

BAT SURVEY REPORT

September 2022

JD Campus,
Hollins Brook Way,
Bury,
BL9 8RR

U R B A N
G R E E N



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NON-TECHNICAL EXECUTIVE SUMMARY

JD Group Ltd are proposing to develop land at Hollins Brook Way in Bury (hereafter referred to as ‘the site’). The proposals include the development of the site in two phases. Phase 1 is planning to develop a creche, private garden and car park. The second phase would provide one multi-purpose all weather pitch, a new Hub facility containing spaces for the wider office campus, including eating spaces, meeting and presentation areas, and offices with associated hard and soft landscaping.

Urban Green have been appointed to complete Bat Surveys and a Report of the site. A Preliminary Ecological Appraisal and a Preliminary Roost Assessment were conducted at the site in February 2022. Further surveys, in the form of nocturnal emergence and re-entry bat surveys were recommended to further assess a tree (T34) with suitability to support roosting bats.

During the surveys conducted no evidence of a roost within T34 was found and the tree has been assessed as not supporting a bat roost. No further surveys or consideration relating to bats is required for the development to proceed.

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1 Introduction

1.1 Background to the Scheme

JD Group Ltd are proposing to develop land at Hollins Brook Way in Bury (hereafter referred to as ‘the site’). The proposals include the development of the site in two phases. Phase 1 is planning to develop a creche, private garden and car park. The second phase would provide one multi-purpose all weather pitch, a new Hub facility containing spaces for the wider office campus, including eating spaces, meeting and presentation areas, and offices with associated hard and soft landscaping.

Urban Green have been appointed to undertake further Nocturnal Bat Surveys following recommendations outlined within a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA), undertaken at the site by Urban Green in 2022.

The author of the report is Jake Healy, MSc, Qualifying CIEEM, Ecologist at Urban Green. Jake has experience providing ecological consulting services for a range of development schemes across the UK, including residential and commercial schemes.

1.2 Site Context

The site is located at National Grid Reference SD 81526 08669 and comprises a total area of 0.1ha (see Figure 1).

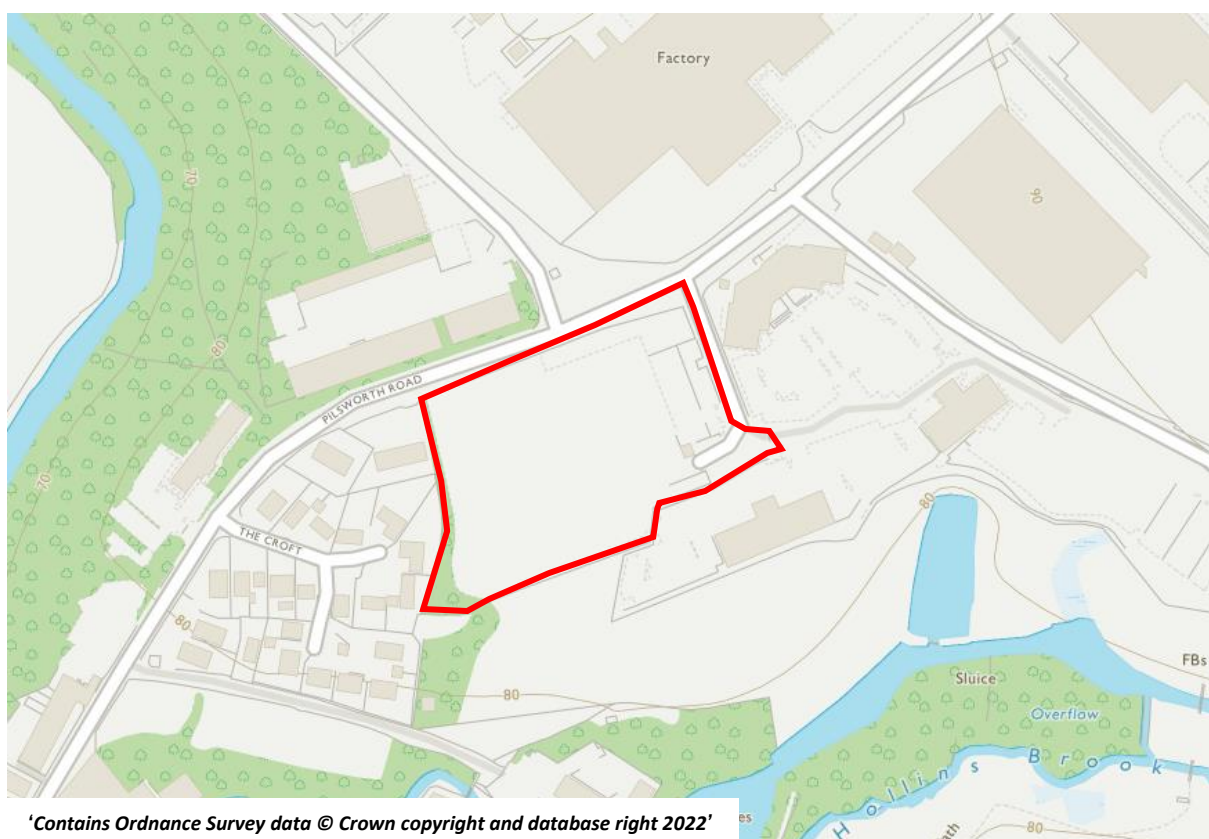


Figure 1 – Site Extent

The site is located on the rural-urban fringe of Bury, which is located approximately 2.5km north-west of the site. Pilsworth Industrial Estate is present immediately to the north-east and east of the site, comprising office blocks and commercial retail outlets. Hollins Vale Local Nature Reserve immediately

borders the south of the site. Hollins Brook and the River Roch are present close to the site, located approximately 100m south and 200m west of the site, respectively.

1.3 Purpose of this Report

This report has been produced to demonstrate the results of nocturnal bat surveys which were completed at the site. The surveys were conducted to confirm likely absence or presence of roosting bats. Appropriate mitigation and suitable roost replacement (compensation) are detailed (if required). The report has been produced in support of the proposed planning application.

Relevant UK legislation of the protection of all UK bats are detailed in Appendix 1.

2 Previous Surveys

A PEA and PRA were completed at the site by Urban Green in February 2022 and are detailed within Report UG_1466_ECO_PEA_o3 (Urban Green, 2022). Two buildings (B1 – B2) and multiple trees were located within the site boundary and were subject to a PRA. Please refer to Table 1, which was extracted from Appendix 1 of the PEA report, summarising the assessment.

Table 1 - PRA Summary (UG_1466_ECO_PEA_o3).

Building Reference	Description and evidence	Category of Suitability
Building (B) 1	<u>External</u> Building 1 comprised a single-storey brick building that was abandoned. The external walls were in good condition and were well sealed offering no PRFs for bats to utilise. The building had a flat roof that was also well sealed and offered no PRFs. Multiple windows were well sealed from the outside offering no cracks or crevices for bats to utilise. <u>Internal</u> Internally the building was in poor condition due to significant water damage. Ceiling tiles were absent and loft insulation material was exposed as were wooden beams within the false ceiling. The building was split into 4 compartments comprising 3 rooms and a hallway. No cracks or crevices were identified however peeling wallpaper was present. This was extremely damp due to water damage.	Negligible
B2	<u>External</u> Building 2 comprised a single storey building that was built of brick and had metal cladding on the northern, eastern, and western aspects. The building looked to be the remains of a larger building that had been demolished. A flat roof was present that offered no PRFs. The exposed brickwork on the south aspect offered some cracks, however, they offered no access to PRFs. <u>Internal</u> Internally the building was comprised of brick which was well sealed and offered no PRFs. A generator was present within.	Negligible
T14	T14 (TN4) was a beech tree that had small knot wound present on its southern aspect that led into a cavity. Underneath the knot wound on the trunk was an area of discolouring.	Low
T34	T34 (TN7) was a dead beech tree. Multiple holes were present at the top of the limbs that led into cavities offering PRFs.	Moderate
T35	T35 (TN8) was a beech tree that had damage at its base and led into a cavity that extended into the stem of the tree, offering a PRF.	Low

As T34 was assessed as having moderate bat roosting potential, a minimum of two nocturnal emergence and re-entry bat surveys were recommended and are to follow guidance set out in Collins (2016).

T14 and T35 were assessed as providing low bat roosting potential. These trees are to be retained as part of the development and no further surveys were required in relation to these features.

B1 and B2 were assessed as having negligible bat roosting potential and no further surveys are required on the buildings for the proposed development to proceed.

3 Methods

3.1 Desk Study

Sources of information used in the desk study are presented in Table 2.

Table 2 – Desk Study Sources of Information

Source	Date Consulted	Information Sought
Online aerial imagery	14/09/2022	Review of satellite imagery.
MAGIC website (www.magic.gov.uk)	14/09/2022	Locations of granted EPSL within 5km of the site.

3.2 Nocturnal Bat Surveys

One emergence and one re-entry survey were undertaken following guidance set out in Collins (2016). All surveys were conducted by two suitability qualified ecologists, and under the guidance of Mark Blacker, Senior Ecologist at Urban Green who holds a Level 1 Class Licence for bats (2022-10353-CL17-BAT).

The surveys were conducted using handheld BatScanner bat detectors. Surveyors were positioned around the feature to observe the Potential Roosting Features (PRFs) identified during the PRA. The emergence survey started at least 15 minutes before sunset until approximately 1.5 to 2 hours after sunset. The re-entry surveys started approximately 1.5 to 2 hours before sunrise, until 15 minutes after sunrise.

An infrared camera (Nightfox Red HD Night Vision Goggles) was utilised during the first survey to aid the survey effort. The camera was positioned to focus on the tree and related PRFs and was set up to record throughout the entirety of the survey.

Summary of the survey details are provided in Table 3. Figure 2 provides a plan illustrating surveyor position.

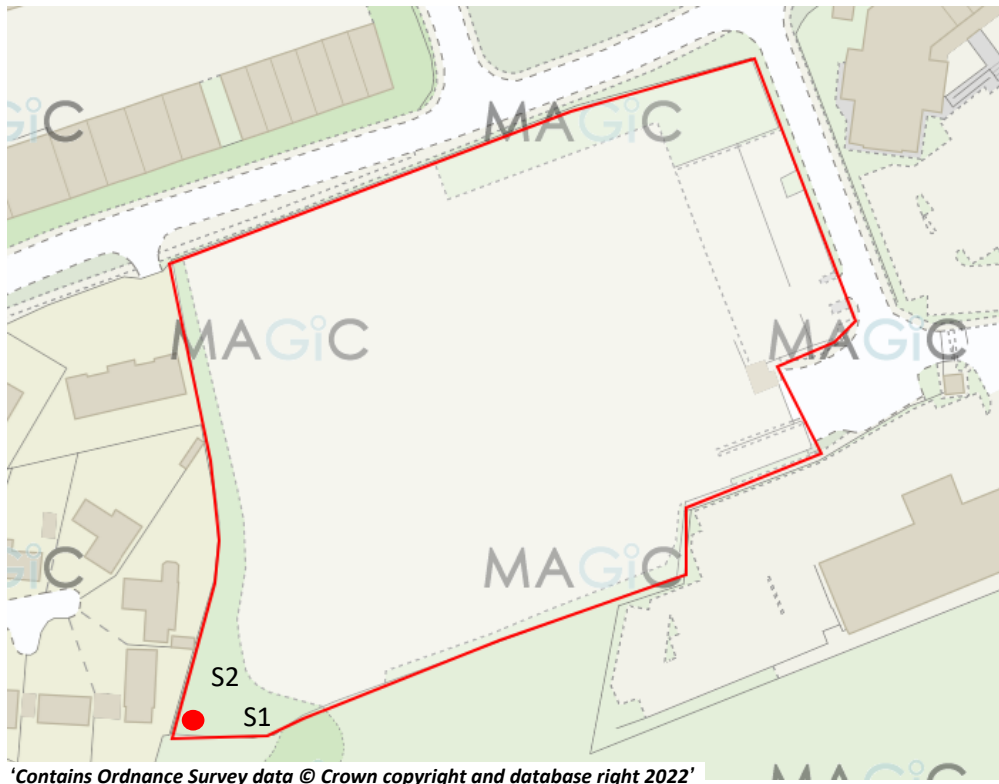


Figure 2 – Surveyor vantage points for T34

Table 3 – Emergence/Re-entry Survey Details

Date	Sunset/sunrise time	Survey time	Surveyors	Weather conditions at sunset
30/08/22	20:05	19:50 – 21:35	S1 – Jake Healy S2 – Jennie Furby	Temp: 17°C Cloud cover: 0/8 oktas Wind: 2 Beaufort Precipitation (Ppt): None
13/09/22	06:39	05:08 – 06:54	S1 – Jake Healy S2 – Mark Blacker	Temp: 9°C Cloud cover: 0/8 oktas Wind: 1 Beaufort Precipitation (Ppt): None

Mark Blacker – Senior ecologist with over four year’s bat survey experience. Level 1 Class Licence for bats (2022-10353-CL17-BAT).

Jake Healy – Ecologist with three year’s bat survey experience.

Jennie Furby – Seasonal ecologist with one year’s bat survey experience

3.3 Night Vision Aids

The Bat Conservation Trust released an interim guidance note that focused on the use of night vision aids for bat emergence surveys and dawn survey in May of 2022. The guidance note states that the upcoming 4th edition of the survey guidelines will shift emphasis towards using Night Vision Aids (NVAs) as standard protocol. As such, an infra-red imaging camera was utilised during these surveys.

The surveys were conducted using a single NVA. The equipment utilised was a pair of Nightfox Red HD Night Vision Goggles which were mounted on a stable tripod at vantage point 1, approximately 10m from T34, and were situated next to a suitably qualified surveyor who noted down bat activity throughout the survey and overlooked the NVA. The NVA was set up prior to the beginning of the survey and recorded for the full duration. The NVA was positioned to focus on the roost that was found during the previous suite of surveys.

Footage was later transferred onto a desktop and reviewed by a suitably qualified ecologist, focusing on times noted by the surveyor that was paired with the NVA during the survey. Any footage relating to a roost was kept on file while other footage was discarded due to the large file size.

3.4 Constraints to the Survey

Due to the surveys being conducted by observation during low light conditions, this may cause constraint of visual assessments. No surveyors were visually constrained during the survey, other than that of low light conditions, and all potential roosting features were observed throughout the survey time period. The use of an infrared camera mitigates for the low light conditions experience by surveyors during the surveys.

3.5 Lifespan of Reports

In accordance with the BCT guidance (Collins, 2016), the details of this report will remain valid for a period of **24 months** from the date of the first survey (i.e. until 30th August 2024). After this date, this assessment should be reviewed to determine whether any update surveys are required.

4 Results

4.1 Nocturnal Surveys

4.1.1 Visit 1 – Dusk Emergence – 30/08/2022

During the dusk emergence survey consistent foraging activity was observed by both surveyors comprising solely of common pipistrelle (*Pipistrellus pipistrellus*). The first pass was recorded by S1 at 20:18 (13 minutes after sunset) and was heard but not seen by the surveyor. Consistent low-levels of foraging/commuting activity then occurred around the treeline surrounding T34 for the remainder of the survey until the last pass was recorded by S2 at 21:34 (89 minutes after sunset). S1 observed a peak count of four common pipistrelle at one time.

No activity was observed relating directly to T34 and no evidence of a roost was identified.

4.1.2 Visit 2 – Dawn Re-entry – 13/09/2022

During the dawn re-entry survey no activity was recorded by any surveyor throughout the entirety of the survey.

No evidence of a bat roost relating to T34 was identified.

4.2 Assessment

Bat activity was recorded throughout the dusk emergence survey with no activity recorded during the dawn re-entry survey. A peak count of 4 common pipistrelles was recorded during the dusk emergence survey. Activity recorded suggests that the site provides valuable foraging activity around the treeline at the south-western extent of the site, adjacent Hollins Vale Local Nature Reserve (LNR).

No activity relating to a roost was observed on either survey. As such, T34 has been assessed as not supporting a bat roost.

5 Mitigation Recommendations

5.1 Impact Assessment

The surveys conducted on site found that T34 does not support a bat roost and as such no further mitigation relating to bats is required regarding this tree for the development to proceed.

5.2 Lighting Mitigation

All bats have some degree of sensitivity to artificial, night-time lighting. Introducing artificial lighting to areas that are not currently illuminated may sever important bat flight lines and discourage bats from using roost provisions. It is recommended external lighting is not to be provided on the building to ensure roosting bats are not impacted by introduced lighting.

It is advised that a light mitigation plan is produced to assess the pre- and post-development changes in lighting and to advise on an appropriately sensitive lighting scheme as part of the development.

The recommendations are as follows:

- Keep site lighting to minimum levels.
- Luminaries should lack UV elements and preferably LED lighting with a warm white light should be used over cool white light (ideally <2700Kelvin).
- Lighting should feature peak wavelengths greater than 550nm.
- Internal lighting should be positioned away from windows to minimise light spill, where appropriate.
- Light placement should be downward facing to prevent excess horizontal or vertical light spill.
- The use of integrated fittings such as cowls, shields, louvres, and hoods, that effectively contain light spill from unintended areas, where appropriate.
- The use of hard landscaping features to block light and create dark corridors.
- Avoid illuminating any suitable retained bat habitats, particularly tree line at the south-western extent of the site and Hollins Vale LNR to the south, that are potential commuting and foraging habitat for bats.
- Use of timed security lights should be set on motion-sensors and using short, 1-minute timers, to minimise light use, where appropriate.
- Column heights of lighting can be considered to minimise light spill.

6 Conclusion

The nocturnal bat surveys found that T34 does not support a bat roost and as such no further mitigation relating to bats is required regarding this tree for the development to proceed.

- The results of the nocturnal bat surveys are detailed in Section 4.1
- The impact assessment for bats is detailed in Section 5.1.
- Appropriate mitigation including artificial lighting recommendations are detailed in Section 5.2.

7 References

Bat Conservation Trust (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (Third Edition). The Bat Conservation Trust, London.

CIEEM (2019). Advice Note on the Lifespan of Ecological Reports and Surveys. CIEEM.

English Nature (2004). Bat Mitigation Guidelines. English Nature, Peterborough.

Hutson A. M. (1993). Action Plan for Conservation of Bats in the United Kingdom. The Bat Conservation Trust, London.

Joint Nature Conservation Committee (2004). Bat Workers Manual. JNCC, Peterborough.

Urban Green (2022). Preliminary Ecological Appraisal of JD Campus. Ref: UG_1466_ECO_PEA_03.

Appendix 1 – Relevant Legislation

Legislation relating to European Protected Species (e.g. bats)

European Protected Species and their resting places (e.g. bat roosts) are protected under the Wildlife and Countryside Act 1981 (as amended), the Countryside and Rights of Way (CROW) Act 2000, and the Conservation of Habitats and Species Regulations 2017.

The Conservation of Habitats and Species Regulations 2017 transpose the European Union's 'Habitats Directive' (Council Directive 92/43/EEC) on the Conservation of Natural Habitats and of Wild Fauna and Flora (EC Habitats Directive) into UK law. The Regulations provide for the designation and protection of 'European Sites', the protection of 'European Protected Species' (EPS), and the adaptation of planning and other controls for the protection of European Sites. EPS are listed on Schedule 2 of the Conservation of Habitats and Species Regulations 2017.