Preliminary Roost Assessment Survey

Land at 188 Heywood Old Road, Manchester M24 4GR

Stuart Plant

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Executive summary

Arbtech Consulting Limited was commissioned by Stuart Plant to undertake a Preliminary Roost Assessment (PRA) at Land at 188 Heywood Old Road, Manchester M24 4GR. The survey was completed on 4th January 2021. The development proposals are for the erection of a dwelling. A planning application is being prepared for submission to Rochdale Metropolitan Borough Council.

Summary of Recommendations

The trees have negligible habitat value for roosting bats. There are no suitable roosting features on the trees. No further surveys are required. In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licenced ecologist contacted for further advice.

This is work you will need to commission to obtain planning permission and to comply with legislation

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was commissioned by Stuart Plant to undertake a Preliminary Roost Assessment (PRA) at Land at 188 Heywood Old Road, Manchester M24 4GR. The survey was completed on 4th January 2021. The assessment is informed by the Bat Conservation Trust publication, *Bat Surveys for Professional Ecologists – Good Practice Guidelines* (Collins, 2016).
No previous reports have been produced for this site by Arbtech.

1.2 Site Context

The site is located at National Grid Reference SD 84573 05925 and has an area of approximately 975m^2. The site consists of improved grassland, hard standing surface, and scattered trees. There are no buildings located within the application boundary.

1.3 Scope of the report

This report provides a description of all features suitable for roosting bats, and evaluates those features in the context of the site and wider environment. It further documents any physical evidence collected or recorded during the site survey that establishes the presence of roosting bats. It provides information on constraints to the proposals as a result of roosting bats, and summarises the requirements for any further surveys, to inform subsequent mitigation proposals, achieve Planning or other statutory consent, and to comply with wildlife legislation.
The aim of the assessment was to determine the presence or evaluate the likelihood of the presence of roosting bats, and to gain an understanding of how they could use the site. To achieve this, the following steps have been taken:

- A desk study has been carried out.
- A field survey has been undertaken, including an external survey and internal inspection where possible.
- An outline of likely impacts on any known roosts has been provided, based on current development proposals.
- Recommendations for further survey and assessment have been made, along with advice on the requirements of a European protected species mitigation licence (EPSML) application if appropriate.

A survey plan is presented in Appendix 1, proposed plans in Appendix 2, desk study results in Appendix 3 and a summary of relevant legislation is presented in Appendix 4.

1.4 Project Description

The development proposals are for the erection of a dwelling. A planning application is being prepared for submission to Rochdale Metropolitan Borough Council.

2.0 Methodology

2.1 Desk Study methodology

The desk study included a 2km radius review of statutory and non-statutory designated sites, Biodiversity Action Plan (BAP) Priority Habitats and granted EPSML records for bats held on magic.gov.uk database. An assessment of the surrounding landscape structure was also completed using aerial images from google earth and OS maps.

Existing bat records relating to the site and a surrounding 2km radius are required to conform to national guidelines. The data search is confidential information that is not suitable for public release and has been analysed and summarised for presentation in this report.

2.2 Site Survey methodology

The survey was undertaken by Louise Sawrey (Natural England Protected Species Licence Numbers: Bats - 2019-43813-CLS-CLS) on 4th January 2021.

All features that will be impacted by the project proposals were assessed for their bat roosting and/or commuting habitat. The surveyor systematically surveyed all features suitable for bats and signs of bat activity.

For any surveyed buildings:

A non-intrusive visual appraisal from the ground using binoculars, inspecting the external features of the building(s) for potential access and egress points, and for signs of bat use. An internal inspection of the building was also made, including the living areas of derelict, or abandoned buildings and the accessible roof spaces of all buildings, using an endoscope, torch, and ladders. The surveyor paid particular attention to the floor and flat surfaces, window shutters and frames, lintels above doors and windows, and carried out a detailed search of numerous features within the roof space.

For any surveyed trees:

A visual inspection from ground level using binoculars and where accessible and safe to do so, an internal inspection of potential roosting features using an endoscope, torch, and ladders.

2.3 Breeding birds and other incidental observations

The surveyor also made note of any other ecological constraints observed during the survey, notably the likelihood of presence or signs of breeding birds, and the suitability of the site for barn owls *Tyto alba*.

2.4 Suitability Assessment

All affected survey features on site were categorised according to the likelihood of bats being present, in line with best practice guidelines (Collins, 2016). The features that dictate the likelihood of roosting bats are summarised in Tables 1 and 2 below. Roost suitability is classified as high, moderate, low, and negligible and dictates any further surveys required before works can proceed.

Table 1: Features of a building that are correlated with use by bats

Likelihood of bats being present	Feature of building and its context
Higher	Buildings or structures with features of particular significance for roosting bats e.g., mines, caves, tunnels, icehouses, and cellars. Habitat on site and surrounding landscape of high quality for foraging bats e.g., broadleaved woodland, tree-lined watercourses, and grazed parkland. Site is connected with the wider landscape by strong linear features that would be used by commuting bats e.g., river and or stream valleys and hedgerows. Site is proximate to known or likely roosts (based on historical data).
Lower	A small number of possible roost sites or features used sporadically by more widespread species. Habitat suitable for foraging in close proximity, but isolated in the landscape. Or an isolated site not connected by prominent linear features. Few features suitable for roosting, minor foraging or commuting.

Table 2: Features of a tree that are correlated with use by bats

Likelihood of bats being present	Feature of tree and its context
Higher	A tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions, and surrounding habitat.
Lower	A tree of sufficient size and age to contain potential roosting features but with none seen from the ground or features seen with only very limited roosting potential.

2.5 Limitations

It should be noted that whilst every effort has been made to describe the features on site in the context of their suitability for roosting bats, this does not provide a complete characterisation of the site. This survey provides a preliminary view of the likelihood of bats being present. This is based on suitability of the habitats on site and in the local area, the ecology and biology of bats as currently understood, and the known distribution of bats as recovered during the desk study.

There were no specific limitations to the survey.

3.0 Results and Evaluation

3.1 Desk Study Results

A summary of desk study results is provided below, full details are presented in Appendix 3.

3.2 Designated sites

Details of any statutory and non-statutory designated sites within a 1km radius of the survey site, including their reasons for notification, are provided in Table 3 below.

Table 3: Designated sites within 1km radius of the site

Designated Site Name	Distance from Site (approx.)	Reasons for Notification from Natural England
Statutory Sites		
None		
Non-statutory Sites		
Pennine Edge Forest - Community Forest	Within	England's Community Forests are located in and around our largest towns and cities. The aim is to deliver a comprehensive package of urban, economic, and social regeneration, creating high-quality environments for millions of people by revitalising derelict land, providing new opportunities for leisure, recreation, and cultural activities, enhancing biodiversity, preparing for climate change, and supporting education, healthy living, and social and economic development. Each Community Forest is a partnership between local authorities and local, regional, and national partners including the Forestry Commission and Natural England. The founding basis for each Forest is a government-approved Forest Plan, a 30-year vision of landscape-scale improvement.

3.3 Landscape

A review of the designated sites, aerial photographs (Figure 1), the magic.gov.uk database and OS maps has been undertaken. Collated together, the site's local bat habitat is described below:

The site is in a semi-rural area of Greater Manchester. The landscape is dominated by large arable fields, with the town of Middleton extending adjacent to the east. There are small, scattered woodland copses and tree lines around the area, which could be used for foraging and commuting.

Priority habitats within 1km of the site are listed in Table 4.

Table 4: Priority habitat inventory within 1km (Magic.gov.uk):

Habitat	**Closest distance from site**
Network Expansion Zone	Within
Broadleaved Woodland	~150m southwest
Priority Habitat Inventory - Deciduous Woodland	~150m southwest



Figure 1: Aerial photo of site, showing landscape structure

3.4 Historical records

Existing bat records relating to the site and a surrounding 2km radius are required to conform to national guidelines. The data search is confidential information that is not suitable for public release. Arbtech was not instructed to commission to provide a standard search of existing local bat records data for a 2km radius from Greater Manchester Local Record Centre. However, given the lack of suitable roosting features at the site and a lack of granted EPSMLs near the site. This is not considered to be a significant limitation to the survey.

Table 5: Historical records of bats within 2km of the site*

Common name	Scientific binomial	Number of records	Number of roost records	Maternity roost records
BRD not required.				

*Records from the past 10 years

A search of the magic.gov.uk database for granted European Protected Species Mitigation Licences (EPSMLs) within a 1km radius of the site has been completed. Displaced bats from licenced sites <1km away from the survey site will find alternative habitat either within the mitigation measures implemented as part of the licence, or will relocate to other known roosts sites in close proximity to the licenced site. The EPSML records show that no bat licences have been issues within 1km of site.

Table 6: Granted EPSMLs (bats) within 1km of the site

Case reference of granted application	Approx. distance from site	Bat Species Effected	Licence Start Date:	Licence End Date:	Impacts allowed by licence
None					

3.5 Field Survey Results

Several trees on site was surveyed and are illustrated in the map in Appendix 1. The weather conditions recorded at the time of the survey are shown in Table 7.

Table 7: Weather conditions during the survey

Date: 4th January 2021	
Temperature	2°c
Humidity	87%
Cloud Cover	30%
Wind	2mph
Rain	None

3.6 Site Feature descriptions and photos

The picture opposite shows the scattered trees across the site. Tree species include common beech *Fagus sylvatica,* elder *Sambucus nigra* and ash *Fraxinus.* The trees are due to be removed as part of the development. As the survey was carried out in winter and the trees are not in leaf, it was easier to search for any bat potential roosting features.



Scattered trees located on the southern site boundary. The trees along the southern site boundary do not have any bat potential roosting features. The trees also had no bird nests at the time of the survey.



Further scattered trees along the southern site boundary.



There is a large common beech tree *Fagus sylvatica* located on the southwestern corner of the site boundary.



The beech tree in the southwestern corner of the site does not have any bat potential roosting features. The tree also had no bird nests at the time of the survey.



The photo opposite shows scattered trees along the northern site boundary. The trees do not have bat potential roosting features.



The photo opposite shows scattered trees along the eastern site boundary. The trees do not have bat potential roosting features.



4.0 Conclusions, Impacts and Recommendations

4.1 Informative guidelines

Bats are protected under the Wildlife and Countryside Act and Conservation Regulations (see Appendix 4 for a summary of legislation protecting bats in the UK). Legislation protects all wild birds whilst they are breeding, and prohibits the killing, injuring, or taking of any wild bird or their nests and eggs. Certain species of bird, including the barn owl, are subject to special provisions; it is an offence to disturb any bird or their young during the breeding season.

There are three possible outcomes of this survey, each with specific recommendations. These are outlined below:

Confirmed bat roost

Best practice survey guidelines (Collins, 2016) recommends additional surveys for confirmed roosts. Three further surveys are required to characterise the bat roost present including species, roost type and access points to inform a European protected species mitigation licence (EPSML) application with Natural England. Surveys must be completed during the active bat season (May – September). At least two of the surveys should be completed during the optimal survey period mid-May to August, and at least on the surveys should be a dawn re-entry survey (Collins, 2016).

Low, moderate, or high likelihood of a bat roost present

Best practice survey guidelines (Collins, 2016) recommends additional surveys for features assessed as having low to high suitability for roosting bats. One, two or three further surveys are required to confirm presence or likely-absence of a bat roost, based on a low, medium or high roost likelihood evaluation. Surveys must be completed during the active bat season (May – September). If more than one survey is recommended, at least one of them should be completed during the optimal survey period mid-May to August, and at least one the surveys should be a dawn re-entry survey (Collins, 2016). If two or one further survey is recommended these surveys must be completed during the optimal survey period (mid-May to August). For low and moderate roost likelihood evaluation the survey effort recommended at this stage is iterative and if bats roosts are confirmed in the building, a further survey will be required to provide sufficient information to inform an EPSML application to Natural England.

Negligible likelihood of a bat roost present

Buildings assessed as comprising negligible suitability for roosting bats do not normally require further surveys. However, if bats are found during any stage of the development, work should stop immediately and Arbtech should be contacted for further advice.

4.2 Evaluation

Taking the desk-based assessment and site survey results into account, the following value for roosting bats has been placed on each site survey feature.

Table 8: Evaluation of the building on site.

Ref	Survey assessment conclusions (with justification)	Foreseen impacts	Recommendations	Enhancements The Local Planning Authority has a duty to ask for enhancements under the NPPF (2019)
Bats	The trees on site have negligible habitat value for roosting bats. There are no suitable roosting features on the trees.	Bats are very unlikely to be roosting within the trees and as such, there are not anticipated to be any impacts on bats as a result of the proposed works.	No further surveys required. In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licenced ecologist contacted for further advice.	A "Habibat Access Tile" can be installed in the new dwelling.
Birds	No evidence of nesting birds was found during the survey. However, birds could use the vegetation on site for nesting.	The trees on site will be removed. Any trees with active bird nests will be destroyed.	Works should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the building/vegetation should be undertaken immediately prior to the commencement of work. All active nests will need to be retained until the young have fledged.	Install one bird box on a retained tree e.g., Schwegler No 17 swift nest box Schwegler 1B nest boxes Schwegler 2H Robin Boxes Or a similar alternative brand. Schwegler 1B and Schwegler 2H nest boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain, and strong sunlight. Small-hole boxes are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole.

5.0 Bibliography

- British Trust for Ornithology (2016) www.bto.org/about-birds/nnbw/putting-up-a-nest-box
- Collins, J. (2016). Bat Surveys for Professional Ecologists —Good Practice Guidelines, 3rd edition, Bat Conservation Trust, London.
- Garland & Markham (2008) Is important bat foraging and commuting habitat legally protected?
- Google Earth (2021) accessed on 04/01/2021.
- Magic database (2021) http://www.magic.gov.uk/MagicMap.aspx accessed on 04/01/2021.
- Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough.
- National Planning Policy Framework (2019) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf

Appendix 1: Survey Plan



Appendix 2: Proposed Site Plan

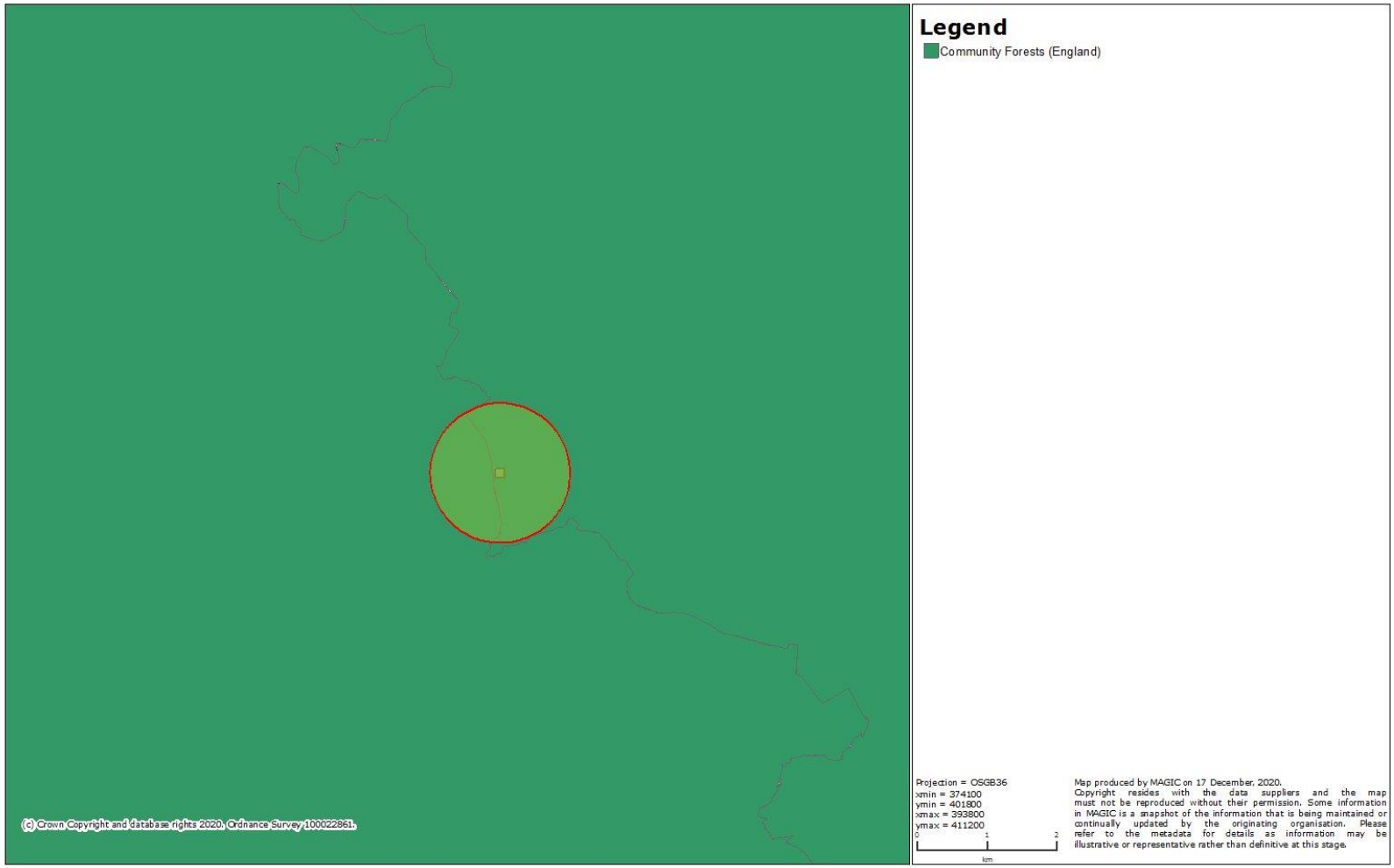
None provided.

Appendix 3: Desk Study Information

Full historical records can be provided on request.

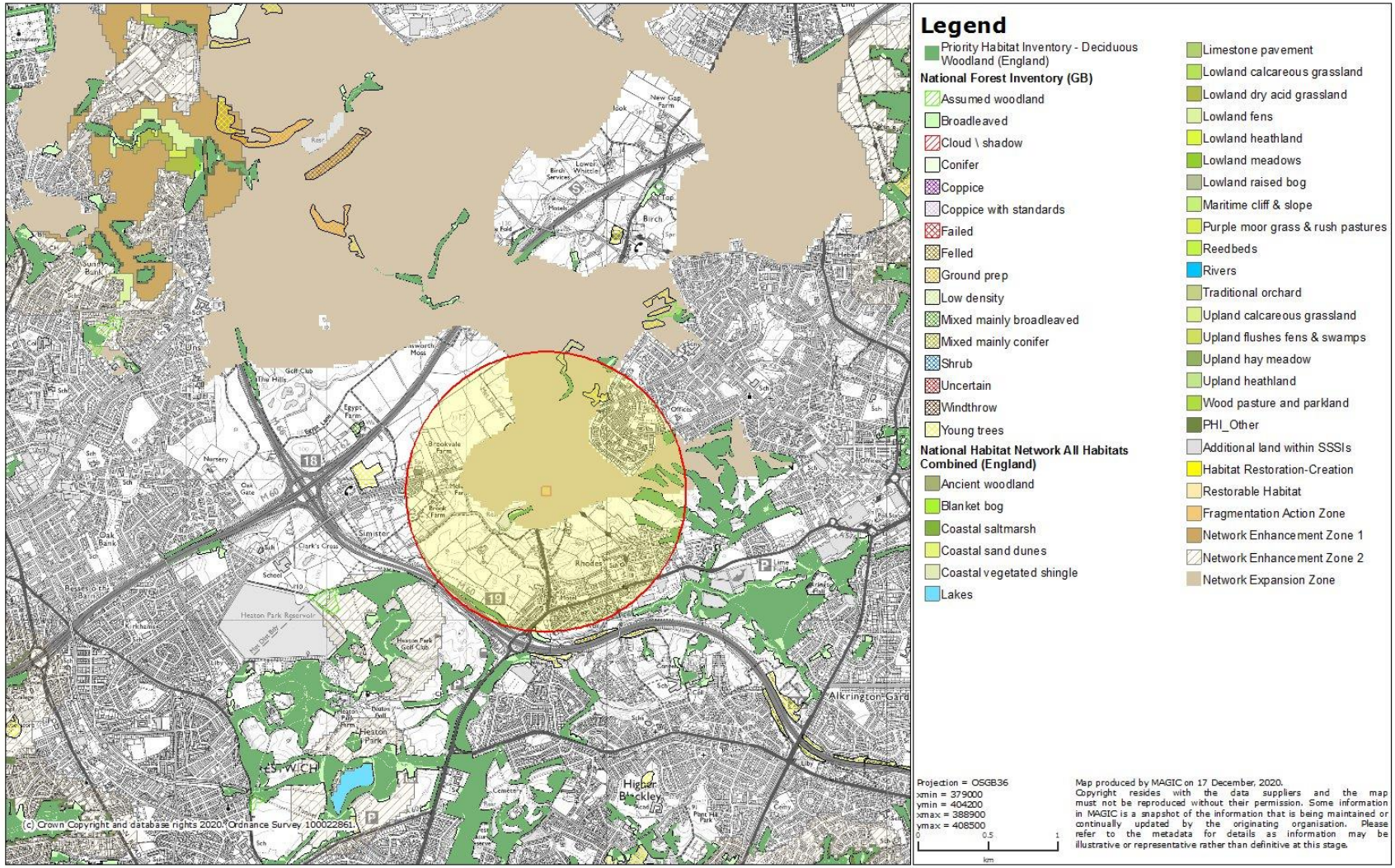
MAGIC

Non-statutory designations



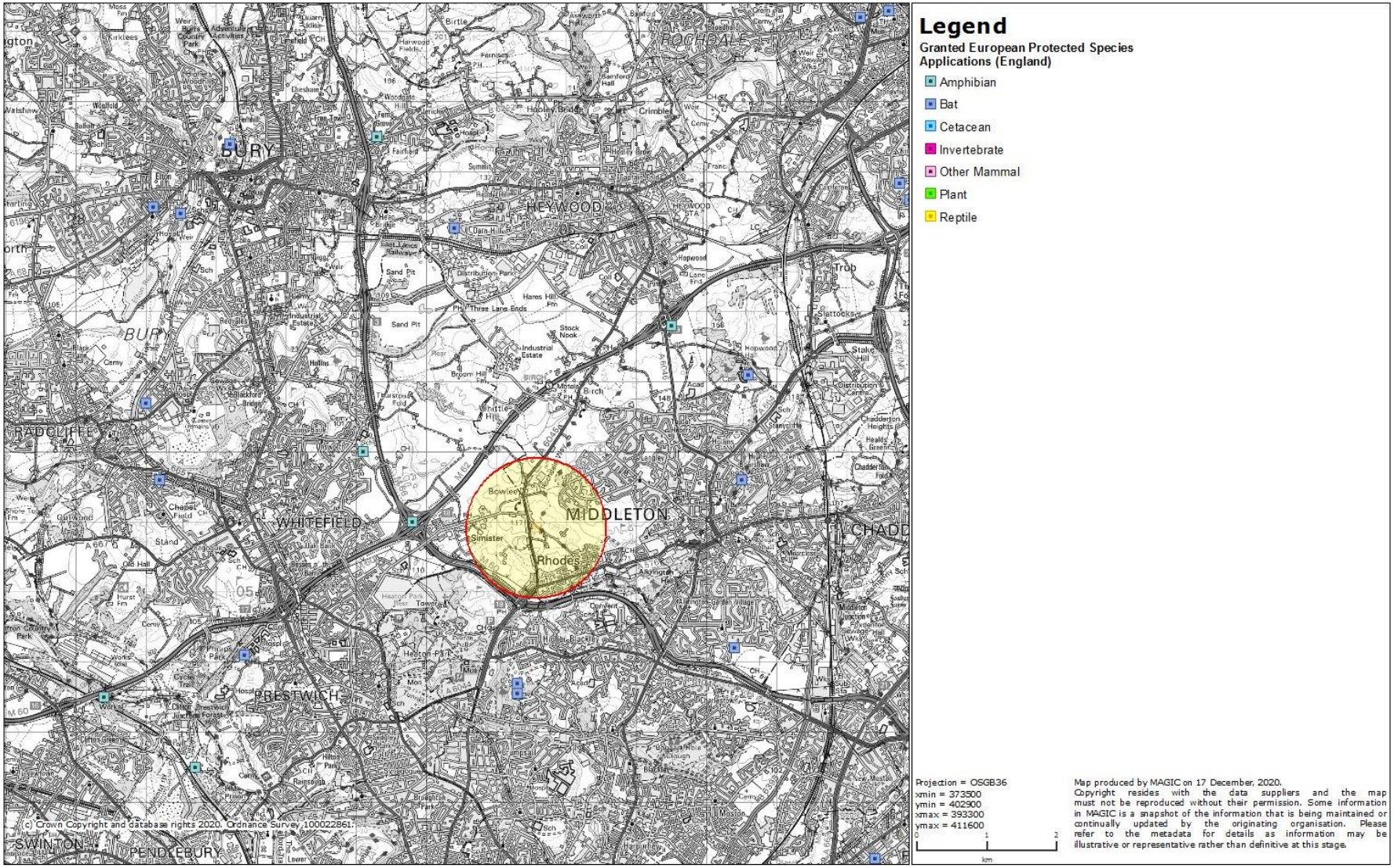
MAGIC

Habitats



MAGIC

EPSMLs



Appendix 4: Legislation and Planning Policy related to bats

LEGAL PROTECTION

All species of bat are fully protected under ***The Conservation of Habitats and Species Regulations 2017*** through their inclusion on Schedule 2.

Regulation 43: Protection of certain wild animals - offences

(1) A person is guilty of an offence if they:

(a) Deliberately captures, injures, or kills any wild animal of a European protected species,

(b) Deliberately disturbs wild animals of any such species,

(c) Deliberately takes or destroys the eggs of such an animal, or

(d) Damages or destroys a breeding site or resting place of such an animal,

(2) For the purposes of paragraph (1) (b), disturbance of animals includes in particular any disturbance which is likely—

(a) To impair their ability:

(i) To survive, to breed or reproduce, or to rear or nurture their young; or

(ii) In the case of animals of a hibernating or migratory species, to hibernate or migrate; or

(b) To affect significantly the local distribution or abundance of the species to which they belong.

Bats are also protected under the ***Wildlife and Countryside Act 1981 (as amended)*** through their inclusion on ***Schedule 5***. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering, or exposing for sale, possession or transporting for purpose of sale

NATIONAL PLANNING POLICY (ENGLAND)

National Planning Policy Framework 2017

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration, and re-creation. The protection and recovery of priority species (considered likely to be those listed as UK Biodiversity Action Plan priority species) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and the Biodiversity Duty

Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity'. This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

Effect on development works:

A European Protected Species Mitigation (EPSM) Licence issued by Natural England will be required for works likely to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g., survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficiency and success to be monitored. The legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded *de facto* protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost (Garland & Markham, 2008).

There are 17 species of bat breeding in England and Natural England issues licences under Regulation 55 of the Habitats Regulations to allow you to work within the law.

Licences are issued for specific purposes stated in the Regulations, if the following three tests are met:

- The purpose of the work meets one of those listed in the Habitats Regulations (see below);
- That there is no satisfactory alternative;
- That the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status (FCS) in their natural range

The Habitats Regulations permits licences to be issued for a specific set of purposes including:

1. ***include preserving public health or public safety or other imperative reasons of over-riding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment;***
2. scientific and educational purposes,
3. ringing or marking
4. conserving wild animals

Development works fall under the first purpose and Natural England issues bat mitigation licences for developments.