that the proposed redevelopment does not fall within any of the development categories for the Impact Risk Zones that would affect Birches Barn Meadows SSSI which is approximately 2.5 km northwest of the site.

5.4.5 There is a total of 12 pLWS, phLWS or cLWS, seven of which are designated hedgerows which are unlikely to be affected by the proposed development. There are further four site which are designated for standing water which are unlikely to be affected by the proposed development as there are no hydrological links from the site to these sites. The final site is an old sand pit being 586 m north-east of the site and is also unlikely to be affected by the development.

5.5 Impacts on Habitats

Habitats Overview

5.5.1 The sections below provide an evaluation, description of potential impacts and

assessment of ecological effects for each habitat type relevant to the study area.

5.5.2 56 Habitats of Principal Importance are included on the Section 41 list under the NERC Act. These are all the habitats in England that are regarded as conservation priorities in the UK Post-2010 Biodiversity Framework ¹³.

5.5.3 The only Habitats of Principal Importance on site are the hedgerows.

Woodland and Scrub

5.5.4 There are no expected impacts upon the small area of mixed woodland from the proposed redevelopment of the farm buildings.

Hedgerows and Boundaries

5.5.5 Unlike most other habitat types, hedgerows have specific legislation affording them protection. The Hedgerows Regulations 1997 are intended to protect 'important' countryside hedgerows from destruction or damage. A hedgerow is considered important if (a) has existed for 30 years or more; and (b) satisfies at least one of the criteria listed in Part II of Schedule 1 of the Regulations. Under the Regulations, it is against the law to remove or destroy certain hedgerows without permission from the local planning authority.

5.5.6 There are no expected impacts upon the hedgerow from the proposed redevelopment of the farm buildings.

Grassland and Marsh

5.5.7 The improved grassland will be affected by the construction of a new access road to the farm. It is considered that there will be a relatively small proportion of the grassland lost due to the construction of the new access road. However, this habitat is of low value and there is similar habitat in the surrounding area. The loss of a small area of improved grassland is therefore not considered to be significant.

Broad-leaved Scattered Trees

5.5.8 It is not currently expected that there will be any impacts upon the broad-leaved scattered trees from the redevelopment of the farm building, as long as the redevelopment remains within the current building footprint.

Introduced Shrubs

5.5.9 The introduced shrubs and ivy growing immediately adjacent to and on the main farm house are highly likely to be removed to allow the redevelopment to take place. However, the introduced shrubs are considered to be of low ecological value.

Hard Standing

5.5.10 The hard standing is considered to be of low ecological value and any loss would not have any ecological impact.

¹³ Maddock, A. (2010) UK Biodiversity Action Plan Habitat Descriptions. BRIG.

Buildings

- 5.5.11 The buildings in and of themselves are of low ecological value, however they have been assessed for their potential to support roosting bats and birds.

5.6 Species Overview

- 5.6.1 The sections below provide an evaluation, description of potential impacts and assessment of ecological effects for European and nationally protected species/group, or priority species/group, relevant to the study area. The important and protected species recorded on site are summarised in Table 7.

Table 7. Protected/Priority Species Recorded on Site

European Protected Species		Notes
Bats	?	The buildings have negligible to high potential for roosting bats, the habitats have a moderate potential to support foraging and/or commuting bats.
Dormouse	No	The habitats on site are considered to be suboptimal to support hazel dormice.
Otter	No	No habitats on site capable of supporting otter.
Great Crested Newt	No	The new pond off site is considered unlikely to support great crested newts.
Nationally Protected Species		
Badger	?	No evidence of badger on site, however the site could support sett building and foraging by badgers
Water Vole	No	No habitats on site capable of supporting water vole
Schedule 1 Birds	?	The buildings have the potential to support barn owl
Breeding Birds	?	Farmland assemblage
Reptiles	No	The habitats on site are considered to have limited potential to support reptiles
Invertebrates	No	The habitats on site are considered unlikely to support protected and/or notable invertebrates
White-clawed crayfish	No	No habitats on site capable of supporting water vole
Plants (inc. fungi, ferns and bryophytes)	No	No protected and / or notable plants recorded during the survey
Priority Species		
Mammals	No	The site is considered unlikely to support priority mammals.
Birds	Yes	House Sparrow, song thrush and yellowhammer all BoCC red listed species recorded on site.
Invertebrates	No	The site is considered unlikely to support protected and/or notable invertebrates due to the small size and limited habitats present.
Plants (Inc. ferns and bryophytes)	No	No protected and / or notable plants recorded during the survey.
Fungi	No	No protected and / or notable fungi recorded during the survey

- 5.6.2 There are 943 Species of Principal Importance included on the Section 41 list under the NERC Act. These are the species found in England which are regarded as conservation priorities under the UK Post-2010 Biodiversity Framework.

5.7 Bats

- 5.7.1 Bats and their habitats are protected under the Wildlife and Countryside Act 1981 (as amended by the CRow Act 2000), and by the Conservation of Habitats and Species Regulations 2017. Seven bat species are also listed as Species of Principal Importance under the provisions of the NERC Act 2006.
- 5.7.2 A bat roost may be any structure a bat uses for breeding, resting, shelter or protection. It is important to note that since bats tend to re-use the same roost sites, current legal opinion is that a bat roost is protected whether or not the bats are present at the time.
- 5.7.3 The ivy growing up the main farm house could potentially hide entrance / exit points for bats but this will be determined during the recommended bat surveys and it recommended that the bat surveys are completed so that appropriate advice and/or

mitigation can be provided prior to any removal of all shrubs or ivy.

5.7.4 Works to some of the buildings have the potential to affect roosting bats. It is recommended that nocturnal bat surveys are undertaken on the buildings B5, B6, B7 and B8, see Appendix 2.

5.7.5 The proposals are to redevelop the farm buildings and access track, however there are no currently defined development plans. The demolition or renovation of the buildings has the potential to adversely affect any bats or bat roosts present within them.

5.8 Badger

5.8.1 Badgers are protected under the Badgers Act 1992. This makes it an offence to willfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so; or to intentionally or recklessly interfere with a sett. Sett interference includes disturbing badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it. Removal of significant areas of badger foraging habitat may also contravene the Act, as it could be regarded as cruelty.

5.8.2 No badger setts or evidence of badgers were found on site, therefore, the proposed redevelopment is considered unlikely to affect badgers.

5.9 Amphibians

5.9.1 Great crested newts and their habitats in water and on land are protected under the Wildlife and Countryside Act 1981 (as amended by the CROW Act 2000), and under the Conservation of Habitats and Species Regulations 2017. In addition, great crested newt is listed as a Species of Principal Importance under the provisions of the NERC Act 2006.

5.9.2 The newly created pond to the north of the Site is considered unlikely to support great crested newts and there are no records from the data search or EPSL licences, therefore great crested newts are considered unlikely to be affected by the proposed redevelopment of the farm buildings.

5.10 Reptiles

5.10.1 All British reptiles are protected under the Wildlife and Countryside Act 1981 (as amended by the CROW Act 2000). Grass snake, slow worm, common lizard and adder are protected against intentional killing or injury and against sale. In addition, all British reptiles are listed as Species of Principal Importance under the provisions of the NERC Act 2006.

5.10.2 The data search returned no records of reptiles within 1 km of the site but the habitats on site are considered to offer limited potential to support the commoner reptiles. Thus, the proposed redevelopment of the farm buildings is considered to have a potential to impact reptiles.

5.11 Birds

- 5.11.1 All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition to this, for some rarer species (listed on Schedule 1 of the Act), it is an offence to intentionally or recklessly disturb them while they are nest building or at or near a nest with eggs or young, or to disturb the dependent young of such a bird.
- 5.11.2 The Birds of Conservation Concern initiative ¹⁴ publishes lists of Red and Amber species. Birds on the Red list are of high conservation concern within the UK, while those on the Amber list are of medium conservation concern. In addition, a number of bird species are also included as Species of Principal Importance under the provisions of the NERC Act 2006.
- 5.11.3 The redevelopment of the farm buildings has the potential to disturb nesting birds within or on them e.g. there is potential for barn owls to roost and/or breed within the buildings.
- 5.11.4 Site clearance or construction works, if undertaken during the bird breeding season, could potentially damage active nests and result in an offence under the legislation. Impacts to consider include damaging or removing breeding sites, disturbing birds and their young, removing vegetation or changing habitats. These impacts could result in the nest being disturbed and thus abandoned, causing any eggs and/or young to die.
- 5.11.5 It is recommended that any site clearance works are undertaken outside of the bird breeding season, which is considered to be between March and September inclusive. If this cannot be done, then a nesting bird check should be undertaken by a suitably experienced ecologist prior to the development. Any active nest must remain in situ with a suitable buffer in which no works can be done, until all the young have fledged and ceased to return to the nest

5.12 Invertebrates

- 5.12.1 It is considered that the small size of the site, along with the limited range of plant species present, is unlikely to support any protected and/or notable invertebrates. The proposed development is unlikely to have any adverse impacts upon invertebrates.

5.13 Plants

- 5.13.1 It is considered that the proposed development is unlikely to have any impact upon protected and/or notable plants.

5.14 Invasive Species

- 5.14.1 No invasive species were recorded during the survey.

¹⁴ Eaton, M.A. et al (2015). Birds of Conservation Concern 4: The population status of birds in the UK, Channel Islands and the Isle of Man. British Birds 108, pp708-746.

6 Recommendations

6.1 Introduction

- 6.1.1 The recommendations below for further survey and mitigation are based on the results and assessment set out above, taking into account standard published guidance from a number of sources (as referenced through the report), including the GOV.UK information on Planning and Development ^{15 16}.
- 6.1.2 Individual Local Planning Authorities have their own requirements for ecological information to support the validation and assessment of planning applications. These requirements often vary widely between Authorities and sometimes do not accord with national guidance- including that issued by the statutory nature conservation organisations. As a result we have applied the more consistent national guidance to our survey and mitigation recommendations set out below.

6.2 Further Survey

- 6.2.1 This Phase 1 survey has provided a baseline of ecological information to describe the main characteristics of the proposed development site. To fully assess the potential ecological impacts of the proposed development, further survey has been recommended for habitats and species.
- 6.2.2 The methods entailed in surveying these habitats and species are outlined below.

Habitat Surveys

- 6.2.3 If the redevelopment plans change such that any hedgerow is affected then it is recommended that a hedgerow survey ¹⁷ is undertaken.

Bats

- 6.2.4 To determine possible impacts upon bats it is recommended that nocturnal bat surveys are undertaken at the buildings identified as having low-high bat roost potential.

Badgers

- 6.2.5 If the redevelopment plans change such that areas outside of the farm buildings be included within the development, then an update badger survey should be undertaken in accordance with published guidance ¹⁸, at the site and on accessible areas up to 50m beyond, in order to check for nearby badger setts or other evidence.

Birds

- 6.2.6 It is recommended that barn owl survey is undertaken of the buildings, to determine if

¹⁵ <https://www.gov.uk/topic/planning-development/protected-sites-species>

¹⁶ <https://www.gov.uk/guidance/natural-environment#biodiversity-and-ecosystems>

¹⁷ Bickmore CJ (2007). Hedgerow Survey Handbook: A standard procedure for local surveys in the UK, 2nd edition. Defra, London.

¹⁸ Harris, S, Cresswell, P & Jeffries, D. (1989). Surveying Badgers. An occasional publication of the Mammal Society – No 9. Mammal Society, London.

any of the buildings are being used for roosting and/or nesting.

6.3 Mitigation Measures

- 6.3.1 Mitigation may be required for bats, barn owl and hedgerows., and this will depend upon the results of the recommended surveys and the precise development proposals.

Bats

- 6.3.2 It is recommended that appropriate and sympathetic lighting is used for the farm buildings so that there is no light spill into the sky, along the woodland, hedgerows, or onto the surrounding habitats.

Reptiles

- 6.3.3 It is recommended that any vegetation clearance works required around the farm buildings are undertaken during the active period for reptiles which is May to September this should allow any reptiles that may be present a chance to escape into the surround habitats.
- 6.3.4 It is recommended that vegetation clearance works are undertaken in two stages, firstly to approximately 500 mm above ground level with all material being moved off site followed by the final removal of the remaining vegetation. This will be undertaken under the supervision of a suitably experienced ecologist.

Birds

- 6.3.5 It is recommended that any building demolition is undertaken outside of the bird breeding season, which is considered to be between March and September inclusive. Redevelopment of buildings should also be undertaken outside of the bird breeding season where possible and if this cannot be done then a nesting bird check should be undertaken by a suitably experienced ecologist prior to the development. Any active nest must remain in situ with a suitable buffer in which no works can be done until all the young have fledged and cease to return to the nest.

6.4 Recommendations Summary

- 6.4.1 In summary, it is recommended that the actions set out in Table 8 below are undertaken in order to ensure that ecological impacts are fully assessed and that appropriate mitigation is put in place. These actions will help to ensure that the proposed development will comply with planning policy and environmental legislation.

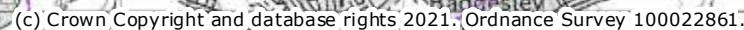
Table 8. Recommendations Checklist

Feature/ receptor	Task	Timing	✓
Hedgerows	Any removal outside the bird breeding season	October - February	
Buildings	Any removal outside the bird breeding season	October - February	
Bats	Nocturnal bat emergence	August to October	
Birds	Barn owl building assessment	August to October	

Appendix 1: Desk Study

Common Name	Scientific Name	Conservation Status	Latest Record
Red kite	<i>Milvus milvus</i>	WCA1	2018
Buck's-horn Plantain	<i>Plantago coronopus</i>	LRPR	2019
Fennel	<i>Foeniculum vulgare</i>	LRPR	2020

Key**WCA1** Listed in Schedule 1 of the Wildlife and Countryside Act 1981 (as amended)**LRPR** Leicestershire and Rutland Priority Species



- Amphibian
- Bat
- Cetacean
- Invertebrate
- Other Mammal
- Plant
- Reptile

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Appendix 2: Habitat Plan



Legend

- Mixed woodland - plantation
- Broadleaved scattered trees
- Improved grassland
- A Cultivated/disturbed land - amenity grassland
- Introduced shrub
- Buildings
- Hard standing
- Hedge with trees - species-poor
- Site boundary
- Target Note
- Tree
 - Ac - *Acer campestre*
 - Pop - *Populus balsamifera*; low bat roost potential

Plan name: Frog Hall Farm Phase 1 Habitat Plan

Project name & number: Frog Hall Farm, 1486

Drawn by: JW

Date: 02/07/2021

Appendix 3: Target Notes

No.	Description
1	Improved grassland
2	Broadleaved scattered trees
3	Species poor hedgerow with trees
4	Plantation mixed woodland containing leyland cypress <i>Cupressus x leylandii</i> , poplar <i>Populus</i> sp., ash <i>Fraxinus excelsior</i> with a shrub layer containing hawthorn <i>Crataegus monogyna</i> and dog-rose <i>Rosa canina</i>
5	Introduced shrubs
6	Pond (newly created off site)



baker*consultants*