



Bat Survey Report

Dodford Farm, Christian Malford, Chippenham,
Wiltshire, SN15 4DE

Client	Mr J S Ewert
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Quality Assurance

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Document History

Version	Date	Revision
1	02/10/2025	Issued to the client.

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The evidence in this document is based upon the field survey(s) detailed. Due to the changing nature of ecology the list of species present cannot be considered comprehensive and Smart Ecology cannot guarantee that other protected/notable species and habitats are not present.

The ecology of a site is constantly changing and therefore the information provided in this document is only relevant at the time of survey. **If it has been over 12 months since this survey was undertaken advice should be sought on whether an updated survey is necessary.**

The evidence which we have prepared and provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

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Non-Technical Summary

Purpose of Report	Smart Ecology was commissioned by Mr J S Ewert to undertake bat surveys of a traditional farm building at Dodford Farm, Christian Malford, Chippenham, Wiltshire, SN15 4DE. This was to inform an application for the conversion of the traditional farm building with tiled roof into an office.
Methodology	Two dusk emergence surveys were carried out of the traditional farm building (B3) to determine the presence or likely absence of roosting bats in the building and to characterise any roosts found. Surveys were carried out with reference to good practice guidelines.
Survey Results	Roosting Bats: No bats emerged from the building. Foraging and Commuting Bats: Passes by common pipistrelle, long-eared bat species, Myotis species of bat, noctule and soprano pipistrelle were recorded during the surveys.
Impact Assessment	Roosting Bats: No bats emerged from the building and it is therefore concluded that roosting bats are likely to be absent. Foraging and Commuting Bats: Conversion of the buildings has the potential to impact foraging and commuting bats if external lighting exceeds current baseline levels.
Required Actions	Roosting Bats: Although no bats were present at the time of the survey, roosts may be used sporadically and so the possible presence of bats cannot be completely discounted, therefore a precautionary method of works has been provided Foraging and Commuting Bats: To avoid impacts on foraging and commuting bats it is recommended that additional external lights are not installed. If additional external lighting is essential then a sensitive lighting scheme following the specifications detailed in ILP Guidance Note 8: Bats and Artificial Lighting at Night (ILP, 2023) must be implemented.



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1 Introduction

1.1 Background

- 1.1.1 Smart Ecology was commissioned by Mr J S Ewert to undertake bat surveys of a building at Dodford Farm, Christian Malford, Chippenham, Wiltshire, SN15 4DE (central national grid reference ST 9736 8087). Refer to Figure 1, Section 7 for a location map.
- 1.1.2 The purpose of the surveys was to inform proposals for the conversion of the traditional farm building with tiled roof (B3) into an office, see Figure 2, Section 7 for the building location plan.
- 1.1.3 The requirement for bat surveys was identified by a Preliminary Roost Assessment undertaken in August 2025 as part of an Ecological Walkover & Preliminary Roost Assessment, which identified the building to have moderate potential for roosting bats (Smart Ecology, 2021).
- 1.1.4 In accordance with good practice guidelines (Collins, 2023) two emergence surveys were undertaken to identify the numbers and species of any bats present and characterise any potential roosts found.
- 1.1.5 This report has been prepared by Alessandra Malloy, an assistant ecologist at Smart Ecology and a qualifying member of the Chartered Institute of Ecology and Environmental Management (CIEEM), with reference to the Bat Conservation Trusts (BCT) good practice guidelines (Collins, 2023) and BS42020 Biodiversity – a code of practice for planning and development (BSI, 2013).

1.2 Aims

- 1.2.1 The purpose of the surveys and report was to:
 - Identify if bats were roosting within the building.
 - Identify the numbers and species of any bats present and characterise roosts.
 - Assess the impact of the proposed works on bats.
 - Provide details of any necessary mitigation and licensing requirements.
 - Provide details of opportunities for biodiversity enhancements.



2 Methodology

2.1 Personnel

- 2.1.1 The surveys were led by Alessandra Malloy with assistance from James Sampson and Douglas Fraser. See Table 2-1 for details of the surveyor's experience and qualifications.

Table 2-1: Surveyor information

Surveyor	Natural England Bat Survey Licences	Qualifications/Experience
Alessandra Malloy BSc	Working as an accredited agent under licence 2016-25176	BSc (Hons) Zoology (Hartpury University 2:1) Four years' experience in ecological consultancy. Ali has carried out professional bat surveys since 2022.
James Sampson	-	BSc Animal Biology (University of Gloucestershire). Bat surveyor trained by Smart Ecology.
Douglas Fraser BSc, MSc	-	MSc Environmental Policy and Management (University of Bristol). BSc Environmental Geography (University of York, 1 st) Bat surveyor trained by Smart Ecology.

2.2 Dusk Emergence Surveys

- 2.2.1 Two dusk emergence surveys were carried out of the traditional farm building (B3). The surveys were carried out with reference to good practice guidelines (Collins, 2023).
- 2.2.2 The surveys commenced 15 minutes before sunset and continued for 1.5 hours after sunset. The survey dates, timings, and weather conditions are provided in Table 2-2.

Table 2-2: Survey dates, timings, and weather conditions

Date	Sunset Time	Start Time	Finish Time	Weather Conditions	
				Start	Finish
30/07/2025	20:59	20:44	22:29	Temp: 21°C Cloud Cover: 40% Beaufort scale: 4 Rain: None Humidity: 59%	Temp: 18°C Cloud Cover: 20% Beaufort scale: 1 Rain: None Humidity: 87%
27/08/2025	20:05	19:50	21:35	Temp: 19°C Cloud Cover: 20% Beaufort scale: 2 Rain: None Humidity: 52%	Temp: 14°C Cloud Cover: 10% Beaufort scale: 2 Rain: None Humidity: 67%



- 2.2.3 Surveyors were positioned to ensure that all potential access points and roost features were viewed. Infrared cameras (Sony FDR-AX700 4K) with additional infrared lights were used to aid the surveys. See Figure 3, Section 7 for a plan showing surveyor and camera positions.
- 2.2.4 Infrared video footage was viewed on a computer screen in the office soon after the surveys to confirm emergences viewed by surveyors and check for any additional emergences.
- 2.2.5 Bat activity was recorded using EM Touch and EM Touch 2 PRO detectors connected to iPhones, iPads, and Android tablets. Information recorded during the survey included points of emergence and re-entry (if any), species, number of bats, flight direction and behaviour (e.g. commuting, foraging). A bat pass was defined as a series of calls separated by more than one second from another call or series of calls.
- 2.2.6 Sonogram recordings were analysed using Kaleidoscope software to confirm species against reference measurements. The parameters used for analysis of calls are provided in the Appendix 2. Where possible bats were identified to species level. Bats within the genus *Myotis* are grouped together as it is difficult to accurately identify these bats to species level due to the overlap in call characteristics (Collins, 2023). In some habitats, particularly cluttered environments, the calls of common and soprano pipistrelle overlap and in this instance, bats are recorded as *Pipistrellus* species, referring to common or soprano pipistrelle only. Additionally, the call characteristics of large bat species (noctule, Leisler's bat, and serotine) sometimes overlap, and where identification was unclear these are grouped. Any unclear sonograms are recorded as unknown bat species.

2.1 Building Inspections

- 2.1.1 Visual inspection of the interior of building B3 was undertaken before the dusk emergence surveys to look for evidence of bats. The inspections involved an internal survey of the building using a high-powered torch (Clulite 1 million candle power) to look for the presence of, and evidence for, bats (e.g. carcasses, droppings, urine, grease marks, feeding remains, squeaking etc.)

2.2 Limitations

- 2.2.1 There was a minor limitation to the surveys, as approximately 40% of the north-east elevation roof tiles could not be directly viewed due to the layout of surrounding buildings and overgrown vegetation. However, this is not considered a significant limitation, as the surveyors maintained a clear view of the roofline and were still able to detect any bat emergence or activity from this area.



3 Results

3.1 Dusk Emergence Survey (30/07/2025)

- 3.1.1 No bats emerged from the traditional farm building (B3).
- 3.1.2 Refer to Appendix 3 for still shots taken from the infrared camera recordings at the darkest point of the survey.
- 3.1.3 Foraging and commuting passes by common pipistrelle, Myotis species, noctule, and soprano pipistrelle were recorded during the survey.

3.2 Dusk Emergence Survey (27/08/2025)

- 3.2.1 No bats emerged from the traditional farm building (B3).
- 3.2.2 Refer to Appendix 3 for still shots taken from the infrared camera recordings at the darkest point of the survey.
- 3.2.3 Foraging and commuting passes by common pipistrelle, long-eared bat species, noctule, and soprano pipistrelle were recorded during the survey.

3.3 Building Inspections

- 3.3.1 No evidence of bats found.



4 Evaluation

4.1 Legislation and Planning Policy

- 4.1.1 All bat species and their roosts are protected by the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended); see Table 4-1.

Table 4-1: Legal implications of legislation with regard to bats

Legislation	Legal Implications
Conservation of Habitats and Species Regulations 2017 (as amended)	It is illegal to: • Deliberately capture, injure or kill bats. • Deliberately disturb¹ bats. • Damage or destroy a breeding site or resting place².
Wildlife and Countryside Act 1981 (as amended) – sub-sections 9(4) b and c and 9(5) only	It is illegal to: • Intentionally or recklessly disturb bats while they are occupying a structure or place of shelter or protection². • Intentionally or recklessly obstruct access to a structure or place of shelter or protection².

¹ Disturbance under the Conservation of Habitats and Species Regulations 2017 (as amended) is defined as impairing the ability of an animal to survive, breed, reproduce, rear or nurture their young, hibernate or migrate, or to significantly affect the local distribution or abundance of the species.

² Bat roosts are any structure or place used for breeding, shelter or protection and are protected even when bats are not present.

- 4.1.2 An EPS licence is required if works affect bats or their roosts. EPS licences are issued by Natural England only after the following three tests have been satisfied:
- The proposed works must be for the purpose of preserving public health or safety or other imperative reasons of overriding public interest.
 - There is no satisfactory alternative to the proposed works.
 - The proposed works will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range.
- 4.1.3 Additionally, barbastelle, Bechstein's bat, brown long-eared, greater horseshoe bat, lesser horseshoe bat, noctule, and soprano pipistrelle bats are designated as species of principal importance (priority species) under the Natural Environment and Rural Communities Act 2006. Section 40 of this Act places a duty on local planning authorities to '*consider what action the authority can properly take, consistently with the proper exercise of its functions, to further the general biodiversity objective*' when determining planning applications.
- 4.1.4 Paragraph 187 of the National Planning Policy Framework (NPPF) 2024 states that planning decisions should protect sites of biodiversity value, minimise biodiversity impacts, and contribute to net biodiversity gains. Paragraph 193 states that planning permission should be refused if significant harm to biodiversity resulting from a development cannot be avoided, adequately mitigated, or, as a last resort, compensated for. The NPPF also emphasises the need to protect priority species.



4.2 Roost Characterisation

- 4.2.1 No bats emerged from building B3 and it is therefore concluded that roosting bats are likely to be absent

4.3 Impact Assessment

Roosting Bats

- 4.3.1 Roosting bats are likely to be absent from building B3 and so no impacts on roosting bats are anticipated.

Foraging and Commuting Bats

- 4.3.2 Foraging and commuting passes by common pipistrelle, long-eared bat, Myotis species, noctule, and soprano pipistrelle were recorded during the surveys.
- 4.3.3 If additional external artificial lighting was installed on the site, then commuting and foraging bats could be disturbed.



5 Mitigation & Enhancements

5.1 Mitigation

Roosting Bats

- 5.1.1 Although no bats were identified to be roosting within the building at the time of the survey, roosts may be used sporadically and so the possible presence of bat roosts cannot be completely discounted. Therefore, a precautionary approach must be implemented during works, as follows:
- All contractors must wear gloves during removal of roof tiles/sheets and other features with potential for roosting.
 - Removal of roof tiles/sheets and other features with potential for roosting must be carefully carried out by hand, lifting vertically upwards and not dragging the material, and inspected for bats.
 - All areas exposed must be carefully inspected for bats.
- 5.1.2 It is the client's responsibility to make sure all contractors are aware of this required precautionary approach to works.
- 5.1.3 **If bats are found at any time during works then works must stop immediately and a bat licensed ecologist contacted on 01453 807188.**

Foraging & Commuting Bats

- 5.1.4 It is recommended that light spill onto habitats on and in the vicinity of the site is avoided by not installing additional external lights. If additional external lighting is essential then it is recommended that the number of lights installed is kept to a minimum and follows the specifications detailed in ILP Guidance Note 8: Bats and Artificial Lighting at Night (ILP, 2023) which includes the use of LED luminaires, warm-white light sources (2700 Kelvin or lower), light sources with a peak wavelength higher than 550 nm, and motion sensors on short-duration timers (1 to 2 minutes) and high motion threshold (e.g. so that moths do not set them off).



5.2 Enhancements

- 5.2.1 In line with the NPPF and local planning policy, an opportunity to provide an enhancement for bats is detailed in Table 5-1.

Table 5-1: Opportunity for enhancements for bats

Opportunity	Details
Provision of bat boxes	Install one or more bat boxes on the site ideally these should be integrated into the walls of the converted buildings. If this is not feasible then they could be mounted on external walls or on trees. Suitable boxes include: Integrated • 1FR Schwegler bat tube. • Vivara Pro Build-in Woodstone bat tube. • Ibstock Enclosed bat box. Wall mounted • Beaumaris Woodstone bat box. • 1FF Schwegler bat box. Tree mounted • Low Profile WoodStone bat box. • 1FF Schwegler bat box. • Vivara Pro WoodStone bat box. Bat boxes must be installed at least 3 m above ground level, facing to the south, south-west and/or south-east, located away from windows and other artificial light sources, and with a clear flight path to and from the entrance.

6 References

British Standards Institute (BSI) (2013). BS4202 Biodiversity – A code of practice for planning and development. BSI, London.

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

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Reason, P.F. and Wray, S. (2023). *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. Chartered Institute of Ecology and Environmental Management, Ampfield.

Russ, J. (2021). *Bat Calls of Britain and Europe: A Guide to Species Identification*. Pelagic Publishing, Exeter.

Smart Ecology (2025). *Ecological Walkover & Preliminary Bat Roost Assessment, Dodford Farm, Christian Malford, Chippenham, Wiltshire, SN15 4DE*. Smart Ecology Ltd., Woolaston.



7 Figures

Figure 1 – Location Map

Figure 2 – Building Location Plan

Figure 3 – Surveyor and IR Camera Positions Plan





**Figure 2 -
Building Location Plan**

Dodford Farm,
Christian Malford,
Chippenham,
Wiltshire,
SN15 4DE

-  Site Boundary
 Building

Base map and data from
OpenStreetMap and OpenStreetMap
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Date:	04/09/2025
Drawn by:	Alessandra Malloy
Checked by:	Rachel Barber

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2025-096\GIS

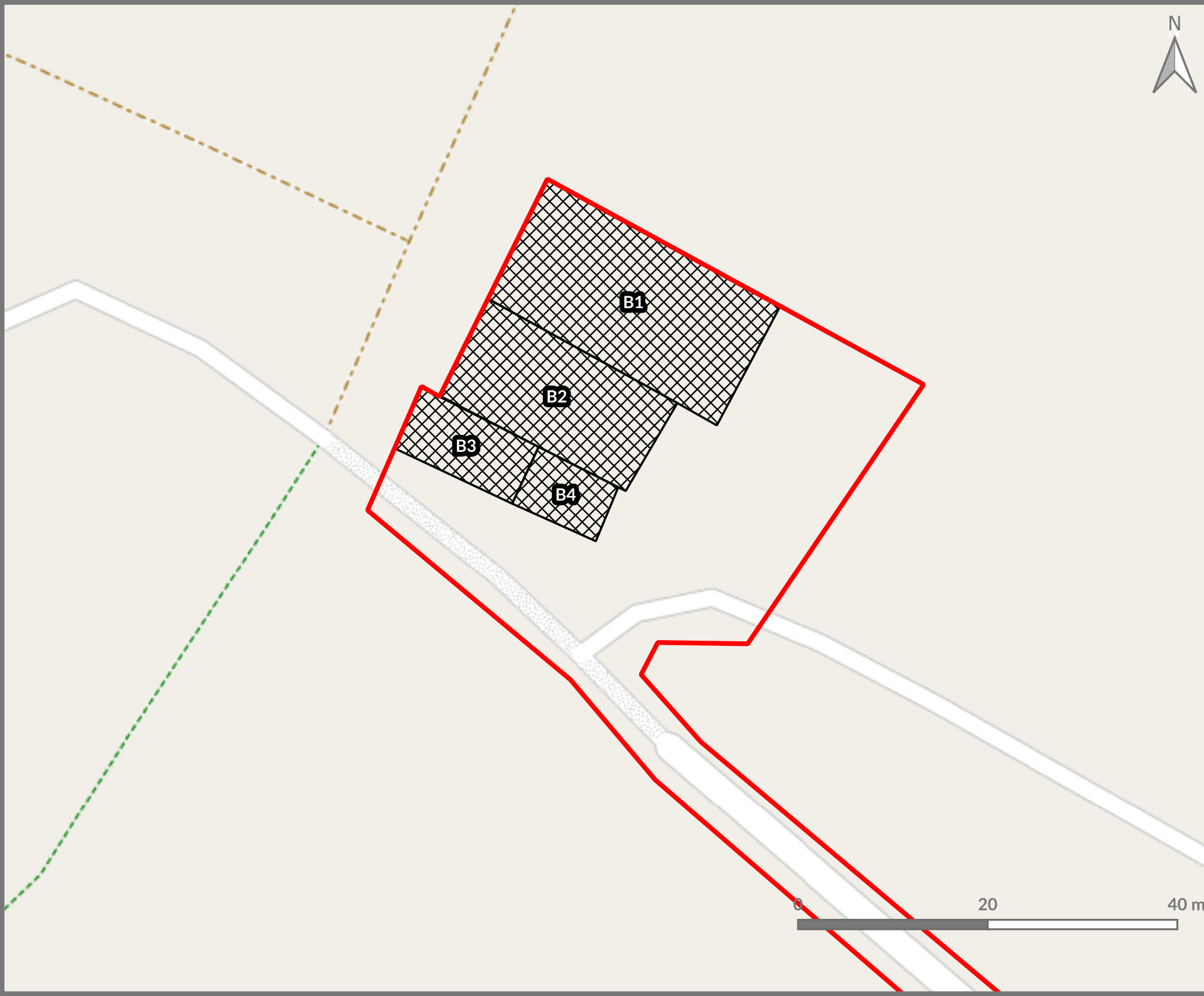




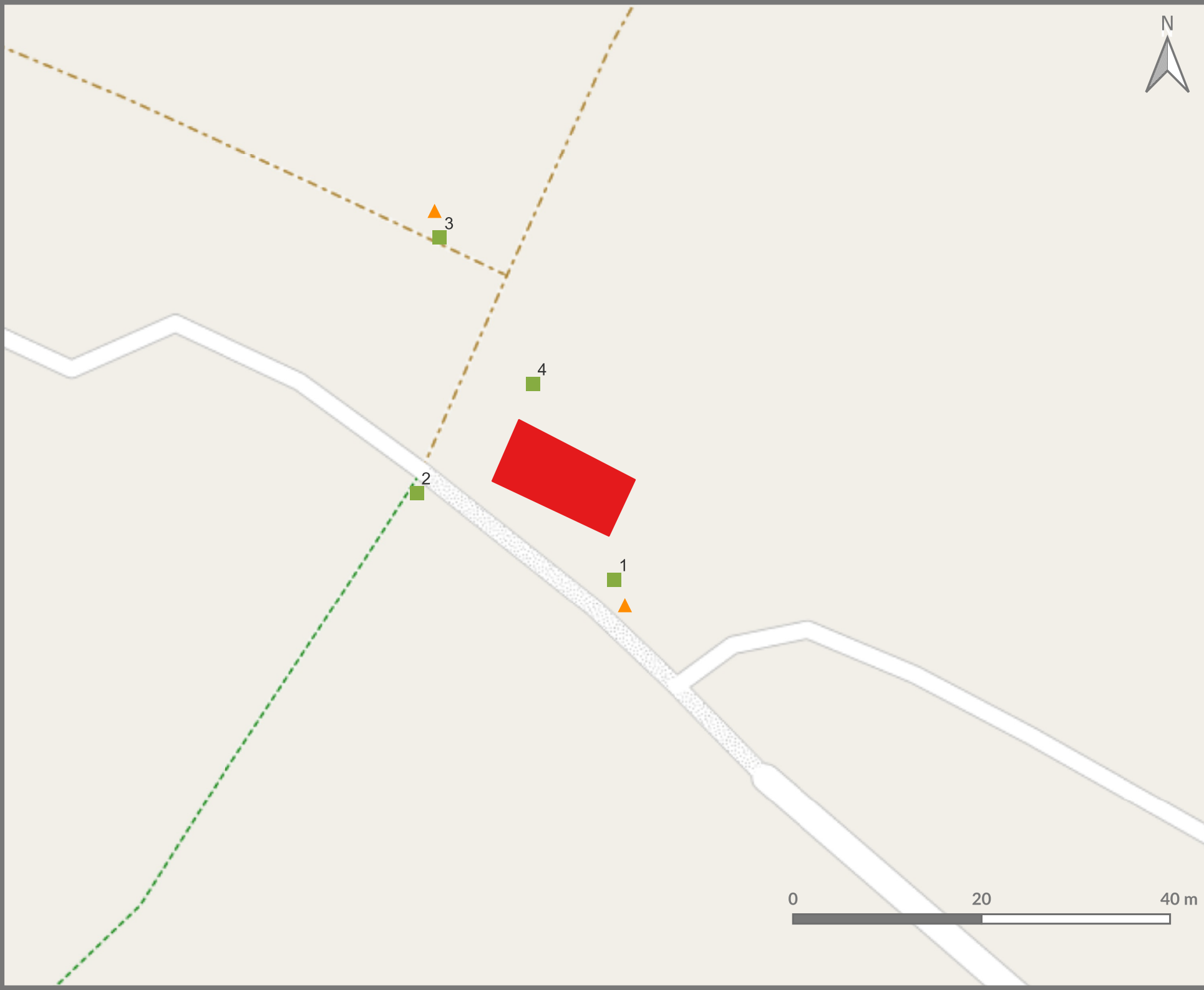
**Figure 3 -
Surveyor and IR
Camera Positions Plan**
Dodford Farm,
Christian Malford,
Chippenham,
Wiltshire,
SN15 4DE

-  Building
-  Camera
-  Surveyor

Base map and data from
OpenStreetMap and OpenStreetMap
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Date:	02/09/2025
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Checked by:	Rachel Barber

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2025-096\GIS

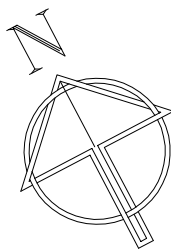


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Appendix 1 – Existing & Proposed Plans

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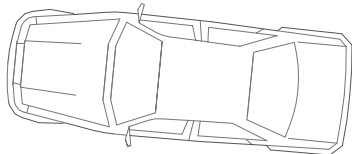
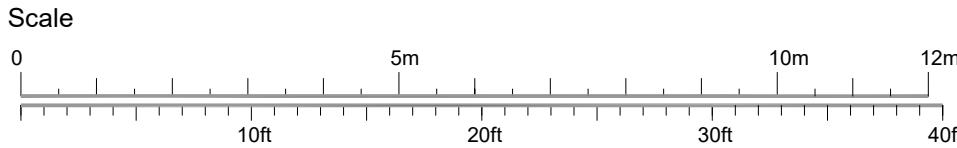
Bungalow

Building 1

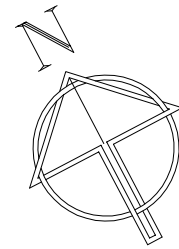
Building 2

Building 3

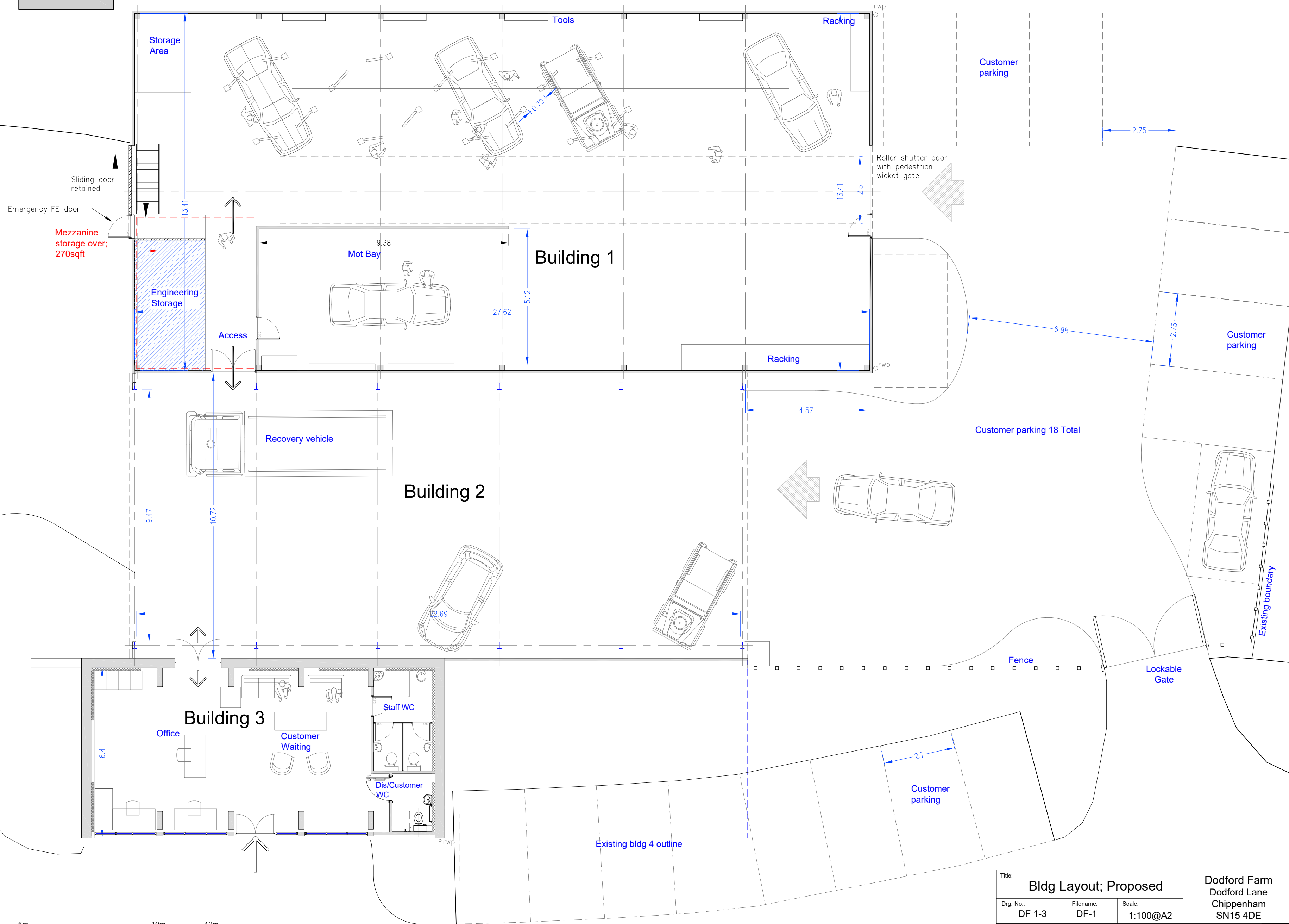
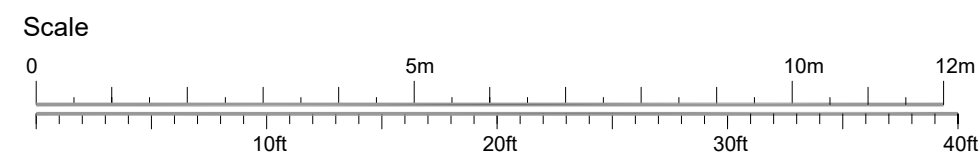
Building 4



Title: Bldg Layout; Existing			Dodford Farm Dodford Lane Chippenham SN15 4DE
Drg. No.: DF 1-2	Filename: DF-1	Scale: 1:100@A2	
Issued for: Planning	Date: 13.01.25	Client: Mr & Mrs Jon Ewart	
Drawn by: Charles Board	Journeyman Draughting + Design 33 Lyeifield Rd. West Cheltenham Glos. GL53 9F7		
M: 07811 739727 E: charlesboard@hotmail.co.uk			



Bungalow



Title: Bldg Layout; Proposed			Dodford Farm Dodford Lane Chippenham SN15 4DE
Drg. No.: DF 1-3	Filename: DF-1	Scale: 1:100@A2	
Issued for: Planning	Date: 21.01.25	Client: Mr&Mrs Jon Ewart	
Drawn by: Charles Board	Journeyman Draughting + Design 33 Lye field Rd. West Cheltenham Glos GL53 9F7 E:charlesboard@hotmail.co.uk		

M: 07811 739727
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Appendix 2 - Sonogram Parameters

The peak frequency measurements used to differentiate between species are shown below. Where further analysis was required additional measurements (inter-pulse interval, call duration and minimum and maximum frequency) were also taken and compared to reference parameters cited in Russ (2021).

Species	Peak Frequency (kHz)		Notes
	Min	Max	
Pipistrellus species			
Common pipistrelle	41.6	50.6	
Soprano pipistrelle	49.8	64.1	
Nathusius' pipistrelle	35.5	46.1	
Large bat species			
Noctule	FM-qCF* – 22.4 qCF* – 17.5	33.6 23.6	Some calls below 20 kHz
Leisler's bat	FM-qCF* – 25.0 qCF* – 21.9	32.1 24.6	All calls above 20 kHz.
Serotine	21.0	31.0	

*FM-qCF – Frequency Modulated – quasi constant frequency *qCF – quasi constant frequency



Appendix 3 - IR Camera Still Shots

30/07/2025 Emergence Survey



Figure A3-1: Camera 1 screenshot



Figure A3-2: Camera 2 screenshot





Figure A3-3: Camera 3 screenshot



Figure A3-4: Camera 2 screenshot



Figure A3-5: Camera 1 screenshot



Figure A3-6: Camera 2 screenshot



Figure A3-7: Camera 3 screenshot



Figure A3-8: Camera 4 screenshot