Somerset Wildlife Trust Consultancy

Pool Cottage
Magor Road, Newport, Wales

Ecological Assessment

July 2025

Document control sheet

Client	Consensus Support Services Limited
Project	Pool Cottage, Magor Road, Newport, NP26 3DA
Title	Ecological Assessment
Reference	AB121
Grid reference	ST 40161 88885
Visit date	Dates between the 11th March 2025 and 4th June 2025
Ecological project manager	Adam Chambers

Version 2	**Name**	**Position**	**Signature**	**Date**
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Executive summary

Pool Cottage is located to the southwest of Magor Road, Newport, NP26 3DA, centred on national grid reference ST 40161 88885. Consensus Support Services Limited is seeking planning permission for the development of the site.

Somerset Wildlife Trust Consultancy was commissioned to undertake an ecological assessment of the site to confirm the ecological constraints relating to the works and provide method statements, as appropriate, to enable statutory compliance.

The desk study confirmed that no statutory or non-statutory designated sites of conservation importance intersect or adjoin the site. However, there were four statutory designated sites and 16 non-statutory designated sites within a 2km radius of the site.

There were records of five Phase 1 habitats which are considered likely to contain eight habitats of principal importance within a 2km radius of the site. There were records of ancient woodlands within a 2km radius of the site.

There were records of 119 legally protected and/or notable species within a 2km radius of the site.

The preliminary habitat assessment identified three habitat types within the site, none of which qualify as habitats of principal importance.

There was potential evidence of badgers in the form of a mammal tunnel entrance immediately adjacent to the southwestern boundary of the site. In addition, the site does have the potential to support various species of bat and bird.

The bat roost survey confirmed the likely absence of bat species within the main building of the day centre. The badger activity survey confirmed potential mammal entrance B to be inactive.

Method statements are as follows:

- Pollution prevention measures during construction in relation habitats of principal importance and ancient woodland records
- Arboricultural survey, tree schedule and tree constraints plan
- Sensitive lighting strategy
- Badger non-licensable method statement and unexpected encounter protocol
- Bat unexpected encounter protocol
- Bird non-licensable method statement
- Unexpected encounter - great crested newt protocol implementation
- Unexpected encounter - hazel dormouse protocol implementation
- Continued site management to maintain current unfavourable condition for various species of reptiles
- Unexpected encounter - reptile protocol implementation

Further ecological consultation will be sought if the scope of the work changes significantly or if the onset of the work is delayed by more than 12 months from the date of the most recent survey.

1.0 Introduction

1.1 Site location

1.1.1 Pool Cottage is located to the southwest of Magor Road, Newport, NP26 3DA, centred on national grid reference ST 40161 88885 (Figure 1).

1.2 Background to the activity/development

1.2.1 Consensus Support Services Limited is seeking full planning permission for the redevelopment of the day centre with the demolition of the existing conservatory on the southeastern elevation of the building and construction of a replacement two floor masonry extension.

1.2.2 Somerset Wildlife Trust Consultancy (SWTC) was commissioned to undertake an ecological assessment of the site to confirm the ecological constraints relating to the works and provide method statements, as appropriate, to enable statutory compliance (Appendix A).

1.3 Objectives

1.3.1 The assessment objectives are listed as follows:

- Identify all relevant statutory and non-statutory designated areas of conservation importance and features of ecological significance relating to the site and area within a 2km radius of the site.
- Identify habitats of principal importance relating to the site and area within a 2km radius of the site.
- Identify protected species and/or species of principal importance within the site and area within a 2km radius of the site.
- Broadly classify habitats within the site in accordance with UKHab and Statutory Biodiversity Metric categories.
- Identify incidental and supplementary evidence of protected species activity and assess the potential of the site to support protected species.
- Undertake surveys to confirm the presence or likely absence of protected species and, if present, the extent and type of protected species activity and/or value of habitats.
- Assess the potential impact of the works on protected and notable habitats and species.
- Inform the design of a proportionate strategy to avoid negative impacts on protected and notable habitats and species.
- If avoidance is not possible, propose actions to mitigate the impact of the works on protected and notable habitats and species.
- If mitigation is not possible, specify compensation habitat for the protected and notable habitats and species impacted.
- Identify and propose options for the ecological enhancement of the site, if required.

2.0 Methodology

2.1 Designated sites of conservation importance records

2.1.1 Statutory and non-statutory designated site information relating to the site and area within a 2km radius of the site was reviewed. The review was undertaken by Adam Chambers (Appendix B). The resources consulted included the following:

- SEWBReC (Appendix C) was commissioned to conduct a search for statutory and non-statutory designated sites of conservation importance. Information was received on the 6th March 2025.
- The Natural Resources Wales website was visited to obtain citation details of the Welsh statutory designated sites on the 12th March 2025.
- The Natural England open data geoportal was consulted to identify impact risk zones relating to statutory designated sites in England that intersect the site.

2.2 Habitats of principal importance records

2.2.1 SEWBReC was commissioned to conduct a search for inventory habitats of principal importance within the site and area within a 2km radius of the site. Information was received on the 6th March 2025.

2.3 Ancient woodland records

2.3.1 SEWBReC was commissioned to conduct a search for ancient woodland records within the site and area within a 2km radius of the site. Information was received on the 6th March 2025.

2.4 Protected species records

2.4.1 SEWBReC was commissioned to conduct a search for legally protected species and/or species of principal importance. Information was received on the 6th March 2025.

2.5 Habitats

2.5.1 The survey was completed in accordance with best practice guidance:

- British Standards Institution (2013). BS42020: Biodiversity Code of Practice for Planning and Development. British Standards Institution, London.
- Chartered Institute of Ecology and Environmental Management (CIEEM) (2017). Guidelines for Preliminary Ecological Appraisal, 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- UKHab Ltd (2023). UK Habitat Classification Version 2.01.

2.5.2 The site survey was undertaken on the 11th March 2025 by Adam Chambers.

2.5.3 Whilst Biodiversity Net Gain is not applicable to sites in Wales, the survey involved a baseline habitat assessment following a combination of the methodology detailed in the UK Habitat Classification Version 2.01 (UKHab) and the methodology detailed in The Statutory Biodiversity Metric User Guide. Habitats were classified in accordance with The Statutory Biodiversity Metric habitat types following definitions set out within UKHab, Annex I Habitats for Natura 2000, EUNIS habitat type hierarchical view or WFD lake typologies. Where present, a minimum of three 1x1m quadrats were sampled within grassland habitat parcels, with relative botanical species abundance recorded using the DAFOR scale with thresholds at >75%, 51-75%, 26-50%, 11-25% and 1-10%, respectively. In addition, where present,

the location of any refuse piles and compost heaps were noted and mapped. The survey involved recording incidental observations of any notable and invasive, non-native plant species, and determining whether the habitats qualify as habitats of principle importance or irreplaceable habitats.

2.5.4 During the survey, a minimum mapping unit of 25m^2 for area and 5m for linear habitats was adopted, with the exception of buildings, standing open waterbodies, refuse piles and compost heaps for which the precise location and scale of any features were mapped as the information is relevant for protected species method statements. Where present, individual trees (those not counted within woodland, orchards, hedgerows or rural lines of trees, unless ancient and/or veteran) were also recorded as point features.

2.5.5 Where possible, all aspects of the buildings were surveyed to identify the status, construction type and materials.

2.6 Badgers

2.6.1 The surveys were completed in accordance with best practice guidance:

- Harris, S., Cresswell, P. and Jefferies, D. (1989). Surveying Badgers. Mammal Society, London.
- Natural England (2009). Guidance on 'Current Use' in the definition of a Badger Sett, WMLG17. Natural England, Peterborough.
- Neal, E. and Cheeseman, C. (2004). Badgers. Poyser Natural History, London.
- Roper, T. J. (2010). Badger. Collins New Naturalist, Glasgow.
- Scottish Natural Heritage (2003). Best Practice Guidance - Badger Surveys. Inverness Badger Survey 2003. Commissioned Report No. 096.

2.6.2 The preliminary badger (*Meles meles*) survey was undertaken on the 11th March 2025 by Adam Chambers.

2.6.3 The survey involved inspecting the site and recording incidental evidence of badger activity in the form of live and dead badgers, day nests, faeces, footprints, hair, paths, push-throughs, scratching posts, setts and snuffle holes (Appendix D).

2.6.4 The survey also involved a visual inspection of the habitats within the site to assess their potential suitability for badgers to breed, commute, forage, rest and shelter.

2.6.5 The badger activity survey of the potential mammal entrance adjacent to the site boundary was undertaken from the 14th May 2025 to the 4th June 2025 by Adam Chambers.

2.6.6 The survey involved the deployment of one motion activated remote infrared camera on the boundary fence of the site, sited approximately 1m away from the tunnel entrance (Table 1, Figure 7).

Table 1. Badger activity survey equipment.

Date	Equipment	Potential mammal entrance reference	Motion activated remote infrared camera location
	Bushnell Prime Trail Camera		
14/05/2025 - 04/06/2025	*	B	1

2.6.7 The motion activated remote infrared camera was programmed to video mode and set to activate for 10 seconds at 30 second intervals. The camera system was then checked on two occasions to determine whether it was functioning effectively and, if so, download footage. The footage was

subsequently reviewed to determine if the potential sett was active or inactive and, if active, the type of sett (Table 2).

Table 2. Badger sett types.

Badger sett type	Description
Main	Setts usually have a large number of entrances with conspicuous spoil heaps. They usually have well-worn paths leading to and from, and between, entrances. They are typically in continuous use.
Annex	Setts usually with several entrances. They are usually close to a main sett, normally less than 150m away, and are usually connected to the main sett by one or more obvious well-worn paths. They are not always continually used even if the main sett is very active.
Subsidiary	Setts usually with three to five entrances. They are usually at least 50m from a main sett and do not have an obvious path connection to another sett. They are not continually active.
Outlier	Setts usually with one or two entrances, often with little spoil outside the entrance, no obvious path connection with another sett and are only used sporadically.

2.7 Bats

2.7.1 The surveys were completed in accordance with best practice guidance:

- Barlow, K. and Waters, D. (2012). Advanced Sound Analysis Bat Conservation Trust Conference Workshop.
- Bat Conservation Trust (2022). Interim Guidance Note: Use of night vision aids for bat emergence surveys and further comment on dawn surveys. Bat Conservation Trust, London.
- Collins, J. (ed.) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London.
- Mitchell-Jones A. and McLeish A. (2004). Bat Workers Manual (3rd Edition). Joint Nature Conservation Committee. Peterborough.
- 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.

2.7.2 The preliminary bat survey was undertaken on the 11th March 2025 by Adam Chambers.

2.7.3 The survey involved inspecting the buildings and undertaking a ground-level tree assessment and recording incidental evidence of bat activity in the form of live and dead bats, droppings, feeding remains, perch abrasions, characteristic staining from urine and marks from grease secretions (Appendix D). The survey also focused on identifying roosting features of value to bats such as crevices, perches and access points. Visual assessments were aided by suitable equipment (Table 3).

Table 3. Preliminary bat survey equipment.

Date	Habitat reference	Equipment		
		Oneplus 10 Pro 5G camera	Avalon 10x42 PRO HD binoculars	Nebo Davinci 5000 torch
11/03/2025	All suitable habitats	*	*	*

2.7.4 In addition, ordnance survey maps and aerial photographs were reviewed to identify habitats of potential value to bats in the wider landscape.

2.7.5 The buildings and trees were subsequently ascribed a bat roost suitability status based on evidence of bat roosting activity, PRFs and habitat features within the landscape (Tables 4-5).

Table 4. Bat roost suitability within structures (defined by Bat Conservation Trust).

Roost suitability	Description
Confirmed	A structure exhibiting evidence of bat roost activity in the form of live and dead bats, notable quantities of droppings and/or feeding remains, perch abrasions, characteristic staining from urine and marks from grease secretions. Where a confirmed roost is identified the roost suitability categorisation still stands and will be stated i.e. moderate - confirmed.
High	A structure with one or more potential roost sites that are obviously suitable for use by large numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. These structures have the potential to support high conservation status roosts (i.e. maternity or classic cool/stable hibernation site). Where there is potential or a confirmed hibernation roost the structure will also be defined as classic (i.e. underground tunnel, cellar, cave mine or above ground tunnel, ice house and lime kilns) or non-classic (i.e. within/behind a buildings external features such as a raised section of bargeboard).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only and not species conservation status).
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats).
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
None	No habitat features on site likely to be used by any roosting bats at any time of year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).

Table 5. Bat roost suitability within trees (defined by Bat Conservation Trust).

Roost suitability	Description
PRF-M	A tree with potential roost feature(s) suitable for multiple bats and may therefore be used by a maternity colony.
PRF-I	A tree with potential roost feature(s) only suitable for individual bats or very small numbers of bats either due to the size or the lack of suitable surrounding habitats.
PRF	A tree with at least one potential roost feature present.
FAR	Further assessment required to establish if potential roost features are present in the tree.
None	Either no potential roost features in the tree or highly unlikely to be any.

2.7.6 The bat roost surveys of the main building of the day centre consisted of two dusk emergence surveys undertaken on the 14th May 2025 and the 4th June 2025 by Adam Chambers and Jacob Hill (Appendix B). The surveys involved two surveyors observing aspects of the main building of the day centre with roost suitability continuously throughout each survey (Table 6, Figure 8).

2.7.7 The dusk emergence surveys commenced 15 minutes before sunset and continued for 90 minutes after sunset. The surveys were all scheduled to take place in suitable weather conditions with sunset

temperature 10°C or above and no rain or strong wind. The surveyors were equipped with a bat detector and recording equipment and recorded bats and their activity in a defined area (Table 6). Sound recordings were then processed using Kaleidoscope Pro Version 5.6.8 sound analysis software to confirm, if possible, the identification of any species of bat encountered emerging from or re-entering a roost within the main building of the day centre.

Table 6. Bat roost manned survey equipment.

Date	Building reference	Equipment		Surveyor initials	Surveyor locations
		Echometer Touch 2 Pro	Samsung Galaxy A14		
14/05/2025	Day centre - main building	*	*	AC, JH	1, 2
04/06/2025					

2.7.8 In addition, NVAs comprised of three-night vision camcorders with externally mounted infrared lights and either an automated static detector or a surveyor with a bat detector and recording equipment were deployed observing aspects of the main building of the day centre with roost suitability continuously throughout each survey. At the darkest point of the survey a screenshot from the camera was taken to illustrate the field of view and visibility. Footage was subsequently reviewed in association with bat call sonogram analysis, processed using Kaleidoscope Pro Version 5.6.8 sound analysis software, to confirm, if possible, the identification of any species of bat emerging from or re-entering a roost within the main building of the day centre (Table 7, Figure 8).

Table 7. Bat roost NVA survey equipment.

Date	Building reference	Equipment					Photos	NVA locations
		SM4BAT FS	Sony FDR-AX33 Handycam	Sony FDR-AX53 Handycam	Nightfox XB5 PRO Infrared LED Torch	Black Sun B20 IR illuminator		
14/05/2025	Day centre - main building	*	*	*	*	*	1-3	1-3
04/06/2025		*	*	*	*	*	4-6	1-3

2.7.9 An automated static detector was deployed within roof void 1 of the main building of the day centre from the 14th May 2025 to the 27th May 2025. The automated static detector system was programmed to record continuously. On completion of the survey the recordings were manually analysed using Kaleidoscope Pro Version 5.6.8 sound analysis software to determine the species present and roost type (Table 8, Figure 8).

Table 8. Automated static detector equipment.

Date	Building reference	Sub-structure	Equipment	Automated static detector location
			SM4BAT FS	
14/05/2025 - 27/05/2025	Day centre - main building	Roof void 1	*	1

2.7.10 Manual sonogram analysis of bat calls was undertaken by Adam Chambers. Manual sonogram analysis was completed of all sonogram recordings recorded during the automated static detector and bat roost surveys with the species identified assigned a call probability (Table 9) Also recorded were the individual number of bats recorded and the number of passes recorded.

Table 9. Manual bat call probability levels (Barlow, K. and Waters, D. 2012).

Probability level	Description
Unknown	There is not enough information from the call, location, habitat or visual observations to make a positive identification. It can however be assigned to a range of species or a genus.
Possible	There is enough information from the call, location, habitat or visual observations to suggest a positive identification, but it could also belong to other species.
Probable	There is enough information from the call, location, habitat or visual observations to suggest a positive identification, and while it could also be from a different species, this is unlikely.
Definite	There is enough information from the call, location, habitat or visual observations to provide a positive identification beyond all reasonable doubt.

2.7.11 The survey involved a visual inspection of the habitats within the site to assess their potential suitability for bats to commute and forage.

2.7.12 The site was subsequently ascribed a bat commuting and foraging habitat potential suitability status based on habitat features within the site and within the surrounding landscape (Table 10).

Table 10. Bat commuting and foraging habitat potential suitability within the site (defined by the Bat Conservation Trust).

Potential suitability	Description
High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. The site is close to, and connected to, known roosts.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked backgrounds.
Low	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Negligible	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
None	No habitat features onsite likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).

2.8 Birds

2.8.1 The survey was completed in accordance with best practice guidance:

- Bird Survey & Assessment Steering Group. (2022). Bird Survey Guidelines for assessing ecological impacts, v.0.1.0. BTO, Norfolk.
- British Trust for Ornithology (BTO) (2018). Breeding Bird Survey Instructions. BTO, Norfolk.

2.8.2 The preliminary bird survey was undertaken on the 11th March 2025 by Adam Chambers.

2.8.3 The survey involved inspecting the site and recording incidental evidence of bird activity in the form of live and dead birds, feeding remains, pellets, active and inactive nests, eggs, eggshells, droppings and feathers (Appendix D). The survey also recorded bird breeding behaviour including adult birds calling, singing, holding territory, returning to nest sites with nest material or food and chicks calling. Visual assessments were aided by suitable equipment (Table 11).

Table 11. Preliminary bird survey equipment.

Date	Habitat reference	Equipment		
		Oneplus 10 Pro 5G camera	Avalon 10x42 PRO HD binoculars	Nebo Davinci 5000 torch
11/03/2025	All suitable habitats	*	*	*

2.8.4 The survey also involved a visual inspection of the habitats within the site to assess their potential suitability for birds to bathe, breed, commute, drink, forage and roost.

2.9 Great crested newts

2.9.1 The survey was completed in accordance with best practice guidance:

- Brady, L. (2010). Great Crested Newt Habitat Suitability Index. ARG UK Advice Note 5. Amphibian and Reptile Groups of the United Kingdom.
- Gent, T. and Gibson, S. (eds) (2003). Herpetofauna Workers' Manual 2003. Joint Nature Conservation Council, Peterborough.
- Hayes, C. and Whitehurst, J. (2001, as amended). Great Crested Newt Mitigation Guidelines. English Nature, Northminster House, Peterborough.
- Langton, T.E.S., Beckett, C.L., and Foster, J.P. (2001). Great Crested Newt Conservation Handbook, Froglife, Halesworth.

2.9.2 The preliminary great crested newt (*Triturus cristatus*) survey was undertaken on the 11th March 2025 by Adam Chambers.

2.9.3 The survey involved inspecting the site and recording incidental evidence of great crested newt activity in the form of live and dead great crested newts and eggs (Appendix D).

2.9.4 The survey also involved a visual inspection of the habitats within the site to assess their potential suitability for great crested newts to disperse, forage, hibernate, rest and shelter.

2.9.5 In addition, ordnance survey maps and aerial photographs were reviewed to identify waterbodies of potential value to great crested newts within a 250m radius and with habitat connectivity to the site.

2.10 Hazel dormice

2.10.1 The survey was completed in accordance with best practice guidance:

- Bright, P. Morris, P. and Mitchell-Jones, T. (2006). The dormouse conservation handbook (2nd Edition). English Nature, Peterborough.

2.10.2 The preliminary hazel dormouse (*Muscardinus avellanarius*) survey was undertaken on the 11th March 2025 by Adam Chambers.

2.10.3 The survey involved inspecting the site and recording incidental evidence of hazel dormouse activity in the form of live and dead hazel dormice, feeding remains and active and inactive nests (Appendix D).

2.10.4 The survey also involved a visual inspection of the habitats within the site to assess their potential suitability for hazel dormice to breed, commute, forage, hibernate, rest and shelter.

2.11 Reptiles

2.11.1 The survey was completed in accordance with best practice guidance:

- Froglife (1999) Reptile survey: An introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice Sheet 10. Froglife, London.
- Gent, A. H. and Gibson, S. D. (2003). Herpetofauna Workers' Manual, 2nd Edition. Joint Nature Conservation Committee, Peterborough.
- Herpetofauna Groups of Britain and Ireland (1998). Evaluating local mitigation/translocation programmes: Maintaining best practice and lawful standards. HGBI advisory notes for Amphibian and Reptile Groups (ARGs). HGBI, c/o Froglife, Halesworth.

2.11.2 The preliminary reptile survey was undertaken on the 11th March 2025 by Adam Chambers.

2.11.3 The survey involved inspecting the site and recording incidental evidence of reptile activity in the form of live and dead reptiles, eggs, eggshells and moults (Appendix D).

2.11.4 The survey also involved a visual inspection of the habitats within the site to assess their potential suitability for reptiles to breed, disperse, forage, hibernate, rest and shelter.

2.12 Other protected and notable species

2.12.1 A preliminary assessment was made of the site's potential to support protected and notable species such as otters (*Lutra lutra*), water voles (*Arvicola amphibius*) and white-clawed crayfish (*Austropotamobius pallipes*).

2.13 Limitations

2.13.1 Ecological assessments are not intended to produce comprehensive lists of species present but, nevertheless, it is considered that the surveys undertaken are sufficient to evaluate the ecological resources within the site and thus to identify potential issues of relevance to the works.

2.13.2 It must be noted that even in situations where the survey evidence suggests the likely absence of species there is still the possibility of encounter due to species dispersal or other undetected or unpredicted changes in species movements.

2.13.3 The assessment of designated sites relates to those designated for nature conservation purposes only and does not include sites designated for other purposes such as geology (e.g. Regionally Important Geological/Geomorphological Sites).

2.13.4 The SEWBReC data search returned Phase 1 habitat typologies, highlighting those which may contain habitats of principal importance. Section 7 of the Environment (Wales) Act 2016 has been reviewed in order to identify the possible habitats of principal importance contained within these Phase 1 typologies.

2.13.5 The presence or likely absence of ancient woodland within the site or a 2km radius of the site is based on the SEWBReC mapping and does not account for unmapped ancient woodlands whose low tree density or small area does not register as woodland on historic maps.

2.13.6 The baseline habitat survey was undertaken outside of the main botanical season (which runs April-September). However, based on the habitat types identified, surveys within the main botanical season are not expected to yield different results.

2.13.7 Incidental evidence of protected species located directly adjacent to the site was recorded. As such, relevant method statements have been included within this report due to the proximity and the nature of the proposed works.

2.13.8 The weather conditions recorded during the badger activity survey and bat automated static detector survey were obtained from the Wunderground website (Baneswell station INEWPO127) and have not been independently verified.

2.13.9 The southwestern elevation of the day centre was unable to be visually inspected for potential bat access/roosting features and evidence of breeding bird activity due to the aspect and orientation within the red line boundary of the site.

2.13.10 Access into the internal area of roof void 2 along the southwestern elevation of the day centre and the apex void, void 3, was not possible due to a lack of access features and, as such, this void could not be inspected.

2.13.11 In relation to the detection of bats using calls it should be noted that the wide ranges of echolocation intensity exhibited between individual bat species makes it probable that echolocation sampling will favour those species with high intensity echolocation calls. Furthermore, a reasonably large proportion of bat species, including as long-eared species (*Plecotus* spp.), mouse-eared species (*Myotis* spp.) and noctule/serotine species (*Nyctalus* spp./*Eptesicus* sp.) cannot be identified with absolute certainty from their ultrasonic calls. In addition, bat calls are adapted dependent on behaviour, environment and how bats interact with other bats in the form of social calls. Therefore, bat sonogram recordings are identified to the most accurate level appropriate based on the information available.

2.13.12 The use of an automated static detector does not provide the directionality of any recorded bat calls and the precise location of the echolocating bat recorded or the activity exhibited by the bat cannot be identified. As such this can only indicate or confirm the likely presence of species of bats within the vicinity of the automated static detector.

2.13.13 The presence or likely absence of waterbodies within a 250m radius and with habitat connectivity to the site is based on OS mapping and does not account for unmapped waterbodies or waterbodies which no longer exist.

2.13.14 These limitations have been taken into consideration within the method statements of this report.

3.0 Results

3.1 Designated sites of conservation importance records

3.1.1 No statutory or non-statutory designated sites of conservation importance intersect or adjoin the site. However, there were four statutory and 16 non-statutory designated site located within a 2km radius of the site (Table 12, Figure 2).

Table 12. Statutory and non-statutory designated sites of conservation importance within a 2km radius of the site (table continues).

Name	Status	Distance and direction from site	Description
Bumble Field, Bowdens Lane	Adopted SINC	1.7km / NE	Small unimproved neutral grassland area.
Cae Wall Wood	Adopted SINC	0.1km / N	Part replanted ancient semi-natural woodland.
Coed y Mynydd	Adopted SINC	1.1km / N	Ancient semi-natural woodland.
Craig-Y-Perthi Field North	Adopted SINC	1.7km / SW	Area of semi-improved calcareous grasslands within larger improved grassland field.
Craig-Y-Perthi Field South	Adopted SINC	1.7km / SW	Area of semi-improved calcareous grassland within larger improved grassland field.
Craig-Y-Perthi Wood	Adopted SINC	1.7km / SW	Ancient semi-natural woodland with large population of goldilocks buttercup and early purple orchids.
Gwent Levels - Redwick And Llandevenn	SSSI	0.9km / S	The Gwent Levels reens are rich in plant species and communities, many of which are rare or absent in other Levels systems. This is due to the variety of reen types and their management regimes and the timing of the management which results in a staggered programme across the Levels. The regular maintenance of some reens provides conditions for submerged species such as hairlike pondweed and open water emergents such as arrowhead an opportunity to flourish.
Langstone-llanmartin Meadows	SSSI	1.5km / NW	Langstone-Llanmartin Meadows is of special interest for its lowland marshy grassland, including two different types of base-enriched fen-meadow, of restricted distribution in Wales and particularly rare in southeast Wales. The site also supports important populations of early marsh-orchid and fragrant orchid, which are rare and declining in the UK.
Llandevaud Common	Adopted SINC	1.1km / N	Mosaic of unimproved/semi-improved neutral grassland and bracken.
Llandevaud Mill Grasslands	Adopted SINC	1.8km / NW	Series of semi-improved neutral grassland with marshy grassland areas.
Monk's Ditch	Adopted SINC	1.7km / W	Linear freshwater stream used by otters.

Name	Status	Distance and direction from site	Description
Pamt Yr Eos Wood	Adopted SINC	0.7km / W	Ancient semi-natural woodland.
Penhow Woodlands	SSSI NNR	1.6km / NE	These two areas of ancient semi-natural woodland are situated mainly on the steep slopes and summits of limestone hills covered with superficial deposits of a calcareous nature. The structure is a mixture of high forest, coppice and coppice-with-standards comprising a range of woodland types, several of which have a restricted distribution in Britain. The dominant canopy tree species are lime, ash, gean, elm and hybrids, field maple and localised oak.
Ridings Wood	Adopted SINC	0.6km / SW	Ancient semi-natural woodland.
Stock Wood (East & West)	Adopted SINC	1.8km / W	Ancient semi-natural woodland.
The Routes Wood	Adopted SINC	1.2km / SW	Ancient semi-natural woodland.
Underwood Field	Adopted SINC	1.6km / W	Unimproved neutral and marshy grassland with pale sedge.
Upper Cottage Pond	Adopted SINC	1.8km / SE	A pond surrounded by agricultural land.
Wilcrick Fort West	Adopted SINC	1.1km / SE	Unimproved neutral grassland on slopes.

3.1.2 The site is located within the impact risk zone(s) of at least one English SSSI (Figure 3). However, the proposed works do not fall within any of the identified risk categories.

3.2 Habitats of principal importance records

3.2.1 There were no records of Phase 1 habitat types returned by SEWBReC within or immediately adjacent to the site, however five Phase 1 habitats returned by SEWBReC within a 2km radius of the site which are considered likely to contain up to eight habitats of principal importance (Table 13, Figure 4):

Table 13. SEWBReC Phase 1 habitat results and Section 7 habitats of principal importance that may be contained within a 2km radius of the site.

Phase 1 habitat type	Section 7 habitats of principal importance that may be contained within
Marshy grassland	Lowland fens
	Purple moor-grass and rush pastures
Standing water	Ponds
Semi-natural broadleaved woodland	Lowland mixed deciduous woodland
Semi-improved neutral grassland	Lowland meadows
	Upland hay meadows
Semi-improved calcareous grassland	Lowland calcareous grassland
	Upland calcareous grassland

3.3 Ancient woodland records

3.3.1 No ancient woodland intersects or adjoins the site. However, there were ancient semi-natural/plantation ancient woodlands located within a 2km radius of the site, the closest of which is located approximately 115m northeast of the site (Figure 5).

3.4 Protected species records

3.4.1 There were records of 119 legally protected species and/or species of principal importance within a 2km radius of the site (Table 14).

Table 14. Summary of legally protected species and/or species of principal importance records within a 2km radius of the site (table continues).

Common name	Scientific name	EU protected	EU priority	WACA 1981	Environment (Wales) Act 2016
Amphibians					
Great crested newt	*Triturus cristatus*	*	*	*	*
Bats					
Barbastelle	*Barbastella barbastellus*	*	*	*	*
Brandt's bat	*Myotis brandtii*	*		*	
Brown long-eared bat	*Plecotus auritus*	*		*	*
Common pipistrelle	*Pipistrellus pipistrellus*	*		*	
Greater horseshoe bat	*Rhinolophus ferrumequinum*	*	*	*	*
Lesser horseshoe bat	*Rhinolophus hipposideros*	*	*	*	*
Natterer's bat	*Myotis nattereri*	*		*	
Noctule	*Nyctalus noctula*	*		*	*
Serotine	*Eptesicus serotinus*	*		*	
Soprano pipistrelle	*Pipistrellus pygmaeus*	*		*	*
Birds					
Barn owl	*Tyto alba*	*		*	
Bewick's swan	*Cygnus columbianus*	*	*	*	
Black-headed gull	*Chroicocephalus ridibundus*	*	*		
Brambling	*Fringilla montifringilla*			*	
Canada goose	*Branta canadensis*	*	*		
Cetti's warbler	*Cettia cetti*			*	
Common gull	*Larus canus*	*	*		
Common sandpiper	*Actitis hypoleucos*	*			
Coot	*Fulica atra*	*	*		
Cormorant	*Phalacrocorax carbo*	*			
Crossbill	*Loxia curvirostra*	*		*	
Cuckoo	*Cuculus canorus*				*
Curlew	*Numenius arquata*	*	*		*
Dunlin	*Calidris alpina*	*			
Dunnock	*Prunella modularis*	*			
Fieldfare	*Turdus pilaris*		*	*	

Common name	Scientific name	EU protected	EU priority	WACA 1981	Environment (Wales) Act 2016
Goldcrest	*Regulus regulus*	*			
Golden plover	*Pluvialis apricaria*	*	*		
Goshawk	*Accipiter gentilis*	*		*	
Great black-backed gull	*Larus marinus*	*	*		
Green sandpiper	*Tringa ochropus*	*		*	
Green woodpecker	*Picus viridis*	*			
Greenfinch	*Chloris chloris*	*			
Grey heron	*Ardea cinerea*	*			
Grey wagtail	*Motacilla cinerea*	*			
Hawfinch	*Coccothraustes coccothraustes*	*			*
Herring gull	*Larus argentatus*	*	*		
Hobby	*Falco subbuteo*	*		*	
House sparrow	*Passer domesticus*				*
Kestrel	*Falco tinnunculus*	*			
Kingfisher	*Alcedo atthis*	*	*	*	
Lapwing	*Vanellus vanellus*	*	*		*
Lesser black-backed gull	*Larus fuscus*	*	*		
Lesser redpoll	*Acanthis cabaret*				*
Lesser spotted woodpecker	*Dryobates minor*	*			
Linnet	*Linaria cannabina*	*			
Mallard	*Anas platyrhynchos*	*	*		
Marsh tit	*Poecile palustris*	*			
Meadow pipit	*Anthus pratensis*	*			
Merlin	*Falco columbarius*	*	*	*	
Mistle thrush	*Turdus viscivorus*		*		
Oystercatcher	*Haematopus ostralegus*	*	*		
Peregrine	*Falco peregrinus*	*	*	*	
Red kite	*Milvus milvus*	*	*	*	
Redstart	*Phoenicurus phoenicurus*	*			
Redwing	*Turdus iliacus*		*	*	
Reed bunting	*Emberiza schoeniclus*	*			*
Ringed plover	*Charadrius hiaticula*	*			
Sand martin	*Riparia riparia*	*			
Shelduck	*Tadorna tadorna*	*			
Short-eared owl	*Asio flammeus*	*	*		
Shoveler	*Spatula clypeata*	*	*		
Skylark	*Alauda arvensis*		*		*
Snipe	*Gallinago gallinago*	*	*		
Song thrush	*Turdus philomelos*		*		
Spotted flycatcher	*Muscicapa striata*	*			*
Starling	*Sturnus vulgaris*		*		
Swallow	*Hirundo rustica*	*			
Teal	*Anas crecca*	*	*		

Common name	Scientific name	EU protected	EU priority	WACA 1981	Environment (Wales) Act 2016
Tree sparrow	*Passer montanus*				*
Wheatear	*Oenanthe oenanthe*	*			
Whimbrel	*Numenius phaeopus*	*	*	*	
Whooper swan	*Cygnus cygnus*	*	*	*	
Wigeon	*Mareca penelope*	*	*		
Woodcock	*Scolopax rusticola*	*	*		
Yellow wagtail	*Motacilla flava*	*			
Yellowhammer	*Emberiza citrinella*	*			*
Fish					
Brown trout	*Salmo trutta*				*
Common eel	*Anguilla anguilla*				*
Invertebrates					
August thorn	*Ennomos quercinaria*				*
Beaded chestnut	*Agrochola lychnidis*				*
Blood-vein	*Timandra comae*				*
Brindled beauty	*Lycia hirtaria*				*
Brown-banded carder bee	*Bombus humilis*				*
Buff Ermine	*Spilosoma lutea*				*
Centre-barred sallow	*Atethmia centrago*				*
Cinnabar	*Tyria jacobaeae*				*
Dark-barred twin-spot carpet	*Xanthorhoe ferrugata*				*
Dot moth	*Melanchra persicariae*				*
Dusky thorn	*Ennomos fuscantaria*				*
Figure of eight	*Diloba caeruleocephala*				*
Ghost moth	*Hepialus humuli*				*
Goat moth	*Cossus cossus*				*
Grey dagger	*Acronicta psi*				*
Knot grass	*Acronicta rumicis*				*
Marsh fritillary	*Euphydryas aurinia*		*	*	*
Minor shoulder-knot	*Brachylomia viminalis*				*
Mouse moth	*Amphipyra tragopoginis*				*
Pretty chalk carpet	*Melanthia procellata*				*
Shaded broad-bar	*Scotopteryx chenopodiata*				*
Shrill carder bee	*Bombus sylvarum*				*
Small emerald	*Hemistola chrysoprasaria*				*
Small phoenix	*Ecliptopera silaceata*				*
The lackey	*Malacosoma neustria*				*
The rustic	*Hoplodrina blanda*				*
The sprawler	*Asteroscopus sphinx*				*
Mammals					
Badger	*Meles meles*			*	
Brown hare	*Lepus europaeus*				*
Harvest mouse	*Micromys minutus*				*

Common name	Scientific name	EU protected	EU priority	WACA 1981	Environment (Wales) Act 2016
Hazel dormouse	*Muscardinus avellanarius*	*		*	*
Hedgehog	*Erinaceus europaeus*				*
Otter	*Lutra lutra*	*	*	*	*
Polecat	*Mustela putorius*				*
Water vole	*Arvicola amphibius*			*	*
Plants					
Bluebell	*Hyacinthoides non-scripta*			*	
Darnel	*Lolium temulentum*				*
Tubular water-dropwort	*Oenanthe fistulosa*				*
Reptiles					
Grass snake	*Natrix helvetica*			*	*

3.4.2 The site is not located within any protected species consultation zones.

3.5 Habitats

3.5.1 There were three habitat types within the site (Tables 15-19, Photos 7-19, Figure 6), none of which qualify as a habitat of principal importance or irreplaceable habitat.

Table 15. Grassland - modified grassland.

Habitat type	Modified grassland
Location details	In the eastern section of the site
Species, DAFOR abundance	Quadrat 1; Perennial rye-grass (*Lolium perenne*), D, common daisy (*Bellis perennis*), F, creeping buttercup (*Ranunculus repens*), O, common mouse-ear (*Cerastium fontanum*), R, lesser celandine (*Ranunculus ficaria*), O, ground-ivy (Glechoma hederacea), A and dandelion (*Taraxacum* agg.), F. Quadrat 2; Perennial rye-grass, D, common daisy, F, creeping buttercup, O, lesser celandine, F, marsh-bedstraw (*Galium palustre*), O and dandelion, F. Quadrat 3; Perennial rye-grass, D, common daisy, F, lesser celandine, F and dandelion, F. Average species/m^2 = 5.7 Additional species recorded within the habitat but outside of quadrat samples included lords-and-ladies (*Arum maculatum*), creeping thistle (*Cirsium arvens*e) and daffodil (*Narcissus pseudonarcissus* sp.).
Management	Mown
Photo(s)	7

Table 16. Urban - developed land, sealed surface.

Habitat type	Developed land, sealed surface
Location details	Throughout the site
Management/use	Vehicle parking and movement.
Photo(s)	8

Table 17. Urban - developed land; sealed surface - day centre**.**

Habitat type	Developed land; sealed surface - building
Building reference	Day centre (Photos 9-15).
Status	Commercial - occupied
Maximum number of floors	Two floor main building with a single storey conservatory
Roof structure and finish	The main building had a double pitched roof covered in interlocking triple Roman cement tiles and cement ridge tiles (Photos 9-12). Interlocking cement cloak verge tiles were present on each gable end. Lead flashing was present on the northwestern elevation of the main building at the junction of the main building and a discrete porch. Multiple skylights were present along the southwestern pitch of the roof. The conservatory located on the southeastern elevation of the main building had a hipped roof covered in UPVC panels with interlocking ridge tiles.
Eaves/rakes	A PVC soffit box was present on all elevations of the main building with PVC fascia board present on the elevations of the conservatory and porch.
Wall construction and finishing	The main building had a breezeblock construction with a complete render. The presence of a cavity wall is unknown. The conservatory was formed from brickwork with a complete render to window ledge height. Glazing forms the remaining wall structure.
Windows and doorways	Multiple double glazed windows and doorways were present within all elevations.
Roof voids/vaulted areas present	There were three roof voids within the building.
Roof void 1 description	The void had an exposed timber truss system. The roof was lined with bitumen roofing felt. The roof was insulated with loose fill insultation/wool insultation. The void was uncluttered by the truss system and noted to be dark, draught-free, warm and dry (Photo 13).
Roof void 2 description	No internal access.
Roof void 3 description	The apex void had an exposed timber truss system. The roof was lined with bitumen roofing felt. The void was uncluttered by the truss system and noted to be dark, draught-free, warm and dry.
Internal area	Internally, within the main building there were multiple rooms present on the ground and first floor which were light, warm and draught-free (Photo 14). The conservatory area was vaulted and was a single open space which was light and warm with a stable temperature (Photo 15).

Table 18. Urban - developed land; sealed surface - fuel storage container

Habitat type	Developed land; sealed surface - building
Building reference	Fuel storage container (Photos 16-18).
Status	Fuel storage
Maximum number of floors	One
Wall construction and finishing	A plastic container

Table 19. Individual urban trees.

Habitat type	Individual urban trees
Location details	In the eastern section of the site
Dominant species	Cherry (*Prunus* spp.) and birch (*Betulus* sp.).
Management	Maintained
Photo(s)	19

3.6 Badgers

3.6.1 No conclusive evidence of badger activity was observed within the site. However, mammal push-throughs were located beneath fencing along the southwestern boundary of the site (Photo 20, Figures 6-7).

3.6.2 A potential mammal entrance was noted within the bank located in the eastern section of the site, however, the dimensions of the entrance are not indicative of a potential badger sett (Table 20, Photo 21, Figures 6-7, tunnel entrance A).

Table 20. Potential mammal entrance details.

Potential mammal entrance reference	Entrance size (width/height (mm))	Tunnel	Spoil	Path(s) leading to/from entrance	Photo
A	80/100	Extending	None	No	21
B	250/200	Unknown	None	No	22

3.6.3 A single potential mammal entrance was noted within the bank of woodland located immediately south of the site (Table 20, Photo 22, Figures 6-7, tunnel entrance B). Whilst not within the boundary of the site, due to the proximity of this feature (i.e. within 30m) and nature of the proposed works, it has been considered within the method statement section of this report.

3.6.4 The habitat features within the site of potential value to badgers were recorded as follows:

- The modified grassland and individual trees constitute suitable foraging habitat for this species.
- The modified grassland and developed land, sealed surface allows unobstructed dispersal across the site.
- The modified grassland provides suitable locations for sett creation.

3.6.5 The badger activity survey and subsequent visits undertaken on the 14th and 21st May and the 4th June 2025 found potential mammal entrance B was filled with debris and vegetation confirming that the potential mammal entrance is inactive and not in current use by badger (Table 21, Photo 23, Figures 6-7).

Table 21. Summary of badger activity survey conditions and results for potential mammal entrance B.

Date	Time		Weather			
	Sunrise	Sunset	Temperature (°C) (minimum - maximum)	Precipitation	Wind direction (predominant)	Wind speed (mph) (minimum - maximum)
14/05/2025		20:56	8-21	None	NNE	7-13
15/05/2025	05:19	20:58	7-18	None	NE	5-15
16/05/2025	05:18	20:59	8-20	None	E	3-13
17/05/2025	05:16	21:00	7-18	None	E	5-13
18/05/2025	05:15	21:02	8-19	None	NE	1-12
19/05/2025	05:13	21:03	6-17	None	NE	5-12
20/05/2025	05:12	21:05	8-20	None	NNE	2-13
21/05/2025	05:11	21:06	10-18	Light rain in the morning	W	3-14
22/05/2025	05:10	21:08	9-19	None	WSW	2-13
23/05/2025	05:08	21:09	9-19	None	SE	3-17
24/05/2025	05:07	21:10	13-16	Light rain throughout the day	W	8-20
25/05/2025	05:06	21:12	11-16	None	SW	12-28
26/05/2025	05:05	21:13	10-16	None	W	7-17
27/05/2025	05:04	21:14	12-15	Drizzle in the afternoon	W	7-22
28/05/2025	05:03	21:15	13-17	None	W	3-21
29/05/2025	05:02	21:17	12-21	Light rain in the morning	SW	3-18
30/05/2025	05:01	21:18	13-21	None	SW	3-15
31/05/2025	05:00	21:19	13-21	None	W	3-18
01/06/2025	04:59	21:20	11-17	None	WSW	7-20
02/06/2025	04:59	21:21	8-18	None	NW	5-13
03/06/2025	04:58	21:22	10-16	Light rain in the morning	SW	10-23
04/06/2025	04:57		9-16	Light rain in the morning	SW	3-16
Result: No badgers were recorded to have emerged from or re-entered potential mammal entrance B.						

3.7 Bats

3.7.1 No live or dead bats, droppings, feeding remains, perch abrasions, characteristic staining from urine or marks from grease secretions were observed within the buildings or trees.

3.7.2 The main building of the day centre exhibited potential bat roost and/or access features (Table 22, Figure 8).

Table 22. Potential features identified within the main building of the day centre and roost suitability assessment.

Building reference	Structure	Location (elevation)	Potential feature	Roost suitability
Day centre - main building	Roof	SE, NW	Gaps under interlocking cloak verge tiles	Moderate
		NE, SW	Gaps under tiles on the bottom course of the pitch	
	Roof void 1-3	N/A	Perch feature from the exposed timber truss system and roof lining	

3.7.3 It is considered likely that the main building of the day centre offers potential as a non-classic hibernation habitat which offers suitable roost features with a stable temperature and high humidity for hibernating vesper species *(Vespertilionidae* sp.).

3.7.4 The conservatory of the day centre and fuel storage container were assessed as offering a negligible roost suitability.

3.7.5 All trees within the survey area were assessed as offering a roost suitability of 'none'.

3.7.6 The dusk emergence and automated static detector surveys confirmed the likely absence of bats roosting within the main building of the day centre (Tables 23-24, Figure 8).

Table 23. Dusk emergence survey conditions and results.

Date	Time			Weather				
	Sunset	Start of survey	End of survey	Temperature (°C) (start - end)	Precipitation	Wind direction (start - end)	Wind speed (mph) (start - end)	Cloud cover (%) (start - end)
14/05/2025	20:56	20:41	22:26	17-14	None	NE-ENE	11-9	10-0
04/06/2025	21:23	21:08	22:53	11-11	None	SW-SW	13-9	100-100
Results: No bats were observed emerging from or re-entering a roost within the main building of the day centre.								

Table 24. Automated static detector survey conditions and results for the 14th May 2025 to the 4th June 2025 (table continues).

Date	Time		Weather			
	Sunrise	Sunset	Temperature (°C) (minimum - maximum)	Precipitation	Wind direction (predominant)	Wind speed (mph) (minimum - maximum)
14/05/2025	05:21	20:56	8-21	None	NE	7-13
15/05/2025	05:19	20:58	7-18	None	NE	5-14

Date	Time		Weather			
	Sunrise	Sunset	Temperature (°C) (minimum - maximum)	Precipitation	Wind direction (predominant)	Wind speed (mph) (minimum - maximum)
16/05/2025	05:18	20:59	8-20	None	NE	3-13
17/05/2025	05:16	21:00	7-18	None	E	5-13
18/05/2025	05:15	21:02	8-19	None	NNE	2-12
19/05/2025	05:13	21:03	6-17	None	NE	5-12
20/05/2025	05:12	21:05	8-20	None	NNE	3-13
21/05/2025	05:11	21:06	10-17	Light rain in the morning	W	3-13
22/05/2025	05:10	21:08	9-19	None	E	2-14
23/05/2025	05:08	21:09	9-19	None	SSE	3-17
24/05/2025	05:07	21:10	13-16	Light rain throughout the day	W	8-20
25/05/2025	05:06	21:12	11-16	None	WSW	13-24
26/05/2025	05:05	21:13	10-16	None	W	7-18
27/05/2024	05:04	21:14	12-15	Drizzle	W	7-22
Results: No bats were recorded within roof void 1 of the main building of the day centre.						

3.7.7 The habitat features within the site of potential value to commuting, and foraging bats are as follows:

- The modified grassland and individual trees support a limited diversity and abundance of invertebrates and opportunities for foraging.

3.7.8 The on-site habitats and woodland situated immediately adjacent to the southwestern boundary of the site are deemed suitable and could be used by low numbers of bats and, therefore, are assessed as providing low suitability commuting and foraging habitat.

3.8 Birds

3.8.1 Bird species observed on site during the survey, but not displaying breeding behaviour, included blackbird (*Turdus merula*), blue tit (*Cyanistes caeruleus*), great tit (*Parus major*), wren (*Troglodytes troglodytes*) and wood pigeon (*Columba palumbus*).

3.8.2 No breeding bird activity was observed and there was no further evidence of birds in the form of dead birds, feeding remains, pellets, active or inactive nests, eggs, eggshells, droppings or feathers within the site.

3.8.3 The visit on the 14th May 2025 confirmed the presence of an active blue tit nest in the soil stack opening along the north western elevation of the day centre main building (Photo 24).

3.8.4 The habitat features within the site of potential value to birds were recorded as follows:

- The modified grassland and individual trees constitute suitable foraging habitat for these species and materials for nest creation.
- The individual trees and conservatory provide suitable locations for nest creation and roosting.

3.9 Great crested newts

3.9.1 The preliminary great crested newt survey did not find any live or dead great crested newts within the site.

3.9.2 Whilst the site contains suitable habitat for great crested newt to commute, forage and rest and/or shelter in the form of modified grassland, given the absence of standing waterbodies within a 250m radius of the site (Figure 9) and lack of suitable terrestrial habitat connectivity, it is considered highly unlikely that great crested newts are present at the site.

3.10 Hazel dormice

3.10.1 No live or dead hazel dormice, feeding remains, active or inactive nests were observed within the site.

3.10.2 The site does not contain habitat suitable for hazel dormice to commute, forage, rest or shelter. The woodland located immediately adjacent to the southwestern boundary is considered suitable for hazel dormice. However, this habitat is considered too small in area and too isolated from other suitable habitat within the wider landscape to support a viable hazel dormouse population. As such, it is considered highly unlikely that hazel dormice are present at, or directly adjacent to, the site.

3.11 Reptiles

3.11.1 No live or dead reptiles were identified within the site. In addition, the site did not contain any habitat suitable for basking, breeding, foraging, resting or sheltering including hibernating, and it is therefore considered highly unlikely that reptiles are present at the site.

3.12 Other protected and notable species

3.12.1 No protected or invasive, non-native species of plant were identified and the habitats within the site which will be impacted by the works were not deemed to provide critical resources for any other protected or notable species of animal such as otters (*Lutra lutra*), water voles (*Arvicola amphibius*) and white-clawed crayfish (*Austropotamobius pallipes*).

4.0 Method statement

4.1 Designated sites of conservation importance records

4.1.1 No further actions are required in relation to statutory designated sites, their impact risk zones, or non-statutory designated sites as the works are not considered likely to pose a potential risk to the sites.

4.2 Habitats of principal importance records

4.2.1 Pollution prevention measures will be enacted so that the Phase 1 semi-natural broadleaved woodland (assumed to be lowland mixed deciduous woodland priority habitat) located approximately 115m northeast of the site does not become degraded by any particulate matter arising from the works. A suitably qualified pollution specialist will advise on the solid waste pollution prevention measures to be implemented during and after works.

4.3 Ancient woodland records

4.3.1 Pollution prevention measures will be enacted in accordance with Section 4.2 so that the ancient woodland situated to the northeast of the site does not become degraded by any particulate matter arising from the works.

4.4 Protected species records

4.4.1 No further actions are required in relation to the protected species records.

4.5 Habitats

4.5.1 An arboricultural survey compliant with BS5837 (2012) including a TPO search will be undertaken to assess the arboricultural features within and directly adjacent to the site that have potential to be impacted by the development proposals. The results of this work will be documented in a tree schedule and tree constraints plan and, if necessary, enable the preparation of an arboricultural impact assessment, method statement and tree protection plan for submission to the local planning authority.

4.5.2 There will be no direct illumination of the woodland located immediately adjacent to the southwestern boundary of the site. Where lighting is necessary elsewhere on site, low impact lighting solutions will be adopted as follows:

- All luminaires will lack UV elements when manufactured. Metal halide, fluorescent sources will not be used.
- LED luminaires will be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.
- All luminaries will emit a warm white spectrum (<2700Kelvin) to reduce the blue light component.
- Luminaires will feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to light sensitive species.
- All internal luminaires will be recessed where installed in proximity to windows to reduce glare and light spill.
- Columns will be selected at a height which minimises light spill.
- All luminaires will have an upward light ratio of 0% and good optical control.
- All luminaires will be mounted on the horizontal to avoid upward tilt.

- A control management system will be used to dim (typically to 25% or less)/turn off groups of space lights when not in use.
- All external security lighting will be set on motion-sensors and short (one minute) timers.
- Accessories such as baffles, hoods or louvres will be used to reduce light spill and direct it only to where it is needed.

4.6 Badgers

4.6.1 A pre-works inspection will be undertaken by a suitably qualified ecologist. The pre-works inspection will involve systematically inspecting the location of potential mammal tunnel entrance B for evidence indicating current use by badger and the site for evidence of badger activity in the form of live and dead badgers, day nests, faeces, footprints, hair traces, paths, push-throughs, scratching posts, sett entrances and snuffle holes.

4.6.2 If the pre-works inspection identifies evidence significantly different to that previously recorded, the works will be postponed and the impacts on badgers reassessed. If necessary, the mitigation, compensation and enhancement strategy will be updated and reapproved by the local planning authority and a licence will be sought from, and issued by, Natural Resource Wales prior to the recommencement of the works.

4.6.3 If the pre-works inspection does not identify significantly different conditions to that previously recorded, the following method statement will be adhered to.

4.6.4 Any work excavations will be covered or fitted with ramps when not in use so that badgers do not become trapped during the work.

4.6.5 Excavations which are more than 1m in depth and less than 1m wide will be covered with a timber sheet material. The timber sheet material will be of a thickness which remains rigid when installed across the excavation and could support the weight of an adult badger (i.e. 20kg). The timber sheet material will also retain structural integrity in wet conditions. The timber sheet material will be secured to the ground using robust fixings (i.e. metal stakes at least 50cm in length). Covered excavations will be visually inspected every day to confirm that the timber sheet material has not become damaged and that no animals have become trapped within the excavation. If an animal is observed within the excavation, a suitably qualified ecologist will be contacted immediately for advice. The site manager will be responsible for the installation of the timber sheet material, checking of covered excavations and, if required, contacting a suitably qualified ecologist for advice.

4.6.6 Excavations which are more than 1m in depth and more than 1m wide will be fitted with ramps. The ramp will be of a timber plank material. The timber plank material will be of a thickness which remains rigid when installed from the bottom corner to the top edge of the excavation and could support the weight of an adult badger (i.e. 20kg). The timber plank will be of a width which will allow an adult badger to walk up the plank without risk of falling off (i.e. 50cm). The slope of the timber plank material will not exceed 45^{o}. The timber plank material will be ridged across its width so that badgers are able to ascend the ramp. The timber plank material will be secured to the ground using robust fixings (i.e. metal stakes at least 50cm in length). Excavations containing ramps will be visually inspected every day to confirm that the timber plank material has not become damaged and that no animals have become trapped within the excavation. If an animal is observed within the excavation, a suitably qualified ecologist will be contacted immediately for advice. The contractor will be responsible for the installation of the timber plank material, checking of excavations containing ramps and, if required, contacting a suitably qualified ecologist for advice.

4.6.7 In the unlikely event that a badger or potential sett is unexpectedly encountered, works will cease until further advice is provided by the suitably qualified ecologist. If the badger is injured, it will be taken to the nearest suitably qualified wildlife rehabilitator.

4.7 Bats

4.7.1 The proposed works will not result in the disturbance, damage, destruction or obstruction of a bat roost as bats have been assessed as likely absent from the main building of the day centre. However, the main building of the day centre does have suitable roosting features and, as such, an unexpected encounter bat protocol will be implemented as per paragraphs 4.7.3 to 4.7.6 to enable legal compliance in the case that a bat is unexpectedly encountered.

4.7.2 As a precaution, the conservatory of the day centre and fuel storage container will continue to be managed to maintain its current state of repair and unfavourable condition for species of bat.

4.7.3 In the event that a bat is unexpectedly encountered and disperses to an adjacent area of suitable habitat outside of the work area, or remains within the work area in a protected location, works will cease until further advice is provided by the suitably qualified ecologist.

4.7.4 If the bat does not disperse when exposed or remains within the work area, and the bat is at immediate risk of harm, the following actions will be undertaken:

- A small cardboard box with a lid will be prepared by placing a soft cloth over the side of the box.
- Wearing a pair of thick, clean, dry and powder-free gloves the bat will be covered by a clean and dry cloth and carefully captured lifting its whole body.
- The bat will then be gently placed into the box.
- The box will be placed in a safe, undisturbed, cool and dark location. A shallow container (i.e. plastic bottle top) containing a few drops of water will be placed on the base of the box and regularly replenished.
- Once the bat is safe, further advice will be provided by the suitably qualified ecologist.

4.7.5 If the bat is confirmed as healthy it will be released at the site after sunset when weather conditions are suitable. If the bat is not fit for release, it will be taken to the nearest suitably qualified wildlife rehabilitator. If the bat recovers, it will subsequently be released at the site, after sunset when weather conditions are suitable. Where necessary, the client will cover any costs related to bat care.

4.7.6 The proposals for the site will be designed to avoid impacting the modified grassland and individual trees. In addition, the sensitive lighting strategy provided in Section 4.5 will prevent any indirect impacts to the off-site woodland habitat which may be used by bats. Due to the limited size of the site and subsequent low habitat suitability, further bat activity surveys are not considered necessary in support of the proposed development or planning application.

4.8 Birds

4.8.1 It is currently understood that the proposals will not result in the loss or disturbance of the active blue tit nest located in the north western elevation of the day centre.

4.8.2 The proposals will seek to retain the individual trees insofar as possible. However, where habitat removal is required, including the removal of the conservatory building, the works will be undertaken in accordance with the following bird non-licensable method statement.

4.8.3 The works will, in preference, be undertaken in the period from the 1st September to the 28th February to avoid any potential risk of impacting breeding birds and in accordance with other protected species method statements.

4.8.4 If it is necessary to demolish the conservatory, undertake works along the north western elevation of the day or remove individual trees in the period from the 1st March to the 31st August, a pre-works inspection will be undertaken by a suitably qualified ecologist in the 24 hour period prior to the works. The inspection will take place between sunrise and 10:00 or between 16:00 and sunset, and will be scheduled to take place in suitable weather conditions with air temperatures between 4°C and 20°C and with no rain or strong wind.

4.8.5 The inspection will involve observation of the conservatory (and individual trees if required) for 30 minutes for evidence of breeding bird activity from discrete vantage points. If no evidence of breeding bird activity is observed the suitable nesting habitat will be closely inspected to confirm that there are no active nests present. If full access is not possible, the initial observation period will be extended to 60 minutes.

4.8.6 If an active nest is discovered, the nest will remain undisturbed until the young have fledged. The suitably qualified ecologist will then undertake a further inspection of the nest once it is likely that the young have fledged and confirm that the nest is inactive.

4.8.7 If there are no signs of breeding activity, demolition and/or clearance works will commence within the 24 hour period following the breeding bird check. However, if more than 24 hours elapses prior to the commencement of the works to remove the suitable nesting habitat, or during the works to remove the habitat, a further breeding bird check will be undertaken.

4.8.8 A toolbox talk will be provided before works commence by the suitably qualified ecologist to the site manager and all contractors involved with the works. The toolbox talk will state that potential nest habitats are present, breeding birds are potentially present, the evidence that would confirm breeding birds are present, the legislation relating to breeding birds, measures that will be used to protect birds, good working practices, licensable activities and what to do should a bird be found. A written record that this has been undertaken, and when, will be kept by the suitably qualified ecologist.

4.8.9 A copy of the toolbox talk will be retained on site and works will be undertaken in accordance with the specified actions.

4.8.10 Opportunities to enhance the nesting provision at the site will be considered within the proposed development, including the installation of nest boxes and planting of trees and/or scrub habitats.

4.9 Great crested newts

4.9.1 In the unlikely event that a great crested newt is unexpectedly encountered, and the amphibian is not at immediate risk of harm, works will cease until further advice is provided by the suitably qualified ecologist.

4.9.2 If the great crested newt is at immediate risk of harm, the following actions will be undertaken:

- A clean bucket or box will be prepared by placing grass and leaves inside to a depth of at least 1cm.
- Wearing a pair of clean and dry gloves the great crested newt will be carefully captured from the middle of its body.
- The great crested newt will then be gently placed into the bucket or box.

- The bucket or box will be placed in a safe, undisturbed, cool and dark location. A shallow container (i.e. plastic bottle top) containing a few drops of water will be placed on the base of the bucket or box and regularly replenished.
- Once the great crested newt is safe, further advice will be provided by the suitably qualified ecologist.

4.9.3 If the great crested newt is confirmed as healthy, it will be released in a location identified by a suitably qualified ecologist. If the amphibian is not fit for release, it will be taken to the nearest suitably qualified wildlife rehabilitator. If the great crested newt recovers, it will subsequently be released in a location identified by a suitably qualified ecologist when weather conditions are suitable. Where necessary, the client will cover any costs related to amphibian care. Once the great crested newt or great crested newts are safe, works will not recommence until further advice is provided by the suitably qualified ecologist.

4.10 Hazel dormice

4.10.1 During the works, if a hazel dormouse is unexpectedly encountered, and is not at immediate risk of harm, it will be allowed to move independently to a location outside the works area and works will cease immediately until further advice is provided by a suitably qualified ecologist.

4.10.2 If the hazel dormouse is at immediate risk of harm, it is not possible for the individual to disperse of its own accord and it is confirmed as healthy, the following actions will be undertaken:

- If the hazel dormice is active or torpid, it will be relocated in its existing nest outside of the construction zone within 100m of the 'capture' location.
- If the hazel dormouse is hibernating, it will be relocated, with surrounding material, to location outside of the construction zone within 100m of the site similar in condition and aspect to the existing hibernation nest location. It will then be covered by suitable material (e.g. a log or tile) for protection. In the unlikely event of the animal rousing from hibernation it will be taken into captivity until it can be released within 100m of its capture site at a suitable time.
- If a breeding nest is discovered, works will cease and provision will be made for the nest to be retained, protected, undisturbed and connected to contiguous habitat, until the young have been weaned and allowed to disperse naturally.
- Once the hazel dormouse or hazel dormice are safe, works will not recommence until further advice is provided by the suitably qualified ecologist.

4.10.3 If the hazel dormouse is not fit for release, it will be taken to the nearest suitably qualified wildlife rehabilitator. If the hazel dormouse recovers, it will subsequently be released to a suitable location when weather conditions are suitable. Where necessary, the client will cover any costs related to hazel dormouse care.

4.11 Reptiles

4.11.1 As a precaution, the site will continue to be managed to maintain its current unfavourable condition for reptiles. This will be achieved by regular mowing of the modified grassland using the lowest blade setting available. In this way the sward will be maintained at a height of less than 10cm until the onset of, and during, the works.

4.11.2 In the unlikely event that a reptile is unexpectedly encountered, and the reptile is at immediate risk of harm, works will cease until it has dispersed of its own accord and the suitably qualified ecologist will be notified prior to the continuation of the works. If it does not disperse, works will cease until further

advice is provided by the suitably qualified ecologist. If the reptile is injured, it will be taken to the nearest suitably qualified wildlife rehabilitator.

4.12 Other protected and notable species

4.12.1 No further works are required in relation to other protected and notable species.

4.13 Survey updates

4.13.1 Further ecological consultation will be sought if the scope of the work changes significantly or if the onset of the work is delayed by more than 12 months from the date of the most recent survey.

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6.0 Photographs

6.1 Methodology

Photo 1. The northeastern and southeastern elevations of the main building of the day centre at the darkest point of the survey on the 14th May 2025 from NVA location 1.

Photo 2. The northwestern and northeastern elevations of the main building of the day centre at the darkest point of the survey on the 14th May 2025 from NVA location 2**.**

Photo 3. The southwestern elevation of the main building of the day centre at the darkest point of the survey on the 14th May 2025 from NVA location 3.

Photo 4. The northeastern and southeastern elevations of the main building of the day centre at the darkest point of the survey on the 4th June 2025 from NVA location 1.

Photo 5. The northwestern and northeastern elevations of the main building of the day centre at the darkest point of the survey on the 4th June 2025 from NVA location 2.

Photo 6. The southwestern elevation of the main building of the day centre at the darkest point of the survey on the 4th June 2025 from NVA location 3.

6.2 Results

Photo 7. The modified grassland in the eastern section of the site.

Photo 8. The developed land; sealed surface located throughout the site.

Photo 9. The northeastern elevation of the day centre main building (yellow) and conservatory (blue).

Photo 10. The southeastern elevation of the day centre main building (yellow) and conservatory (blue).

Photo 11. The southwestern elevation of the day centre main building (yellow) and northwestern elevation of the conservatory (blue).

Photo 12. The northwestern elevation of the day centre main building.

Photo 13. The internal space within roof void 1 of the main building of the day centre.

Photo 14. The internal space within the day centre main building looks towards the conservatory.

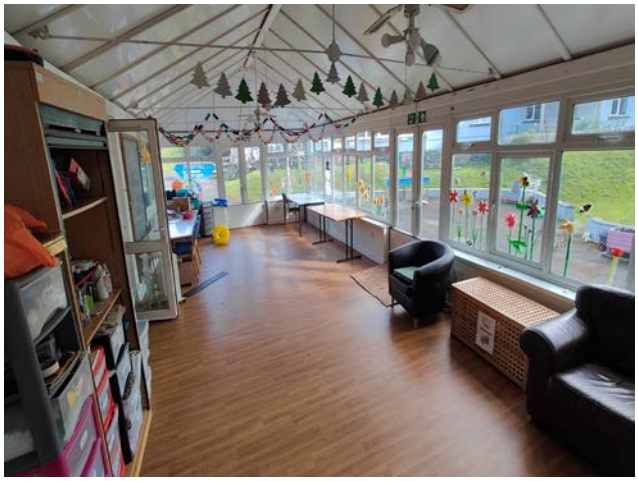

Photo 15. The internal space within the conservatory.

Photo 16. The northeastern (blue) and southeastern (pink) elevations of the fuel storage container.

Photo 17. The southwestern elevation of the fuel storage container.

Photo 18. The northwestern elevation of the fuel storage container (green).

Photo 19. The individual trees in the eastern section of the site.

Photo 20. A mammal push-through located beneath fencing along the southwestern boundary of the site.

Photo 21. The potential mammal entrance A located in the eastern section of the site.

Photo 22. The potential mammal entrance B (red) located off-site adjacent to the southwestern site boundary.

Photo 23. Potential mammal entrance B filled with debris and vegetation on the 14th May 2025.

Photo 24. The location of the blue tit nest identified on the 14th May 2025 along the north western elevation of the day centre.

7.0 Figures

Figure 1 Site location plan

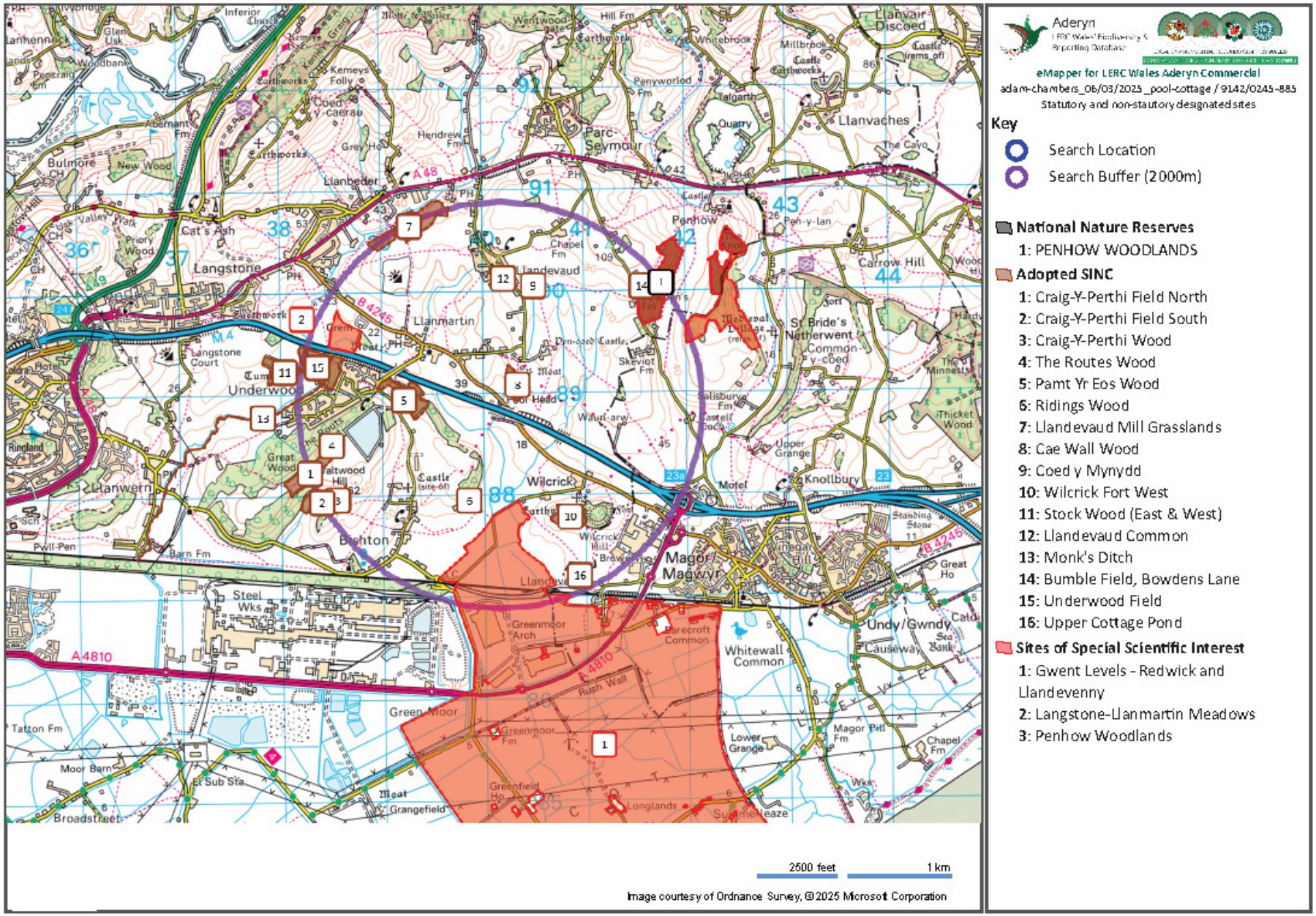

Figure 2 Statutory and non-statutory designated sites plan (courtesy of SEWBReC)

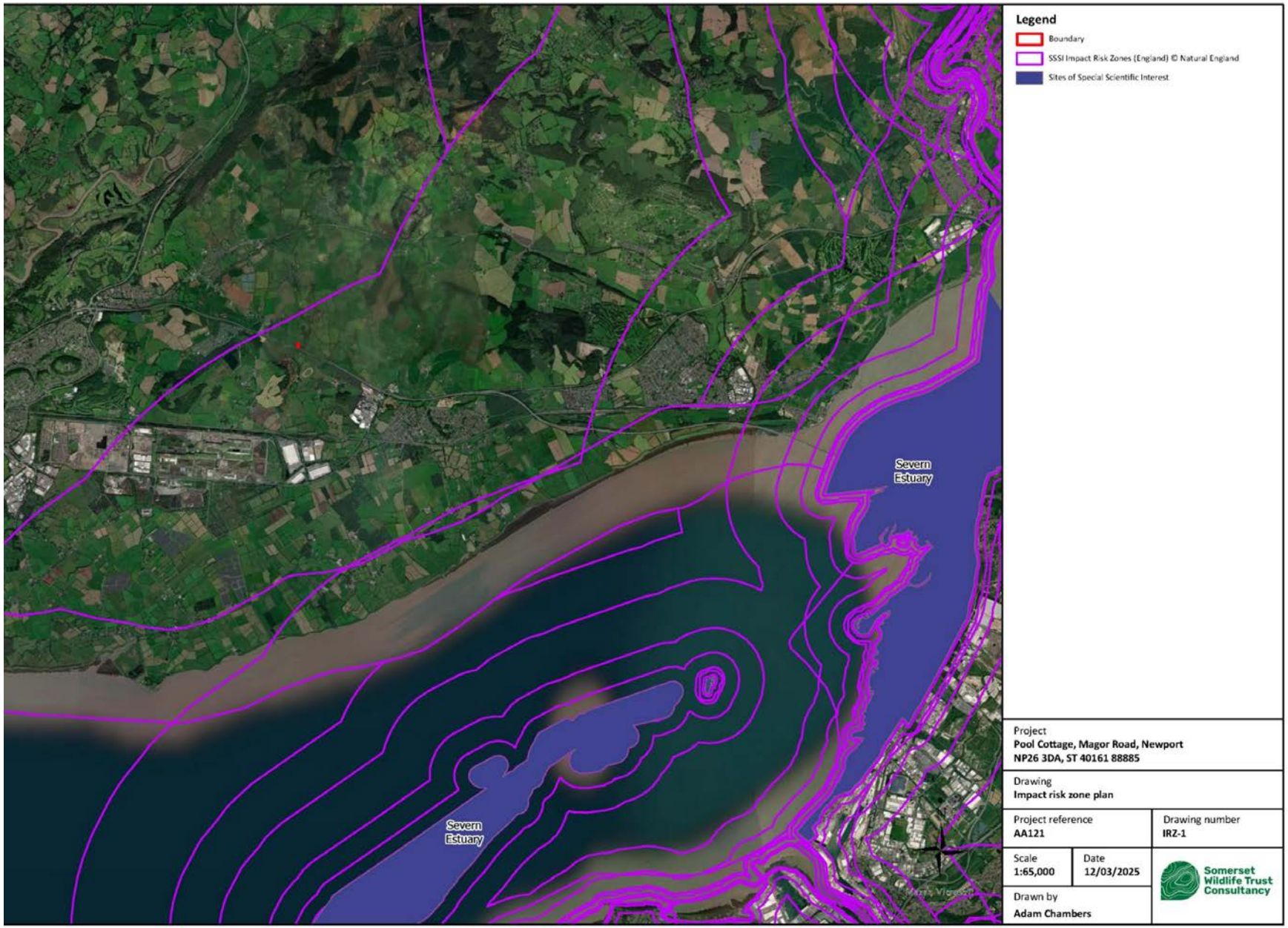

Figure 3 Impact risk zone plan (courtesy of the Natural England open data geoportal)

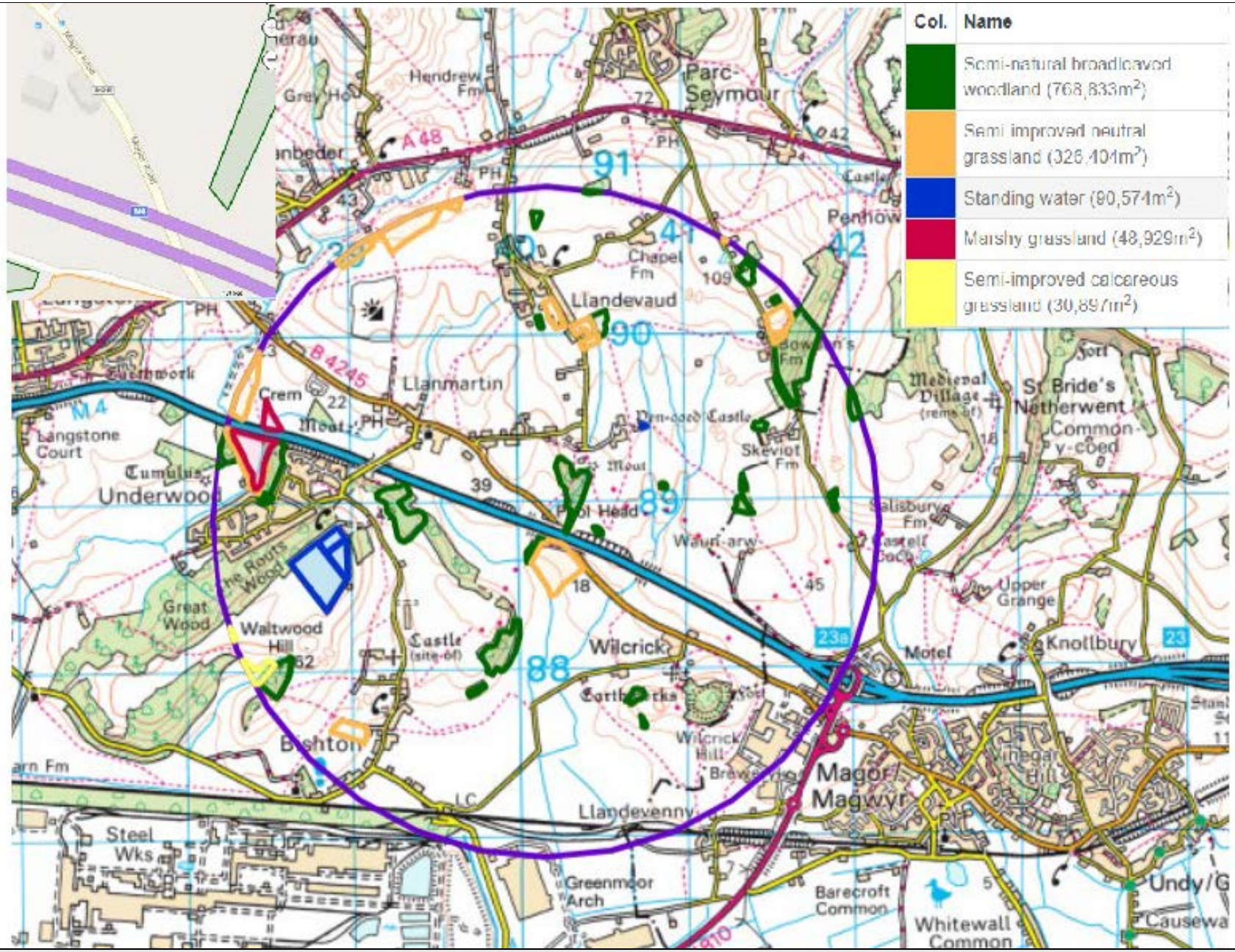

Figure 4 Phase 1 habitats which may contain habitats of principal importance plan (courtesy of SEWBReC)

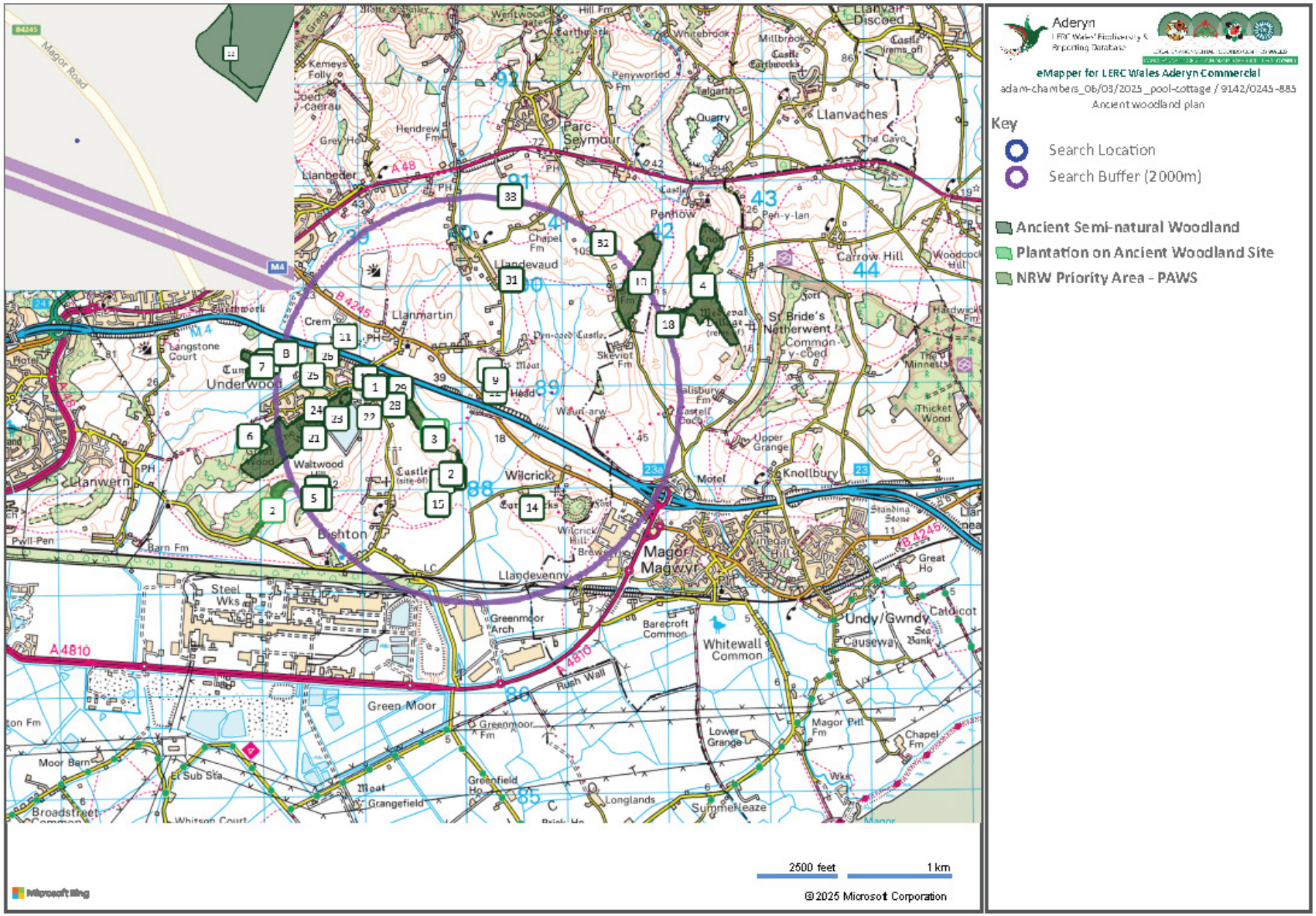

Figure 5 Ancient woodland plan (courtesy of SEWBReC)

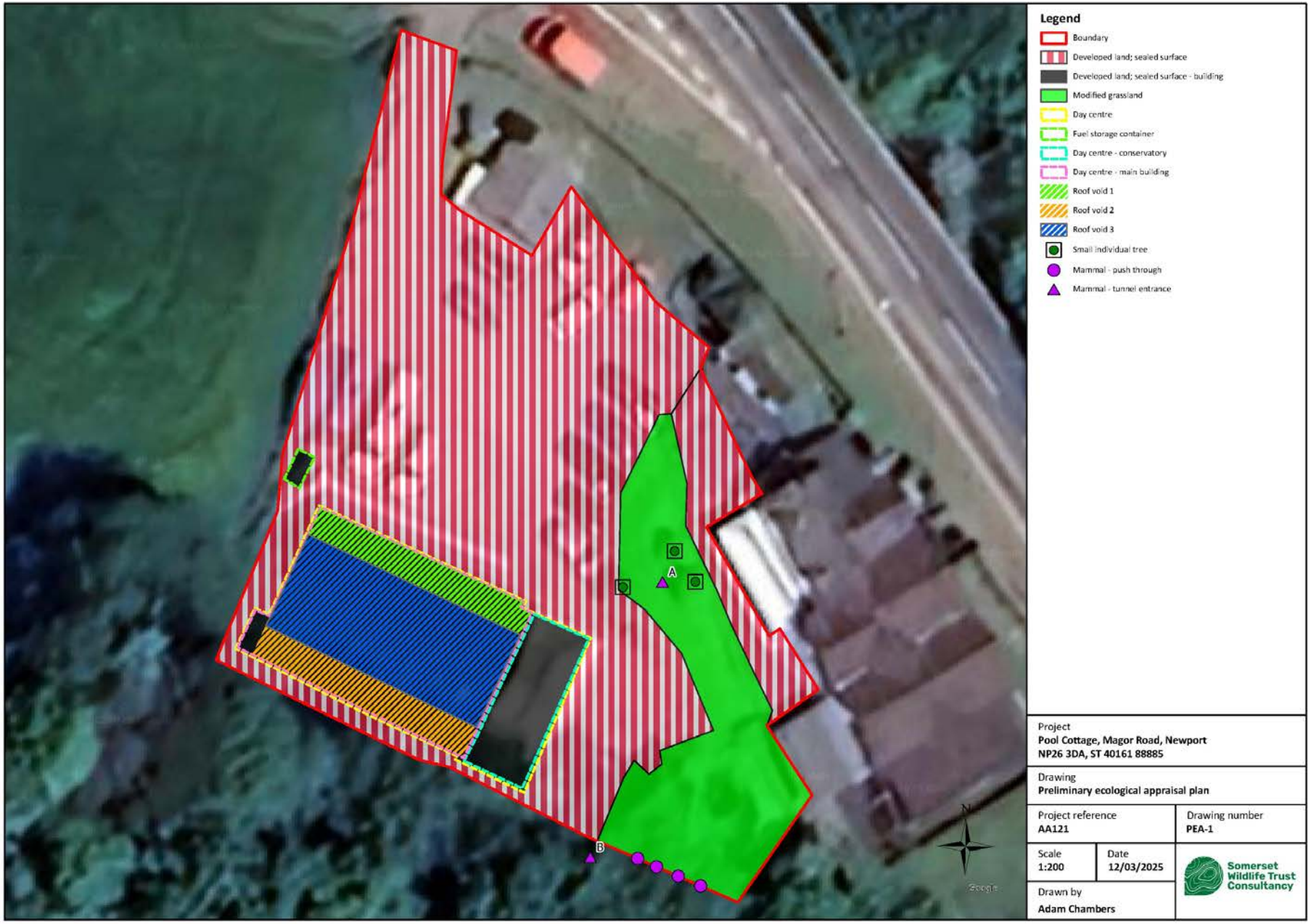

Figure 6 Preliminary ecological appraisal plan

Figure 7 Badger assessment plan

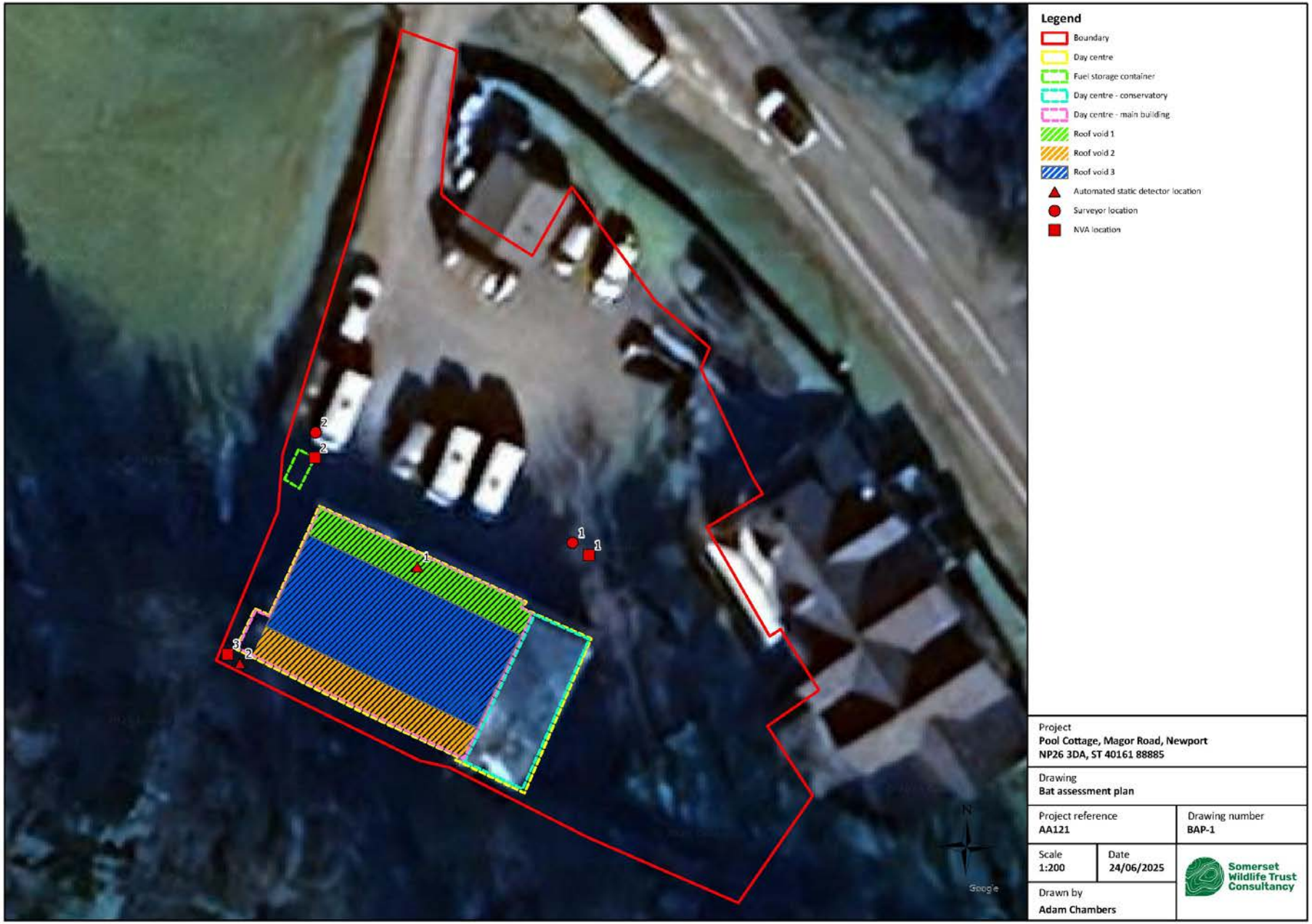

Figure 8 Bat assessment plan

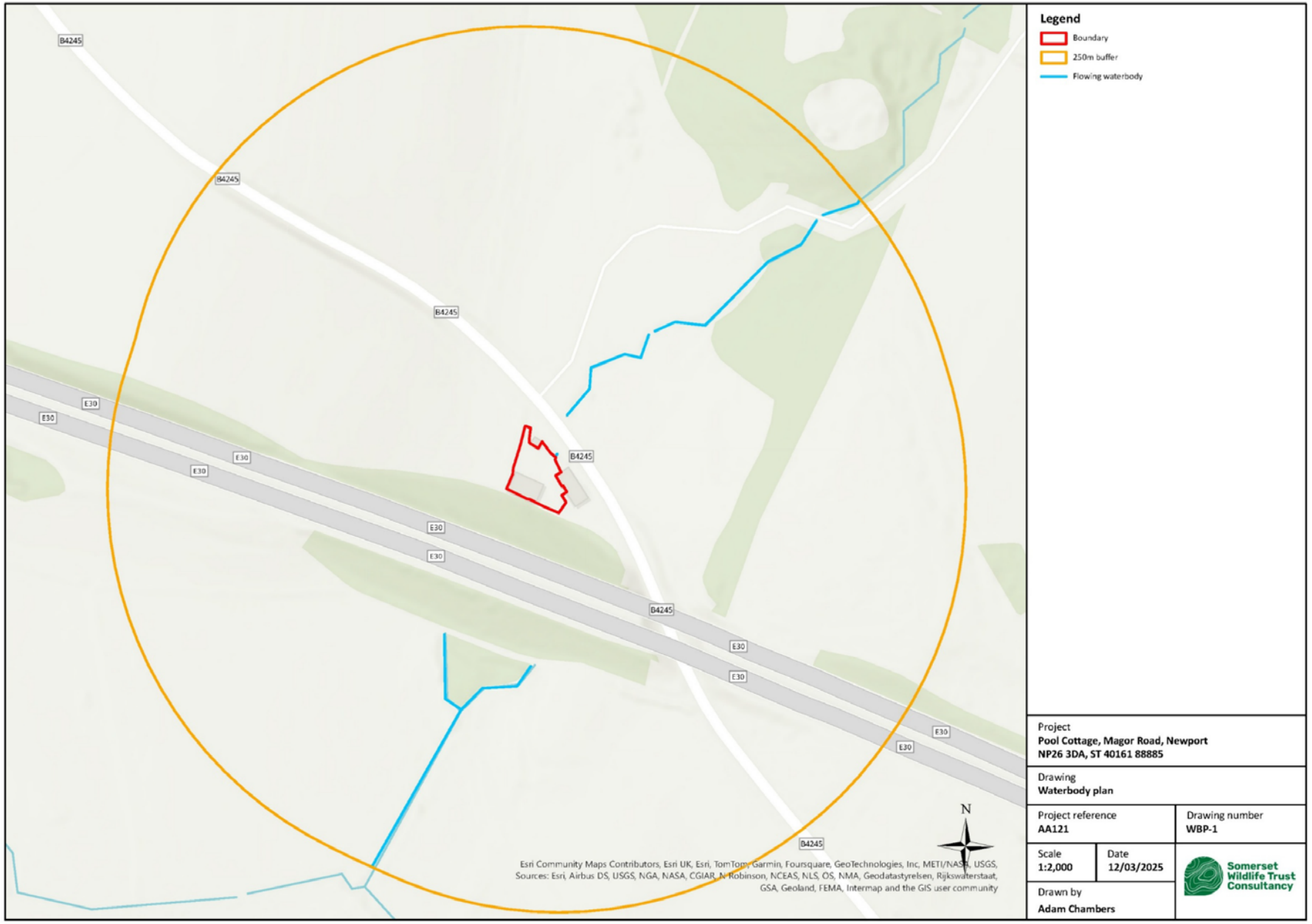

Figure 9 Waterbody plan

8.0 Appendices

Appendix A Wildlife legislation and national planning policy

The following information provides a summary of wildlife legislation and national planning policy which affords protection to plants and animals and seeks to conserve, enhance and restore biodiversity.

Table 25. Summary of wildlife legislation afforded to terrestrial and freshwater animals.

Species	Legislation
Birds	All species of bird whilst actively nesting are afforded legal protection under the Wildlife and Countryside Act 1981 (as amended) and additional penalties are incurred for offences relating to birds listed on Schedule 1.
Amphibians	The great crested newt is afforded full legal protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). It is also listed under Schedule 2 of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and is therefore a European Protected Species (EPS). Common amphibian species (common frog (*Rana temporaria*), common toad (*Bufo bufo*), smooth newt (*Lissotriton vulgaris*) and palmate newt (*Lissotriton helveticus*)) are afforded limited legal protection under the act (as amended). Common toad and great crested newt are also listed as species of principal importance under Section 7 of the Environment (Wales) Act 2016.
Badger	Badgers are afforded legal protection under the Badgers Act 1992 and are afforded limited protection under the Wildlife and Countryside Act 1981, Section 11, Schedule 6 (as amended).
Bats	All species of bat and their roosts are protected under the Wildlife and Countryside Act 1981 (as amended) (Section 9 (4)(b), (1) and (5)), the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 listed in Schedule 2 as European protected species, the Countryside and Rights of Way (CroW) Act 2000 and the Wild Mammals Protection Act 1996.
Hazel dormouse	The hazel dormouse is afforded full legal protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). It is also listed under Schedule 2 of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and is therefore a European protected species.
Otter	The otter is afforded full legal protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). It is also listed under Schedule 2 of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and is therefore a European protected species.
Reptiles	Common reptiles are afforded limited legal protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). They are also listed as species of principal importance under Section 7 of the Environment (Wales) Act 2016.
Water vole	Water voles are afforded full legal protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). They are also listed as species of principal importance under Section 7 of the Environment (Wales) Act 2016.
White-clawed crayfish	White-clawed crayfish are afforded limited legal protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). They are also listed as species of principal importance under Section 7 of the Environment (Wales) Act 2016.

Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

The Habitats Directive and Birds Directive provide protection for a wide range of habitats and species within the European Community in order to meet their obligations as a signatory to the Bern Convention. The Conservation of Habitats and Species Regulations 2017 transposes these directives into European law. On the

departure of the UK from the EU in 2020, this legislation was transposed into domestic law via the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

The Conservation of Habitats and Species Regulations 2017 (SI No. 2017/1012) update and supersede the Conservation of Habitats and Species Regulations 2010 (SI No. 2010/490) and the Conservation Regulations 1994 (as amended). The 2017 Regulations are the principal means by which the European Habitats Directive is transposed in England and Wales.

The Regulations provide for the designation and protection of a network of 'European Sites' termed Natura 2000, the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European Sites.

The Conservation of Habitats and Species Regulations 2017 apply in the terrestrial environment and in territorial waters out to 12 nautical miles. The EU Habitats and Wild Birds Directives are transposed in UK offshore waters by separate regulations - The Conservation of Offshore Marine Habitats and Species Regulations 2017 (the "2017 Regulations") which consolidate and update the Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (the "2007 Regulations").

Regulation 43 relates to the protection of European protected species listed under Schedule 2 of the Regulations. Taken together it is an offence to undertake the following acts with regard to European protected species:

- deliberately capture, injure or kill any wild animal of a European protected species;
- deliberately disturb animals of any such species in such a way as to be likely to:
  - impair their ability to survive, breed, rear or nurture their young, hibernate or migrate, or
  - affect significantly the local distribution or abundance of the species to which they belong;
- deliberately take or destroy the eggs of such an animal; or
- damage or destroy a breeding site or resting place of such an animal.

The disturbance offence is generally taken to refer to a discernible effect at population level and biogeographic level, rather than simply to an individual animal. However, in certain circumstances the disturbance of one individual animal may have population level effects.

The Regulations also make it an offence (subject to exceptions) to deliberately pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 5.

However, the actions listed above can be made lawful through the granting of licences (European protected species licence) by the appropriate authorities (Natural Resources Wales in Wales). Licences may be granted for several purposes (such as science and education, conservation, preserving public health and safety), but only after the appropriate authority has determined that the following regulations are satisfied:

- the works under the licence are being carried out for the purposes of 'preserving public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment';
- there is 'no satisfactory alternative'; and
- the action 'will not be detrimental to the maintenance of the population of the species concerned at favourable conservation status in their natural range'.

To apply for a licence, the following information is required:

- the species concerned;

- the size of the population at the site (note this may require a survey to be carried out at a particular time of the year);
- the impact(s) (if any) that the development is likely to have upon the populations; and
- what measures can be conducted to mitigate for the impact(s).

The Wildlife and Countryside Act 1981

The Wildlife and Countryside Act 1981 (as amended) is the principal piece of UK legislation relating to the protection of wildlife. It consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the Conservation of Wild Birds (Birds Directive) in Great Britain.

The Act makes it an offence (with exception to species listed in Schedule 2) to intentionally kill, injure, or take any wild bird or their eggs or nests. Special penalties are available for offences related to birds listed on Schedule 1, for which there are additional offences of disturbing these birds at their nests, or their dependent young. The Secretary of State may also designate SPA (subject to exceptions) to provide further protection to birds. The Act also prohibits certain methods of killing, injuring, or taking birds, restricts the sale and possession of captive bred birds, and sets standards for keeping birds in captivity.

The Act makes it an offence (subject to exceptions) to intentionally kill, injure, or take, possess, or trade in any wild animal listed in Schedule 5, and prohibits interference with places used for shelter or protection, or intentionally disturbing animals occupying such places. The Act also prohibits certain methods of killing, injuring, or taking wild animals listed in Schedule 6.

The Act makes it an offence (subject to exceptions) to pick, uproot, trade in, or possess (for the purposes of trade) any wild plant listed in Schedule 8, and prohibits the unauthorised intentional uprooting of such plants.

The Act contains measures for preventing the establishment of non-native species which may be detrimental to native wildlife, prohibiting the release of animals and planting of plants listed in Schedule 9. It also provides a mechanism making any of the above offences legal through the granting of licences by the appropriate authorities.

The Countryside and Rights of Way Act 2000

The Countryside and Rights of Way Act 2000 (CroW) was passed to provide additional levels of protection for wildlife whilst also strengthening the protection afforded to SSSI.

Schedule 12 of the Act amends the Wildlife and Countryside Act 1981, strengthening the legal protection for threatened species. The provisions make certain offences ‘arrestable’, create a new offence of ‘reckless’ disturbance, confer greater powers to police and wildlife inspectors for entering premises and obtaining wildlife tissue samples for DNA analysis, and enable heavier penalties on conviction of wildlife offences.

Planning Policy Wales: Edition 12

Planning Policy Wales sets out the land use planning policies of the Welsh Government. Together with technical advice notes and policy clarification letters it comprises national planning policy for Wales. It outlines the broad framework for LPA’s to implement their Section 6 Duty under the Environment (Wales) Act 2016 (see below) in relation to enhanced biodiversity and resilience of ecosystems.

Technical Advice Note 5 (TAN5) - Nature Conservation and Planning

TAN5 provides advice about how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation. It sets out that wildlife and its habitats are of fundamental importance to our future well-being and prosperity. TAN5 outlines key principles of planning for nature conservation, provides advice about the preparation and review of development plans, addresses nature conservation in development control procedures, the conservation of statutory and non-statutory designated sites and of protected and priority species.

Environment (Wales) Act 2016

Section 6 of the Act places a duty on public authorities to 'seek to maintain and enhance biodiversity' so far as it is consistent with the proper exercise of those functions. In so doing, public authorities must also seek to 'promote the resilience of ecosystems'. The duty replaces the Section 40 duty in the Natural Environment and Rural Communities Act 2006 (NERC Act 2006) in relation to Wales, in relation to publishing a list of the living organisms and types of habitat which in the Secretary of State's opinion are of principal importance for the purpose of conserving biodiversity. Public authorities will be required to report on the actions they are taking to improve biodiversity and promote ecosystem resilience.

Section 7 replaces the duty in Section 42 of the NERC Act 2006. The Welsh Ministers will publish, review and revise lists of living organisms and types of habitat in Wales, which they consider are of key significance to sustain and improve biodiversity in relation to Wales. The Welsh Ministers must also take all reasonable steps to maintain and enhance the living organisms and types of habitat included in any list published under this section, and encourage others to take such steps.

The Protection of Badgers Act 1992

In the UK badgers are primarily afforded protection under the Protection of Badgers Act 1992. This makes it illegal to wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so and to intentionally or recklessly interfere with a sett. Sett interference includes disturbing badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it.

Badgers also receive limited protection under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended). This outlaws certain methods of taking or killing animals.

Under Section 10 (1)(d) of the Protection of Badgers Act 1992, a licence may be granted by Natural Resources Wales to interfere with a badger sett for the purpose of development, as defined by Section 55(1) of the Town and Country Planning Act 1990.

Section 3 of the Protection of Badgers Act 1992 defines interference as:

- damaging a badger sett;
- destroying a badger sett;
- obstructing access to, or any entrance of, a badger sett;
- causing a dog to enter a sett; or
- disturbing a badger when it is occupying a badger sett.

The following operations may disturb badgers in their setts, and therefore unless these can be avoided a licence may be required for:

- excavation within 20m of any entrance to an active sett;

- excavation or other ground disturbance using heavy machinery within 30m of a sett;
- fire or chemicals within 20m of a sett;
- tree felling in the area of a sett – trees should be felled away from setts and cleared away from badger paths; and
- other disturbances such as loud noises or vibrations; some activities such as pile driving and the use of explosives that may result in a disturbance over a much greater distance will require individual consideration.

The Wild Mammals (Protection) Act 1996

The Wild Mammals (Protection) Act 1996 makes it an offence for any person to mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

The Animal Welfare Act 2006

Prior to the Animal Welfare Act 2006, people only had a duty to ensure that an animal didn't suffer unnecessarily. The new Act keeps this duty but also imposes a broader duty of care on anyone responsible for an animal to take reasonable steps to ensure that the animal's needs are met. This means that a person has to look after the animal's welfare as well as ensure that it does not suffer. The Act says that an animal's welfare needs include:

- a suitable environment (how it is housed);
- a suitable diet (what it eats and drinks);
- the ability to exhibit normal behaviour patterns;
- any need it has to be housed with, or apart from, other animals; and
- protection from pain, suffering, injury and disease.

With regards to development, this may have implications when translocations of animals are proposed. As such, care must be taken to ensure that any receptor sites are suitable for the species in terms of habitat and carrying capacity.

The Hedgerows Regulations 1997

The Hedgerows Regulations 1997 were introduced to protect hedgerows of importance from destruction. However, the legislation does not apply to any hedgerow which is within or marking the boundary of the curtilage of a dwelling house.

For the Regulations to be applicable, the hedgerow must be at least 20m in length or, if less than 20m, it must meet another hedgerow at each end. A hedgerow is deemed to be important if it is more than thirty years old and meets at least one of the criteria listed in Part II of Schedule 1 of the Regulations.

If a hedgerow which qualifies under the Regulations is to be removed, the landowner must contact the local planning authority in writing by submitting a hedgerow removal notice. The local planning authority then has a period of 42 days to decide whether or not the hedgerow meets the importance criteria of the regulations.

The National Planning Policy Framework

The National Planning Policy Framework (NPPF) sets out national planning policy and provides guidance to local planning authorities to apply within local plans. Of particular relevance to ecology is paragraph 180, which specifies that planning permission should be refused in cases where the development would cause

significant harm to biodiversity, have adverse impacts on designated sites or result in deterioration of irreplaceable habitats.

Appendix B Personnel qualifications, accreditations and memberships

- Adam Chambers, Somerset Wildlife Trust Consultancy, Ecologist, BSc (Hons), qualifying member of the CIEEM, Natural England Class Licence CL08 (Great Crested Newt Survey Level 1) Registration Number 2022-10402-CL08-GCN. Accredited agent of Hannah Pouncey under Natural Resources Wales Bat Survey Licence number S092610/1 and specific endorsements under Natural England Class Licence CL18 (Bat Survey Level 2) Registration Number: 2019-41077-CLS-CLS.
- Hannah Pouncey, Somerset Wildlife Trust Consultancy, Senior Ecologist, BSc (Hons), MSc, ACIEEM, Natural England Class Licence CL18 (Bat Survey Level 2) Registration Number: 2019-41077-CLS-CLS, Natural Resources Wales Bat Survey Licence Number S092610/1, Natural England Class Licence CL08 (Great Crested Newt Survey Level 1) Registration Number 2022-10308-CL08-GCN, Natural England Dormouse Class Licence CL10A (Dormouse Survey) Registration Number: 2016-22096-CLS-CLS, Natural Resources Wales Dormouse Licence Number: S094888/1. Accredited agent of Jamie Edmonds under Natural England Barn Owl Class CL29 Licence Number CL29/00472.
- Jacob Hill, First Ecology, Assistant Ecologist, BSc (Hons), qualifying member of the CIEEM.

Appendix C Acronyms

Table 26. Glossary of acronyms used in the report (table continues).

Acronym	Description
ACIEEM	Associate member of the Chartered Institute of Ecology and Environmental Management
AONB	Area of Outstanding Natural Beauty
ASNW	Ancient and Semi-Natural Woodland
AWI	Ancient Woodland Inventory
AWIS	Ancient Woodland Indicator Species
BSc (Hons)	Bachelor of Science with Honours
CEMP	Construction Ecological Management Plan
CIEEM	Chartered Institute of Ecology and Environmental Management
CWS	County Wildlife Site(s)
DBH	Diameter at Breast Height
E	East (-ern/-erly)
eDNA	Environmental Deoxyribonucleic Acid
ENE	Eastnortheasterly
EPS	European Protected Species
ESE	Eastsoutheasterly
EUNIS	European Nature Information System
G	Good
Hons	Honours
HRA	Habitat Regulations Assessment
HSI	Habitat Suitability Index
IAW	Inventory of Ancient Woodland
IHS	Integrated Habitat System
JNCC	Joint Nature Conservation Committee
LNR	Local Nature Reserve(s)
LWS	Local Wildlife Site(s)
M	Moderate
MAGIC	Multi-Agency Geographic Information for the Countryside
Mbiol (Hons)	Master of Biology (Mbiol) with Honours (Hons)
MCIEEM	Full member of the Chartered Institute of Ecology and Environmental Management
MEWP	Mobile Elevated Working Platform
MSc	Master of Science
mtDNA	Mitochondrial Deoxyribonucleic Acid
N	North (-ern/-erly)
N/A	Not Applicable
NE	Northeasterly
NNE	Northnortheasterly
NNR	National Nature Reserve(s)
NVAs	Night Vision Aids
NW	Northwesterly
OSWI	Other Site(s) of Wildlife Interest
P	Poor
PAWS	Plantations on Ancient Woodland Sites
pCWS	Potential County Wildlife Site(s)
PCR	Polymerase Chain Reaction
PRF	Potential Roost Feature
Ramsar	Wetland Site(s) of International Importance

Acronym	Description
RSPB	Royal Society for the Protection of Birds
S	South (-ern/-erly)
SAC	Special Area(s) of Conservation
SE	Southeasterly
SEWBReC	South East Wales Biodiversity Records Centre
SNCI	Site(s) of Nature Conservation Importance
SPA	Special Protection Area(s)
SSE	Southsoutheasterly
SSSI	Site(s) of Special Scientific Interest
SSW	Southsouthwesterly
SW	Southwesterly
TPO	Tree Preservation Order
UKHab	United Kingdom Habitat Classification
UWS	Unconfirmed Wildlife Site
W	West (-ern/-erly)
WFD	Water Framework Directive
WSW	Westsouthwesterly

Appendix D Field signs

Table 27. Descriptions of field signs used in the report (table continues).

Species	Field sign	Definition
Badger	Day nests	Bundles of grass and other vegetation where badgers may sleep above ground.
	Faeces	Usually deposited in characteristic excavated pits, concentrations of which, known as latrine sites, are typically found at home range boundaries.
	Footprints	Typically observed in damp mud, prints comprise the impression of a large, wide pad with five toes aligned in front.
	Hair traces	Black and white, appearing shiny when fresh.
	Paths	Between setts or leading to foraging areas.
	Push-throughs	Where a badger passes beneath a boundary feature creating a depression in the ground or pushes up fencing.
	Scratching posts	At the base of tree trunks.
	Setts	Comprising either single isolated entrances or a series of entrances, likely to be interconnected underground.
	Snuffle holes	Small scrapes where badgers have searched for insects, earthworms and plant tubers.
Bats	Droppings	A dropping that when rolled between fingers will crumble and disintegrate. Bats droppings vary in shape, size and particle size and they can appear sparkly as a result of the wing fragments of invertebrates within the material.
	Feeding remains	The remains of prey including butterfly and moth wings lacking an abdomen and beetle casings.
	Grease secretions	Brown in appearance and caused by an oily substance secreted by bats skin usually found around a frequently used access point or within a crevice roost feature.
	Perch abrasions	A favoured location where bats have repeatedly perched resulting, for example, in timber becoming rough or breathable roofing felt fluffing where bat claws scratch the wood or tangle in the membrane fibres respectively.
	Urine staining	A collection of urine that looks like a dense water or oil stain which may be wet or dry and smell of urine. Usually found directly below a perch roost feature that is frequently used for a longer period of time and within a cluster of bat droppings.
Birds	Droppings	White splattering's, often with a black/brown centre.
	Eggs / egg shells	Eggs are found in a variety of shapes, sizes and colours which are characteristic of different species. The presence of eggs and/or egg shells provides evidence of breeding activity.
	Feathers	Discarded feathers or fragments of down.
	Feeding remains	Different species of birds leave different types of feeding remails, but these can include empty snail shells, insect wings and carcasses.
	Pellets	A mass of undigested parts of a bird's food (i.e. bones, hair, feathers, grain husks) that are regurgitated by some bird species and particularly raptors and corvids.
	Nest - active	A nest which is in use containing eggs and/or chicks; or is being constructed.
	Nest - inactive	A nest which has collapsed or deteriorated, contains cold eggs and/or debris.
Great crested newts	Egg	Great crested newt eggs are white surrounded by a jelly capsule 4.5-6.0mm in diameter. Single eggs are folded inside leaves of aquatic plants.

Species	Field sign	Definition
Hazel dormice	Feeding remains	Nuts with tooth marks around the rim of the hole, smoothing it out, with a few toothmarks on the nut surface. Nuts opened by hazel dormice will have no transverse tooth marks across the rim of the nut shell.
	Active nests	Typically, these are grapefruit-size and often found in brambles or other low-growing shrubs and are most likely to be found in the autumn. Dormouse nests are woven from strips of honeysuckle bark, or similar material, and frequently have whole leaves incorporated into the outer layers. These are often collected fresh and are either green or faded to grey. The nests are spherical and lack an obvious entrance hole.
	Inactive nests	As above but showing clear signs of degradation.
Otter	Breeding sites	An area of land or open water, large enough to provide security from disturbance, with one or more potential natal dens, play areas for cubs, access to a food supply and an area where there is no risk of flooding.
	Couches	Above ground daytime resting places for otters typically comprising a nest like structure or an area of flattened vegetation.
	Feeding remains / stations	Remains such as fish skeletons.
	Footprints	Usually 5-7cm wide, with five toes and webbed feet.
	Holts	Underground sites used by otters for sleeping and resting usually situated on riverbanks.
	Latrines or spraint sites	Typically located at prominent points along riverbanks, on rocks or under bridges to mark territories.
	Natal dens	Used by female otters to give birth to cubs and are usually similar in structure to holts with an opening leading into a cavity.
	Spraints	Otter faeces which are typically 2-7cm long, black when fresh, often contain fish bone fragments and have a characteristic fishy odour.
	Slides	A worn area down a bank that otters use for play and for access to a watercourse.
Reptiles	Egg / egg shell	Grass snakes and sand lizards are the UK's only egg-laying reptiles. Grass snake eggs are laid in rotting vegetation including garden compost heaps. They typically lay 10-40 white leathery eggs which are approximately 25-30 mm in diameter.
	Moult	The molting of the skin occurs regularly in reptiles. Molting is common, and results in the entire outer layer of epidermis being lost.
Water voles	Burrows	Water vole burrows are typically wider than they are high with a diameter of 4-8cm.
	Droppings	Cylindrical with blunt ends, usually 12mm long and 4-5mm wide. The colour is variable but they are often green and sometimes have a faint musty smell.
	Latrines	Used to mark range boundaries or are located at favoured spots close to burrows. They typically consist of a flattened mass of old droppings topped with fresh ones.
	Feeding remains / stations	Pieces of cut vegetation to favoured feeding stations close to the water's edge and leave remains.
	Footprints	Star-shaped print and are typically 3-4cm long in neat piles. Well-grazed 'lawns' are also often found surrounding burrow entrances.