




# **PRELIMINARY ROOST ASSESSMENT AND GREAT CRESTED NEWT IMPACT ASSESSMENT**

**Wild Acre, Mainsforth, Ferryhill, DL17 9AA**



**December 2020**

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<b>Document title</b> Preliminary Roost Assessment and Great Crested Newt Impact Assessment – Wild Acre, Mainsforth, Ferryhill, DL17 9AA	
<b>Date and version</b>  Version 1 03/01/2021 FINAL	<b>Producer</b> Rachel Hepburn  

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*Ecology surveys are carried out in good faith, to the relevant professional guidelines. Where variation from these guidelines is necessary, this is outlined in the report. Any comments regarding condition of buildings or trees are in relation to the use of the building/tree by bats and birds, and should not be considered as a building survey or arboricultural opinion on the condition of those features.*

*The client should be aware that the mitigation recommendations in ecology reports are often translated directly into planning conditions, and as such these should be studied closely and agreed with any contractors in advance of site works commencing.*

*It is the clients responsibility to commission, in writing, any additional survey effort/licence requirements detailed within this report with RH Ecological Services.*

*Mitigation recommendations should be clearly marked on the Architect's Plans or included in any Method Statements submitted with any planning or other consent.*

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## Preliminary Roost Assessment and Great Crested Newt Impact Assessment Wild Acre, Mainsforth, Ferryhill, DL17 9AA

### Summary

A Preliminary Roost Assessment for bats and birds at Wild Acre, Mainsforth (NZ 31472 31452) was produced to support a planning application for extension works to the property. No planning application reference is currently available.

The building is in a good state of repair, with no gaps or crevices noted that could potentially be used by roosting bats. No signs of bats were noted on the building or within the two loft voids.

The site and wider area has moderate potential for supporting bats, however the building itself is deemed to have **negligible potential for roosting bats** due to lack of potential roosting features and no signs of bats seen.

A tree (NZ 31414 31504) within the garden of the property has Potential Roost Features (PRFs) for bats present. No work is proposed for this tree and negligible impact is expected as long as additional site lighting is sensitively designed and the tree kept in darkness. Any external lighting should be low level, directional and follow the ILP/BCT 2018 guidance<sup>1</sup>.

Records from Durham Bat Group have been requested and will be discussed once received.

There is potential for birds to nest on the property.

Integrated features suitable for bats (such as bat access tiles) are recommended to be incorporated into the proposed extension.

Due to previous site ecological reports for great crested newts (GCN) in the locality, the nearest record being ~170 metres south of the plot of land within which Wild Acre lies, this species has been included in this report for completeness. No impact is expected as the development lies within an area of hardstanding.

No further survey effort is recommended. Precautionary Working Methods are provided within this report (**appendix 1**).

This report is valid for 2 years. An updated assessment will be required should work not commence by December 2022.

<sup>1</sup> ILP (2018). Advice note 08/18 - Bats and artificial lighting in the UK - Bats and the Built Environment series. BCT



## 1. Introduction and proposed works

The proposal is for extension works to the property. No plans are available but the proposal is for the demolition of the single-storey section and the garage, with this area rebuilt to two-storey height. Pillars are proposed on the front (northern) elevation of the property. No work is proposed to the main section of the house.

No plans or planning application reference is currently available.

The site location / aerial imagery is shown in **figure 1**.

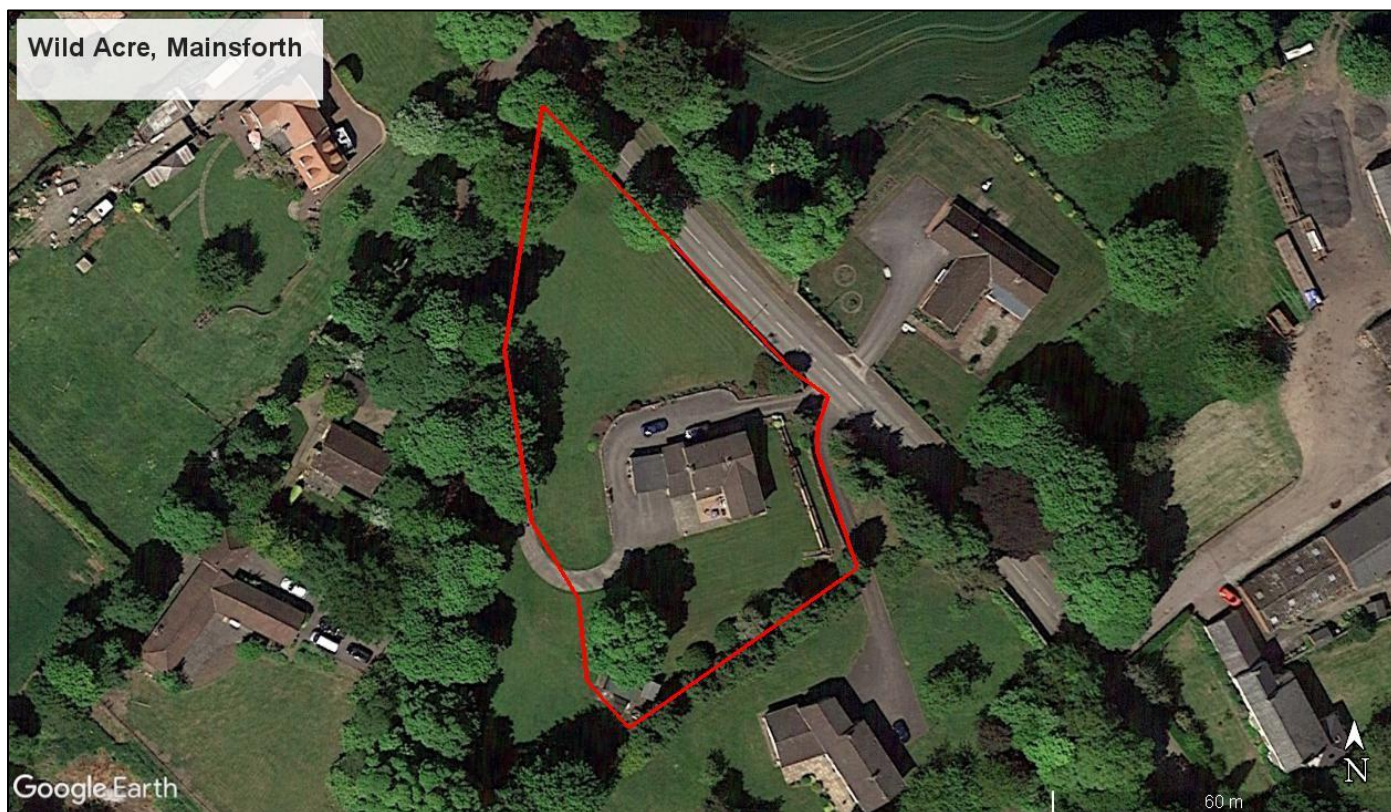


Figure 1. Site location - aerial view<sup>2</sup>.

## 2. Relevant legislation

The applicable legislation and policies with regard to bats and birds are:

- Conservation of Habitats and Species Regulations (2017)
- Countryside and Rights of Way Act (2000)
- Directive 79/409/EEC on the Conservation of Wild Birds – ‘The Birds Directive’
- Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora – ‘The Habitats Directive’
- National Planning Policy Framework (NPPF)
- Natura 2000
- Natural Environment and Rural Communities Act (2006)
- Wildlife and Countryside Act (1981)

Further details can be found in **appendix 2**.

<sup>2</sup> Reproduced with permission from Google Earth (2020).

### 3. Methodology

#### 3.1 Desktop survey

The area was surveyed using Ordnance Survey Explorer maps (1:25,000 scale) and Google Earth Pro with habitat features of value to bats such as watercourses, woodland and hedgerows noted.

Bat data records have been requested from Durham Bat Group.

Natural England's 'Magic on the Map' website was accessed for details of the citations for the designated sites and EPS licensing. The JNCC website<sup>3</sup> and Natural England websites provided further information on site designations.

#### 3.2 Daylight assessment

The daylight assessment 'Preliminary Roost Assessment' was carried out 29<sup>th</sup> December 2020. This was conducted according to the Chartered Institute of Ecology and Environmental Management's Guidelines for Preliminary Ecological Appraisal (CIEEM, 2012) and the Bat Conservation Trust's Bat Surveys Good Practice Guidelines (2016) on Preliminary Roost Assessment.

The weather was 2°C and sunny, with recent snow.

The surveyor assessed the building for signs of bats and birds. The building was thoroughly checked both internally and externally for any signs of bats; including live or dead bats, droppings, feeding remains, clawing or scuff/grease/urine marks at roost entrances, and potential roost features such as cavities or gaps in roofing tiles, soffits, loose mortar *etc.* The surveyor used a headtorch, powerful compact torch, Opticron 42x8 binoculars and inspection camera (endoscope).

#### 3.3 Great crested newt impact assessment

Natural England's 'Rapid Assessment Tool' was used to assess any risk to newts as a result of the proposed development due to proximity of records of ponds containing great crested newts.

#### 3.4 Surveyor

The daylight site visit and report were compiled by Rachel Hepburn, an experienced ecologist and an associate member of the CIEEM since 2013 with over 13 years' experience in ecological surveying. She holds Natural England Licences for bat surveys (2015-12969-CLS-CLS) and great crested newt surveys (2016-19907-CLS-CLS).

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<sup>3</sup> <http://jncc.defra.gov.uk>



#### 4. Site description

The property is a detached dwelling sat centrally in a plot of land, laid to lawn with mature trees surrounding the site (NZ 31472 31452). The development site is located at the northern end of the small village of Mainsforth, to the south east of Ferryhill.

Naple Hill, an expanse of woodland with ponds present is located approximately 150 metres west/south west.

The wider area consists of grassland fields with scattered trees and hedges and small villages. The A1(M) motorway runs approximately 800 metres east.

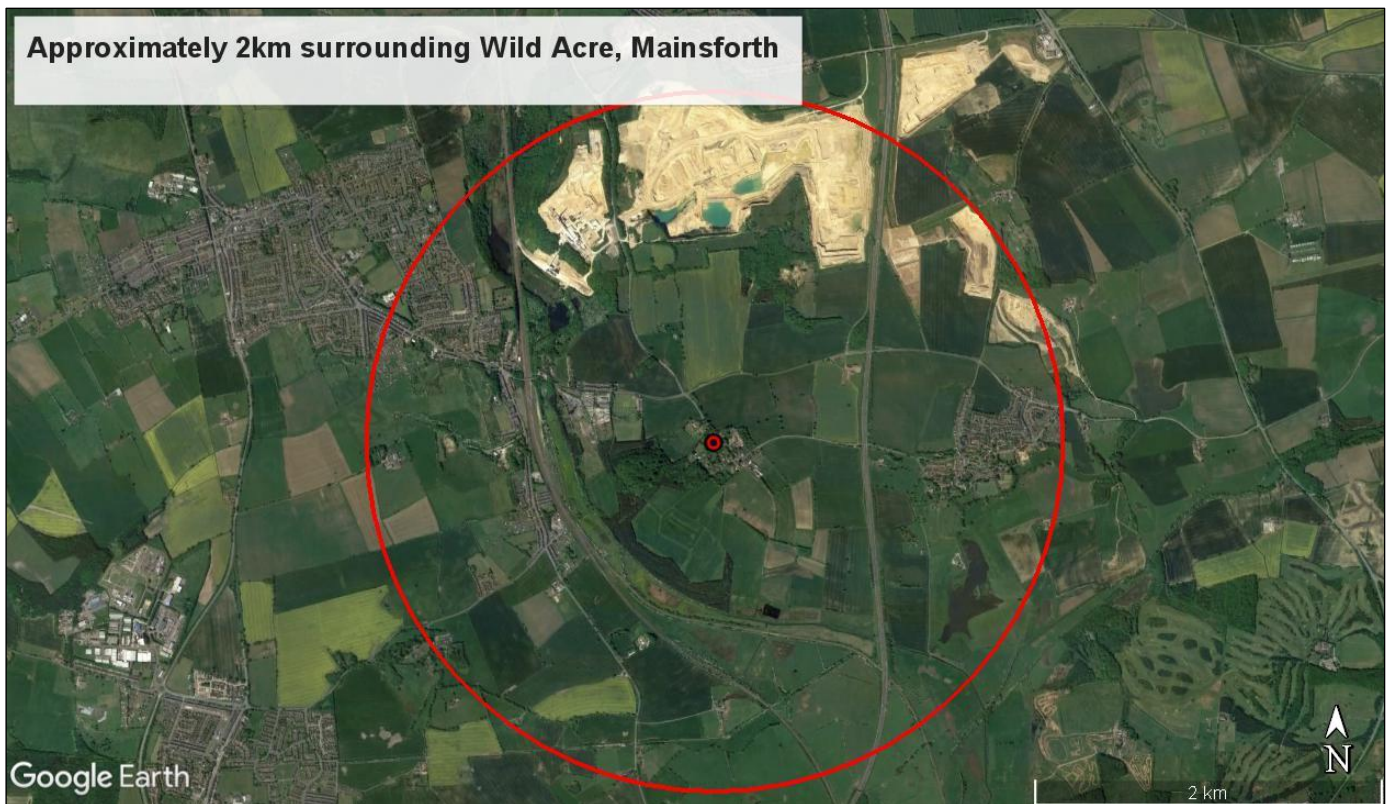


Figure 2. Surrounding area<sup>4</sup>.

<sup>4</sup> Reproduced with permission from Google Earth (2020).

## 5. Desktop survey

### 5.1 Designated Sites

Designated [wildlife] Sites were checked on 'MAGiC on the Map'<sup>5</sup>. There are five within 2km.

Site	Proximity
Thrislington Special Area of Conservation (SAC)	~930 metres north
Bishop Middleham Community Wildlife Garden Local Nature Reserve (LNR)	~1.4km south east
Ferryhill Carrs LNR	~1.4km north west
The Carrs Site of Special Scientific Interest (SSSI)	
Bishop Middleham Quarry SSSI	~1.8km north east

**Thrislington SAC** is a small site but nonetheless contains the largest of the few surviving stands of '*CG8 Sesleria albicans – Scabiosa columbaria grassland*'<sup>6</sup>. This form of calcareous grassland is confined to the Magnesian Limestone of County Durham and Tyne and Wear, north-east England. It now covers less than 200 ha and is found mainly as small scattered stands. The site is designated for its Annex 1 Habitat – '*6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (\* important orchid sites)*'.

**Bishop Middleham Community Wildlife Garden LNR** lies to the south of Bishop Middleham village in a low-lying valley part of a leisure facility called the park. The site has developed into a mature biodiverse site consisting of small areas of mixed woodland, small areas of standing open water, phragmites reed bed and fen carr surrounded by a gentle steepening gradient towards the outer edges of wildflower meadow and grassland vegetation. Due to the history of the area the land has a mixed soil type dominated by sandy loam and peat with some water holding capacity. The site has scattered trees around the perimeter consisting of Willow, Silver Birch, Black Poplar, Alder and a range of shrubs many have recently planted.

**The Carrs SSSI/Ferryhill Carrs LNR** is a wonderful mix of fen, open water, ancient semi-natural woodland, calcareous grassland, marshy grassland and scrub habitats. The reserve is a haven for a number of bird species including linnet, willow warbler, reedbunting, blackcap, lesser white-throat, sparrowhawk, yellow hammer and various other birds. Both the extensive fen habitat and calcareous (magnesian limestone) grassland meadow are rare in the region and are priority habitats within the UKBAP.

**Bishop Middleham Quarry SSSI** is a disused Magnesian Limestone quarry has, since it was abandoned, been recolonised by a wide range of plant and animal species characteristic of limestone soils, several of which are rare or local. The site is known to have a diverse invertebrate fauna which includes the rare Durham Argus butterfly (*Aricia artaxerxes salmacis*).

Tipping and re-working have destroyed the biological interest of a major part of the quarry complex at Bishop Middleham, and the boundary of the site first notified in 1968 has been reduced in the 1982 revision to exclude areas no longer of high biological interest.

<sup>5</sup> magic.defra.gov.uk

<sup>6</sup> National Vegetation Classification



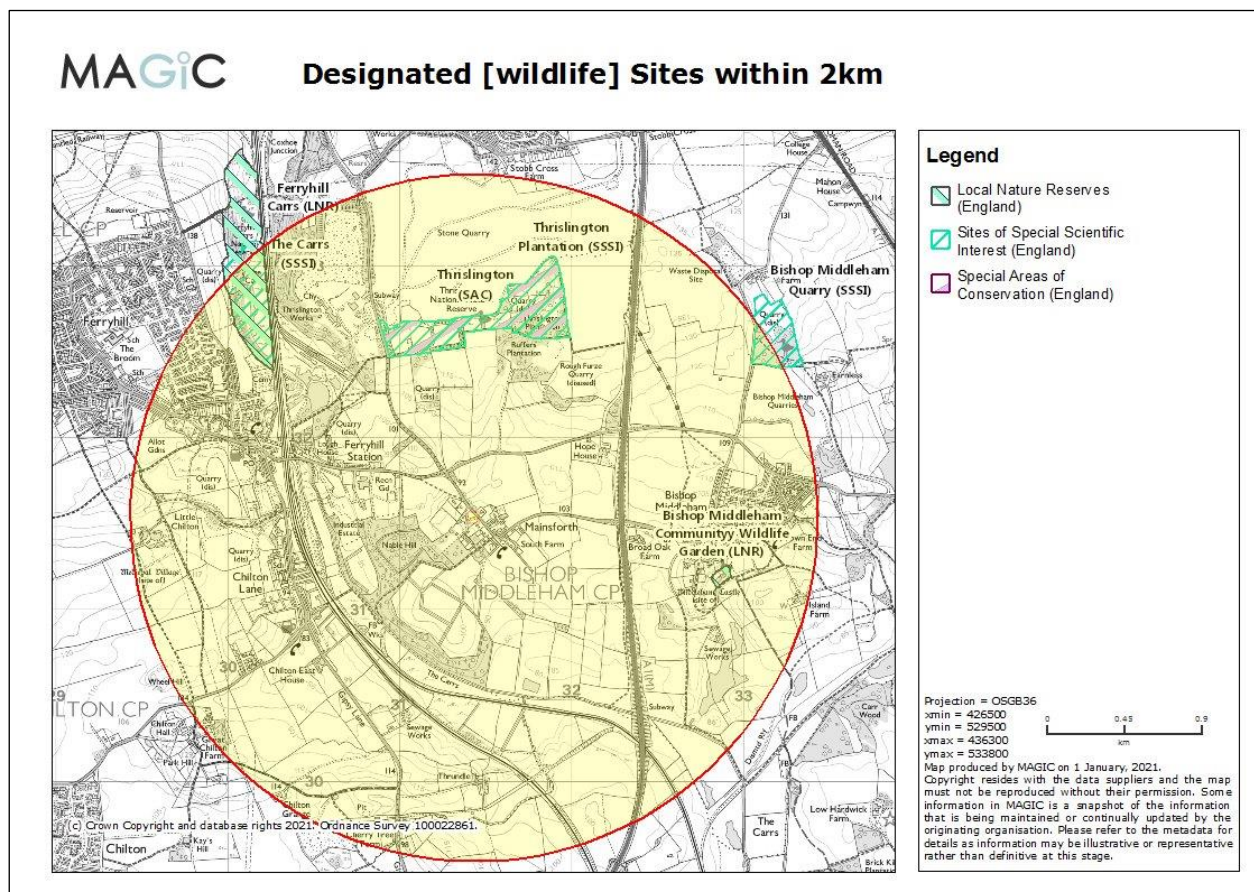


Figure 3. Designated [wildlife] Sites within 2km.

The site falls within the Impact Risk Zones for Sites of Special Scientific Interest (SSSI). Potential impacts are discussed in the table below. No impacts are expected.

Category	Impact	Description
Infrastructure	N/A	Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.
Minerals, oil and gas	N/A	Planning applications for quarries. Oil and gas exploration/extraction.
Air pollution	N/A	Any industrial/agricultural development that could cause air pollution.
Combustion	N/A	General combustion processes >20MW energy input.
Waste	N/A	Landfill.
Composting	N/A	Any composting proposal with more than 500 tonnes maximum annual operational throughput.
Water supply	N/A	Large infrastructure such as warehousing / industry where total net additional gross internal floorspace following development is 1,000m <sup>2</sup> or more.

## 5.2 Priority Habitats

'MAGiC on the Map' was checked for Priority Habitats (Habitats of Principal Importance). These are habitats listed under Section 41 of the Natural Environment and Rural Communities Act 2006.

There are no Priority Habitats on/adjacent to the development site. The following are found within 2km of the site:

Habitat	Proximity
Deciduous woodland	~100 metres south west
Traditional orchard	~130 metres north east
Open Mosaic Habitats on Previously Developed Land <sup>7</sup>	~660 metres west
Good quality semi-improved grassland	~720 metres south
Lowland calcareous grassland	~935 metres north
Wood-pasture and parkland BAP	~1.1km south east
Reedbeds	~1.25km north west
Lowland heathland	~1.3km west
Lowland fens	~1.3km north east

As the development is an extension to an existing property and will not result in an increase of residential dwellings, negligible impact is expected on these habitats.

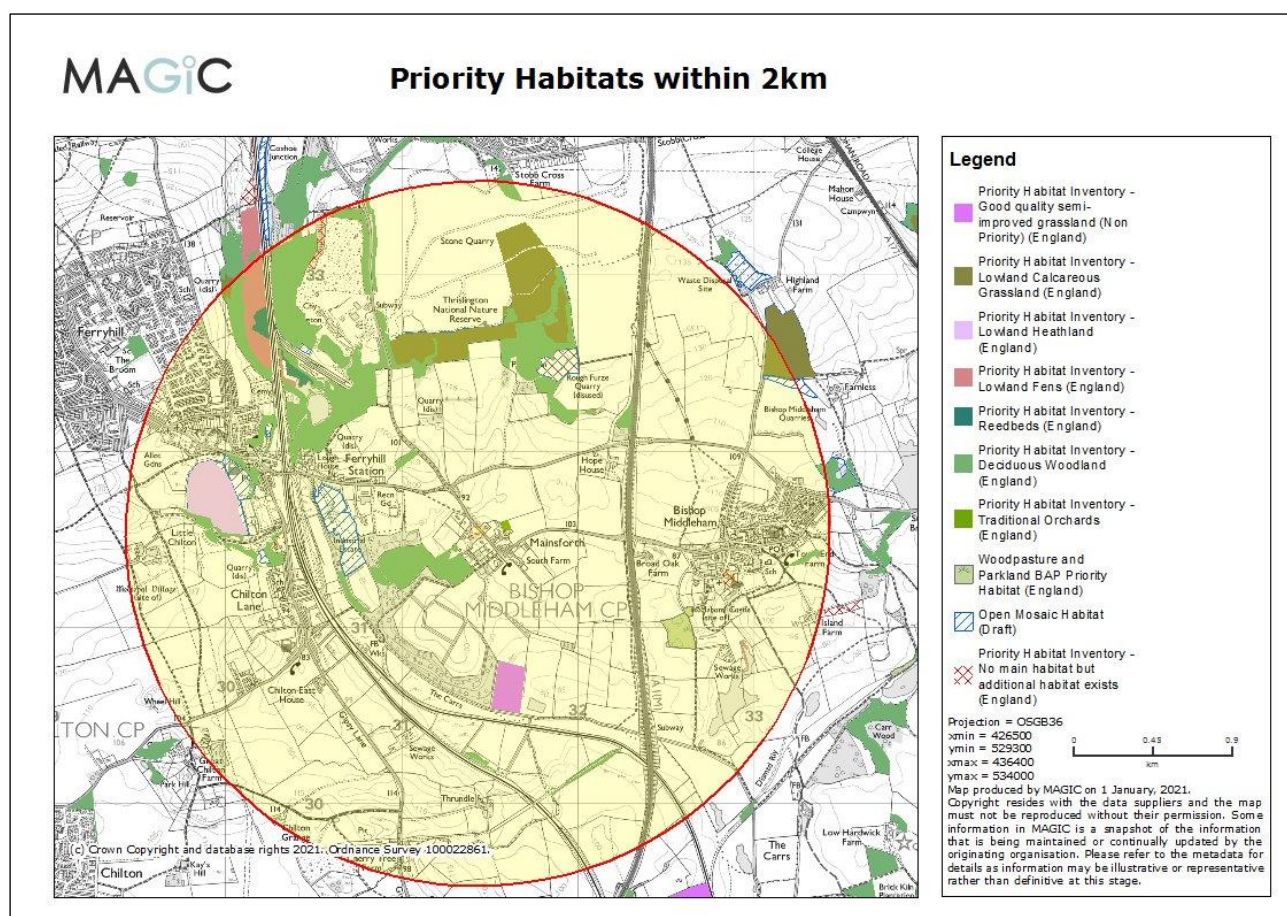


Figure 4. Priority Habitats.

<sup>7</sup> Draft mapping.



### 5.3 EPSLs and bat records

Durham Bat Group records have been requested and will be discussed once received and this section updated. The full dataset can be made available upon request.

'MAGiC on the Map' was checked for any granted Endangered and Protected Species Licences (EPSLs) granted within 2km. This brought back one result:

<b>Reference</b>	2017-28674-EPS-AD2
<b>Species</b>	<b>Great crested newt</b>
<b>Licence dates</b>	19/09/2017 - 31/12/2022
<b>Impact</b>	Impact on a breeding site. Damage on a resting place. Destruction of a breeding site.
<b>Proximity</b>	~1.1km north

The area was also checked for great crested newt records (GCN) related to licence returns, this brought back two results with positive records of GCN, from the same site (NZ311328), approximately 1.2km north west in 2014 and 2016.

There were no results from Natural England surveys carried out between 2017 and 2019.

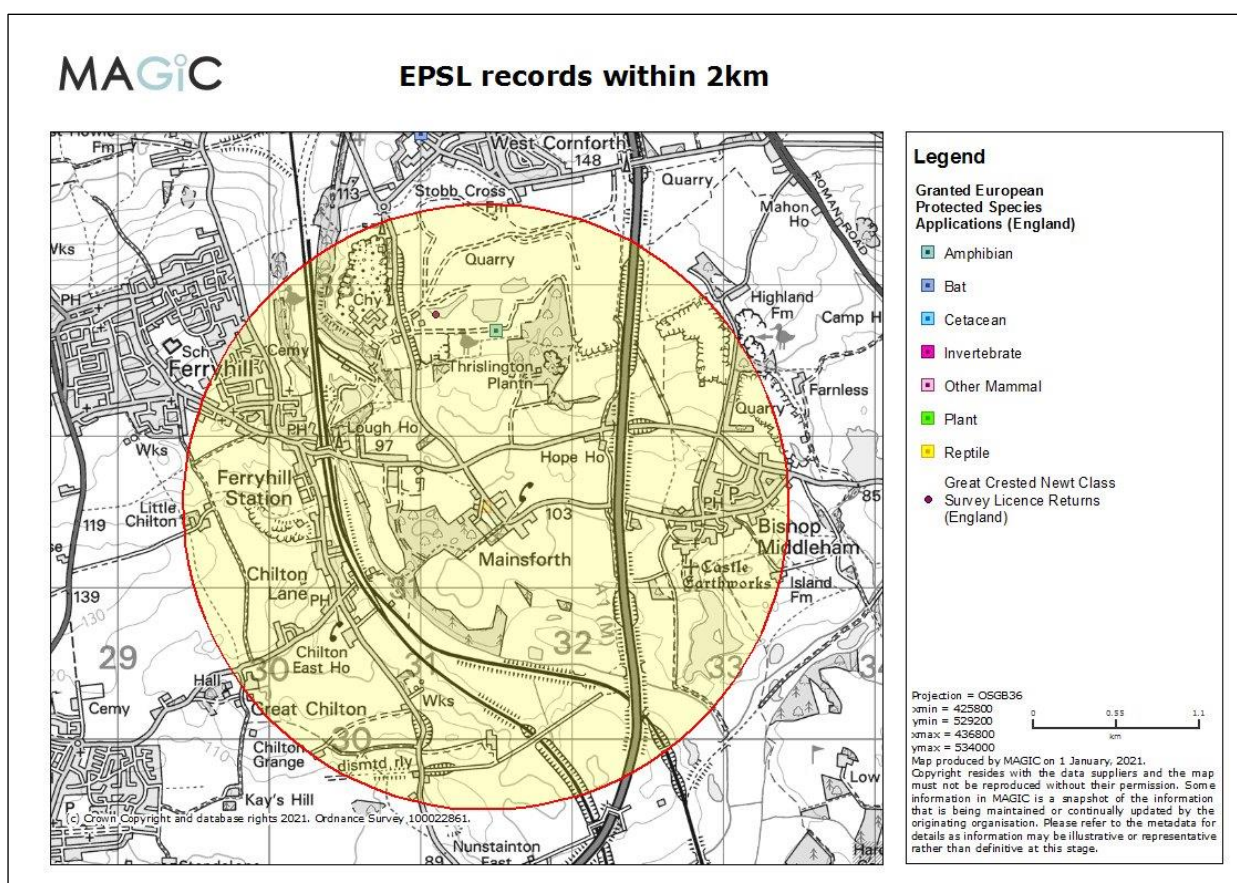


Figure 5. Granted EPSLs within 2km.

## 5.4 Local planning portal

The site has the following planning history:

*It should be noted that part of the site has been sold off for the construction of a new single dwelling and this area is not within the current application for the current planning application for an extension to the existing dwelling.*

- 2020 - Discharge of condition 3 (protective fencing) pursuant to DM/20/01383/VOC (reference DRC/20/00292, application approved).
- 2020 - Variation of condition 2 (approved plans) and removal of conditions 3 (materials), 4 (means of enclosure) and 7 (landscaping) pursuant to DM/19/00170/VOC (reference DM/20/01383/VOC, application approved).
- 2019 - Variation of condition 2 of planning application DM/17/02580/FPA (reference DM/19/00170/VOC, application approved).
- **2017 – One dwelling (DM/17/02580/FPA, application approved).**
- **2016 – One dwelling (reference DM/16/03966/FPA, application withdrawn).**
- **2013 – Erection of detached dwelling (reference 7/2013/0471/DM, application approved).**
- 2010 – Pruning of overhanging branches to 4 sycamore trees – TPO<sup>8</sup> SBC-23-2005 (reference 7/2010/0324/DM, application approved).
- 2010 – Application to renew planning permission AP/2005/011 for the erection of bungalow (reference 7/2010/0322/DM, application approved).
- 2008 – Reduction of weight in overhanging and pruning of T15 of TPO 23/2004 (reference 7/2008/0632/DM, application approved).
- 2007 – Erection of one dwelling (reference 7/2007/0488/DM, application approved).
- 2005 – Erection of one bungalow (reference 7/2005/0253/DM, application refused).
- 2004 – Removal of 5 sycamore trees and pruning of 8 sycamore trees of the TPO, Wildacre, 1980 (reference 7/2004/0591/DM, application approved).
- 2004 – Erection of one bungalow (reference 7/2004/0358/DM, pending consideration).
- 2003 – Removal of beech tree (T2) TPO, Wildacre 1980 (reference 7/2003/0583/DM, application approved).
- 1983 – Extension and pitched roof over existing garage and utility room (reference 7/1983/1181/DM, application approved).
- 1979 – Two-storey extension (reference 7/1979/0947/DM, application approved).

The wider site has several historic ecology reports, however as no trees are directly impacted by the current development proposals arboricultural reports are not discussed here.

The planning applications in **bold** have ecological reports associated with them, which are discussed below:

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<sup>8</sup> Tree Preservation Order



**Dendra Consulting Ltd. (2010). Great crested newt risk assessment and method statement.**

The local authority has requested this risk assessment due to known great crested newt (GCN) breeding ponds being located in close proximity to the site. There are four ponds between 170 metres south and 320 metres west. Durham Wildlife Trust (2010) holds multiple records of GCN from within 1.5km of the site, the closest being ~170 metres away.

Species	Grid ref and location	Approx distance from site and direction	Additional Comments
GCN	NZ315314	170m south	Closest record to site
GCN	NZ313312	250m south west	-
GCN	NZ312312	250m south west	-
GCN	NZ306322	1.15km north west	-
GCN	NZ328312	1.5km east southeast	-
GCN	NZ32911 31214	1.5km east southeast	-

Figure 6. Records of GCN ponds in the surrounding area.

There are no waterbodies present on site. The site did not appear to contain piles of deadwood or rubble which could be used by GCN as refugia.

Any development activities likely to result in any offences with regard to GCN would require a European Protected Species Mitigation Licence from Natural England. An assessment was undertaken regarding the likelihood of an offence (Natural England's Rapid Risk Assessment Tool).

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability score
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	0.01 - 0.1 ha lost or damaged	0.01
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	Minor disturbance of newts	0.5
	Maximum:	0.5
Rapid risk assessment result:	<b>AMBER: OFFENCE LIKELY</b>	

Figure 7. Natural England's rapid assessment tool (2010).

No breeding ponds will be affected and the development site is not considered to have terrestrial habitat suitable for GCN other than potentially lying on a commuting route. No land use by GCN for shelter/hibernation purposes will be affected by the proposals.

The risk to GCN is considered low and a licence is not required.

The local planning portal was checked for nearby (within ~500 metres) and/or recent (in the last 5 years) planning applications that have reference to bats only. References to individual trees away from the development site have been omitted.

<b>Address</b>	The Firs, Mainsforth, Ferryhill, DL17 9AA
<b>Planning application</b>	DM/17/03532/FPA (2017) – Two dwellings.
	DM/15/01249/OUT (2015) - One dwelling (Outline - all matters reserved).
<b>Proximity</b>	~20 metres south

**Dendra Consulting Ltd. (2018). *Letter – Ecology at The Firs, Mainsforth, DL17 9AA (dated 25<sup>th</sup> January 2018).***

The site has not noticeably changing since the previous ecology report (2015). It is concluded that the change in plans from 1 dwelling to 2 smaller dwellings in the same area will not alter the findings of the 2015 ecology report (see below).

**Dendra Consulting Ltd. (2015). *Ecology report for The Firs, Mainsforth.***

Overall, the site has very little potential for protected species; however the site does contain habitats suitable of supporting nesting common bird species.

## 6. Building assessment

### 6.1 Description

The property is a brick-built detached dwelling with a pitched roof. To the western end is a single-storey pitched roof and attached flat-roof (felt-covered) garage (**figure 8**). The windows are uPVC double-glazed.

The property is surrounded by gardens (**figure 18**) laid to lawn with species present of no particular note.

The property has two loft voids:

- The large void within the main building (**figure 17**) is not affected by development proposals and has bitumen underfelt present beneath the tiles and insulation laid on the floor. No gaps or areas of light ingress were noted.
- The second loft void (**figure 16**) is above the single-storey section of the building. A pitched roof has been constructed above the previous felt flat-roofed section and bitumen underfelt is present. The void appeared tightly sealed.

The roof (**figure 14**) is in a good state of repair with no gaps or misaligned tiles noted. The flat-roofed garage was also in good condition with no peeling felt noted.

There are fascia boards present around the garage (**figure 15**) and soffit boxes around the main house (**figure 13**), these are flush to the wall with no gaps created.

A nearby mature sycamore tree (grid reference NZ 31414 31504, **figure 19**), located approximately 20 metres south of the development area has Potential Roost Features for bats noted, including cracks and holes. No work is proposed to this tree. This tree has a Tree Preservation Order on it<sup>9</sup>. A planning application was submitted in 2010<sup>10</sup> to have overhanging branches pruned.

There was no evidence of nesting birds, but the building and wider site has potential to support them.

There are no waterbodies with the patch of land associated with Wild Acre.

No signs of bats or Potential Roost Features were noted.

<sup>9</sup> T8 - SBC-23-2005 (Wildacre, Mainsforth 23/2005).

<sup>10</sup> 7/2010/0324/DM

## 6.2 Photos



*Figure 8. Southern and western elevations.*



*Figure 9. Southern elevations*



*Figure 10. Northern elevations.*





Figure 11. Single-storey section.



Figure 12. Main section of the property.



Figure 13. Soffit boxes in a good state of repair and flush to the wall.



Figure 14. Single-storey roof viewed from upper floor window.



Figure 15. Garage.



Figure 16. Single-storey loft void.





Figure 17. Main house loft void.



Figure 18. Garden.



Figure 19. Nearby tree with PRFs.

## 7. Impact assessment and proposed mitigation

### 7.1 Summary

- The building has no Potential Roost Features for bats present.
- The nearby sycamore tree (NZ 31414 31504) has Potential Roost Features for bats present. No work should be undertaken on this tree without consultation with the project ecologist.
- Great crested newts are recorded within 250 metres. The development plot has limited opportunities for this species and therefore negligible impact is expected with Precautionary Working Methods in place.
- There is potential for birds to nest on the property.
- No further survey work is recommended.

Integrated features for bats and birds are recommended to be incorporated into the proposed extension<sup>11</sup>. Aside from bats, any other potential impacts can be suitably dealt with *via* a Precautionary Working Method Statement (**appendix 1**) without the need for further survey work. This should be conditioned as part of a planning application.

Factors supporting the recommendations are discussed in the sections below:

### 7.2 Limitations

The survey comprised a single daylight visit, outside of the active bat season. Recent weather conditions mean any external signs are unlikely to be still present.

Recent snow had fallen in the area, and evidence of this was still on the ground. However it had melted from the rooftops, allowed the condition of the roof to be effectively assessed.

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<sup>11</sup> [www.nhbs.com](http://www.nhbs.com)



### 7.3 Birds

There was no evidence of nesting birds, but the building and wider site has potential to support them.

#### **Potential impacts**

- Disturbance to breeding birds.
- Destruction of active nests, causing death or injury to fledging birds.

#### **Actions and mitigation**

- Site contractors must be made aware of the law around the bird nesting season (March-August inclusive).
- Construction works should avoid the bird nesting season unless a suitably qualified ecologist has confirmed that no nesting birds are present 48 hours prior to the works commencing.

## 7.4 Bats

The building is in a good state of repair, with no gaps or crevices noted that could potentially be used by roosting bats. No signs of bats were noted on the building or within the two loft voids.

The site and wider area has moderate potential for supporting bats, however the building itself is deemed to have **negligible potential for roosting bats** due to lack of potential roosting features and no signs of bats seen.

The [initial] Assessment was made based on the Bat Conservation Trust (2016) 'Bat Surveys Good Practice Guidelines'. The full assessment tables can be found in **appendix 3**.

<b>Overall suitability for bats</b>	Habitat and settings	<b>Moderate-high</b>
	Building	<b>Low</b>
	External	<b>Low-medium</b>
<b>Potential suitability of the development site for bats</b>	Commuting and foraging habitats	<b>Moderate</b>
	Roosting habitats	<b>Negligible</b>

A tree (NZ 31414 31504) within the garden of the property has Potential Roost Features (PRFs) for bats present. No work is proposed for this tree and negligible impact is expected as long as additional site lighting is sensitively designed and the tree kept in darkness. Any external lighting should be low level, directional and follow the ILP/BCT 2018 guidance<sup>12</sup>.

Records from Durham Bat Group have been requested and will be discussed once received.

### Potential impacts

- Disturbance to occasional/opportunistic roosting bats.
- Disturbance, killing or injury to bats which may use the building.

### Actions and mitigation

- No work should be undertaken on the nearby sycamore without consultation with the project ecologist.
- Roofing features such the tiles, flashing, soffit boxes and fascia boards to be removed by hand, carefully checking for bats.
- If bats or signs of bats are found, then work must stop, and the project ecologist contacted for advice.
- Any external lighting should be low level, directional and follow the ILP/BCT 2018 guidance.
- Non-Bitumen (Breathable) Roofing Membranes<sup>13</sup> should not be used as these are known to cause death to bats by entanglement. Currently the only 'bat safe' roofing membrane is bitumen 1F felt that is a non-woven short-fibred construction.
- Any external paint used should be checked to ensure it will not cause harm to bats or birds.
- Integrated features suitable for bats (such as bat access tiles/integrated bat box) are recommended to be incorporated into the proposed extension.

<sup>12</sup> ILP (2018). *Advice note 08/18 - Bats and artificial lighting in the UK - Bats and the Built Environment series*. BCT

<sup>13</sup> [www.bats.org.uk/our-work/buildings-planning-and-development/non-bitumen-roofing-membranes](http://www.bats.org.uk/our-work/buildings-planning-and-development/non-bitumen-roofing-membranes)

## 7.5 Great crested newts

The nearest great crested newt (GCN) pond is approximately 170 metres south of the plot of land within which Wild Acre lies. There are no waterbodies within the area of land associated with Wild Acre.

There are clear barriers to dispersal for amphibians such as wide hardstanding and short-sward grassland between the ponds and the development site. Habitats on site are primarily hardstanding, deemed to have low suitability for GCN. There were no suitable features on site for refugia/hibernation, such as log and stone piles within the adjacent mown grassland garden.

Natural England's 'Rapid Assessment Tool' was used to assess any risk to newts as a result of the proposed development. This scored as 'offence highly unlikely', due to proximity and lack of suitable terrestrial habitats for the species within the development plot.

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability score
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	0.01 - 0.1 ha lost or damaged	0.01
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	No effect	0
	Maximum:	0.01
Rapid risk assessment result:	<b>GREEN: OFFENCE HIGHLY UNLIKELY</b>	

Figure 20. Natural England's 'Rapid Assessment Tool' for potential GCN offences.

Precautionary Working Methods should be followed in the event occasional GCN are found on site (see **appendix 1**).



## 7.6 Trees

A nearby mature sycamore tree (**figure 19**) located approximately 20 metres south of the development area has Potential Roost Features for bats noted, including cracks and holes. No work is proposed to this tree. This tree has a Tree Preservation Order on it<sup>14</sup>. A planning application was submitted in 2010<sup>15</sup> to have overhanging branches pruned.

### Potential impacts

- Damage/loss to nearby trees, particularly the root systems.

### Actions and mitigation

- No work should be undertaken on the mature tree with Potential Roosting Features (PRFs) for bats. This tree should be kept in darkness.
- Any external lighting should be low level, directional and follow the ILP/BCT 2018 guidance<sup>16</sup>.
- No tree work should be carried out without consultation from the project ecologist and an arboricultural consultant.
- The root systems of the sycamore may be impacted by the development. A Root Protection Plan should be drawn up by a suitability qualified arboricultural consultant. Root Protection Areas (RPAs) to be clearly marked out prior to construction work. Refer to 'British Standard 5837:2012 Trees in relation to design, demolition and construction' and 'BS 3998:2010: Tree work – Recommendations'.
- Utilities (if applicable) should be installed along areas of hardstanding/paving and outside of any tree's RPA where practical to minimise damage to roots and disturbance of soils.
- Vehicles and machinery will be restricted from operating/parking on unprotected soil within tree RPAs in order to minimise damage to the trees via compaction or contamination of the soil.

## 7.7 Designated Sites and Priority Habitats

As the development is an extension of an existing residential dwelling there will be no net increase in residents in the local area. No direct impacts are expected, and indirect impacts are deemed to be negligible.

The site falls within the Impact Risk Zones for Sites of Special Scientific Interest (SSSI). Potential impacts are discussed in the **section 5.1** above. No impacts are expected.

There are no Priority Habitats adjacent to the development site and due to the nature of the proposed development, no impact on Priority Habitats within 2km is expected on the nearby Deciduous Woodland Priority Habitat (~100 metres south west).

<sup>14</sup> T8 - SBC-23-2005 (Wildacre, Mainsforth 23/2005).

<sup>15</sup> 7/2010/0324/DM

<sup>16</sup> ILP (2018). *Advice note 08/18 - Bats and artificial lighting in the UK - Bats and the Built Environment series*. BCT

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## APPENDIX 1. Precautionary Working Method Statement

### METHOD STATEMENT FOR CONTRACTORS WILD ACRE, MAINSFORTH, FERRYHILL, DL17 9AA

The following precautions are necessary to prevent a legal offence being committed. All species of breeding bats and breeding birds are protected by law. Deliberate or reckless disturbance of these animals is a legal offence, punishable by fines and/or imprisonment. They are intended to reduce the impact of this development to protected species. These recommendations must be followed by all of those working on the site.

Should any protected species be found, work should immediately stop, and the project ecologist contacted.

**Bats** commonly roost in cavity walls and roofs. They may be present under roof tiles, ridge tiles and at wall tops or within crevices. All species of bats are strictly protected by law. Damage or destruction of a bat roost is an absolute offence with a maximum penalty of a £5,000 fine per offence, up to 6 months imprisonment, and confiscation of equipment.

**Birds** often nest at eaves, in roofs and in soffits. All species of breeding birds, their nests (whilst being built and when in use), eggs and chicks are also protected by law.

*No tree work should be carried out without consultation from the project ecologist and an arboricultural consultant.*

- Roofing features such tiles, flashing, soffit boxes and fascia boards to be removed by hand, carefully checking for bats.
- If bats or signs of bats are found, then work must stop, and the project ecologist contacted for advice.
- Non-Bitumen (Breathable) Roofing Membranes<sup>17</sup> should not be used as these are known to cause death to bats by entanglement. Currently the only 'bat safe' roofing membrane is bitumen 1F felt that is a non-woven short-fibred construction.
- Any external paint used should be checked to ensure it will not cause harm to bats or birds.
- Integrated features suitable for bats (such as bat access tiles or an integrated bat box) are recommended to be incorporated into the proposed extension.
- All works to cease immediately if bats, bat signs or nesting birds are found, and the project ecologist contacted to for advice before works can proceed.
- Any external lighting should be directional away from any roosts/valuable habitat featured and follow the ILP 2018 guidance<sup>18</sup>. Any new external lighting will be directional, low intensity and controlled by motion sensor. The nearby sycamore tree to the south west of the building (NZ 31414 31504) should be kept in darkness.

<sup>17</sup> [www.bats.org.uk/our-work/buildings-planning-and-development/non-bitumen-roofing-membranes](http://www.bats.org.uk/our-work/buildings-planning-and-development/non-bitumen-roofing-membranes)

<sup>18</sup> ILP/BCT (2018) Advice note 08/18 - Bats and artificial lighting in the UK - Bats and the Built Environment series.

- A Root Protection Plan should be drawn up by a suitability qualified arboricultural consultant, particularly with regard to the nearby tree. Root Protection Areas (RPAs) to be clearly marked out prior to construction work. Refer to '*British Standard 5837:2012 Trees in relation to design, demolition and construction*' and '*BS 3998:2010: Tree work – Recommendations*'.
- Utilities (if applicable) should be installed along areas of hardstanding/paving and outside of any tree's RPA where practical to minimise damage to roots and disturbance of soils.
- Vehicles and machinery will be restricted from operating/parking on unprotected soil within tree RPAs in order to minimise damage to the trees *via* compaction or contamination of the soil.
- Site contractors must be made aware of the law around the bird nesting season (March-August inclusive). Construction works should avoid the bird nesting season unless a suitably qualified ecologist has confirmed that no nesting birds are present 48 hours prior to the works commencing.
- Any storage of materials on site is likely to create suitable refugia for several species and therefore should only be moved by hand.
- Any pits or holes dug during construction phase must be covered up overnight or fitted with exit ramps (scaffolding planks) for mammals to be placed at an angle of 30° from base to top.
- Contractors should check any areas of ground thoroughly before starting work and before they leave.
- All materials, fuel, equipment and chemicals, if left on site, to be stored securely.

**Signed by Owners**

Names .....

Date.....

**Signed by Contractors**

Name	Job Title	Date	Signature

## APPENDIX 2. Relevant wildlife legislation

Under Section 25 (1) of the Wildlife & Countryside Act (1981) local authorities have a duty to take such steps as they consider expedient to bring to the attention of the public the provisions of Part I of the Wildlife & Countryside Act, which includes measures to conserve protected species.

The Natural Environment and Rural Communities Act (2006) places a Statutory Biodiversity Duty on public authorities to take such measures as they consider expedient for the purposes of conserving biodiversity, including restoring or enhancing a population or habitat.

Paragraph 109 of the National Planning Policy Framework (NPPF) requires that the planning system minimizes impacts on biodiversity and provides net gains where possible.

In Britain all bat species and their roosts are legally protected, principally under the Conservation of Habitats and Species Regulations (2010), with additional protection under the Wildlife and Countryside Act (1981) (as amended), including under Schedule 12 of the Countryside and Rights of Way Act, 2000, which created a new offence of reckless disturbance.

The combined effect of these is that a person is guilty of an offence if they:

- Deliberately capture, injure or kill a bat.
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats.

In particular where this may:

- i. Impair their ability to survive, to breed or reproduce, or rear or nurture their young.
- ii. Affect significantly the local distribution or abundance of the species.
  - Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time).
  - Intentionally or recklessly obstruct access to a bat roost.

All birds, their nests and eggs are protected by law and it is an offence, with certain exceptions, to:

- Intentionally kill, injure or take any wild bird.
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built.
- Intentionally take or destroy the egg of any wild bird.
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building or is in, on or near a nest with eggs or young; or disturb the dependent young of such a bird. Barn Owls are named in Schedule 1 of this Act.

The barn owl is protected under Part 1 of the Countryside Act 1981 and is listed on Schedule 1, which gives them special protection. It is an offence, with certain exceptions to:

- Intentionally or deliberately kill, injure or capture (take) any wild barn owl.
- Intentionally take, damage or destroy any wild barn owl nest whilst in use or being 'built'.
- Intentionally take or destroy a wild barn owl egg.
- Intentionally or recklessly disturb any wild barn owl whilst 'building' a nest or whilst in, on, or near a nest containing young.
- Intentionally or recklessly disturb any dependent young of wild barn owls.



## Great crested newt

Great crested newts are listed on Appendix II of the Bern Convention and on Annexes II and IV of the EU Natural Habitats Directive. In England and Wales the great crested newt is protected under Schedule 2 of the Conservation of Habitats and Species Regulations 2010 and under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). In Scotland, great crested newts are protected under Schedule 2 of the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended).

It is an offence, with certain exceptions, to:

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

The legislation covers all newt life stages such that eggs, tadpoles and adult newts are all equally protected. Actions that are prohibited can be made lawful by a licence issued by the appropriate Statutory Nature Conservation Organisation. The GCN is a Priority Species under the UK Biodiversity Action Plan and has been adopted as a Species of Principal Importance in England under section 41 of the NERC Act 2006 (section 42 in Wales) and in Scotland under the Nature Conservation (Scotland) Act 2004.

### APPENDIX 3. Bat suitability tables

From 'Bat Conservation Trust (2016). Bat Surveys Good Practice Guidelines'.

Overview of site suitability for bats.				
Habitats and settings				
	Negligible	Low	Moderate	High
<b>Habitats and cover within 200 metres.</b>	City centre.	<b>Open, exposed arable, amenity grass or pasture.</b>	Hedges and trees linking site to wider countryside.	Excellent cover with mature trees and/or good hedges.
<b>Habitats within 1km.</b>	City centre.	Little tree cover, few hedges, arable dominated.	Semi-natural habitats e.g. trees, hedgerows.	<b>Good network of woods, wetland and hedges.</b>
<b>Alternative roosts within 1km.</b>	City centre.	Numerous alternative roost sites of a similar nature.	<b>A number of similar buildings in the local area.</b>	Few alternative buildings and site of good quality for roosts.
<b>Setting.</b>	Inner city.	Urban with little green space.	<b>Built development with green-space, wetland, trees.</b>	Rural Lowland with woodland and trees.
<b>Distance to water/marsh.</b>	>1km	500m-1000m	200m-500m	<b>&lt;200m</b>
<b>Distance to woodland/scrub.</b>	>1km	500m-1000m	200m-500m	<b>&lt;200m</b>
<b>Distance to species-rich grassland.</b>	>1km	<b>500m-1000m</b>	200m-500m	<200m
<b>Commuting routes.</b>	Isolated by development, major roads, large scale agriculture.	No potential flyways linking site to wider countryside.	<b>Some potential commuting routes to and from site.</b>	Site is well connected to surrounding area with multiple flyways.

<b>Overview of site suitability for bats.</b>				
<b>Buildings</b>				
	<b>Minimal</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>
<b>Age (approximate)</b>	Modern.	<b>Post 1940s.</b>	1900-1940.	Pre 20th Century.
<b>Building/complex type</b>	Industrial complex of modern design.	<b>Single, small building.</b>	Several buildings, large old single structure.	Traditional farm buildings, country house, hospital.
<b>Building – storeys</b>	N/A	Single storey.	<b>Multiple storeys.</b>	Multiple storeys with large roof voids.
<b>Stone/brick work</b>	No detectable crevices.	<b>Well-pointed.</b>	Some cracks and crevices.	Poor condition, many crevices, thick walls.
<b>Framework – timbers/steel</b>	Modern metal frame with sheet cladding.	Timber purlins, sheet asbestos.	<b>Timbers kingpost or similar.</b>	Large timbers traditional joints.
<b>Roof void</b>	Fully sealed roof.	Small, cluttered void.	<b>Medium, relatively open.</b>	Large, open, interconnected.
<b>Roof covering</b>	<b>Modern sheet materials and tightly sealed.</b>	Good condition or very open not weatherproof modern sheet materials.	Some potential access routes, slates, tiles.	Uneven with gaps, not too open, stone slates.
<b>Additional features</b>	<b>Very well maintained and tightly sealed.</b>	No features with potential access.	Some features with potential access.	Hanging tiles, cladding, barge boards, soffits with access gaps.
<b>External</b>				
<b>Lighting</b>	Extensive security. Lights covering much of the site.	Widespread areas above 2 lux at night.	<b>Intermittent lights of low intensity</b>	Minimal
<b>Building use</b>	Very noisy, dusty	<b>Regular use</b>	Intermittent use	Disused

**Guidelines for assessing the potential suitability of proposed development sites for bats, based on presence of habitat features within the landscape.**

Suitability	Commuting and foraging habitats
<b>Negligible</b>	Negligible habitat features on site likely to be used by commuting or foraging bats.
<b>Low</b>	<p>Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or un-vegetated stream, but isolated, <i>i.e.</i> not very well connected to the surrounding landscape by other habitat.</p> <p>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.</p>
<b>Moderate</b>	<p><b>Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.</b></p> <p><b>Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.</b></p>
<b>High</b>	<p>Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.</p> <p>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.</p> <p>Site is close to and connected to known roosts.</p>

Suitability	Roosting Habitats
<b>Negligible</b>	<b>Negligible habitat features on site likely to be used by roosting bats.</b>
<b>Low</b>	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used by larger numbers of bats ( <i>i.e.</i> unlikely to be suitable for maternity or hibernation).
<b>Moderate</b>	A structure 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 – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
<b>High</b>	A structure 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.