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BADGER SCOPING SURVEY

At

The Oaks
Wrexham Industrial Estate
Wrexham
LL13 9RG

NGR: SJ 38806 49238

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EXECUTIVE SUMMARY

This report is written by Harry Fox Bsc MRes, Graduate Ecologist for United Environmental Services (UES) Ltd. It provides an assessment of the potential impacts on badgers *Meles meles* as a result of the proposed development at The Oaks, Wrexham Industrial Estate.

A badger scoping survey was undertaken by UES on the 23rd May 2024. The objective of the walkover survey was to search for signs of badger activity. The onsite and surrounding habitats were also evaluated for their suitability to support badgers.

Habitats on site predominantly comprise large areas of dense scrub of varying age and density. Small areas of semi-improved grassland are present across the site including pathways and small glades within the scrub. The River Clywedog flows along the southern site boundary and the Redwither Brook flows along the western boundary. Both watercourses are bordered by a band of riparian woodland. Other habitats present on site include hardstanding access tracks and small areas of marshy grassland, tall ruderal vegetation, bare ground, scattered broadleaved trees and ephemeral / short perennial vegetation.

No badgers were observed on any of the cameras during the monitoring period and no additional evidence of badger activity was recorded during the weekly inspections of the cameras and potential setts. As such, it is considered that none of the three burrows that were surveyed are in use as badger setts.

As no badgers were observed using the three surveyed setts during the monitoring period, it is considered that none of these burrows are in use as active badger setts and a licence is not required for their disturbance or destruction.

the mitigation measures detailed in section 4.2 of this report are to be implemented during the construction phase of the development. These measures include a pre-commencement check and reasonable avoidance measures. Additionally, the need to avoid disturbance and damage to Potential Sett 2 should be considered when designing wider site habitat enhancement works.

The report should be read in conjunction with appendices 1 to 4, which provide visual representations of the survey results and statutory and planning context.

1 INTRODUCTION

1.1 Author, surveyors, qualifications and experience

This report is compiled and written by Harry Fox BSc MRes, UES Graduate Ecologist. Other surveyors include:

- Daniel Smith, UES Ecologist
- Josh Howard, UES Graduate Field Ecologist

All surveyors have the knowledge, skills and experience identified within CIEEM's "Competencies for Species Survey: Badger" (2013) or were under the supervision of a surveyor with the required competencies.

This report has been reviewed and approved by Tom Kenwright BSc MSc ACIEEM, UES Senior Ecologist.

1.2 Survey objectives

UES was commissioned in April 2024 to conduct site surveys which include the following activities:

- Inspection of the proposed development site (including a 30m buffer where accessible) for field signs of badger
- Assess the suitability of the site for use by badgers
- Confirm the presence or absence of badgers through monitoring of potential setts observed that could be impacted by the proposals
- Assess the level of activity and usage of the sett by badgers

1.3 Proposed development and previous survey information

The proposed development is limited to the western section of the wider Oaks Site and will involve the construction of an industrial / commercial unit with associated infrastructure including car parking, access roads and landscaping.

A suite of ecological surveys was undertaken at The Oaks between 2016 and 2019 by Kingdom Ecology. During these surveys, limited field signs of badger use were observed,

In order to inform the planning application, a Preliminary Ecological Appraisal (PEA) was undertaken of the site by UES in November 2022 (see report reference UES03918/02). During this survey, no definitive evidence of badger activity was observed.

1.4 Structure of the report

This report sets out the methodology, results, recommendations and compensation measures in relation to a specific badger survey. Recommendations are in line with statutory legislation and planning policy objectives.

The report should be read in conjunction with appendices 1 to 4, which provide visual representations of the survey results and statutory and planning context.

2 METHODOLOGY

2.1 Site survey

As part of the badger scoping survey, a badger walkover survey was conducted of the site by Daniel Smith on the 23rd May 2024. The survey covered the entire site and a 30m buffer zone (where accessible), which was searched in order to find and record any field signs of badger use. Signs of badger use searched for and recorded where present included:

- Badger setts - main, annexe, subsidiary and outlier
- Bedding at sett entrances (such as grass or leaves)
- Dung pits - small, excavated pits in which droppings are deposited
- Latrines - concentrations of dung pits
- “Snuffle holes” - small scrapes where badgers have excavated whilst foraging for food
- Badger hairs around sett entrances or caught on nearby fences or vegetation
- Conspicuous badger paths - channels through vegetation that are well used leading to or from setts
- Scratch marks on trees (predominantly in the local vicinity of sett entrances)
- Day nests - patches of grass or other vegetation where badgers may have spent time above ground
- Footprints

If found, activity levels at setts were gauged using the following criteria:

- Number of well-used holes (with one or more of the features: well-worn entrance; freshly excavated soil; bedding material)
- Number of partially used holes (leaves or twigs in entrance and/or mosses and other plants growing in or around entrance)
- Number of disused holes (partially or completely blocked, with a considerable amount of excavation required for reoccupation)

2.2 Monitoring survey

The badger activity monitoring survey involved the installation of motion-triggered, night vision camera traps outside each of the three potential setts. Cameras were positioned appropriately, in order to give the best coverage of these areas and all potentially active burrows.

Cameras were set to record between sunset and sunrise for 21 consecutive nights (11th November – 2nd December 2024). Batteries and memory cards were replaced weekly throughout this period, during which signs of activity (fresh bedding, footprints, hairs etc) were searched for within the immediate vicinity of all entrance burrows.

Activity levels were then gauged using all of the information gathered and setts were classified using the definitions shown in the following table:

Table 1 – Badger sett classification

SETT TYPE	DEFINITION
Main	Several holes with large spoil heaps and obvious paths emanating from and between sett entrances.
Annexe	Normally less than 150m from a main sett, comprising several holes. May not be in use all of the time, even if the main sett is very active.
Subsidiary	Usually at least 50m from a main sett, with no obvious paths connecting to other setts. May only be used intermittently.
Outlier	Little spoil outside holes. No obvious paths connecting to other setts and only used sporadically. May also be used by foxes and rabbits.
Inactive / not badger sett	No evidence of badger activity and not observed to be in use by badgers. May be used by other species such as rabbits and foxes.

2.3 Survey limitations

The site contains numerous areas of dense scrub, with some areas that are too dense to be fully accessed. All habitats on site were inspected as thoroughly as possible and no evidence of badger activity such as mammal paths were observed leading into dense areas of scrub that couldn't be fully accessed. Additionally, a full suite of ecological surveys has been undertaken on site across 2022-2024, and no additional evidence of badger activity was observed. As such, it is considered that the site is only subject to low levels of badger activity and as robust a survey as possible has been undertaken. The limitation of dense scrub has been taken into account within the recommendations section of this report, which includes measures to ensure that no badgers are harmed as a result of the proposed development.

3 RESULTS

3.1 Habitat assessment

The habitats on site predominantly comprise large areas of dense scrub of varying age and density. Small areas of semi-improved grassland are present across the site including pathways and small glades within the scrub. The River Clywedog flows along the southern site boundary and the Redwither Brook flows along the western boundary. Both watercourses are bordered by a band of riparian woodland. Other habitats present on site include hardstanding access tracks and small areas of marshy grassland, tall ruderal vegetation, bare ground, scattered broadleaved trees and ephemeral / short perennial vegetation.

The site is situated on the border between an industrial and rural setting with connectivity to the wider landscape.

The habitats on site are considered to provide moderate-high quality foraging and commuting habitat for badgers and the areas of dense scrub and woodland on site provide sheltered sett building opportunities.

3.2 Scoping survey

Despite a comprehensive and through search of the area, the previous badger sett identified within the south-western section of the by Kingdom Ecology between 2016 and 2019 could not be located during the updated 2022 PEA or the 2024 badger surveys. The previous surveys that identified the burrow were conducted between 6 and 9 eight years ago, and the site has been left unmanaged since. As such, the entire site has been subject to significant scrub encroachment, and it is considered that the sett was abandoned during this time.

3.3 Monitoring survey

Following the scoping survey, cameras were deployed to monitor Setts 1, 3 and 4 for a continuous 21-day period, to monitor levels of badger activity and classify the type of setts, if confirmed to be badger setts.

No badgers were observed on any of the cameras during the monitoring period and no evidence of badger activity was recorded during the weekly inspections of the cameras and potential setts. As such, it is considered that none of the three burrows are in use as badger setts.

Wildlife recorded by the cameras included wood mouse *Apodemus sylvaticus*, brown rat *Rattus norvegicus* and numerous common woodland and garden bird species.

4 EVALUATION AND RECOMMENDATIONS

4.1 Evaluation of results

The Oaks is situated on the border between rural and industrial areas, with connectivity to the wider landscape. The site is considered to provide moderate to high quality foraging and commuting opportunities for badgers and the areas of woodland and scrub that cover the majority of the site provide sheltered sett building opportunities.

Despite the suitability of the habitats, evidence of badger activity observed on site by UES during a suite of ecology surveys and a specific badger scoping survey is limited to badger hairs and potential badger feeding signs, observed in one location and on a single occasion.

No definitive evidence of badger activity was observed around within close proximity to the four potential badger setts observed on site, and no evidence of badgers was recorded on the camera during the activity monitoring survey of Setts 1, 3 and 4. As such, these are not considered to be in use as badger setts.

Sett 2 was not subject to an activity monitoring survey as it appears to be inactive and due to its location and sufficient distance from the proposed working area. In the unlikely event this sett is in use, it is considered that it will be used no more than as an outlier sett used on an occasional basis by a single or very low number of individuals. The potential impacts on the sett from the proposed works is negligible given the distance from the working area and the large area of habitat due to be retained and enhanced as part of the proposals.

4.2 Mitigation and compensation

Potential setts 1 ,3, and 4 are not considered to be active badgers setts and there is no requirement to secure a licence from Natural Resources Wales allow their disturbance or destruction as part of the development works.

<u>Construction phase</u>

works. As such, a pre-commencement badger inspection should be undertaken of the proposed working area and a 30m buffer zone, to ensure no new badger setts are present that would be impacted by the works.

In the unlikely event that further badger setts are identified during the pre-commencement check or during the construction phase of the development, UES will be contacted for advice on how to proceed.

Additionally, the following measures should be implemented during the construction phase of the development to ensure the potential of harm to badgers using the site for commuting or foraging purposes is reduced to the lowest practicable level:

- Contractors working on site will be briefed as to the potential presence of badgers on the site, and their individual and collective responsibilities under legislation. An ecologist will remain on call for the duration of the works.

- Any site lighting will be directed away from the wildlife corridors along the site boundaries and retained habitat outside of the working area.

- Where possible, any open excavations will be filled in before the site is closed in the evenings. If this is not possible and excavations are to be left open overnight, then either the edge of the excavation will be cut at a 45-degree angle to allow animals to exit unaided or a plank will be left in the holes as a means of escape.

- Excavations will be checked prior to infilling in order to ensure that no animals are present. If animals are present then the site manager will be informed and a suitably experienced ecologist will be called for advice.

- Chemicals and materials which have the potential to harm wildlife such as fuels, concrete mix, solvents, nails, reels of wire etc., will be stored in a way which removes any risk of badgers (or other wildlife) coming into contact with them.

- Barbed wire or similar materials that could harm wildlife will not be used on the site.

- Any temporary exposed pipe systems will be capped or sealed so that badgers are prevented from gaining access during non-operational hours.

<u>Habitat retention and enhancement</u>

Due to the very low levels of badger activity on site and the absence of any active badger setts within, or within close proximity to the proposed working area, it is considered that the development will have no significant adverse impacts on badgers.

The proposed level of habitat retention, creation and enhancement, including the retention of wildlife corridors at the site boundaries, will ensure that connectivity to offsite habitats and sufficient foraging opportunities will remain available for badgers throughout the construction and operational phases of the development. Furthermore, the wider habitat enhancement works on site will provide higher quality foraging opportunities through conversion of scrub into wildflower and rough grassland, increasing botanical diversity and feeding opportunities.

5 CONCLUSION

The habitats on site provide moderate to high quality foraging and commuting opportunities for badgers and the areas of woodland and scrub that cover the majority of the site provide sheltered sett building opportunities.

. No evidence of badger activity was observed on the cameras or within close proximity to the three potential setts, which are considered to be inactive / are not considered to be badger setts.
but appears to be inactive and is located a sufficient distance from the proposed working area that it won't be impacted by the proposals.

however this is considered to be in a transitory capacity for foraging or commuting and on an occasional basis by a single or very low number of individuals. No confirmed badger setts are present on site and no potential setts are due to be impacted by the proposed development.

Providing the measures detailed in section 4.2 are adhered to, it is considered that the development may proceed without any significant adverse impacts on badgers.

6 REFERENCES

Chartered Institute of Ecology and Environmental Management (2013). *Competencies for Species Survey: Badger*.

Natural England (2011). *Badgers and Development: A Guide to Best Practice and Licensing,* IN75 Version 12/11.

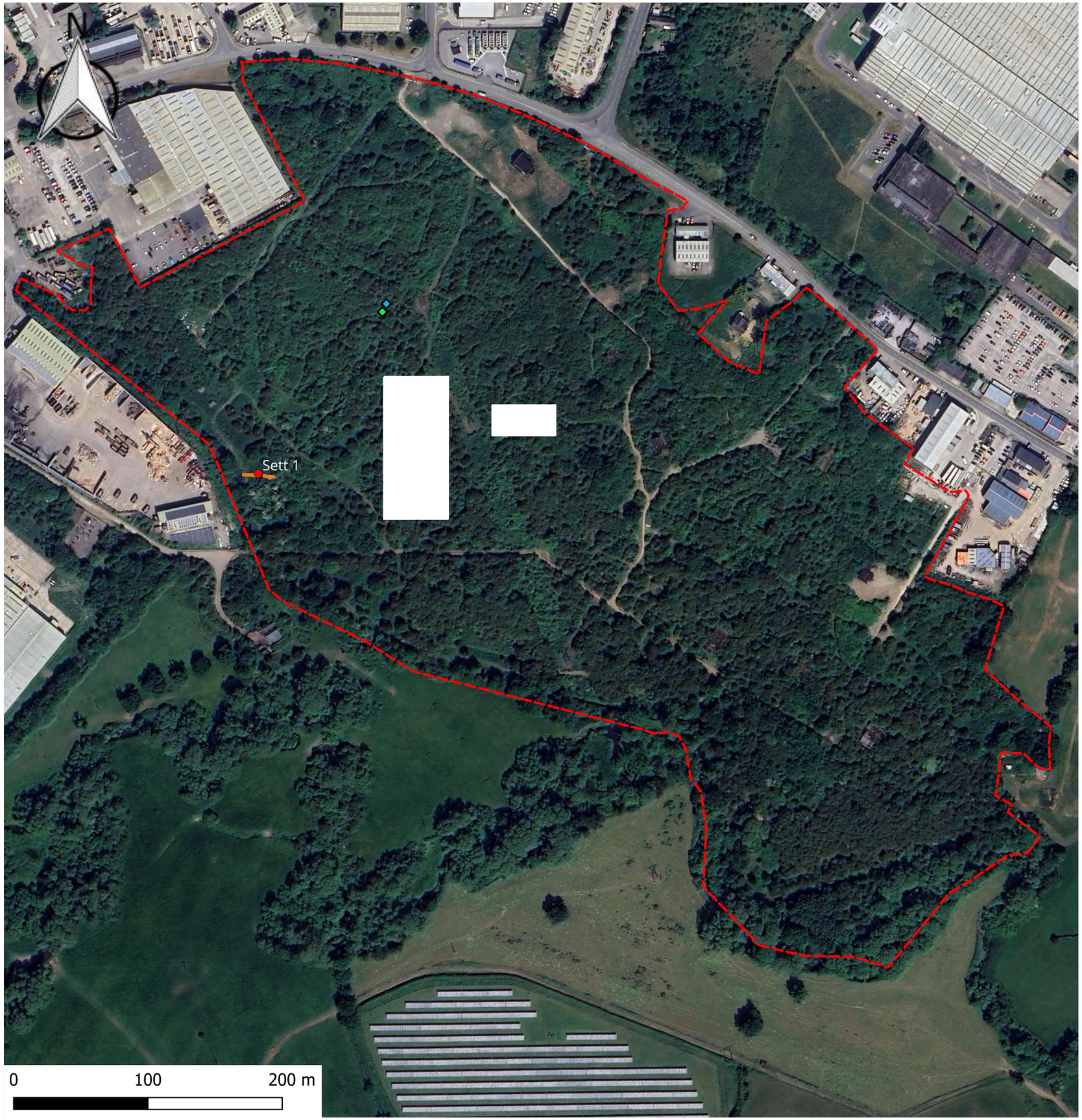
Welsh Government (2024). *Planning Policy Wales Edition 12.*

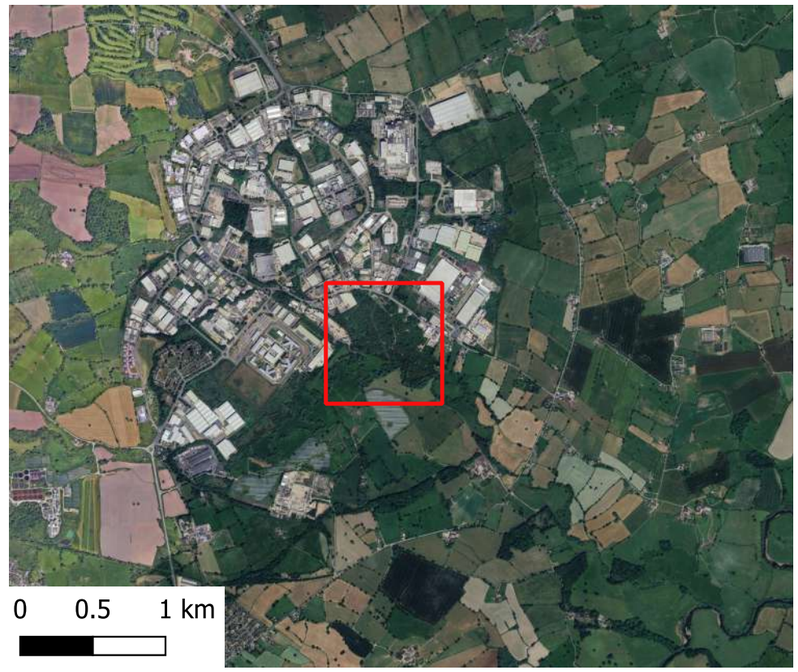
APPENDICES

Appendix 1 – Badger survey plan

Site Plan

Site: The Oaks, Wrexham
NGR: SJ 38754 49205
Author: Harry Fox
Date: 23/01/2025





KEY:

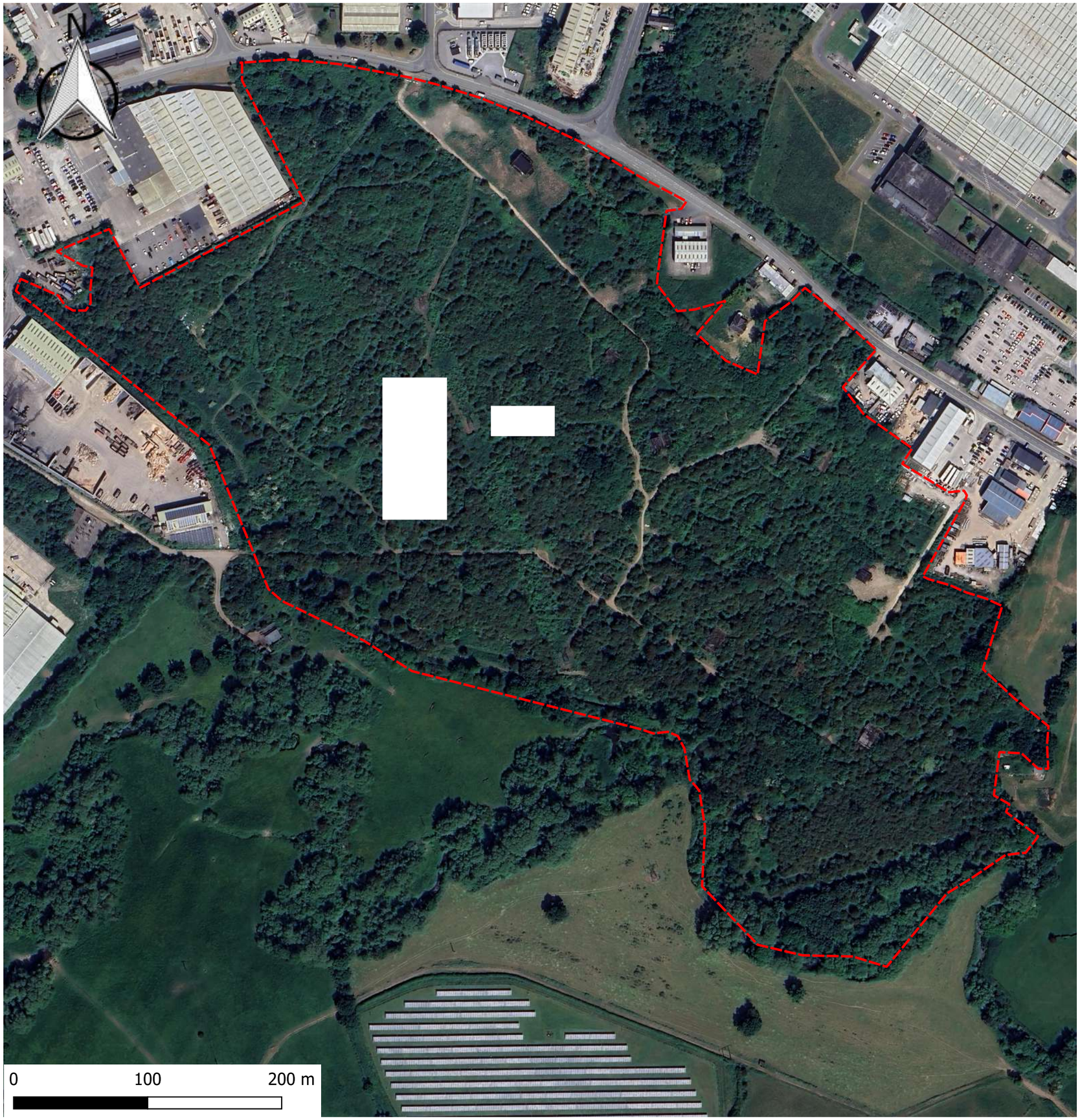
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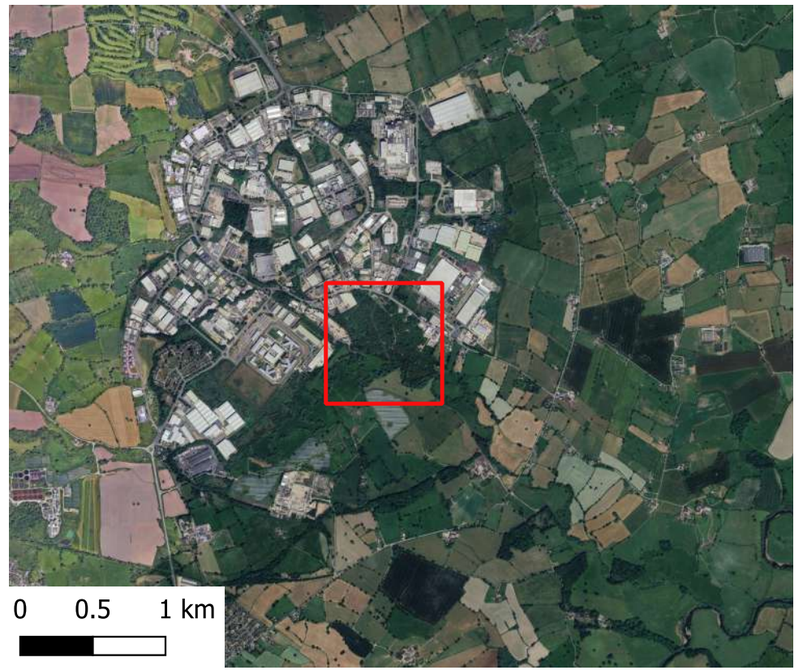
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Appendix 2 – Aerial photographs

Aerial Plan

Site: The Oaks, Wrexham
NGR: SJ 38754 49205
Author: Harry Fox
Date: 23/01/2025





KEY:

Survey boundary

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Appendix 3 – Photographs



Photograph 10 – Brown rat seen on multiple occasions using Sett 1.



Photograph 11 – Brown rat seen on multiple occasions using Sett 3.



Photograph 12 – Wood mouse foraging at the entrance of Sett 4.

Appendix 4 – Statutory and planning context

STATUTORY AND PLANNING CONTEXT

Ecological assessments

Ecological assessments play an important part within the planning context; they include an initial assessment which highlights any specific interests of a site. From the initial site assessment, the surveyor assesses the suitability of habitats within the site to support protected species and makes recommendations for further survey works if required. The following paragraphs provide a brief interpretation of the legislative protection that is relevant to the findings of this report.

Badgers

European badgers *Meles meles* and their habitat are protected under The Protection of Badgers Act 1992 and are also included on Schedule 6 of the Wildlife and Countryside Act 1981, and Appendix III of the Bern Convention. The legislation affords badgers protection against deliberate harm or injury making it an offence to:

- Wilfully kill, injure, take, possess or cruelly ill-treat a badger (or attempt to do so)
- To interfere with a sett by damaging or destroying it
- To obstruct access to, or entrance of, a badger sett
- To disturb a badger whilst it is occupying a sett

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

Works that disturb badgers whilst they are occupying a sett are illegal without a licence. Disturbance can occur even without direct interference or damage to the sett in question. In general, the following activities are likely to require a licence:

- Use of heavy machinery or significant earth moving within 30m of a sett
- Use of lighter machinery (usually any wheeled vehicles) within 20m of a sett
- Any digging, chain saw use or scrub clearance within 10m of a sett

Planning Policy

National planning guidance is issued in the form of Planning Policy Wales (PPW - 2024). The most relevant sections are included in Chapter 6: Distinctive and Natural Places. This chapter details the policies on issues such as the protection of trees, woodlands, species, and designated sites. The document is free and available to view online