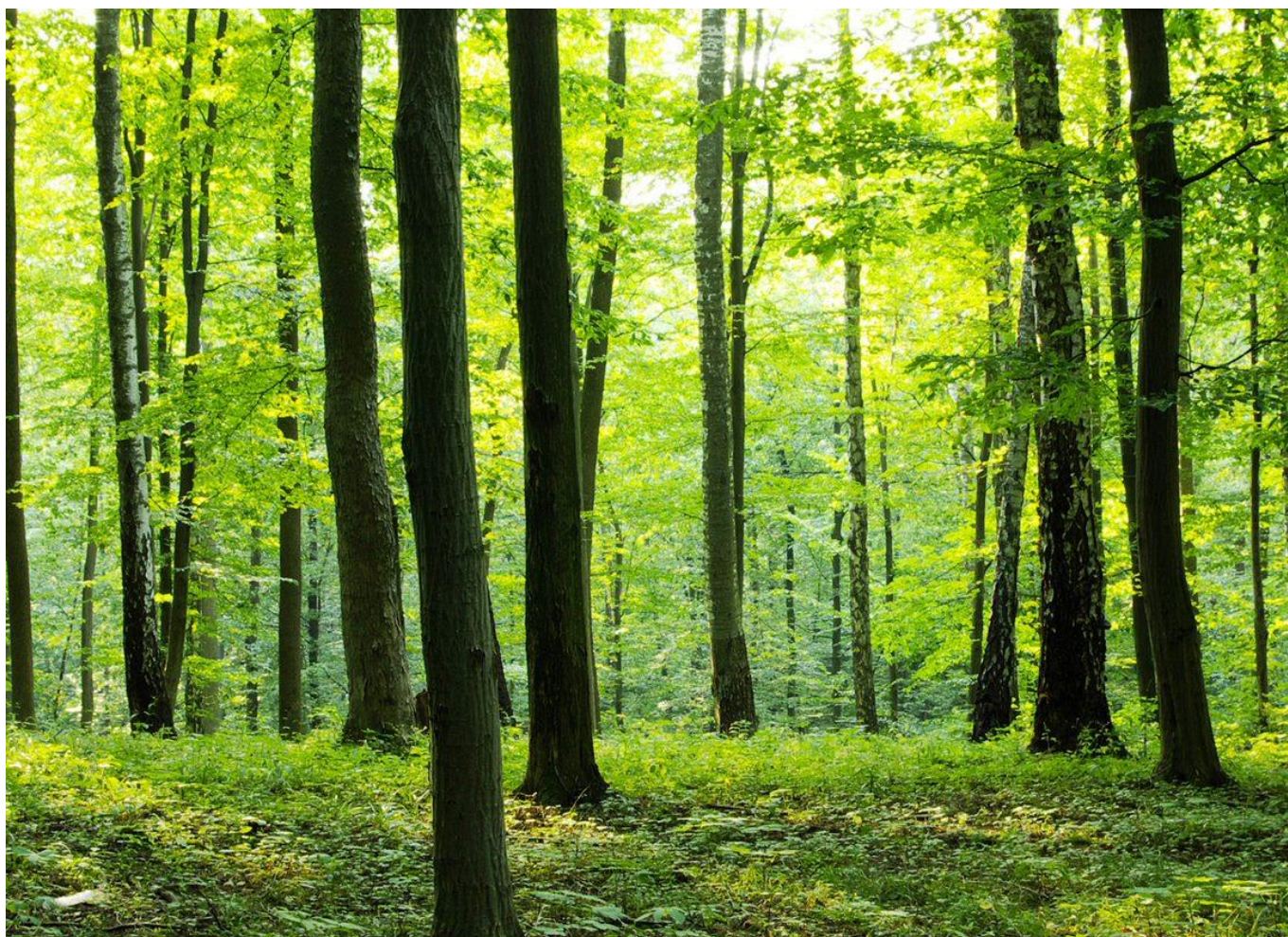




DAY Architectural Ltd.

North Manchester General Hospital

Preliminary Roost Assessment Report

2486422

DECEMBER 2023

RSK
biocensus
EXPERTS IN ECOLOGY

RSK GENERAL NOTES

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Title: North Manchester General Hospital - Preliminary Roost Assessment

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DAY Architectural Ltd.

North Manchester General Hospital - Preliminary Roost Assessment

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EXECUTIVE SUMMARY

This report presents the results of a preliminary bat roost assessment (PRA) survey carried out of eight buildings at the North Manchester General Hospital, Manchester on 12 December 2023. The surveys were carried out by RSK Biocensus on behalf of DAY Architectural Ltd to support the proposed demolition of nine buildings of the hospital complex.

RSK Biocensus have previously recorded transitional common pipistrelle (*Pipistrellus pipistrellus*) bat roosts within the hospital complex buildings. These buildings which contained the roost have been either been demolished or altered under an appropriate Natural England licence. It is likely the bats which were using the previous roosts are now using other buildings within the hospital complex and/or within the bat boxes erected as part of the licence mitigation.

The Department of Infectious Diseases and Tropical Medicine (Building 47), OPD 'F' (Building 54), Doctors Home (Building 70), Staff Gym (Building 71) and Homewood - Diabetes / Mediscreen (Building 75) have moderate potential for supporting roosting bats. The Ante-Natal Department (Building 32) and Waste Transfer Station (Building 50) have low potential for roosting bats. Sub-station 10 (Building 59) had negligible potential for roosting bats.

Before demolition works, these buildings should be subject to dusk emergence surveys to establish the presence / likely absence of roosting bats. These surveys should be carried out with the bat active period (April to September, inclusive). As transitional bat roosts have been previously recorded within the hospital complex it is recommended surveys are started during the Spring transitional period which is typically during suitable weather in April.

The sub-station building (Building 59) has negligible potential for roosting bats and no further surveys for bats are required prior to the proposed works.

A mature Willow tree with two bat mitigation boxes is present between the Staff Gym (Building 71) and Homewood - Diabetes/Mediscreen (Building 75). Prior to works, the bat boxes will need to be inspected by a licensed ecologist. If the boxes have contain no bat field signs they must be relocated to an appropriate tree close to their existing location. In the event the boxes contain bat field signs such as droppings, further surveys will be required.

A number of burrows are present on the site, possibly created by foxes. Monitoring is recommended to confirm if foxes are using them. Subsequently, one-way gates should be fitted before the fox breeding season (January to February) and immediately before works in the immediate vicinity of the den.

The invasive non-native species Japanese Knotweed (*Reynoutria japonica*) is present on the site. It is illegal to cause this to spread in the wild. Eradication or adherence to an invasive species management plan is required to prevent the spread of this species during works.

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1.0 INTRODUCTION

1.1 Purpose of this report

- 1.1.1 This report presents the results of a preliminary roost assessment (PRA) for bats of eight buildings at the North Manchester General Hospital, Manchester (hereafter referred to as the site) in December 2023. The site location is shown in Figure 1. (OS grid reference: SD 84881 02381. The buildings locations are shown in Figure 2. The surveys were carried out by RSK Biocensus on behalf of DAY Architectural Ltd. in connection with the proposed demolition of eight buildings (Buildings 32, 47, 50, 54, 59, 70, 71, 75) located on the site.
- 1.1.2 This report will detail the likelihood of bat presence within these buildings, and provide recommendations for mitigation should it be required.

1.2 Ecological context

- 1.2.1 North Manchester General Hospital is on the northern outskirts of the city of Manchester. The hospital itself comprises mainly concrete and hardstanding, with a limited number of scattered trees throughout. East of the hospital is a c. 60 m wide strip of woodland, with a thin strip of grassland located in its middle. On all other sides the hospital is bordered by semi-urban housing, with a small recreational park located to its south west. The surrounding landscape comprises of further residential development with small areas of woodland / lines of trees intermixed.

2.0 METHODS

2.1 General

- 2.1.1 The surveys were carried out in accordance with the Bat Conservation Trust (BCT) good practice guidelines (Collins, 2023), which contain prescribed methodologies for undertaking preliminary roost assessment (PRA) for bats.
- 2.1.2 The PRA was completed on 12 December 2023 by Lewis Wright and assisted by Claire Hesketh and Iveta Nikandrovaite of RSK Biocensus. Lewis is a principal ecological consultant who holds a Class 2 Natural England bat licence (licence number: 2017-32926-CLS-CLS) and is experienced in this type of survey.

2.2 Background data search

- 2.2.1 A background data search was made in December 2023 to identify any existing roost information relating to the Manchester North General Hospital site, and a list of sources is given in Table 1.

Table 1: Data sources for background data search

Information obtained	Available from
Protected and noteworthy species records (bats)	Greater Manchester Local Record Centre
Designated site locations and citations (which include bats as part of their site designation)	Natural England website; Joint Nature Conservation Committee (JNCC) website; Greater Manchester Local Record Centre
Designations and legal protection of noteworthy species (bats)	Joint Nature Conservation Committee (JNCC) website

- 2.2.2 A search was made for information on statutory designated sites of national and international importance (which include bats as part of their site designation) within 2 km of the site boundary and non-statutory designated site within a minimum of 2 km.
- 2.2.3 A search was also made for existing bat roost information relating to the site and its surroundings.

2.3 Preliminary roost assessment

- 2.3.1 The exterior of the eight buildings were surveyed for features and characteristics that may be used by roosting bats. Potential access points into roof voids were noted as were as any crevices and voids in the external structure which could provide roosting opportunities.
- 2.3.2 The buildings were assessed according to the following factors that influence the likelihood of bats roosting:
- Surrounding habitat: whether there are potential flight-lines and foraging areas for bats nearby.
 - Construction detail: the type and construction of architectural features such as attics, soffit boxes, lead flashing and hanging tiles that could be used by roosting bats.
 - Building condition: whether disrepair has opened potential bat-access points (especially in roofs).
 - Potential bat-access points: whether there is flight and crawl access.
 - Potential roosting locations: description of all bat-accessible voids, cracks and crevices.
- 2.3.3 The description of the buildings were recorded and digital photographs were taken. The buildings' potential to support roosting bats was then classified using the criteria in Table 2 (Collins, 2023).

Table 2: Categorisation of roosting habitats.

Category	Description
Negligible suitability	Negligible habitat features on the site likely to be used by roosting bats.
Low suitability	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 on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain PRFs but with none seen from the ground of features seen with only very limited roosting potential.
Moderate suitability	A structure or tree 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 for 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).
High suitability	A structure or tree with one or more potential roost sites that are obviously suitable for 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.
Confirmed roost	Bats or evidence of bats recorded within the building during the initial inspection surveys or during dusk/dawn surveys. A confirmed record (supplied by records centre/local bat group) would also apply.

2.4 Survey constraints

- 2.4.1 Access could not be obtained to the loft spaces of the buildings at the time of the survey. A detailed external inspection for all buildings was undertaken and this constraint has been considered when assessing the buildings suitability to support roosting bats, with a precautionary approach adopted where necessary.

3.0 RESULTS

3.1 Background data search

- 3.1.1 There are no statutory or non-statutory designated sites which include bats as part of their site designation within 2 km of the site.
- 3.1.2 The desk study returned at least six species within 2 km of the site boundary. This included brown long-eared bat (*Plecotus auritus*), common pipistrelle (*Pipistrellus pipistrellus*), Daubenton's bat (*Myotis daubentonii*), Natterer's bat (*Myotis nattereri*), noctule (*Nyctalus noctula*) and soprano pipistrelle (*Pipistrellus pygmaeus*), as well as unidentified *Myotis* and *Pipistrellus* bats.
- 3.1.3 The BDS also returned a number of common pipistrelle and soprano pipistrelle roosts within 2 km of the site. There are records of two common pipistrelle roosts within North Manchester Hospital site recorded in 2021.

3.2 Preliminary roost assessment

Building Inspections

- 3.2.1 There are eight buildings on the site that are due to be demolished, each of which was subject to a detailed external inspection. Five buildings have been identified as having moderate potential for roosting bats, two as low and one as having negligible potential. The results of the PRA survey are detailed in *Table 3* and *Figure 2*.

Table 3: Results of the PRA of buildings.

Building Reference	Description of PRFs	Roost potential
Ante-Natal Department (Building 32)	Single-storey building with a flat roof and constructed of brick. The building was in use at the time of the survey. PRFs include holes behind the cladding, gaps in the cladding on the southern aspect, and a gap in the air brick on the southern side.	Low
Department of Infectious Diseases and Tropical Medicine (Building 47)	Single-storey portacabin-style building with a flat roof and sections of hanging tiles. The building was not in use at the time of the survey. PRFs include missing and cracked hanging tiles, gaps between wall tiles and the adjacent wall, holes in vertical cladding boards, holes in the roof with direct access into the building, and a ground-level hole allowing direct access into the cellar.	Moderate
Waste Transfer Station (Building 50)	Single-storey brick garage building with a pitched tile roof. The building was in use at the time of the survey. PRFs include a gap underneath the north-eastern and south-western gables, open ventilation tiles, and broken soffits on the western elevation.	Low

Building Reference	Description of PRFs	Roost potential
OPD 'F' (Building 54)	Single-storey brick-built building with rendering on the southern aspect and a multi-pitched tiled roof. The building was in use at the time of the survey. PRFs include gaps in the corner above the gutter on the eastern side, multiple lifted tiles on all aspects, holes in fascia boards, and holes in the brickwork.	Moderate
Sub-station 10 (Building 59)	Single-storey modern pump house constructed of red brick with a metal sloped roof. No PRFs were identified.	Negligible
Doctors Home (Building 70)	Three-storey brick building with a pitched tiled roof. The building was not in use at the time of the survey. PRFs found include a missing soffit board on the corner of the southern aspect and missing lead flashing on the chimney.	Moderate
Staff Gym (Building 71)	Two-storey brick building with a pitched tiled roof featuring hip tiles. The building was not in use at the time of the survey. PRFs include missing ridge tiles, lead flashing along the single-storey entrance, and missing tiles on the apex.	Moderate
Homewood - Diabetes/Mediscreeen (Building 75)	Single-storey brick building with a multi-pitched tiled roof. The building was in use at the time of the survey. PRFs include damaged fascias along northern and western elevations, gaps between fascia and brickwork on the southern elevation, multiple rotten holes in soffit boxes, multiple service holes, and gaps around the skylights.	Moderate

3.3 Trees

- 3.3.1 A large Willow (*Salix* sp.) tree with two bat mitigation boxes has been recorded between the Staff Gym (Building 71) and Homewood - Diabetes/Mediscreeen (Building 75). It is unknown from the ground level tree assessment whether the bat boxes have been used by roosting bats. The tree includes numerous snapped branches and cavities within the bark which are potentially suitable for roosting bats.

3.4 Other species

- 3.4.1 A number of large burrows, presumably created by foxes, has been recorded in close proximity to surveyed buildings.

3.5 Invasive non-native species (INNS)

- 3.5.1 Japanese Knotweed (*Reynoutria japonica*) was recorded growing along the Department of Infectious Diseases and Tropical Medicine (Building 47). This species is invasive and is listed under Schedule 9 of the Wildlife and Countryside Act 1981.

4.0 EVALUATION AND CONCLUSIONS

4.1 Preliminary Roost Assessment

- 4.1.1 The Department of Infectious Diseases and Tropical Medicine (Building 47), OPD 'F' (Building 54), Doctors Home (Building 70), Staff Gym (Building 71) and Homewood – Diabetes/Mediscreeen (Building 75) have been classified as having moderate potential for supporting roosting bats. The Ante-Natal Department (Building 32) and Waste Transfer Station (Building 50) have been classified as having low potential for roosting bats.
- 4.1.2 In line with best practice guidelines (Collins, 2023), structures offering a moderate potential for roosting bats should be subject to a minimum of two dusk emergence surveys and structures with low bat roost potential should be subject to a single dusk emergence survey. Where two surveys are required, these should be undertaken a minimum of three weeks apart.
- 4.1.3 The surveys aim to identify if bats are using the buildings and if so, which species are present and the type of roost. These surveys should be carried out within the bat active period (April to September, inclusive), with at least one of the surveys for each building undertaken within the transitional period (April) and one during the maternity period (May to August). Where only one survey is required (Buildings 32 and 50) the survey should be completed between May and August.
- 4.1.4 Following on from these dusk and dawn surveys, the classifications of the buildings will be re-assessed. Where the classification are up-graded further surveys would be required, and correspondingly if the classification is down-graded a reduced number of surveys may be required. Re-classification would be influenced by the number and species of bats noted within the first dusk / dawn bat survey.
- 4.1.5 If the surveys identify roosting bats within the any of the buildings, then a licence from Natural England will be required before works start. The licence will allow works affecting the roost to proceed legally, once planning permission has been granted from the local planning authority. The data collected during the recommended emergence and re-entry surveys, would be used to inform a Natural England licence application, if required. The licence application requires a robust mitigation scheme that provides like for-like roost replacement, where possible and a schedule of works that minimises disturbance, i.e. demolition works to be undertaken outside the bat active period. Licence application packages take approximately two weeks to compete and Natural England aim to review licence applications within 30 working days.
- 4.1.6 The substation (Building 59) offer negligible potential for roosting bats and no further surveys for bats are required prior to the proposed works.

4.2 Trees

- 4.2.1 The Willow tree with two bat mitigation boxes located between the Staff Gym (Building 71) and Homewood – Diabetes/Mediscreeen (Building 75) will be affected by the

demolition works. Therefore, a suitably licensed ecologist will need to inspect the bat boxes to determine if the bats are using them.

- 4.2.2 If no bat field signs are found within the boxes they must be relocated to a suitable tree close to their existing location. In the event bat field signs are found further surveys to determine species, number of bats and roost type will be required between May and September.
- 4.2.3 The tree containing the bat boxes includes numerous potential roost features (PRF's) such as cavities within the thick bark and snapped branches. To ensure the features are thoroughly assessed for bat roosting suitability it is recommended the tree is climbed and inspected by a licenced and certified ecologist. The initial inspection can be completed at any time of year and combined with the bat box check and relocation. In the event any PRF's are assessed as suitable for roosting bats further surveys will be required between May and September.

4.3 Other species

- 4.3.1 The large burrows, possibly created by foxes, recorded on the site will be affected by the proposed demolition works. The burrows should be monitored to confirm if foxes are using them. Should their presence be confirmed, either careful excavation of the den could be completed under supervision by an ecological clerk of works, or one-way gates could be fitted prior to the fox breeding season (January to February) and immediately before works in the immediate vicinity of the den. Either works would not commence until all cubs have left the den and are fully independent.

4.4 Invasive non-native species (INNS)

- 4.4.1 Japanese Knotweed was identified along the Department of Infectious Diseases and Tropical Medicine (Building 47). This species is listed on Schedule 9 of the Wildlife and Countryside Act. It is recommended the client produces a detailed invasive species management plan to ensure the plant is not spread elsewhere on or off site and appropriately monitored post development.

5.0 REFERENCES

Bat Conservation Trust (2022), Interim Guidance Note: Use of night vision aids for bat emergence surveys and further comment on dawn surveys. Bat Conservation Trust.

Chartered Institute of Ecology and Environmental Management (2019), *Advice Note on the Lifespan of Ecological Reports & Surveys*. CIEEM, Winchester, Hampshire.

Collins, J. (2023), *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th edition). The Bat Conservation Trust, London.

HMSO, *The Wildlife and Countryside Act 1981* (Variation of Schedule 9) (England and Wales) Order 2010.

FIGURES

Figure 1 - Site location plan

Figure 2 - Building PRA Location Map



Legend:

Site Boundary

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TITLE: Figure 1:
Site Location Plan

060120180

Metres

SCALE: 1:5,000 @ A3

N
W
E
S

REV 00



Legend:

- Site Boundary
- Bat Roost Potential
 - Moderate
 - Low
 - Negligible
 - Not Surveyed



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TITLE: Figure 2:

Potential Roost Features
Building Locations



0 30 60 90
Metres
SCALE: 1:3,000 @ A3



N
W E
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APPENDIX A - RELEVANT LEGISLATION

Bats

All species of British bat are protected by The Wildlife and Countryside Act 1981 (as amended) extended by the Countryside and Rights of Way Act 2000. This legislation makes it an offence to:

- intentionally kill, injure or take a bat;
- possess or control a bat;
- intentionally or recklessly damage, destroy or obstruct access to a bat roost; and
- intentionally or recklessly disturb a bat while it occupies a bat roost.

Bats are also European Protected Species listed on The Conservation of Habitats and Species Regulations 2017 (as amended). This legislation makes it an offence to:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats, including 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) hibernate or migrate, where relevant; or (b) to affect significantly the local distribution or abundance of the species to which they belong.
- damage or destroy a breeding site or resting place of a bat; and
- possess, control, transport, sell, exchange a bat, or offer a bat for sale or exchange.

All bat roosting sites receive legal protection even when bats are not present.

APPENDIX B - SITE PHOTOGRAPHS

Building Reference	Photograph
Ante-Natal Department (Building 32)	
Department of Infectious Diseases and Tropical Medicine (Building 47)	

Building Reference	Photograph
Waste Transfer Station (Building 50)	
OPD 'F' (Building 54)	

Building Reference	Photograph
Sub-station 10 (Building 59)	
Doctors Home (Building 70)	

Building Reference	Photograph
Staff Gym (Building 71)	
Homewood - Diabetes / Mediscreen (Building 75)	

