

149 High Street, Thurnscoe
Preliminary Ecological Appraisal
13th October 2017



Prepared by:

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Site Name 149 High Street	Location High St, Thurnscoe, Barnsley S63 0RW
Document ref: MEC/PEA/2017/27/01	
Local Authority Barnsley Metropolitan Borough Council	Grid Reference SE 44865 05557
Surveyor Peter Middleton MCIEEM	Date of Survey 11/10/2017
Geology/soil type Coal Measures	Designation of Site None

Phase 1 Habitat Types on Site A3.3 Scattered trees, J1.2 Amenity grass, J1.4 Introduced shrub, J2.1.2 Species poor hedgerow, J3.6 Buildings, J4 Bare ground.
NVC Communities on Site None
Protected/Notable Species, Constraints on Site Potential presence of roosting bats, nesting birds, <i>Cotoneaster simonsii</i>
HPIs and SPIs under NERC Act 2006 None
Barnsley BAP None

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1. Summary

- 1.1.1 The preliminary ecological appraisal of land and buildings at 149 High Street, Thurnscoe was commissioned by the owner of the site and client Mr Graham Howell on 3rd October 2017. The survey was commissioned to inform an outline planning application for a small residential development, indicatively of nine dwellings.
- 1.1.2 No site habitat is considered to be of importance at greater than the site level of importance to nature conservation.
- 1.1.3 Further bat activity surveys are considered necessary before impacts on this species group can be confidently determined. Further survey recommendations are detailed in Section 6 of the report.
- 1.1.4 The following ecological constraints and associated recommendations to avoid/mitigate/compensate for potential impacts have been identified.
- **Invasive flora** (presence of *Cotoneaster simonsii* on site) – Avoid spread through development of a plan to control the species during construction works.
 - **Nesting birds** (Nesting opportunities across site) – Clearance of habitats outside nesting season or checks by an Ecological Clerk of Works (ECoW)
 - **Hedgerow** (along boundaries of site) – Retention of hawthorn hedgerow along site boundaries is advised and protection through tree protection measures in accordance with BS5837:2012 is recommended.
- 1.1.5 In addition to mitigation recommendations outlined above enhancement recommendations provided include:
- In-situ cavity bat boxes and house sparrow boxes integral to the fabric of the buildings.
 - New tree and shrub plantings of locally native standard species of trees and shrubs.
 - Boundaries and fences that will not impede the free movement of hedgehogs throughout the site.
- 1.1.6 Providing the mitigation recommendations detailed in the report, are adopted then no ecological impacts of greater than site level importance are envisaged as a result of the proposed development.

2. Introduction

- 2.1.1 The preliminary ecological appraisal of land and buildings at 149 High Street, Thurnscoe was commissioned by the owner of the site and client Mr Graham Howell on 3rd October 2017. The survey was commissioned to inform an outline planning application for a small residential development, indicatively of nine dwellings.
- 2.1.2 The purpose of this report is to present the results of an extended Phase 1 habitat survey which includes determining the potential for, or presence of, protected and notable species, plus an appended map of the site showing the Phase 1 habitats present. Some sites require subsequent targeted species surveys but in many cases the preliminary ecological appraisal is sufficient to accompany the planning application. Therefore, where possible, recommendations in relation to avoiding, mitigating and compensating for ecological impacts are included in this report together with biodiversity enhancement recommendations.
- 2.1.3 Key legislation relating to designated sites and protected species and habitats is detailed in Appendix 3. The implications of legislation are detailed in the body of the report, where necessary.

3. Site Description

- 3.1.1 The site comprises a former farmstead, including a farm house and associated buildings, together with a relatively large garden. The site is approximately 0.36ha in size, of which buildings and hard surface occupy almost half of the site and include the farm house, an old two storey barn, a single storey stable, a brick built outbuilding, two garages and two timber built former battery hen buildings. Habitats present on site include, species poor hedgerow, amenity grassland (lawn), introduced shrub and scattered trees.
- 3.1.2 Land adjacent to the application site supports the following habitats.
- Residential and associated gardens
 - Hard surface (roads)
- 3.1.3 The surrounding area is predominantly residential (see Figure 1). The site falls within Natural Area 24 Coal Measures which is characterised by dense populations centred on a number of towns and cities that developed largely as a result of the underlying coal fields. The topography of the Natural Area is gently undulating and the network of towns and cities is characterised by a matrix of acidic ancient and secondary woodlands, valley wetlands, neutral and acid grasslands, and mixed agriculture. Canals, mill-ponds and natural rivers are also important features.

Figure 1. The site, as indicated by red circle



4. Methodology

4.1 Data Consultation

4.1.1 Barnsley Biological Records Centre (BBRC) were contacted to request the following information for locations within a 1.5km radius of the site:

- Protected and notable species records
- The boundaries of non-statutory designated sites of nature conservation interest

4.1.2 South Yorkshire Bat Group (SYBG) were contacted to request records within a 2km radius of the site.

4.1.3 A search of the Multi-Agency Geographical Information for the Countryside (MAGIC) website was undertaken to determine the following:

- The boundaries of statutory designated sites of nature conservation interest
- The locations of historic European Protected Species (EPS) licences granted by Natural England

4.2 Field Survey

4.2.1 The site was surveyed on 11th October 2017 using extended Phase 1 habitat survey methodology (JNCC, 2010) by the following personnel:

- Peter Middleton (MCIEEM)

4.2.2 Notable, rare or scarce plant species were highlighted if present. Evidence of protected species or species of nature conservation importance was recorded where

present at the time of survey. Species recorded are included within the report as appropriate. Information is presented on the Phase 1 plan, using Target Notes (TN) to identify particular features of interest, where appropriate. Additionally, and where possible, habitats were classified using the National Vegetation Classification (NVC), as described in the JNCC National Vegetation Classification – Users Handbook (Rodwell, 2006).

- 4.2.3 Aerial photographs (Google Earth) were studied to place the site in its wider context and to look for ecological features that would not be evident on the ground during the walkover survey. This is particularly useful for identifying wildlife corridors and ponds but because the latter are often not apparent on aerial photographs, OS 1:25 000 scale maps are also used.
- 4.2.4 Habitats of Principal Importance (HPs) and Species of Principal Importance (SPs) are included on Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 were noted together with priority species and habitats as included on the Local Biodiversity Action Plan (LBAP).
- 4.2.5 The value and sensitivity of ecological features present on site were determined based on the guidance given in 'Guidelines on Ecological Impact Assessment' (CIEEM, 2016). Individual ecological receptors (habitats and species that could be affected by the development) for the scheme were assigned levels of importance for nature conservation. The highest level is international, then decreasing in order of importance through national, regional, county, local and lastly site.
- 4.2.6 A preliminary bat roost assessment of the buildings on site in compliance with relevant Bat Survey Guidelines (Collins 2016) was undertaken by Peter Middleton (Class license WML-A34-Level 4, 2017-27977-CLS-CLS).

4.3 Survey Limitations

- 4.3.1 No limitations to an effective survey were identified. Whilst the survey was undertaken outside the appropriate period for detailed botanical survey the habitats present are species poor and could be confidently characterised during the survey.

5. Results

5.1 Data Consultation

- 5.1.1 There are no designated sites present within 1.5km of the application site.
- 5.1.2 No impacts are anticipated upon designated sites in excess of 1.5km because of the distance from the application site.
- 5.1.3 Records of protected and notable species obtained are discussed in the species sections of the results.
- 5.1.4 No EPS mitigation licences have been obtained for locations within 2km of the application site.

5.2 Field Survey

- 5.2.1 The arrangement of site habitats is shown on the Phase 1 plan in Appendix 1, whilst a filtered species list to show amphibians, reptiles and terrestrial mammals is provided

in Appendix 4.

- 5.2.2 All site habitats are considered to be of site level importance to nature conservation. Until bat activity surveys are undertaken it is not possible to assign a level of importance of the site to this species group. The site is not however considered to be of greater than site level importance to any other faunal species group.
- 5.2.3 A detailed description of the site habitats and the site's potential to support protected and notable species is provided below.

Habitats

A3.3 Scattered mixed trees

- 5.2.4 There are four trees on site including a plum tree *Prunus*, one large Leyland cypress *Cupressocyparis leylandii* and two elder *Sambucus nigra*.

Plate 1. View north from beneath plum tree



J1.4 Introduced shrub

- 5.2.5 Several shrubs are present on site and include holly *Hedera helix*, butterfly bush *Buddleia davidii* and *Cotoneaster simonsii*.

J1.2 Amenity grassland

- 5.2.6 This habitat comprises approximately 50% of the site and includes a large domestic lawn and a small area in front of a garage door on the west elevation of the outbuildings. The grassland is dominated by perennial ryegrass *Lolium perenne* together with frequent white clover *Trifolium repens* and occasional creeping buttercup *Ranunculus repens*.

J2.1.2 Species poor hedgerow

- 5.2.7 The boundary of the garden has in most part a short cropped hawthorn *Crataegus monogyna* hedge approximately 1.2m in height. The only other species present within the hedge is a lone sycamore *Acer pseudoplatanus*. Additionally, there are hawthorns along the length of east boundary stone wall and a *leylandii* hedge (see Figure 2).

Figure 2. Aerial image of hawthorn hedge

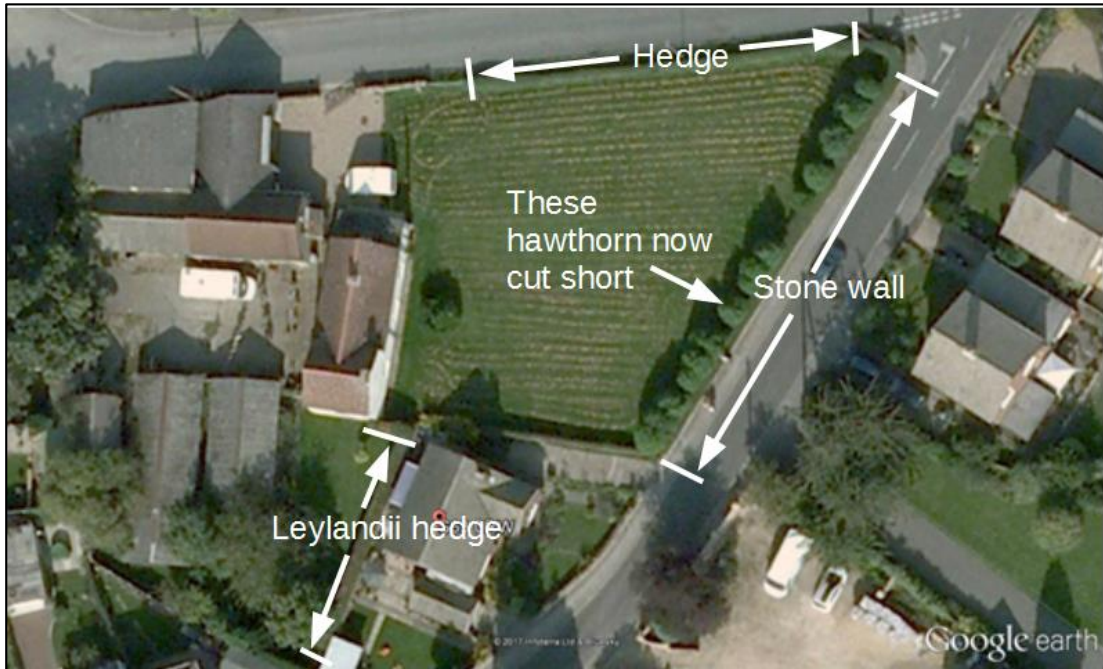


Plate 2. Amenity grass on east side of farm house



J3.6 Buildings

- 5.2.8 There is a an old cement rendered stone built farm house together with a complex of both two and single storey outbuildings built of stone, brick and timber. The buildings are discussed in more detail in relation to their potential to support bats within the Species section of the report.

J4 Bare ground

- 5.2.9 Bare ground is present and includes the access and driveway and the central yard area.

Species

Amphibians

- 5.2.10 No Great Crested Newt (GCN) *Triturus cristatus* records were provided by BBRC for a location within a 1.5 radius of the site.
- 5.2.11 The only water body within 500m of the application site is a seasonal flooded arable field 320m west of the site which is separated by roads and residential. The site poor terrestrial habitat for GCN and the site is bordered by roads. Consequently GCN are not considered likely to be a receptor to the proposed scheme.

Badger

- 5.2.12 No badger records were provided by BBRC for a location within a 1.5km radius of the application site.
- 5.2.13 The application site and its environs were searched for any signs of badgers but none were found. No setts are currently present on site, however, the site may be used as part of wider badger foraging areas.

Bats

Data search

- 5.2.14 South Yorkshire bat Group (SYBG) supplied 33 records of at least three species, including common pipistrelle *Pipistrellus pipistrellus*, unknown pipistrelle, noctule *Nyctalus noctula* and whiskered bat *Myotis mystacinus*. The nearest roost (1992) is 70m northeast of the site (species and number unknown). A common pipistrelle maternity roost also from 1992 is 350m north of the application site.
- 5.2.15 Barnsley Biological Data Centre (BBDC) provided 16 records of three species including pipistrelle spp., noctule and whiskered bat. The nearest roost is 200m northeast of the site for a single pipistrelle spp. in 1999.

Description

- 5.2.16 One dwelling, one two storey barn, one stable block, two chicken sheds and two garages are present on site. No definite signs of bat presence were recorded from any of these buildings.
- 5.2.17 The detached two storey dwelling (farm house) is stone built and cement rendered on all sides. The building has a pitched concrete tile roof with ridge, gables and valleys (see Plate 1 & 2). The building has no roof-space as it has been converted to living space and consequently there is now a vaulted ceiling throughout. There is a Velux window in the west facing roof and a window to the roof-space area on the north facing gable (see Plate 5).

Plate 3. Single storey stable (left), two storey barn (right)



- 5.2.18 There are a complex of outbuildings on site including an old two storey stone barn with a pitched concrete tile roof (see Plate 3), a brick built northern wing (garage) (see Plate 6), a brick built garage with a mono pitched corrugated asbestos cement roof (see Plate 7) and a two compartment single storey stable with a pitched asbestos cement roof (see Plate 3). All are adjoining each other (see Phase 1 map in Appendix 1).
- 5.2.19 In addition, there is a small two storey brick built detached outbuilding with a Welsh slate roof with ridge and gables and two former chicken sheds built of wood with a pitched asbestos cement roofs (see Plate 4).
- 5.2.20 No trees on site display features with potential to accommodate bats.

External inspection of buildings

- 5.2.21 The farm house is cement rendered and therefore lacks wall features with potential to accommodate bats. One or two slightly lifted tiles may allow access to the void between tile and membrane within the roof.
- 5.2.22 The two storey detached brick built outbuilding has nine inch wide solid walls which are in danger of collapsing. The roof is also in a bad state of repair but in spite of this the building lacks significant potential to accommodate bats on its exterior.
- 5.2.23 The chicken sheds (see Plate 4) are built of timber and are only single skin therefore there are no cavities or crevices suitable for use by crevice dwelling bats.
- 5.2.24 The complex of buildings that includes the two storey stone barn, stables and garages display little potential to support roosting bats, with the exception of the stone barn (see Plate 3). All external walls of the stone barn have holes in mortar joints of the masonry of various sizes on all elevations. Additionally, the bottom two rows of tiles on the roof are flat Danum tiles whilst the upper tiles are Double Roman type. Consequently, there are several holes where the mortar pointing has fallen out allowing access to the void between tiles and Type 1f felt (see Plate 3).

Plate 4. Former chicken sheds

two storey brick outbuilding



Plate 5. West elevation of farm house with barn on left and chicken sheds on right



Plate 6. East elevation of outbuilding complex

north wing



Farm house

Plate 7. North elevation of outbuildings showing garage

North wing

Stable



Plate 8. Example of roost potential in external walls of stone barn



Internal inspection of buildings

5.2.25 The farm house has no roof-space. All the other buildings are open to the underside of the roof with the exception of the stables which has a ceiling. The roof-space of the stable building has no insulation and the space was found to be extremely 'cobwebby', which is a good indication that it is not being used by brown long-eared bats *Plecotus auritus*. The upper floor of the brick built outbuilding could not be accessed for reasons of health and safety but it was possible to see through the gable hatch and there is no membrane beneath the slates.

5.2.26 The upper floor of the stone barn is open to the underside of the bitumen hessian 1f felt. The ridge was not found to be 'cobweby' but nevertheless no signs of bats were found, perhaps with the exception of a single peacock butterfly wing. Several bat sized droppings were white at the ends which is not consistent with bat droppings. One swallow nest was located against the ridge.

Plate 9. Inside of roof-space of stone barn



Assessments

5.2.27 No bats were found roosting in buildings during the preliminary daytime assessment and there were no definite signs of bat presence. However, one of the buildings displayed features likely to accommodate bats (Stone barn, Appendix 1) including holes and crevices in masonry, potential access to void between roof tiles and membrane and easy access to internal roof space, potentially for brown long-eared bats. This building displayed a relatively high number and diversity of roost features and therefore was considered to offer moderate/high bat roost potential. The farm house displayed low roost potential whilst all other buildings were considered to offer no more than negligible bat roost potential.

Birds

5.2.28 No SPI bird species or Red Listed Species of Conservation Concern (Eaton *et al.*, 2015) were recorded on site. However, house sparrow *Passer domesticus* is known to be present in the wider area.

5.2.29 No bird species were recorded on site during the walkover survey, however, the site does have the potential to support a limited number of common resident species. Old swallow *Hirundo rustica* were noted in one of the outbuildings.

5.2.30 Hedgerows and derelict buildings on site have potential to be used by a range of species for nesting.

Reptiles

5.2.31 No reptile records were provided by BBRC for locations within 1.5km of the application site.

5.2.32 There is no suitable habitat for reptiles on site and no connectivity with suitable habitat elsewhere.

Invasive species

5.2.33 There are two *Cotoneaster simonsii* shrubs one of which is beside the highway adjacent to the garage buildings on the north boundary to the site. This species is included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

6. Assessment

6.1 Proposals

- 6.1.1 The proposal development comprises the construction of a small residential development, consisting indicatively of nine dwellings.
- 6.1.2 The assessment of impacts is based upon the site plan entitled 159 High St, Thurnscoe by Tom Faulkner dated 9th May 2017.

6.2 Assessment of Impacts

- 6.2.1 The potential impacts of the development are considered to comprise:
- Potential loss of existing hedgerows
 - Temporary increase in vehicle movements during the period of construction into and out of the site.
 - An increase in potential predation of birds and mammals as a result of new pets.
 - Until further survey work is undertaken a full assessment of the impacts on bats cannot be assessed
 - Temporary increase in noise, dust and vibration caused by construction work.
 - Destruction of active bird nests during site clearance. It is an offence to damage or destroy active bird nests (see Appendix 3).
 - Spread of cotoneaster as a result of development activities. It is an offence to plant or otherwise cause this plant species to grow in the wild (see Appendix 3)
- 6.2.2 The impact of the proposed development on roosting bats cannot currently be assessed, of the other impacts detailed above, none would result in impacts to nature conservation at more than site level.
- 6.2.3 Methods to avoid or mitigate for the impacts detailed in Section 6.2.1 are discussed in Section 6.3.

6.3 Further Survey and Mitigation

- 6.3.1 In order to avoid or mitigate ecological impacts of the scheme it is advised that the following recommendations are adopted:
- Development of a plan to eradicate *Cotoneaster simonsii* from site prior to development in order to prevent seed spread. This can be undertaken through removal of plants prior to works commencing at an appropriate time of year. MEC can advise on appropriate control measures.
 - Site clearance including building demolition, should take place at a time when it will not affect nesting birds (outside March to September). If works are to be undertaken during this time then they should be preceded by a nesting bird check, to be undertaken by an Ecological Clerk of Works.
 - All boundary hedgerows should remain intact where possible. Taking a best practice approach to nature conservation issues, where boundary hedgerows and trees are to be retained, British Standard 5837 (2012): Trees in relation to design, demolition and construction, should be followed. Root Protection Zones (RPZ's) should be calculated and implemented to prevent harm to trees. This should also apply to any trees outwith the site, up to 5 m from the boundary.

6.3.2 One of the buildings has been assessed as having moderate/high bat roost potential. In accordance with the good practice guidelines (Collins, 2016). Three nocturnal surveys using two surveyors at least two weeks apart should be undertaken with one comprising a dawn return survey. Nocturnal surveys should be undertaken during the bat activity survey period (peak period: Mid-May – August).

6.4 Recommended Enhancements

6.4.1 In accordance with the aims of planning policy NPPF: 11, it is suggested that the developer follows the recommendations detailed below. Please note that the enhancements have been informed by the results and findings of the field survey.

- Two of the properties should have in-situ cavity boxes or bat tubes integral to the fabric of the buildings situated high on the south and west facing gables but not over windows or doors. The remainder should have house sparrow boxes under eaves either integral to the fabric of the building or fastened to the wall surface.
- New tree and shrub plantings should be an integral component of the soft landscaping proposals for the site. Plantings within the site should be generous and be locally native standard species of trees and shrubs.
- Dwelling boundaries and fences should not impede the free movement of hedgehogs throughout the site.

6.5 Conclusion

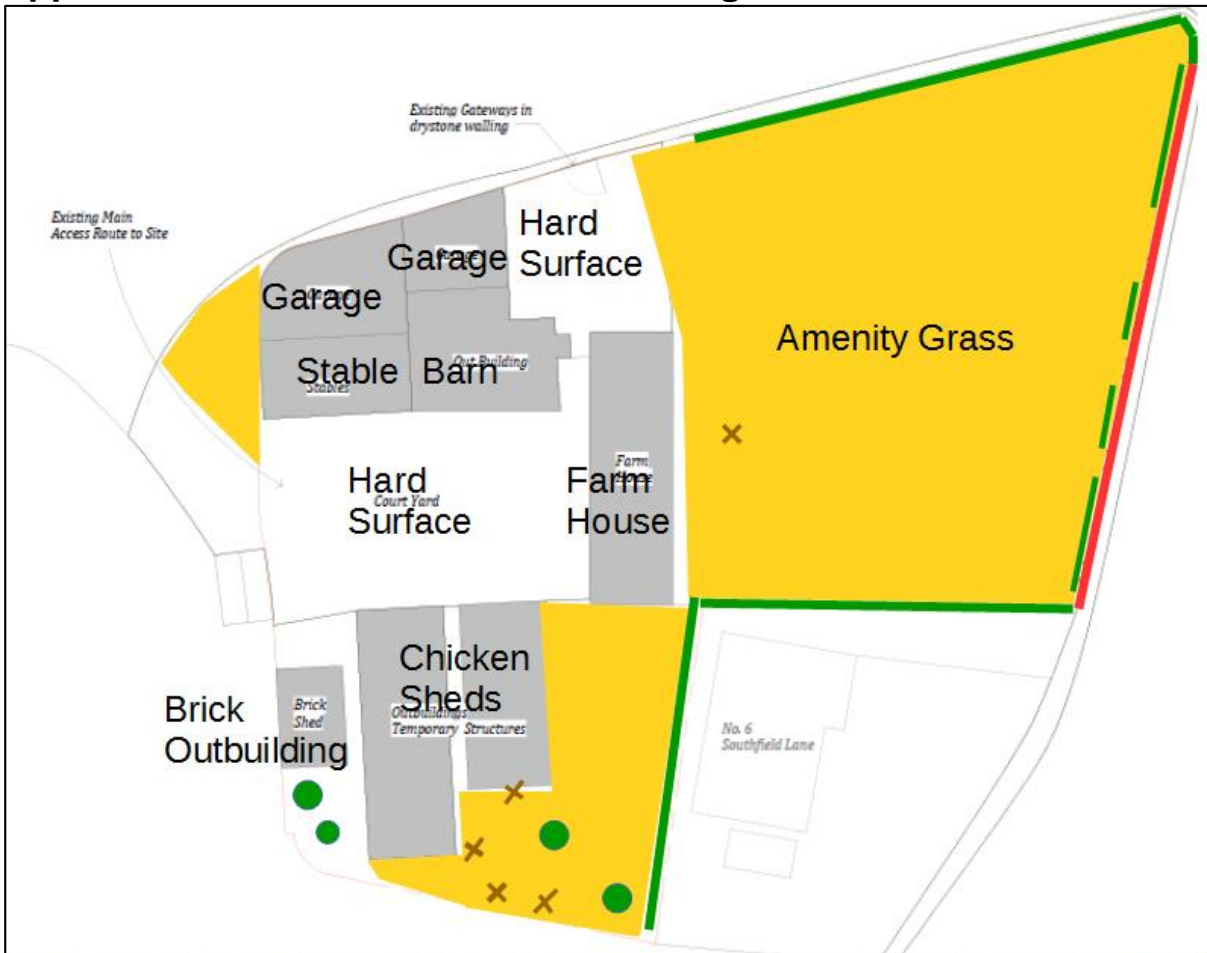
6.5.1 Provided the mitigation options detailed in section 6.3 are adopted then no significant impacts on nature conservation are envisaged with the information gathered so far.

6.5.2 The information is not currently available to determine the impact of the scheme on bats therefore activity surveys are required to establish the true status of bats at the site.

7. References

- Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines. The Bat Conservation Trust.
- Connolly, S and Charles, P. (2005) Environmental Good Practice Pocket Book. CIRIA, London.
- Eaton MA, Aebischer NJ, Brown AF, Hearn RD, Lock L, Musgrove AJ, Noble DG, Stroud DA and Gregory RD (2015) *Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and Isle of Man*. British Birds 108, 708–746.
- Environment Agency (2007) Pollution Prevention Guidelines – Works and maintenance in or near water: PPG5. Now retracted, but available from: <https://www.gov.uk/government/collections/pollution-prevention-guidance-ppg>
- Froglife (1999). Froglife Advice Sheet 10: reptile survey. Froglife, London.
- Gent T and Gibson S (2003). Herpetofauna Workers Manual. JNCC, Peterborough.
- Gunnel K, et al 2013, Designing for Biodiversity: A technical guide for new and existing buildings, RIBA Publishing.
- Harris S, Cresswell P and Jefferies D (1989). Surveying Badgers. Mammal Society.
- Institute of Environmental Management (2006) Guidelines for Ecological Impact Assessment in the United Kingdom.
- Institute of Environmental Management (2013) Guidelines for Preliminary Ecological appraisal.
- Joint Nature Conservation Committee (2010). Handbook for Phase 1 Habitat Survey - a Technique for Environmental Audit. Reprinted by JNCC, Peterborough.
- Gunnel K, et al 2013, Designing for Biodiversity: A technical guide for new and existing buildings, RIBA Publishing.
- Mitchel- Jones AJ, 2004, Bat Mitigation Guidelines, English Nature.
- Rodwell, J.S, (2006), NVC Users' Handbook. JNCC

Appendix 1. Phase 1 Plan and Aerial Image



Appendix 2. Plant Species Recorded on Site

Full Species List		
English Name	Scientific Name	DAFOR Rating
Perennial ryegrass	<i>Lolium perenne</i>	D
White clover	<i>Trifolium repens</i>	F
Creeping buttercup	<i>Ranunculus repens</i>	F
Red fescue	<i>Festuca rubra</i>	R
Spear thistle	<i>Cirsium vulgare</i>	R
Broad leaved willowherb	<i>Epilobium montanum</i>	R
Daisy	<i>Bellis perennis</i>	F
Dandelion	<i>Taraxicum officinale</i>	O
Broad leaved dock	<i>Rumex obtusifolius</i>	R
Nettle	<i>Urtica dioica</i>	R
Elder	<i>Sambucus nigra</i>	R (2)
Ragwort	<i>Senecio jacobea</i>	R
Cock's foot	<i>Dactylis glomerata</i>	R
Ivy	<i>Hedera helix</i>	Loc A
Cotoneaster	<i>Cotoneaster simonsii</i>	R (2)
Wall barley	<i>Hordeum murinum</i>	R
Great plantain	<i>Plantago major</i>	Loc F
Pinappleweed	<i>Matricaria discoidea</i>	O
Common chickweed	<i>Stellaria</i>	O
Ribwort plantain	<i>Plantago lanceolata</i>	O
Smooth sow-thistle	<i>Sonchus oleraceus</i>	R
Groundsel	<i>Senecio vulgaris</i>	O
Precumbent pearlwort	<i>Sagina procumbens</i>	R
American willowherb	<i>Epilobium ciliatum</i>	O
Butterfly bush	<i>Buddleja davidii</i>	R
Leyland cypruss	<i>Cupressocyparis leylandii</i>	Loc D
Plum spp	<i>Prunus spp</i>	R
Wild strawberry	<i>Fragaria vesca</i>	O
Annual meadow-grass	<i>Poa annua</i>	R
Opium poppy	<i>Papaver somniferum</i>	R
Holly	<i>Ilex angustifolius</i>	R
Dovesfoot cranesbill	<i>Geranium molle</i>	R
Hairy bittercress	<i>Cardamine hirsuta</i>	R

Appendix 3. Relevant Legislation

Wildlife legislation relating to statutory designated sites and species is summarised in Table A1 and A2 below. This legal information is intended for summary only, and the original legal documents should be consulted if a detailed understanding is required.

Table A1. Legislation relating to designated sites and habitats

Designated Site	Legal Status
Hedgerows	Hedgerows that meet certain criteria are protected by The Hedgerows Regulations 1997, under which it is an offence to remove or destroy such hedgerows without permission from the Local Planning Authority.

Table A2. Legislation relating to species

Species	Legal Status
European protection	
European Protected Species (EPS) (including bats, Great Crested Newt (GCN), otter and hazel dormouse)	<p>These animal species and their breeding sites or resting places are protected under Regulation 41 of the Conservation of Habitats and Species (Amendment) Regulations 2012, which makes it illegal to:</p> <ul style="list-style-type: none"> • Intentionally or deliberately capture, injure or kill any such animal or to deliberately take or destroy their eggs; • Deliberately disturb such an animal; • Damage or destroy a breeding site or resting place of such an animal. <p>European Protected Species (EPS) licences can be granted by Natural England in respect of development to permit activities that would otherwise be unlawful under the Conservation Regulations, providing that the following 3 tests (set out in the EC Habitats Directive) are passed:</p> <ul style="list-style-type: none"> • The development is for reasons of overriding public interest; • There is no satisfactory alternative; and • The favourable conservation status of the species concerned will be maintained and/or enhanced. <p>Under Regulation 9(5) of the Conservation Regulations, Planning Authorities have a legal duty to 'have regard to the requirements of the EC Habitats Directive in the exercise of their functions'. This means that they must consider the above 3 tests when determining whether Planning Permission should be granted for developments likely to cause an offence under the Conservation Regulations. As a consequence, Planning Applications for such developments must demonstrate that the 3 tests will be passed.</p> <p>Natural England also allow sites to be registered on the Bat Low Impact Class Licence to permit activities that would otherwise be unlawful under the Conservation Regulations where the 3 tests can be passed and the bat roosts to be impacted are of low conservation status.</p>
National protection	

Species	Legal Status
European Protected Species and other species including: water vole and white clawed crayfish	These animals receive full protection under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000), which makes it illegal (subject to exceptions) to: <ul style="list-style-type: none"> • Intentionally kill, injure or take any such animal; • Intentionally or recklessly damage, destroy or obstruct any place used for shelter or protection by any such animal; and • Intentionally or recklessly disturb such animals while they occupy a place used for shelter or protection.
Common amphibians and reptile species	These animals receive limited protection under The Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000), which makes it illegal to intentionally kill or injure any such animal.
Badger	The Protection of Badgers Act 1992 makes it illegal to wilfully kill or injure a Badger, or attempt to do so and also make it illegal to intentionally or recklessly interfere with a Badger sett. This includes damaging or destroying a sett, obstructing access to a sett and disturbing a Badger while it is occupying a sett. Licences can be granted by Natural England to permit sett closure and/or disturbance between July and November inclusive.
Schedule 1 birds	Special penalties relate to offences concerning birds listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). In addition to the offences detailed above relating to all wild birds, it is illegal to intentionally or recklessly disturb any Schedule 1 bird or their dependent young while nesting.
All bird species	All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000), which makes it illegal (subject to exceptions) to: <ul style="list-style-type: none"> • Intentionally kill, injure or take any wild bird; • Take, damage or destroy the nest (whilst being built or in use) or eggs of any wild bird.
Invasive species	The Wildlife and Countryside Act 1981 (as amended) contains measures for preventing the establishment of non-native species which may be detrimental to native wildlife, prohibiting the release of animals and planting of plants listed in Schedule 9 of the Act. In relation to Schedule 9 plants it is an offence to plant or otherwise cause these plant species to grow in the wild.

Species and Habitats of Principal Importance

Planning authorities have a duty under Section 40 of the NERC Act 2006 to have regard to priority species and habitats in exercising their functions including development control and planning. In compliance with Section 41 of the NERC Act, the Secretary of State has published a list of species and habitats considered to be of principal importance for conserving biodiversity in England under the UK Post-2010 Biodiversity Framework. This is known as the list of Habitats and Species of Principal Importance (HPI/SPI). The HPI/SPI list is used to guide planning authorities in implementing their duty under the NERC Act.

National Planning Policy Framework

The National Planning Policy Framework for England was introduced in March 2012. The NPPF's policy on biodiversity has been summarised by the Government as: "The Framework underlines that the planning system should seek not just to protect, but, where possible to enhance biodiversity – making sure we don't just have isolated pockets of wildlife, but rich and connected green spaces for all kinds of species to thrive. Planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats,

including ancient woodland.”

Local Biodiversity Action Plans

The HPI/SPI list included on Section 41 of the NERC Act 2006 is supported by a series of Local Biodiversity Action Plans (LBAPs), usually set up on a local authority local authority administrative boundary basis. Each LBAP identifies those habitats and species considered to be most important in that area (usually referred to as priority habitats and species). Commonly, an LBAP will identify a number of habitats and species for which “action plans” have been prepared.

Appendix 4. Data Search (BBRC)

<i>Location Name</i>	<i>Date</i>	<i>Common Name</i>	<i>Comments</i>	<i>Distance (Km)</i>	<i>Bearing (Degrees)</i>
Butcher Street	08/07/1999	Pipistrelle	roost exit count 1	0.21	47
Clayton Drive Thurnscoe	28/07/1992	Pipistrelle	roost exit count 57	0.35	352
Clayton Drive Thurnscoe	20/06/1992	Pipistrelle	roost exit count 102 by householder	0.35	352
Clayton Drive Thurnscoe	13/06/1992	Pipistrelle	roost exit count 60 by householder	0.35	352
Clayton drive Thurnscoe	25/06/1992	Pipistrelle	roost	0.45	354
Clayton drive Thurnscoe	02/07/1992	Pipistrelle	roost exit count 1	0.45	354
Sports ground off Clayton Lane (Thurnscoe United FC)	22/07/2017	European Mole	Few molehills on edge of sports pitches.	0.64	356
Shephard Lane	01/08/2012	Hedgehog	visiting garden - resident told DW	0.85	94
Great Houghton	02/07/1996	Pipistrelle	1	0.91	292
Bridleway to Thurnscoe	31/05/2017	European Rabbit	Live sighting. Juvenile.	0.93	158
Thurnscoe Grove	04/07/1993	Bats	exit count	0.97	118
Thurnscoe Grove	01/08/1993	Pipistrelle	roost exit count 125 by householder	0.97	118
Thurnscoe Grove	07/08/1993	Pipistrelle	roost exit count 63 by householder	0.97	118
Thurnscoe Grove	06/07/1993	Pipistrelle	roost exit count 120	0.97	118
Thurnscoe Grove	17/07/1993	Pipistrelle	roost exit count 187 by householder	0.97	118
Thurnscoe Dyke	31/03/2012	Noctule		1.02	150
Knabs Hill	22/07/2017	West European Hedgehog	Remains of dead animal on edge of Clayton Lane.	1.15	353
Back Lane Billingley	24/04/1990	Pipistrelle	2	1.21	231
	24/10/2014	Hedgehog	Dead on road - Barnsley Road	1.36	178
Poplar Farm	02/06/2004	45 Khz Pipistrelle	1 feeding	1.43	233

Location Name	Date	Common Name	Comments	Distance (Km)	Bearing (Degrees)
Wombwell By-pass	21/09/2012	Common Toad		7.37	221
Dearne Enterprise Centre	09/08/1992	Whiskered Bat	1 in building	7.37	221
Edderthorpe, Barnsley MDC	09/09/1983	Brown Rat	dor	7.37	221
Edderthorpe, Barnsley MDC	09/09/1983	Brown Rat	dor	7.37	221
Edderthorpe	01/05/2014	Brown Hare	Edderthorpe flooded so walking round we followed 2 adult hares to water edge. It ran back past us about %0A	7.37	221

Data Search SYBG

Date	GridRef 6Fig	Address line 1	Type	Species	No	Distance from site (Km)	Bearing from site (Degrees)
04/08/1997	SE449056	Lorne Road	House	Pipistrelle sp.	+Dr	0.07	50
04/05/2016	SE 448057			PIP	1	0.15	341
04/07/2016	SE 448057			Whiskered	1	0.15	341
19/06/2012	SE449057		Sunset Survey	Vespertilionidae	8	0.15	20
19/06/2012	SE449057			species unknown	8	0.15	20
22/07/2012	SE450057	Thurnscoe, S63		Common pipistrelle		0.21	47
08/07/1999	SE450057	Butcher Street		Pipistrelle sp.	1	0.21	47
13/06/1992	SE448059	Clayton Drive	House	Pipistrelle sp.	102	0.35	352
13/06/1992	SE448059	Clayton Drive		Pipistrelle sp.	60	0.35	352
20/06/1992	SE448059	Clayton Drive		Pipistrelle sp.	102	0.35	352
28/07/1992	SE448059	Clayton Drive		Pipistrelle sp.	57	0.35	352
25/06/1992	SE448060	Clayton Drive	House	Pipistrelle sp.	24	0.45	354
25/06/1992	SE448060	Clayton Drive		Pipistrelle sp.	Unkno wn	0.45	354

Date	GridRef 6Fig	Address line 1	Type	Species	No	Distance from site (Km)	Bearing from site (Degrees)
26/06/1992	SE448060	Clayton Drive		Pipistrelle sp.	Unkno wn	0.45	354
02/07/1992	SE448060	Clayton Drive		Pipistrelle sp.	1	0.45	354
13/02/2006	SE453062	Burn Side		Pipistrelle sp.	1	0.79	35
02/07/1996	SE440059	Disused Railway		Pipistrelle sp.	1	0.91	292
04/07/1993	SE457051	Turnesc Grove	House	Pipistrelle sp.	187	0.97	118
04/07/1993	SE457051	Turnesc Grove		Vespertilionidae	138	0.97	118
06/07/1993	SE457051	Turnesc Grove		Pipistrelle sp.	120	0.97	118
17/07/1993	SE457051	Turnesc Grove		Pipistrelle sp.	187	0.97	118
01/08/1993	SE457051	Turnesc Grove		Pipistrelle sp.	125	0.97	118
07/08/1993	SE457051	Turnesc Grove		Pipistrelle sp.	63	0.97	118
31/03/2012	SE453046	Thurnscoe Dyke		Noctule	1	1.06	155
24/04/1990	SE439048	Back Lane		Pipistrelle sp.	2	1.21	231
02/06/2004	SE437047	Chapel Lane		Common pipistrelle	1	1.43	233
01/07/2011	SE4507			Common pipistrelle	1	1.45	6
18/04/2005	SE463045	Lockwood Road		Common pipistrelle	1	1.80	126
14.04.16	SE462043	Doncaster Road		Common pipistrelle		1.85	133
08.06.16	SE462043	Doncaster Road		Noctule		1.85	133
11/07/1993	SE4306	Pleasant Avenue		Pipistrelle sp.	1	1.90	283
02/08/2005	SE460040	Goldthorpe		Vespertilionidae	Unkno wn	1.94	144
18/09/1989	SE431064	Rotherham Road		Pipistrelle sp.	1	1.94	296