Alderholt Meadows, Fordingbridge

ES Technical Appendix 9.1Ad: Addendum Ecology Baseline

1. INTRODUCTION

1.1 Dudsbury Homes (Southern) submitted an Outline planning application to Dorset Council (DC) in March 2023 for mixed use development on land at Alderholt, East Dorset. The planning application (reference number P/OUT/2023/01166) was refused and is currently subject to an appeal.

1.2 The planning application was supported by an Environmental Statement (ES), of which Chapter 9 and its associated Technical Appendices relate to ecology.

1.3 Table 9.2 of ES Chapter 9 lists the extensive suite of ecological surveys that have been undertaken by Lindsay Carrington Ecological Services (LCES) in 2019, ABR Ecology in 2021 and 2022 and EPR in 2022 at the Site. ES TA 9.1 presented the ecological baseline that informed the Ecological Impact Assessment (EcIA) set out in the ES and the proposed mitigation and enhancement strategies.

1.4 To ensure the ecological baseline information remains up to date, the following update surveys have been completed in 2024:

- Baseline habitat survey (UK Habitat Classification);
- Ground Level Tree Assessment for suitability to support roosting bats;
- Building Inspection Assessment for suitability to support roosting bats;
- Bat Emergence Survey of buildings 10 and 11;
- Barn Owl Roost Verification Survey; and
- Badger Survey.

1.5 This note, which forms an Addendum to ES TA 9.1, provides the results of these update surveys and reviews any implications for the submitted ES.

2. UPDATE SURVEY RESULTS

Habitats

Introduction

2.1 An update baseline habitat survey of the Site was carried out in April 2024 to check and where necessary update the baseline UK Habitat Classification mapping, and to check and where necessary update the BNG baseline habitat types and condition assessments. A revised BNG metric calculation is reported in the separate Addendum Biodiversity Net Gain Report (ES TA 9.5Ad).

Methodology

Desktop Study

2.2 Prior to the update field surveys, a thorough desktop study was undertaken to review previous reports, published information and internet resources, including data held on habitats, flora species, geology, topography and landscape history for the Site. Sources consulted included:

- The Multi-Agency Geographic Information for the Countryside (MAGIC);
- The British Geological Survey;
- The Soil Survey of England and Wales;
- Open-source LiDAR imagery published by DEFRA;
- The 6" and 25" to the Mile Ordnance Survey Maps (c. 1880-1930s); and
- Aerial imagery from the 1940s onwards.

2.3 A combination of the OS MasterMap Topography Layer and open-source aerial imagery (ESRI, Google Earth) was used to divide the Site into parcels and create a draft habitat map in ArcGIS software, which was then ground-truthed and updated following the field survey.

Field Survey

2.4 Field surveys of area habitats were carried out by Jodie Southgate BA (Hons) MSc MCIEEM, Specialist Principal Ecologist, on 24, 25 and 30 April 2024, and Andy Cross BSc (Hons) MSc MCIEEM, Specialist Principal Ecologist, on 30 April 2024.

2.5 Field surveys of hedgerows and lines of trees were carried out by Craig Sellwood LLB Hons LPC ACIEEM, Ecologist, on 24 and 25 April and 1 May 2024.

2.6 No significant limitations were encountered. The vast majority of the Site, apart from a horse paddock (A22), was accessible. The timing of the surveys meant that habitats and species could be readily identified.

2.7 Each habitat parcel/line was walked to record the vascular plant species present and make notes on habitat condition and any evidence of management. Any readily identifiable bryophytes and lichens were also recorded where present. Notable differences in species frequency compared to those reported by ABR Ecology in 2022 were recorded, and new species added where found. The habitat type was then either confirmed, or updated with

reference to the descriptions set out in the National Vegetation Classification (NVC) (Rodwell, 1992-2000) and UK Habitat Classification v2.0 (UKHab Ltd, 2023). 2x 2m quadrats were recorded where necessary to assist in the classification of the habitat type.

2.8 A Biodiversity Metric 3.1 Condition Assessment form for the appropriate habitat type was completed for each parcel/line. A minimum of one 1x1m quadrat was taken in each grassland parcel to inform the condition assessment. Refer to ES TA 9.5Ad for details.

Results

2.9 **Table 2.1** below compares the 2022 habitat types with the 2024 updates, and **Maps 1a** and **b** show the revised UK Habitat Classification baseline habitat maps for the Site (areal and linear habitats, respectively).

Table 2.1: Updates to Habitat ID, Type and Condition 2024 (see Map 2)

2022 Parcel ID	2022 Habitat Type	2024 Parcel ID	2024 Habitat Type
A1, A2	Temporary grass and clover leys	A1, A2	Cereal crops
A2	Modified grassland	A2a	Modified grassland
A3	Temporary grass and clover leys	A3	Temporary grass and clover leys
A4	Modified grassland	A4	Other neutral grassland
A4	Ruderal/ephemeral	A4a	Bramble scrub
A4	Modified grassland	A4b	Modified grassland
A4	Vacant/derelict land/bare ground	A4c	Vacant/derelict land/bare ground
A4	Developed land, sealed surface	A4d	Developed land, sealed surface
A4	Bramble scrub	A4e	Bramble scrub
A5	Modified grassland	A5	Other neutral grassland
A6	Modified grassland	A6	Other neutral grassland
A6	Bramble scrub	A6a	Bramble scrub
A6	Ruderal/ephemeral	A6b	Ruderal/ephemeral
A6	Vacant/derelict land/bare ground	A6c	Vacant/derelict land/bare ground
A6	Developed land, sealed surface	A6d	Developed land, sealed surface
A7	Temporary grass and clover leys	A7	Temporary grass and clover leys
A7	Lowland mixed deciduous woodland	A7a	Lowland mixed deciduous woodland
A8	Cereal crops	A8	Cereal crops
A8	Bramble scrub	A8a	Bramble scrub
A9	Non cereal crops	A9	Temporary grass and clover leys
A10	Other neutral grassland	A10	Other neutral grassland
A10	Other neutral grassland	A10a	Purple moor grass and rush pastures
A11	Wet woodland	A11	Wet woodland
A11	Lowland mixed deciduous woodland	A11a	Other woodland, mixed

2022 Parcel ID	2022 Habitat Type	2024 Parcel ID	2024 Habitat Type
A11	Purple moor grass and rush pastures	A11b	Purple moor grass and rush pastures
A11	Vacant/derelict land/bare ground	A11c	Vacant/derelict land/bare ground
A11	Developed land, sealed surface	A11d	Developed land, sealed surface
A11	Vacant/derelict land/bare ground	A11e	Vacant/derelict land/bare ground
A11	Modified grassland	A11f	Vegetated garden
A11	Lowland mixed deciduous woodland	A11g	Other woodland, broadleaved
A11	Other neutral grassland	A11h	Other neutral grassland
A11	Purple moor grass and rush pasture	A11h	Other neutral grassland
A11	Purple moor grass and rush pasture	A11i	Other neutral grassland
A12	Modified grassland	A12	Modified grassland
A12	Modified grassland	A12a	Modified grassland
A12	Vacant/derelict land/bare ground	A12b	Vacant/derelict land/bare ground
A13	Modified grassland	A13	Modified grassland
A13	Bramble scrub	A13a	Bramble scrub
A13	Developed land, sealed surface	A13b	Developed land, sealed surface
A14	Missing - now offsite?		
A15	Non-cereal crops	A15	Non-cereal crops
A16	Modified grassland	A16	Modified grassland
A17	Cereal crops	A17	Temporary grass and clover leys
A18	Modified grassland	A18	Modified grassland
A19	Other neutral grassland	A19	Purple moor grass and rush pastures
A19	Other woodland, mixed	A19a	Other woodland, mixed
A20	Modified grassland	A20	Modified grassland
A21	Modified grassland	A21	Modified grassland
A21	Bramble scrub	A21a	Bramble scrub
A21	Vacant/derelict land/bare ground	A21b	Vacant/derelict land/bare ground
A22	Modified grassland	A22	Modified grassland
A22	Developed land, sealed surface	A22a	Developed land, sealed surface
A23	Modified grassland	A23	Other neutral grassland
A23	Lowland Mixed Deciduous Woodland	A23a	Lowland Mixed Deciduous Woodland
A23	Bramble scrub	A23b	Bramble scrub
A24	Modified grassland	A24	Other neutral grassland
A24	Modified grassland	A24a	Other neutral grassland
A24	Bramble scrub	A24b	Bramble scrub
A25	Modified grassland	A25	Temporary grass and clover leys
A26	Modified grassland	A26	Temporary grass and clover leys

2022 Parcel ID	2022 Habitat Type	2024 Parcel ID	2024 Habitat Type
A27	Modified grassland	A27	Modified grassland
A27	Cereal crops	A27a	Temporary grass and clover leys
A28	Temporary grass and clover leys	A28	Temporary grass and clover leys
A28	Cereal crops	A28a	Temporary grass and clover leys
A28	Developed land, sealed surface	A28b	Developed land, sealed surface
A29	Modified grassland	A29	Other neutral grassland
A29	Developed land, sealed surface	A29a	Developed land, sealed surface
A30	Modified grassland	A30	Other neutral grassland
A30	Lowland Mixed Deciduous Woodland	A30a	Lowland Mixed Deciduous Woodland
A31	Cereal crops	A31	Temporary grass and clover leys
A31	Ruderal/Ephemeral	A31a	Other neutral grassland
A31	Ruderal/Ephemeral	A31b	Other neutral grassland
A31	Cereal crops	A31c	Temporary grass and clover leys
A32	Other neutral grassland	A32	Other lowland acid grassland
A32	Other neutral grassland	A32a	Other Scot’s pine woodland
A33	Lowland Mixed Deciduous Woodland	A33	Wet woodland
A33	Lowland Mixed Deciduous Woodland	A33a	Other woodland, mixed
A33	Lowland Mixed Deciduous Woodland	A33b	Felled
A33	Lowland Mixed Deciduous Woodland	A33c	Other woodland, mixed
A33	Lowland Mixed Deciduous Woodland	P8	Ponds (priority)
A33	Lowland Mixed Deciduous Woodland	P9	Ponds (priority)
A34	Other Woodland, Mixed	A34	Other Scot’s Pine Woodland
A35	Other Woodland, Mixed	A35	Other Scot’s Pine Woodland
P1	Ponds (Priority Habitat)	P1	Ponds (Priority Habitat)
P2	Ponds (Priority Habitat)	P2	Ponds (Priority Habitat)
P3	Ponds (Non-Priority Habitat)	P3	Ponds (Non-Priority Habitat)
P4	Ponds (Non-Priority Habitat)	P4	Ponds (Non-Priority Habitat)
P5	Ponds (Non-Priority Habitat)	P5	Ponds (Non-Priority Habitat)
P6	Ponds (Non-Priority Habitat)	P6	Ponds (Non-Priority Habitat)
P7	Ponds (Non-Priority Habitat)	P7	Ponds (Non-Priority Habitat)

Bats

Ground Level Tree Assessment for Bats

Methodology

2.10 A survey of trees within the developable areas of the Site with the potential to be impacted by adjacent development was completed on the 11th March by Hannah Corrigan BSc (Hons) PGCert and Siobhan Pryke BSc (Hons). Both surveyors hold a Natural England level 1 bat survey class licence. The trees within the Site were not surveyed as part of the previous work carried out by LCES and ABR Ecology, therefore the results set out below constitute new data.

2.11 The surveys comprised a search from ground level, with the aid of binoculars, for features that could be used by roosting bats (Potential Roosting Features – 'PRFs'), including woodpecker holes, loose bark, cracks and crevices, broken off limbs and dense Ivy *Hedera helix*, as well as signs of bats, such as scratching and staining.

2.12 A GPS point was taken for each tree assessed and the following information was recorded:

- Tree species;
- Approximate height;
- Approximate diameter at breast height;
- Any potential roost feature, its type, aspect, height and any other descriptive features;
- Suitability for roosting bats; and
- Any constraints to survey.

2.13 Based on the information collected during the surveys, trees were categorised for their suitability for bats in accordance with Bat Surveys – Good Practice Guidelines (Bat Conservation Trust, 2023). Based on the features recorded, trees were identified as 'PRF-I' or 'PRF-M'. 'PRF-I' is defined as a PRF that is only suitable for supporting individual roosting bats or very small numbers of bats, either due to the limited size of the feature or lack of suitable surrounding habitat. 'PRF-M' is defined as a PRF that is suitable for supporting multiple roosting bats and may therefore be used by a maternity colony.

Results

2.14 A total of 45 trees were assessed as having suitability to support roosting bats (**Map 2**). All 45 trees were assessed as being a PRF-I.

2.15 **Table 2.2** below summarises the features present on each tree and identifies further surveys that would be required to confirm the presence or likely absence of a bat roost. These surveys, to be carried out at the detailed design stage, would inform the approach to tree removal (including any requirement for European Protected Species Mitigation Licence, EPSML) and any compensation required, and can be secured by planning condition.

Table 2.2: Bat roost suitability of trees within the Site

Tree Species (Common Name)	Tree ID	Bat Roost Suitability Assessment	PRF	Further Survey, if required
Pedunculate Oak	T1	PRF-I	Knot Hole	Ladder and Endoscope Survey
Silver Birch	T2	PRF-I	Dense Ivy	Precautionary Method Statement

Tree Species (Common Name)	Tree ID	Bat Roost Suitability Assessment	PRF	Further Survey, if required
Pedunculate Oak	T3	PRF-I	Hazard Beam	Ladder and Endoscope Survey
Pedunculate Oak	T4	PRF-I	Pruning Cut	Climbing/ MEWP Survey
Pedunculate Oak	T5	PRF-I	Knot Hole	MEWP Survey
Pedunculate Oak	T6	PRF-I	Knot Hole	Climbing/ MEWP Survey
Pedunculate Oak	T7	PRF-I	Lifted Bark	Climbing/ MEWP Survey
Pedunculate Oak	T8	PRF-I	Tear Out	Climbing/ MEWP Survey
Pine Sp.	T9	PRF-I	Dense Ivy	Precautionary Method Statement
Pedunculate Oak	T10	PRF-I	Ivy Plated	Climbing/ MEWP Survey
Pedunculate Oak	T11	PRF-I	Three Pruning Cuts	Climbing/ MEWP Survey
Pedunculate Oak	T12	PRF-I	Lighting Strike	Climbing/ MEWP Survey
Pedunculate Oak	T13	PRF-I	Hazard Beam	Climbing/ MEWP Survey
Pine Sp.	T14	PRF-I	Lifted Bark	Emergence Survey
Pine Sp.	T15	PRF-I	Dense Ivy	Precautionary Method Statement
Pedunculate Oak	T16	PRF-I	Lifted Bark	Emergence Survey
Pedunculate Oak	T17	PRF-I	Tear Out and Desiccation Fissure	Climbing/ MEWP Survey
Ash	T18	PRF-I	Butt Rot & Desiccation Fissure	Ladder and Endoscope Survey
Pedunculate Oak	T19	PRF-I	Tear Out	Ladder and Endoscope Survey
Pedunculate Oak	T20	PRF-I	Tear Out and Lifted bark	Climbing/ MEWP Survey
Willow Sp.	T21	PRF-I	Lighting Strike	Ladder and Endoscope Survey
Willow Sp.	T22	PRF-I	Pruning Cut	Ladder and Endoscope Survey
Willow Sp.	T23	PRF-I	Two Hazard Beams	Ladder and Endoscope Survey
Willow Sp.	T24	PRF-I	Knot Hole	Climbing/ MEWP Survey
Willow Sp.	T25	PRF-I	Lighting Strike	MEWP Survey
Willow Sp.	T26	PRF-I	Pruning Cut	Ladder and Endoscope Survey
Red Oak	T27	PRF-I	Knot Hole and Tear Out	Climbing/ MEWP Survey
Pedunculate Oak	T28	PRF-I	Two Pruning Cuts and Butt Rot	Climbing/ MEWP Survey
Pedunculate Oak	T29	PRF-I	Tear Out	Climbing/ MEWP Survey
Pedunculate Oak	T30	PRF-I	Two Pruning Cuts	Climbing/ MEWP Survey
Pedunculate Oak	T31	PRF-I	Two Hazard Beams	Emergence Survey
Pedunculate Oak	T32	PRF-I	Two Hazard Beams	Emergence Survey
Pedunculate Oak	T33	PRF-I	Hazard Beam	Emergence Survey
Pedunculate Oak	T34	PRF-I	Three Knot Holes	Emergence Survey
Pedunculate Oak	T35	PRF-I	Two Knot Holes	Emergence Survey
Pedunculate Oak	T36	PRF-I	Pruning Cut	Emergence Survey
Ash	T37	PRF-I	Knot Hole	Emergence Survey

Tree Species (Common Name)	Tree ID	Bat Roost Suitability Assessment	PRF	Further Survey, if required
Pedunculate Oak	T38	PRF-I	Tear Out	Ladder and Endoscope Survey
Pedunculate Oak	T39	PRF-I	Two Knot Holes	Climbing/ MEWP Survey
Pedunculate Oak	T40	PRF-I	Tear Out	Climbing/ MEWP Survey
Pedunculate Oak	T41	PRF-I	Tear Out	Climbing/ MEWP Survey and Emergence Survey
Pedunculate Oak	T42	PRF-I	Pruning Cut	Climbing/ MEWP Survey and Emergence Survey
Pedunculate Oak	T43	PRF-I	Tear Out	Ladder and Endoscope Survey
Ash	T44	PRF-I	Knot Hole	Emergence Survey
Pedunculate Oak	T45	PRF-I	Lifted Bark	Ladder and Endoscope Survey

Building Inspection for Bats

Methodology

2.16 An update daytime building inspection for bats was undertaken of the 15 buildings located within the Site boundary on the 15th and 18th April 2024, by Natalie Compton BSc (Hons) MCIEEM a Natural England level 2 bat survey class licence holder and Siobhan Pryke BSc (Hons) a Natural England level 1 bat survey class licence holder, in order to verify the results of the previous survey work conducted between 2019-2022 and to verify the conclusions of the submitted ES chapter.

2.17 Based on survey methods described in the Bat Survey Guidelines (Bat Conservation Trust, 2023), the building inspections involved external and (where possible) internal inspections using a high-powered torch and binoculars to ascertain the suitability of the structures for supporting roosting bats, including identifying PRFs and associated potential access/egress points. The search also included looking for direct evidence of bat use, such as the presence of bats, feeding remains, bat droppings on surfaces and/or immediately adjacent to the building, and staining or scratch marks around suitable bat roost locations or suitable access points into the building. Based on this assessment, each building was classified as either a confirmed roost, or as being of High, Medium, Low or Negligible suitability for roosting bats.

Results

2.18 The results of the bat roost suitability assessment largely verify the previous survey findings (see **Map 3**). The only significant change to roosting suitability of the buildings was recorded for Buildings 10 and 11, both of which were classified previously as having negligible suitability for roosting bats. Anecdotal evidence from the homeowner at Jasper Cottage in April 2024 suggested that the stables (Building 11) support roosting bats. Several PRFs, including the possible roosting location described by the homeowner, were noted across the extent of this building. Building 10 (the garage) also contained PRFs above the garage doors.

2.19 **Table 2.3** below presents a summary of the features suitable for roosting bats within the on-site buildings and an assessment of their suitability to support roosting bats. Photographs taken in B2 and B5 are provided in **Appendix 1**.

Table 2.3: Bat Roost Suitability of Buildings within the Site

Building Reference	Building Description	Features Suitable for Roosting Bats	2019-2022 Bat Roost Suitability Assessment	2024 Bat Roost Suitability Assessment
1	• The large building is constructed of cinderblock elevations. • Cement fibre sheeting is present at the upper elevations of the west and east gable ends. • The roof is pitched and constructed of metal material. • Open doors are present at the west and east elevations. • Wooden hatches are present at the north and south elevations for feeding the chickens. • Vents are present across the roof. • Silos are present at the north elevation. • Wooden rafters are present internally with wooden support struts. • Chipboard and plaster boarding lines the roof internally.	Access: open doors PRFs: hanging from rafters and chipboard internally **No hibernation potential**	Low	Low
2	• The outbuilding is constructed of cinderblock elevations. • The roof is pitched and hipped with concrete roof, ridge, and bonnet tiles. • An attached garage was present to the northeast of the building, and no access was available internally. • Wooden fascia, window and door frames were present. • Most of building is ivy and flora covered. • No loft hatch was present internally.	**Brown Long-eared maternity roost recorded (x6 roosting Brown Long-eared bats noted during survey).** Access: open doors, gaps at roof and bonnet tiles PRFs: hanging from rafters and chipboard internally **Hibernation Roost previously recorded via static bat detectors**	Confirmed Brown Long Eared Maternity & Hibernation Roost and Greater Horseshoe Day Roost	Confirmed Brown Long Eared Maternity & Hibernation Roost and Greater Horseshoe Day Roost
3	• The outbuilding was constructed of cinderblock and render elevations. • The roof is pitched with single-skinned metal corrugated material. • Wooden window and door frames are present. • Most of building is ivy and flora covered. • Internally no enclosed loft void is present. • A double wooden ridge, rafters and purlin beams are present internally.	Access: open door PRFs: hanging from rafters and beams **No hibernation potential**	Low	Low

Building Reference	Building Description	Features Suitable for Roosting Bats	2019-2022 Bat Roost Suitability Assessment	2024 Bat Roost Suitability Assessment
4	• The 'L' shaped barn is constructed of cinderblock elevations. • Cement fibre sheeting is present at the upper elevation of the northwest gable end. • The roof is pitched and constructed of metal corrugated material. • The barn ins open fronted on the southeast elevation. • Wooden door frames are present. • Most of the building to the southeast was covered in ivy and flora. • No enclosed voids are present. • Wooden rafters are present internally. • The section of the barn to the northwest was inaccessible.	Access: open door PRFs: hanging from rafters and beams **No hibernation potential**	Low	Low
5	• The two-storey detached house was constructed of brick elevations with wooden cladding present at the upper elevations. • The roof is pitched and hipped with concrete interlocking roof tiles and concrete ridge and bonnet tiles. • A single-storey extension with a pitched roof constructed of concrete roof tiles is present at the southwest elevation. • A vaulted ceiling is present internally within the extension.	Access: gaps in tiles and bonnet tiles, gaps in soffit, wooden cladding and lead of chimney PRFs: see above and rafters/beams internally **No hibernation potential**	Confirmed Brown Long Eared and Common Pipistrelle Day Roost	Confirmed Brown Long Eared and Common Pipistrelle Day Roost
6	• The prefabricated wooden shed with a pitched roof covered in bituminous 1F felt is located to the northeast of the house at Sleepbrook.	None	Negligible	Negligible
7	• The partly collapsed outbuilding is located to the northeast of the house at Sleepbrook. • The outbuilding is of wooden construction. • The roof is pitched and constructed of corrugated bituminous felt sheeting. • Wooden fascia is present. • An open door is present at the southeast elevation. • Internally, a wooden double ridge and rafters and no enclosed voids are present.	None	Negligible	Negligible
8	• The collapsed outbuilding is located to the northeast of the house at Sleepbrook.	None	Negligible	Negligible

Building Reference	Building Description	Features Suitable for Roosting Bats	2019-2022 Bat Roost Suitability Assessment	2024 Bat Roost Suitability Assessment
	• The outbuilding is of wooden construction. • The roof is pitched and constructed of cement fibre and metal material. • No enclosed voids are present.			
9	• The building comprises a single-storey block-built barn with a pitched corrugated roof; the upper elevations comprise single-skin corrugated metal. • An open-fronted single-storey section adjoins the northeast elevation and comprises a flat corrugated Perspex roof supported by a timber frame and a block wall. • A small block-built store room adjoins the open-fronted section on the northeast end and comprises a flat corrugated metal roof with wood fascia boards. • A wooden doorway is present on the southeast elevation of the storeroom. • No enclosed voids are present within the building.	None	Negligible	Negligible
10	• The building comprises a single-storey double-bay garage of block construction. • The slanting roof is constructed of corrugated composite metal. • Two metal 'up-and-over' garage doors are present on the southeast elevation. • No enclosed voids are present.	Access: gaps above garage door PRFs: gaps above garage door **No hibernation potential**	Negligible	Low
11	• The building comprises a block-built stables consisting of three stalls each with three wooden Dutch stable doors on the northeast elevation. • The slanting roof is constructed of corrugated metal. • Wooden fascia boards are present. • The roof is lined with chipboard. • No enclosed voids are present.	Access & PRFs: Gaps at rafter foot, Gap beneath wooden cladding, Gaps in soffit and wooden bargeboard, Gaps in wooden ceiling panel **No hibernation potential**	Negligible	Potential Roost (Anecdotal Evidence)
12	• The building comprises a single-storey and one-and-a-half storey building of block/brick construction in the south and corrugated asbestos/fibre cement in the north.	Access: gaps in bricks and ridge PRFs: as above **No hibernation potential**	Low	Low

Building Reference	Building Description	Features Suitable for Roosting Bats	2019-2022 Bat Roost Suitability Assessment	2024 Bat Roost Suitability Assessment
13	• The building comprises a former milking parlour and is a single-storey barn of rendered block construction. • The roof is pitched with corrugated asbestos/fibre cement and a fibre cement ridge covering. • Metal-framed windows are present on the south and north elevations. • Perspex rooflights are present on both roof pitches. • Some areas of wooden fascia boards are present along the south and north elevations. • No enclosed voids are present.	Access: gaps in render and ridge, doorways and windows PRFs: as above and internally from rafters and beams **No hibernation potential**	Low	Low
14	• The building comprises a single-storey barn of rendered block and brick construction. • The roof is pitched with corrugated asbestos/fibre cement and a fibre cement ridge covering, Perspex rooflights are present. • Exposed rafters are present on both gable ends. • The render has begun to fail at the gables with large cracks present. • Internally the barn is used for storage. • Various doorways are present around the building. • No enclosed voids are present.	Access: open doors, gaps in roof and ridge covering and cracks in render and exposed rafters on gable ends PRFs: as above and internally via rafters and beams **Hibernation potential**	Confirmed Common and Soprano Pipistrelle Day Roost	Confirmed Common and Soprano Pipistrelle Day Roost
15	• The building comprises a former stables of block construction. • The roof is pitched with corrugated asbestos/fibre cement and a fibre cement ridge covering. • Several wooden Dutch stable doors are present on the southwest elevation. • Perspex rooflights are present. • No enclosed voids are present.	Access: open doorways, gaps at ridge and on wooden fascia PRFs: as above, crevices at wall tops, and hanging internally from ridge and beams **No hibernation potential**	Low	Low

2.20 Where suspected bat droppings were found as part of the building inspection, these were collected and submitted to Swift Ecology for DNA analysis in order to verify species present within the building.

2.21 During the internal inspection of Building 2, c. 10 droppings were located in the south-east room and were suspected to be of the size and shape typically associated with Long-eared bats. Six roosting Long-eared bats (suspected to be Brown Long-eared based on previous surveys but will be confirmed via DNA analysis) were noted within the south-west room in a crevice created by the peeling plastic ceiling lining. This confirmed the presence of a maternity Brown Long-eared roost within Building 2.

2.22 During the internal inspection of Building 5, droppings were recorded in the loft (c.300-400 spread across the loft beneath the ridge) and within the eastern eaves (c. 50). Droppings were of the size and shape typical of Long-Eared bats. Three roosting Long-eared bats (suspected to be Brown Long-eared based on previous surveys but will be confirmed via DNA analysis) were noted roosting in the loft where the roofing membrane had peeled at the ridge creating a crevice. This confirmed the presence of a Brown Long-eared day roost within Building 5.

Bat Emergence Survey of Building 10 and 11

Methodology

2.23 A dusk emergence survey was undertaken of Buildings 10 and 11 on the 10th May 2024.

2.24 Surveys were carried out by experienced bat surveyors equipped with bat detectors (Batlogger M and Batlogger M2) in accordance with Bat Conservation Trust Bat Good Practice Guidelines (Bat Conservation Trust, 2023). Three surveyors were positioned around the buildings, one positioned outside Building 10 by both garage doors, and two around Building 11 to provide good visual coverage of potential roosting features. Night Vision Aids (Nightfox Whiskers) were positioned adjacent to the surveyors to provide coverage of the Potential Roost Features once light levels had dropped. Any bats seen or heard were recorded on a detailed map of the survey area, logging any emergence and egress feature, the time a bat was recorded, bat species/species group, number of bats, direction of flight (where observed) and behaviour, where possible, e.g. commuting, etc. Recordings were later analysed using appropriate software, e.g. Kaliedoscope to confirm identification to species/species groups, as necessary. Footage gathered from the Night Vision Aids were reviewed where activity close to the buildings was suspected or to verify behaviours.

2.25 Dusk emergence surveys commenced 15 minutes prior to sunset and continued for an hour and a half. Weather details are provided in **Table 2.4** below.

Table 2.4: Emergence survey date, timings and weather conditions

Date	Building/ Tree Reference	Sunset /Sunrise Time	Start Time	Finish Time	Temp (°C)	Cloud Cover (%)	Wind (Bf)	Rain
10/05/2024	Building 10 and 11	20:42	20:27	22:12	17	5	0	Dry

Results

2.26 During the emergence survey no bats were recorded emerging from either building. Common Pipistrelle and Soprano Pipistrelle bats were recorded throughout the survey, foraging in low numbers within Building 9 (the open barn). Noctules were also recorded commuting west over the buildings.

2.27 An additional dusk emergence survey is proposed for June 2024.

Badgers

Methodology

2.28 The Badger walkover survey was undertaken on the 13th March 2024 by Natalie Compton BSc (Hons) MCIEEM and Hannah Corrigan BSc (Hons) PGCert, and the 18th March 2024 by Laura Gravestock BSc (Hons) MSc MCIEEM and Siobhan Pryke BSc (Hons), in accordance with the methodology described by Harris et al. (1989). The purpose of the survey was to verify the results of the previous surveys and, given the highly mobile nature of Badgers and their strong instinct for digging, to identify any additional signs of Badgers such as newly created setts. The survey was undertaken in suitable weather conditions.

2.29 The Site was examined for Badger presence through the discovery of setts, and their activity levels through identification of field signs (e.g. well-used pathways, foraging holes (snuffle holes), Badger hairs, footprint, dung pits and latrines). Any setts that were discovered were categorised (in accordance with **Table A1** in **Appendix 2**) and their entrance numbered and where possible assigned a level of current use (as per **Table A2** in **Appendix 2**). The locations of any setts and other signs of Badger activity identified were recorded and subsequently mapped in order to establish the distribution of Badger activity across the Site.

Results

2.30 A summary of the 2024 walkover survey results are presented below in **Table 2.5** and illustrated on **Map 4**. With reference to the previous survey findings in 2019 and 2021, which are presented on **Map 5**, the results of the 2024 survey largely confirm that the use of the Site by Badgers remains unchanged.

Table 2.5: 2024 Badger survey results

Badger Sett Reference 2021	2021 Sett Classification (and entrance holes) – (See ABR Ecology Report, 2022)	Bader Sett Reference 2024	2024 Sett Classification/ details
MS2	Main (11 Used, 2 part used entrances with bedding, latrines and snuffling)	4	Subsidiary (2 well used entrances and 5 partially used entrances - mostly in use by rabbits)
AS2	Annex (two part used entrances)	5	Subsidiary (3 well used entrances and 4 partially used entrances - most in use by rabbits)
OS2	Outlier (two part used entrances but restricted be dense shrub)	1	Subsidiary (1 well used entrance and 6 partially used entrances)

Badger Sett Reference 2021	2021 Sett Classification (and entrance holes) – (See ABR Ecology Report, 2022)	Bader Sett Reference 2024	2024 Sett Classification/ details
OS4	Outlier (two part used holes but within dense scrub)	9	Outlier (4 partially used entrances)
MS1	Main (Five used, four part used, two disused entrances with latrines and snuffling)	7	Main (7 well used, 6 partially used and 2 disused entrances, with large spoil, well-worn paths and latrines)
AS1	Annex (three used, on part used and two disused)	6	Annex (2 well used entrances and 2 partially used entrances)
SS1	Subsidiary (three used entrance but scrub prohibited access to this area)	10	Large subsidiary (15 well used entrances, some of which were in use by rabbits, and 2 partially used entrance holes, no latrines or large spoil, linking paths to main sett MS1 (Sett 7))
OS1	Outlier (three part used entrances)	8	Outlier (on partially used entrance likely to be in use by rabbits)
OS3	Outlier (two part used entrances)	11	Outlier (1 partially used entrance)
-	-	2	New outlier (1 partially used entrance)
-	-	3	New outlier (1 partially used entrance)

Barn Owl

Methodology

2.31 An updated survey for Barn Owl *Tyto Alba* was undertaken in April 2024 in order to verify the results of the previous survey work conducted in 2021.

2.32 All buildings within the survey area were inspected externally and internally, where possible, for potential Barn Owl access points, with evidence of breeding or roosting Barn Owl (such as pellets, feathers, droppings, chicks, eggs, and adults) being recorded when present (Barn Owl Trust, 2012).

2.33 A bottom-up approach was adopted for this survey and started with a search of areas that were least likely to have nesting or roosting Barn Owl (i.e. assessment of open habitats), and then gradually progressing through the Site, leaving the most likely areas until last (i.e. buildings) (Shawyer, 2012).

Results

2.34 In 2021 only B4 was identified as an Active Roost Site (ARS), with no evidence found in any of the other buildings within the Site.

2.35 The results of the 2024 Barn Owl survey verify the previous survey findings (ABR, 2021). B4 is still an ARS with over 10 fresh pellets recorded and a Barn Owl was observed in the building.

2.36 The only changes from the previous survey findings are that Barn Owl evidence was also found in B3 and B1.

2.37 B3 had approximately 10 pellets present, these were aged at approximately 12-24 months. During the updated bat-building inspection, a Barn Owl was also noted in B3. Based on the Barn Owl chest feathers it was identified as a male Barn Owl. B3 has been classified as an Occasional Roost Site (ORS).

2.38 B1 had a single fresh pellet present at the western end of the building. Although only a single Barn Owl pellet was present, it showed recent use, as the pellet was aged at 1 week old. Therefore, B1 is classified as an ORS.

2.39 The results from the 2024 survey are summarised in **Map 6.**

3. SUMMARY OF IMPLICATIONS FOR DEVELOPMENT

Habitats

3.1 The 2024 update UK habitat classification survey has identified minor modifications to the baseline habitats recorded across the site, however the overarching **assessment set out within the ES chapter and conclusions reached remain valid**. Revisions to the baseline habitats have been captured in a revised BNG metric calculation, which is reported separately within the Addendum Biodiversity Net Gain report (ES TA 9.5Ad).

Bats

Ground Level Tree Assessment for Bats

3.2 The ES stated that a high number of trees on the Site possess PRFs for bats and proposed further investigation at the Reserved Matters stage.

3.3 The Ground Level Tree Assessment for bats completed in 2024 recorded a total of 45 trees with suitability to support roosting bats. Further surveys are recommended at the Reserved Matters stage to determine if the trees support roosting bats. A bat EPSML will be required if any works will result in the damage and/or destruction of any bat roosts and disturbance of any roosting bats.

3.4 **The conclusions and further recommendations detailed above, as outlined in the ES chapter, therefore remain valid and proportionate based on the outcome of the 2024 Ground Level Tree Assessment for bats.**

Building Inspection and Emergence Survey for Bats

3.5 The ES listed the following bat roosts as present within the Site and/or within the ZOI:

- A maternity roost/hibernation roost for Brown Long-eared Bats in building B2;
- A day roost for Greater Horseshoe Bat in B2;
- Day roosts for Brown Long-eared Bat and Common Pipistrelle in B5; and
- A day roost for Soprano and Common Pipistrelles in B14.

3.6 The results of the updated 2024 building inspection confirmed the presence of the maternity roost within B2 and the features previously utilised by Greater Horseshoe bats remain present within the structure. The updated building inspection also confirmed the presence of a day roost for Brown Long-eared bats in B5 with the features previously utilised by Common Pipistrelle bats remaining unaltered. No evidence of use by Common or Soprano Pipistrelle bats were recorded in B14 during the updated building inspection, however, the features previously utilised by both species remained unaltered.

3.7 No evidence of roosting bats was noted during the inspection of Building 11, previously assessed as having negligible suitability to support roosting bats, however, anecdotal evidence of bats roosting within the structure was received from the homeowner. Although no evidence was noted during the inspection, the building contains PRFs that may support roosting bats.

The dusk emergence survey of buildings 10 and 11 conducted on the 10th May recorded no roosting bats emerging from either building.

3.8 The ES Chapter concluded that the bat assemblage within the ZOI is considered to be of **County** importance with a **favourable, stable** conservation status. **Based on the results of the updated bat surveys to date this assessment remains valid.**

3.9 The conservation status was considered to be favourable, since it is likely that the bat populations have good access to a range of foraging habitats and roosting sites within the potential ZOI, and access to further foraging and roosting resources beyond the ZOI, especially to the east along the Avon valley. The conservation status is considered to be stable, since disturbance from existing levels of activity is likely to continue at a similar level in the absence of development. **The conservation status remains valid at the time of writing this report.**

3.10 The ES chapter stated that mitigation for the loss of potential roosting bats would comprise *'Trees and buildings which will be directly impacted by the proposals will be subject to an update assessment for bat roost suitability, followed, as required, by a suite of update presence/absence surveys conducted in accordance with good practice guidance or, if practicable, an exhaustive endoscopic inspection of potential roosting features. If a bat roost is identified during update surveys, it will be retained in situ if possible, or otherwise lawfully removed pursuant to a European Protected Species mitigation licence, which will prescribe suitable mitigation and compensation measures to the satisfaction of the licensing body.'*

3.11 **The mitigation proposed within the ES chapter remains valid.**

Badgers

3.12 The 2021 survey found evidence of Badgers across the Site. This included the presence two active main setts (one breeding), one subsidiary sett, two annex setts and four outlier setts.

3.13 Since the setts were clustered in two separate areas in the north west and north east of the Site, it was unclear whether these setts were associated with one or two clans. A bait marking study at the Reserved Matters stage was identified as a possible requirement where sett closure under Natural England licence is necessary.

3.14 Main Sett MS2 was historically recorded as a main sett, however, it was clear during the 2024 update survey that the majority of entrances were in use by rabbit. Of the seven entrances recorded only one entrance had signs indicating use by Badgers (a single Badger hair found). The sett complex lacked signs of recent digging, large spoil piles, well connected paths linking the entrances, latrines or signs of foraging - all of which usually be evident for a sett in regular use as a main sett. No well worn paths leading to or from the sett were recorded. Due to the lack of signs that would typically be associated with an active main sett, MS2 was reclassified as a subsidiary sett. As a consequence, Annexe sett AS2 was also reclassified as a subsidiary sett.

3.15 Best Practice Guidance (Badger Trust, 2023) recommends that a detailed survey is conducted over a continuous period of no less than 21 consecutive days to establish Badger activity. Therefore, at the Reserved Matters stage further monitoring may be required where sett closure under Natural England licence is necessary.

3.16 The ES chapter stated that Badgers are widespread and relatively common in England and are therefore not a species of conservation concern. Due to the low nature conservation value of Badgers, the Badger population within the ZOI of the Proposed Development was evaluated as being of no more than **Within the ZOI importance**. **This assessment remains valid.**

3.17 Mitigation proposed within the ES chapter was that '*in order to ensure Badger setts are safeguarded, an update Badger survey will be carried out within six months of any site clearance or earthworks commencing to confirm the presence, distribution and status of Badger setts. Should any new setts be discovered within 30m of the construction zone, it may be necessary to obtain a mitigation licence from Natural England to enable works close to the sett or in some circumstances to close the sett(s), in which case Natural England would seek appropriate mitigation or compensation through the mitigation licencing process…Standard working procedures to ensure the protection of Badgers and their setts during construction (which would be secured as conditions of any licence granted by Natural England) include implementing buffer zones around retained setts, ensuring that key commuting and foraging corridors are not blocked, and covering excavations at night. Whilst negative impacts on Badgers in the absence of mitigation would not be of more than zone of influence significance, there is the potential for accidental legal offences. Implementation of these measures would reduce the impacts to not significant and prevent accidental legal offences in relation to the Protection of Badgers Act 1992.'*

3.18 **Based on the results of the updated 2024 Badger survey the mitigation proposed within the ES chapter remains proportionate and valid.**

Barn Owl

3.19 Previous survey in 2021 only recorded a single building as a roost or having evidence of Barn Owl. The update survey has identified Barn Owl presence in three buildings within the Site, one ARS (B4) and two ORS (B1 and B3).

3.20 The ES Chapter concluded that the presence of Barn Owl roosts is of **Local** importance and stated that whilst there is currently no evidence of breeding, that the possibility remains in the future. **This assessment remains valid**, and an update survey will be required at the Reserved Matters stage.

3.21 The ES chapter recommended that '*Loss of the barn and therefore the roost will be compensated by providing Barn Owl nest boxes on suitable buildings or trees within the SANG in the western half of the Site.'* **The mitigation proposed in the ES chapter remains valid and proportionate based on the 2024 survey results.**

4. REFERENCES

Barn Owl Trust (2012) *Barn Owl Conservation Handbook*. Pelagic Publishing, Exeter.

Shawyer, C. R. (2012) *Barn Owl Tyto alba Survey Methodology and Techniques for use in Ecological Assessment: Developing Best Practice in Survey and Reporting*. IEEM, Winchester

English Nature (2002) *Badgers and Development.* English Nature, Peterborough.

Harris, S., Creswell. P., and Jefferies, D.J. (1989) *Surveying badgers*. Mammal Society, London.

Natural England (2007) *Badgers and Development: A Guide to Best Practice and Licensing* Interim Guidance Document. Natural England, Peterborough.

Roper, T. J. (1992) *Badger Meles meles sett architecture, internal environment and function. Mammal. Rev.* 22, 43– 53.

Rosalino, L., Macdonald, D. and Santos-Reis, M. (2005) *Activity rhythms, movements and patterns of sett use by badgers, Meles meles, in a Mediterranean woodland.* Mammalia. 69, 3-4.

Woods, Michael (1995) *The Badger Book.* The Mammal Society, Southampton.

Document Prepared By: Natalie Compton BSc (Hons) MCIEEM & Siobhan Pryke BSc (Hons)

Document Reviewed By: Dr Rebecca Brookbank BSc (Hons) PhD MCIEEM

Document Dated: 24/05/2024

Maps

Map 1a	**Baseline Habitats – Area Habitats**
Map 1b	**Baseline Habitats – Linear Habitats**
Map 2	**Ground Level Tree Assessment Results**
Map 3	**Building Inspection Results**
Map 4	**2024 Badger Survey results**
Map 5	**Previous Badger Survey Results**
Map 6	**2024 Barn Owl Survey Results**

MAP 1a Baseline Area Habitats - UK Habitat Classification

KEY

- Site boundary
- c1 - Arable and horticulture
- c1b - Temporary grass and clover leys
- c1c - Cereal crops
- c1d - Non-cereal crops
- f2b - Purple moor-grass and rush pastures
- g1d - Other lowland acid grassland
- g3c - Other neutral grassland
- g3c5 - Arrhenatherum neutral grassland
- g3c8 - Holcus-Juncus neutral grassland
- g4 - Modified grassland
- h3d - Bramble scrub
- r1 - Standing open water and canals
- u1 - Built-up areas and gardens
- u1b - Developed land, sealed surface
- u1b5 - Buildings
- w1d - Wet woodland
- w1f - Lowland mixed deciduous woodland
- w1f7 - Other lowland mixed deciduous woodland
- w1g - Other broadleaved woodland
- w1h - Other woodland, mixed
- w2b - Other scot's pine woodland

A1: Unique Area Feature ID

SCALE: 1:7,500 at A3

0 100 200 300 400 500 Metres

N

EPR

CLIENT: Dudsbury Homes (Southern)

PROJECT: Alderholt Meadows, Fordingbridge

DATE: 24 May 2024

Y:\Alderholt, East Dorset 2240\GIS\Addendum Ecology Baseline\Map1a_BaselineAreaHabitats_P2240_1990_240524.mxd

P22/40

Aerial Image: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

MAP 1b Baseline Linear Habitats - UK Habitat Classification

KEY

- Site boundary
- w1 - Broadleaved and mixed woodland
- h2a - Native hedgerow
- h2a5 - Species-rich native hedgerow
- h2b - Non-native and ornamental hedgerow
- r2b - Other rivers and streams

A1: Unique Linear Feature ID

SCALE: 1:7,500 at A3

0 100 200 300 400 500 Metres

N

EPR

CLIENT: Dudsbury Homes (Southern)

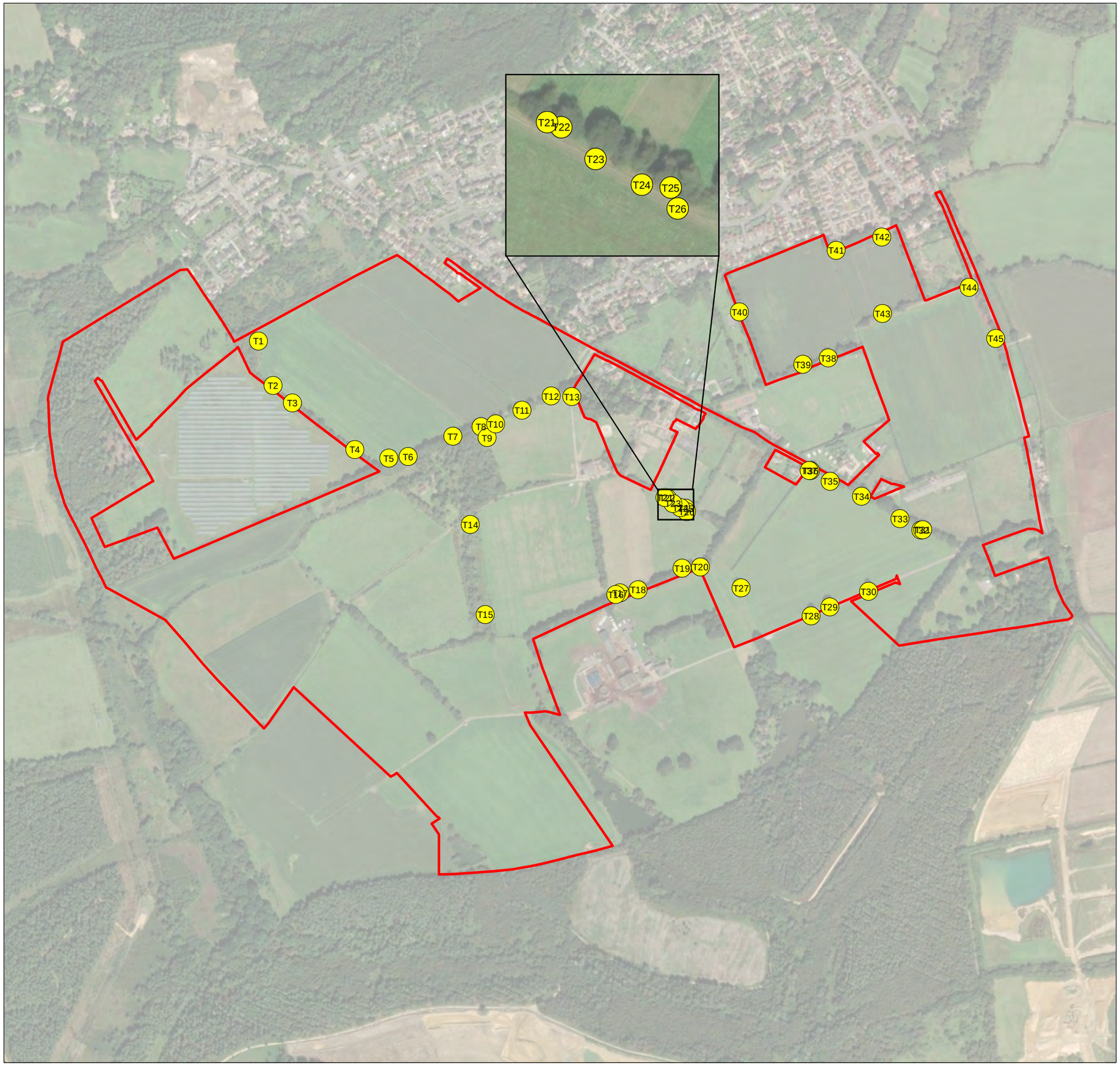
PROJECT: Alderholt Meadows, Fordingbridge

DATE: 24 May 2024

Y:\Alderholt, East Dorset 2240\GIS\Addendum Ecology Baseline\Map1b_BaselineLinearHabitats_P2240_240524.mxd

P22/40

Aerial Image: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



MAP 2 Ground Level Tree Assessment Results

KEY

Site boundary

Estimated PRF Inspection Results

PRF-I

Main Map Frame:
SCALE: 1:1,250 at A3

0 100 200 300 400 500 Metres

N

EPR

CLIENT: Dudsbury Homes (Southern) Ltd

PROJECT: Alderholt Meadows

DATE: 24 May 2024

Y:\Alderholt, East Dorset 2240\GIS\Addendum Ecology Baseline\Map2_GroundLevelTreeAssessmentResults_P3043_2928_240524.mxd

P30/43

Aerial Image: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

MAP 3 Building Inspection Results

KEY

- Site boundary
- Confirmed roost
- Low suitability
- Negligible suitability
- Potential roost (anecdotal evidence)

Confirmed Roosts:

Building 2:
Brown Long Eared Maternity & Hibernation Roost
Greater Horseshoe Day Roost

Building 5:
Brown Long Eared Day Roost
Common Pipistrelle Day Roost

Building 14:
Common and Soprano Pipistrelle Day Roost

Main Map Frame:
SCALE: 1:2,000 at A3

0 100 200 300 400 500 Metres

N

EPR

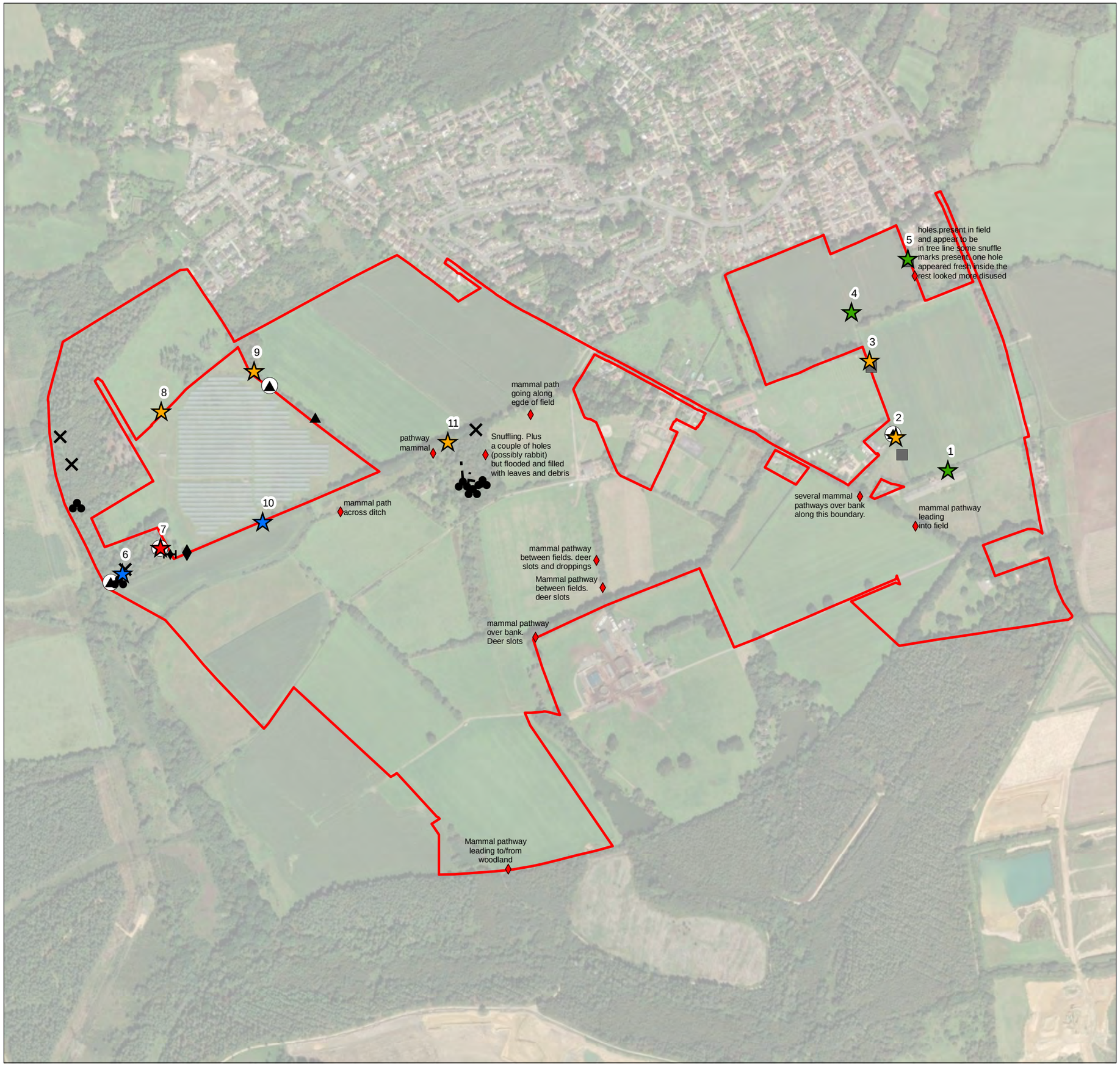
CLIENT: Dudsbury Homes (Southern)

PROJECT: Alderholt Meadows, Fordingbridge

DATE: 24 May 2024

Y:\Alderholt, East Dorset 2240\GIS\Addendum Ecology Baseline\Map3_BuildingInspectionResults_P3043_2923_240524.mxd

P30/43



MAP 4 Badger Survey Results Summary

KEY

- Site boundary
- Main sett
- Annex sett
- Subsidiary sett
- Outlier sett
- Badger hair
- Claw marks/scratching post
- Dung pit
- Latrine
- Push-under with Badger hair
- Foraging signs / snuffle hole
- Rabbit burrow
- Other feature
- Mammal path

SCALE: 1:7,500 at A3

0 100 200 300 400 500 Metres

N

EPR

CLIENT: Intelligent Land

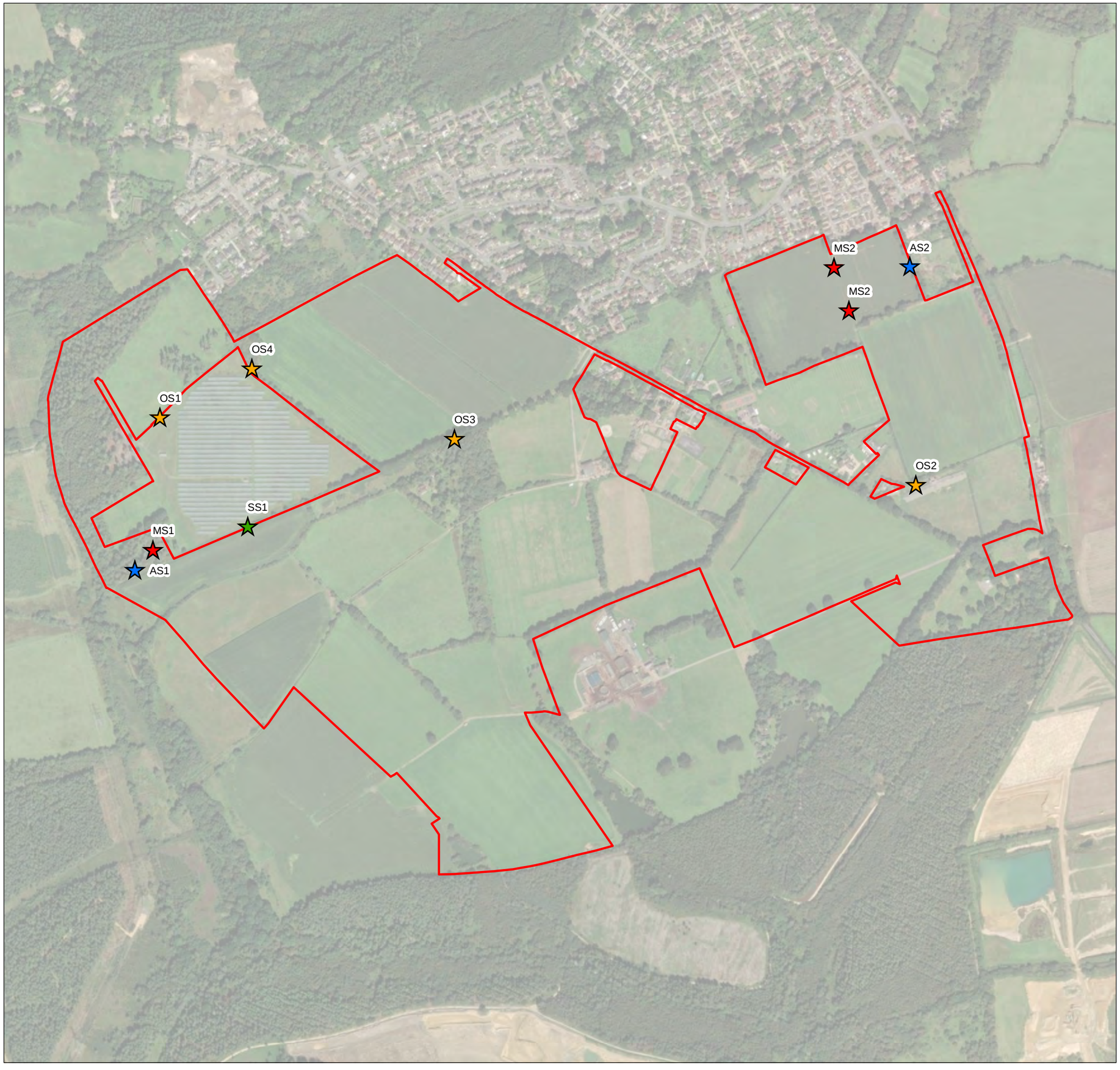
PROJECT: Alderholt Meadows

DATE: 24 May 2024

Y:\Alderholt, East Dorset 2240\GIS\Addendum Ecology Baseline\Map4_BadgerSurveyResults2024_P3043_2838_240524.mxd

P30/43

Aerial Image: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



MAP 5 Previous Badger Sett Summary

KEY

- Site boundary
- Main sett
- Annex sett
- Subsidiary sett
- Outlier sett

SCALE: 1:7,500 at A3

0 100 200 300 400 500 Metres

N

EPR

CLIENT: Dudsbury Homes (Southern)

PROJECT: Alderholt Meadows, Fordingbridge

DATE: 24 May 2024

Y:\Alderholt, East Dorset 2240\GIS\Addendum Ecology Baseline\Map5_PreviousBadgerSettSummary_P2240_1840_240524.mxd

P22/40

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

MAP 6 Barn Owl Survey Results

KEY

- Site boundary
- Active roost site
- Occasional roost sites

Main Map Frame:
SCALE: 1:20,000 at A3

0 10 20 30 40 50 Metres

N

EPR

CLIENT: Dudsbury Homes (Southern)

PROJECT: Alderholt Meadows, Fordingbridge

DATE: 24 May 2024

Y:\Alderholt, East Dorset 2240\GIS\Addendum Ecology Baseline\Map6_BarnOwlSurveyResults_P3043_2929_240524.mxd

P30/43

Aerial Image: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Appendix 1
Photographs

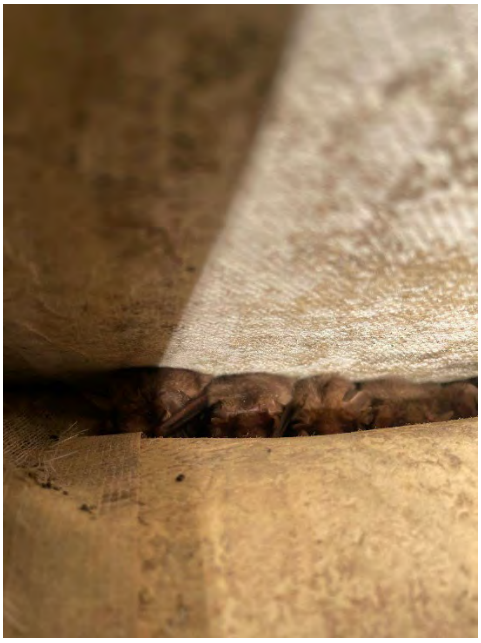


Photo 1. 6 Brown Long-eared bats roosting in **B2**

Photo 2. Staining beneath roosting bats in **B2**

Photo 3. Roosting feature in **B2**

Photo 4. Roosting Brown Long-eared bats in **B5**

Appendix 1
Badger Survey Signs - Terminology

Table A1: Badger Survey Signs

Sign	Description	Interpretation and Significance
Sett	A complex of burrows (tunnels and chambers) used as a dwelling-place.	Setts are classified according to their size and level of use, providing an indication of their value to the occupiers – see **Tables 2 and 3**. Any sett that is in current use, usually determined as within the last year, is protected by national law.
Entrance	Mouth of a tunnel/ burrow.	Sett classification relies on counting the number of entrances and determining the level of Badger activity at these entrances– see **Tables 2 and 3**.
Day-nest	Above-ground resting-place, often comprising a bed of hay beneath scrub or other cover.	Temporary, usually overnight resting-place, not considered to be given the same level of protection as setts.
Path	Well-worn, determined movement routes, most obvious through long grass, across muddy areas and when there are push-unders.	Badgers are creatures of habitat, using well-established pathways to patrol their territory and reach setts and foraging areas. Continued use of major paths is vital to clan survival.
Push-under	Gap created by a Badger under fencing or other barrier to enable access.	Gives an indication of the level of activity along a path and degree of determination to access an area.
Footprint	Characteristic broad, five-toed, large-padded impression.	Confirms Badger use of an area and gives an indication of the recentness and level of activity along a path, around a sett, or in a foraging area.
Hair	Black and white striped, coarse, angled hairs, often caught on barbs of fencing or thorns, especially at push-	Confirms Badger use of an area and gives an indication of the recentness and level of activity.

Sign	Description	Interpretation and Significance
	unders and found amongst diggings and bedding in sett entrances.	
Dung	Droppings of a variable consistency, but usually predominantly composed of black matter from earthworms. Also include grain, berries and insect remains. Of a larger size than fox droppings and with a musty, rather than unpleasant, smell.	Confirms Badger use of an area and gives an indication of the recentness and level of activity.
Dung-pit	Small pit that may have originally been a snuffle-hole, but used for the deposition of dung, urine or scent. May or may not contain traces of dung at the time.	Confirms Badger use of an area and gives an indication of the recentness and level of activity.
Latrine	Aggregation of dung-pits, usually showing dung of various ages and with pits containing more than one deposition of dung.	Used by a clan as a social marker of an important feature, including the main sett and path intersections and push-unders, especially near the territory boundary. May be used to mark important foraging resources. At the territory boundary, the neighbouring clan may also contribute to the latrine.
Snuffle-hole	Small pit dug by Badgers in pursuit of retreating earthworms.	Shows Badger use of an area for foraging. Care must be taken interpreting foraging signs, which can be confused with those of other mammals.

Table A2: Sett Classification

Sett Type	Average Number of Entrances	Description
Main	15	Sett in continuous use, large, well-established, often extensive and usually with large spoil heaps outside the entrances. There are likely to be well-worn paths leading to the sett and between constituent entrances. It is where the cubs are most likely to be born. There is generally only one main sett per clan of Badgers. Main setts are usually built in very specific locations, where there is the right combination of soil (to facilitate drainage and ease of digging), aspect, slope and cover. Since suitable sett sites are at a premium, main setts are usually long-established, and may have been in use for decades or even centuries.
Annexe	6	Sett closely associated with the main sett (usually within 150m) and linked to the main sett by clear, well-used paths. Annexe setts are not necessarily in use all the time, even if the main sett is very active. If a second litter of cubs are born, this may be where they are reared.
Subsidiary	5	Setts that are not in continuous use and are usually some distance from the main sett (50m or more), with no obvious path connecting them to the main sett. The 'ownership' of such setts can often only be determined by a bait-marking survey.
Outlier	1/2	Small setts that can be found anywhere within a territory and usually have small spoil heaps, indicating that they are not very extensive underground. There are no obvious paths connecting them to other setts, they are only used sporadically and often used by foxes or rabbits when not occupied by Badgers. Again the 'ownership' of such setts can often only be determined by a bait-marking survey.

Table 3: Determining the Level of Badger Activity at Sett Entrances

Activity Level	Description
Well-used	Entrance clear of any debris or vegetation, obviously in regular use and may or may not have been excavated recently.
Partially-used	Entrance not in regular use and may have debris such as leaves and twigs in the entrance, or have moss and/or other plants growing in or around the entrance. Regular use could be resumed after a minimal amount of clearance.

Disused	Entrances that have not been in use for some time, are partially or completely blocked and could not be used without a considerable amount of clearance. If the burrow has been disused for a long time, all that may be visible is a depression in the ground and the remains of the spoil heap, which may be covered in moss or plants.