Bat Survey - Preliminary Roost Assessment

Linton House, 2a Wellington Road, Fallowfield, Manchester M14 6EQ

Union Chapel (Baptist) Fallowfield

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Executive summary

Arbtech Consulting Ltd. undertook a Preliminary Roost Assessment at Linton House, 2a Wellington Road, Fallowfield, Manchester M14 6EQ on 19/09/2018. The aim of the assessment was to consider the value and suitability of the structures for roosting bats.

The development proposals are 'To demolish the existing building fully and leave the site clear and erect a 2metre high hit and miss timber fence around the perimeter of the site'.
A planning application is being prepared to Manchester City Council.

Recommendations - This is work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent

Survey feature	Recommendations
B1 – This building has a **negligible** likelihood of supporting roosting bats.	No further surveys. Bats are very unlikely to be roosting within this building and as such, there are not anticipated to be any impacts on bats as a result of the proposed works.
B1 – No evidence of nesting birds was found during the survey; however, birds could use the vegetation on site for nesting.	Any building/tree and scrub removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the building/trees and scrub to be removed should be undertaken immediately prior to clearance by an experienced ecologist. All active nests will need to be retained until the young have fledged.

For full justification of these recommendations, please go straight to section 4.0 Conclusions, Impacts and Recommendations. Otherwise, the full report starts below.

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1.0 Introduction and Context

1.1 Background

Arbtech were commissioned by Union Chapel (Baptist) Fallowfield to undertake a Preliminary Roost Assessment (PRA) at Linton House, 2a Wellington Road, Fallowfield, Manchester M14 6EQ. The assessment is informed by the Bat Conservation Trust Publication *Bat Surveys for Professional Ecologists – Good Practice Guidelines* (Collins, J. (Ed) 2016).

No previous reports have been produced for this site by Arbtech Consulting Ltd.

1.2 Site Context

The site is located at National Grid Reference SJ 85283 94011 and comprises an area of approximately 0.2ha. There is one building within the site boundary. One building was surveyed as this will be affected by the proposed development.

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, information has been requested from the local Records Centre Greater Manchester Local Record Centre (GMLRC).
- 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 European Protected Species Mitigation Licensing if appropriate

A survey plan is presented in Appendix 1, the proposed Project Plan is included in Appendix 2 (where available), desk study results are provided in the Appendix 3 and a summary of relevant legislation can be found in Appendix 4.

1.4 Project Description

This report is prepared in support of a planning application that is being prepared for submission to Manchester City Council.

The proposed development is described as: To demolish the existing building fully and leave the site clear and erect a 2metre high hit and miss timber fence around the perimeter of the site.

A planning application is being prepared to Manchester City Council.

The proposed site plan is included in Appendix 2 (where available).

2.0 Methodology

2.1 Desk Study methodology

Existing bat records relating to the site and a surrounding 2km radius (the study area) are required to conform with national guidelines and these will need to be requested from GMLRC. The data search is confidential information that is not suitable for public release.

A review of the following information sources has also been undertaken to inform the assessment:

- Landscape structure using aerial images from Google Earth and OS maps
- Designated sites, habitat and granted EPSL records held on Magic.gov.uk.

2.2 Site Survey methodology

The survey was undertaken by Louise Sawrey (accredited agent Natural England Bat Licence Number: 2016-22119-CLS-CLS from 23/08/2018) on 19/09/2018.

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.

<u>For any surveyed buildings:</u>

A non-intrusive visual appraisal from the ground using binoculars, inspecting the external features of the building(s) for potential access/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.

<u>For any surveyed trees</u>

A visual inspection from ground level using binoculars and where accessible an internal inspection of suitable 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, J. (ed) 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/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/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 – evaluation of the methodology

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 the 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.

Specific limitations to the survey were that asbestos is present within the property, PPE was worn as a precaution.

3.0 Results and Evaluation

3.1 Desk Study Results

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

3.2 Designated sites

There are no statutory designated sites and no known non-statutory sites within the study area.

Table 3: Designated sites within 2km radius of the site

Designated Site Name	Distance from Site (approx.)	Reasons for Notification from Natural England and/or BRD or LPA policy maps
Statutory Sites		
None	N/A	N/A
Non-statutory Sites		
None	N/A	N/A

3.3 Landscape

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

The site is in a residential area of Manchester. The landscape is dominated by residential buildings with gardens. There are small, scattered woodland copses and tree lines around the area, which could be used for foraging and commuting.

The surrounding buildings have missing and broken roof tiles which will provide bats with roosting potential.

Priority habitats within 2km of the site are listed in Table 4.

Table 4: Priority Habitat Inventory within 2km (Magic.gov.uk):

Habitat	**Closest distance from site**
Deciduous Woodland	~90m south-east
Broadleaved Woodland	~660m south-east
Wood pasture and Parkland BAP Priority Habitat	~600 southwest
National Forest Inventory (GB) – Mixed mainly broadleaved woodland	~1650m southwest

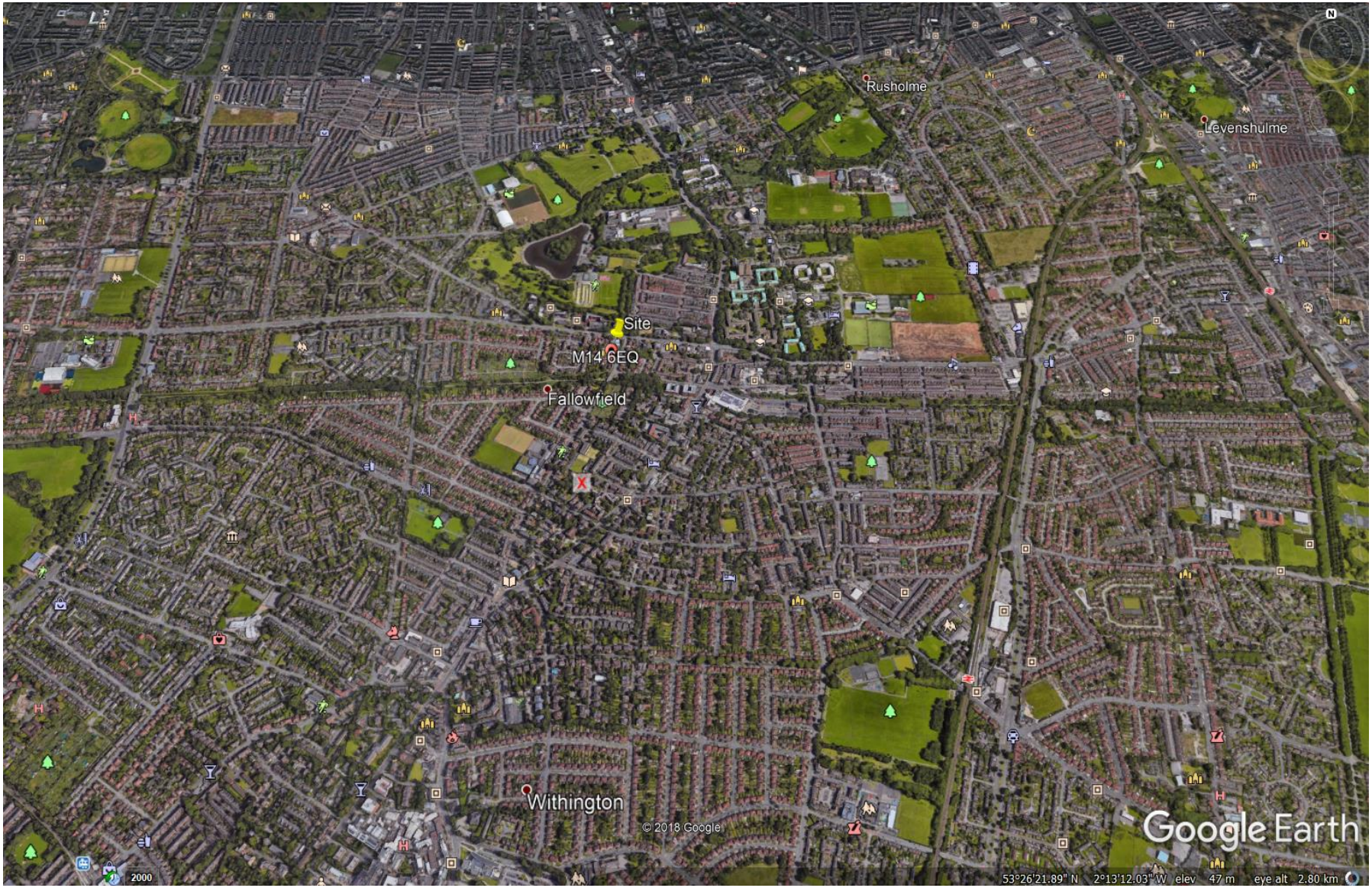


Figure 1: Aerial photo of site, showing landscape structure

3.4 Historical records

The County biological records centre GMLRC have been commissioned to provide bat records for within 2km of the site. These can be provided on request and once received will be analysed and summarised in Table 5.

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
Common Pipistrelle	*Pipistrellus pipistrellus*	36	4	1
Soprano Pipistrelle	*Pipistrellus pygmaeus*	12	0	0
Pipistrelle sp.	*Pipistrellus*	67	9	0
Noctule	*Nyctalus noctula*	11	0	0
Brown Long Eared Bat	*Plecotus auritus*	3	0	0
Daubenton's Bat	*Myotis daubentonii*	4	0	0
Bat sp.	*Chiroptera*	4	0	0

A search of the Magic database for granted European Protected Species Mitigation Licences (EPSMLs) for bats within a 2km radius found one licenced site and details are provided in Table 6 below.

Table 6: Granted EPSMLs (bats) within 2km 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
2016-21779-EPS-MIT	1650m to the north	C-PIP	01/04/2016	01/04/2021	Destruction of a resting place

The EPSML records show that roosts of one species of bat (Common pipistrelle) has recently been destroyed.

3.5 Field Survey Results

There is one survey building. This building is designated as B1 and is illustrated in the map in Appendix 1. The environmental variables recorded at the time of the survey are shown in Table 7.

Table 7: Environmental variables during the survey

Date: 19/09/2018	
Temperature	17°C

Humidity	50%
Cloud Cover	73%
Wind	20mph
Rain	Light

3.6 Site Feature descriptions and photos

Building B1 Description

Exterior Description

West elevation shown in photo opposite.

B1 is a former student residential block. It is brick-built with concrete detail and a flat roof.

The brickwork which is in very good condition with no gaps or broken bricks.

Photos



The roof consists of large metal corrugated sheets. The roof is tightly sealed with no gaps into the building.





Sections of the roof are flat and have a waterproof lining.



The north elevation shown in the photo opposite.

The roof consists of slopped and flat areas made with metal sheets that overlap at the eaves. These are tight fitting and no gaps are present that would provide suitable roosting features for bats.



B1 Interior description

The loft area is located in the northeast of B1.

The main loft space consists of concrete blocks and the underside of the flat roof is constructed from timber beams and chip board.

The loft space is tightly sealed with no gaps.



The loft space also incorporates a boiler area.

This area is tightly sealed with no gaps.



The underside of the flat roof in the boiler area is also constructed from wood chip board. The boards are tight fitting with no gaps visible.



Fibrous loft insulation inside the part of roof space is located in the northeast section of B1. This section of the loft is approximately 6.5m in width, 8m in length and 1m in height.

The roof structure in this area is tightly sealed with no gaps.



A tear in the lining in the roof space which is water damaged which is located on the south elevation of the loft area.



There is a window inside the car parking area located on the south elevation, which is tightly sealed and has no gaps.



Car park entrance into the building on the south elevation. The entrance is tightly sealed with no gaps.



Evidence of bats

No evidence of bats was located internally or externally during the survey.

Breeding birds and other incidental observations

No evidence of nesting birds was located internally and externally during the survey.

4.0 Conclusions, Impacts and Recommendations

4.1 Informative guidelines

Bats are protected under the Wildlife and Countryside Act and Conservation Regulations; see Appendix 3 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, J. 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/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, J. 2016). The survey effort recommended at this stage is iterative and if bats are recorded emerging from the buildings, 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 a suitably qualified ecologist should be contacted to seek further advice.

Appropriate justification for this assessment is provided in Section 3 and Tables 1 and 2 of this report.

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 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 and circular 06/2005: Biodiversity and Geological Conservation. Para.99
B1	This building has a **negligible** likelihood of supporting roosting bats.	Bats are very unlikely to be roosting within this building and as such, there are not anticipated to be any impacts on bats as a result of the proposed works.	No further surveys required.	N/A As the proposed plans involve the demolition of the existing building and leaving the site clear with a 2m fence around the perimeter.
B1	No evidence of nesting birds was found during the survey; however, birds could use the vegetation on site for nesting.	Any works which affect the building and vegetation on site could have an impact on nesting birds.	Any building/tree and scrub removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the building/trees and scrub to be removed should be undertaken immediately prior to clearance by an experienced ecologist. All active nests will need to be retained until the young have fledged.	As above

5.0 Bibliography

- British Trust for Ornithology (2016) www.bto.org/about-birds/nnbw/putting-up-a-nest-box
- Collins, J. (ed.) (2012). 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 (2018) accessed on 19/09/2018.
- Magic database (2018) http://www.magic.gov.uk/MagicMap.aspx accessed on 19/09/2018.
- Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough.

Appendix 1: Survey Plan



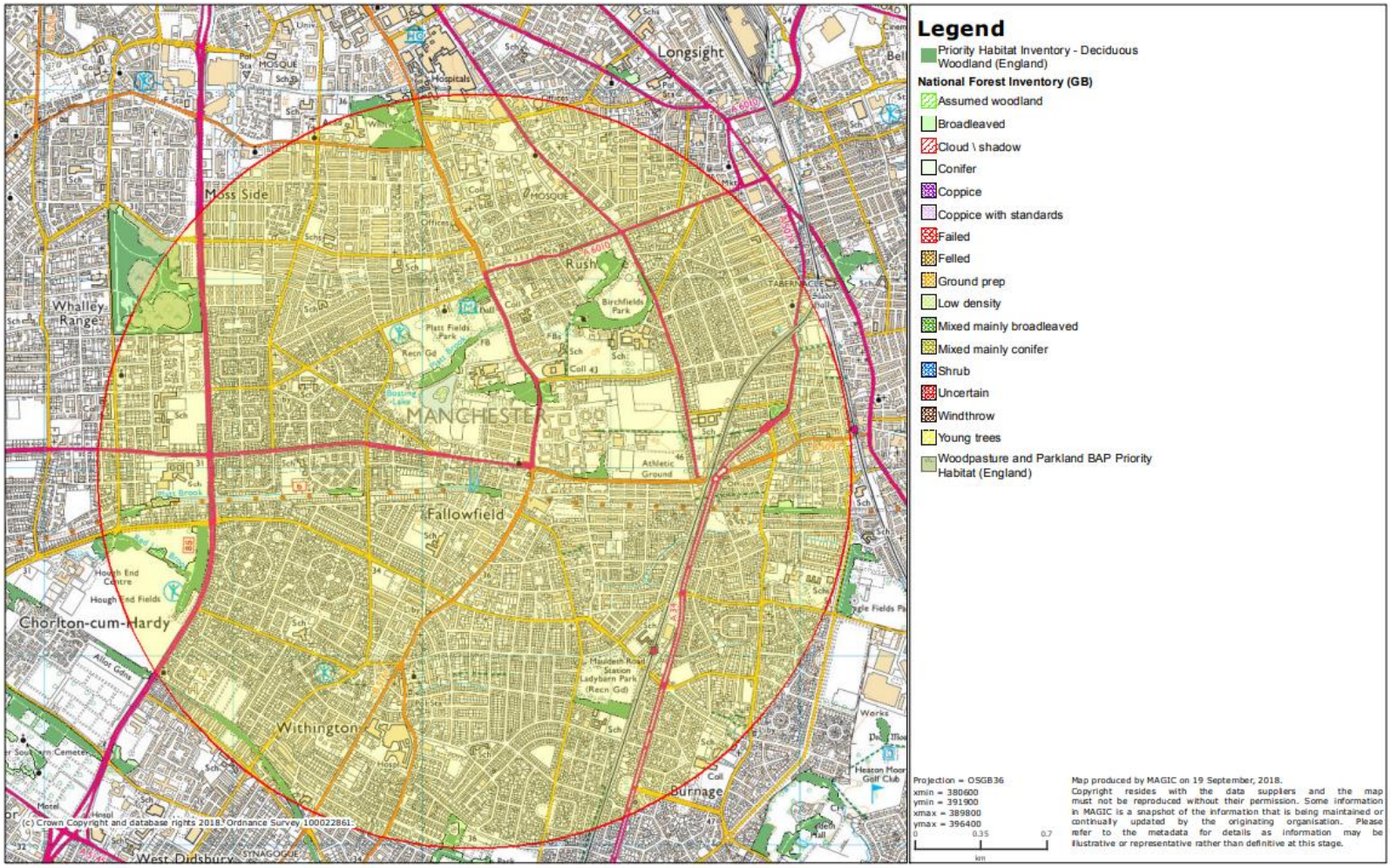
Appendix 2: Proposed Site Plan

None provided

Appendix 3: Desk Study Information

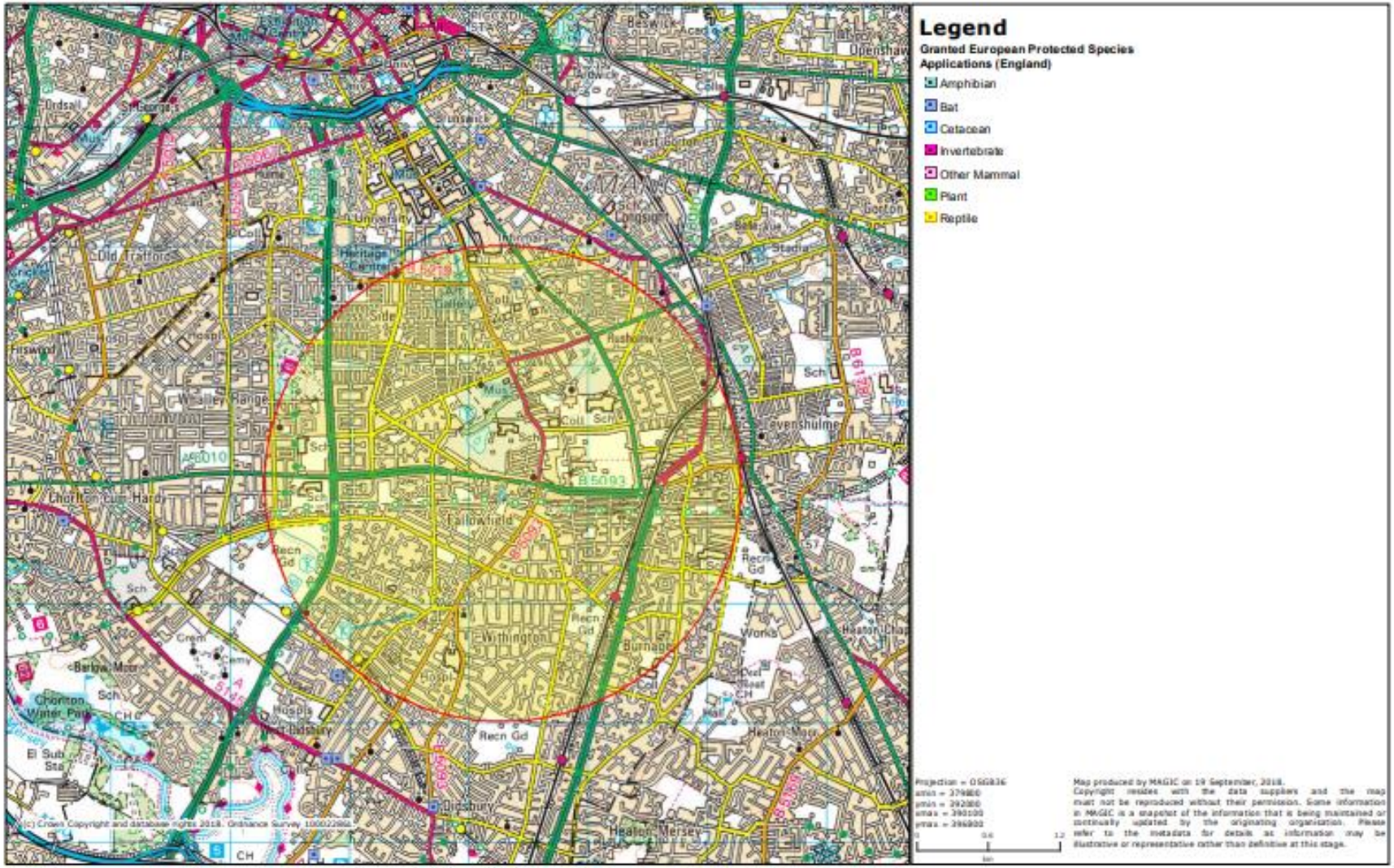
MAGIC

Magic Map - Habitats



MAGiC

EPSLs within 2km of site



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 2010 (as amended) through their inclusion on Schedule 2.

Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. all bats)
- Deliberate disturbance of bat species as:

  a) to impair their ability:

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

  (ii) to hibernate or migrate

  b) to affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

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

Effect on development works:

A European Protected Species Mitigation (EPSM) Licence issued by the relevant statutory authority (e.g. 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/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).

NATIONAL PLANNING POLICY (ENGLAND)

National Planning Policy Framework

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 (Section 42 in Wales) 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.