

Confidential Report

Badger Set Survey
For Detailed and Hybrid Applications
Lanwades Woodland Park

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This report and its findings should be considered in relation to the terms and conditions proposed and scope of works agreed between Sweco UK and Lochailort Investments Ltd.

Interpretations and recommendations contained in the report represent our professional opinions, which were arrived at in accordance with currently accepted industry practices at the time of reporting and based on current legislation in force at that time.

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Scientific survey data will be shared with local biological records centre in accordance with the CIEEM (Chartered Institute of Ecology and Environmental Management) professional code of conduct.

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Please note that Sweco does not purport to provide specialist legal advice.

This document should be considered valid for up to 12 months from the date of issue, in accordance with CIEEM guidance.

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1 Introduction

1.1 Purpose

This badger sett survey report has been prepared by Sweco UK Ltd. for Lochailort Investments Ltd, and relates to the proposed redevelopment, hereafter referred to as 'the Project', of the former Animal Health Trust Research Centre, Kentford, CB8 7UA, hereafter referred to as 'the Project Site', for which detailed and outlined planning permission will be sought.

The purpose of this report is to provide the results of the 2024 badger sett surveys, to detail which sett entrance holes are active, and to inform mitigation measures that should be put in place to minimise the effect of the development on badger setts during works on site.

The findings of this report should be read in conjunction with the Ecological Impact Assessment (EclA) report [1] which is part of a detailed planning application and Environmental Statement (ES) Chapter: Biodiversity [2] which is part of a Hybrid planning application.

1.2 Project Site

The Application Site has been split into two separate parts, the Project Site (red line) which envelopes 15.54 ha, and the wider ownership area (blue line) which envelopes 48.54 ha, as shown in Figure 1.1 below.

The Project consists of demolition of existing buildings on site, and phased redevelopment to provide residential units alongside a retail/commercial building (Use Class E), re-use of the existing listed stable block to community/commercial use (Use Class F2/ E), provision of open space, play space, and associated infrastructure and car parking, as shown on Woods Hardwick drawing 19400/1009-E.

The construction phase will comprise of the following:

- Clearance of grassland habitats on site.
- Demolition of existing buildings.
- Conversion of the existing listed stable block.
- Retention and protection of woodland blocks and some hedgerows.

The operational phase will comprise the following:

- Residential homes and associated car park and private gardens.
- Community hub, shops and associated infrastructure.
- Green infrastructure comprising sustainable drainage systems (SuDS), play area including Neighbourhood Equipped Area for Play (NEAP) and Multi-Use Games Area (MUGA) facilities
- Semi-natural areas comprising additional hedgerows and trees, ornamental planting, shrubs, amenity and meadow grasslands.



Figure 1.1. Indicative red line boundary of the Project site (Detailed Application) and blue line boundary (Hybrid application site) of the wider survey area. *Map data from Google 2025. Bluesky, CNES / Airbus, Getmapping plc, Infoterra ltd & Bluesky, Maxar Technologies.*

2 Methodology

2.1 Personnel

This report was produced by Graduate Ecologist Charlotte Hoskyns BSc (Hons) and Senior Ecologist Claudia Ferreira BSc (Hons), reviewed by Principal Ecologist Joshua Stafford BSc (Hons) MRSB, and approved by Richard Webber-Salmon BSc(Hons) MCIEEM.

2.2 Sett Classification Survey and Mapping

An update sett classification survey was undertaken on 23 September 2024 by formerly employed Senior Ecologist Sophie Barrell MEdol (Hons) MCIEEM, and Graduate Ecologist Emily Chubb BSc (Hons) for the known sett previously identified in the April 2024 Preliminary Ecological Appraisal Report [3].

This survey comprised the surveyors searching all areas within the site boundary for evidence of badger activity and for badger sett entrances. When identified, sett entrances were GPS tagged using ESRI FieldMaps with the tunnel tracking direction noted. For each sett entrance the level of use was assessed and assigned based on current guidance [4].

Levels of use are:

1. well used;
2. partially used; and
3. disused.

Any evidence of use (e.g. claw marks, fresh spoil, latrines, hairs) were also noted.

Following the sett classification survey, the inter-sett entrance distance was measured to determine likely sett type, based on current guidance [5] [4]. Sett types include:

1. main (average of 12 entrance holes);
2. annexe (average of eight entrance holes) - typically <150 m of the main sett;
3. subsidiary (average of four entrance holes) – typically >50 of the main sett;
4. outlier (average of two entrance holes).

2.3 Stick-Screen Survey

As part of the sett classification survey, setts 25, 26, 32, 37, 38, 39, 40 and 42 entrances were 'stick-screened' (sticks were wrapped with double-sided sticky tape and placed firmly in front of sett entrances). If badger (or other mammals, e.g. rabbit) enter or exit the sett, the stick would be knocked down, with hairs caught on the sticky tape. As badger guard hairs are distinctive this can then confirm if badger have been within the vicinity of the entrance hole. Graduate Ecologist Charlotte Hoskyns BSc (Hons) made subsequent visits to check the stick screens and refresh tape as required, on the 1, 7 and 14 October 2024. Sett numbers 10, 11, 12, 27, 28, 35, and 36 were all classified as probably disused and therefore were not stick screened.

2.4 Camera Monitoring Survey

During the sett classification survey on 23 September 2024, Sophie Barrell and Emily Chubb also set out nine remote monitoring trail cameras. These monitored activity on entrance holes 2-8, 9, and 13-23 (see Table 2.1 below). Sett entrance 1 did not appear to be in use and was therefore soft blocked during this visit, whereby it was blocked with sticks and materials that can easily be dug out if an animal is inside, however if the soft block remains in place, then it confirms that it is not in use.

The surveyors returned on the 1 October 2024 to set out an additional seven remote monitoring trail cameras to monitor activity on entrances 25, 26, 29, 30, 31, 34, and 41 (see Table 2.1 below).

Cameras were positioned on tree trunks / limbs or stakes and positioned to record individual sett entrance holes/multiple holes where close enough for any movement triggers, which automatically starts the recording window. Visits were made weekly to change batteries and memory cards where required. The cameras were set to record both photos and videos. Cameras are set out with the aim to record for a minimum 21 days, as this is the longest duration that badger may remain in torpor within a sett.

Table 2.1 below shows the dates and collection of each camera, and the total monitoring period on each. See Sweco drawing 65210959-SWE-XX-XX-D-J-0003 for camera trap locations.

Table 2.1. Camera Placement Dates and Monitoring Periods

Sett No.	Camera Placed	Camera Collected	Total Monitoring Period (days)
1	Stick screened 23 September 2024.		
2	23/09/2024	14/10/2024	21 days
3			
4			
5	Any activity would be covered by camera covering Sett entrance 8.		
6	However, no suspected use of these setts.		
8	23/09/2024	14/10/2024	21 days
7	Stick screened October 1 st . Any activity would be covered by camera covering Sett entrance 8.		
9	23/09/2024	14/10/2024	21 days
10	Classified as probably disused		
11			
12			
13	23/09/2024	14/10/2024	21 days
14			

15			
16	No suspected use. Two cameras were placed around the building so any activity would have been recorded from the sett entrances 20, 21, 22, 24 23 and 15.		
17			
18			
19			
20	23/09/2024	14/10/2024	21 days
21			
22			
23			
24	No suspected use. Two cameras were placed around the building so any activity would have been recorded from the sett entrance.		
25	01/10/2024	21/10/2024	21 days
26			
27	Classified as probably disused		
28	Classified as probably disused		
29	01/10/2024	21/10/2024	21 days
30			
31			
32	Stick screened October 1 st .		
33			
34	01/10/2024	21/10/2024	21 days
35	Classified as probably disused		
36			
37	Stick screened October 1 st .		
38			
39			
40			
41	01/10/2024	21/10/2024	21 days
42	Stick screened October 1 st .		

3 Results

3.1 Settle Classification Survey and Mapping

A total of 42 badger sett entrances were identified during the sett classification survey on 23 September 2024, most situated among the woodland habitats on site, with a few around the buildings as shown on Sweco drawing 65210959-SWE-XX-XX-D-J-0003.

In addition to the addition entrance holes, field signs recorded include:

- Snuffle holes towards the west boundary, within the modified grassland;
- Field run towards the central west of the site, heading into the wooded area;
- Latrines in the woodland area, west of set entrances no. 15 to no. 24;
- Latrines toward the east boundary, south of set entrance 41;
- Badger hair outside sett entrance no. 2.

3.2 Stick-Screen Survey

A total of eight entrance holes were stick screened. The sticks screen placed on entrance hole 25 was no longer in place by the 1 October 2024, it could not be found by surveyors to check if any hair was present on it, although it does confirm that an animal likely entered the sett, therefore a camera trap was deployed on the 1 October 2024. Otherwise, no stick screens on any of the other entrances had been displaced, and no guard hair was recorded on the stick screened setts.

3.3 Camera Monitoring Survey

The use of each sett has been updated based on the results of the sett classification survey, stick screen and camera monitoring surveys.

Footage of badger was recorded on cameras placed on sett entrance holes 9, 25 and 30. Selected photographs of the camera footage are shown in Appendix A.

Sett entrance 25 was the only monitored entrance hole on which a badger was recorded either entering or leaving the sett. On the 14 October 2024 a badger emerged from the sett. No other occurrences were recorded of badgers entering / exiting this sett. This confirms that it is in active use as a badger.

Entrances 9 and 30 recorded badger within their close proximity, but not entering / exiting the sett itself. Badger were not recorded on any other camera traps.

Entrance hole 4 had numerous recordings of fox entering, suggesting that it is being used as a fox den.

3.4 Overall Settle Classification

The use of each sett has been updated based on the results of the sett classification survey, stick screen and camera monitoring surveys. These are summarised within Table 3.1 below.



Table 3.1. Sett Entrance Activity Results and Badger Sett Classification

Sett No.	Grid Reference	Recording Date	Recording Time	Activity	Badger Sett Classification
1	TL 69872 66105	N/A	N/A	No evidence of use	Disused
2	TL 69877 66095	Throughout recording period	Throughout recording period	Numerous recordings of fox and mice within the vicinity of the hole. No evidence of use by badger.	Disused
3	TL 69874 66098	N/A	N/A	No evidence of badger.	Disused
4	TL 69814 66098	25/09/2024	06:49	Fox enters hole.	Disused by badger. Active fox den.
		27/09/2024	06:34	Fox likely enters the hole.	
		28/09/2024	05:52	Fox enters hole.	
		30/09/2024	06:20	Fox enters hole.	
		05/10/2024	06:37	Fox enters hole.	
5	TL 69820 66101	N/A	N/A	No evidence of badger.	Disused
6	TL 69819 66096	N/A	N/A	No evidence of badger.	Disused
7	TL 69820 66101	N/A	N/A	No activity recorded.	Disused
8	TL 69821 66100	Throughout recording period	Throughout recording period	Recordings of deer and fox throughout within vicinity of hole. No evidence of use by badger.	Disused
9	TL 69788 66098	25/09/2024	00:14	Badger recorded foraging within vicinity but not entering the sett .	Disused
10	TL 69785 66106	N/A	N/A	No evidence of use	Disused
11	TL 69786 66113	N/A	N/A	No evidence of use	Disused



12	TL 69792 66093	N/A	N/A	No evidence of use	Disused
13	TL 69785 66089	Throughout recording period	Throughout recording period	Recordings of fox in vicinity of the hole. No evidence of badger.	Disused
14	TL 69741 66121	Throughout recording period	Throughout recording period	Recordings of fox in vicinity of the hole. No evidence of badger.	Disused
15	TL 69594 66037	Throughout recording period	Throughout recording period	Recordings of fox in vicinity of the hole. No evidence of badger.	Disused
16	TL 69589 66042	N/A	N/A	No evidence of use	Disused
17	TL 69589 66057	N/A	N/A	No evidence of use	Disused
18	TL 69587 66059	N/A	N/A	No evidence of use	Disused
19	TL 69585 66061	N/A	N/A	No evidence of use	Disused
20	TL 69584 66063	Throughout recording period	Throughout recording period	Recordings of fox in vicinity of the hole. No evidence of badger.	Disused
21	TL 69584 66065				Disused
22	TL 69584 66065				Disused
23	TL 69584 66065				Disused
24	TL 69589 66042	N/A	N/A	No evidence of use	Disused
25	TL 69661 65914	09/10/2024	23:49	Badger investigated the entrance hole, then walked off.	Partially used
			02:47	Badger walked past.	
		14/10/2024	19:45	Badger emerges from hole.	
		18/10/2024	20:17	Badger investigated camera and hole, then walked past.	



		19/10/2024	02:01	Badger within vicinity of the hole.	
26	TL 69674 65935	N/A	N/A	No evidence of use.	Disused
27	TL 69894 66198	N/A	N/A	No evidence of use	Disused
28	TL 69651 65917	N/A	N/A	No evidence of use	Disused
29	TL 69775 65998	N/A	N/A	No evidence of use	Disused
30	TL 69779 65992	19/10/2024	20:05	Badger within vicinity of the hole entrance.	Disused
31	TL 69802 65985	Throughout recording period	Throughout recording period	Recordings of fox within the vicinity. No evidence of badger.	Disused
32	TL 69804 65991	N/A	N/A	No evidence of use after soft screened	Disused
33	TL 69805 65986	N/A	N/A	No evidence of use	Disused
34	TL 69825 66033	Throughout recording period	Throughout recording period	Recordings of fox within the vicinity of the hole. No evidence of badger.	Disused
35	TL 69826 66028	N/A	N/A	No evidence of use	Disused
36	TL 69824 66025	N/A	N/A	No evidence of use	Disused
37	TL 69918 66198	N/A	N/A	No evidence of use after soft screened	Disused
38	TL 69917 66199	N/A	N/A	No evidence of use after soft screened	Disused
39	TL 69884 66200	N/A	N/A	No evidence of use after soft screened	Disused
40	TL 69909 66198	N/A	N/A	No evidence of use after soft screened	Disused



41	TL 69886 66195	N/A	N/A	No evidence of use	Disused
42	TL 69862 66382	N/A	N/A	No evidence of use after soft screened	Disused

4 Conclusions and Recommendations

4.1 Active Badger Setts

Based on the results of the badger stick screen and camera trap survey, entrance hole 30 has been classified as being partially used and therefore legally protected under the Badger Protection Act 1992 as its considered active setts.

There were no other active badger setts on site.

Currently it is understood that the Project will not affect any badger setts and as such, a mitigation licence will not be required from Natural England. However, badgers are highly mobile, and the setts will be monitor during other surveys that will be conducted on site. If news entrance holes//setts are discovered, additional monitoring surveys will be required to.

If the Project works are found to affect a badger sett, then a mitigation licence will be required to legally facilitate completion of any works which may cause an offence (i.e. damage, destruction, or obstruction of the sett or disturbance of badger within the sett).

During a ground level tree assessment in March 2025. Additional entrance holes were discovered, and their locations are shown on Sweco drawing 65210959-SWE-XX-XX-D-J-0013. If these are to be impacted, additional monitoring surveys will be required to understand if these are being use by badgers.

4.2 Other Mammals

Multiple recordings were made of foxes entering entrance hole 4, suggesting that it is an active fox den.

4.3 Recommendations

4.3.1 Entrance Holes not in use

All entrance holes, with the exception of hole **30** were not considered in use by badger. Therefore, they are not legally protected under the Badger Protection Act 1992, and a license is not required for nearby excavation works or other works which may otherwise cause an offence (i.e. damage, destruction, or obstruction of the entrance or tunnel). If entrances become used by badger in the future, they will require a license for nearby works.

Entrance hole 4 is a suspected fox den. Any excavation work within 5 m of entrance hole 4 should be undertaken by hand, with foxes allowed to escape, to ensure animal welfare and avoid offences under the Wild Mammals (Protection) Act 1996.

If entrances are suspected to be in use by rabbit they should be dug out by hand to ensure animal welfare and avoid offences under the Wild Mammals (Protection) Act 1996. Any rabbit which appear should be allowed to escape.

4.3.2 Entrance Hole in use

Currently, it is understood that the Project will not affect any badger setts including hole 30, and as such, a mitigation licence will not be required from Natural England.

However, badgers are highly mobile, and the setts will be monitored during other surveys conducted on site. If new entrance holes or setts are discovered, additional monitoring surveys will be required.

If the Project works are found to affect a badger sett, a mitigation licence will be required to legally facilitate the completion of any works that may cause an offence (i.e., damage, destruction, or obstruction of the sett or disturbance of badgers within the sett).

As such, a mitigation licence will be required from Natural England to legally facilitate completion of any works which may cause an offence (i.e. damage, destruction, or obstruction of the sett or disturbance of badger within the sett). All licensable work will take place between the 1 July and the 30 November (the 'licensable period').

4.3.2.1 *Exclusion Buffers*

Prior to works reassessment of all sets and the site will be required however the following exclusion buffers around entrance **30** will be marked and exclusion buffers will be applied to avoid offence(s) being caused:

- **0 – 10 m radius**; no works to be undertaken without prior ecologist consultation. No heavy plant to enter this area.
- **10 – 20 m radius**; Above ground work (e.g. vegetation clearance) by hand only. No excavation works should take place.
- **20 – 30 m radius**; Above ground work (e.g. demolition, hard standing removal) using plant / machinery may proceed.
- **30+ m radius**; All work may commence as normal.

4.3.2.2 *Pre-Works Walkover*

A pre-commencement check must be undertaken by a qualified and experienced ecologist within three months prior to the intended start of works. This visit will record any significant changes to any sett on site (e.g. creation of new holes, change in use/classification, and creation of new setts). A written record will be kept of the walkover and results. Any significant changes may require a license application, or changes to the mitigation approach.

4.3.2.3 *Live Dig*

No live dig of sett entrances are required at the time of writing this report.

4.3.2.4 *Compensation*

Based on camera monitoring data, the setts on site is considered likely to consist of subsidiary and outlier setts, no main setts have been identified currently, and as such no compensatory artificial sett is considered necessary at this time. However, this could change given they are highly mobile.

5 References

- [1] Sweco UK Ltd, "Ecological Impact Assessment: Lanwades Country Park. Report reference: 65210959-SWE-XX-XX-T-J-0008," 2025.
- [2] Sweco UK Ltd, "Environmental Statement Chapter: Biodiversity. Report Reference: 65210959-SWE-XX-XX-T-J-0011," 2025.
- [3] Sweco UK Ltd, "Preliminary Ecological Appraisal Report: Animal Health Trust, Kentford, West Suffolk. Report reference: 65210959-SWE-XX-ZZ-T-J-0002," 2024. [Online].
- [4] Scottish Badgers, "Surveying for Badgers - Good Practice Guidelines," 2018.
- [5] R. Andrews, "The Classification of Badger Meles Meles Setts in the UK: A Review and Guidance for Surveyors," *InPractice*, vol. 82, pp. 27-31, 2013.

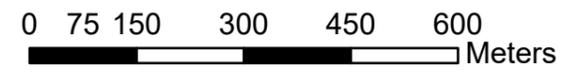
Drawings

65210959-SWE-XX-XX-D-J-0003: Badger Setts and Camera Locations

65210959-SWE-XX-XX-D-J-0013: Badger Setts Locations



- Legend**
- RLB
 - East scheme boundary
- C-Sett hole activity**
- Disused
 - Partially Used
- Badger Field Signs**
- Badger camera trap locations



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Legend

- Whole Site Boundary
- East Site Boundary
- Disused
- Partially Used
- Unknown
- ◇ Badger Field Signs

C-Sett hole activity

- Disused
- Partially Used
- Unknown
- ◇ Badger Field Signs



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Appendix A – Selected Photographs



Photo A.1. Badger outside sett entrance 9, snuffling on 25/09/2024 at 00:14am.



Photo A.2. Badger entering sett no. 25. 09/10/2024 at 02:01pm.



Photo A.3. Badger outside sett entrance no. 30 on 19/10/2024 at 20:05pm.